Appendix 12

Whale Tail 2020 Water Management Plan Version 6

AGNICO EAGLE

Meadowbank Division

WHALE TAIL PROJECT

Water Management Plan

APRIL 2021

VERSION 6

EXECUTIVE SUMMARY

Agnico Eagle Mines Limited – Meadowbank Division (Agnico Eagle) is developing the Whale Tail Pit and Haul Road Project (Project), a satellite deposit located on the Amaruq property, to extend mine operations and milling at Meadowbank Mine. In 2020 the Whale Tail Expansion Project (Expansion Project) was approved, permitting Agnico Eagle to expand and extend the Whale Tail Pit operations to include a larger Whale Tail open pit, development of the IVR open pit, and underground operations while continuing to operate and process ore at the Meadowbank Mine.

The Amaruq property is a 408 square kilometre (km^2) site located on Inuit Owned Land (IOL) approximately 150 kilometres (km) north of the hamlet of Baker Lake and approximately 50 km northwest of Meadowbank Mine in the Kivalliq Region of Nunavut. The deposit will be mined as two open pits (i.e., Whale Tail Pit and IVR Pit) and underground operations, and ore will be hauled to the approved infrastructure at Meadowbank Mine for milling.

The open pit mine, mined by truck-and-shovel operation, includes four development phases: 1 year of construction (complete), 7 years of mine operations, 25 years of closure, and the post closure period. On September 30th, 2019 commercial production began at the Whale Tail Pit. The Expansion Project includes mining an additional 15.2 million tonnes of ore from the expanded Whale Tail Pit, the IVR open pit and underground operations. This expanded resource will be extracted over an approximately three-year period. In total, the ore milling period for the Whale Tail project has been expanded and extended over approximately an eight-year period from 2019 to 2026.

The water management objectives are to minimize potential impacts to the quantity and quality of surface water at the mine site. Water management structures (water retention dikes/berms and diversion channels) have been and will be constructed, dependent on the potential presence and volume of water, to contain and manage the contact water from the areas affected by the mine or mining activities. The major water management infrastructure includes: contact water collection ponds, freshwater collection ponds, diversion channels, water retention dikes, dams, culverts, seepage collection systems, water treatment plants for effluent, a potable water treatment plant, a sewage treatment plant, and discharge diffusers. Non-contact water is managed in specific ponds with their own pumping systems.

This Water Management Plan for the Project describes the main objectives pertaining to water management, which are to limit and/or stop the flow of surface water runoff in the pit and to limit the impact on the local environment. In developing the water management plan, the following principles were followed:

- keep the different water types separated as much as possible;
- control and minimize contact water through diversion and containment;

- minimize freshwater consumption by recycling and reusing the contact and process water wherever feasible; and
- meet discharge criteria before any site contact water is released to the downstream environment.

During mine construction and operations, contact water originating from affected areas on surface is intercepted, diverted and collected within the various collection ponds. The collected water on the mine site is pumped and stored in the Whale Tail Attenuation Pond starting in the summer of 2020, where the contact water is treated by the Water Treatment Plant (WTP) (as required according to water quality) prior to discharge to the receiving environment or reused in the operations. Prior to the summer of 2020 Whale Tail North Pond was used for non-contact water management and Quarry 1 was used for contact water management.

During operations, site contact water quality is predicted to exceed established effluent criteria (i.e. under the Whale Tail Water Licence (2AM-WTP1830) for arsenic and total dissolved solids in the Whale Tail Waste Rock Storage Facility (WRSF) Pond and in the Whale Tail Pit sump. Therefore, this water is controlled by Whale Tail WRSF Dike and the Whale Tail WRSF Pond. The Whale Tail WRSF Pond water will report with all other contact water and will be mixed in the Whale Tail and IVR Attenuation Ponds and treated during operations.

During operations when the mine is at its maximum footprint, the conservative predictions of future water quality indicate that most parameter concentrations in the downstream environment are below CEQG-AL except for arsenic. A site wide water balance and water quality modeling will be updated yearly, and end pit water quality modelling will be conducted as needed to update predictions.

Water management during closure and reclamation will involve actively filling the underground facilities and IVR Pit, and passively allowing the Whale Tail Attenuation Pond and the Whale Tail Pit to flood. The Groundwater Storage Ponds, and IVR Attenuation Pond will be emptied at the start of closure and backfilled with NPAG/non-ML waste rock. The Whale Tail and IVR WRSFs will be progressively covered with NPAG/non-ML waste rock throughout operations and are expected to be completely covered at the beginning of closure. Contact water management systems will remain on site until monitoring results demonstrate that water quality is acceptable for discharge of all contact water to the environment without further treatment. Once water quality meets the discharge criteria, the water management systems will be decommissioned to allow the water to naturally flow to the receiving environment. Through best management practices and mitigation, the predicted water quality of Whale Tail Lake (North Basin) meets aquatic life guidelines post-closure.

The updated water quality model shows a stable trend in the water quality indicators through operations. At closure and post-closure, flooded pit water quality is predicted to meet receiving water quality criteria when flooding is complete, allowing reconnection with the downstream receiving environment. Arsenic release from the submerged Whale Tail Pit walls is anticipated once pit-flooding commences but is expected to be a relatively short-lived source to the flooded pit lake. The site wide

water balance is updated on a regular basis and end pit water quality modelling will be conducted as needed to update predictions.

Dikes will not be breached until the water quality in the flooded area meets the approved water quality objectives. During mine closure, no mine discharges will occur to the downstream receiving environment since all contact waters are diverted to the open pit, underground and Whale Tail Lake (North Basin) for re-flooding. The water quality in the open pit and Whale Tail Lake (North Basin) averaged over the closure period is predicted to be similar to that of the last year of operations, with similar maximum and average concentrations.

DOCUMENT CONTROL

Version	Date	Section	Page	Revision	Author
1	January 2017			Water Management Plan for the Whale Tail Pit	Agnico Eagle Meadowbank Division and Golder Associates Ltd.
2	September 2018	All	All	Water Management Plan for the Whale Tail Pit	Agnico Eagle Meadowbank Division and SNC-Lavalin Inc.
3	October 2018	3.1.4.11 3.3.1	23 32	Updated to align with recommendations issued by CIRNAC, ECCC and KIA in October 2018	Agnico Eagle Meadowbank Division
4	March 2020	All	All	Updated to reflect current operations/water management and to comply with commitments and requests	Agnico Eagle Meadowbank Division
5	July 2020	All	All	Water Management Plan for the Whale Tail Pit – including Expansion Project	Agnico Eagle Meadowbank Division
6	April 2021	All	All	Updated to reflect current operations/water management and to comply with commitments and requests	Agnico Eagle Meadowbank Division

Approved by: 

Alexandre Lavallee – Water & Tailings Superintendent

TABLE OF CONTENTS

List of Tables

List of Figures

List of Appendices

ACRONYMS

Agnico Eagle	Agnico Eagle Mines Limited – Meadowbank Division
ARD	Acid Rock Deposition
CCME	Canadian Council of Ministers of the Environment
DFO	Department of Fisheries and Oceans Canada
Expansion Project	Whale Tail Pit – Expansion Project
FEIS	Final Environmental Impact Statement
IOL	Inuit Owned Land
LOM	Life of Mine
NIRB	Nunavut Impact Review Board
NWB	Nunavut Water Board
NE	North-East
OMS	Operation, Maintenance, and Surveillance
PGA	Peak Ground Acceleration
Plan	Water Management Plan
Project	Whale Tail Pit and Haul Road
STP	Sewage Treatment Plant
TSF	Tailings Storage Facility
TSS	total suspended solids
WRSF	Waste Rock Storage Facility
WSER	Wastewater System Effluent Regulations
WTP	Water Treatment Plant
WT	Whale Tail
WTSC	Whale Tail South Channel

UNITS

±	plus or minus
<	less than
%	percent
°C	degrees Celsius
°C/m	degrees Celsius per metre
km	kilometre(s)
km^2	kilo square metre(s)
L/day/person	litres per person per day
masl	metre(s) above sea level
mbgs	metre(s) below ground surface
mg/L	milligrams per litre
km	kilometre(s)
km^2	kilo square metre(s)
L/day/person	litres per person per day
m	metre
mm	millimetre
m^3	cubic metre(s)
m^3/day	cubic metres per day
m^3/hour	cubic metres per hour
m^3/year	cubic metres per year
Mm^3/year	million cubic metre(s) per year
Mm^3	million cubic metre(s)
t	tonne
Mt	million tonne(s)

SECTION 1 • INTRODUCTION

Agnico Eagle Mines Limited – Meadowbank Division (Agnico Eagle) is developing the Whale Tail Pit and Haul Road Project (Project), a satellite deposit located on the Amaruq property, to continue mine operations and milling at Meadowbank Mine. In 2020 the Whale Tail Expansion Project (Expansion Project) was approved, allowing Agnico Eagle to expand and extend the Whale Tail Pit operations to include a larger Whale Tail open pit, development of the IVR open pit, and underground operations while continuing to operate and process ore at the Meadowbank Mine.

The Amaruq property is a 408 square kilometre (km^2) site located on Inuit Owned Land approximately 150 kilometres (km) north of the hamlet of Baker Lake and approximately 50 km northwest of Meadowbank Mine in the Kivalliq Region of Nunavut. The deposit will be mined as two open pits (i.e., Whale Tail Pit and IVR Pit) and underground operations, and ore will be hauled to the approved infrastructure at Meadowbank Mine for milling.

The open pit and underground mine, mined by truck-and-shovel operation, includes four development phases: 1 year of construction (complete), 7 years of mine operations, 16 years of closure, and the post closure period. In total, the ore milling period for the Whale Tail project has been expanded and extended over approximately an eight-year period from 2019 to 2026.

The construction and preparation of material started in summer 2018 after all permits and authorizations were received and construction of the dikes started in the third quarter of Year -1 (2018). Focus on site preparation and construction of infrastructure, with the development of the open-pit to produce construction material continued in 2018 and 2019. On September 30th, 2019 commercial production began.

Waste rock and overburden will be stored in the Waste Rock Storage Facility (Whale Tail WRSF and IVR WRSF) and ore stockpiled on the ore pads. The waste rock storage footprint, water management infrastructure and camp have been designed and considers up to eight years to allow for expected resource growth. The underground WRSF (AP-5 location) that was permitted under the Type B will be expanded and became a facility regulated under the Type A Water Licence (2AM-WTP1830). Agnico Eagle will increase the footprint of the underground area to the north to accommodate additional waste storage. The existing tailings facility at Meadowbank Mine will continue to be used for tailings disposal. All tailings treatment and disposal will remain consistent with the current Project Certificate (No. 004).

Closure will occur from Year 8 (2026) to Year 24 (2042) after the completion of milling and will include removal of the non-essential site infrastructure and flooding of the mined-out open pits and underground mine as well as reestablishment of the natural Lake A17 (Whale Tail Lake) level. Only essential infrastructure related to water treatment will remain on site during the closure and post-closure phases. Accordingly, in addition to the Water Treatment Plant (WTP), a part of the camp,

including all infrastructure allowing camp autonomy and security, as well as site roads, will be maintained following the operational phase (see more information in Whale Tail Pit Interim Closure and Reclamation Plan). Post-closure is expected from Year 24 (2042) onwards. Site and surrounding environment monitoring started from the beginning of the construction and will be completed during the post-closure phase when it is shown that the site and water quality meets the regulatory closure objectives.

Table 1.1 summarizes the overview of the timeline and general activities.

Table 1.1 Overview of Timeline and General Activities

Phase	Year	General Activities
Construction	Year -1	• Construct site infrastructure • Develop open pit mine • Stockpile ore
Operations	Year 1 to 7	• Open pits operations • Underground operations • Transport ore to Meadowbank Mine • Stockpile ore • Discharge Tailings in Meadowbank TSF
	Year 8	• Complete transportation of ore to Meadowbank Mine • Complete discharge of tailings in Meadowbank TSF
Closure	Year 9 to 24	• Remove non-essential site infrastructure • Flood mined-out open pits and underground operations • Re-establish natural Whale Tail Lake level
Post-Closure	Year 25 onwards	• Site and surrounding environment monitoring

TSF = Tailings Storage Facility

This document presents the Water Management Plan (Plan) for the Project in accordance with Part B, conditions 14 and 15, and Part E, condition 5, of the Nunavut Water Board (NWB) Water License 2AM – WTP1830. It is also addressing Term and Condition n. 6 of the Nunavut Impact Review Board (NIRB) project certificate. Agnico Eagle has applied the same water management and water balance approach in this document as used for the annual Meadowbank Mine Water Management Report (Agnico Eagle, 2021). The purpose of this Plan is to provide consolidated information on water management, required water management infrastructure, and water balance for the operations of Whale Tail Pit and IVR Pit as satellite pits for the Meadowbank Mine. This plan also includes lessons learned on water management at site during the first year of the project. Finally, this plan includes the Whale Tail water quality forecast update (Appendix D).

This Plan will be updated as required to reflect any changes that occur in operations or economic feasibility, and to incorporate new information and the latest technology, where appropriate.

SECTION 2 • BACKGROUND INFORMATION

2.1 Site Conditions

The general mine site location for the Project is presented in Figure 2-1.

2.1.1 Climate

Climate characteristics presented herein were extracted from the permitting level engineering report (SNC 2015).

The Project is in an arid arctic environment that experiences extreme winter conditions, with an annual mean temperature of -11.3 degrees Celsius (°C). The monthly mean temperature ranges from -31.3°C in January to 11.6°C in June, with above-freezing mean temperatures from June to September. The annual mean total precipitation at the Project is 249 millimetres (mm), with 59 percent (%) of precipitation falling as rain, and 41% falling as snow. Mean annual losses were estimated to be 248 mm for lake evaporation, 80 mm for evapotranspiration, and 72 mm for sublimation. Mean annual temperature, precipitation, and losses characteristics are presented in Table 2.1.

Short-duration rainfall, representative of the Project are presented in Table 2.2, based on intensity-duration-frequency curves available from the Baker Lake A meteorological station (Station ID 300500) operated by the Government of Canada (2015).

Figure 2.1 Location of the Project

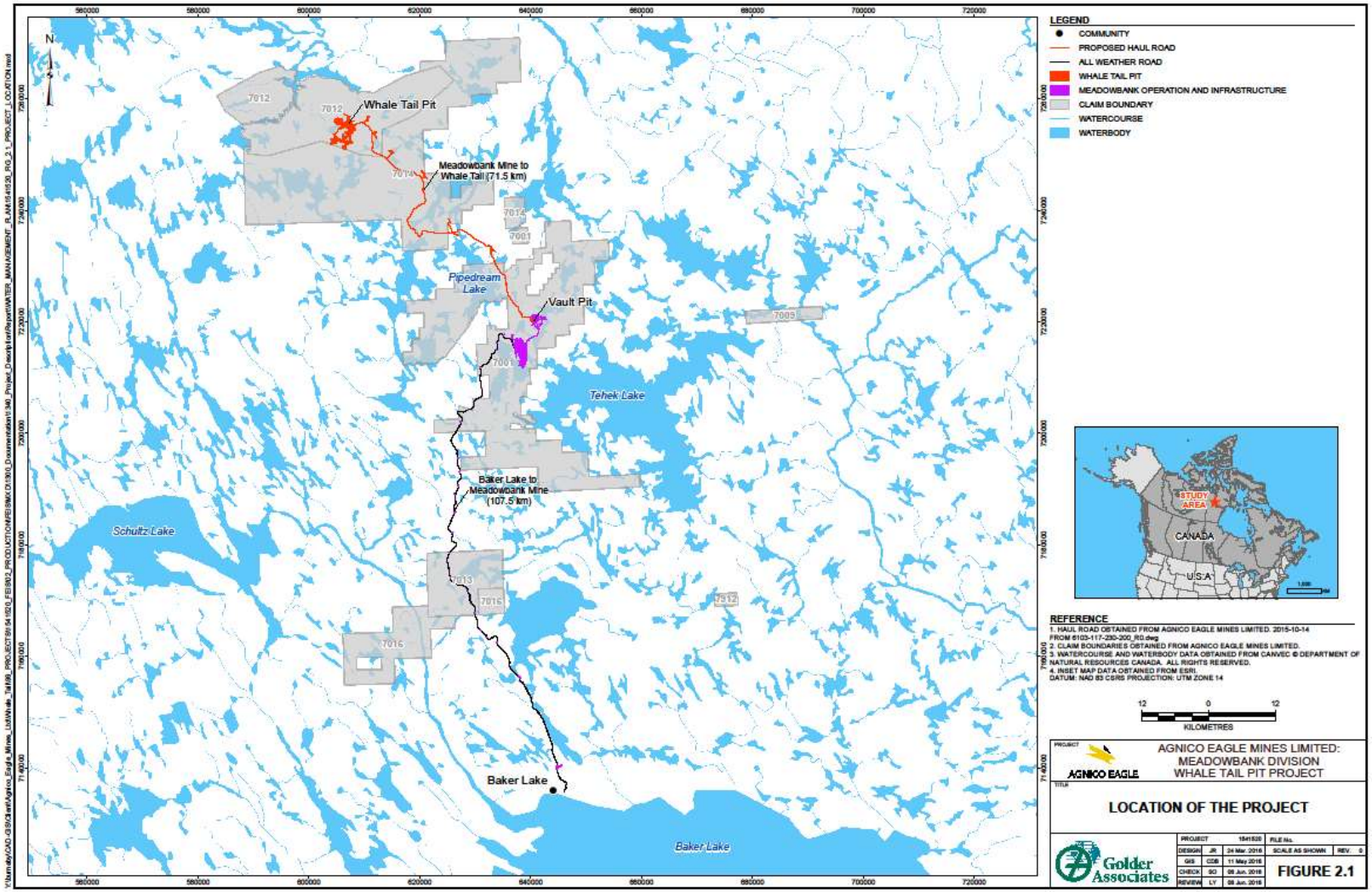


Table 2.1 Estimated Mine Site Monthly Mean Climate Characteristics

Month[a]	Mean Air Temp. (°C) [a]	Monthly Precipitation (mm) [a]			Losses [a]		
		Rainfall (mm)	Snowfall Water Equivalent (mm)	Total Precip. (mm)	Lake Evap. (mm)	Evapo-transpiration (mm)	Snow Sublimation (mm)
January	-31.3	0	7	7	0	0	9
February	-31.1	0	6	6	0	0	9
March	-26.3	0	9	9	0	0	9
April	-17.0	0	13	13	0	0	9
May	-6.4	5	8	13	0	0	9
June	4.9	18	3	21	9	3	0
July	11.6	39	0	39	99	32	0
August	9.8	42	1	43	100	32	0
September	3.1	35	7	42	40	13	0
October	-6.5	6	22	28	0	0	9
November	-19.3	0	17	17	0	0	9
December	-26.8	0	10	10	0	0	9
Annual	-11.3	146	103	249	248	80	72

[a] SNC (2015).

°C = degrees Celsius; mm = millimetre.

Table 2.2 Estimated Mine Site Extreme 24-Hour Rainfall Events

Return Period (Years) [a]	24-hour Precipitation (mm) [a]
2	27
5	40
10	48
25	57
50	67
100	75
1000	101

[a] SNC (2015).

mm = millimetre.

2.1.2 Permafrost and Hydrogeology

2.1.2.1 Permafrost Conditions and Assessment

Thermal assessments have been completed that contribute to the understanding of the permafrost conditions near the Whale Tail Pit, IVR Pit and Underground. An update of the Whale Tail Thermal Assessment was conducted in April 2019 (Golder 2019b). The thermal assessment evaluated existing permafrost characteristics in the Whale Tail Lake and Project area and existing talik conditions under the Whale Tail Lake adjacent to the Project. The thermal assessment was completed based on available thermistor data to date, as well as the results of a thermal 2D modelling exercise and 3D block model prepared to assess permafrost conditions and the extent of talik formations beneath the Whale Tail Lake.

The updated thermal assessment of the project also took into consideration the groundwater monitoring program (Westbay sampling) that took place in November 2018 (Golder 2019b). The 2018 groundwater monitoring program indicates that water samples were collected from fixed ports along the Westbay system between 276 m and 499 m below the ground surface, which suggests that the Westbay system is installed in open talik, or water sampling would not have been possible at depth.

The mine site is located in an area of continuous permafrost, as shown on **Error! Reference source not found.**. Based on measurements of ground temperatures (Knight Piésold 2015), the depth of permafrost at the mine site is estimated to be in the order of 425 metres (m) outside of the influence of waterbodies. The depth of the permafrost and active layer will vary based on proximity to the lakes, overburden thickness, vegetation, climate conditions, and slope direction. The typical depth of the active layer is 2 m in this region of Canada. The estimated depth of zero amplitude from the temperature profiles ranges from 18 m to 35 m. The temperatures at the depths of zero amplitude are in the range of -3.1 °C to -8.6 °C for on land thermistors and 2.7 °C for AMQ17-1265A. The geothermal gradient estimated based on the lowest 70 to 100 m of the thermistor strings is in the range of 0.004 °C/m (AMQ15-294) to 0.052 °C/m. Late-winter ice thickness on freshwater lakes is approximately 2.0 m. Ice covers usually appear by the end of October and are completely formed in early November. The spring ice melt typically begins in mid-June and is complete by early July.

The information presented in the following section is based on the updated report *Hydrogeological Assessment and Modelling Whale Tail Pit - Expansion Project* (Golder 2019e). The following summarizes the updated understanding of permafrost conditions in the Expansion Project Area:

- The depth of permafrost outside of the influence of lakes is estimated to be between 452 m and 522 m based on thermal gradients and ground temperatures at the lowest portions of the thermistor strings. The depth of permafrost increases with increasing distance from lakes with talik.
- Considering the 2D thermal modelling and 3D block model, the assessment indicated that:

- Under the northern portion of the lake below Whale Tail Pit, there is likely a closed talik formation (Section C of the thermal modelling report, reproduced on Figure 3 of this report).
- Open talik conditions are probable in the southern portion of the lake where the Whale Tail Lake becomes wider (Section G of the thermal modelling report, reproduced on Figure 4 of this report).
- Permafrost depth is between 480 m and 550 m for ground away from the Whale Tail Lake, and between 350 m and 450 m below surface in portions beneath the Whale Tail Lake where a closed talik is present.
- The cryopeg thickness is likely between 20 m to 30 m.

2.1.2.2 Groundwater Flow Regime

Groundwater characteristics at the mine site are detailed in the Expansion Project Final Environmental Impact Statement (FEIS), Addendum Volume 6, Section 6.3. The hydrogeological model was updated in May 2019 with hydrogeological modelling completed for the Expansion Project since submission of the FEIS addendum in December 2018 (Golder 2019e). The model was updated based on results of monitoring at the Westbay system in November 2018, supplemental packer testing in December 2018, and additional 2D and 3D thermal analysis in 2019. The updated hydrogeological model was then used to provide revised predictions of groundwater inflow and total dissolved solids (TDS) concentrations during dewatering, mining, pit and underground flooding, and long-term post-closure (reflooded) conditions.

Two groundwater flow regimes occur at the Expansion Project: a deep groundwater flow regime beneath permafrost and a shallow groundwater flow system located in the active (seasonally thawed) layer near the ground surface. Except for areas of taliks beneath lakes, the two groundwater regimes are isolated from one another by thick permafrost.

Groundwater flow within the deep groundwater flow regime is limited to the sub-permafrost zone. This deep groundwater flow regime is connected to ground surface by open taliks underlying larger lakes. The elevations of these lakes are the primary control of groundwater flow directions in the deep groundwater flow regime, with density gradients providing a potential secondary control. The elevations of these lakes in the baseline study area indicate that Whale Tail Lake is likely a groundwater discharge zone at the south end of the Lake, with flow from Lake A60 to Whale Tail Lake, and a groundwater recharge zone at the north end of the Lake, with flow from Whale Tail Lake to Lake DS1 (Figure 2-3).

While portions of Whale Tail Pit is located within unfrozen rock, the IVR Pit and the Underground Project are fully contained within permafrost as per current planification. Groundwater inflow is therefore only expected during operations in the Whale Tail Pit.

Mining of the Whale Tail Pit occurs within the talik underlying Whale Tail Lake, whereas the latest version of the Underground Project is located in permafrost. The Underground is not directly connected to either Whale Tail Pit or IVR Pit.

During mining, the Whale Tail Pit will act as a sink for groundwater flow, with seepage faces developing along the portions of the pit walls. In response to the deepening of the mine workings, groundwater will be induced to flow through bedrock to the Whale Tail Pit. Mine inflow will originate primarily from Whale Tail Lake (South Basin), the Whale Tail Attenuation Pond, and deep bedrock underlying the permafrost.

Figure 2.2 Permafrost Map of Canada

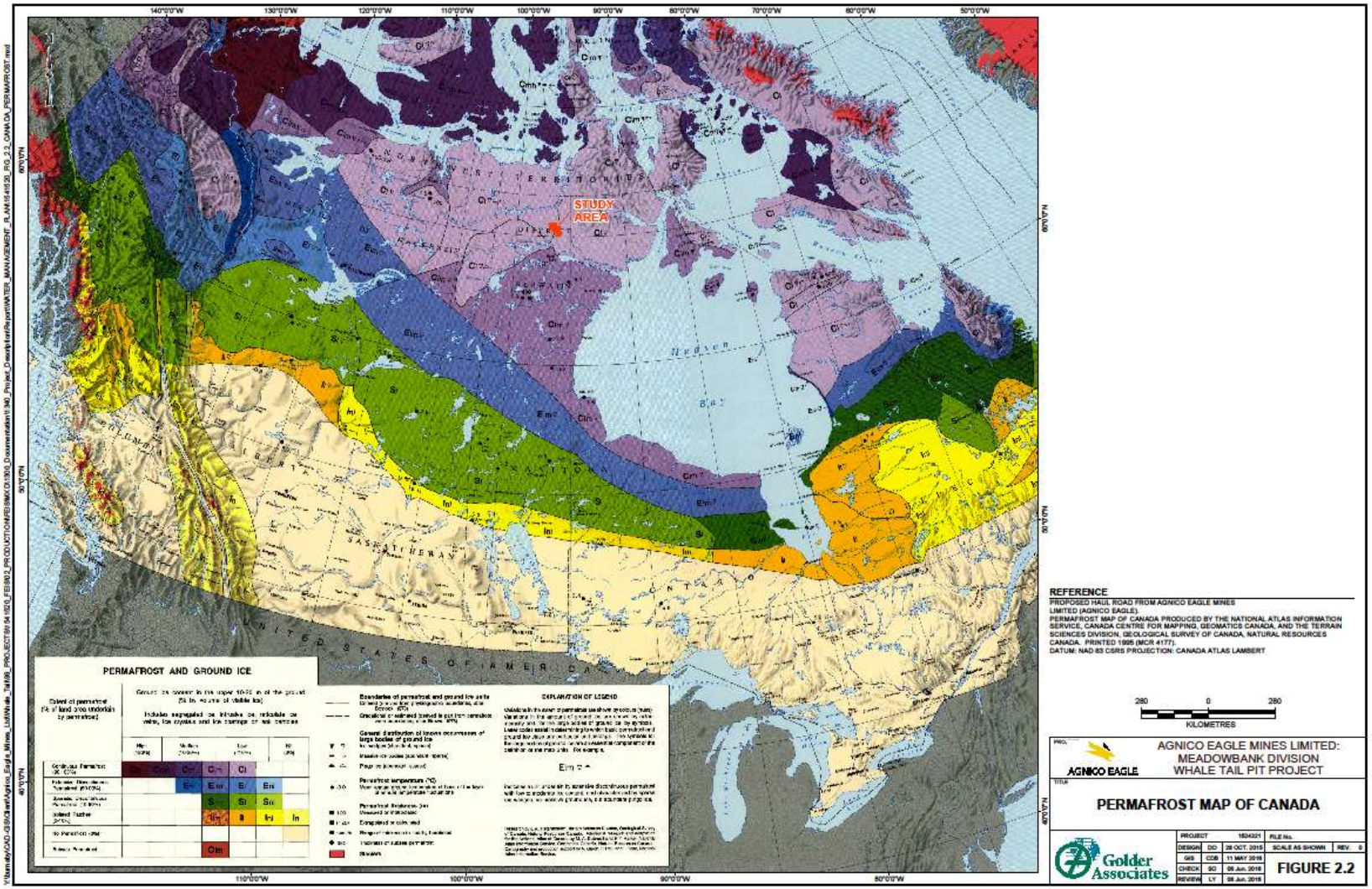
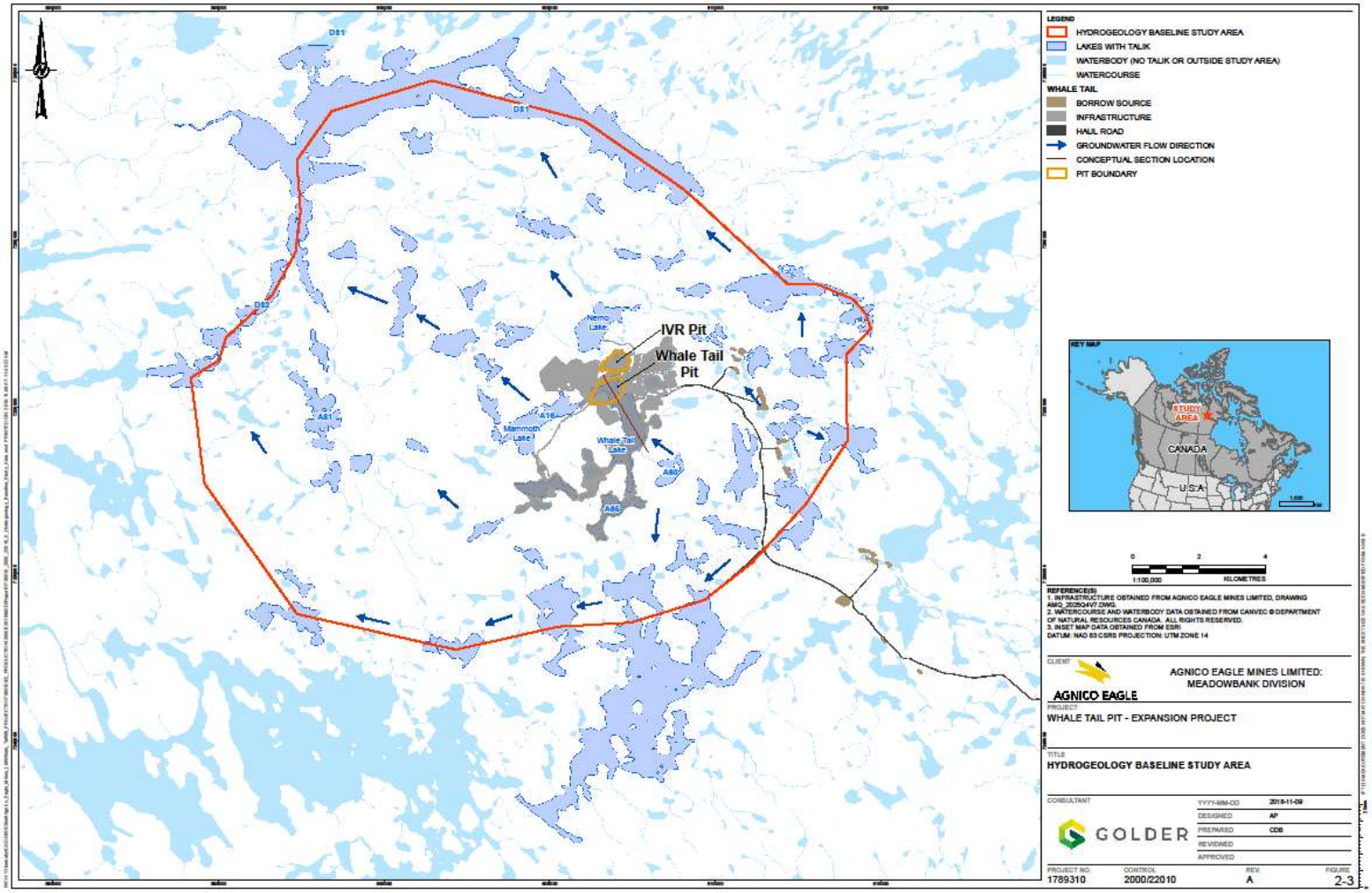


Figure 2.3 Hydrogeology Baseline Study Area



2.1.3 Hydrology

Hydrology characteristics were extracted from the surface water quantity impact assessment section (FEIS, Addendum Volume 6, Section 6.3; Volume 6, Appendix 6-C).

The mine site is located in the A watershed (i.e., where Lake A17 [Whale Tail Lake] and Lake A16 [Mammoth Lake] are located), and water management activities are planned in the A watershed and the C watershed (i.e., where Lake C38 [Nemo Lake] is located); these two watersheds drain into Lake DS1, which drains north to the Meadowbank River. These watersheds comprise an extensive network of lakes, ponds, and interconnecting streams, and have lake water surface fractions (i.e., the ratio of lake area to watershed area) of 16% (A watershed) and 23% (C watershed).

Shorelines in the mine site area exhibit a consistent terrain type related to shorelines that have developed in morainal material. These morainal shorelines were observed at all lakes visited during the 2015 field survey. Limited areas of bedrock and shallowly sloped sandy shorelines were also observed. As a general characteristic for the surveyed shorelines, the predominant materials are boulder gardens mixed with cobble with very limited soils or organic materials on top. The outlet channels are relatively short with a low sinuosity (i.e., close to 1.0) and exhibit the same characteristics for streambed materials, which results in interstitial flow through large boulders or below the surface likely close to the bedrock, making flow difficult to observe and measure.

Discharges of watercourses in the mine site area typically peak in late-May to mid-June from snowmelt, rapidly decline in July, and low discharges prevail until frozen conditions in October to November, with a secondary peak in September from rainfall events. Watercourses in the Project area are frozen over the winter.

Derived long-term mean annual water yield for selected lakes in the mine site area vary between 86 mm at Lake C38 (Nemo Lake) to 230 mm at Lake A69. These water yields are like regional water yields reported at the Meadowbank Mine.

2.1.4 Surface Water Quality

Water quality characteristics were extracted from the water quality baseline report (FEIS, Volume 6, Appendix 6-G, Agnico Eagle, 2016) and the water quality impact assessment section (FEIS, Volume 6, Section 6.4, Agnico Eagle, 2016). Baseline water quality sampling was conducted at lakes and tributaries in various watersheds in the study area during open-water conditions in 2014 and 2015.

Surface water collected from lakes during the open water season was characteristic of low productivity headwater lakes in the Arctic; soft water, with low alkalinity, low turbidity (and corresponding high Secchi depth) and low total suspended solids (TSS). There was minor thermal stratification evident at some deeper lake stations. The water columns of lakes are well oxygenated, and pH was neutral to slightly acidic. The majority of water chemistry parameter concentrations were below the analytical detection limit and below the Canadian Council of Ministers of the Environment

water quality guidelines for the protection of aquatic life (CCME, 1999) and the Canadian drinking water guidelines (Health Canada, 2014).

Samples collected from the tributaries showed them to be well oxygenated, with low conductivity, and neutral to slightly alkaline pH. As with the lakes, most of the water chemistry parameter concentrations were below the aquatic life and drinking water quality guidelines.

2.1.5 Climate Change

Climate change information presented herein was extracted from the air quality impact assessment section (FEIS, Addendum Volume 4, Section 4.2).

The climate in the Arctic is changing faster than at mid-latitudes (IPCC, 2014). The most recent set of climate model projections (CMIP5) predict an Arctic-wide year 2100 multi-model mean temperature increase of +13°C in late fall and +5°C in late spring under the IPCC's "business as usual scenario" (RCP8.5). IPCC climate change mitigation scenario RCP4.5 results in a year 2100 multi-model Arctic wide prediction of +7°C in late fall and +3°C in late spring (Overland et al., 2013). The effects of changes of this magnitude to terrestrial, aquatic and marine ecosystems, social and economic systems of the Arctic are an active area of research. However, the short duration of the proposed Project means that climate change related effects to the Project are likely negligible.

2.1.6 Seismic Zone

The mine site is in an area of relatively low seismic risk. The peak ground acceleration (PGA) for the area was estimated using seismic hazard calculator from the 2010 National Building Code of Canada website (http://www.earthquakescanada.nrcan.gc.ca/hazard-alea/interpolat/index_2010-eng.php). The estimated PGA is 0.019 g for a 5% in 50-year probability of exceedance (0.001 per annum or 1 in 1,000-year return) and 0.036 g for a 2% in 50-year probability of exceedance (0.000404 per annum or 1 in 2,475 year return) for the area.

2.2 Mine Operations Description

2.2.1 Mine Development Plan

Whale Tail Open Pit, IVR Open Pit and Underground mining will be mined using the traditional open pit method and long hole mining (95%) with some mechanized cut and fill in flat areas. The mining is planned from 2019 to 2025, while milling will continue through 2026.

Two mine waste streams will be produced at Whale Tail Pit; waste rock and overburden. Ore will be stockpiled in a series of stockpiles located adjacent to the pits. As ore is transported to the Meadowbank Mine for processing, a third mine waste stream, tailings, will be produced at Meadowbank Mine (refer to the Whale Tail Pit – Waste Rock Management Plan, Agnico Eagle, 2021a). The operation, management, and monitoring of the TSF is regulated under the Agnico Eagle Type A water Licence 2AM-MEA1530.

The mine development will include the following major infrastructure:

- industrial area (camp, power plant, heli-pad, landfarm and garage)
- crusher
- ore stockpiles
- rock and overburden storage facilities
- landfill
- haul and access roads
- underground mine
- two open pits

In addition, the mine development will include construction of water management facilities, listed in Section 3.1.2.

2.2.2 Summary of Mine Waste Management

This section is a summary of the mine waste management plan. More detailed information on mine waste management is presented in the Whale Tail Pit – Waste Rock Management Plan, Agnico Eagle, 2021a. Water management associated with mine waste management is described in Section 3.1.4 of this document. Two areas of the site were identified as the Whale Tail WRSF and the IVR WRSF to store waste rock and overburden material, as shown in Appendix A. Table 2.3 presents a summary of the proposed usage or destination for the waste material.

Table 2.3 Summary of Mine Waste Destination

Mine Waste Stream	Waste Destination
Overburden	• Temporary storage West of Whale Tail Lake • Co-disposed with waste rock in Whale Tail WRSF
Waste Rock	• Construction material • Whale Tail WRSF and IVR WRSF • Underground backfill material • Closure and site reclamation
Tailings	• As slurry tailings placed in the approved Meadowbank Mine tailings storage facility

WRSF = Waste Rock Storage Facility; Mt = million tonne

SECTION 3 • WATER MANAGEMENT PLAN AND WATER BALANCE

3.1 General Water Management Strategy

3.1.1 Water Management Objectives and Strategies

The main objectives pertaining to water management for Project are to limit and/or stop the flow of surface water runoff in the pit and to limit the impact on the local environment. The key objectives for water management are:

- keep the different water types (i.e., contact, non-contact, and freshwater) separated to the extent practical;
- control and minimize contact water through diversion and containment;
- minimize freshwater usage by recycling and reusing the contact water to the extent practical; and
- meet discharge criteria before any site contact water is released to the downstream environment.

To achieve the above water management objectives, the following key strategies were implemented to develop the surface water Management Plan:

- Two levels of catchment disturbance have been defined for the area, namely undisturbed and disturbed. Areas that have been disturbed as part of the mine development are considered disturbed catchments, while the areas left unaffected are considered undisturbed catchments.
- For the purpose of mine water management, runoff from undisturbed areas is considered non-contact water, while runoff from disturbed catchment areas is considered contact water. Surface water that is diverted around the mine facilities, or groundwater that does not emerge into a mine facility, is considered non-contact water. Any non-contact water that mixes with contact water becomes contact water.
- Conveyance and storage of contact water will be controlled by channels and containment structures (i.e., sumps and ponds). Sumps will be installed in the open pits and in low points surrounding the open pits. Contact water will be diverted and collected in various sumps and water collection ponds and conveyed to an Attenuation Pond. Two attenuation ponds are planned for surface water and include the Whale Tail Pit Attenuation Pond and the IVR Attenuation Pond at former Lake A53.
- The IVR Attenuation Pond will contribute in reducing the operational water head in the Whale Tail Attenuation Pond. This will allow:
    - decreased operational risks (i.e. ice build-up above ramp and pit wall stability)
    - decreased overall volume of contact water and decrease global Arsenic (As) loading (less groundwater will flow in the pit and get in contact with PAG/ML material)

  - improved operation efficiency (reduce ice build-up beside the ramp that could reduce operation ramp width – keep double lane instead of having a single lane to keep a safe distance from the seepage area during winter time – observed previously at Goose Pit)
- The collected water will be treated if the water quality does not meet the discharge criteria established in the Water Licence 2AM-WTP1830.
- The treated water will be reused as much as possible for mining and site operations to minimize the freshwater requirements. The excess treated water will be discharged into Lake A16 (Mammoth Lake) through a submerged diffuser or through a diffuser in Whale Tail Lake (South Basin) or other alternatives.
- Non-contact water will be intercepted and directed away from disturbed areas by means of natural catchment boundaries and/or man-made diversion structures or pumping systems and will be allowed to flow or to be discharged to the neighbouring waterbodies.

Underground development groundwater and contact water will be managed separately from surface infrastructure contact water. For underground water management, water management infrastructure was defined based on the following underground water management guideline principles:

- It is not currently planned to mine in the permafrost. It is an opportunity that will be further studied
- Heating is required when mining below top of cryopeg
- Brine needed until cryopeg elevation is reached (-275m)
- Contact and non-contact UG water not segregated – segregation is an opportunity
- Grouting is a mitigation measure during development (not included in hydrogeological model)
- UG storage stope (used to recycle UG water) – delay treatment, needed early
- Recirculation of brine during mining operation
- Limit addition of freshwater (used only for CRF, promote use of natural groundwater for operation)
- Treatment of UG saline water is not required if mining stay in the permafrost

The key strategies detailed below were implemented to support the underground water management:

- A Groundwater Storage Pond system (GSP) is designed to capture TDS (salt) affected waters. Up to three GSPs are planned to provide operational flexibility and adaptive management opportunity. GSP-1 and is used to store high salinity water from early mining operations through the permafrost. GSP-2 is used to store low salinity water,. A potential third pond (GSP-3) is planned for contingency

- Excess water volumes in the mine will be managed through the Underground Mine Stope and GSP-1 and GSP-2. Excess water volumes may also be managed with GSP-3 planned for contingency, operational flexibility, and adaptive management opportunity
- The Project has been planned with contingency water management storage to manage contact water during upset conditions. For example, GSP-3 could be used for temporary storage when not used for saline water management. This storage has sufficient capacity to manage the potential water quantity exceedances occurring during the freshet and can be used to hold excess contact water temporarily until it can be treated by the water treatment plant during the remaining open water season (July to September). During this time, at maximum capacity, the excess water can be treated and discharged within two weeks.
- At the end of underground mining, any remaining water in GSP ponds will be pumped underground for flooding of the underground workings

3.1.2 Water Management System

The water management system includes contact water collection ponds, freshwater collection ponds, diversion channels, retention dikes, culverts, water treatment plants for effluent, potable water treatment plant, sewage treatment plant, and discharge diffusers (as listed in Table 3.2). These various components are identified in Appendix A.

The water management system includes the following components (identified in Appendix A):

- four contact water collection ponds (Whale Tail Attenuation, IVR Attenuation, Whale Tail WRSF, plus the GSP Ponds);
- a temporary staging sump for WT Pit contact water dewatering (Quarry 1);
- two surface water collection ponds (Whale Tail Lake (South Basin) and Mammoth Lake);
- two water diversion channels (South Whale Tail Channel, and IVR diversion channel);
- four water retention dikes (Whale Tail, Mammoth, Whale Tail WRSF, and the IVR dikes once built);
- Culverts
- a freshwater intake causeway and pump system;
- a WTP and associated intake causeway;
- a Sewage Treatment Plant (STP);
- pipelines and associated pump systems;
- a Potable WTP;
- discharge diffusers located in Mammoth Lake and Whale Tail South

Additional water management system components have been or will be put in place at the Whale Tail Project, in order to adapt effectively to the site conditions and to manage non contact water adequately. The following components are part of the to the global water management system:

- a pumping system from Whale Tail South to Mammoth Lake; and
- the Whale Tail Dike seepage collection system;

Additional details on the water management system components are presented in section 3.1.4 of this plan.

3.1.3 Waterbody Inventory

The A and C watersheds will potentially be impacted by mining activities, primarily by dewatering of Whale Tail Lake (North Basin) to Lake A16 (Mammoth Lake), the Northeast Diversion to the C watershed, and the Whale Tail Lake (South Basin) Diversion to Lake A16 (Mammoth Lake). Waterbodies directly impacted by mining activities are presented in Table 3.1 and shown in Appendix A. The treated effluent discharge period for Lake A16 (Mammoth Lake) began in the second dewatering phase of the project in June 2019 and will continue throughout mine operations and into closure.

Table 3.1 Inventory of Waterbodies Directly Impacted by Mining Activities

Watershed	Primary Disturbance	Waterbody	Note
A	Dewatering	Lake A17	Dewatering of Lake A17 (Whale Tail Lake) to Whale Tail Lake (South Basin)
	IVR Pit	Lake A46	Part of the IVR Pit footprint
		Lake A47	Part of the IVR Pit footprint
		Lake A49	Part of the IVR Pit footprint
		Pond AP-67	Part of the IVR Pit footprint
		Pond AP-68	Part of the IVR Pit footprint
	IVR WRSF Placement	Lake A50	Covered by IVR WRSF
		Lake A51	Covered by IVR WRSF
		Lake A52	Covered by IVR WRSF
		Pond A-P21	Covered by IVR WRSF
	Whale Tail Lake (South Basin) Diversion	Lake A18	Flooded
		Lake A19	Flooded
		Lake A20	Flooded
		Lake A21	Flooded
		Lake A22	Flooded
		Lake A45	Part of diversion channel
		Lake A55	Flooded
		Lake A62	Flooded
		Lake A63	Flooded
		Lake A65	Flooded
		Pond A-P1	Flooded
		Pond A-P53	Flooded

Watershed	Primary Disturbance	Waterbody	Note
	Various Water Management Activities	Lake A17 (Whale Tail Lake)	Whale Tail Lake (North Basin) used as the Whale Tail Attenuation Pond Whale Tail Lake (South Basin) receives dewatering flows during dewatering activities, and discharge of treated effluent
		Lake A16 (Mammoth Lake)	Receives discharge of treated effluent
		Lake A53	Used as the IVR Attenuation Pond
		Lake A50	Covered by a Groundwater Storage Pond
C	Water Intake	Lake A16 (Mammoth Lake)	Sourced during operations for emulsion plant
		Lake C38 (Nemo Lake)	Sourced during operations
		Lake A17 (Whale Tail Lake)	Whale Tail Lake (South Basin) sourced during closure

3.1.4 Water Management Plan During Construction and Operations

3.1.4.1 Infrastructure Required for Mine Site Water Management

During the mine construction, operational, and closure phases, a network of collection and interceptor channels and sumps will be constructed and maintained to facilitate mine site water management. A list of the water management control structures and facilities is presented in Table 3.2 together with the proposed construction schedule. These structures were designed according to design criteria presented in the Appendix K: Project Design Considerations of the Water Licence 2AM-WTP1826 amendment, submitted to the NWB in May 2019. Final design details of these structures will be provided to the regulators for approval at least 60 days prior to construction.

Water management strategy updates were also communicated in August and September 2019 to the Nunavut Water Board regarding changes to the management of non-contact water for specific areas of the project. Those changes are reflected in Table 3.2.

Appendix A shows the location of the main structures at the different development stages of the mine life. Information on operation, maintenance, and surveillance (OMS) of Project dikes is provided in the following sub-sections.

Table 3.2 Water Management Facilities and Construction Schedule

Mine Year	Figure	Water Management Facilities Constructed or Installed
Year -1 (2018) Construction	-	• Turbidity Curtains installation for dike construction • Start Whale Tail Dike • Construction of the low-permeability access road built of overburden and collection sump for Stage 1 WRSF • Freshwater intake causeway in Nemo Lake

Mine Year	Figure	Water Management Facilities Constructed or Installed
		• Water Treatment Plant and Construction Water Treatment Plant • Pipelines and associated pump systems for water management and dewatering • Sewage Treatment Plant • Potable Water Treatment Plant • Discharge diffuser in Mammoth Lake • Culverts 184, 186, and Mammoth Channel
Year 1 to 2 (2019-2020) Operations – Phase 1	A.1	• Completion of Whale Tail Dike • Construction of Mammoth Dike • Construction of the Whale Tail WRSF Dike • Construction of the Northeast Dike • Construction of the South Whale Tail Diversion Channel • Construction of the dewatering system (ramp, pipe, diffuser) for the Whale Tail North Basin to the Whale Tail South Basin, dewatering system from North Basin to Mammoth Lake (and Water Treatment Plant), plus possibly dewatering systems for A53 and NE Pond • Construction of the Whale Tail contact water intake causeway and construction of the WT attenuation pond infrastructure (diffuser, pipeline) • Installation of pumping system from the North-East Pond to C Watershed • Installation of pumping system from Whale Tail South to Mammoth Lake • Construction of the of the Whale Tail Dike seepage collection system • Installation of pumping system from A53 Lake to Whale Tail South, • Installation of pumping system from lake A49 to North-East Sector to maintain the water level • Installation of pumping system for contact water from the open pit to the Whale Tail Attenuation Pond (to Quarry 1 until freshet 2020) • Installation of pumping system for contact water from the Whale Tail WRSF Pond to the Whale Tail Attenuation Pond (to Quarry 1 until freshet 2020) • Underground WRSF saline ditch system
Year 2 to 7 (2020-2025) Operations – Expansion Project	A.2	• Construction of the dewatering system (ramp, pipe) for Lake A46, A47, A49, A50, A51, A52, A53, AP-21. Used to dewater the footprint of IVR Pit, IVR WRSF, and IVR Attenuation Pond. • Dismantling of North-East Dike for IVR Pit mining activity • Construction of the contact water intake causeway and construction of the IVR attenuation pond infrastructure (diffuser, pipeline) • IVR Attenuation Pond Pump Station • Installation of pumping system for contact water from the open pit to the IVR Attenuation Pond

Mine Year	Figure	Water Management Facilities Constructed or Installed
		• IVR WRSF Contact Water Collection System ; Ore stockpile 3 Contact Water Collection System • IVR Diversion • IVR D-1 Dike • Underground Water Management System • Groundwater Storage Ponds

WRSF = Waste Rock Storage Facility.

3.1.4.2 Dike Construction

Infrastructures Under Whale Tail Pit Project

The following sections briefly describe the various dikes constructed for the Project. Information regarding the operation, surveillance, and maintenance of these structures is contained in the OMS Manual – Whale Tail Water Management Infrastructures (Agnico Eagle, 2021c). Additional information regarding construction of the dikes including all design drawings and figures, can be found in the As-built reports created and submitted for each structure.

Agnico Eagle will continue to identify and assess the water infrastructure performance issues to ensure efficient water management. A lesson learned exercise on the 2019 freshet was performed in 2020 and was used to improve water management practices and plans for 2020 and beyond. As a result, the 2020 open water season was considerably less problematic than 2019.

Whale Tail Dike

The WTD was constructed to raise Whale Tail Lake (South Basin), Lake A18, Lake A19, Lake A20, Lake A21, Lake A22, Lake A55, Lake A62, Lake A63, Lake A65, Pond A-P1, and Pond A-P53, to an elevation of 156.0 metres above sea level (masl), and divert runoff downstream to the Lake A16 (Mammoth Lake) watershed through the Whale Tail Lake (South Basin) diversion channel (SWTDC). Whale Tail Dike is a zoned rockfill dike constructed on the lakebed foundation with a core composed of a fine filter dynamically compacted. A coarse filter was placed between the rockfill and the fine filter. A cement-bentonite cut-off wall consisting mainly of secant piles was constructed through this dense core and acts as a seepage barrier.

Whale Tail Dike Seepage

The Whale Tail Dike was commissioned on March 5, 2019 with the beginning of the dewatering activity of the North Basin. During the construction of the dewatering ramp extension in April 2019, the pumping was interrupted. During that time, a decrease of the water level was observed in the South Basin (upstream) and an increase of the water level on the North Basin (downstream). Seepage was identified as a probable cause for these observations.

In July 2019, the seepage flow was measured using v-notch weirs at approximately 300 m^3/h which is higher than what was anticipated in the water balance. A detailed investigation including additional instrumentation and geophysics was conducted for a better understanding of the seepage phenomenon at the Whale Tail Dike. In 2020, a pumping system was installed to collect and manage the seepage water prior reaching Whale Tail Attenuation Pond, as presented in section 3.1.4.18 of this report, with the objective of returning water to the environment if water quality allows.

In 2020, Agnico Eagle conducted an intensive grouting campaign to reduce the seepage flow. Following the dike grouting campaign, the seepage flow, measured using v-notch, has significantly decreased to approximately 80 m^3/h and it was concluded that the seepage reduction objective of the grouting campaign was successfully reached. Agnico Eagle continues to closely monitor the situation.

Mammoth Dike

The Mammoth Dike was constructed to protect the mine site area from potential backwatering from Lake A16 (Mammoth Lake) during the operational and closure phases. Mammoth Dike has a length of about 330 m and a height of 2 m. The Mammoth Dike is a rockfill dike lined with bituminous geomembrane on its upstream face encapsulated at the toe in a layer of fine filter amended with bentonite (FFAB) liner in turn constructed in a key trench. The key trench extends down to the bedrock on most of the dike length. A thermal berm of rockfill was placed on top of the key trench during the winter season to prevent the FFAB from thawing.

Whale Tail WRSF Dike

The WRSF Dike confines contact water in the Whale Tail WRSF Pond before it is pumped to the Whale Tail Attenuation Pond. The WRSF dike is about 360 m long and 5 m high. The Whale Tail WRSF Dike is a rockfill dike with a bituminous liner on its upstream face encapsulated at the toe in a layer of FFAB liner in turn constructed in a key trench. The FFAB liner takes advantage of frozen soil conditions to integrate the permafrost into its foundation (and key trench).

On August 2019, seepage from WRSF Pond reported through this structure to Mammoth Lake inducing tension cracks on the crest of the structure. Immediate actions taken were to build an access road to the downstream portion of the dike, in order to excavate a small sump and pump the seepage water into WRSF pond. Furthermore, WRSF Pond was emptied and maintained dry. Downstream pumping stopped on September 30th, when the reporting flow and surrounding had frozen. In October 2019, the KIA conducted a sample analysis of the lake bed sediments in Mammoth Lake. The report concluded the seepage did not have a measurable impact on metal quantities of the Mammoth Lake sediments (McDougall et al. 2019).

A series of measures were implemented by Agnico to minimize the risk of future similar events occurring in this location:

- Operational water level were reviewed to keep water as low as possible in the WRSF pond recommended by the Meadowbank Dike Review Board (MDRB);
- Aggradation of permafrost into the dikes foundation by:
    - Construction of a thermal berm in 2020 on the upstream portion of the dike;
  - Access road to the downstream area was constructed to facilitate inspection ;
  - A downstream water collection system was designed and constructed;
  - Various environmental monitoring programs:
    - Monthly limnology profile of Mammoth Lake during winter and open water conditions;
    - Mammoth Lake to be included in a Core receiving environmental monitoring program; and
    - A sediment sampling campaign to be executed at Mammoth Lake.

Additional details on this event can be found in the letter submitted on December 20, 2019 to Environment and Climate Change Canada. Agnico Eagle continues to closely monitor the situation. No seepage was observed in 2020 which confirmed the adequacy of the mitigation measures implemented to ensure adequate performance of the structure

Northeast Dike

The North East (NE) Dike was a temporary structure is designed to prevent runoff from the Northeast watershed reporting to the Whale Tail Pit and to divert them to Nemo Lake. The upstream slope of the NE Dike is lined with bituminous geomembrane encapsulated at the toe in a layer of FFAB liner in turn constructed in a key trench to an ice-poor till foundation.

Following the fish out and dewatering of surrounding lakes (A46 & A47) in 2020, this structure was dismantled as part of the IVR pit development.

Infrastructures Under Expansion Project

During the Expansion Project, flow of surface water into the Whale Tail Pit will continue to be controlled by Whale Tail Dike and Mammoth Dike. Flow of surface water into IVR Pit will be controlled by the IVR Diversion and IVR Attenuation Pond Dikes. Construction mitigation measures and construction methods of the A53 Dikes are consistent with measures and methods for dike construction of approved infrastructure (above). In 2020, the Lake A53 catchment remained at baseline conditions until it became the IVR Attenuation Pond following fishout and dewatering completion. IVR Attenuation Pond dike construction is planned in 2021 prior freshet. The IVR Attenuation Pond will be operational by freshet 2021.

It should be noted that no details on IVR Dike are presented in this report, as this infrastructure was under detailed engineering design in 2020. Information will be added in the plan once the structure is commissioned.

3.1.4.3 Dewatering

As per Type A Water Licence 2AM-WTP1830, Agnico Eagle initiated the dewatering of Whale Tail Lake (North Basin) in 2019 following the construction of the dike and the fish out. To allow the mining of the Whale Tail Pit, Lake A17 (Whale Tail Lake) was partly dewatered following the Whale Tail Dike construction.

The estimated total volume of Whale Tail Lake (Lake A17) is 8.5 million m^3 (Mm^3). The dewatering started early March 2019. A total of 2,148,542 m^3 of water was discharged directly to Whale Tail Lake South Basin without requiring treatment. The second phase of dewatering started in mid June 2019 discharging to Lake A16 (Mammoth Lake). For this phase of dewatering, water from the North Basin was treated via the TSS removal unit of the WTP and discharged in Mammoth Lake through the diffuser.

Once the dewatering phase was completed in Q2 2020, part of the North Basin located outside the Whale Tail Pit footprint became the Whale Tail Attenuation Pond. The Whale Tail Attenuation Pond is since used to receive contact water from different sumps and ponds around site.

Waterbodies and ponds within the footprint of the IVR Pit, IVR WRSF and IVR Attenuation Pond required dewatering in 2020. To allow the mining of the IVR Pit, lakes A46, A47 and A49 were dewatered in 2020. Following fish out completion, lakes inside IVR pit mining footprint were dewatered and transferred into Whale Tail Attenuation Pond representing a total approximate volume of 215,000 m^3.

Similar process mentioned above was also used to dewater the waterbodies inside IVR WRSF footprint (AP-21, A50, A51 and A52). The water was discharged into lake A53 once its fish out was completed for a total approximate volume of 38,000 m^3.

Similar to the Whale Tail (North Basin) dewatering process, approximately 2/3 of the dewatered water from Lake A53 was pumped and directly discharged to Whale Tail Lake (South Basin). The remaining 1/3 of the water was processed through the WTP during open water conditions. The complete dewatering of A53 represents a total approximate volume of 213,000 m^3. The IVR Attenuation Pond is intended to manage all contact water from 2021 to closure while discharging through the O- WTP during open water conditions.

3.1.4.4 Key Water Management Activities during Construction and Operations

An inventory of waterbodies impacted by mining activities is provided in Table 3.1 (Section 3.1.3) and the water management facilities required for the Plan is provided in Table 3.2 (Section 3.1.4.1). These tables should be read in conjunction with Table 3.3, which presents the yearly major water management activities during the construction and operational phases. Water management activities during the closure phase are described in Section 3.2.

Any water requiring treatment will be pumped to the water treatment plant(s) prior to discharge through the diffuser in Mammoth Lake or through the diffuser in Whale Tail Lake (South Basin) or other alternatives. The latter are outlined in the Whale Tail Pit Expansion Project Adaptive Management Plan (Table 3: Receiver Water Quality Adaptive Management Strategy). The plan is currently under the NWB approval process. The other alternatives for discharge are Lakes D1 and D5 in the case that Level 3 is reached (high risk situation in the receiver water quality). Discharging in Lakes D1 or D5 would require a complete assessment of potential discharge, with approval from the NWB as per NIRB Project Certificate Conditions.

Water collected in the Whale Tail Attenuation Pond and/or IVR Attenuation Pond will be reused to the extent practical in the open pit and dust control operations, and the excess water will be treated by the WTP prior to discharge to the receiving environment.

Non-contact water will be diverted away from the mine site infrastructure by reversing natural flows or by using diversion channels and culverts.

Freshwater usage on site will be supplied from Lake C38 (Nemo Lake) and from Lake A16 (Mammoth Lake) during operations, and from Whale Tail Lake (South Basin) during closure.

In the amended Water Licence the permitted freshwater sources are Nemo Lake (all purpose), Lake D1 (Re-flooding of Whale Tail Pit, IVR Pit, Underground mine, and Whale Tail (North Basin) and associated use, or as otherwise approved by the Board in writing), Whale Tail South (Re-flooding of Whale Tail Pit, IVR Pit, Underground mine, and Whale Tail (North Basin) and associated use, or as otherwise approved by the Board in writing).

Table 3.3 Water Management Activities During Construction and Operations

Mine Year	Water Management Activities and Sequence
Year -1 (2018)	• Temporarily pump contact water from the Stage 1 WRSF sump to Quarry 1 • Temporarily pump contact water from the starter pit, construction, ore stockpiles, industrial sector, and main camp sector to Quarry 1 • Treat turbid water from construction using the construction WTP and discharge in Whale Tail North • Pump STP effluent to Whale Tail Lake (North Basin) • Freshwater intake initially located in Whale Tail Lake (South Basin); moved to Lake C38 (Nemo Lake)
Year 1 (2019)	• Dewatering of Whale Tail Lake (North Basin) to Whale Tail South Basin and Mammoth Lake (through the WTP) • Pump contact water from the open pit to Quarry 1 • Pump contact water from the Whale Tail WRSF Pond to Quarry 1 • Treat through the WTP the Whale Tail North Water above discharge limit and discharge in Lake A16 (Mammoth Lake)

Mine Year	Water Management Activities and Sequence

	• Pump contact water from Quarry 1 to Mammoth Lake (when water quality meets discharge criteria, treat as needed at WTP) (following authorization)
	• Pumping of non-contact water from:
	  ○ North-East Pond to the C-watershed
	  ○ North-East Pond to Whale Tail North
	  ○ North-East Pond to AP5 (Licence B)
	  ○ A53 Lake to Whale Tail North
	  ○ Whale Tail South Basin to Mammoth Lake
	  ○ AP5 to the C-watershed (Licence B)
	  ○ Whale Tail North to Whale Tail South in the summer months
	  ○ Whale Tail North to Mammoth
	  ○ Whale Tail North to AP5 (Licence B)
	• Operation of the Whale Tail Dike seepage collection system by pumping seepage water to Whale Tail South Basin
	• Pump STP effluent to Whale Tail North

Year 2-3 (2020-2021)	• Completion of dewatering activity. WTN becomes an attenuation pond • Pump contact water from the open pit to the Whale Tail Attenuation Pond (to Quarry 1 until May 2020) • Pump contact water from the Whale Tail WRSF Pond to the Whale Tail or IVR Attenuation Pond (to Quarry 1 until freshet 2020) • Treat through the WTP the Whale Tail and IVR Attenuation Ponds contact water and discharge in Lake A16 (Mammoth Lake) or Whale Tail Lake (South Basin) • Pump contact water from Quarry 1 to Mammoth Lake (if water quality meets discharge criteria) until May 2020 • Whale Tail Lake (South Basin) flows to Lake A16 (Mammoth Lake) through the Whale Tail Lake (South Basin) Diversion Channel • Operation of the Whale Tail Dike seepage collection system by pumping seepage water to Whale Tail South when water quality meets discharge criteria • Pump STP effluent to the Whale Tail or IVR Attenuation Ponds • Maintain North-East Pond sector water level by pumping to Whale Tail North Basin (only for 2020) • Construct IVR Diversion and divert non-contact water from the Northeast Sector to Nemo Lake • Dewater waterbodies and ponds inside IVR pit footprint to Whale Tail Attenuation Pond • Dewater waterbodies and ponds inside IVR WRSF footprint to A53 • Dewater Lake A53 to Whale Tail Lake (South Basin) and remaining to Whale Tail Attenuation Pond • Pump GSP-1 contact water to Whale Tail or IVR Attenuation Ponds. • Pump contact water from the IVR Pit to the IVR Attenuation Pond • Pump contact water from the IVR WRSF Contact Water Collection System to the IVR Attenuation Pond • Pump excess water from underground sump to GSP 1 when Underground Storage Stope is full • Pump contact water from the Whale Tail Pit to the IVR Attenuation Pond

Mine Year	Water Management Activities and Sequence
	• Pump contact water from the Whale Tail Attenuation Pond to the IVR Attenuation Pond • Pumping of non-contact water from Whale Tail South Basin to Mammoth Lake • Capture runoff from Whale Tail WRSF and NPAG WRSF; pump to the IVR Attenuation Pond • Treat the IVR Attenuation Pond contact water through the WTP and discharge in Whale Tail Lake (South Basin) and/or Lake A16 (Mammoth Lake)
Year 4 to 7 (2022 to 2025)	• Pump contact water from the Whale Tail WRSF Pond to the Whale Tail and IVR Attenuation Ponds • Treat through the WTP the Whale Tail and IVR Attenuation Ponds contact water and discharge in Lake A16 (Mammoth Lake) or Whale Tail Lake (South Basin) • Whale Tail Lake (South Basin) flows to Lake A16 (Mammoth Lake) through the Whale Tail Lake (South Basin) Diversion Channel • Operation of the Whale Tail Dike seepage collection system by pumping seepage water to Whale Tail South when water quality meets discharge criteria • Pump STP effluent to the Whale Tail Attenuation Pond or IVR Attenuation Pond • divert non-contact water from the Northeast Sector to Nemo Lake using IVR Diversion • Pump GSP-1 contact water to Whale Tail or IVR Attenuation Ponds. • Pump contact water from the Pits to the IVR Attenuation Pond or Whale Tail Attenuation pond • Pump contact water from the IVR WRSF Contact Water Collection System to the IVR Attenuation Pond • Pump excess water from underground sump to GSP 1 when Underground Storage Stope is full • Pump contact water from the WRSF Pond to the IVR Attenuation Pond • Pump contact water from the Whale Tail Attenuation Pond to the IVR Attenuation Pond • Pumping of non-contact water from Whale Tail South Basin to Mammoth Lake • Capture runoff from Whale Tail WRSF and NPAG WRSF; pump to the IVR Attenuation Pond • Treat the IVR Attenuation Pond contact water through the WTP and discharge in Whale Tail Lake (South Basin) and/or Lake A16 (Mammoth Lake)

WRSF = Waste Rock Storage Facility; WTP = Water Treatment Plant.

Table 3-4 presented below summarizes the overall contact water management plan for the major mine infrastructure with the initial water collection location and final water destination. Note that all contact water was sent to the Whale Tail Attenuation Pond in 2020. In 2021, during freshet, a transition phase will be established to move most contact water collection location's discharges from Whale Tail Attenuation Pond to IVR Attenuation Pond. Detailed water management information for major mine infrastructure areas is described in the following sub-sections. Water management of the non-contact water on site is also presented in section 3.1.4.18. Water management flowsheets for the construction and operations phase are provided in Appendix B.

Table 3.4 Overall Site Surface Contact Water Management Plan

Contact Water Source	Initial Contact Water Collection Location	Final Contact Water Collection Location
Industrial Sector	Whale Tail Attenuation Pond	IVR Attenuation Pond (primary) Whale Tail Attenuation Pond (secondary)
Whale Tail and IVR WRSFs Sector	Whale Tail WRSF Ponds IVR WRSF collection system	
Ore Stockpiles	Whale Tail Attenuation Pond	
Landfill	Whale Tail WRSF Pond	
Open Pits (Whale Tail and IVR)	Open pit sumps	

WRSFs = Waste Rock Storage Facilities.

3.1.4.5 Erosion and Sediment Control Plan

As described in the previous sections, Project site infrastructure, channels, sumps, and associated water management activities are designed with consideration of site wide erosion and sediment control. In addition to design controls, best management practices (BMPs) will furthermore ensure that activities, practices, devices or a combination thereof will prevent or reduce the release of sediments and will control erosion. The selection of permanent or temporary BMPs will be specific to the site and timing and may require regulatory approval prior to installation or construction.

Temporary BMPs for Whale Tail and IVR Pits may include:

- Silt fences and fabric installation
- Turbidity curtains
- Sediment control basins to detain sediment-laden water
- Diversion of flows away from the construction area

Permanent BMPs at the Whale Tail and IVR Pits may include:

- Infiltration basins and trenches
- Sedimentation basins or ponds
- Construction of swales in ditches

Monitoring of erosion and sedimentation associated with construction and operations are discussed in Section 3.2 of this plan and are detailed in the Water Quality and Flow Monitoring Plan (Agnico Eagle, 2019), and dike construction sediment control and monitoring is presented in the Dike Construction and Dewatering Management Plan (Agnico Eagle, 2020).

For specific details on sediment control guidelines and license requirements, on erosion monitoring and mitigation during freshet and the rise of water level in the South Basin of Whale Tail Lake, refer to the Whale Tail Project - Erosion Management Plan (Agnico Eagle, 2018b).

3.1.4.6 Whale Tail Attenuation Pond

One of the main contact water ponds of the project (i.e., Whale Tail Attenuation Pond) is located in a deep part of Whale Tail Lake (North Basin), following the dewatering of the North Basin. Until freshet 2020, Quarry 1 was used as main contact water pond for the Whale Tail site. During freshet 2020, contact water from the major mine infrastructure was diverted and/or collected in the Whale Tail Attenuation Pond. Contact water from the Whale Tail WRSF Pond and runoff water in the open pit collected by sumps was also pumped to the Whale Tail Attenuation Pond.

The excess water is treated by the WTP for TSS and arsenic if required prior to discharge to the receiving environment via the diffuser into Lake A16 (Mammoth Lake) or Whale Tail South. Water quality objectives for arsenic and phosphorous was met via the diffusor design: 10 ports at 12.6 m spacing, 75mm diameter diffusor ports, and effluent mixing (mixing zone).

For 2021, Whale Tail Attenuation Pond will remain one of the main contact water ponds for the project. However, excess water will be transferred to IVR Attenuation Pond.

3.1.4.6 IVR Attenuation Pond

The other main contact water pond of the Project (i.e., IVR Attenuation Pond) will be in a deep part of former Lake A53, following the A53 dewatering and IVR dike construction.Contact water from the IVR WRSF collection system will be pumped to the IVR Attenuation Pond.

The maximum operating level for normal condition is set at El. 163.2 at all time. The normal operating level will be set at a lower elevation based on operational strategy. Details on the operating level can be found in the OMS manual for the Whale Tail Water Management Structures (AEM, 2021).

Excess water will be treated by the WTP for TSS and arsenic if required prior to discharge to the receiving environment via the diffuser into Lake A16 (Mammoth Lake) or Whale Tail South.

Monitoring of the effluent discharge to Mammoth Lake or Whale Tail South is done as per the Water License requirement and is detailed in the Whale Tail Pit Water Quality and Flow Monitoring Plan.

3.1.4.7 Water Management in Whale Tail Waste Rock Storage Facility

The Whale Tail WRSF will be used to permanently store all waste rock and overburden from mining activities.

Seepage and runoff from the Whale Tail WRSF during the construction and operational phases will be managed via the Whale Tail WRSF Pond, isolated by the Whale Tail WRSF dike, where the contact

water was pumped to the Whale Tail Attenuation Pond for further treatment until 2021 (i.e., when the IVR Attenuation Pond becomes operational), and to the IVR Attenuation Pond

Runoff from the ultimate footprint of Whale Tail WRSF will report to the Whale Tail WRSF Contact Water Collection System and the IVR Pit.

All overburden soils will be stabilized with waste rock berms in order to limit spreading and soil water separation. More details about management of the Whale Tail WRSF are presented in the Mine Waste Rock and Tailings Management Plan.

In April 2019, O'Kane Consultants developed a landform water balance model for the Whale Tail and IVR WRSFs (OKC, 2019). Information on the landform water balance model can be found in the report referenced in the management plan (OKC, 2019). The objective of the landform water balance was to estimate the runoff, interflow, and basal seepage rates for different slopes and aspects of the Whale Tail and IVR WRSFs.

3.1.4.8 Water Management in IVR Waste Rock Storage Facility

The IVR WSRF is in operation since the IVR Pit was initiated.. Anticipated runoff from the IVR WRSF during freshet 2021 will be sent to the IVR Attenuation Pond. The total catchment of the IVR WRSF increases proportionally with the increase in waste rock footprint.

3.1.4.9 Water Management for Overburden Storage

The overburden storage is located within the catchment of the Whale Tail Attenuation Pond as shown in Appendix A. Based on the topographic information, contact water will naturally flow to the Whale Tail Attenuation Pond for further treatment. Channels will be constructed if deemed required.

3.1.4.10 Water Management for Ore Stockpile Areas

The ore stockpiles are located within the catchment of the Whale Tail Attenuation Pond as shown in Appendix A. Based on the topographic information, contact water will naturally flow to the Whale Tail Attenuation Pond for further treatment. Channels will be constructed if deemed required and water management systems (i.e. pump, piping, etc) will be installed to direct the seepage and runoff to the pond.

The Ore Stockpiles are designed based on the following considerations. A cover of overburden and/or waste rock was placed over original ground to reduce any thaw-induced differential settlements. Waste rock was then placed to follow the natural topography, thereby reducing the likelihood of water ponding on the surface of the pad requiring additional maintenance. A final grade of about 0.5% sloping towards the Whale Tail Attenuation Pond was achieved. Any surface run off from the ore stockpile or the pad will therefore be directed to the Attenuation Pond containment area.

3.1.4.11 Water Management for Quarry 1

Prior to commissioning of the Whale Tail Attenuation Pond, contact water collected from the Stage 1 WRSF sump, from the starter pit, construction, and industrial sectors was pumped to Quarry 1.

The contact water from Quarry 1 was pumped to Mammoth Lake without treatment when the water quality met discharge criteria. The discharge was done via the permanent diffuser in Mammoth Lake. If needed, water was treated via the Water Treatment Plant to meet discharge criteria.

Water quality monitoring follows the requirements of the Water License 2AM-WTP1830. Discharge from Quarry 1 ceased in May 2020.

3.1.4.12 Water Management for the Whale Tail Open Pit Sector

The Whale Tail open pit is planned to extend to approximately 300 m below the ground surface. The open pit will be mined mostly within permafrost except for the north-central portion of the pit which will be within the closed talik at the northern end of Lake A17 (Whale Tail Lake). The pit does not extend through the bottom of the closed talik; however, the open pit acts as a sink for groundwater flow during operations, with water induced to flow up through the open talik beneath the central portion of Lake A17 (Whale Tail Lake) and into the open pit. Accordingly, groundwater inflows into the open pit are expected; this water will be mixed with the open pit contact water and pumped to the IVR Attenuation Pond and/or Whale Tail Attenuation Pond for further treatment.

Once mining intersects the closed talik, the groundwater inflow to the pit is predicted to be 1,140 m^3/day. The overall inflow to the pit is not expected to decrease significantly as the pit deepens because the flow of water is primarily through the permeable weathered bedrock and because the lower portion of the pit is in permafrost. It is important to note that most of the volume is expected to be due to residual water that remained and lakebed sediment drainage as the pit expanded into dewatered section of the Whale Tail North Basin. In 2021, the pit will continue to expand eastward and south. While most of the expansion is projected to be excavated in winter time, some sediment drainage is expected during the 2021 summer.

Groundwater inflow predictions during operations conservatively assume that no freeze-back will occur in the pit walls during mining. This assumption was adopted for Whale Tail Pit to be conservative and because during the first few years of mining, the pit will be both widened and deepened, resulting in the continual exposure of unfrozen bedrock. During the later years of mining; however, the pit development will be entirely within the permafrost and significant freeze back in the pit walls is considered possible and has been observed at Meadowbank. Although not simulated, if freeze back does occur as is the case at Meadowbank, actual groundwater inflow to the pit could be significantly lower.

Additional details on the most recent site water balance are presented in Section 3.3 of this plan.

TDS concentration in the groundwater inflow to the pit was predicted to decrease during mining. The relatively low TDS concentration and decrease in TDS over time reflects the minimal upwelling of higher salinity waters at depth due to the presence of the permafrost at the base of the pit and the high contribution of lake water and Whale Tail Attenuation Pond water.

3.1.4.13 Water Management for the IVR Open Pit Sector

The IVR Pit is located just north of Whale Tail Lake, within the Northeast Sector in the permafrost environment, thus no groundwater inflows are predicted. Water management infrastructures are designed to only manage runoff water reporting to the pit during freshet. The IVR Pit was initiated in Q3 2020. Its operational runoff is conveyed to the active attenuation pond (i.e. IVR Attenuation Pond).

3.1.4.14 Water Management for Haul Roads

A network of access and haul roads will connect the ore body to the Whale Tail and IVR WRSF Sector and the Industrial Sector. Most of the roadways servicing the mining area will drain directed towards the proposed contact water management infrastructure. Detailed information on roads is described in the Whale Tail Pit Haul Road Management Plan.

The approach to water management for these roads will involve the implementation of local best management practices during the construction, operational, and closure phases. The roads are constructed of non-potential for acid generating and non-leaching waste rock from mining operations. Other best management practices will strive to minimize the amount of runoff originating from the roadways and to prevent the migration of surfacing material from the roadways and crossings. Any areas identified as point sources of runoff originating from the roadways or crossings can be managed locally with silt fences, straw booms, turbidity curtains, interceptor channels, rock check dams, and/or small sedimentation ponds.

3.1.4.15 Water Management for Landfill

The landfill is located southeast of the Whale Tail WRSF, within the catchment of the Whale Tail WRSF Pond, as shown in Appendix A. Based on the topographical information , runoff and any seepage from the landfill will naturally flow to the Whale Tail WRSF Pond and then be pumped to the Whale Tail Attenuation Pond for further treatment before discharge.

Further information on the management of this facility is described in the Whale Tail Pit Landfill and Waste Management Plan.

3.1.4.16 Sludge and Brine Management from Water Treatment Plants

This section summarizes water treatment requirements and is extracted from the Mean Annual Water Balance and the Mine Site and Downstream Receiving Water Quality Predictions, from Golder Associates, both dated May 2019. Any water requiring treatment will be pumped to the water treatment plant(s) prior to discharge through the diffuser in Mammoth Lake or through a diffuser in Whale Tail Lake (South Basin) or other alternative discharges.

Sludge disposal will be done in the Whale Tail WRSF.

OPERATION WATER TREATMENT PLANT (WTP)

The arsenic and TSS water treatment plant (WTP) was commissioned at the beginning of May 2019, to treat the final dewatering volumes from Whale Tail Lake (North Basin). This plant is used to treat surface water for TSS and Arsenic before discharging to approved diffuser. The arsenic water treatment unit has not been required so far.

Sludge water from the Operation Water Treatment Plant (OWTP) is dewatered with a centrifuge to produce a cake having a density with 20% of solid content. This cake will be stored in the Whale Tail WRSF. The maximum predicted annual volume of cake from the OWTP is approximately 5,760 cubic metres (m^3).

TDS WATER TREATMENT PLANT (S-WTP)

The S-WTP is not needed according to the latest water balance as the current underground mining plan is designed to minimize the inflows requiring TDS treatment by stating in the permafrost. The S-WTP would include a TDS Treatment plant if required.

The concept for the TDS Treatment plant would be to treat low salinity water that is stored in the GSP-2 until closure. The TDS Treatment plant would be active only from June through September. The permeate would be combined with the WTP effluent for discharge from site. The brine produced from the TDS Treatment plant would be stored in GSP-1. The S-WTP could also include two Desalination units, which would treat water stored in GSP-1. The salt solid produced from treatment would either used at site and/or shipped off site, and the permeate would be combined with WTP effluent for discharge from site.

Agnico Eagle is currently developing an Underground Project limited into the permafrost only. This change results in no more treatment and discharge of saline water to Whale Tail Lake. The water management strategy for underground water would only be based on storing water in GSP-1 and GSP-2. High and low salinity water would not be segregated anymore. At closure, the water from GSP1 and GSP2 will be sent underground.

3.1.4.17 Underground Water Management

Underground development groundwater and contact water will be managed separately from surface infrastructure contact water. For underground water management, the following key strategies were implemented to develop the underground water Management Plan:

- A Groundwater Storage Pond system (GSP) is designed to capture TDS (salt) affected waters. Up to three GSPs are planned to provide operational flexibility and adaptive management opportunity.

- Excess water volumes in the underground mine will be managed through the Underground Mine Stope and GSP-1 and GSP-2. Excess water volumes may also be managed with GSP-3 planned for contingency, operational flexibility, and adaptive management opportunity
- At the end of underground mining, any remaining water in the GSP ponds will be pumped underground for flooding of the underground workings

3.1.4.18 Non-Contact Water Management

In order to adequately manage non-contact water on site, some passive flows have been substituted with a pumping alternative that complies with the original intent of the approved water balance and Water License 2AM-WTP1830 (same origin and destination of water). Those systems were proposed as adaptive management methods, in response to the encountered site conditions during open water season and the high volume of precipitation received, resulting in additional volume of water to manage.

The actual non-contact water management systems put in place in summer 2019 and 2020 are described below.

North-East Pond to C-watershed

The non-contact water from the North-East (NE) Pond watershed was initially planned to overflow by gravity toward Nemo Lake once the North-East Dike is operational. During a routine inspection in July 2019, it was observed that the topography toward Nemo Lake would not allow water to overflow naturally before overtopping the dike liner. Following this observation, water was pumped from NE Pond toward the project site, adding pressure on dewatering activity. The water from the NE Pond was then pumped to the tundra within the Nemo watershed (Water shed C). This system for water level management was operational in 2019 and 2020 prior de dewatering of the IVR footprint to manage water level in the NE Pond when required, until NE Dike was dismantled in late 2020.

North-East Sector Pond Management

During the summer of 2019 and 2020, significant water inflows from Lake A49 towards the Whale Tail Pit area were noticed. Maintaining the water elevation in Lake A49 throughout freshet was required to avoid the transformation of non-contact water (Lake A49 overflow) to contact water (pit water). The objective of this water transfer is to minimize contact water creation. Water was sent into the North-East Pond. Lakes A47 and A49 were then dewatered in 2020 as part of the IVR Pit development.

A53 Lake to Whale Tail South

The non-contact water from the A53 watershed was planned to be redirected to Whale Tail South through the East Channel.

Prior the dewatering phase, the water level in Lake A53 was maintained to the natural level by pumping exceeded volume to Whale Tail South as per previous approval from NWB. Regular water level monitoring was conducted at this time. The monitoring aligns with the Water License 2AM-WTP1830 requirements, Schedule I Table 2 for ST-WT-7 and as per Part F Item 7 for TSS limits.

Once the dewatering phase completed, as per explained in section 3.1.4.3 of this report, A53 became IVR Attenuation Pond.

Whale Tail South Discharge to Mammoth Lake

The non-contact water from Whale Tail South Basin was pumped to Mammoth Lake in 2019 as per approval from NWB. This pumping activity was required to manage and then maintain the water level in Whale Tail South Basin, in order to allow for the construction of the Whale Tail South Channel (SWTC) and preserve Whale Tail Dike integrity. This system temporarily substitutes passive flow via the SWTC with a pumping alternative that complies with the original intent of the approved water balance and Water License 2AM-WTP1830 (same origin and destination of water). This pumping activity also provides flexibility and adds robustness to the water management strategy. Discharge was completed via a diffuser to avoid erosion into Mammoth Lake. In 2020, no mechanical transfer from Whale Tail South to Mammoth Lake occurred but Agnico might re-use this system in the future to

.

Whale Tail Dike Seepage Discharge to Whale Tail South Basin

The non-contact water seeping from Whale Tail Dike (WTD) is collected into the seepage collection system before reaching the Whale Tail Attenuation Pond and then discharged to Whale Tail South Basin. The seepage collection system consists of 4 pumping wells where surface seepage is diverted into and that are deep enough to potentially collect most below surface seepage as well. This system allows to minimize volume of water reporting to Whale Tail Attenuation Pond. Details of the installation and the system will be compiled in the as-built report, which is in progress and will be completed once the system is fully commissioned.

Seepage water, collected from this system, can discharged into the Whale Tail South Basin via a diffuser without treatment if the water quality meets the discharge criteria of the Water License 2AM-WTP1830. If discharge criteria are not met, water will overflow from the pump stations to the Whale Tail Attenuation Pond, and then will be pumped through the WTP for discharge.

Routine monitoring of the seepage water quality from each pump station will be as per the Water Licence 2AM-WTP1830 and the Metal and Diamond Mining Effluent Regulation (MDMER). This monitoring will allow Agnico Eagle to put mitigation measures (for example, treating the water via the WTP) in place if needed. Turbidity and pH will also be monitored.

In 2020, following the Whale Tail Dike grouting campaign, the seepage pH results indicated an increase above the acceptable limit indicated in the Water License 2AM-WTP1830. The seepage collected from the system was therefore pumped to Whale Tail Attenuation Pond.

In 2021, Agnico Eagle will closely continue to monitor the situation.

IVR Diversion Channel

This IVR Diversion channel has the intent to collect non-contact runoff water from the east side of the Nemo watershed and diverting by gravity the water to Nemo Lake. This infrastructure allows minimizing the volume of non-contact runoff water reporting to IVR pit area. IVR Diversion Channel construction has been completed in 2020. The 260m long channel has been excavated and then covered with multi layers of fine and coarse materials and with geotextiles which will allow minimizing TSS in water reporting to Nemo Lake. More details of the channel construction can be found in the as-built report (SNC, 2021).

2021 will be the first year of the channel's operation. For this reason, Agnico Eagle will closely monitor and inspect during the year this new infrastructure to ensure it will meet operational criteria and respect minimal TSS.

South Whale Tail Channel (SWTC)

Construction of South Whale Tail Channel has been completed in 2020 prior freshet. The SWTC connect Whale Tail South basin to Mammoth Lake. The 900 m long channel is approximately 5m wide at the base with lateral slope of 3H:1V. Once excavated, the channel has been covered with multi layers of coarse and fine materials, rip rap and layer of geotextiles to ensure minimal TSS in the flow reporting to Mammoth Lake and also preventing erosion. Also, at the outlet of the channel, a turbidity barrier was installed and will remain in place as a supplementary protection to avoid TSS flowing in Mammoth Lake. The channel allows to naturally control Whale Tail South water level without any mechanical transfer intervention. Details of the channel construction can be found in the as-built report (SNC, 2020).

In mid-June 2020, first flow was observed in the channel reporting to Mammoth Lake. In 2020, a total of 3.9 M m^3 have been reported flowing through this channel until mi-November when the inlet of the channel froze.

In 2021, routine inspections and monitoring will be executed to ensure channel continue to operate under normal conditions and to ensure minimal TSS reporting to Mammoth Lake.

3.1.5 Freshwater and Sewage Water Management

3.1.5.1 Freshwater Management

The permitted freshwater sources as per the Water License 2AM-WTP1830 are Nemo Lake (all purpose), Lake D1 (Re-flooding of Whale Tail Pit, IVR Pit, Underground mine, and Whale Tail (North Basin) and associated use, or as otherwise approved by the Board in writing), Whale Tail South (Re-flooding of Whale Tail Pit, IVR Pit, Underground mine, and Whale Tail (North Basin) and associated use, or as otherwise approved by the Board in writing).

Freshwater usage includes potable use, fire suppression, dust suppression, drilling water (if contact water is not available), water for the emulsion plant, and water for the truck shop. The freshwater source is Lake C38 (Nemo Lake), and Lake A17 (Whale Tail Lake) during closure. For explosives mixing and associated use, the water is pumped from Lake A16 (Mammoth Lake), as per Part E, condition 1 of the Water License 2AM-WTP1830. Freshwater will also be required to refill Whale Tail Lake (North Basin) at closure and will be sourced from Lake D1 and inflows to Whale Tail Lake (North Basin). Agnico Eagle will endeavour to minimize the amount of freshwater required for the Project, where possible.

Freshwater is sourced through a freshwater intake and pump system. The intake consists of vertical filtration wells fitted with vertical turbine pumps that supply water on demand. The intake is connected to the pump house with piping buried under a rockfill causeway. The intake pipe exits at the bottom of the causeway and is fitted with a stainless-steel screen, as per Part E, condition 4 of the Water License 2AM-WTP1830. The rockfill causeway acts as a secondary screen to prevent fish from becoming entrained.

The stainless-steel screens design for the water intake is consistent with the Fisheries and Oceans Canada (DFO) “Freshwater Intake End-Of-Pipe Fish Screen Guideline” (DFO 1995). As per the DFO policy intake screens will be cleaned every 2 years. The freshwater intake will be moved to Whale Tail Lake (South Basin) at closure.

Freshwater is pumped to an insulated main storage tank located at the Whale Tail Camp. The freshwater pipeline is made of a high density polyethylene pipe and insulated and heat traced. The Whale Tail Camp has a Freshwater Treatment Plant (potable). In the Potable WTP, the freshwater first goes through sand filters and then is pumped through ultraviolet units, and finally treated with chlorine. The treated water is stored within a potable water tank. Potable water is monitored according to the Nunavut health regulations for total and residual chlorine and microbiological parameters. Treated potable water is piped to other facilities requiring potable water. Detailed plant operation specifications were provided in FEIS Volume 1, Section 1. 2.4.1.

Freshwater and potable water use is required during operations and additional freshwater will be required from Whale Tail Lake at closure. The current Type A Water Licence Part E Item 1 and 2 provides for a maximum quantity of water use not to be exceeded at 700,859 m^3 annually during

construction and operation as well as 14,855,606 m^3 annually during closure. The freshwater usage from Nemo Lake needs to respect the license limit of 209,544 cubic meter per year.

It is important to note that total annual withdrawals of water from Nemo Lake (209,554 m^3/year) will remain well below the lake's annual inflow volume of approximately 476,000 m^3 (based on the mean annual water balance of the lake under baseline conditions), and ii) DFO's guideline of 10% of the under ice volume for the duration of operations (i.e., under-ice volume of 6,170,000 m^3 derived from FEIS Addendum Appendix 6-M submitted with the Whale Tail Pit - Expansion Project). Residual effects to fish and fish habitat are therefore expected to be negligible.

During closure, the Whale Tail and IVR Pits, the underground mine, and Whale Tail Lake (North Basin) will be allowed to flood naturally with non-contact water, treated water, freshwater from direct precipitation, runoff from adjacent land, and Whale Tail Lake (South Basin). It is anticipated that approximately 47,000,000 m^3 over 16 years from Whale Tail Lake is required to fill the mined-out Whale Tail Pit (i.e., approximately 55,000,000 m^3), IVR Pit (i.e., approximately 10,000,000 m^3), underground mine (i.e., approximately 1,000,000 m^3) and Whale Tail Lake (North Basin) (i.e., approximately 6,000,000 m^3) to its original level, representing approximately 2,900,000 m^3/year from Whale Tail Lake (South Basin).

As per part E, condition 2 of the Water License 2AM-WTP1830, the use of water from Whale Tail Lake shall not exceed a total of 10,655,000 m^3/year commencing when notification of closure is received by the NWB through to the expiry of the Licence. The limit for Nemo Lake is 14,672 m^3/year and the limit for Lake D1 is 1,710,000 m^3/year, both commencing when notification of closure is received by the NWB through to the expiry of the Licence.

3.1.5.2 Sewage Water Management

Sewage is collected from the camp and change-room facilities and pumped to a STP. The objective of the STP is to treat sewage to an acceptable level for discharge to the Whale Tail or IVR Attenuation Pond via a sewage water discharge pipeline. The STP is housed in a prefabricated (modular) structure located in the Whale Tail Camp. The sewage treatment system is designed based on the occupation maximum of the camp for 400 persons (240L per day and per person). The design average daily flow is 96 m^3/day (4 cubic metres per hour [m^3/hour]).

Previously, the sewage treatment plant at the Amaruq camp could accommodate 400 workers. With the addition of four wings to the Operations Camp for the project expansion, the total camp capacity was increased to 546 workers. An expansion of the sewage treatment systems was thus required. These systems are built with typical 40-foot containers.

No major change in operation and water quality happened as a result of this expansion. The upgraded sewage treatment system is designed based on a flow rate of 240 L per day per room for 546 people, for an average daily flow rate of 131 m^3/day (5.42 cubic metres per hour [m^3/hour]).

The sewage treatment plant receives two streams of sewage. The first source is domestic sewage, which is fed directly to the fine screening process to remove any fibers or debris that might damage the membranes. The second source is kitchen sewage which is pre-treated in the oil and grease tanks to remove oil and grease prior to being fed into the fine screen.

The STP for the camp facilities is designed to meet appropriate guidelines for wastewater discharge (for example, NWT Water Board 1992). Wastewater System Effluent Regulations (WSER) criteria are not currently applicable to systems located in Nunavut and is unlikely to apply to the Project effluent quality.

Table 3.5 provides the anticipated performance of the system compared to the WSER criteria. Further information on the management of this facility is described in the Whale Tail Sewage Treatment Plant Operation and Maintenance Manual (Agnico Eagle, 2019a).. As stipulated in Part B, Item 17, Agnico Eagle will review the Plans as required by changes in operation and/or technology and modify the Plans accordingly in the form of an addendum to be included in the Annual Report.

Table 3.5 Effluent Quality and Wastewater Characteristics

Parameter	Units	Regulatory Limit	Design Value
Wastewater			
• Biochemical Oxygen Demand	mg/L	-	952
• Total Suspended Solids	mg/L	-	300
• Total Kjeldahl Nitrogen	mg/L	-	130
• Ammonia Nitrogen	mg/L	-	130
• Fat, Oil and Grease	mg/L	-	30
• pH	-	-	6 to 9.5
• Water Temperature	°C	-	10 to 25
• Alkalinity	mg/L as $CaCO_3$	-	471.1
• Prohibited Chemicals/Compounds	Not present		
• Grinder Pumps	Not present Upstream of MBR		
Effluent			
• pH	-	6-9.5	6.5 to 8.5
• Carbonaceous Biochemical Oxygen Demand	mg/L	<25	<5
• Total Suspended Solids	mg/L	<25	<1
• Un-ionized Ammonia	mg/L	<1.25	<0.08
• $N0_3$-N	mg/L	<5	4
• TP	mg/L	<0.5	0.5
• Fat, Oil and Grease	mg/L	<5	<1
• Fecal Coliform	CFU/100mL	<200	Non-Detect

• Total Residual Chlorine	mg/L	<0.02	0

1. Noted values are assumed blended between kitchen and dormitory wastewater after the grease trap.
2. A complete list of prohibited chemicals is included in the membrane maintenance manual.

3.2 Water Management During Closure

Mine closure is integral to the mine design and will be modified during operations. Planning for permanent closure is an active and iterative process. The intent of the process is to develop a final closure plan including specific water management components using adaptive management. This begins during the mine design phase and continues through to closure implementation. Adaptive management enables the plan to evolve as new information becomes available through analysis, testing, monitoring, and progressive reclamation. The detailed mine closure and reclamation activities are provided in the Whale Tail Pit Interim Closure and Reclamation Plan (Golder, 2020).

Water management during closure and reclamation will involve actively filling the underground facilities and IVR Pit, and passively allowing the Whale Tail Attenuation Pond and the Whale Tail Pit to flood. The Groundwater Storage Ponds and IVR Attenuation Pond will be emptied at the start of closure and backfilled with NPAG/NML waste rock. The Whale Tail and IVR WRSFs will be progressively covered with NPAG/NML waste rock throughout operations and are expected to be completely covered at the beginning of closure.

Water management during closure and reclamation will involve maintaining contact water management systems on site until monitoring results demonstrate that water quality is acceptable for discharge of all contact water to the environment without further treatment. Once pit lake water quality meets the discharge criteria, the water management systems will be decommissioned to allow the water to naturally flow to the receiving environment. In 2018, a Whale Tail WRSF seepage analysis and hydrodynamic modelling of Mammoth Lake were conducted to address NIRB project certificate Term and Condition no. 6a. The objectives were to assess Mammoth Lake near-field water quality at the WRSF seepage outlet post-closure and to evaluate seasonal water circulation patterns in Mammoth Lake resulting from effluent discharge. This analysis also aimed to predict and evaluate the water quality within Mammoth Lake during operations and post-closure (Golder, 2019c). Results show that no modification to the water management strategy is needed concerning closure activities and sequence.

Runoff from the Whale Tail WRSF and discharge from Whale Tail Lake (North Basin) (IVR runoff flows to Whale Tail Lake (North Basin)) will enter and mix in Mammoth Lake. Concentrations outside the mixing zone of the Whale Tail WRSF contact water plume are predicted to meet receiving water quality criteria. Results of the studies showed that baseline drainage patterns of East Sector needs to be re-established to direct runoff towards the Whale Tail Attenuation Pond, including runoff over the backfilled IVR Attenuation Pond. Runoff from the IVR WRSF and the backfilled Groundwater Storage Ponds needs to be passively directed to the Whale Tail Pit. The IVR Pit walls are composed primarily

of south komatiite and basalt with some north greywacke rock. Based on these predictions, a control mechanism will be required for IVR Pit Walls including re-sloping and cover placement.

The dewatered Whale Tail Pit and IVR Pit area will be filled with a combination of natural runoff and contact water from the entire site (i.e., the Whale Tail and IVR WRSF Contact Water Collection Systems and the Whale Tail and IVR Attenuation Ponds), and water pumped from Whale Tail Lake (South Basin). The runoff and seepage from the Whale Tail WRSF and IVR WRSF will continue to be collected in the designated collection ponds and pumped to Whale Tail Lake (North Basin) during active closure (re-filling). Water will be monitored during flooding and until results demonstrate that water quality conditions from the WRSFs are acceptable for direct discharge. Based on the cover thermal model results, the Whale Tail WRSF and IVR WRSF will be covered with a cover of 4.7 m thick to be constructed with NPAG/NML waste rock. The intent of the cover is to contain the yearly active layer inside the thickness of the cover and to maintain a temperature below 0° Celsius for the underlying rock. The objective of the cover is the control of acid generating reactions and of migration of contaminants by freezing. Consistent with the Approved Project, the segregation of the PAG/NPAG and ML/NML waste rock will occur during the operation of the mine.

The key water management activities during mine closure are summarized in Table 3-6. Appendix B shows the water management flowsheets during mine closure phases.

Table 3.6 Key Water Management Activities During Mine Closure

Mine Year	Key Water Management Activities and Sequence
Year 8 (2026)	• Dewater the Groundwater Storage Ponds and the IVR Attenuation Pond to the underground mine • Backfill the Groundwater Storage Ponds and the IVR Attenuation Pond with NPAG/NML waste rock • Draw-down of the raised Whale Tail Lake (South Basin) to 153.5 masl, pumping to the underground until refilled and then to the IVR Pit. Lake A55, Lake A65, Lake A62, Lake A63, Lake A18, Pond A-P23, Lake A20, Lake A21, Lake A22, and Lake A45 return to baseline elevations. • Water from Whale Tail Lake (South Basin) ceases flow through Whale Tail Lake Diversion Channel and to Lake A16 (Mammoth Lake) • Decommission IVR Diversion to re-establish baseline drainage patterns of the Northeast Sector catchment towards the IVR Pit • Pump WRSF Pond water to the IVR Pit • Pump Whale Tail Lake (South Basin) to the IVR Pit during summer months to maintain its elevation at 153.5 masl • Re-establish baseline drainage patterns of East Sector runoff towards the Whale Tail Attenuation Pond, including runoff over the backfilled IVR Attenuation Pond • The Whale Tail Attenuation Pond overflows (once full) into the Whale Tail Pit • Passively direct runoff from the IVR WRSF and the backfilled Groundwater Storage Pond to the Whale Tail Pit • Runoff from the backfilled Groundwater Storage Ponds flow to the Whale Tail Pit

Mine Year	Key Water Management Activities and Sequence
	• Start of site water quality monitoring of flooding open pit reservoirs
Year 9 to Year 23 (2027 to 2041)	• Refilling of the IVR Pit to 149.3 masl (i.e., the spill elevation of the IVR Pit onto the bed of Whale Tail Lake [North Basin]) expected in 2027 • The IVR Pit reaches the spill elevation to the Whale Tail Pit and begins overflowing to the Whale Tail Pit • A sill will be constructed at closure on the upstream of Mammoth Lake to increase the water level by 1 m to 153.5 m.
Year 24 (2042)	• The Whale Tail Pit reaches the spill elevation that connects it with the Whale Tail Attenuation Pond and both water bodies fill simultaneously • The Whale Tail Pit and the Whale Tail Attenuation Pond reach the spill elevation that connects the Whale Tail Pit with the IVR Pit, and all three reservoirs fill simultaneously to 153.5 masl, forming Whale Tail Lake (North Basin) • Once Whale Tail Lake (North Basin) is flooded to 153.5 masl, pumping of the Whale Tail Lake (South Basin) to Whale Tail Lake (North Basin) during summer months will be on-going to maintain the elevation of Whale Tail Lake (South Basin) to 153.5 masl until water quality allows to decommission the dikes and reconnect the North and South Basins of Whale Tail Lake • Once Whale Tail Lake (North Basin) is flooded to 153.5 masl, remove STP • Once Whale Tail Lake (North Basin) is flooded to 153.5 masl, decommission the Whale Tail WRSF Dike and re-establish natural drainage patterns of the Whale Tail WRSF Sector Lake A16 (Mammoth Lake) • Once Whale Tail Lake (North Basin) is flooded to 153.5 masl, create spillway in Mammoth Dike to re-establish baseline flow patterns to Lake A16 (Mammoth Lake) • Decommission the Whale Tail Dike, water quality permitting • Remove site infrastructure
Post-Closure (2043+) (triggered when water quality in all three water bodies meets the appropriate water quality criteria)	• Monitoring

WRSF = Waste Rock Storage Facility; N/A = not applicable.

3.2.1 Flooding Sequence

The flooding sequence will be adapted to meet water quality closure objectives to allow for the reconnection of the lakes. Both the water balance and water quality forecast will be updated during operations and closure phases in order to optimize the flooding sequence.

The Whale Tail Open Pit will be filled with a combination of natural runoff and contact water from the entire site. The Underground mine and the IVR Open Pit will be filled with a combination of natural runoff and contact water from the entire site and water pumped from Whale Tail Lake (South Basin). Flooding will begin following the end of operations.

Beginning in 2026, the water accumulated in Whale Tail Lake (South Basin) over the years of operations will be pumped into the underground mine until it is filled and into the IVR Pit thereafter. Active closure will be consistent with the Approved Project and current Type A Water Licence 2AM-WTP1830. Whale Tail Pit active closure will be followed by passive closure measures until the pits and underground have flooded, Whale Tail Lake and IVR Pit water levels are restored, and runoff from the WRSFs are shown to be suitable for uncontrolled release.

The Whale Tail Pit operations will be closed and reclaimed in a manner consistent with the Approved Project and as required under Project Certificate No. 008 and Type A Water Licence 2AM-WTP1830.

It is anticipated that approximately 72,000,000 m^3 over 16 years from Whale Tail Lake is required to fill the mined-out Whale Tail Pit (i.e., approximately 55,000,000 m^3), IVR Pit (i.e., approximately 10,000,000 m^3), underground mine (i.e., approximately 1,000,000 m^3) and Whale Tail Lake (North Basin) (i.e., approximately 6,000,000 m^3), including approximately 2,900,000 m^3/year from Whale Tail Lake (South Basin).

Following the first pumping summer, the water elevation in Whale Tail Lake (South Basin) will be back to the baseline value (153.5 masl) and no outlets will be available for this basin as the Whale Tail Lake (South Basin). The elevation of the Mammoth sill will be 153.5 masl. The Diversion Channel inlet is at the elevation 155.3 masl and the Whale Tail Dike is maintained in place. Refilling of the IVR Pit to 149.3 masl (i.e., the spill elevation of the IVR Pit onto Whale Tail Lake (North Basin) is expected in 2027. Refilling of Whale Tail Pit to 146.3 masl (i.e., the spill elevation of the Whale Tail Pit onto the bed of Whale Tail Lake (North Basin) is expected in 2039.

3.2.2 Contact Water Collection System

The contact water collection system will remain in place to collect surface runoff water and seepage from the mine site until the open pits are flooded. During this period, the Industrial Sector and the Whale Tail Camp will be reclaimed, and the non-essential site infrastructure will be removed. Thereafter, water in these sectors will no longer be collected and will contribute to the reestablishment of the natural elevation of Whale Tail Lake (North Basin). The Mammoth Dike and Whale Tail Dike will remain in place until pit lake water quality meets receiving environment water quality objectives. If this occurs after full flooding as is predicted at this time, the pit lake water elevation will be maintained at 153.5 masl by pumping from Whale Tail (South Basin)to the North Basin, and through controlled discharge from Whale Tail (North Basin) to Mammoth Lake over the Mammoth sill.

In the Whale Tail WRSF Sector, the contact water collection system will remain in place. Dikes will not be reconnected until the water quality in the flooded area meets Closure water quality objectives. Contingency for water treatment if required in closure is also accounted for in the closure plan.

In closure, water from the Whale Tail WRSF Contact Water Collection System is used to actively flood IVR Pit, and the IVR WRSF water is directed to Whale Tail Pit. In post-closure, water from the Whale Tail WRSF Contact Water Collection System is allowed to flow passively to Mammoth Lake as baseline drainage patterns are re-established. Lower volumes and chemical loading of water originating from either of the WRSFs would improve water quality throughout closure in the Whale Tail and IVR Pits, and in Mammoth Lake in post-closure.

Dike decommissioning will involve the removal (breach) of a portion of the dike to original ground levels whenever possible. Consideration will be given to breach staging, with the above water portions of the dike/berm in the breach area removed during winter periods, when there will be little surface water flow, thereby minimizing the potential release of sediments to the neighbouring waterbodies. The remainder of the breach would be completed during the open water season following freshet to allow for the deployment of turbidity curtains to control potential releases of sediment.

For water collection and management systems closure the infrastructure will be re-contoured and/or surface treated according to site-specific conditions to minimize wind-blown dust and erosion from surface runoff, if required. This closure activity is intended to enhance site area development for re-colonization by native plants and wildlife habitat.

3.2.3 Post-Closure Modeling Results Summary

Following refilling of Whale Tail Lake (North Basin) to 153.5 masl (i.e., to overtop the Mammoth Lake sill), and once the pit lake water quality is acceptable (full flooding predicted to occur in 2042; adequate water quality in 2042; Golder 2019c), the Whale Tail Dike, Mammoth Dike, and the Whale Tail WRSF Dike are decommissioned. Whale Tail Lake (North Basin) and Whale Tail Lake (South Basin) form Whale Tail Lake with a water surface area of 2.34 km^2, or a 41% increase from baseline, which flows to Lake A16 (Mammoth Lake) over the Mammoth Lake Dike via spillway. Runoff from the Whale Tail WRSF Contact Water Collection System area flows to Lake A16 (Mammoth Lake).

The reflooding strategy will be adapted during closure based on future water quality predictions validated with site monitoring data. The objective will be for pit lake water to meet quality objectives concurrently with completed reflooding such that lake reconnection can happen as soon as possible after thereafter.

Steady-state untreated WRSF contact water released is predicted to meet SSWQO for arsenic at the edge of the mixing zone in the long-term, under the anticipated cover performance scenario (from the 4.7 meters cover of low arsenic leaching waste rock).

The mixing zone in the Lake is predicted to range from 5 meters (under calm conditions in July when 6% of the seasonal seepage flow occurs), to 60 meters (under medium current conditions in June when 65% of the seasonal flow is predicted to occur at a more dilute arsenic concentration) from the entry point of this seepage into the Lake and along the plume centre line.

Other inflows to Mammoth Lake include natural runoff and overflow from Whale Tail Lake; both are predicted to meet SSWQO as described in FEIS Appendix 6H (Agnico Eagle, 2016).

Mammoth Lake is sensitive to cover material seepage quality, which is in turn sensitive to cover composition and WRSF pile contact water volume. Observational data at the Meadowbank WRSF suggests that pile contact water volumes are substantially lower than originally predicted (Portage is 20 to 40% lower, Vault WRSF contact water is minimal compared to 178,000m^3 predicted at maximum footprint year) using similar modelling assumptions. Recent modelling results of the WRSF landform reflect a significant reduction in the volume of seepage from the WRSF and conservative chemical load estimate to Mammoth Lake which will be verified with monitoring. As per Type A Water Licence 2AM-WTP1830 Part E, conditions 5 and 6, Agnico Eagle completes a site wide water balance and pit water quality model update for the Whale Tail Pit Site as part of the annual water management plan.

3.3 Water Balance

As per the Type A Water Licence 2AM-WTP1830, Part E, Item 5, a Project water balance will be updated and presented on an annual basis, integrated into the water management plan update. The developed water balance will assist in evaluating future water management infrastructure, including under closure conditions (Whale Tail Interim Closure and Reclamation Plan).

The water balance was computed on a monthly time step based on mean annual climate conditions (Section 2.1.1). The water management flow sheets are presented in Appendix B, and the full water balance report is presented in Appendix C (Whale Tail Pit – Expansion Project Mean Annual Water Balance (Golder 2021).

3.4 Water Quality Forecast

Water quality forecast reports will be revisited on an annual basis until mine closure, as per the Water License part E item 8. The purposes of the report are to identify, through a mass balance approach, the contaminants of concern during the pit flooding process and WRSF contact water mixing into Mammoth Lake post-closure, and determine if water treatment will be required on site for closure activities when comparing the final contaminant levels to the CCME guidelines and/or site specific criteria for parameters that are not included in the CCME Guidelines.

In the 2021 report (Golder 2021a), Golder presents that water quality indicators remain mostly stable from 2021 through operations. Because of the development of differing seasonal trends in the Whale Tail WRSP pond, analysis of monitoring data from the Whale Tail WRSF in future years will provide support for the calibration. In the Whale Tail Attenuation Pond, modelled constituents that showed

concentrations consistently above their respective EQCs were total aluminum, iron, and chromium. Total phosphorus, arsenic, mercury, cadmium, copper, nickel, lead, zinc, and ammonia remained below their respective EQCs. The IVR Attenuation Pond was included for the first time in the water quality model. For this pond, arsenic treatment is expected to be required over the entire operation period. Predicted concentrations for phrosphorus remain below the site EQC for the duration of operations, though daily variability in the monitoring data shows concentrations approaching the EQC and supports the continuation of treatment prior to discharge. Modelled constituents that showed concentrations consistently above their respective EQCs were total aluminum and iron. Total mercury, cadmium, chromium, copper, nickel, lead, zinc, and ammonia remained below their respective EQCs. It is anticipated that the IVR Attenuation Pond will require further calibration in future years as it becomes operational and monitoring data are available.

At closure and post-closure, flooded pit water quality is predicted to meet receiving water quality criteria when flooding is complete, allowing reconnection with the downstream receiving environment. Arsenic release from the submerged Whale Tail Pit walls is anticipated once pit-flooding commences but is expected to be a relatively short-lived source (a few years) to the flooded pit lake.

3.5 Adaptive Management

Adaptive management will be achieved through performance monitoring and management actions that will be implemented, should they be triggered. Action level responses taken during the year will be documented in Agnico Eagle's annual report submitted to the NWB. The Whale Tail Pit Expansion Project – Adaptive Management Plan (Agnico Eagle, 2020c) includes the specific adaptive management strategies that will be implemented in the WRSF to meet water quality objectives, and chemical and physical stability of the WRSFs during operations, closure, and post-closure phases. The Adaptive Management Plan is still under approval by the Nunavut Water Board but once approved this plan will fully cover the adaptive management strategy.

SECTION 4 • REFERENCES

Agnico Eagle (Agnico Eagle Mines Limited). 2021a. Whale Tail Pit – Waste Rock Management Plan, version 6, Meadowbank Division, February 2021.

Agnico Eagle (Agnico Eagle Mines Limited). 2021b. Water Management Report and Plan, version 9, Meadowbank Division, February 2021.

Agnico Eagle, 2020c (in progress). Whale Tail Pit Expansion Project – Adaptive Management Plan. Meadowbank Division, January 2020.

Agnico Eagle (Agnico Eagle Mines Limited). 2019a. Whale Tail Sewage Treatment Plant Operation and Maintenance Manual, February 2019.

Agnico Eagle (Agnico Eagle Mines Limited). 2021c. OMS Manual – Whale Tail Water Management Infrastructures, Version 2, March 2021.

Agnico Eagle (Agnico Eagle Mines Limited). 2021d. Dewatering Dikes, Operation, Maintenance and Surveillance Manual, Meadowbank Division, March 2021.

Agnico Eagle (Agnico Eagle Mines Limited). 2018b. Erosion Management Plan, Version 2_NIRB, Meadowbank Division, September 2018.

Agnico Eagle (Agnico Eagle Mines Limited). 2018c. Amaruq Stage 1 WRSF, Ore Stockpile 1 and Starter Pit Design Report and Drawings. Meadowbank Division, June 2018.

Agnico Eagle (Agnico Eagle Mines Limited). 2018d. Whale Tail North Basin dewatering, 60-Day Notice to Nunavut Water Board. Version 1, September 2019.

Agnico Eagle (Agnico Eagle Mines Limited). 2016. Final Environment Impact Statement (FEIS) Volumes 1 to 8, Whale Tail Pit Project, Meadowbank Division.

Agnico Eagle (Agnico Eagle Mines Limited). 2015. Water Management Report and Plan, version 3, Meadowbank Division, October 2015.

CCME (Canadian Council of Ministers of the Environment). 1999 (with updates to 2016). Canadian Environmental Quality Guidelines, 1999. Canadian Environmental Quality Guidelines Summary Table, with updates to 2016. Winnipeg, MB, Canada. Available at: http://st-ts.ccme.ca/. Accessed March 2016.

CCME. 2004. Canadian Water Quality Guidelines for the Protection of Aquatic Life: Phosphorus: Canadian Guidance Framework for the Management of Freshwater Systems. In: Canadian Environmental Quality Guidelines, 2004. Canadian Council of Ministers of the Environment, Winnipeg, MB, Canada.

CDA (Canadian Dam Association). 2014. Canadian Dam Association, Technical Bulletin: Application of Dam Safety Guidelines to Mining Dams.

DFO (Fisheries and Oceans Canada). 1995. Freshwater Intake End-of-Pipe Fish Screen Guideline, March 1995.

Golder Associates Ltd. 2020a. Mine Site and Downstream Receiving Water Quality Predictions – 2019 Annual Report. Ottawa, ON, Canada.

Golder Associates Ltd., 2021a. Whale Tail Project 2020 Annual Report – Site and Downstream Receiving Water Quality (Reference 21442330-517-RPT-Rev0.

Golder Associates Ltd. 2021b. Whale Tail Pit – Approved Project 2020 Annual Report – Water Balance

Golder (Golder Associates Ltd.). 2019a. Interim Closure and Reclamation Plan, Agnico Eagle Whale Tail. May 2019.

Golder. 2019b. Whale Tail Lake Thermal Assessment. Dated April 2019 (Reference 18108905-276-RPT-Rev0).

Golder. 2019c. Whale Tail Pit – Expansion Project 2019 Mine Site and Downstream Receiving Water Quality Predictions Update. Dated May 2019.

Golder. 2019d. Whale Tail Pit – Expansion Project 2019 Mean Annual Water Balance Update. Dated May 2019 (Reference 18108905-294-RPT-Rev1).

Golder. 2019e. Updated Hydrogeological Assessment, Whale Tail Pit, Expansion Project. May 2019 (Reference 8108905-291-TM-Rev0)

Golder Associates Ltd. 2017a. Whale Tail Lake Thermal Assessment, Whale Tail Pit Project, Nunavut dated 22 February 2017.

Golder Associates Ltd. 2017b. Hydrogeological and Permafrost Field Investigations, Amaruq Project 2017 Factual Report. Dated 31 July 2017. (Reference 1649355-008-R-Rev0-5000).

Government of Canada. 2015. Historical Climate Data. Available online from: http://climate.weather.gc.ca/index_e.html

Health Canada. 2014. Guidelines for Canadian Drinking Water. Prepared by the Federal-Provincial-Territorial Committee on Drinking Water. Ottawa, ON, Canada.

ICOLD (International Commission of Large Dams) 1998. Dam Failures and Statistical Analysis. Bulletin 99.

IPCC. 2014. Summary for Policymakers. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the

Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1-32

Knight Piesold. 2015. Agnico Eagle Mines Ltd.: Meadowbank Division – Whale Tail Pit – Permafrost and Hydrogeological Characterization, File No.: NB101-00622/04-A.01

McDougall, M., G. Tomy, J. Stetefeld. 2019. 2019 Mammoth Lake Sediment Sampling Report

NWT Water Board. 1992. Guidelines for the Discharge of Treated Municipal Wastewater in the Northwest Territories.

Overland, J.E., M. Wang, J.E. Walsh, and J.C. Stroeve. 2013. Future Arctic climate changes: Adaptation and mitigation time scales, Earth's Future, 2, doi:10.1002/2013EF000162.

PhotoSat Information Ltd. (PhotoSat). 2015. PhotoSat Stereo Satellite Elevation Mapping Project Report. Reference No. 3631.

SNC (SNC Lavalin Inc.). 2018a. Whale Tail Dike Detailed Design Report.

SNC (SNC Lavalin Inc.). 2018b. Design criteria – Basins and Pumps. Technical note no. 651298-8000-40EC-0001_00, April 2018.

SNC (SNC Lavalin Inc.). 2018c. Amaruq Freeboard Study. Technical note no. 651298-2600-4HER-0002_01, June 2018.

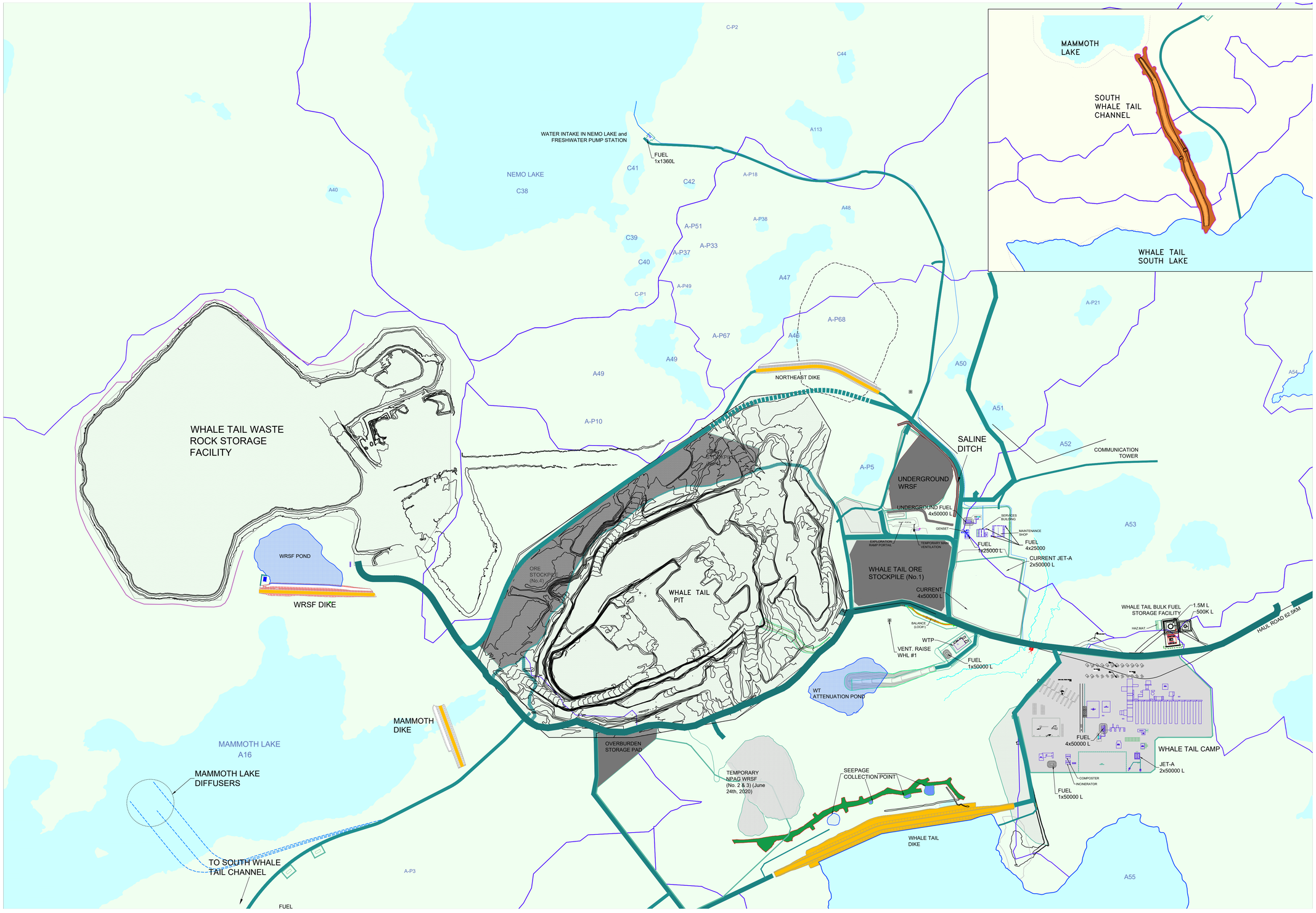
SNC (SNC Lavalin Inc.). 2017. Preliminary design of Mammoth Dike. Technical note no. 645003-3000-4GER-0001_01, August 2017.

SNC (SNC Lavalin Inc.). 2015. Whale Tail Pit Project Permitting Level Engineering, Geotechnical and Water Management Infrastructure, A Technical Report Submitted to Agnico Eagle Mines Ltd. by SNC Lavalin, December 2015.

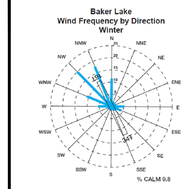
APPENDIX A • SITE LAYOUT PLANS

NO. DESSIN
DRAWING NO.

FORMAT ARCHD



PLAN CLÉ
KEY PLAN



NOTES GÉNÉRALES / GENERAL NOTES

LEGEND

- WATERSHED

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
	–
–	–
–	–
–	–
–	–
–	–

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT

REVISIONS

AMARUQ PROJECT

TITRE / TITLE
AGNICO EAGLE – MEADOWBANK DIVISION
AMARUQ MINE PROJECT

GENERAL ARRANGEMENT (PHASE 1 2020)

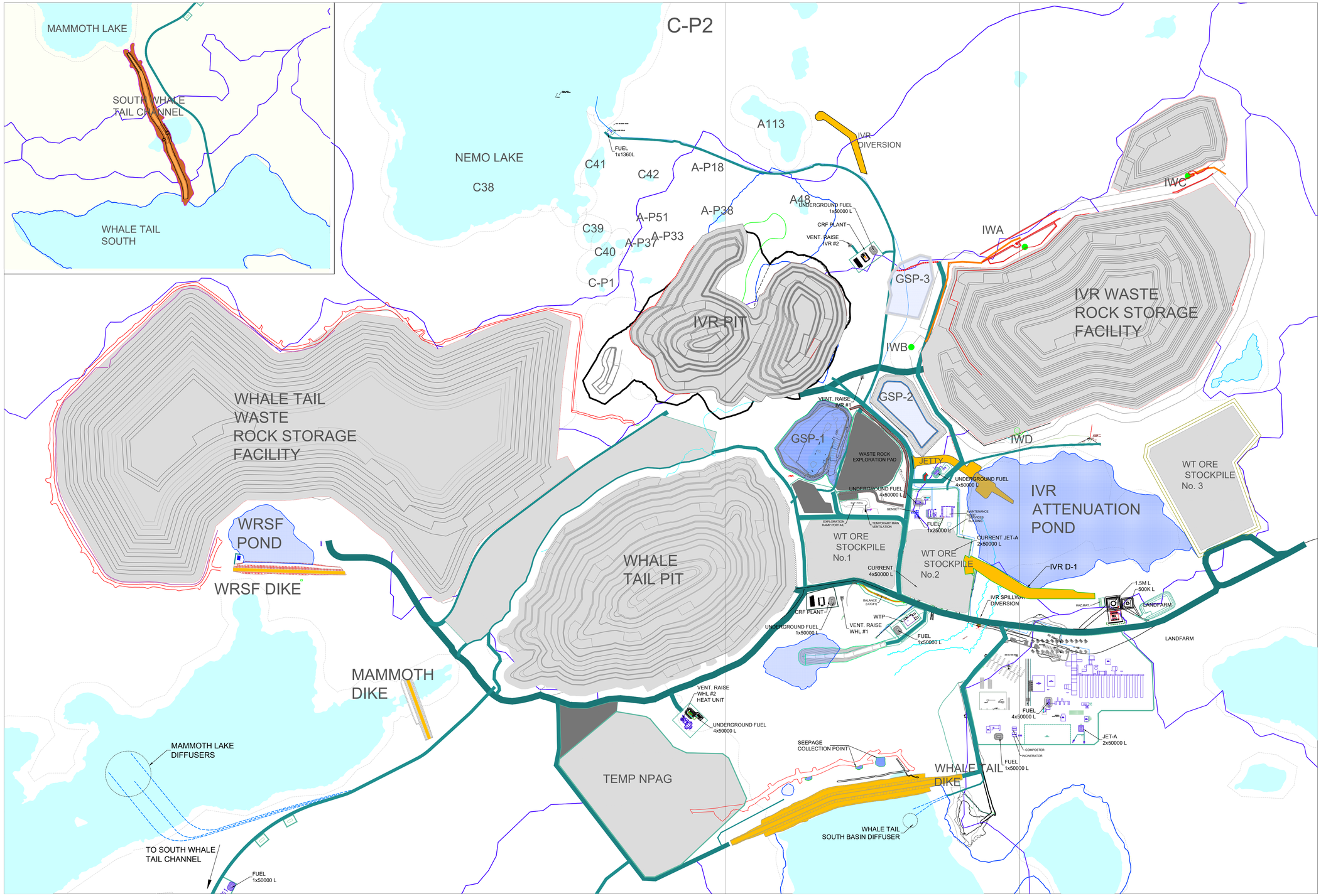
DESSINÉ PAR / DRAWN BY	THOMAS DAHM	DATE 2021-03-01
VERIFIÉ PAR / CHECKED BY		
APPROUVÉ PAR / APPROVED BY	FREDERICK L. BOLDUC	2021-03-01
ÉCHELLE / SCALE	DATE 2020-06-29	
NO. DESSIN / DRAWING NO.		
NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT / –

AE-CART-ARCH D

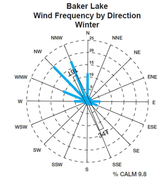
P:\Engineering\05-Geotechnic\14- Amaruq\99- Site Maps\2019 AMQ site map submitted phase 2 permit\6117-005-210-001_R0_BIND\Phase 1.DWG

NO. DESSIN
DRAWING NO.

FORMAT ARCHD



PLAN CLÉ
KEY PLAN



NOTES GÉNÉRALES / GENERAL NOTES

LEGEND

- WATERSHED

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT

REVISIONS

TITRE / TITLE
AGNICO EAGLE – MEADOWBANK DIVISION
AMARUQ MINE PROJECT

GENERAL ARRANGEMENT
EXPANSION PROJECT 2025

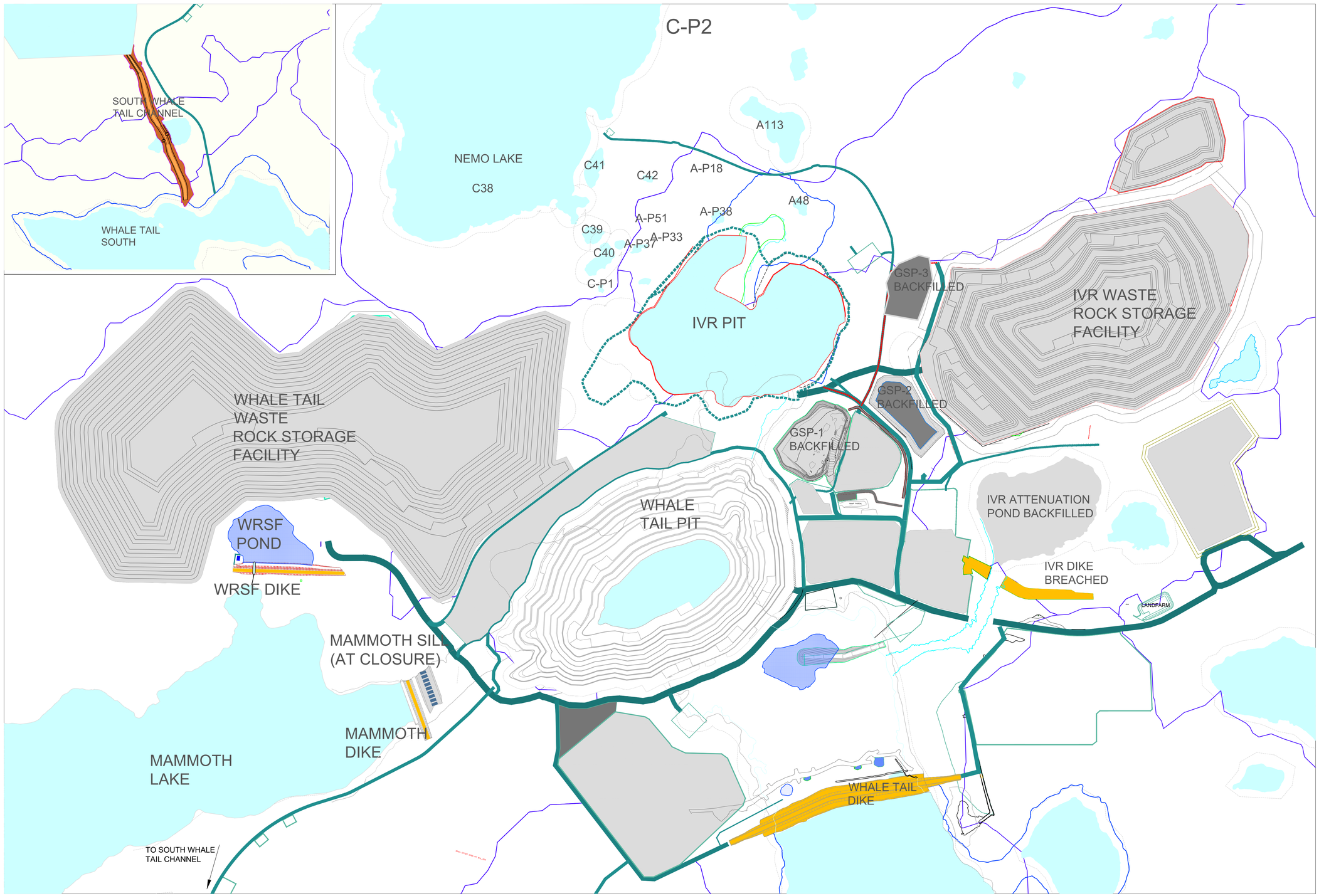
DESSINÉ PAR / DRAWN BY	THOMAS DAHM	DATE 2021-03-02
VERIFIÉ PAR / CHECKED BY		
APPROUVÉ PAR / APPROVED BY	FREDERICK L BOLDUC	2021-03-26
ÉCHELLE / SCALE	DATE 2021-03-02	
NO. DESSIN / DRAWING NO.		
NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT / –

AE-CART-ARCH D

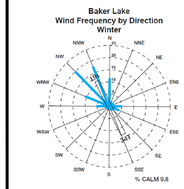
P:\Engineering\05-Geotechnic\14- Amaruq\99- Site Maps\2019 AMQ site map submitted phase 2 permit\6117-005-210-001_R0_BIND\Phase 2.dwg

NO. DESSIN
DRAWING NO.

FORMAT ARCHD



PLAN CLÉ
KEY PLAN



NOTES GÉNÉRALES / GENERAL NOTES

LEGEND

- WATERSHED

L'INFORMATION CI-CONTENUE EST LA PROPRIÉTÉ DE AGNICO-EAGLE LTÉE ET DOIT ÊTRE RETOURNÉE SUR DEMANDE. SANS AUTORISATION ÉCRITE PRÉALABLE, TOUTE TRANSMISSION DE COPIE(S) À AUTRUI ET TOUTE UTILISATION AUTRE QUE CELLE POUR LAQUELLE L'INFORMATION EST PRÊTÉE SONT INTERDITES. © AGNICO-EAGLE LTÉE

THE INFORMATION HERE ON IS THE PROPERTY OF AGNICO-EAGLE LTD. AND MUST BE RETURNED UPON REQUEST. WITHOUT WRITTEN PERMISSION, ANY COPYING TRANSMITTAL TO OTHERS AND ANY USE EXCEPT THAT FOR WHICH IT IS LOANED ARE PROHIBITED. © AGNICO-EAGLE LTD.

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT

REVISIONS

TITRE / TITLE
AGNICO EAGLE – MEADOWBANK DIVISION
AMARUQ MINE PROJECT

GENERAL ARRANGEMENT CLOSURE

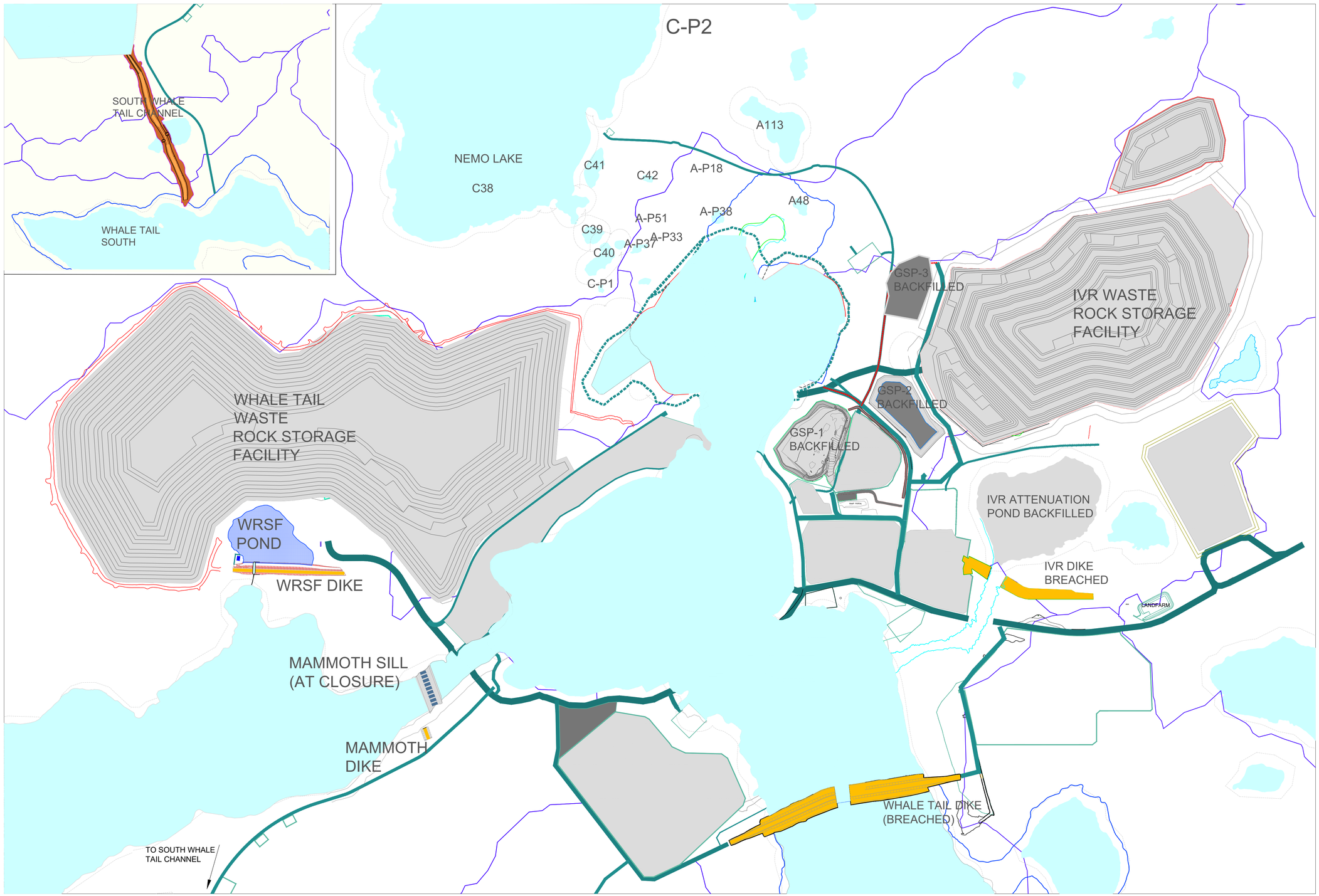
DESSINÉ PAR / DRAWN BY	THOMAS DAHM	DATE 2021-03-02
VERIFIÉ PAR / CHECKED BY		
APPROUVÉ PAR / APPROVED BY	FREDERICK L BOLDUC	2021-03-26
ÉCHELLE / SCALE		DATE 2021-03-02
NO. DESSIN / DRAWING NO.		
NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
		/ -

AE-CART-ARCH D

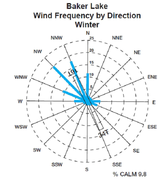
P:\Engineering\05-Geotechnic\14- Amaruq\99- Site Maps\2019 AMQ site map submitted phase 2 permit\6117-005-210-001_R0_BIND\Closure.dwg

NO. DESSIN
DRAWING NO.

FORMAT ARCHD



PLAN CLÉ
KEY PLAN



NOTES GÉNÉRALES / GENERAL NOTES

LEGEND

- WATERSHED

L'INFORMATION CI-CONTENUE EST LA PROPRIÉTÉ DE AGNICO-EAGLE LTÉE ET DOIT ÊTRE RETOURNÉE SUR DEMANDE. SANS AUTORISATION ÉCRITE PRÉALABLE, TOUTE TRANSMISSION DE COPIE(S) À AUTRUI ET TOUTE UTILISATION AUTRE QUE CELLE POUR LAQUELLE L'INFORMATION EST PRÊTÉE, SONT INTERDITES. © AGNICO-EAGLE LTÉE

THE INFORMATION HERE ON IS THE PROPERTY OF AGNICO-EAGLE LTD. AND MUST BE RETURNED UPON REQUEST. WITHOUT WRITTEN PERMISSION, ANY COPYING TRANSMITTAL TO OTHERS AND ANY USE EXCEPT THAT FOR WHICH IT IS LOANED ARE PROHIBITED. © AGNICO-EAGLE LTD.

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT

REVISIONS

TITRE / TITLE
AGNICO EAGLE – MEADOWBANK DIVISION
AMARUQ MINE PROJECT

GENERAL ARRANGEMENT POST CLOSURE

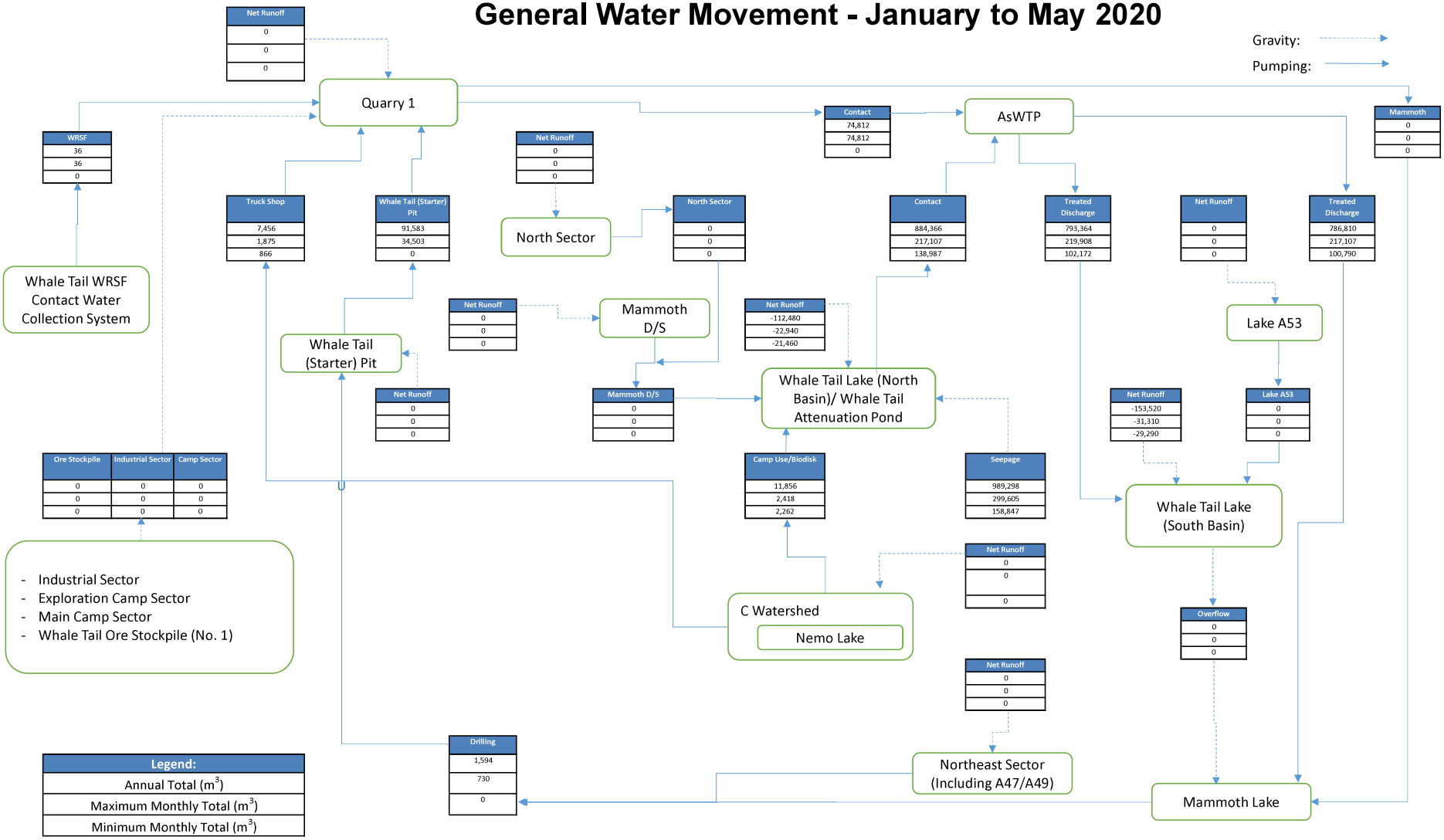
DESSINÉ PAR / DRAWN BY	THOMAS DAHM	DATE 2021-03-25
VERIFIÉ PAR / CHECKED BY		
APPROUVÉ PAR / APPROVED BY	FREDERICK L BOLDUC	2021-03-26
ÉCHELLE / SCALE		DATE 2021-03-02
NO. DESSIN / DRAWING NO.		
NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
		/ -

AE-CART-ARCH D

P:\Engineering\05-Geotechnic\14- Amaruq\99- Site Maps\2019 AMQ site map submitted phase 2 permit\6117-005-210-001_R0_BIND\Post Closure.dwg

APPENDIX B • WATER MANAGEMENT SCHEMATIC FLOW SHEETS

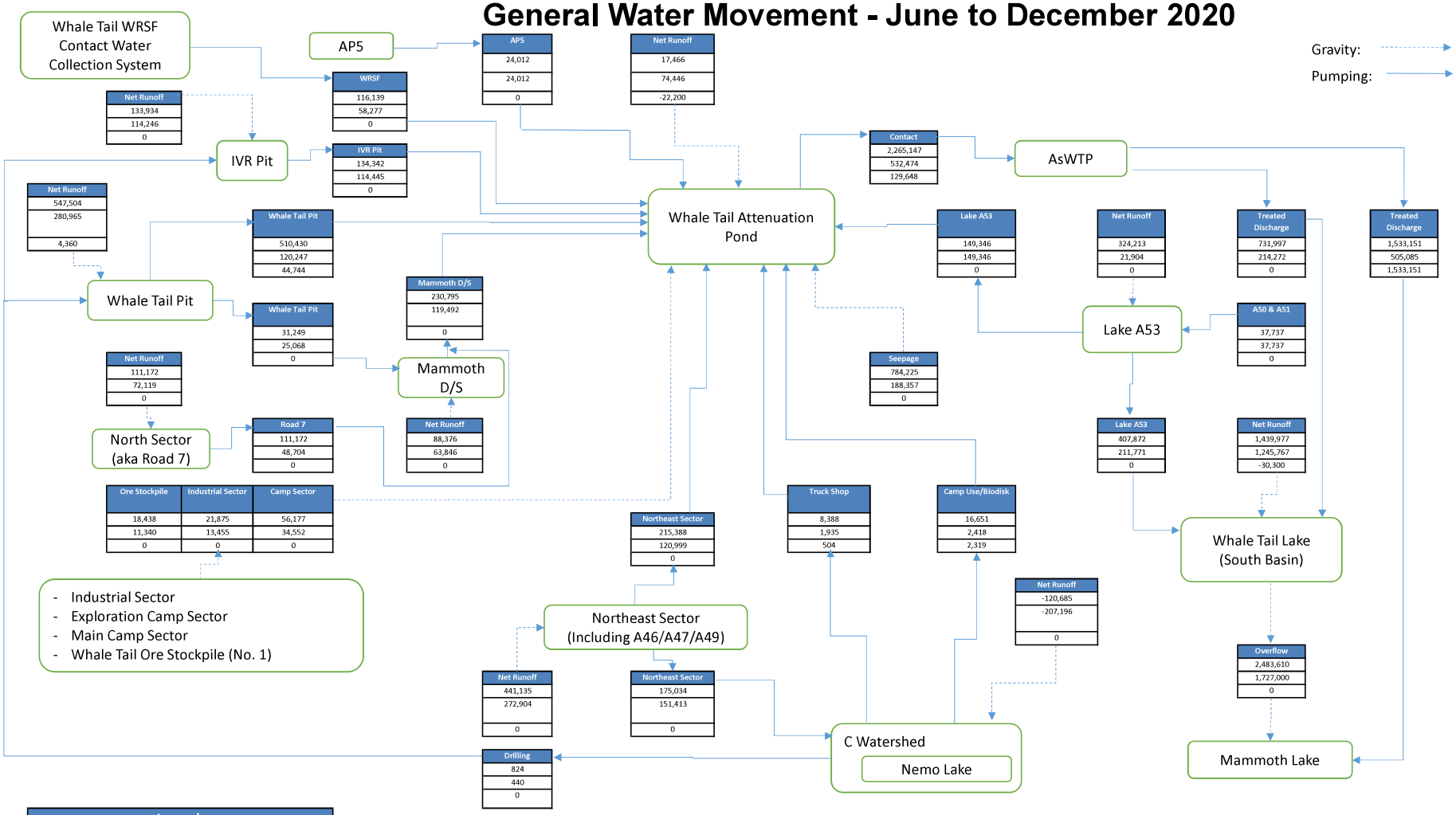
General Water Movement - January to May 2020



Legend:
Annual Total (m^3)
Maximum Monthly Total (m^3)
Minimum Monthly Total (m^3)

Note: Net runoff is runoff and Precipitation minus evaporation, seepage and ore losses

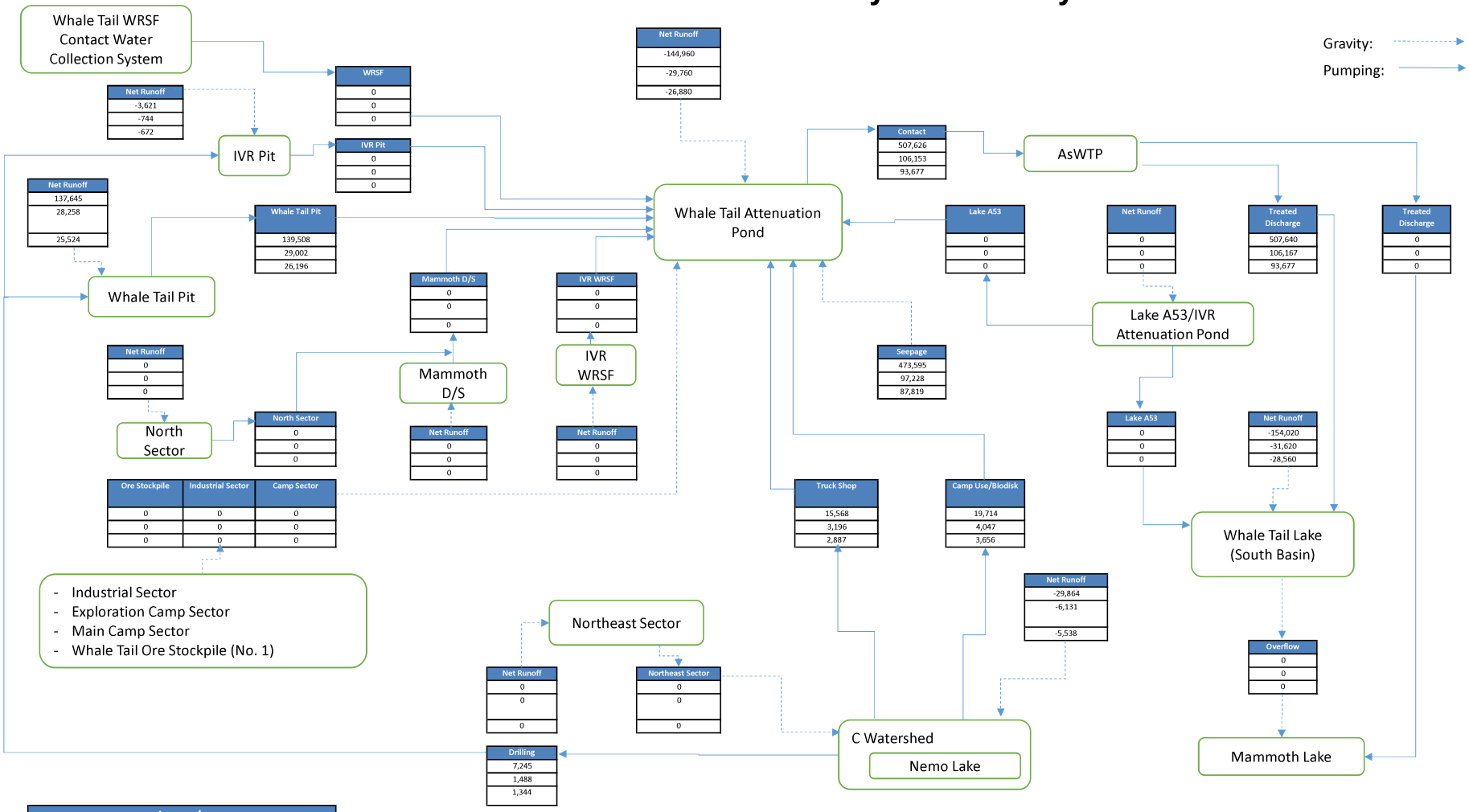
General Water Movement - June to December 2020



Legend:
Annual Total (m^3)
Maximum Monthly Total (m^3)
Minimum Monthly Total (m^3)

Note: Net runoff is runoff and Precipitation minus evaporation, seepage and ore losses

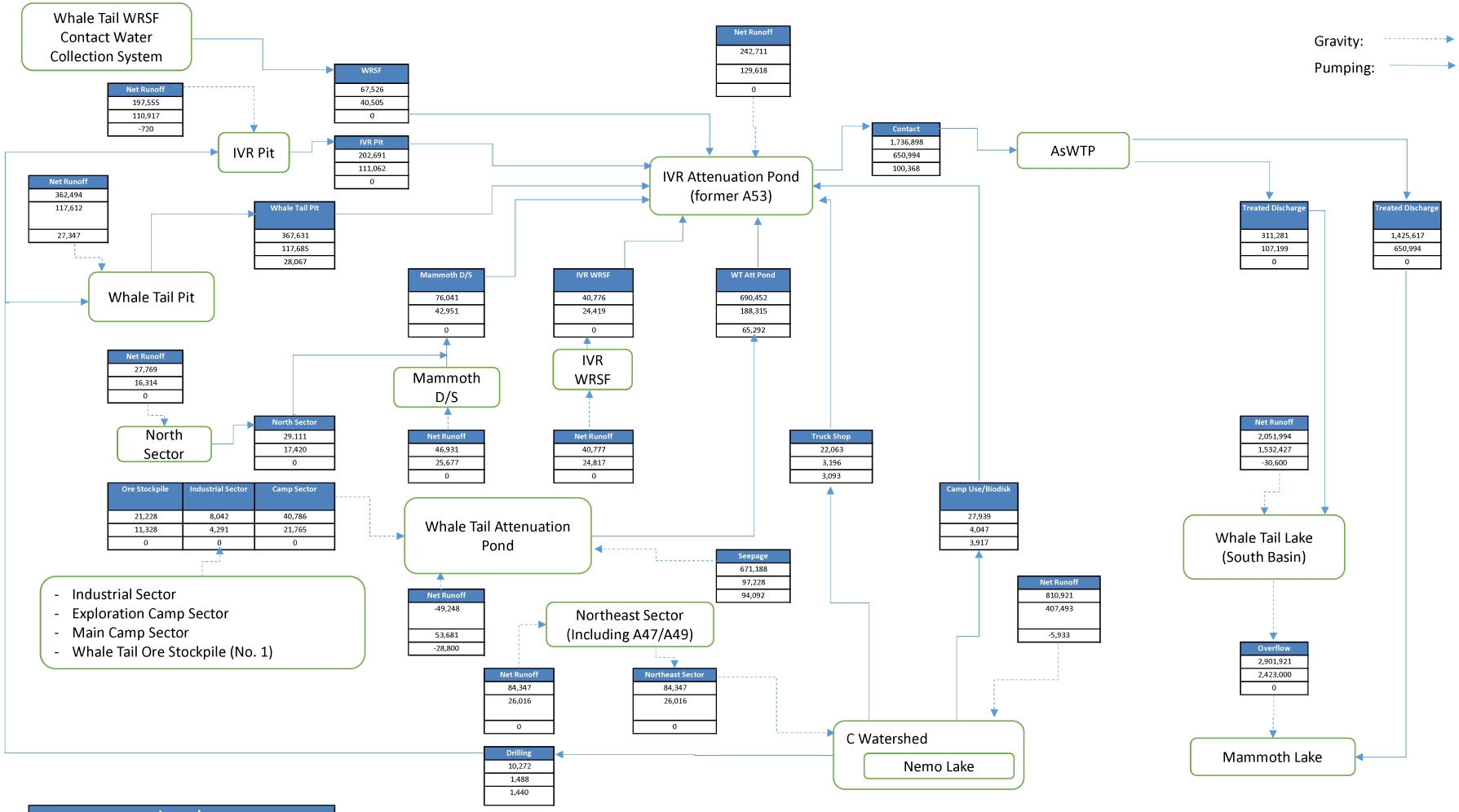
General Water Movement - January 2021 to May 2021



Legend:
Annual Total (m^3)
Maximum Monthly Total (m^3)
Minimum Monthly Total (m^3)

Note: Net runoff is runoff and Precipitation minus evaporation, seepage and ore losses

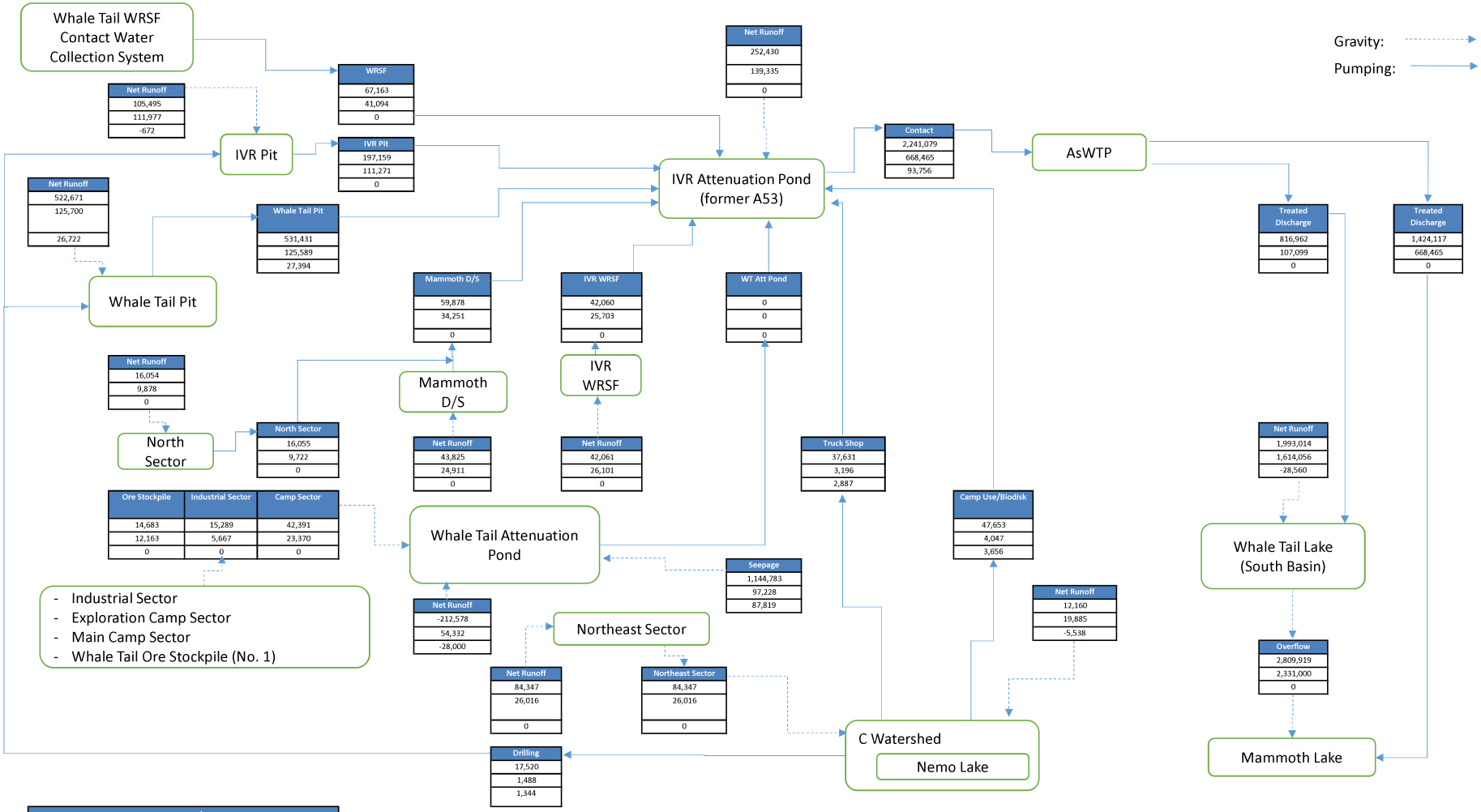
General Water Movement - June 2021 to December 2021



Legend:
Annual Total (m^3)
Maximum Monthly Total (m^3)
Minimum Monthly Total (m^3)

Note: Net runoff is runoff and Precipitation minus evaporation, seepage and ore losses

General Water Movement - 2022 - 2025



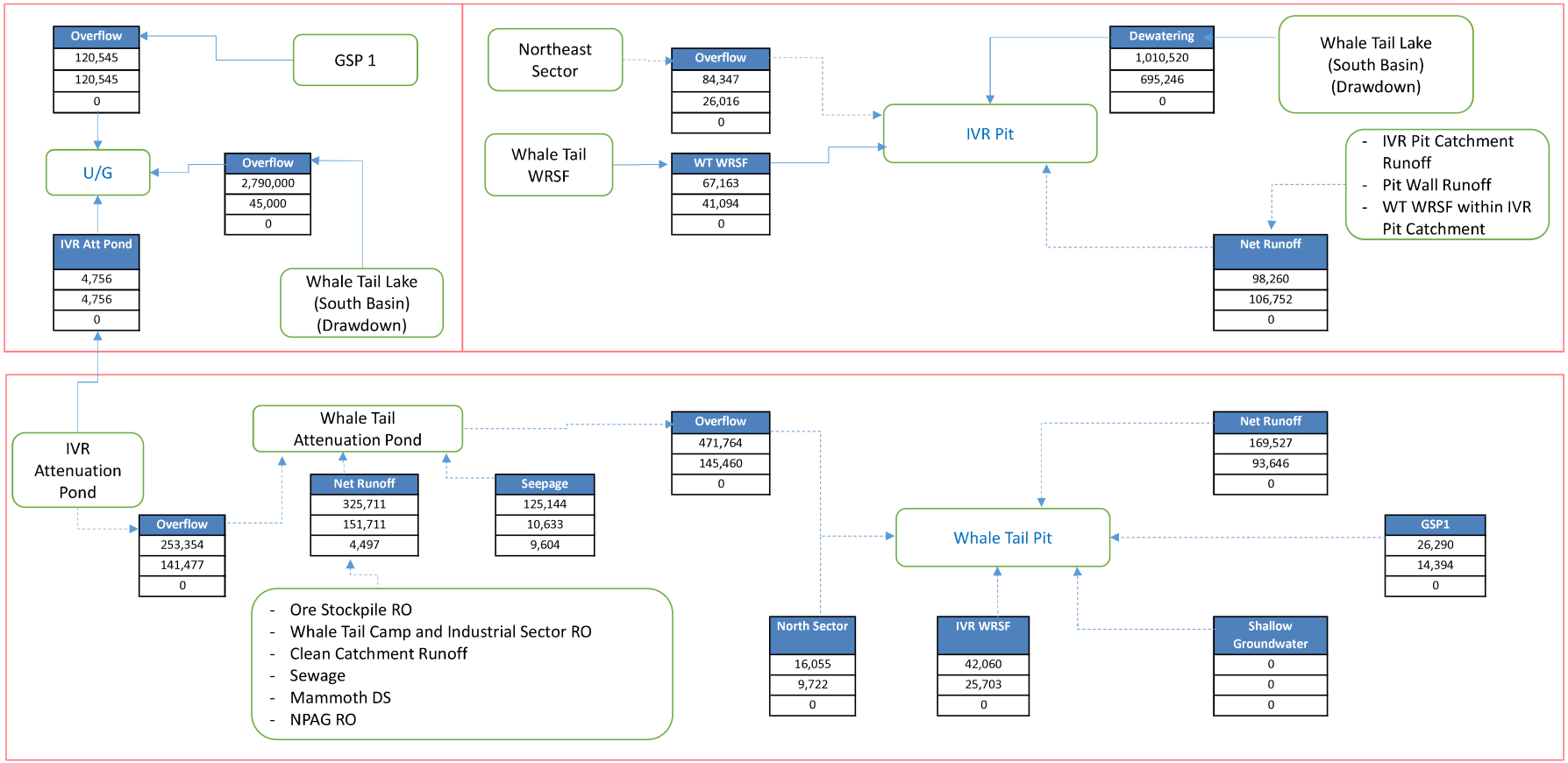
Legend:
Annual Total (m^3)
Maximum Monthly Total (m^3)
Minimum Monthly Total (m^3)

Note: Net runoff is runoff and Precipitation minus evaporation, seepage and ore losses

General Water Movement - Closure (Active Flooding): Underground Mine
(Values shown for 2026)

Gravity: ⇢

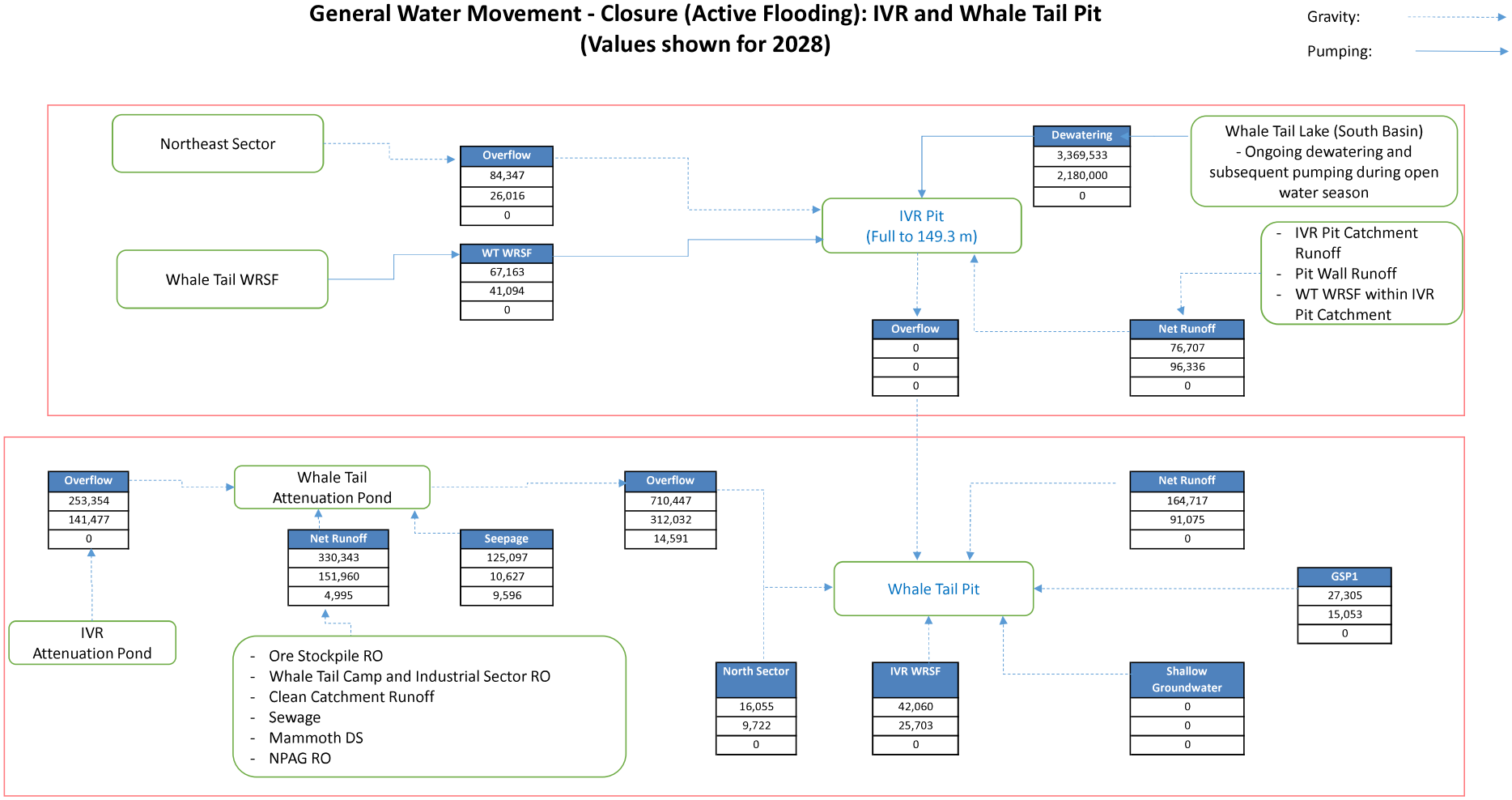
Pumping: →



Legend:
Annual Total (m^3)
Maximum Monthly Total (m^3)
Minimum Monthly Total (m^3)

Note: Net runoff is runoff and Precipitation minus evaporation, seepage and ore losses

General Water Movement - Closure (Active Flooding): IVR and Whale Tail Pit
(Values shown for 2028)



Legend:
Annual Total (m^3)
Maximum Monthly Total (m^3)
Minimum Monthly Total (m^3)

Note: Net runoff is runoff and Precipitation minus evaporation, seepage and ore losses

APPENDIX C • WHALE TAIL PIT - EXPANSION PROJECT MEAN ANNUAL WATER BALANCE

GOLDER

REPORT

Whale Tail Project

2020 Annual Report - Water Balance

Submitted to:

Agnico Eagle Mines Limited

10 200, Route de Preissac
Rouyn-Noranda, Quebec, Canada

Submitted by:

Golder Associates Ltd.

16820 107 Avenue, Edmonton, Alberta, T5P 4C3, Canada

+1 780 483 3499

20442330-514-RPT-Rev1

April 2021

Distribution List

1 eCopy: Agnico Eagle Mines Limited

1 eCopy: Golder Associates Ltd.

Table of Contents

TABLES

FIGURES

APPENDICES

1.0 INTRODUCTION

Agnico Eagle Mines Limited: Meadowbank Division (Agnico Eagle) is developing the Whale Tail and IVR pits and underground operations on the Amaruq property (the Project), in continuation of mine operations and milling of the Meadowbank Mine. The Amaruq Exploration property is a 408 km^2 site located on Inuit Owned Land approximately 150 km north of the hamlet of Baker Lake and approximately 50 km north of the Meadowbank Mine in the Kivalliq region of Nunavut.

The Project supports the mining of approximately 23.6 million tonnes of ore from the operations, processed over the mine life. As a part of its commitment under the Type A Water Licence 2AM-WTP1830, Part E, Item 6, Agnico Eagle has agreed to submit an updated water management plan on an annual basis to the Board for review following the commencement of operations.

This report presents the water balance component of the 2020 Annual Report, including a description of water management activities and the mean annual water balance for the Project, from operations to post-closure, starting in 2020. The water balance includes data collected at the site in 2020. It is limited to catchments of the Project footprint and does not address the receiving environment within and downstream of the effluent discharge point.

Water quality predictions corresponding to the Project's mean annual water balance are presented under a separate cover (Golder 2021).

2.0 WATER MANAGEMENT SUMMARY

The Project consists of mining from the Whale Tail and IVR Pits and underground operations. The 2020 site layout is shown in Figure 1, with the key water management features labelled. The ultimate layout is provided in the water management plan (Agnico Eagle 2021). The main objectives pertaining to water management are to minimize: the quantity of contact water that must be managed; and potential impacts on the receiving environment. The water management plan was developed using the following principles (Agnico Eagle 2016):

- Keep the different water types separated to the extent feasible;
- Control and minimize contact water through diversion and containment;
- Minimize freshwater consumption by recycling and reusing the contact and process water wherever feasible; and
- Meet discharge criteria before any site contact water is released to the downstream environment.

Non-contact surface water is diverted and discharged directly into the environment without treatment.

Runoff from the surface facilities is collected in sumps or ponds around the Project and pumped to a central location before being treated and discharged to either Whale Tail Lake (South Basin) or Mammoth Lake.

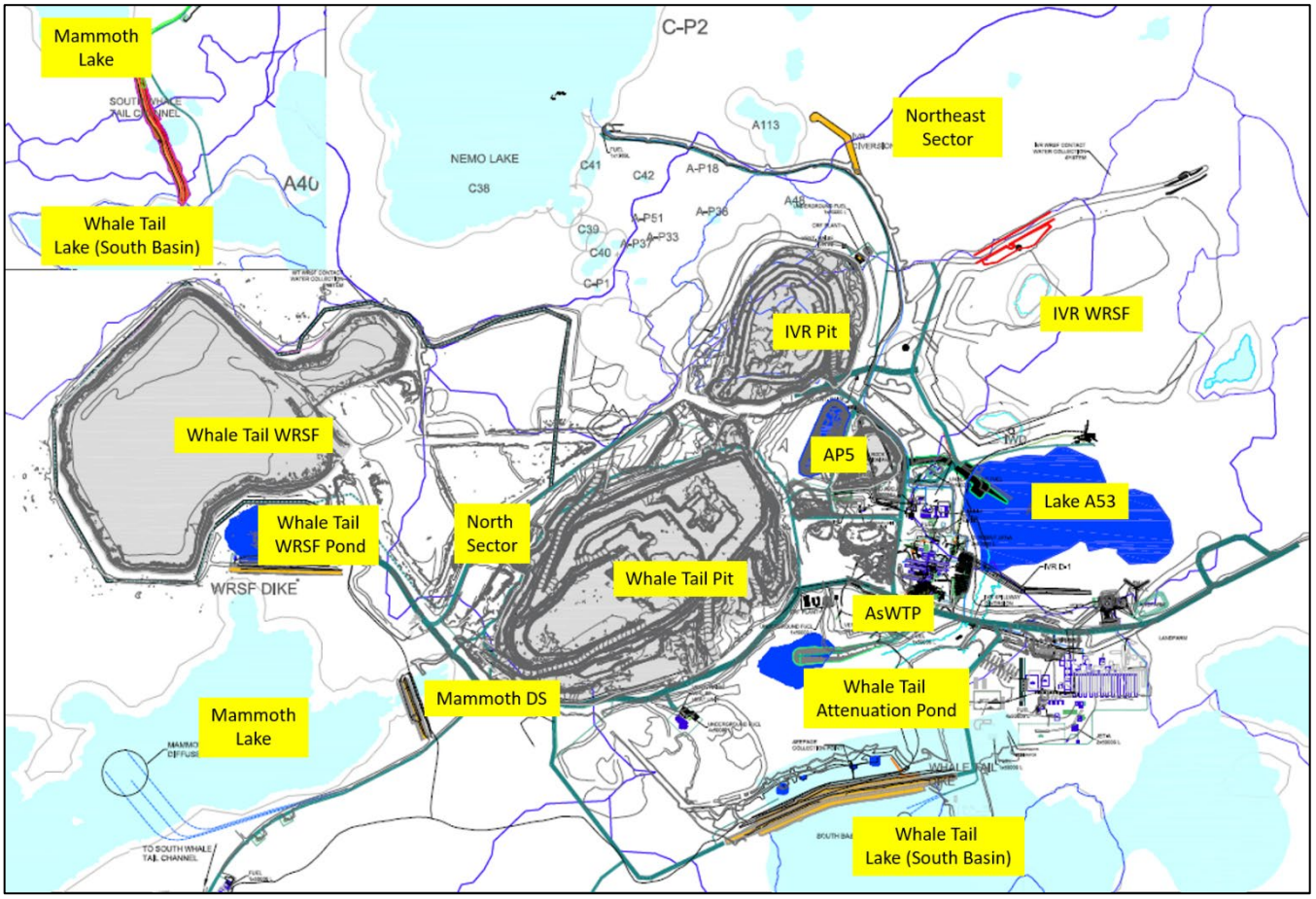


Figure 1: Current Water Management Facilities – 2020

2.1 2020 Winter Water Management

The mining of Whale Tail Pit required the dewatering of Whale Tail Lake (North Basin). Dewatering of the basin was completed by May 15, 2020. Whale Tail Dike (WTD) seepage water reporting to Whale Tail Lake (North Basin) was discharged back to Whale Tail Lake (South Basin) where it accumulated below the diversion invert to Mammoth lake. Prior to dewatering, mining occurred in the portions of the Whale Tail Pit that are above Whale Tail Lake (North Basin). The eastern portion is referred to as Quarry 1, and the western area as Whale Tail (Starter) Pit. During the dewatering period, Quarry 1 was the established attenuation pond on site. Its collected water was pumped to Mammoth Lake either directly or via the Arsenic water treatment plant (AsWTP) depending on the water quality relative to the discharge criteria.

The water management activities for the winter of 2020 are illustrated in the form of a flow diagram in Figure 2.

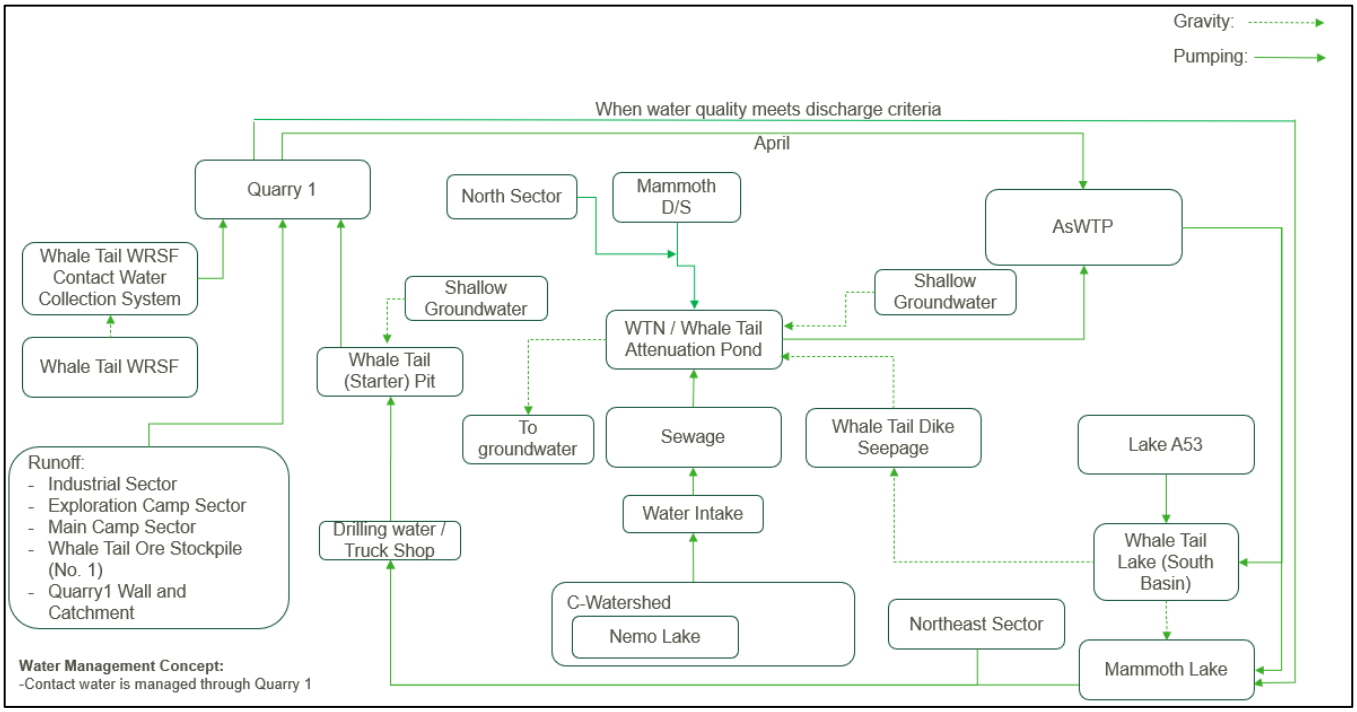


Figure 2: Conceptual Flow Diagram: Winter 2020

2.2 June 2020– June 2021 Water Management

Starting in the spring of 2020, Quarry 1 and the Whale Tail (Starter) Pit merged to form the Whale Tail Pit. The Whale Tail Attenuation Pond became the established attenuation pond, collecting all contact water on site. Water from the Whale Tail Attenuation Pond was discharged to either Mammoth Lake or Whale Tail Lake (South Basin) via the AsWTP, depending on water quality in the receiver. For 4 days in June, water was also temporarily pumped to AP5 before being pumped back to the Whale Tail Attenuation Pond in August for eventual discharge from site.

Whale Tail Attenuation Pond will be the established attenuation pond until Freshet 2021, when the IVR Attenuation Pond comes online. At that point, the IVR Attenuation Pond will be the preferred discharge location; the Whale Tail Attenuation Pond will remain available if / when required.

The water management activities from June 2020 to June 2021 are illustrated in the form of a flow diagram in Figure 3.

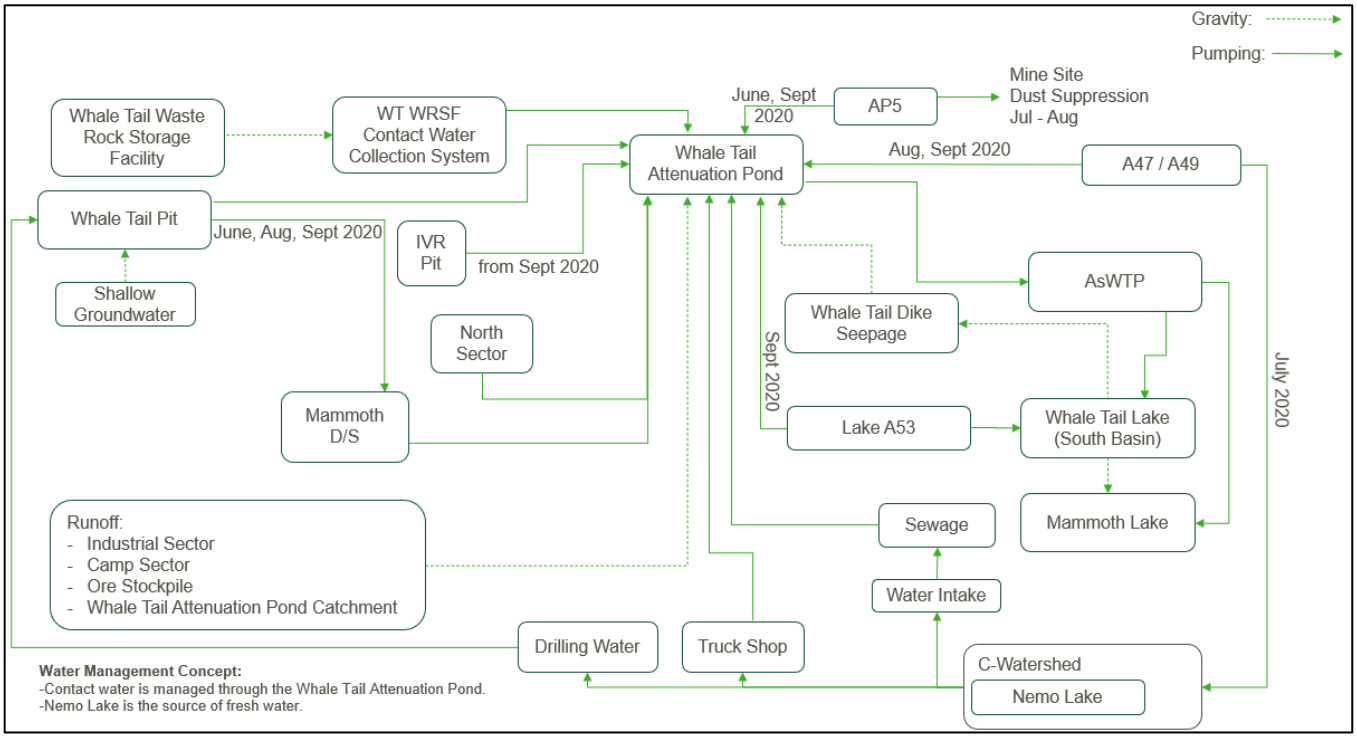


Figure 3: Conceptual Flow Diagram: June 2020 – June 2021

2.3 July 2021 to the End of Operations Water Management

Starting with the 2021 spring melt, all site contact water will report to the IVR Attenuation Pond (former Lake A53, which will discharge - via the AsWTP - to Whale Tail Lake (South Basin) in the winter and Mammoth Lake in the summer. At that point, the Whale Tail Attenuation Pond will only collect WTD seepage, Camp Biodisk flows and runoff.

The planned water management activities for the remainder of operations are illustrated in the form of a flow diagram in Figure 4.

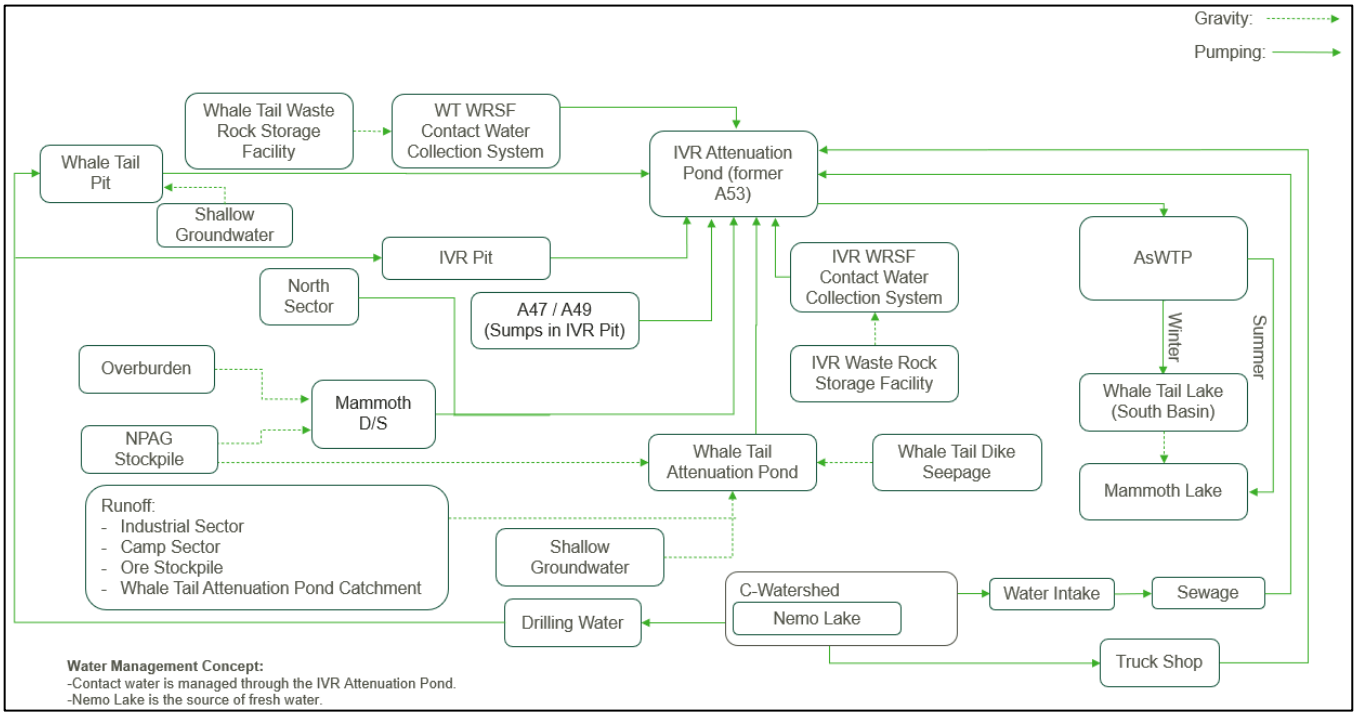


Figure 4: Conceptual Flow Diagram: July 2021 – End of Operations (December 2025)

2.4 Closure Water Management

At closure, the pits and Attenuation Ponds will be allowed to refill. To expedite the filling process, the runoff from the managed catchments will be conveyed to IVR Pit, and to the rest of Whale Tail Lake (North Basin) once the IVR Pit is refilled. As part of this process, Whale Tail Lake (South Basin) will be drawn down. As part of the Whale Tail Project Fisheries Offsetting, at closure, aquatic habitat at the Project will be created by maintaining a higher water level than the baseline level in Whale Tail Lake (Agnico Eagle 2016). A sill will be constructed at the Mammoth Dike to raise water levels in Whale Tail Lake to a surface elevation of 153.5 masl (i.e., 1 metre over the baseline elevation).

The water management activities for the closure period are illustrated in the form of a flow diagram in Figure 5.

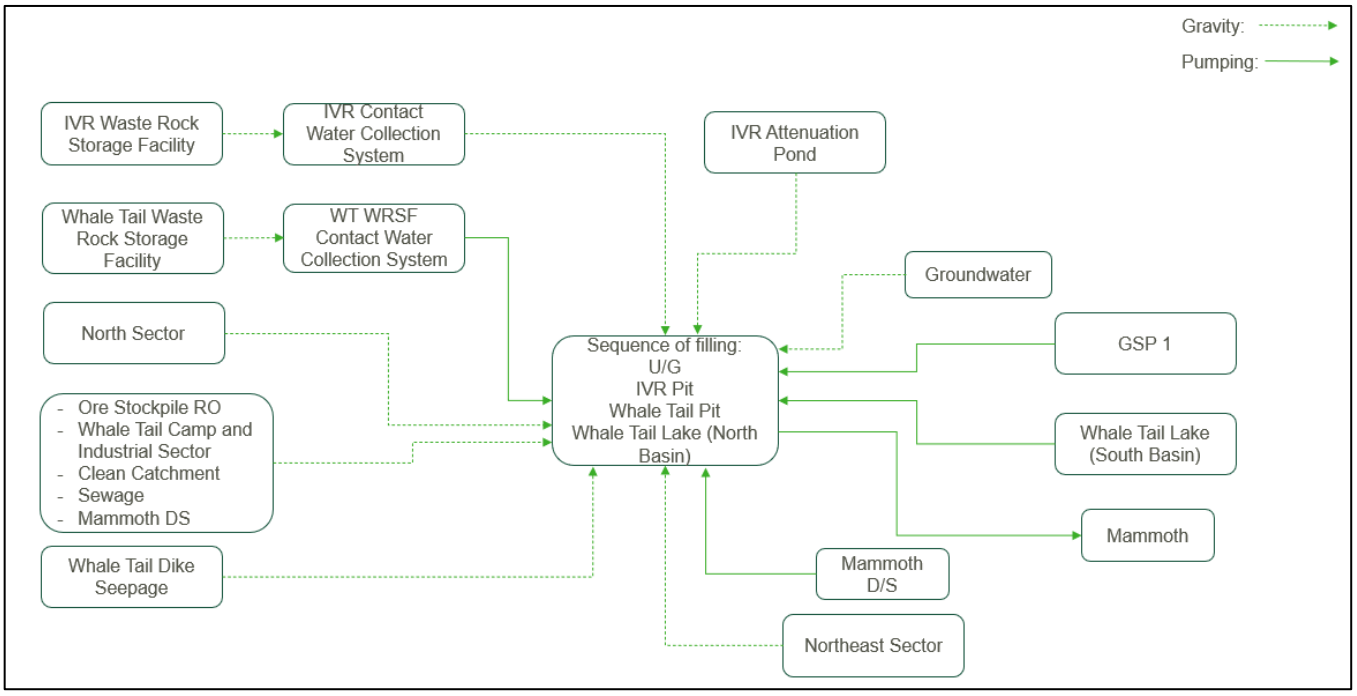


Figure 5: Conceptual Flow Diagram for Closure

3.0 WATER BALANCE BASIS

The inputs and assumptions used in the water balance have been summarized in the Project design document presented in Appendix A. These include site climate inputs, mine plan, consumptive flows and hydrogeological inputs and assumptions. Reported data were used instead of design values in 2020.

4.0 MEAN ANNUAL WATER BALANCE RESULTS

A summary of the managed catchments, water balance inputs and graphical results is presented below. The monthly water balance results are presented in tabular and schematic format in Appendices B and C, respectively. Results are provided for the period of 2020 to post-closure.

4.1 Quarry 1

Prior to the dewatering of Whale Tail Lake (North Basin), mining occurred in Quarry 1 and the Whale Tail (Starter) Pit. The Whale Tail Pit and Quarry 1 merged and are modelled as the Whale Tail Pit after June 2020. Once mining was completed in Quarry 1, Quarry 1 acted as the site attenuation pond until the Whale Tail Attenuation Pond came online in June 2020. The quarry received inflows from the Whale Tail Waste Rock Storage Facility (WRSF), the Whale Tail Pit, the Industrial and Camp sectors as well as drilling water and flows from the truck shop. In 2020, water from Quarry 1 was discharged to Mammoth Lake either directly (if water quality met discharge criteria) or via the AsWTP.

Inflows and outflows are summarized in Table 1, Figure 6 and Figure 7, and presented in tabular form in Appendix B.

Table 1: Water Balance Flow Components (Quarry 1)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
Figure 6 (Operations)	Runoff from the Whale Tail (Starter) Pit	Natural Drainage	2018	June 2020	Runoff collected from the Whale Tail (Starter) Pit until decommissioning of Quarry 1 by June 2020 after the spring melt occurs and Whale Tail Attenuation Pond becomes operational for contact water.
	Runoff from the Whale Tail WRSF, Industrial Sector, Camp Sector and Ore Stockpile	Natural Drainage	2018	June 2020	Runoff collected until decommissioning of Quarry 1.
	Pumped flows from the Truck Shop	Pump / Pipeline	2018	June 2020	Flow from the Truck Shop until decommissioning of Quarry 1 by June 2020 after the spring melt occurs and Whale Tail Attenuation Pond becomes operational for contact water.
OUTFLOWS					
Figure 7 (Operations)	Evaporation	n/a	2018	June 2020	Evaporative losses proportional to the water surface area in Quarry 1.
	Discharge to Mammoth Lake	Pump / Pipeline	June 2019	June 2020	Quarry 1 inflows requiring treatment pumped to Mammoth Lake directly or via the AsWTP, depending on water quality.

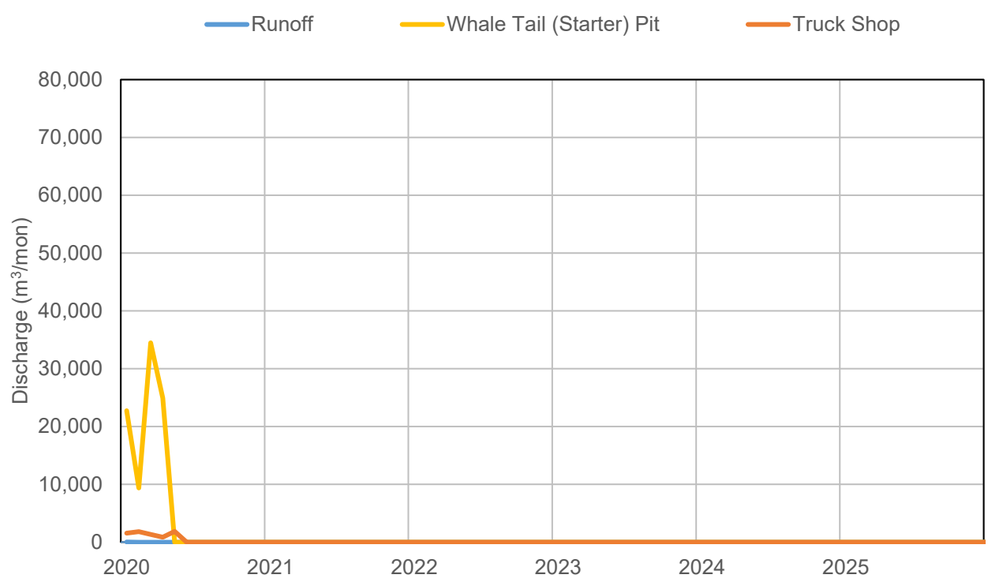


Figure 6: Inflows to Quarry 1 (Operations)

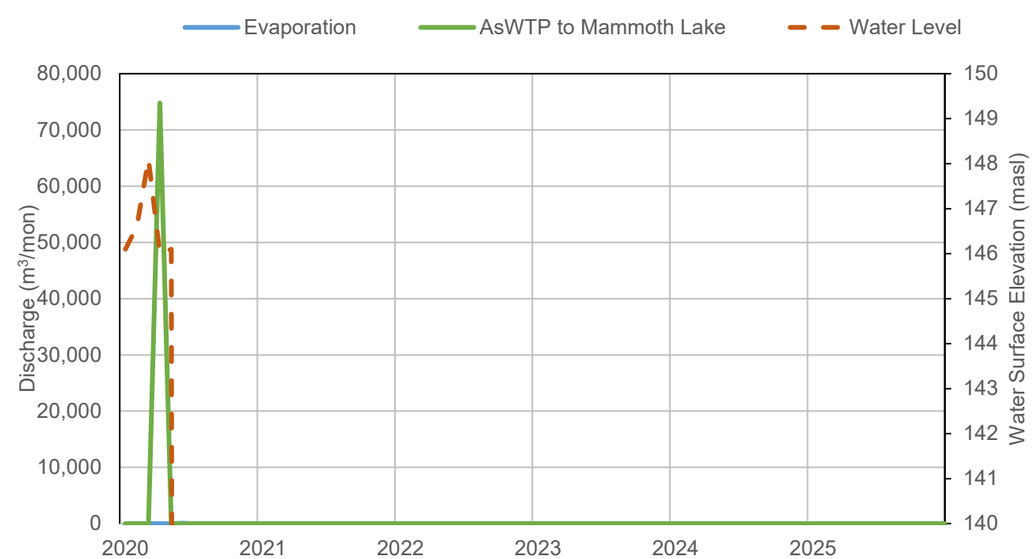


Figure 7: Outflows from Quarry 1 (Operations)

4.2 AP5 / GSP1

AP5/GSP1 is located just northeast of, and drains naturally to, Whale Tail Lake. The pond was excavated and pumped dry prior to 2018 to permanently increase capacity to manage runoff. The pond receives runoff from its watershed, which includes the underground waste rock storage facility and ore stockpiles and the underground portal. Excess water from the Whale Tail Attenuation Pond was also temporarily pumped to AP5 in June 2020. In September 2020, AP5 was pumped dry and no longer received contact water to provide capacity in the event that saline water storage from the underground workings was required. At this point, AP5 was renamed Groundwater Storage Pond 1 (GSP1). Water reporting to GSP1 will accumulate. If GSP1 reaches capacity, overflow will be discharged to available underground stopes where mining has been completed. At closure, GSP1 will be pumped to the underground and GSP1 will be backfilled.

Inflows and outflows for AP5 / GSP1 are summarized in Table 2, Figure 8 to Figure 11, and presented in tabular form in Appendix B.

Table 2: Water Balance Flow Components (AP5/GSP1)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 8 (Operations) ■ Figure 9 (Closure)	■ Runoff from natural areas	■ Natural drainage	■ 2018	■ Post-Closure	■ Runoff volumes are expected to be inversely proportional to the disturbed and waste rock pad areas.
	■ Runoff from the underground waste rock pad and underground ore stockpile	■ Natural drainage	■ 2018	■ Post-Closure	■ Runoff volumes are expected to be proportional to the area of the waste rock pad.
	■ Runoff from underground portal	■ Pump / Pipeline	■ 2019	■ Closure	■ Runoff volumes are expected to be proportional to the area of the portal.
	■ Whale Tail Attenuation Pond	■ Pump / Pipeline	■ June 2020	■ June 2020	■ Excess water from the Whale Tail Attenuation Pond was temporarily pumped to AP5 in June 2020.
OUTFLOWS					
■ Figure 10 (Operations) ■ Figure 11 (Closure)	■ Evaporation	■ n/a	■ 2018	■ Closure	■ Evaporative losses expected to be proportional to the water surface area of AP5/GSP1. ■ At closure, AP5 is backfilled. It has evaporation potential.
	■ Discharge to Whale Tail Attenuation Pond	■ Pump / Pipeline	■ 2020	■ 2020	■ In the event the Whale Tail Attenuation Pond cannot discharge to the environment, overflow reports to AP5.
	■ Dust Suppression	■ Pump / Pipeline	■ 2020	■ 2020	■ Water in AP5 was temporarily used for dust suppression in 2020.
	■ Pump to unidentified stope	■ Pump / Pipeline	■ 2020	■ Closure	■ In the event GSP1 exceeds its capacity, the overflow will be stored in underground stopes.
	■ Pump to Underground	■ Pump / Pipeline	■ Closure	■ Closure	■ At closure, GSP1 will be pumped to the underground.
	■ Runoff to Whale Tail Pit	■ Natural drainage	■ Closure	■ Post-Closure	■ Once GSP1 is backfilled, runoff from natural areas will be directed to Whale Tail Pit.

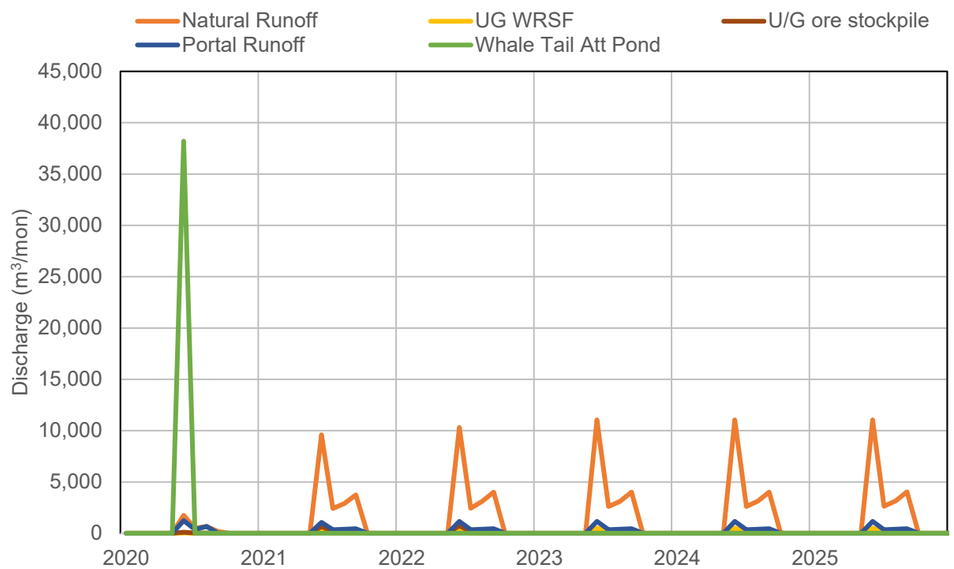


Figure 8: Inflows to AP5 / GSP1 (Operations)

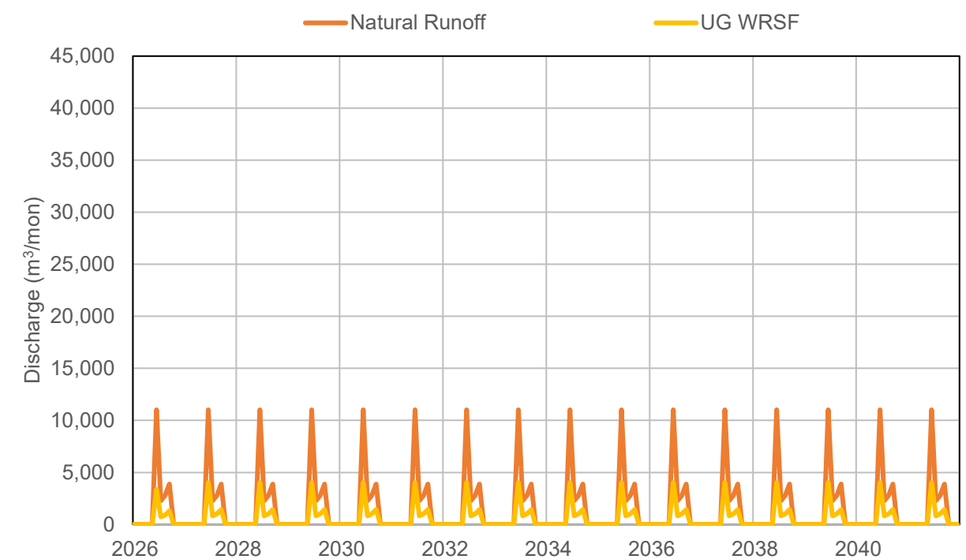


Figure 9: Inflow from AP5 / GSP1 (Closure)

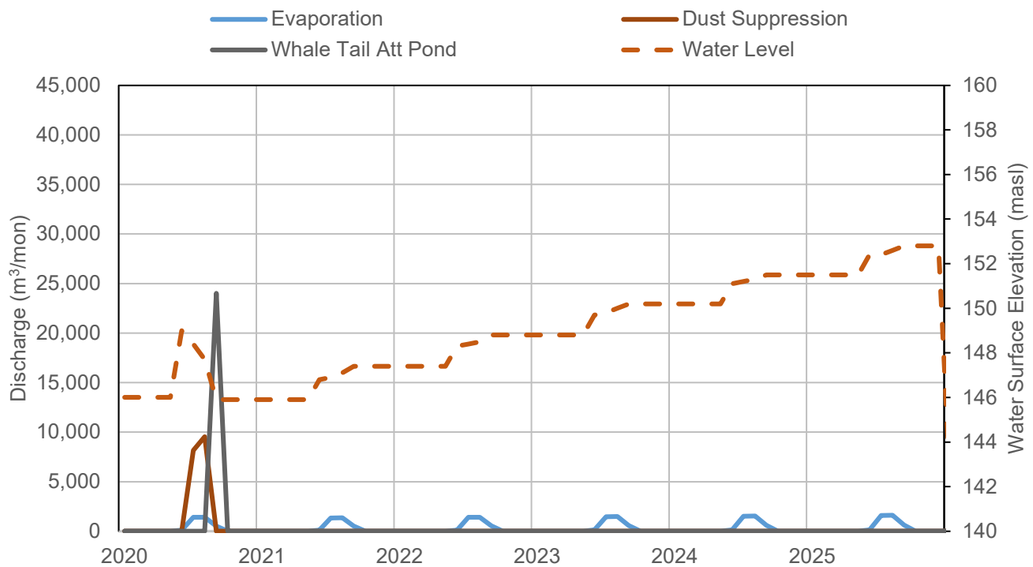


Figure 10: Outflow to AP5 / GSP1 (Operations)

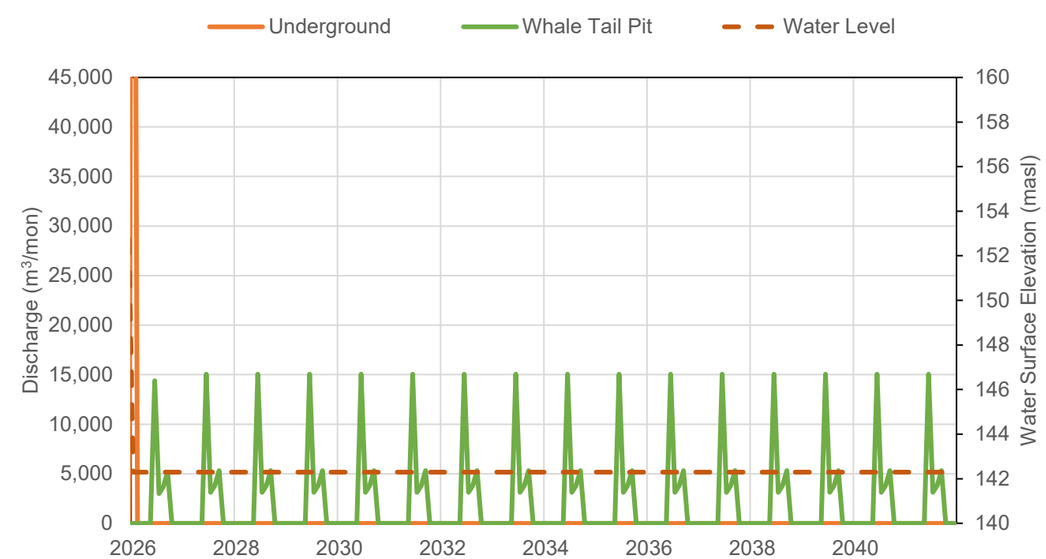


Figure 11: Outflows from AP5 / GSP1 (Closure)

4.3 Northeast Sector

The Northeast Sector consists of the catchment draining into Lakes A49 and A47. Prior to the operations of IVR pit, this catchment was impounded by the Northeast Dike (operational in January 2019) and diverted to the C-watershed. By September 2020, the Northeast Dike was decommissioned and Phase 1 of the IVR Pit was operational. At this point, Lakes A49 and A47 became sumps within the IVR Pit footprint; their inflows were pumped to the Whale Tail Attenuation Pond. This is expected to continue until the expansion of the IVR pit to its ultimate footprint, at which time Lakes A49 and A47 will cease to exist and their upstream catchment (Northeast Channel [NE Channel]) will be diverted north towards the C-watershed.

Inflows and outflows are summarized in Table 3 and Figure 12 to Figure 15, and presented in tabular form in Appendix B.

Table 3: Water Balance Flow Components (Northeast Sector)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 12 (Operations) ■ Figure 13 (Closure)	■ Runoff from natural areas	■ Natural drainage	■ 2018	■ Post-Closure	■ Natural areas include Lakes A47 and A49 until the expansion of IVR Pit. ■ After the expansion, the NE Channel will be diverted to the C-watershed.
OUTFLOWS					
■ Figure 14 (Operations) ■ Figure 15 (Closure)	■ Runoff to Whale Tail Attenuation Pond	■ Pump / Pipeline	■ 2020	■ 2020	■ Runoff pumped to Whale Tail Attenuation Pond.
	■ Drill Water	■ Pump / Pipeline	■ 2020	■ 2020	■ In 2020, water in Lake A47 is used for drilling.
	■ Runoff to C-watershed	■ Pump / Pipeline ■ Natural drainage	■ 2020 ■ 2021	■ 2020 ■ Closure	■ In 2020, runoff in Lake A47 is pumped to C-watershed. ■ Runoff diverted to C-watershed.
	■ Runoff to IVR Pit	■ Natural drainage	■ Closure	■ Post-Closure	■ Natural flow path re-established at closure. Drains to IVR Pit.

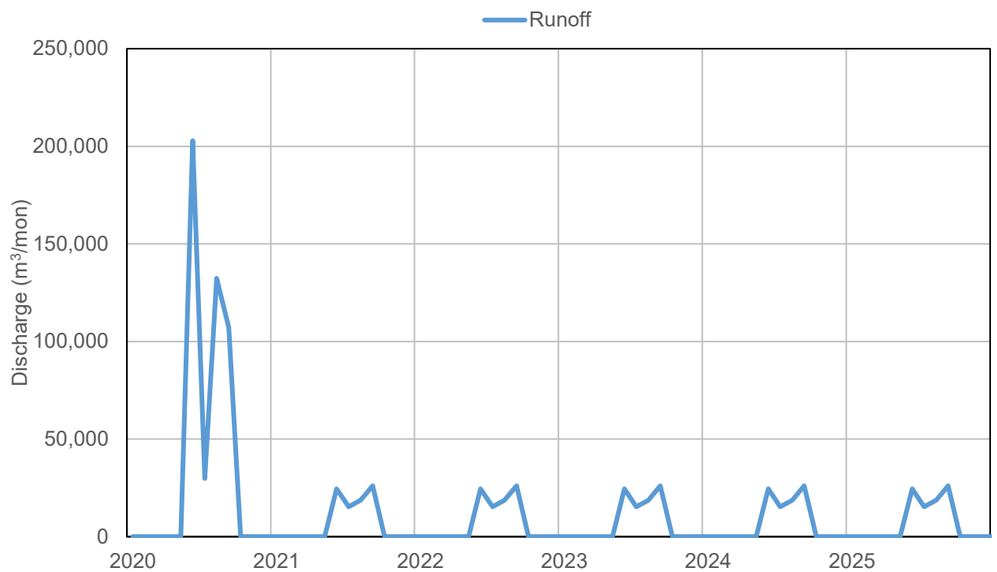


Figure 12: Inflows to the Northeast Sector (Operations)

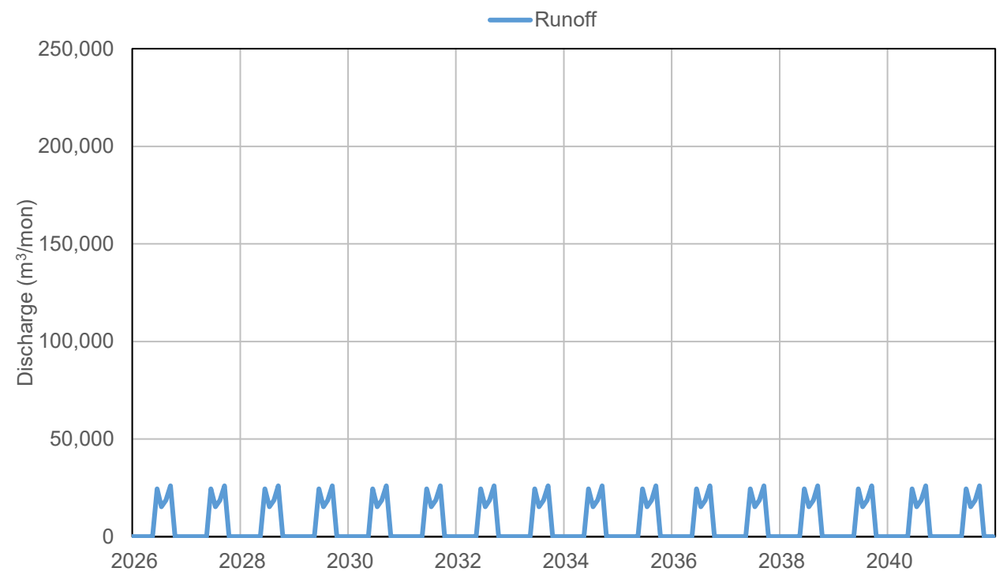


Figure 13: Inflows to the Northeast Sector (Closure)

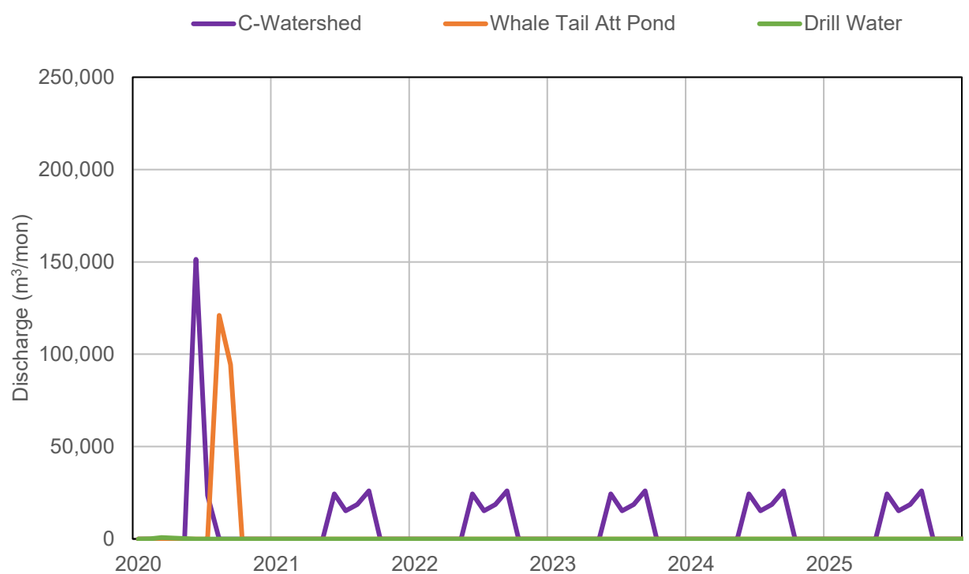


Figure 14: Outflows from the Northeast Sector (Operations)

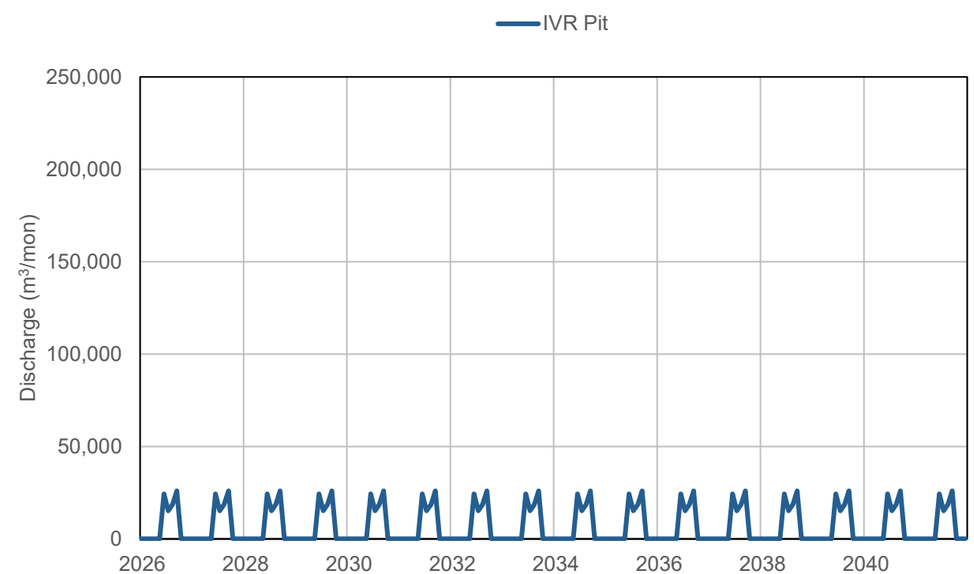


Figure 15: Outflows from the Northeast Sector (Closure)

4.4 Whale Tail Waste Rock Storage Facility Contact Water Collection System

The catchment of the Whale Tail WRSF Contact Water Collection System is located in the northern headwaters of the Mammoth Lake catchment. Its runoff drained naturally to Mammoth Lake until Licence A was approved in July 2018. Since then, runoff reporting to the collection system was collected in the Whale Tail WRSF Pond and pumped to the Whale Tail Attenuation Pond. The current plan is to continue pumping to Whale Tail Attenuation Pond until the IVR Attenuation Pond comes online in 2021. Runoff from the Whale Tail WRSF Pond will then be discharged to the IVR Attenuation Pond until closure.

Due to seepage through the Whale Tail WRSF Dike in 2019, since September 2019, no water has been accumulating in the Whale Tail WRSF Pond. All runoff reporting to the Whale Tail WRSF Pond is pumped directly to the active attenuation pond (i.e., either the Whale Tail Attenuation Pond or the IVR Attenuation Pond).

At closure, runoff will be pumped to the IVR Pit to expedite refilling of the pits and Whale Tail Lake (North Basin). Natural drainage patterns will be re-established at Post-Closure if water quality criteria are met (i.e., the assumed scenario in this water balance). The Whale Tail WRSF has a drainage area of 1.09 km^2.

Inflows and outflows are summarized in Table 4 and Figure 16 to Figure 19, and presented in tabular form in Appendix B.

Table 4: Water Balance Flow Components (Whale Tail WRSF Contact Water Collection System)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 16 (Operations) ■ Figure 17 (Closure)	■ Runoff from natural areas	■ Natural drainage	■ 2018	■ Post-Closure	■ Runoff volumes are expected to be inversely proportional to the footprint of the Whale Tail WRSF located in the Whale Tail WRSF Contact Water Collection System catchment, which reaches its maximum footprint in 2021.
	■ Runoff from the Whale Tail WRSF	■ Natural drainage	■ Q3 2018	■ Post-Closure	■ Runoff volumes are expected to be proportional to the footprint of the Whale Tail WRSF located in the Whale Tail WRSF Contact Water Collection System catchment, which reaches its maximum footprint in 2021.
	■ Seepage from the Whale Tail WRSF	■ Natural drainage	■ Q3 2018	■ Post-Closure	■ Based on OKC modelling results, seepage from the WRSF is negligible (See Appendix A).
OUTFLOWS					
■ Figure 18 (Operations) ■ Figure 19 (Closure)	■ Evaporation	■ n/a	■ Q3 2018	■ Post-Closure	■ Evaporative losses, proportional to the water surface area of the Whale Tail WRSF Water Collection System, once the pond becomes operational.
	■ Runoff to Mammoth Lake	■ Natural drainage	■ 2018 ■ Post-Closure	■ Q3 2018 ■ Post-Closure	■ Natural drainage to Mammoth Lake until Licence A is received. ■ Natural drainage to Mammoth Lake at Post-Closure.
	■ Runoff discharged to Whale Tail Attenuation Pond	■ Pump / Pipeline	■ 2020	■ 2021	■ Runoff discharged to the Whale Tail Attenuation Pond once operational until IVR Attenuation Pond is online.
	■ Runoff discharged to IVR Attenuation Pond	■ Pump / Pipeline	■ 2021	■ Closure	■ Runoff discharged to the IVR Attenuation Pond once operational until closure.
	■ Runoff discharged to IVR Pit	■ Pump / Pipeline	■ Closure	■ Post-Closure	■ Runoff discharged to Whale Tail Lake (North Basin) via IVR Pit to expedite refilling of the pit.

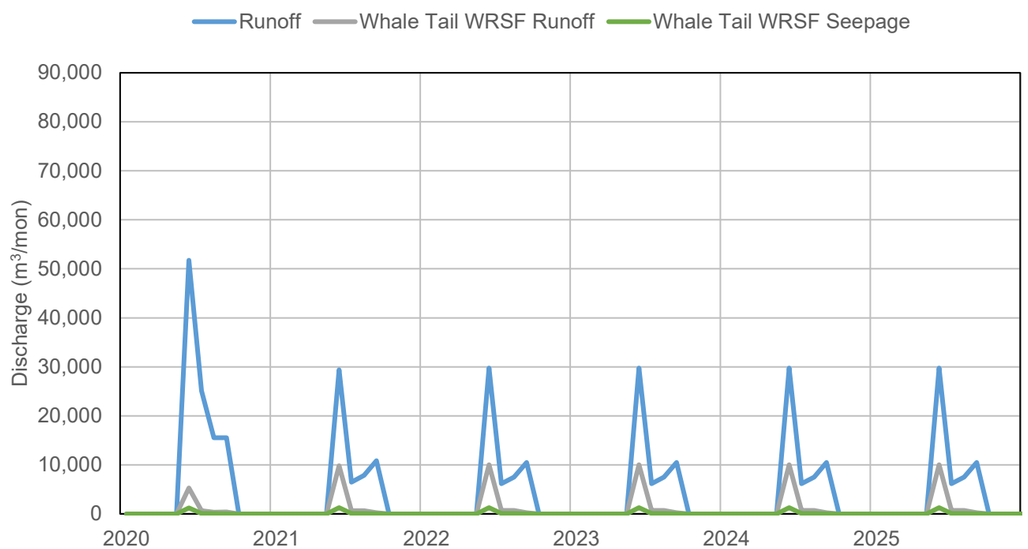


Figure 16: Inflows to the Whale Tail WRSF Contact Water Collection System (Operations)

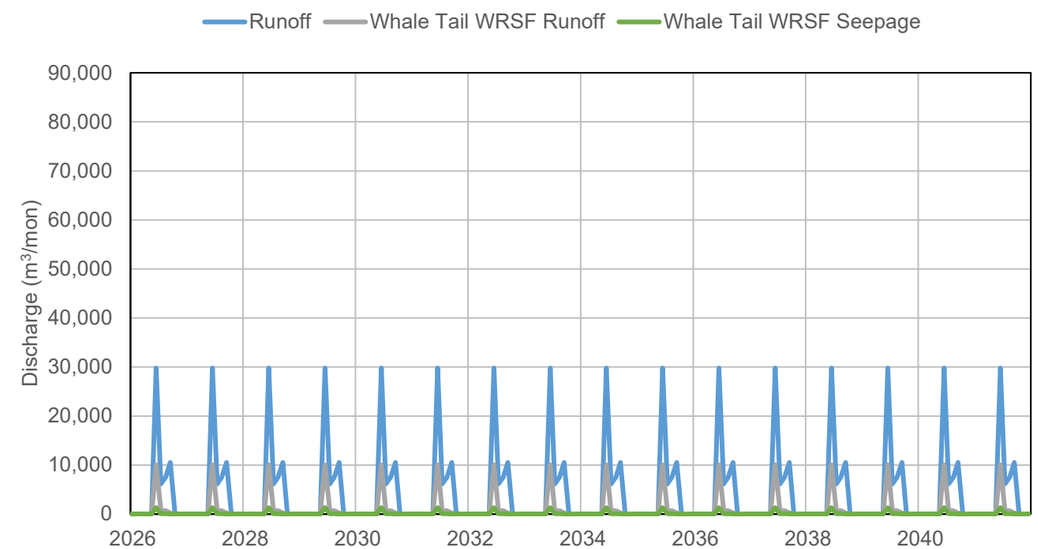


Figure 17: Inflows to the Whale Tail WRSF Contact Water Collection System (Closure)

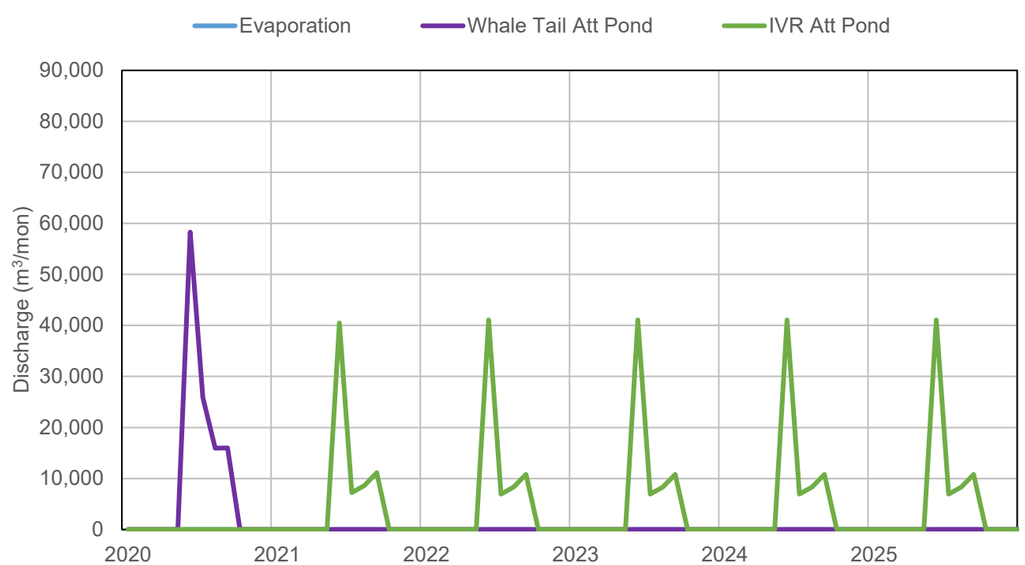


Figure 18: Outflows from the Whale Tail WRSF Contact Water Collection System (Operations)

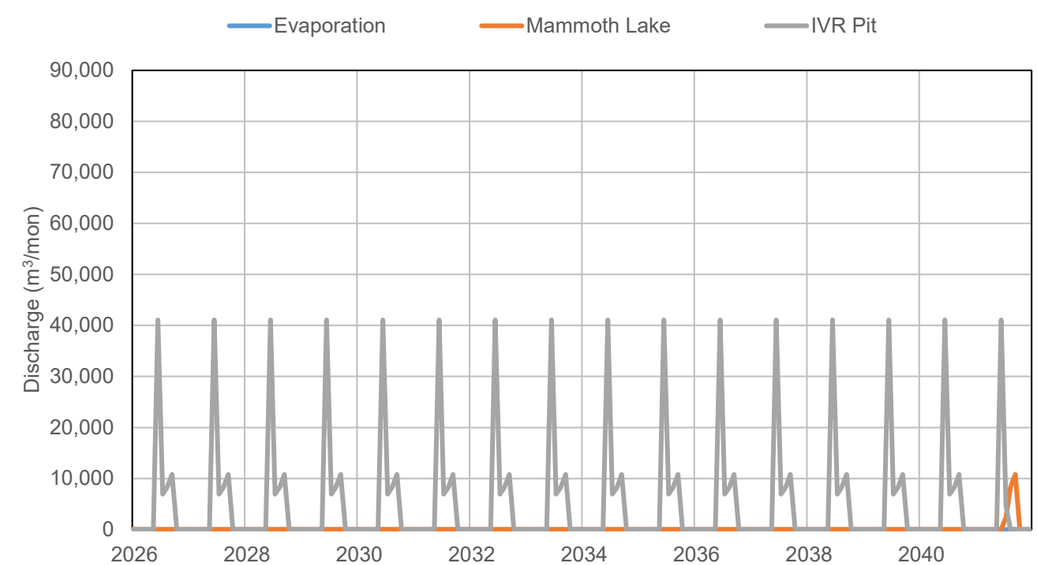


Figure 19: Outflows from the Whale Tail WRSF Contact Water Collection System (Closure)

4.5 North Sector

The North Sector consists of the northwest catchment area of Whale Tail Lake, just north of its natural lake outlet. The North Sector collection area became operational once Whale Tail Lake (North Basin) was dewatered and is intended to collect water draining north of Whale Tail Pit. The water is then pumped to the depression located upstream of Whale Tail Pit, downstream of Mammoth Dike (i.e., Mammoth Downstream [DS]). The North Sector collection area remains operational until closure when it is decommissioned and its natural drainage patterns towards Whale Tail Lake (North Basin) are re-established. The North Sector collection area has a drainage area of 0.243 km^2.

Inflows and outflows are summarized in Table 5 and Figure 20 to Figure 23. They are also presented in tabular form in Appendix B.

Table 5: Water Balance Flow Components (North Sector)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 20 (Operations) ■ Figure 21 (Closure)	■ Runoff from natural areas	■ Natural drainage	■ 2018	■ Post-Closure	■ Runoff volumes are expected to be proportional to the natural ground surface area from 2021 until the end of operations.
	■ Runoff from WRSF	■ Natural drainage	■ 2021	■ Post-Closure	■ Runoff volumes are expected to be proportional to the surface area of the WRSF from 2022 until the end of operations.
OUTFLOWS					
■ Figure 22 (Operations) ■ Figure 23 (Closure)	■ Runoff to Mammoth DS	■ Pump / Pipeline	■ 2019	■ Closure	■ Runoff pumped to Mammoth DS until closure.
	■ Runoff to Whale Tail Pit / Lake (North Basin)	■ Natural drainage	■ Closure	■ Post-Closure	■ Runoff volumes remain the same as in operations.

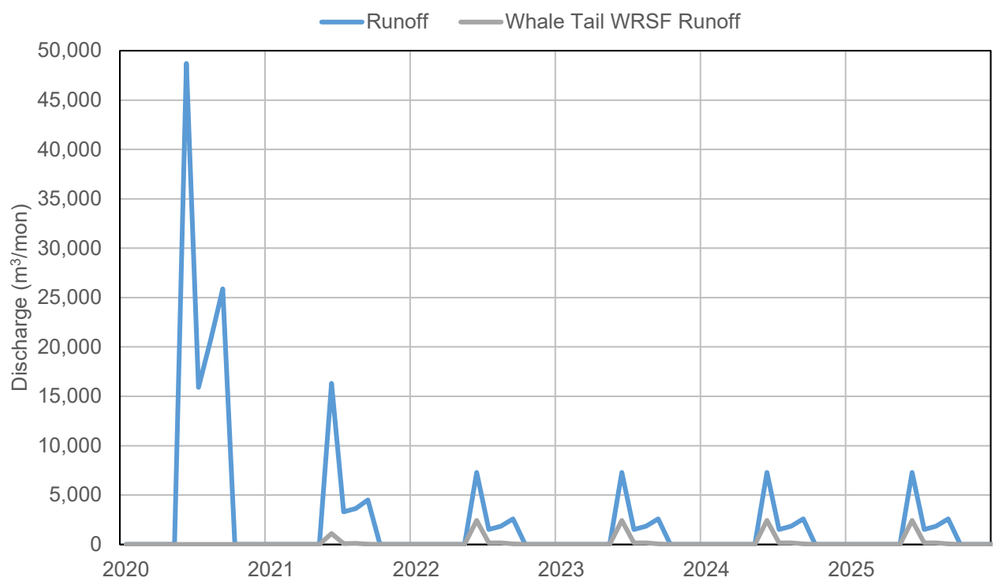


Figure 20: Inflows to the North Sector (Operations)

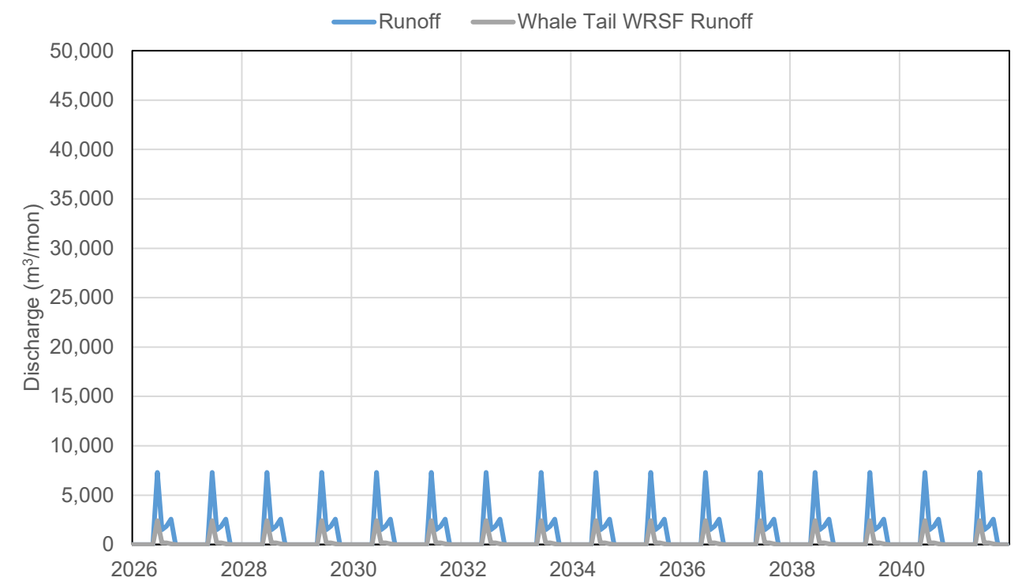


Figure 21: Inflows to the North Sector (Closure)

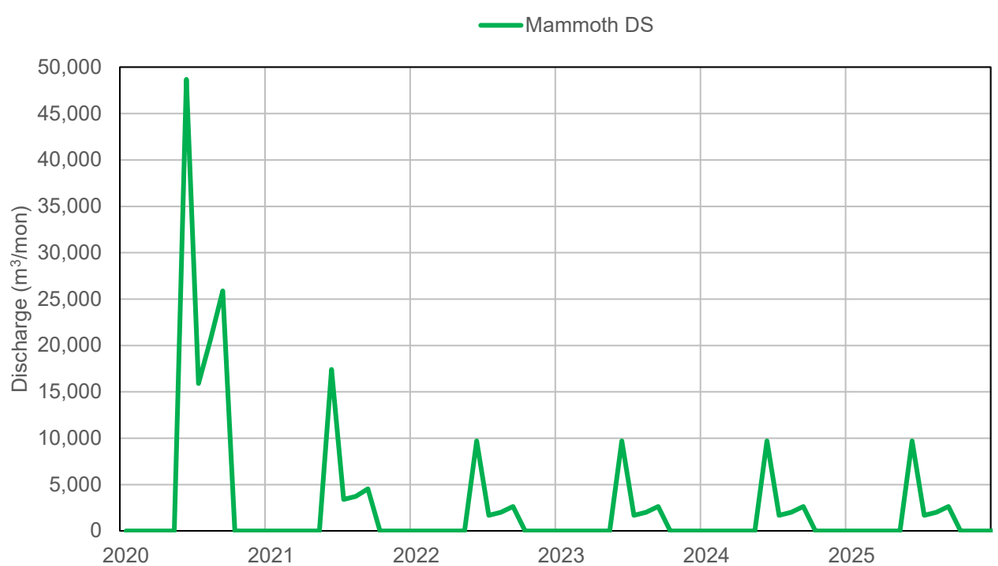


Figure 22: Outflows from the North Sector (Operations)

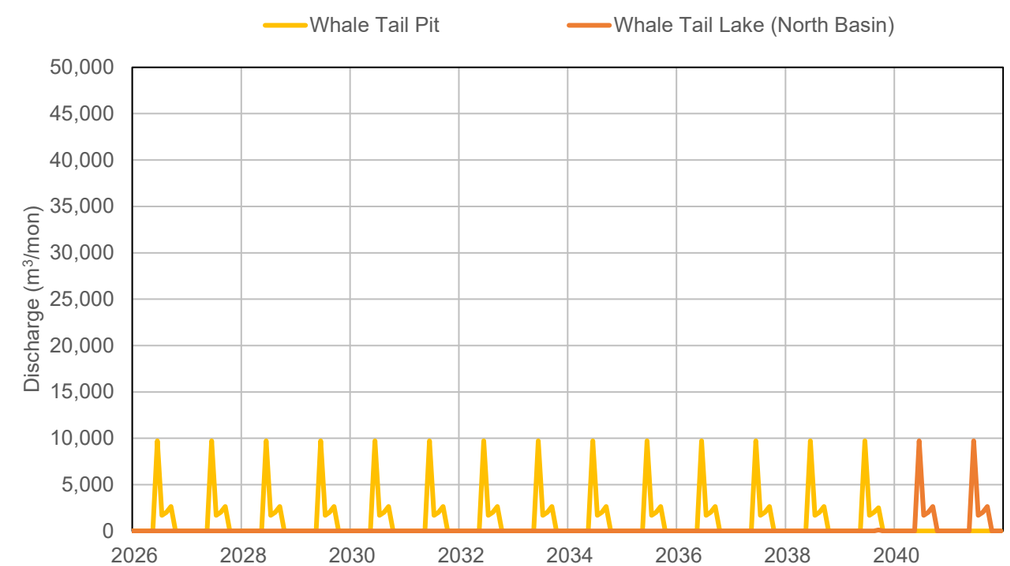


Figure 23: Outflows from the North Sector (Closure)

4.6 Whale Tail Pit

Prior to the dewatering of the Whale Tail Lake (North Basin), the Whale Tail Pit had a baseline drainage area of 0.13 km^2. This increased to 1.17 km^2 once the pit merged with Quarry 1 in June 2020. At closure, natural drainage patterns surrounding the Whale Tail Pit will be re-established to expedite its refilling. The drainage area of the Whale Tail Pit will increase to 29.6 km^2 which includes the sum of the natural drainage area of Whale Tail Lake and of the Whale Tail WRSF (whose flows will be pumped to IVR Pit).

At closure, Whale Tail Pit will be allowed to refill with runoff from its natural catchment and overflow from IVR Pit once it is filled. The Whale Tail Pit is expected to be refilled to 146.3 masl (i.e., the bed elevation of Whale Tail Lake at Whale Tail Pit) by 2039. At that point, it will become part of Whale Tail Lake (North Basin) (Section 4.8).

Inflows and outflows are summarized in Table 6 and Figure 24 to Figure 27. They are also presented in tabular form in Appendix B.

Table 6: Water Balance Flow Components (Whale Tail Pit)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 24 (Operations) ■ Figure 25 (Closure)	■ Catchment Runoff	■ Natural drainage	■ 2018	■ Post-Closure	■ Runoff volumes are expected to be proportional to the watershed area until the end of operations.
	■ Groundwater	■ Natural drainage	■ 2020	■ Closure	■ Groundwater inflows are expected throughout operations of the pit. ■ Freeze back of the pit wall is expected by closure, preventing inflows into the pit until thawing during pit refilling.
	■ Drilling Water	■ Pump / Pipeline	■ 2018	■ Closure	■ Drilling water from Whale Tail Lake (South Basin) until September 2018 when the water source switches to Nemo Lake.
	■ GSP1	■ Natural drainage	■ Closure	■ Post-Closure	■ Runoff from GSP1 at closure once its natural drainage patterns are re-established.
	■ Runoff from the North Sector	■ Natural drainage	■ Closure	■ Post-Closure	■ Runoff from the North Sector at closure once its natural drainage patterns are re-established.
	■ Runoff from the IVR Pit Sector	■ Natural drainage	■ Closure	■ Closure	■ Runoff from the IVR Pit is directed to the pit until the water level reaches 146.3 m.
	■ Runoff from the IVR WRSF	■ Pump / Pipeline	■ Closure	■ Closure	■ Runoff from the IVR WRSF is pumped to the pit until the water level reaches 146.3 m.
	■ Overflow from the Whale Tail Lake (North Basin)	■ Natural drainage	■ WT Att. Pd. Full	■ Post-Closure	■ Overflow from the Whale Tail Attenuation Pond (water surface elevation of 146.3 masl) into Whale Tail Pit during closure.
OUTFLOWS					
■ Figure 26 (Operations) ■ Figure 27 (Closure)	■ Mammoth DS	■ Pump / Pipeline	■ 2020	■ 2020	■ Runoff pumped to Mammoth DS
	■ Evaporation	■ n/a	■ 2018	■ Closure	■ Evaporative losses proportional to the water surface area of Whale Tail Pit. At closure, once the pit water level reaches 146.3 m and the pit becomes a part of Whale Tail Lake (North Basin), the evaporation is accounted for in Whale Tai Lake (North Basin)
	■ Water Lost in Ore	■ n/a	■ 2018	■ Closure	■ Water locked within the ore.
	■ Discharge to Whale Tail Attenuation Pond	■ Pump / Pipeline	■ 2020	■ 2021	■ Runoff is managed through the Whale Tail Attenuation Pond until the IVR Pit comes online.
	■ Discharge to IVR Attenuation Pond Attenuation Pond	■ Pump / Pipeline	■ 2021	■ Closure	■ Runoff is managed through the IVR Attenuation Pond until closure.
	■ Groundwater	■ n/a	■ WT Pit Full	■ Post - Closure	■ Groundwater flows from the pit are expected once the pit water levels reach 146.3 m.

WT Att. Pd. = Whale Tail Attenuation Pond; WT Pit = Whale Tail Pit

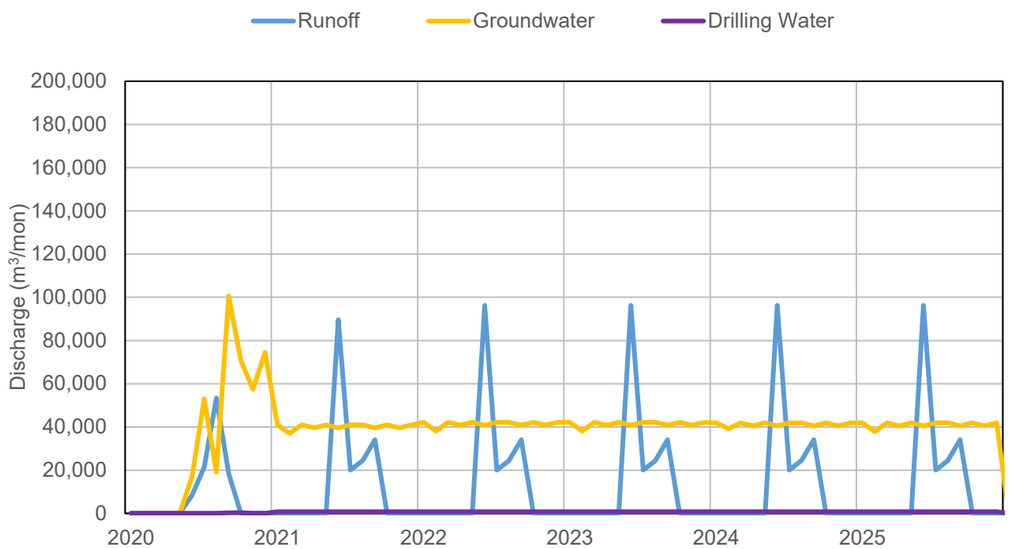


Figure 24: Inflows to the Whale Tail Pit (Operations)

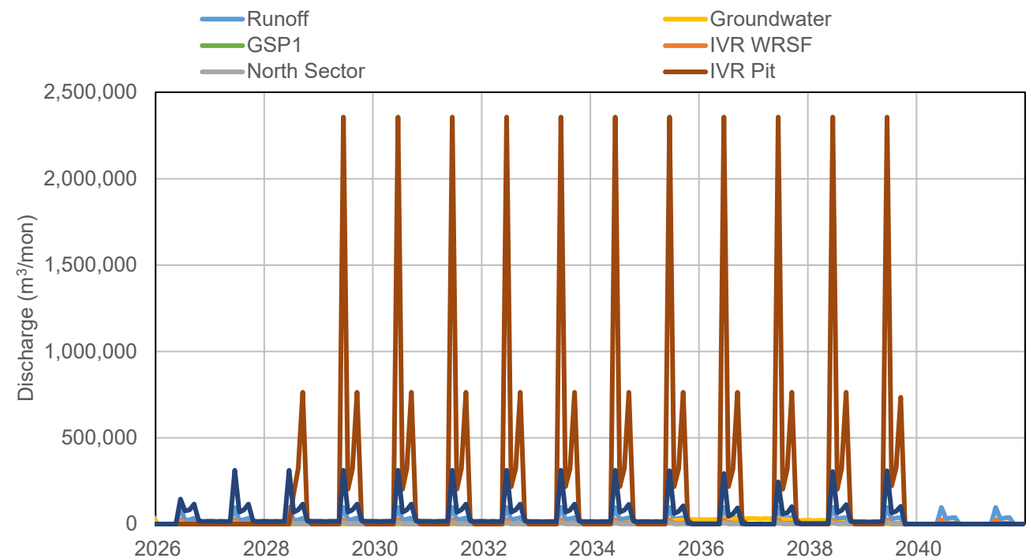


Figure 25: Inflows to the Whale Tail Pit (Closure)

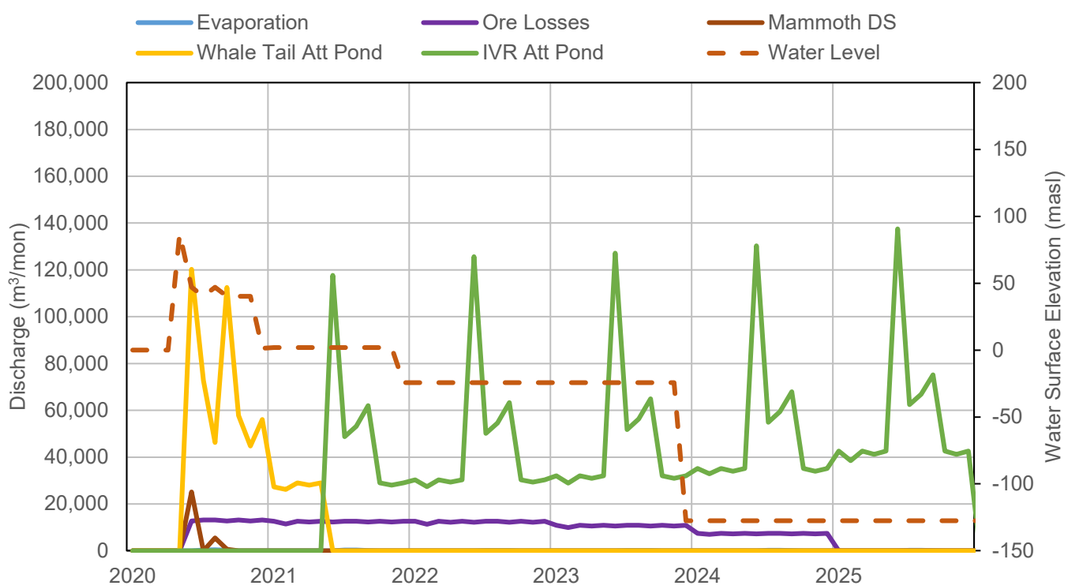


Figure 26: Outflows from the Whale Tail Pit (Operations)

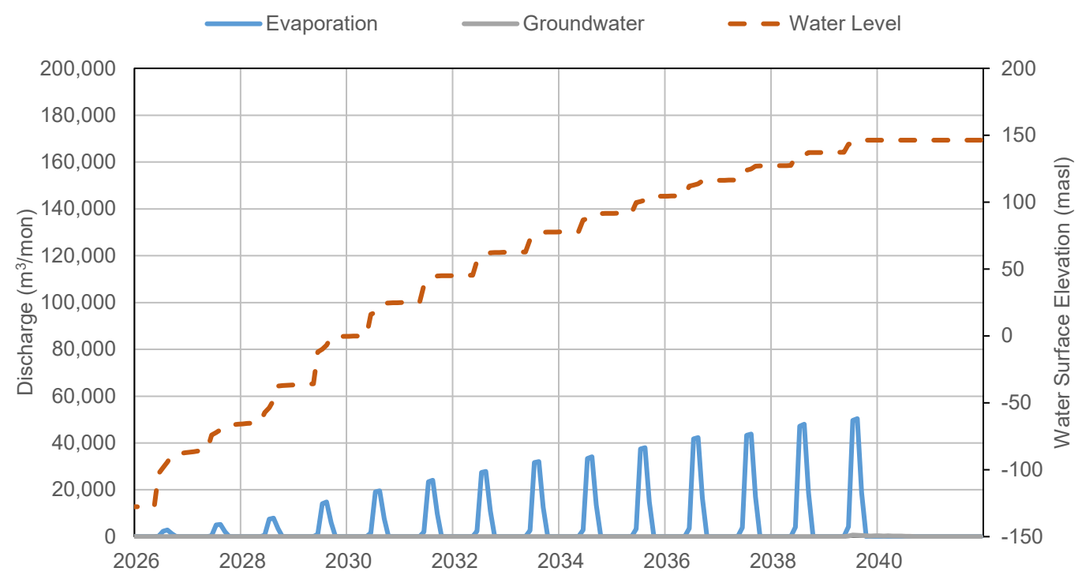


Figure 27: Outflows from the Whale Tail Pit (Closure)

4.7 Mammoth Downstream

Mammoth Downstream (DS) is located in the area between Whale Tail Pit and the Mammoth Dike. It collects runoff from its natural catchment, including runoff from the non-potentially acid generating rock (NPAG) stockpile, as well as flows from the North Sector (which actually discharges to the pipeline downstream of Mammoth DS). Its inflows are then pumped to the operational attenuation pond.

At closure, runoff to Mammoth DS will be allowed to overflow to Whale Tail Pit and Whale Tail Lake (North Basin).

Inflows and outflows are summarized in Table 7 and Figure 28 to Figure 31. They are also presented in tabular form in Appendix B.

Table 7: Water Balance Flow Components (Mammoth DS)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 28 (Operations) ■ Figure 29 (Closure)	■ Catchment Runoff	■ Natural drainage	■ 2018	■ Post-Closure	■ Runoff volumes are expected to be proportional to the watershed area until the end of operations.
	■ Runoff from NPAG Stockpile	■ Natural drainage	■ 2021	■ Post-Closure	■ Annual runoff volumes are expected to be constant.
	■ Runoff from the North Sector	■ Pump / Pipeline	■ 2020	■ Closure	■ Runoff from the North Sector during operations (discharged to the pipeline just downstream of Mammoth DS).
	■ Flow from Whale Tail Pit	■ Pump / Pipeline	■ 2020	■ 2020	■ Runoff from Ramp 1 of the Whale Tail Pit was pumped to Mammoth DS in 2020.
OUTFLOWS					
■ Figure 30 (Operations) ■ Figure 31(Closure)	■ Discharge to Whale Tail Attenuation Pond	■ Pump / Pipeline	■ 2020	■ 2021	■ Runoff is managed through the Whale Tail Attenuation Pond until the IVR Pit comes online.
	■ Discharge to IVR Attenuation Pond Attenuation Pond	■ Pump / Pipeline	■ 2021	■ Closure	■ Runoff is managed through the IVR Attenuation Pond until closure.
	■ Discharge to Whale Tail Lake (North Basin)	■ Natural drainage	■ Closure	■ Post Closure	■ Runoff drains to the Whale Tail Lake (North Basin).

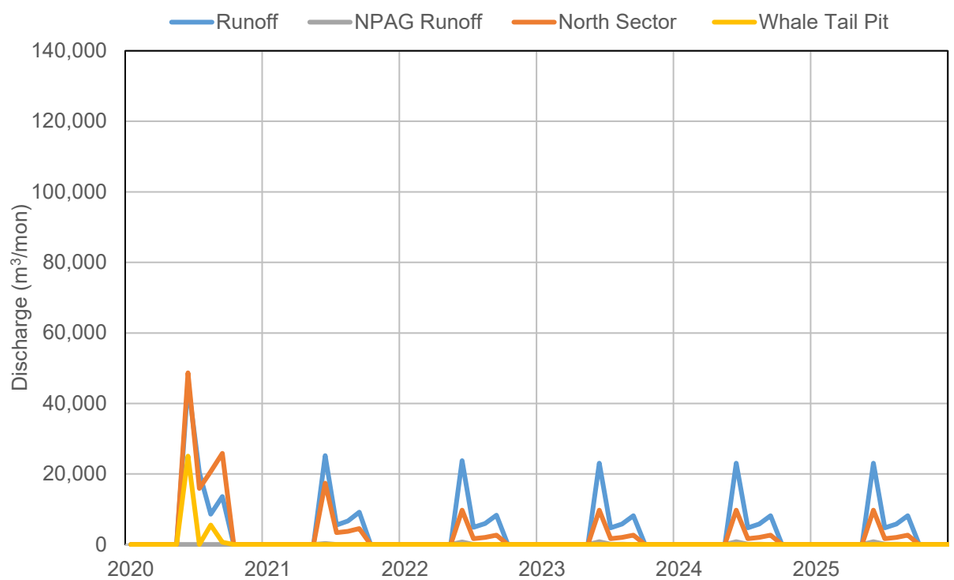


Figure 28: Inflows to Mammoth DS (Operations)

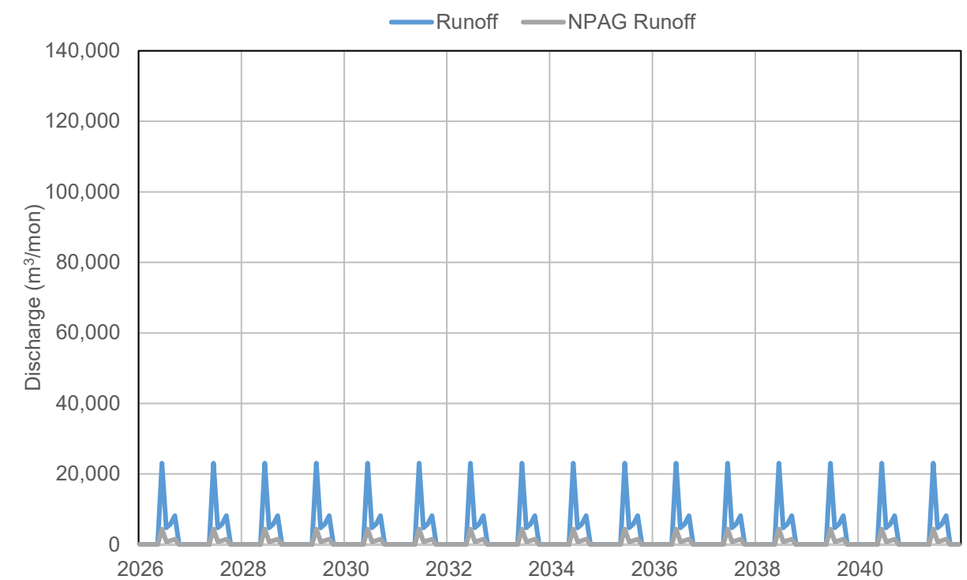


Figure 29: Inflows to Mammoth DS (Closure)

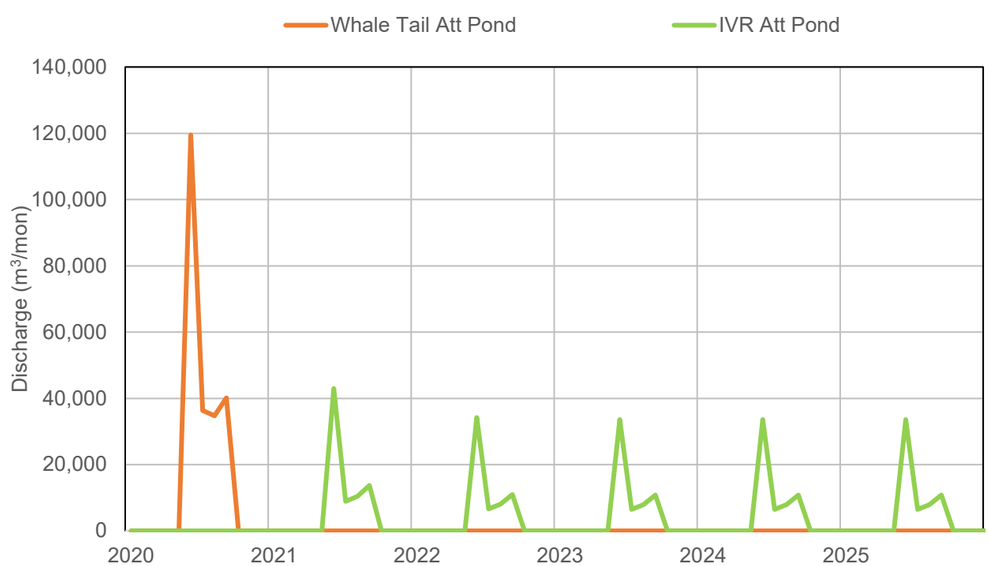


Figure 30: Outflows from Mammoth DS (Operations)

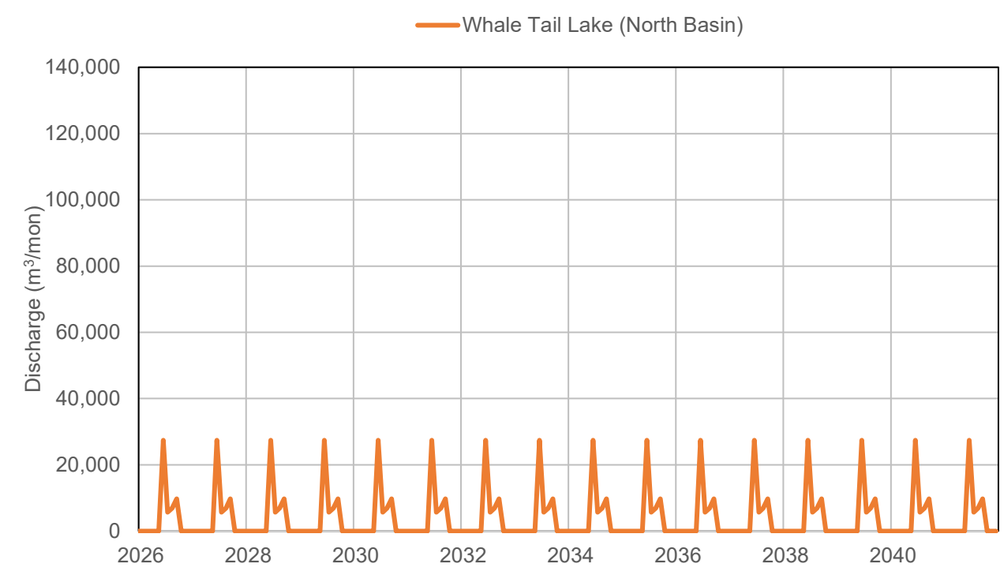


Figure 31: Outflows from Mammoth DS (Closure)

4.8 Whale Tail Lake (North Basin) / Whale Tail Attenuation Pond

The Whale Tail Attenuation Pond is located just south of the Whale Tail Pit. It became operational once Whale Tail Lake (North Basin) was dewatered mid-May 2020.

Prior to mid-May 2020, site contact water (with the exception of flow from the camp biodisk) was managed within Quarry 1; the Whale Tail Lake (North Basin) only received camp biodisk flows and naturally draining runoff (including runoff from the Lake A53 watershed) and seepage through the Whale Tail Dike. During this time, water collected in the Whale Tail Lake (North Basin) was discharged to Whale Tail Lake (South Basin) and Mammoth Lake via the AsWTP.

After mid-May 2020, all site contact water was managed in the Whale Tail Attenuation Pond and discharged to either Whale Tail Lake (South Basin) or Mammoth Lake, via the AsWTP. This will continue until June 2021, when the IVR Attenuation Pond becomes operational until closure. At that time, the contact water collected in the Whale Tail Attenuation Pond will be discharged to the IVR Attenuation Pond.

At closure, the Whale Tail Attenuation Pond will become part of Whale Tail Lake (North Basin) once more upon the filling of the Whale Tail and IVR Pits. As part of the Project's Fisheries Offsetting Plan, the final elevation of Whale Tail Lake (North Basin) will be 153.5 masl. This level will be maintained by the Mammoth Lake sill constructed at the Mammoth Dike at closure. The Whale Tail Dike will remain in place until pit lake water meets quality objectives.

Post-closure will be initiated in 2042 once the final water level is reached, and water quality is acceptable. At that time, drainage patterns will then be re-established towards Mammoth Lake (i.e., water overflows the Mammoth Lake sill) and the Whale Tail Dike will be decommissioned, reconnecting the North and South basins of Whale Tail Lake.

Whale Tail Lake (North Basin) has a baseline catchment area of 28.6 km^2. This catchment area was reduced to 28.4 km^2 in 2017 from the isolation of the Underground Mine and related water management systems. It was further reduced to 6.12 km^2 with the construction of Whale Tail Dike in 2018. In 2019, the construction of the Northeast Dike and the pumping of the Lake A53 watershed runoff to Whale Tail Lake (South Basin) further reduced the catchment area to 3.05 km^2. At post-closure, the natural drainage will be restored, returning to baseline conditions.

Inflows and outflows are summarized in Table 8 and Figure 32 to Figure 35. They are also presented in tabular form in Appendix B. Whale Tail Lake (North Basin) is expected to reach the elevation of 153.5 masl by 2042.

Table 8: Water Balance Flow Components (Whale Tail Lake [North Basin] / Whale Tail Attenuation Pond)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 32 (Operations) ■ Figure 33 (Closure)	■ Catchment runoff	■ Natural drainage	■ 2018	■ Post-Closure	■ Runoff from the local catchment. Until November 2019, this includes runoff from the Lake A53 watershed. ■ Mean annual runoff volumes are expected to be constant following the installation of the Whale Tail Dike and Mammoth Dike.
	■ Flows from the Camp Biodisk	■ Pump / pipeline	■ 2018 ■ Closure	■ 2021 ■ Post-Closure	■ Flows from the Camp Biodisk until the IVR Attenuation Pond becomes operational. ■ Flows from Camp Biodisk during closure.
	■ NE Sector	■ Pump / Pipeline	■ 2020	■ 2020	■ Pumped flows from the NE Sector in 2020.
	■ Lake A53 Dewatering	■ Pump / pipeline	■ 2020	■ 2020	■ In September 2020, Lake A53 is dewatered.
	■ Pumped flows from the Truck Shop	■ Pump / Pipeline	■ 2020	■ 2021	■ Flow from the Truck Shop until the IVR Attenuation Pond becomes operational.
	■ Groundwater	■ Natural drainage	■ 2019	■ Post-Closure	■ Groundwater inflows during dewatering from March to June 2019. ■ Groundwater inflows following the dewatering of Whale Tail Lake (North Basin) from 2020 to Post-Closure.
	■ Seepage through the Whale Tail Dike	■ Natural drainage	■ 2019	■ Closure	■ Seepage through the Whale Tail Dike ■
	■ Intercepted runoff from the Industrial Sector, Camp Sector and Ore Stockpile	■ Natural drainage	■ 2020	■ Post-Closure	■ Runoff collected once the Whale Tail Attenuation Pond becomes operational until post-closure.
	■ Runoff collected in the Whale Tail WRSF Contact Water Collection System	■ Pump / pipeline	■ 2020	■ 2021	■ Runoff collected until the IVR Attenuation Pond becomes operational.
	■ Flows from Whale Tail Pit	■ Pump / pipeline	■ 2020 ■ WT Pit Full	■ 2021 ■ Post-Closure	■ Pumped flow from Whale Tail Pit until the IVR Attenuation Pond is operational. ■ Overflow from Whale Tail Pit once full (2039).
	■ Flows from IVR Pit	■ Pump / pipeline	■ 2020	■ 2021	■ Pumped flow from IVR Pit until the IVR Attenuation Pond is operational.
	■ IVR Attenuation Pond	■ Natural drainage	■ Closure	■ Post-Closure	■ Overflow to Whale Tail Attenuation Pond during closure.
	■ Flows from Mammoth DS	■ Pump / pipeline ■ Natural drainage	■ 2020 ■ Closure	■ 2021 ■ Post-Closure	■ Flows collected until the IVR Attenuation Pond becomes operational. ■ Runoff from Mammoth DS drains to Whale Tail Lake (North Basin) after closure.
	■ AP5 Pump	■ Pump / pipeline	■ 2020	■ 2020	■ Discharge from AP5 for treatment and discharge to the environment.
	■ Runoff from NPAG stockpile	■ Natural drainage	■ 2022	■ Post-Closure	■ Runoff is proportional to the stockpile catchment.
	■ North Sector	■ Natural drainage	■ WT Pit Full	■ Post-Closure	■ Overflow from the North Sector once the Whale Tail Pit is full (2039).
	■ Overflow from IVR Pit	■ Natural drainage	■ WT Pit Full	■ Post-Closure	■ Overflow from IVR Pit once the Whale Tail Pit is full (2039).
	■ Whale Tail Lake (South Basin)	■ Natural drainage	■ WTN Full	■ Post-Closure	■ After Whale Tail Lake (North Basin) is full (2041), the Whale Tail Dike will be breached and the basins will merge.

Table 8: Water Balance Flow Components (Whale Tail Lake [North Basin] / Whale Tail Attenuation Pond)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
OUTFLOWS					
■ Figure 34(Operations) ■ Figure 35 (Closure)	■ Evaporation	■ n/a	■ 2018	■ Post-Closure	■ Evaporative losses are expected to be proportional to the water surface area of Whale Tail Lake (North Basin) / Attenuation Pond.
	■ AP5/GSP1	■ Pump / Pipeline	■ June 2020	■ June 2020	■ Excess water from the Whale Tail Attenuation Pond was temporarily pumped to AP5 in June 2020.
	■ Discharge via the AsWTP (Seepage)	■ Pump / pipeline	■ 2020	■ Closure	■ Discharge of collected water (primarily seepage from Whale Tail Dike) to Whale Tail Lake (South Basin) via the AsWTP.
	■ Discharge to IVR Attenuation Pond	■ Pump / pipeline	■ 2020	■ Closure	■ Discharge of contact water to IVR Attenuation Pond.
	■ Groundwater	■ Natural drainage	■ 2019	■ Post-Closure	■ Infiltration once the Whale Tail Attenuation Pond becomes operational until post-closure.
	■ Overflow to Whale Tail Pit	■ Natural drainage	■ Closure	■ WT Pit Full	■ Overflow of the Whale Tail Attenuation Pond into Whale Tail Pit during refilling at 146.3 masl. ■ Overflow of the Whale Tail Attenuation Pond is expected to start in June 2026.
	■ Runoff to Mammoth Lake	■ Natural drainage	■ Post-Closure	■ Post-Closure	■ Natural runoff to Mammoth Lake following the refilling of Whale Tail Lake (North Basin).

WT Pit = Whale Tail Pit; WTN = Whale Tail Lake (North Basin)

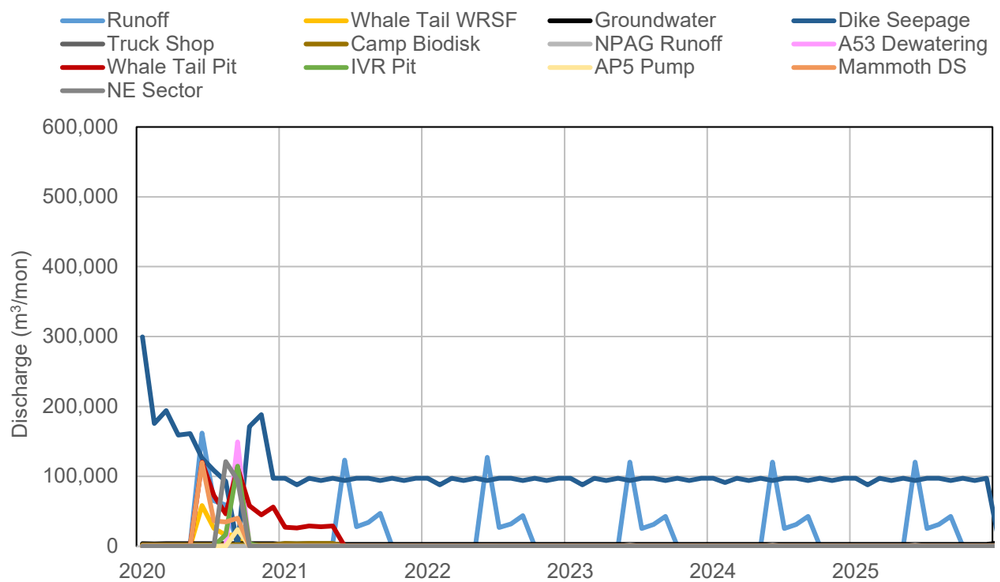


Figure 32: Inflows to the Whale Tail Lake (North Basin) / Whale Tail Attenuation Pond (Operations)

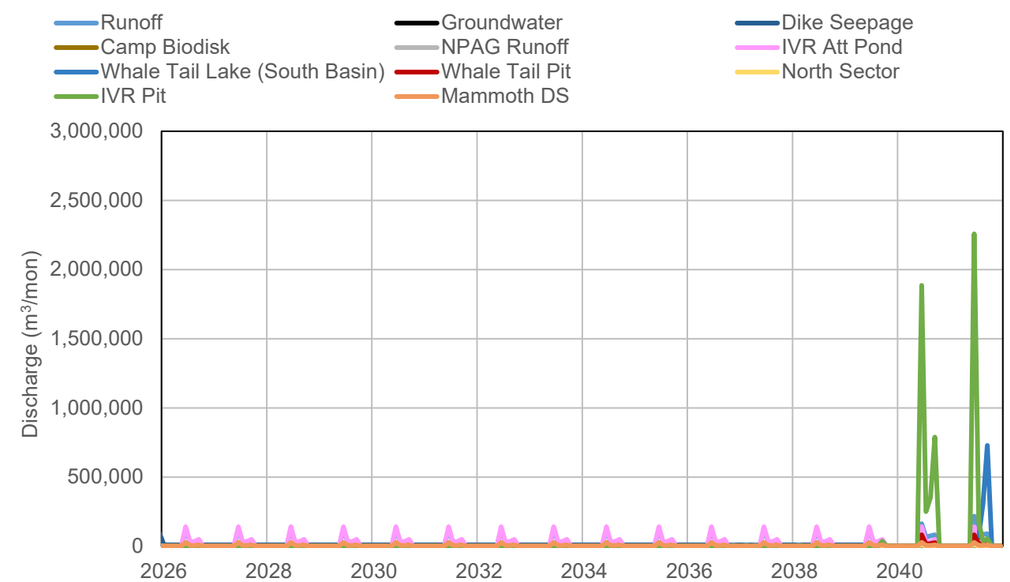


Figure 33: Inflows to the Whale Tail Lake (North Basin) / Whale Tail Attenuation Pond (Closure)

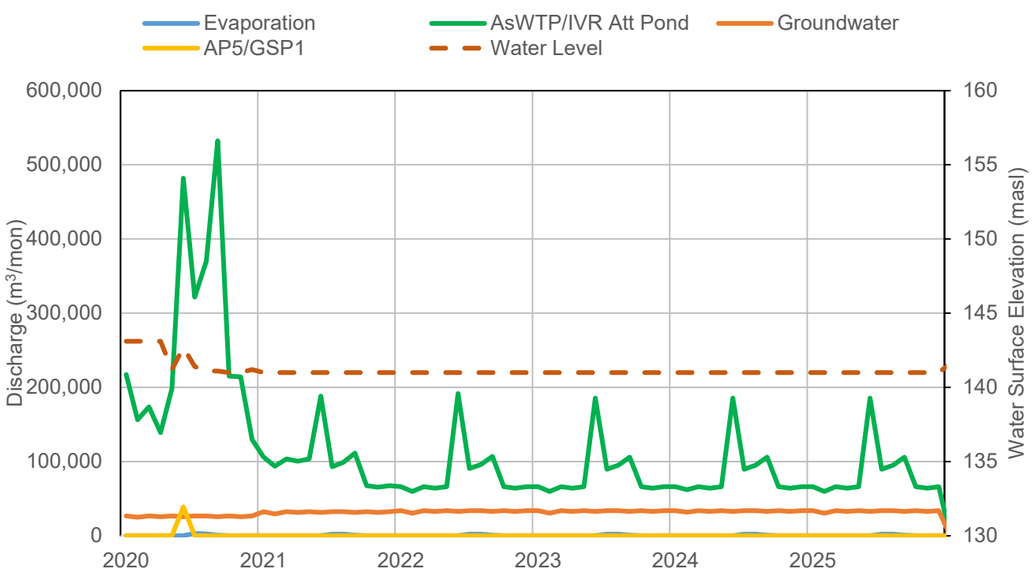


Figure 34: Outflows from the Whale Tail Lake (North Basin) / Whale Tail Attenuation Pond (Operations)

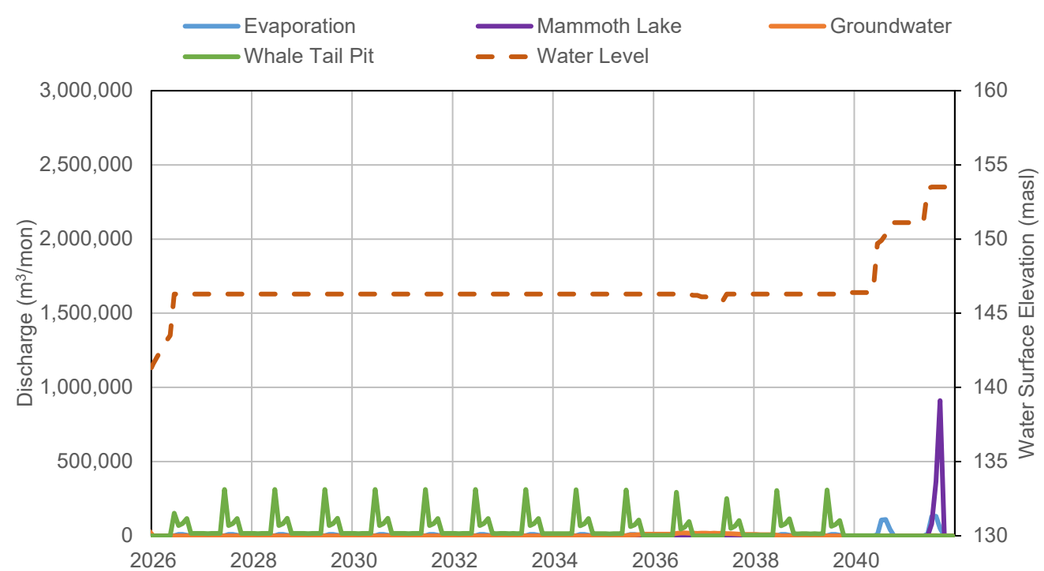


Figure 35: Outflows from the Whale Tail Lake (North Basin) / Whale Tail Attenuation Pond (Closure)

4.9 IVR Pit

The IVR Pit is located just north of Whale Tail Lake, within the Northeast Sector. The IVR Pit was initiated in September 2020. During Phase 1 of the IVR Pit, runoff from the Northeast Sector reports to Sump A47 (i.e., a sump within the pit footprint) and is pumped to the active attenuation pond (i.e., either the Whale Tail Attenuation Pond or the IVR Attenuation Pond). With the expansion of the pit footprint, runoff from the upstream portion of the Northeast sector will be diverted to the C-watershed. The IVR Pit's operational runoff is conveyed to the active attenuation pond.

The IVR Pit catchment has a drainage area of 1.18 km^2 until closure. At closure, natural drainage patterns surrounding the IVR Pit will be mostly re-established, including the Northeast Sector watershed. Runoff from the Whale Tail Lake (South Basin), the GSP-1 watershed area, the Underground Mine watershed area and the Whale Tail WRSF Contact Water Collection System will be pumped to the IVR Pit to expedite its refilling. The drainage area of the IVR Pit Tail Pit will increase to 25.4 km^2 which includes the sum of the natural drainage area of Whale Tail Lake (South Basin) and of the Whale Tail WRSF.

Inflows and outflows are summarized in Table 9 and Figure 36 to Figure 39. They are also presented in tabular form in Appendix B.

Table 9: Water Balance Flow Components (IVR Pit)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 36 (Operations) ■ Figure 37 (Closure)	■ Catchment Runoff	■ Natural drainage	■ 2020	■ Post-Closure	■ Runoff volumes are expected to be proportional to the watershed area.
	■ Drilling Water	■ Pump / Pipeline	■ 2020	■ Closure	■ Drilling water from Whale Tail Lake (South Basin) until September 2018 when the water source switches to Nemo Lake.
	■ Runoff from the WT WRSF (IVR Pit catchment)	■ Natural drainage	■ 2021	■ Post-Closure	■ Runoff from the portion of the Whale Tail WRSF in the IVR Pit catchment area drains to the pit.
	■ Runoff from the Northeast Sector	■ Natural drainage	■ Closure	■ Post-Closure	■ Runoff from the Northeast Sector is directed to the pit at closure.
	■ Runoff from the WT WRSF (WT WRSF Pond catchment)	■ Pump / Pipeline	■ Closure	■ Closure	■ Runoff collected in the WT WRSF Pond is pumped to the IVR Pit until water quality permits discharge to Mammoth Lake (2042).
	■ Drawdown from Whale Tail Lake (South Basin)	■ Pump / Pipeline	■ Closure	■ Closure	■ Drawdown flows from Whale Tail Lake (South Basin) is pumped to the pit until the water level reaches 146.3 masl.
OUTFLOWS					
■ Figure 38 (Operations) ■ Figure 39 (Closure)	■ Evaporation	■ n/a	■ 2020	■ Post-Closure	■ Evaporative losses proportional to the water surface area of Whale Tail Pit.
	■ Water Lost in Ore	■ n/a	■ 2020	■ 2025	■ Water locked within the ore.
	■ Discharge to Whale Tail Attenuation Pond	■ Pump / Pipeline	■ 2020	■ 2021	■ Runoff is managed through the Whale Tail Attenuation Pond until IVR Attenuation Pond is online
	■ Discharge to IVR Attenuation Pond	■ Pump / Pipeline	■ 2021	■ Closure	■ Runoff is managed through the IVR Attenuation Pond until closure.
	■ Discharge to Whale Tail Pit	■ Natural drainage	■ IVR Pit Full	■ WT Pit Full	■ Overflow to Whale Tail Pit until Whale Tail Pit is full (2039).
	■ Discharge to Whale Tail Lake (North Basin)	■ Natural drainage	■ WT Pit Full	■ Post-Closure	■ Overflow to Whale Tail Lake (North Basin) once Whale Tail Pit is full (2039).

WT Pit = Whale Tail Pit

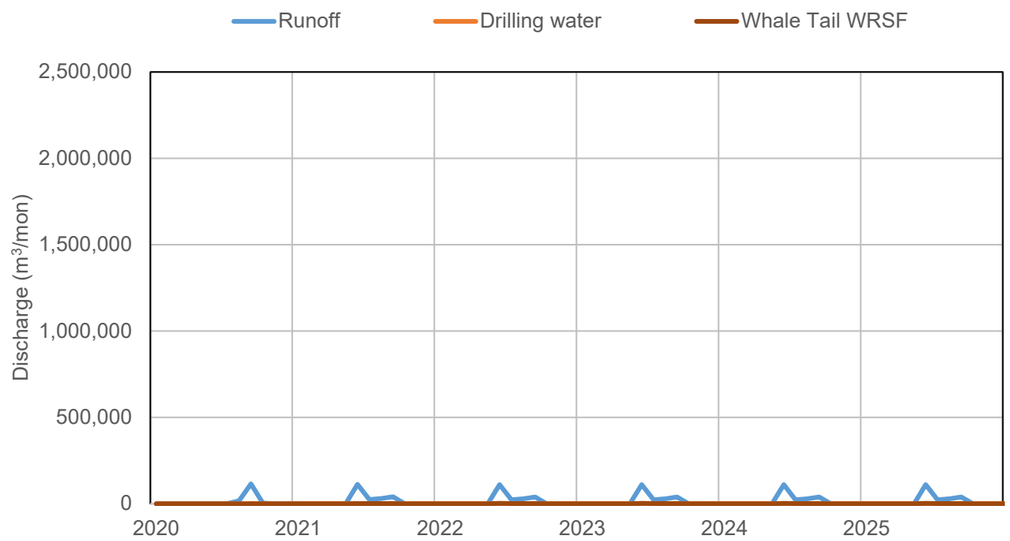


Figure 36: Inflows to IVR Pit (Operations)

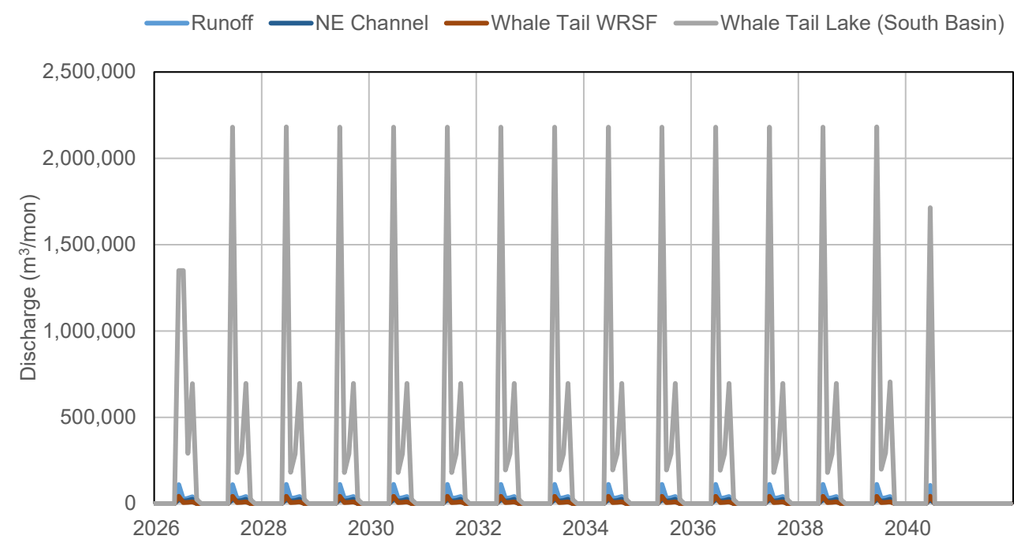


Figure 37: Inflows to IVR Pit (Closure)

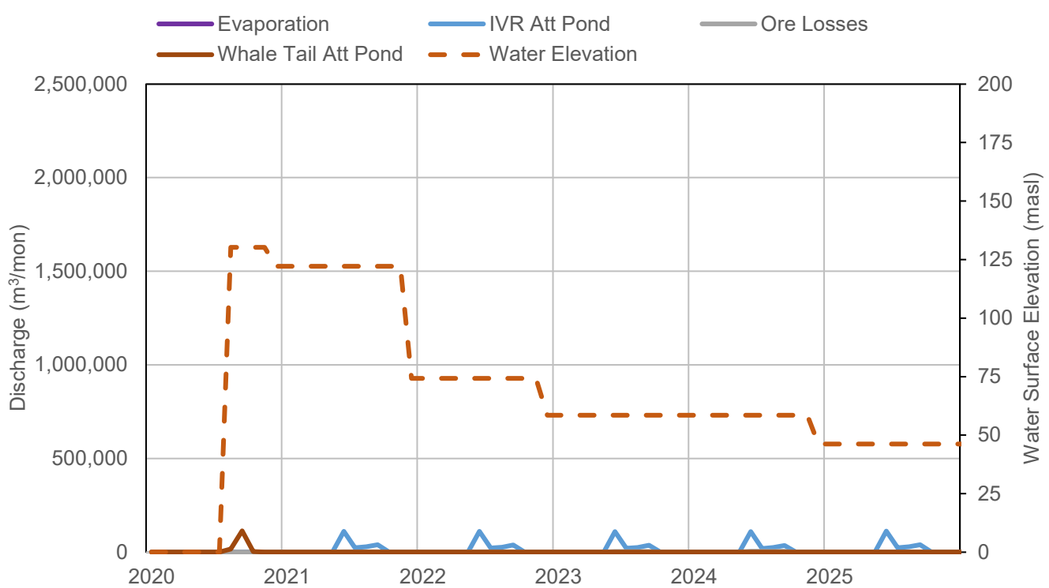


Figure 38: Outflows from IVR Pit (Operations)

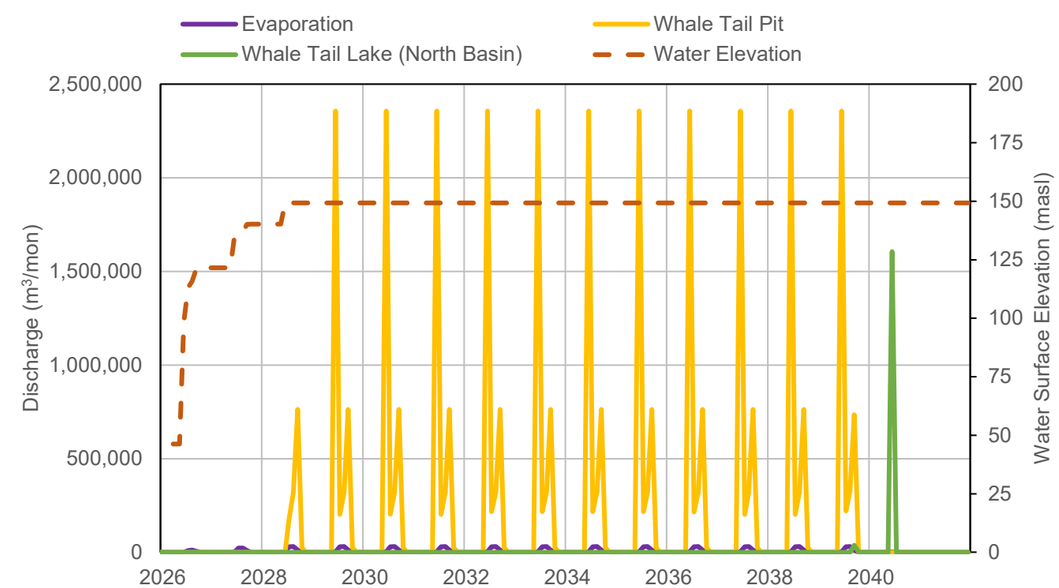


Figure 39: Outflows from IVR Pit (Closure)

4.10 IVR Waste Rock Storage Facility

The IVR WSRF Contact Water Collection System became operational once the IVR Pit was initiated. Prior to its operation, the natural catchment formed a portion of the Northeast Sector. Runoff from the IVR WRSF is captured by perimeter ditches and conveyed to the IVR WRSF Contact Water Collection System prior to being pumped to the active attenuation pond (i.e., either the Whale Tail Attenuation Pond or the IVR Attenuation Pond). At closure, the runoff from this area will be diverted to Whale Tail Pit.

Inflows and outflows are summarized in Table 10 and Figure 40 to Figure 43. They are also presented in tabular form in Appendix B.

Table 10: Water Balance Flow Components (IVR WRSF)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 40 (Operations) ■ Figure 41 (Closure)	■ Runoff from natural areas	■ Natural drainage	■ July 2020	■ Post-Closure	■ Runoff volumes are expected to be inversely proportional to the footprint of the IVR WRSF which reaches its maximum footprint in 2021.
	■ Runoff from the IVR WRSF	■ Natural drainage	■ July 2020	■ Post-Closure	■ Runoff volumes are expected to be proportional to the footprint of the IVR WRSF, which reaches its maximum footprint in 2021.
OUTFLOWS					
■ Figure 42 (Operations) ■ Figure 43 (Closure)	■ Runoff to Northeast Sector	■ Natural drainage	■ 2019	■ June 2020	■ Natural drainage to Northeast Sector until IVR Pit is operational.
	■ Runoff discharged to Whale Tail Attenuation Pond	■ Pump / Pipeline	■ 2020	■ 2021	■ Runoff discharged to the Whale Tail Attenuation Pond once IVR Pit is operational until IVR Attenuation Pond is online.
	■ Runoff discharged to IVR Attenuation Pond	■ Pump / Pipeline	■ 2021	■ Closure	■ Runoff discharged to the IVR Attenuation Pond once operational until closure.
	■ Runoff discharged to Whale Tail Pit	■ Pump / Pipeline	■ Closure	■ Post-Closure	■ Runoff discharged to Whale Tail Lake (North Basin) via Whale Tail Pit to expedite refilling of the pit.

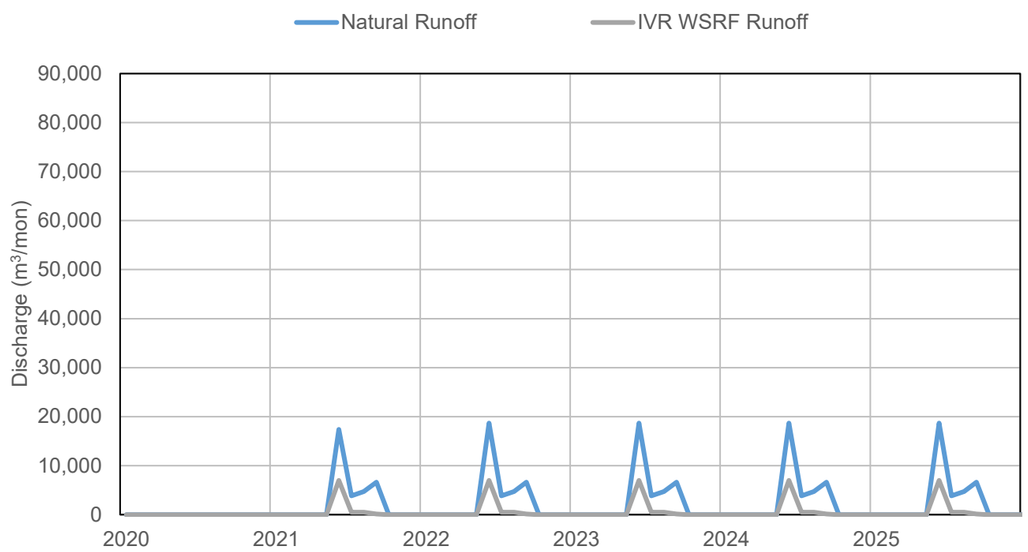


Figure 40: Inflows to IVR WRSF (Operations)

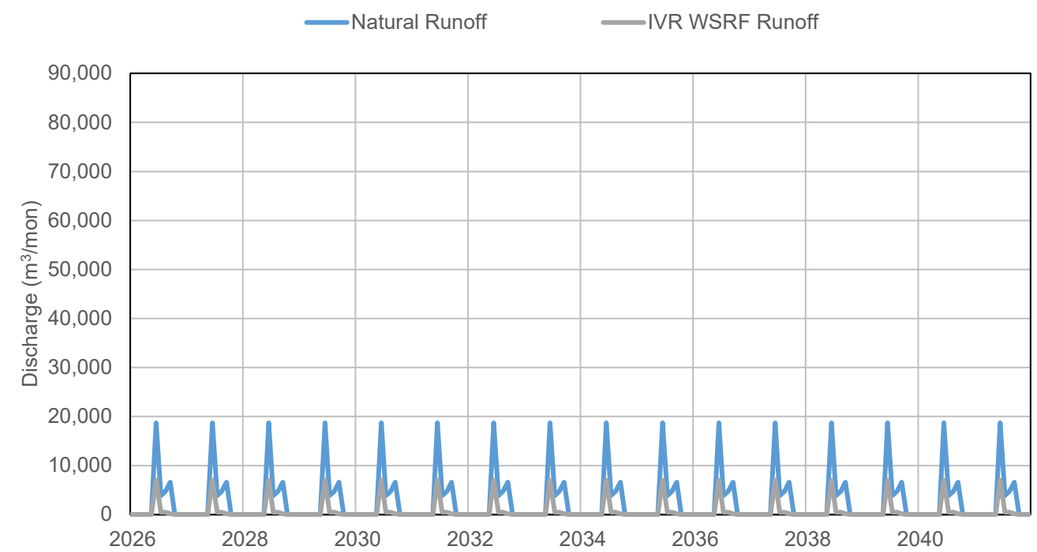


Figure 41: Inflows to IVR WRSF (Closure)

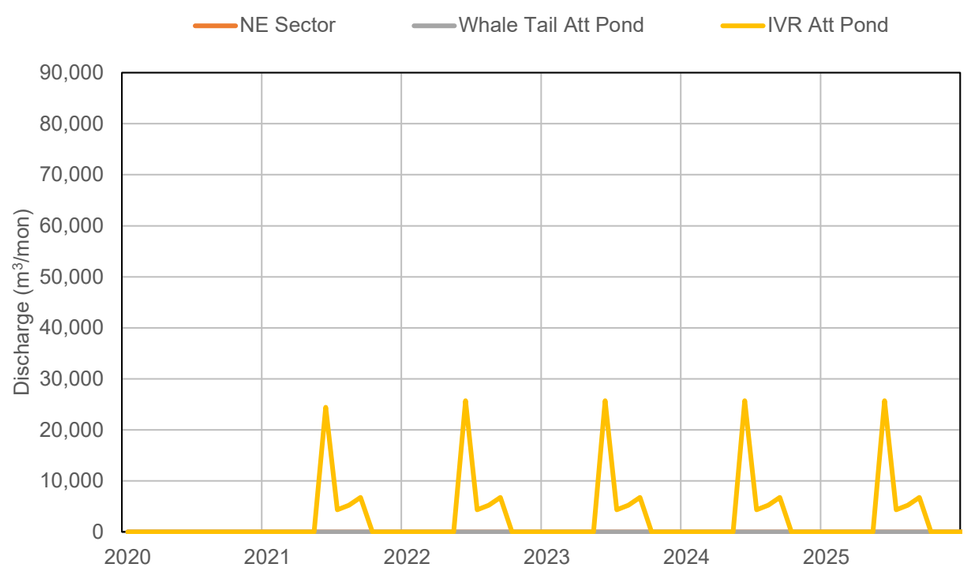


Figure 42: Outflows from IVR WRSF (Operations)

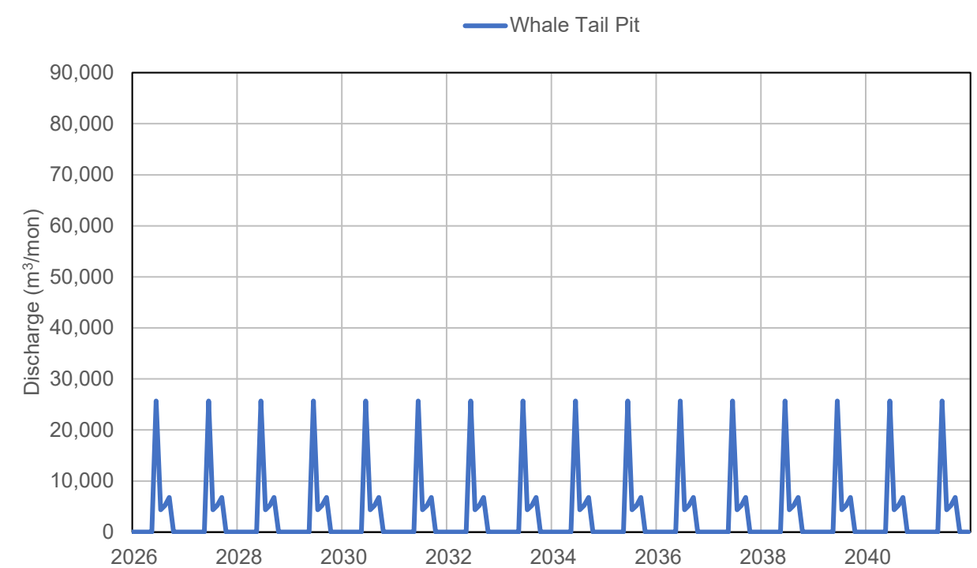


Figure 43: Outflows from IVR WRSF (Closure)

4.11 Lake A53 / IVR Attenuation Pond

The Lake A53 catchment, is located east of Whale Tail Lake. The catchment remains at baseline conditions until the freshet of 2021, when it becomes the IVR Attenuation Pond following fishout, the construction of the IVR Attenuation Pond Dike, and dewatering of Lake A53. Its outlet drains naturally to Whale Tail Lake (North Basin); in 2020, its flow was diverted to Whale Tail Lake (South Basin). The IVR Attenuation Pond is intended to manage all contact water from 2021 to closure while discharging through the AsWTP during open water conditions. At closure, it will be drawn down by pumping to the Underground Mine, backfilled with NML/NPAG waste rock to decrease its storage to zero and its natural drainage patterns will be re-established towards Whale Tail Lake (North Basin) via the Whale Tail Attenuation Pond.

The IVR Attenuation Pond has a drainage area of 1.32 km^2 at baseline. Its local drainage area diminishes with the increasing IVR WRSF footprint. Contributing catchments include those from the Whale Tail WRSF Contact Water Collection System, the North Sump, the Whale Tail Attenuation Pond, the Whale Tail Pit, the IVR Pit and the IVR WRSF Contact Water Collection System resulting in a total drainage area of 6.48 km^2 during operations. At closure, its drainage area consists of its local drainage area of 0.86 km^2.

Inflows and outflows are summarized in Table 11 and Figure 44 to Figure 47. They are also presented in tabular form in Appendix B.

Table 11: Water Balance Flow Components (Lake A53 / IVR Attenuation Pond)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 44 (Operations) ■ Figure 45 (Closure)	■ Catchment runoff	■ Natural drainage	■ 2018	■ Post-Closure	■ Runoff from the local catchment. Until November 2019, this includes runoff from the Lake A53 watershed. ■ Mean annual runoff volumes are expected to be constant following the installation of the Whale Tail Dike and Mammoth Dike.
	■ Flows from the Camp Biodisk	■ Pump / pipeline	■ 2021	■ 2021	■ Flows from the Camp Biodisk.
	■ Lake A50 and Lake A51 Dewatering	■ Pump / pipeline	■ 2020	■ 2020	■ Dewatering of Lake A50 and A51 in September 2020.
	■ Pumped flows from the Truck Shop	■ Pump / Pipeline	■ 2021	■ Closure	■ Flow from the Truck Shop once the IVR Attenuation Pond becomes operational.
	■ Runoff from the Landfarm	■ Natural drainage	■ 2018	■ Closure	■ Annual runoff volumes are expected to be constant.
	■ Flows from Whale Tail Attenuation Pond	■ Pump / pipeline	■ 2021	■ Closure	■ Pumped flow from Whale Tail Attenuation Pond once the IVR Attenuation Pond is operational.
	■ Flows from Whale Tail Pit	■ Pump / pipeline	■ 2021	■ Closure	■ Pumped flow from Whale Tail Pit once the IVR Attenuation Pond is operational.
	■ Runoff collected in the Whale Tail WRSF Contact Water Collection System	■ Pump / pipeline	■ 2021	■ Closure	■ Runoff collected once the IVR Attenuation Pond becomes operational.
	■ Flows from IVR Pit	■ Pump / pipeline	■ 2021	■ Closure	■ Pumped flow from IVR Pit until the IVR Attenuation Pond is operational.
	■ Flows from IVR WRSF	■ Natural and Pump / Pipeline	■ 2021	■ Closure	■ Runoff collected once the IVR Attenuation Pond becomes operational.
	■ Flows from Mammoth DS	■ Pump / pipeline	■ 2021	■ Closure	■ Flows collected once the IVR Attenuation Pond becomes operational.
	■ Flows from the Ore Stockpile 3	■ Natural drainage	■ 2022	■ Closure	■ Runoff volumes expected to be constant.
OUTFLOWS					
■ Figure 46 (Operations) ■ Figure 47 (Closure)	■ Evaporation	■ n/a	■ 2019	■ Post-Closure	■ Evaporative losses are expected to be proportional to the water surface area of Whale Tail Lake (North Basin) / Attenuation Pond.
	■ Dewatering to Whale Tail Lake (South Basin)	■ Pump / pipeline	■ 2020	■ 2020	■ Lake A53 dewatered prior to being operational as IVR Attenuation Pond.
	■ Dewatering to Whale Tail Attenuation Pond	■ Natural drainage	■ 2020	■ 2020	■ Lake A53 dewatered prior to being operational as IVR Attenuation Pond.
	■ Discharge via the AsWTP	■ Pump / pipeline	■ 2021	■ Closure	■ Discharge of collected water to the AsWTP.
	■ Flush to Underground	■ Pump / pipeline	■ Closure	■ Closure	■ IVR Attenuation Pond drained and discharged to underground at closure.
	■ Overflow to Whale Tail Lake (North Basin)	■ Natural drainage	■ Closure	■ Post-Closure	■ Overflow into Whale Tail Lake (North Basin) during refilling

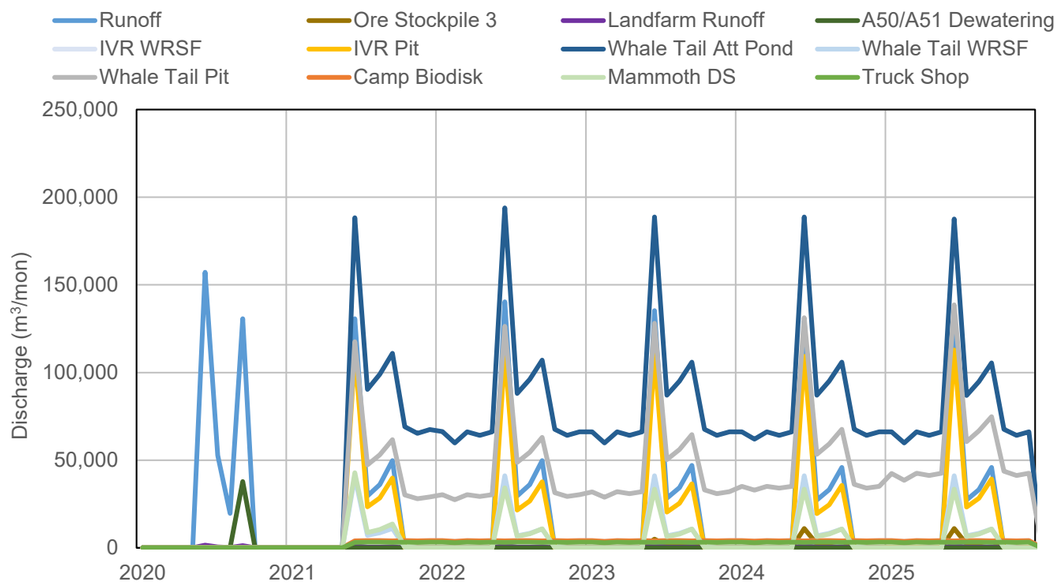


Figure 44: Inflows to IVR Attenuation Pond (Operations)

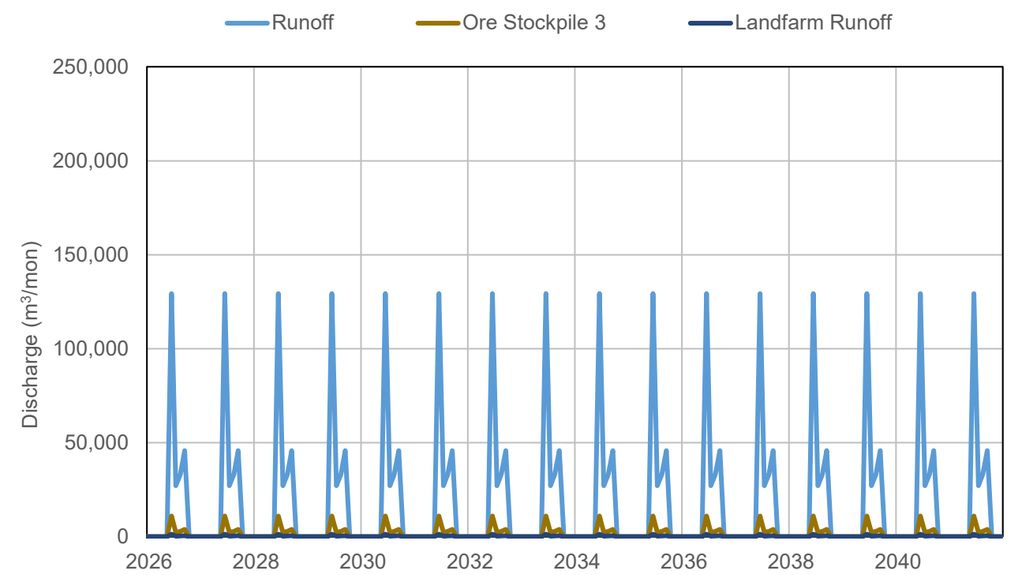


Figure 45: Inflows to IVR Attenuation Pond (Closure)

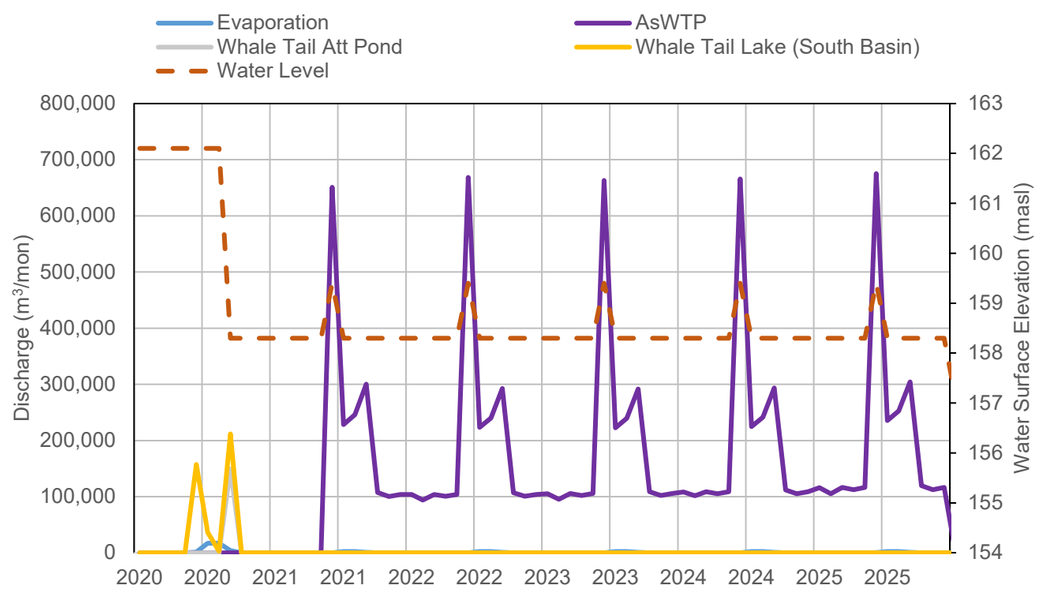


Figure 46: Outflows from IVR Attenuation Pond (Operations)

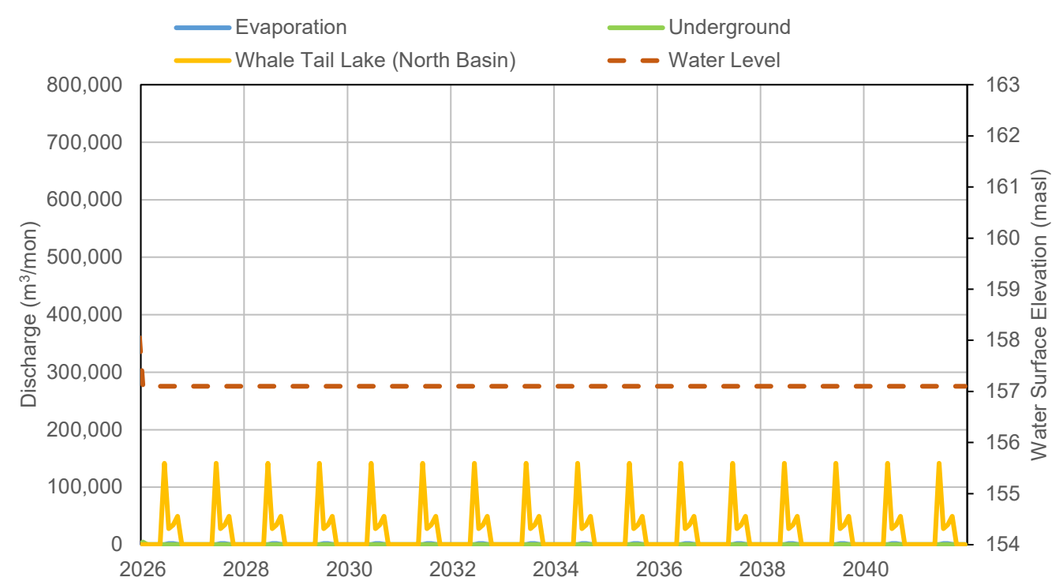


Figure 47: Outflows from IVR Attenuation Pond (Closure)

4.12 Whale Tail Lake (South Basin)

Whale Tail Lake (South Basin) is located south of, and adjacent to, the proposed Whale Tail Dike. Whale Tail Lake (South Basin) was connected to Whale Tail Lake (North Basin) until the construction of the Whale Tail Dike in June 2018. Dewatering of Whale Tail Lake (North Basin) resulted in the flooding of Whale Tail Lake (South Basin) (to an elevation of 156 masl) and overflow of Whale Tail Lake (South Basin) into the Mammoth Lake watershed via an engineered channel during operations.

At the end of operations and into closure, the water level in the South Basin will be lowered permanently to 153.5 masl (i.e., one metre above baseline level) by pumping the flooded volume into the IVR Pit. This water level will be maintained by pumping from Whale Tail Lake (South Basin) into the IVR Pit during closure. Post-closure, the Whale Tail Dike will be decommissioned to re-establish natural drainage patterns in Whale Tail Lake. Whale Tail Lake then flows to Mammoth Lake via the Mammoth sill.

The baseline drainage area of Whale Tail Lake (South Basin), 22.3 km^2 is augmented during the dewatering of Whale Tail Lake (North Basin) in 2019 and by the routing of the Lake A53 Sector runoff to Whale Tail Lake (South Basin) (by pumping) from 2019 to closure.

Inflows and outflows are summarized in Table 12 and Figure 48 to Figure 51. They are also presented in tabular form in Appendix B.

Table 12: Water Balance Flow Components (Whale Tail Lake [South Basin])

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 48 (Operations) ■ Figure 49 (Closure)	■ Runoff from natural areas	■ Natural drainage	■ 2018	■ Post-Closure	■ Runoff volumes are proportional to the area of Whale Tail Lake (South Basin).
	■ Dewatering from Lake A53 Sector	■ Pump / Pipeline	■ 2020	■ 2020	■ Lake A53 dewatered prior to being operational as IVR Attenuation Pond.
	■ Discharge from AsWTP	■ Pump / Pipeline	■ 2020	■ Closure	■ Treated Discharge from AsWTP.
OUTFLOWS					
■ Figure 50 (Operations) ■ Figure 51 (Closure)	■ Evaporation	■ n/a	■ 2018	■ Post-Closure	■ Evaporative losses proportional to the lake surface area of Whale Tail Lake (South Basin).
	■ Groundwater	■ Natural drainage	■ 2019	■ Post-Closure	■ Groundwater infiltration through Whale Tail Dike is expected from the dewatering of Whale Tail Lake (North Basin) until it is refilled.
	■ Runoff diversion to Mammoth Lake	■ Channel	■ 2020	■ Closure	■ Whale Tail Lake (South Basin) is expected to reach an elevation of 154.5 masl and overflow during open water conditions to Mammoth Lake by June 2020 until closure.
	■ Drawdown and runoff diversion to the IVR Pit	■ Pump / Pipeline	■ Closure	■ WTN Full	■ Runoff diversion from Whale Tail Lake (South Basin) to maintain water surface elevations at 153.5 masl until Whale Tail Lake (North Basin) is full (2041).
	■ Overflow to Whale Tail Lake (North Basin)	■ Natural drainage	■ WTN Full	■ Post-Closure	■ After Whale Tail Lake (North Basin) is full (2041), the Whale Tail Dike will be breached and the basins will merge.
	■ Camp Use	■ Pump / Pipeline	■ Closure	■ Post-Closure	■ Camp use during closure.

WTN = Whale Tail Lake (North Basin)

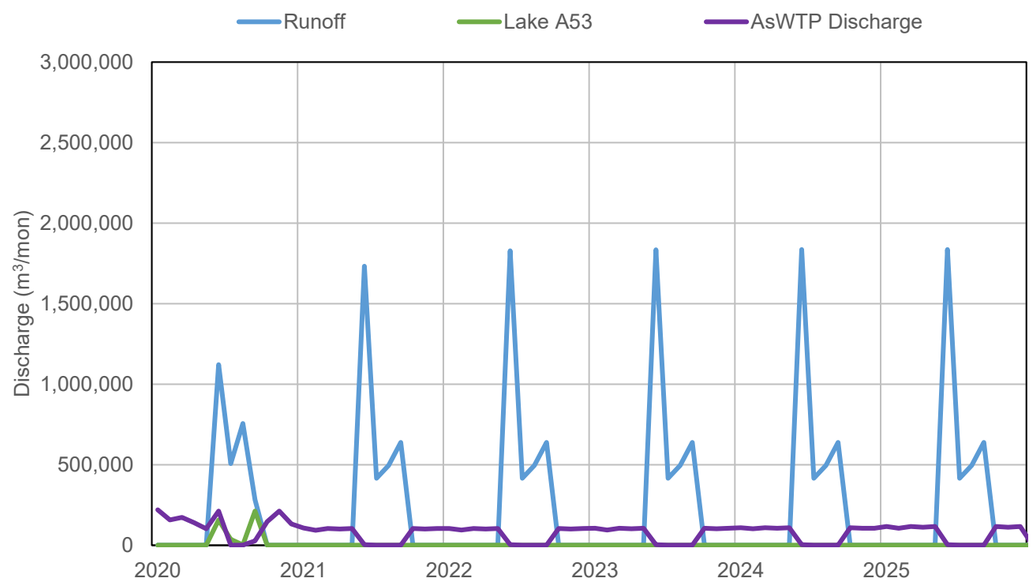


Figure 48: Inflows to Whale Tail Lake (South Basin) (Operations)

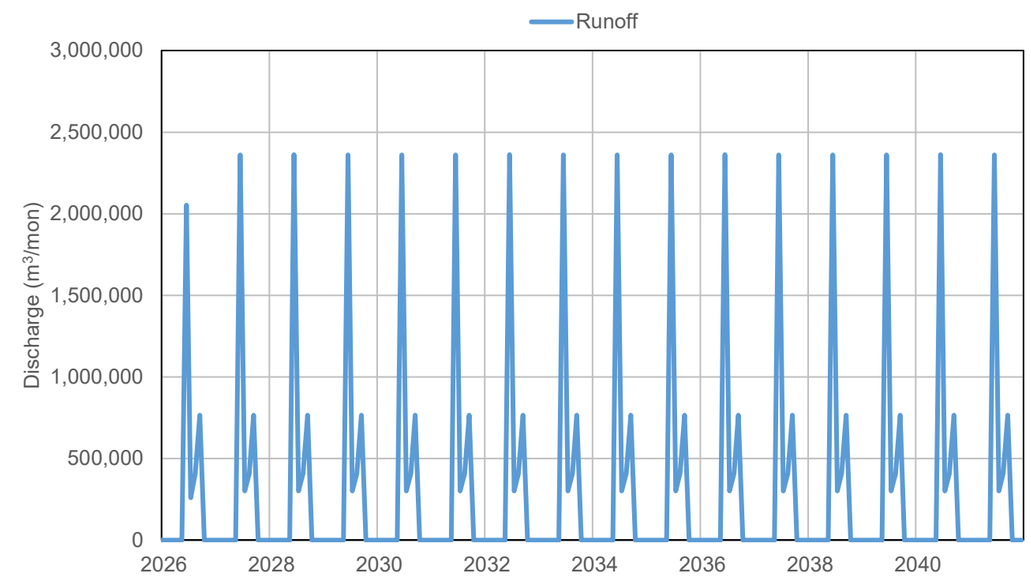


Figure 49: Inflows to Whale Tail Lake (South Basin) (Closure)

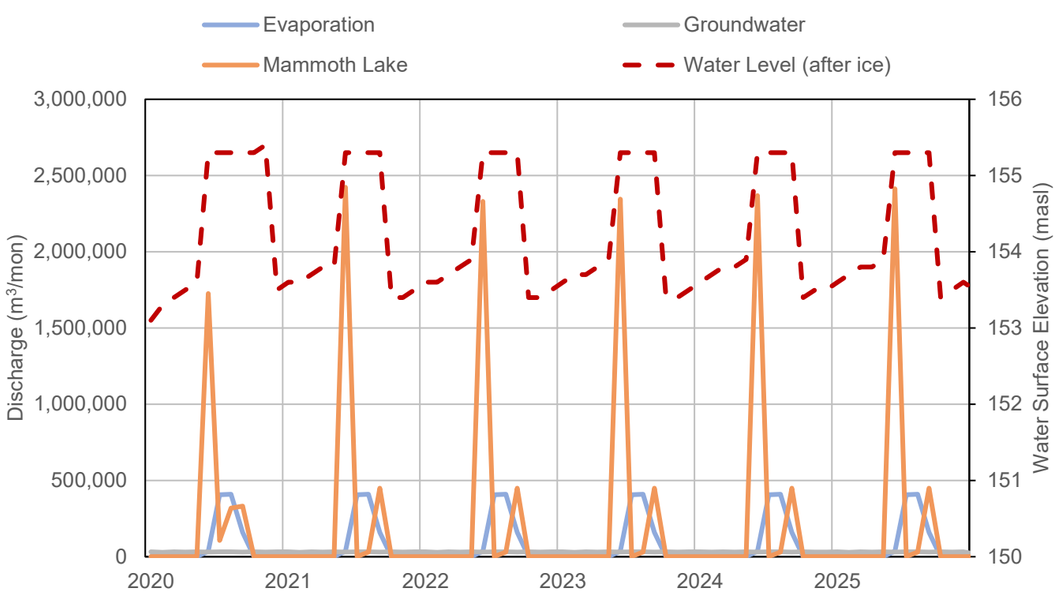


Figure 50: Outflows from Whale Tail Lake (South Basin) (Operations)

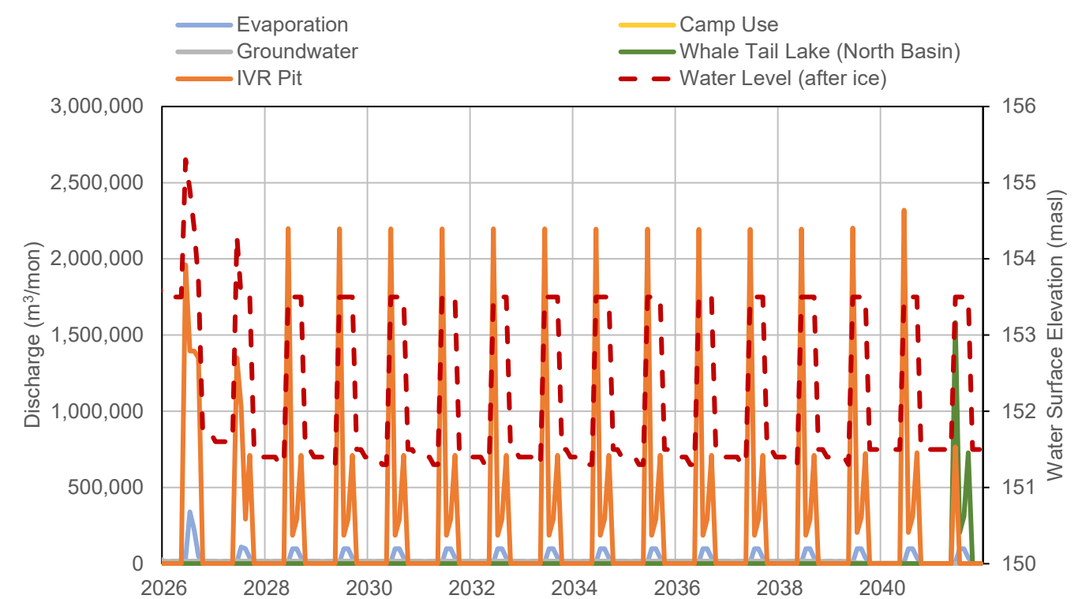


Figure 51: Outflows from Whale Tail Lake (South Basin) (Closure)

Note that water levels in Whale Tail Lake (South Basin) consider 2m ice accumulation every October which melts in May.

4.13 Water Treatment Plants: Treatment Requirement Summary

This section summarizes water treatment requirements identified in previous sections. Inflows and outflows are summarized in Table 13 and Figure 52 and Figure 53. They are also presented in tabular form in Appendix B.

Table 13: Water Balance Flow Components (Water Treatment Plants)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
■ Figure 52 (Inflows) ■ Figure 53 (Outflows)	■ Discharge from Quarry 1	■ Pump / pipeline	■ June 2019	■ June 2020	■ Drawdown of Quarry 1 to Mammoth Lake via the O- WTP once available in March 2019. ■ Drawdown volume is expected to be approximately 210,000 m^3.
	■ Discharge from the Whale Tail Attenuation Pond	■ Pump / pipeline	■ 2020	■ 2021	■ Discharge of collected water to Whale Tail Lake (South Basin) until IVR Attenuation Pond is operational.
	■ Discharge from the IVR Attenuation Pond	■ Pump / pipeline	■ 2021	■ Closure	■ Discharge of collected water to Whale Tail Lake (South Basin) until IVR Attenuation Pond is operational.

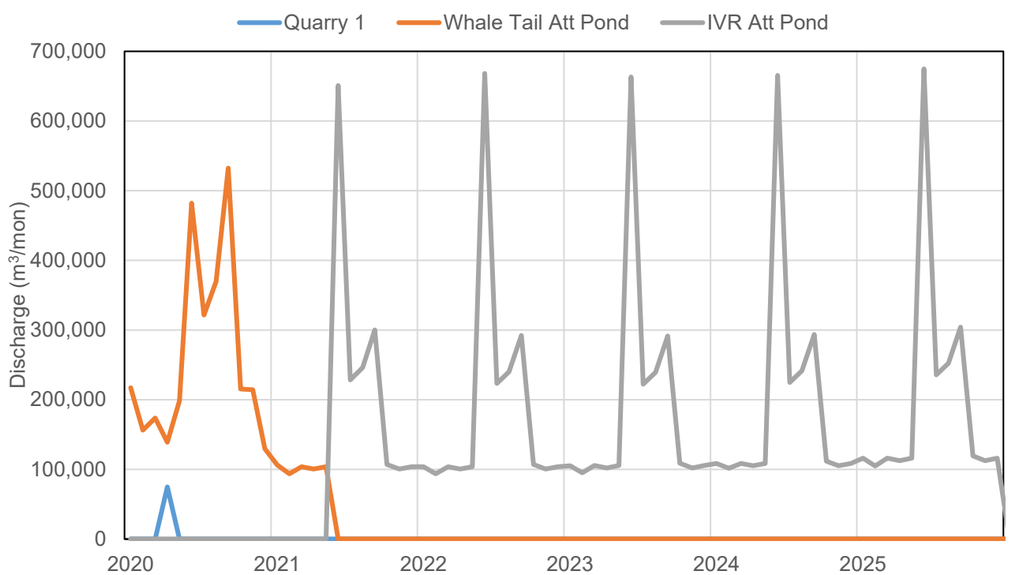


Figure 52: Inflows to the AsWTP

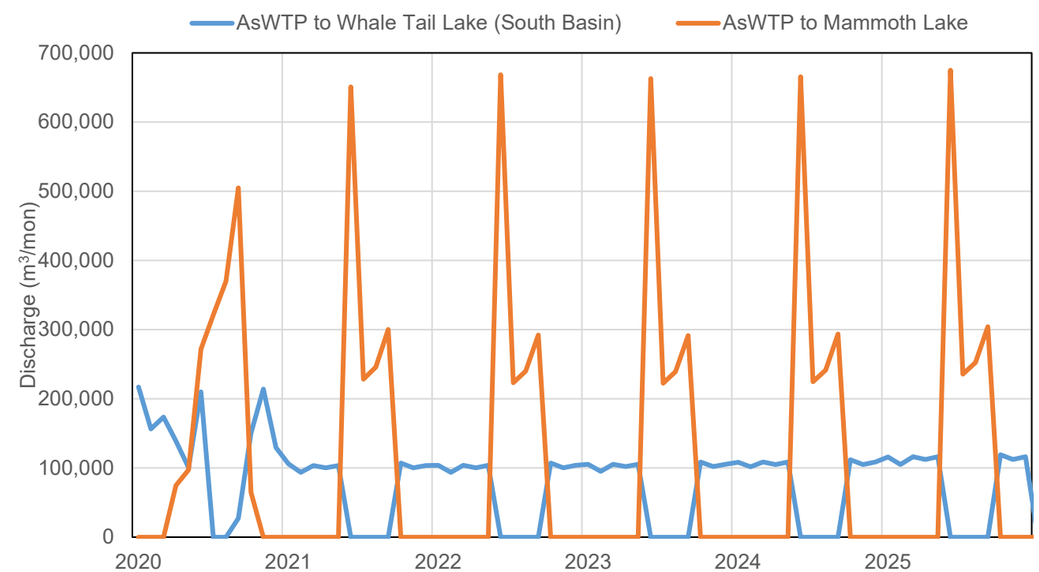


Figure 53: Outflows from the Water Treatment Plants

4.14 Closure: Flooding of Open Pits and Refilling of Whale Tail Lake (North Basin)

Mine closure will be initiated after cessation of mining activities, in January 2026, until water levels in Whale Tail Lake (North Basin) reach a water surface elevation of 153.5 masl (i.e., 1 metre over the baseline elevation). This water level will be maintained through the construction of a sill at the Mammoth Dike to promote aquatic habitat in the Project site post operations. The water management plan for the closure period is presented conceptually in Figure 5.

The refilling duration of Whale Tail Lake (North Basin) was estimated using the mean annual water balance based on the following assumptions:

- The Whale Tail Pit, IVR Pit, and Underground Mine are not hydraulically connected below the surface during the refilling period.
- Refilling of mining development is prioritized as follows:
  - Underground Mine;
  - IVR Pit; and
  - Whale Tail Pit.
- The Underground Mine is refilled by local catchment runoff, drawdown of GSP 1, IVR Attenuation Pond and partial drawdown of Whale Tail Lake (South Basin) to complete its flooding.
- The IVR Pit is refilled by local catchment runoff, runoff collected in the Whale Tail WRSF Contact Water Collection System, partial drawdown of Whale Tail Lake (South Basin), and diversion of runoff from Whale Tail Lake (South Basin) to maintain its closure water surface elevation (i.e., 153.5 masl).
- The Whale Tail Pit is refilled by local catchment runoff, runoff from the IVR WRSF Contact Water Management System, and overflow of the Whale Tail Attenuation Pond and of the IVR Pit. Once Whale Tail Pit is refilled, the water surface elevation increases until Whale Tail Lake (North Basin) reaches the water surface elevation of 153.5 masl.

Using this approach, refilling of Whale Tail Lake (North Basin) to 153.5 masl is estimated to occur by 2042.

Reconnection of the South Basin and North Basin and Mammoth Lake will occur once water quality objectives are met within Whale Tail Lake (North Basin), the predictions of which are presented in the corresponding water quality modelling report (Golder 2021). However, this timeline will be updated via water quality modelling and operations management with the aim of matching the timing of end of flooding with meeting of water quality objectives.

The reflooding strategy will be adapted during closure based on future water quality predictions validated with site monitoring data. The goal will be for pit lake water to meet quality objectives concurrently with completed reflooding such that lake reconnection can happen as soon as possible thereafter.

5.0 STUDY LIMITATIONS

Golder Associates Ltd. (Golder) has prepared this document in a manner consistent with that level of care and skill ordinarily exercised by members of the engineering and science professions currently practicing under similar conditions in the jurisdiction in which the services are provided, subject to the time limits and physical constraints applicable to this document. No warranty, express or implied, is made.

This document, including all text, data, tables, plans, figures, drawings and other documents contained herein, has been prepared by Golder for the sole benefit of Agnico Eagle Mines Limited. It represents Golder's professional judgement based on the knowledge and information available at the time of completion. Golder is not responsible for any unauthorized use or modification of this document. All third parties relying on this document do so at their own risk.

The factual data, interpretations, suggestions, recommendations and opinions expressed in this document pertain to the specific project, site conditions, design objective, development and purpose described to Golder by Agnico Eagle Mines Limited and are not applicable to any other project or site location. In order to properly understand the factual data, interpretations, suggestions, recommendations and opinions expressed in this document, reference must be made to the entire document.

This document, including all text, data, tables, plans, figures, drawings and other documents contained herein, as well as all electronic media prepared by Golder are considered its professional work product and shall remain the copyright property of Golder. Agnico Eagle Mines Limited may make copies of the document in such quantities as are reasonably necessary for those parties conducting business specifically related to the subject of this document or in support of or in response to regulatory inquiries and proceedings. Electronic media is susceptible to unauthorized modification, deterioration and incompatibility and therefore no party can rely solely on the electronic media versions of this document.

6.0 CLOSURE

This report presents methods and results of the Project's updated mean annual water balance with a focus on the operation and closure phases of the Project for annual reporting purposes. It is limited to the catchments of the Project footprint and does not address the receiving environment within and downstream of the effluent discharge point.

Please do not hesitate to contact the undersigned should you have any questions or comments.

Golder Associates Ltd.

ORIGINAL SIGNED BY

Adelle Roberge, B.Sc.
Water Resources Specialist

ORIGINAL SIGNED BY

Adwoa Cobbina, MA.Sc.
Senior Water Resources Specialist

ORIGINAL SIGNED BY

Julien Lacrampe, B.Sc. Civil Engineering, P.Eng.
Associate, Senior Water Resources Engineer

AC/LM/JL/jr/crm

7.0 REFERENCES

Agnico Eagle (Agnico Eagle Mines Limited). 2016. Whale Tail Pit Project - Meadowbank Mine Final Environmental Impact Statement and Type A Water Licence Amendments. Amendment/Reconsideration of the Project Certificate (No. 004/ File No. 03MN107) and Amendment to the Type A Water Licence (No. 2AM-MEA1525). Submitted to the Nunavut Impact Review Board. June 2016.

Agnico Eagle. 2021. Whale Tail Project Water Management Plan, Version 6.

Golder (Golder Associates Ltd.). 2021. Whale Tail Project – 2020 Annual Report – Site Downstream Receiving Water Quality. Ref No. 20442330-517-RPT-RevA – in Development.

APPENDIX A

Project Design Document

MEMORANDUM

DATE April 12, 2021 **Reference No.** 20442330

TO Alexandre Lavallée
Agnico Eagle Mines Limited

FROM Adwoa Cobbina, Kristina Skeries, and Jennifer Levenick

WORKING DOCUMENT

WHALE TAIL EXPANSION PROJECT DESIGN DOCUMENT – WATER BALANCE AND WATER QUALITY MODEL INPUT PARAMETERS AND ASSUMPTIONS

This document provides the design basis assumptions used by Golder Associates Ltd. (Golder) for the Whale Tail Project water balance and water quality modelling in support of the 2020 Annual Reporting. These data have largely been provided by Agnico Eagle Mines Limited (Agnico Eagle) either specifically for the Expansion Project, carried over from the Approved Project, or have been derived from these data.

This is meant to be a working document for both Agnico Eagle and Golder to record changes in design or management plans occurring during the period of study. This document is organized into the following sections:

1) Mine Design Parameters

2) Water Balance Criteria and Assumptions

Annexes provide additional information and calculations made by Golder based on information received.

1.0 DESIGN PARAMETERS

Table 1: Design Version Identification

Document Revision No.	Date	Design Features	Agnico Eagle Version No.	Reference
01	19-Feb-18	Whale Tail Pit	WHL-001-009C	Base Case for EIS
		IVR Pit	IVR-001-004	
		Underground	AMQMY17UG003	
02	07-May-18	Same as above	Same as above	Base Case for EIS
03	04-July-19	Whale Tail Pit	Same as above	Base Case for EIS
		IVR Pit	Same as above	Base Case for EIS
		Underground – New Permafrost Plan C1	AMQMY18UG0012	Salvage Plan C1

Table 2: Mine Design Criteria

Infrastructure	Whale Tail	IVR	Total
Life of Mine	Construction: Q4 2017 to Q3 2019 Pit Operation: Q3 2019 to end Q4 2025 UG Operation: Q3 2019 to end Q4 2025 Closure: Q1 2026 to Q3 2041	Pit Operation: Q3 2020 to end Q4 2025 Closure: Q1 2026 to Q3 2041	Construction and Operations: Q4 2017 – end Q4 2025 Closure: Q1 2026 to Q3 2041
Open Pit Depth	275.3 m depth, from -129 to 146.3 masl	103.3 m depth, from 46 to 149.3 masl	-
Open Pit - Ore, total mined (t)	16,835,533	2,907,063	19,742,595
Open Pit - Waste rock total mined (t)	137,977,416	27,619,187	165,596,603
Open Pit - Overburden total mined (t)	7,619,698	3,723,876	11,343,574
Underground – Ore, total mined (t)	3,345,321	-	3,345,321
Underground – Waste rock total mined (t)	1,566,530		1,566,530
Waste Rock Storage Facility (t)	-	-	174,413,680
Waste Rock Storage Facility maximum height (metres above ground)	95 metres	85 metres	-
Underground Waste Rock Storage Facility height (meters above ground)	35 metres		-
Underground Waste Rock Storage Facility surface area	3.8 ha		-
Whale Tail Ore stockpile surface area (1, 2, 3 combined)	22.3 ha		-
Underground Ore Stockpile surface area	1.0 ha		-
Overburden Area	1.8 ha		-
NPAG WRSF Storage Area	20 ha		-

MT = million tonnes

Table 3: Construction and Operation Schedule

Dewatering/Construction/Operation Activities	Starts at Beginning of	Ends at the End of
GSP-1 Construction-Operation	Q4 2017	Q4 2025
Whale Tail Pit Quarry 1 Operation	October 2017	June 2020
Sewage Treatment Plant	2017	Closure
Underground Ramp/Mine Construction-Operation	Q1 2018	Q4 2025
Whale Tail Pit (Starter Pit) Operation	July 2018 (prior to the start of the water balance)	May 2020
Whale Tail Dike Construction and Operation	June 2018	Post-Closure
Pipeline and Effluent Discharge Diffuser in Mammoth Lake	Q4 2018	Q4 2025
Whale Tail Waste Rock Storage Facility Dike Construction and Operation	October 2018	Post-Closure
Mammoth Dike Construction and Operation	November 2018	Post-Closure
Northeast Dike Construction and Operation	January 2019	September 2020
Operational Water Treatment Plant (AsWTP)	March 2019	Q4 2025
North Sump Construction/Operation	June 2019	Q4 2025
Pipeline and Effluent Discharge Diffuser in Whale Tail (South Basin)	Q3 2019	Q4 2025
Whale Tail Dike Seepage Collection System	January 2020	Q4 2025
Whale Tail Lake (South Basin) Diversion Channel Construction	April 2020	April 2020
Whale Tail Attenuation Pond Operation	June 2020	Q4 2025
Lake A53 Diversion Operation	June 2020	Q4 2025
Whale Tail Pit Operation (Quarry 1 and Starter Pit merge into one open pit and to end of Life-Of-Mine)	July 2020	Q4 2025
IVR Pit Operation	September 2020	Q4 2025
IVR Diversion Operation	July 2020	Q4 2025
IVR WRSF Operation	July 2020	Q4 2025
Lake A53 Drawdown	Prior to Freshet 2021	Prior to Freshet 2021
IVR Attenuation Pond	June 2021	Q4 2025
Mammoth Sill and Spillway Construction and Operation	January 2026	In perpetuity
Closure	January 2026	Post-Closure (Mammoth Lake Sill overtopped)
Decommissioning of Ore Stockpiles	Closure	Q2 2027
Decommissioning of Landfarm	Closure	Q1 2040
Post - Closure	Mammoth Lake Sill overtopped	In perpetuity

Table 4: Mine Plan

Year	Underground (Salvage C1)		Whale Tail		IVR	
	Ore (tonnes)	Waste Rock (tonnes)	Ore (tonnes)	Waste Rock (tonnes)	Ore (tonnes)	Waste Rock (tonnes)
2018	0	0	179,003	981,556	0	0
2019	0	65,099	2,196,993	17,118,752	0	0
2020	276	229,272	2,825,211	28,218,266	244,910	1,130,804
2021	46,461	366,352	3,046,689	26,789,634	125,651	4,112,738
2022	380,002	278,057	2,992,263	26,638,663	775,982	4,470,156
2023	790,773	251,558	2,436,952	23,322,174	645,070	7,392,004
2024	857,611	288,445	3,158,422	14,446,748	771,739	9,422,600
2025	900,000	87,789	0	0	343,712	1,090,886
2026	370,183	0	0	0	0	0

2.0 WATER BALANCE CRITERIA AND ASSUMPTIONS

Table 5: Climate Assumptions

Item	Assumption	Reference
Climate Data	Average year	Agnico Eagle, 2016b
Undercatch	■ Rain undercatch = 1.15 ■ Snow undercatch = 1.55	Agnico Eagle, 2016a (Amendment/Reconsideration of the Project Certificate and Amendment to the Type A Water Licence. Volume 6, Appendix 6-C. Submitted to the Nunavut Impact Review Board, June 30, 2016.)
Frozen Conditions	■ October to May. Rainfall during frozen conditions is applied as rainfall in June of the same year if fallen between January and May inclusively, or during June of the following year if fallen between October and December inclusively. ■ Snowfall outside of frozen conditions is applied as rainfall during the same month.	assumed
Ice formation	Formation of a maximum of 2 m of ice thickness over waterbodies every winter. All ice volume is removed instantly from active storage on October 1 and restored (i.e., melted) gradually over 30 days starting May 1. Note: A gradual build up time series does exist but causes the model to run extremely slowly so instant build up is being used, without implications on the results.	Based on Golder Hydrology baseline as well as professional experience in northern climates. Intended to be conservative.
Infiltration Losses	Infiltration losses are assumed to be negligible in natural areas based on permafrost conditions.	assumed
Runoff from: ■ Whale Tail WRSF ■ IVR WRSF ■ Underground WRSF ■ NPAG stockpile	■ Percentage of total annual precipitation over the footprint, by month: ▪ October through May: 0% ▪ June: 4.3% ▪ July: 0.3% ▪ August: 0.3% ▪ September: 0.1% ■ Total annual precipitation was calculated as 323.022 mm/yr. This is not accounting for evaporative losses; it assumes evaporative losses were taken into account in O'Kane results. ■ Basal seepage assumed to be negligible. ■ Interflow is small and occurs past the modeling time period. This may need to be revisited.	O'Kane Consultants, 2019
Runoff from ore stockpiles and construction material stockpile (esker material)	Calculated as per the previous water balance (i.e., does not use O'Kane inputs)	

Table 6: Average Year Climate Data Used in the Site Water Balance

Month	Rainfall (mm/mon)	Lake Evaporation (mm/mon)	Evapotranspiration (mm/mon)	Snowfall (mm/mon)	Sublimation (mm/mon)
January	0	0	0	6.88	9
February	0	0	0	6.24	9
March	0	0	0	9.11	9
April	0	0	0	13.29	9
May	0	0	0	8.09	9
June	33.36	9	3	0	0
July	38.51	99	32	0	0
August	42.74	100	32	0	0
September	41.47	40	13	0	0
October	0	0	0	22.45	9
November	0	0	0	16.59	9
December	0	0	0	9.95	9

Table 7: Site Water Balance: Modelled Flows

Location	Description of Inflows
Quarry 1	■ Natural runoff and direct precipitation (Q4 2017 – WTN Dewatered) ■ Runoff from Starter Pit (July 2018 – WTN Dewatered) ■ Pumped water from WT WRSF System (Q2 2018 – WTN Dewatered) ■ Pumped water from Industrial Sector, Overburden Sector and Camp Sector (Q2 2018 – WTN Dewatered ■ Drilling water from Nemo Lake (Q4 2017 to August 2018)
GSP-1 (formerly AP5)	■ Natural runoff and direct precipitation (2018 – Post Closure) ■ Runoff from the WERP waste rock pad (2019 – Closure) ■ Excess underground contact water pumped from the underground (2018 – Q4 2025) ■ Overflow from the Whale Tail Attenuation Pond (October 2019 – May 2020)
Underground Mine	■ Natural runoff from the portal catchment area (2018 – Post Closure) ■ Make-up water from Nemo Lake (2019 – Closure) ■ Recirculation of consumptive flows assuming ■ 100% re-use post water loss to ore and waste rock from January 2018 to June 2020 ■ 95% re-use post water loss to ore and waste rock (July 2020 – Closure) ■ Water loss at a rate of 3% water content by weight of extracted ore and waste material ■ No Groundwater inflow as mining is assumed to occur completely within the permafrost ■ Excess underground contact water pumped to GSP 1 ■ Drawdown of Whale Tail Lake (South Basin) (Closure) ■ Drawdown of the IVR Attenuation Pond, GSP-1 and GSP-2 (Closure)
Northeast Sector	■ Natural runoff from catchment area (2018 – Post Closure) ■ Runoff from Lake A49 (2018 – July 2020)
Whale Tail Waste Rock Storage Facility Contact Water Collection System	■ Natural runoff reports to Mammoth Lake prior to construction of the collection system ■ Natural runoff and direct precipitation (Q3 2018 – WTN Flooded) ■ Runoff from the Whale Tail WRSF (including marginal ore) (Q3 2018 – End of Closure)
North Sump	■ Natural runoff reports to Whale Tail Lake (North Basin) prior to construction of the sump ■ Natural runoff (2018 – Post Closure) ■ Runoff from the Whale Tail WRSF (2021 – Post Closure)

Table 7: Site Water Balance: Modelled Flows

Location	Description of Inflows
Mammoth Downstream	■ Natural runoff from catchment area (2020 – Post Closure) ■ Natural runoff from Road 7 (2020 – Post Closure) ■ Runoff from the overburden/esker material stockpile (2019 – Post Closure) ■ Runoff from part of the NPAG WRSF (~20% of the total area; 2022 – Post Closure)
Whale Tail Pit	■ Catchment runoff (natural and pit wall) (2019 – Post Closure) ■ Groundwater inflow to pit (2019 – Post Closure). Pit mining in unfrozen rock assumed to occur in Q4 2019. ■ Drilling water from Whale Tail South (Q3 2017 – August 2018) ■ Drilling water from Nemo Lake (September 2018 - Q4 2025) ■ Runoff from overburden/esker material stockpile (2019 – Post Closure) ■ Runoff from part of the NPAG WRSF (~80% of the total area; 2022 – Post Closure) ■ Runoff from GSP-1, North Sump, IVR WRSF (Closure - Post Closure) ■ Overflow from IVR Pit (IVR Pit full – Post Closure) ■ Overflow from the Whale Tail Attenuation Pond (Whale Tail Attenuation Pond full – Post Closure) ■ Water loss at rate of 1% water content by weight of extracted ore and waste material.
Whale Tail Lake (North Basin) / Whale Tail Attenuation Pond	■ Natural runoff and direct precipitation (2018 – Post Closure) ■ Runoff from the Whale Tail Pit, IVR Pit, Northeast Sector, and Lake A53 (2018) ■ Whale Tail Lake (South Basin) (2018 – 2019 and Post Closure) ■ Runoff from the North Sector (2018 – 2021) ■ Flows from the Camp STP (2018 – 2022 and Closure – Post Closure) ■ Intercepted runoff from the Industrial Sector, Camp Sector and Ore Stockpiles No. 1 and 2 (2019 – 2022) ■ Runoff collected in the Whale Tail WRSF Contact Water Collection System (2019 – 2022) Groundwater discharge to Whale Attenuation Pond (2019 – Post Closure). ■ Groundwater discharge to dewatered Whale Tail Lake (North Basin) (2019 – Post Closure) ○ Assumed 50% of this flow is captured by the Whale Tail Attenuation Seepage Well starting in January 2020, so Whale Tail Attenuation Pond only receives the remaining 50% of the flow at that point moving forward. ■ Direct seepage through Dike (i.e. berm material) is assumed to be negligible. ■ Flows from the Truck Shop (2019 – 2022) ■ Discharge from the Whale Tail Pit, IVR Pit, and IVR WRSF (2019 – 2022) ■ Runoff from NPAG stockpile (2020 – Post Closure)
IVR Pit	■ No groundwater inflow (assumed to be in permafrost without connection to nearby surface water). ■ Catchment runoff (natural and pit wall) (Q3 2020 – Post Closure) ■ Drilling water from Nemo Lake (Q3 2020 – End of operations) ■ Water loss at rate 1% water content by weight of extracted ore and material. ■ Runoff from the IVR Diversion sub-watershed (Closure – Post Closure) ■ Drawdown of Whale Tail Lake (South Basin) (Closure – Whale Tail Lake (South Basin) drawdown) ■ Discharge of overflow from the Whale Tail Lake (South Basin) (Whale Tail Lake (South Basin) drawdown – Post Closure) ■ Pumping of WT WRSF Pond water (Closure) ■ Runoff from the northeast portion of the Whale Tail WRSF (Closure – Post Closure)
IVR Waste Rock Storage Facility Contact Water Collection System	■ Natural runoff (2018 – Post Closure) ■ IVR WRSF contact runoff (Q3 2020 – Post Closure) ■ GSP-2 runoff (Closure – Post Closure)

Table 7: Site Water Balance: Modelled Flows

Location	Description of Inflows
IVR Attenuation Pond (formerly A53)	■ Natural runoff and direct precipitation (2018 – Post Closure) ■ Runoff from the landfarm (2018 – Post Closure) ■ Runoff from Ore Stockpile No. 3 (2022 – Post Closure) ■ Camp STP and truck shop inflows (2022 – Closure) ■ Discharge from the Whale Tail Attenuation Pond (2022 – Closure) ■ Discharge from the IVR Pit (2022 – Closure) ■ Runoff from the IVR WRSF, North Sump, Whale Tail Pit and Whale Tail WRSF (2022 – Closure)
Whale Tail South Basin	■ Catchment runoff (natural runoff and direct precipitation) (2018 – Post Closure) ■ Runoff from tributary Lakes A18, A55, A60, A62, and A65 (2018 – Post Closure) ■ Runoff diversion from the East Sector (2019 – 2021) ■ Dewatering of Whale Tail Lake (North Basin) (March – May 2019) ■ Discharge from Whale Tail Attenuation Seepage Well (2020 – Closure) ■ Effluent discharge from the AsWTP (June 2021 – Closure)
Mammoth Lake	■ Overflow from Whale Tail Lake (South Basin) (July 2019 to End of Operations) ■ Effluent discharge from the AsWTP (June – September 2020) ■ Runoff from WT WRSF (Post-closure)
AsWTP for TSS Removal (non-contact water)	■ Drawdown from Whale Tail Lake (North Basin)
AsWTP for TSS and Arsenic Removal	■ Discharge from Quarry 1 (June 2019) ■ Discharge from the Whale Tail Attenuation Pond (June to September 2019 –2022 and winter 2020-2021 & 2021-2022) ■ Discharge from GSP-1 (June 2020) ■ Last third of dewatering volume from Lake A53 (May 2022) ■ Runoff diversion from the Northeast Sector (2019 – July 2020) ■ Discharge from the IVR Attenuation Pond (June to September 2022 – End of Operations)

Table 8: Water Storage Assumptions

Pond	Feature	Value	Reference
Quarry 1	Capacity	203,450 m^3	Golder Water Balance, 2019a
GSP-1 (formerly AP5)	Capacity	148 601 m^3	
	Spill Elevation	153.9 masl	
Underground	Capacity	In closure: 651,000 m^3	
	Spill Elevation	149.0 masl	
Underground Stope	Capacity	0 m^3	
Whale Tail Attenuation Pond	Capacity	Dewatered to closure: 117,857 m^3	
	Spill Elevation	143.5 masl	
IVR Attenuation Pond (formerly Lake A53)	Capacity	Up to 2021: 160,051 m^3 2022 – Q4 2026: 413,000 m^3	
	Spill Elevation	Up to 2022: 161.73 masl 2022 – Q4 2025: 163.9 masl	
Northeast Sector Pond (Managed at baseline levels)	Capacity	33,785 m^3	
	Spill Elevation	Baseline: 154.40 m	
Whale Tail Waste Rock Storage Facility Pond	Capacity	Operations: 244,580 m^3 Closure: 1 m^3 (intended to act as a flow-through system)	
	Spill Elevation	158.4 masl	
IVR Waste Rock Storage Facility Ponds	Capacity	1 m^3 (intended to act as a flow-through system)	
Whale Tail Lake (South Basin	Capacity	Baseline: 4,597,768 m^3 Flooded: 11,832,960 m^3 Post Closure: 5,547,803m^3	
	Spill Elevation	Baseline: 152.5 masl Flooded: 156.0 masl Post Closure: 153.5 masl	
Whale Tail Lake	Capacity	Baseline: 10,516,453 m^3 Post Closure: 12,719,584m^3	
	Spill Elevation	Baseline: 152.5 masl Post Closure: 153.5 masl	
Mammoth Lake	Capacity	5,717,693 m^3	
	Spill Elevation	152.5 masl	

Table 9: Consumptive Flows

Item	Flow Rate	Source
Camp Use	As recorded (2020) 0.24 m^3/person/day (January 2021 to end of operations) January 2021 to end of operations: 544 people Closure: 50 people	Whale Tail Lake (South Basin) (January – August 2018 and closure) Nemo Lake (Lake C38) (September 2018 - end of operations)
Truck Shop	As recorded (2020) 103.1 m^3/day (January 2021 - end of operations)	Whale Tail Lake (Q1 – Q2 2018 (until Quarry 1 is mined out) Whale Tail Lake (South Basin) (July, August 2018) Nemo Lake (September 2018 – end of operations
Drilling Water, per pit	As recorded (2020) 48.0 m^3/day (2021 - end of operations)	Whale Tail Lake (2017 - Q1 – Q2 2018 (until Quarry 1 is mined out) Whale Tail Lake (South Basin) (July, August 2018) Nemo Lake (September 2018 – February 2019) Mammoth/Lake A47/Meadow River (March 2020 – December 2020) Nemo Lake (2021 – end of operations)
Ore moisture content from pits	1% of ore tonnage	Loss from system
Waste rock moisture content from open pits	1% of waste rock tonnage	Loss from system
Ore moisture content from underground	3% of ore tonnage	Loss from system
Waste rock moisture content from underground	3% of waste rock tonnage	Loss from system
Dust Control	As recorded (2020) 72,240 m^3/yr (2021 - end of operations)	Loss from AP5 (not included as inflow to site) (2020) Loss from Nemo Lake (not included as inflow to site) (2021 - end of operations)
Emulsion Plant	2.9 m^3/day	Loss from Mammoth Lake
Underground recirculation percent	95%	Underground sump
Underground consumptive flows	2019: 396.9 m^3/day 2020: 672.7 m^3/day 2021: 852.1 m^3/day 2022: 921.2 m^3/day 2023: 860.8 m^3/day 2024: 802.0 m^3/day 2025: 757.8 m^3/day 2026: 357.1 m^3/day	Demand for water use underground supplied primarily through recirculation of underground water, groundwater inflows, and makeup water from Nemo Lake or GSP1 if required.

Table 10: Water Treatment Rates

Treatment Type	Dates	Water Flow
Sewage Treatment Plant (STP)	Model start to end of closure	See Table 9
AsWTP (TSS and As)	June 2019 (TSS + As) to end of operations ■ Summer only for contact water (June – Sept) ■ Contact water inflow from: ■ Quarry 1: June 2019 ■ Whale Tail Attenuation Pond: June 2020 to 2021 ■ IVR Attenuation Pond: 2022 - closure ■ Dewatering flows: ■ Northeast Sector: June 2019 – closure	■ Maximum rate of 1750 m^3/hr when dewatering (based on reported values) ■ Maximum rate of 1350 m^3/hr (1600 m^3/hr at 85% efficiency) after dewatering (Jan 2020 to end of operations) ■ Assumed 24hr/ day

Table 11: Groundwater Inflows (m^3/day) (EA case)

Year	to Whale Tail Pit	to Underground	To Attenuation Pond	From Attenuation Pond to Groundwater	To Whale Tail Lake (North Basin)	Through Whale Tail Dike	From Whale tail Lake (South Basin) to Groundwater
2019	970	0	350	180	1330	650	840
2020	1,170	0	120	860	0	720	1,010
2021	1,320	0	90	1,050	0	730	1,020
2022	1,360	0	90	1,090	0	720	1,020
2023	1,360	0	90	1,090	0	720	1,020
2024	1,350	0	90	1,090	0	720	1,020
2025	1,350	0	90	1,090	0	720	1,020
2026	0	0	0	0	0	0	0
2027	0	0	0	0	0	0	0

Table 12: Water Treatment

Treatment Type	Dates	Water Flow	Discharge Location
Sewage Treatment Plant (STP)	Model start to December 31, 2020	77.8 m^3/day 0.24 m^3/person/day at approx. 325 ppl	■ Prior to WTN dewatered: Whale Tail Lake (North Basin) ■ June 2019 – May 2022: Whale Tail Attenuation Pond ■ June 2022 – December 2025: IVR Attenuation Pond ■ Closure: Whale Tail Attenuation Pond/Whale Tail Lake (North Basin)
	January 1, 2021 to December 31, 2025	130.56 m^3/day 0.24 m^3/person/day at approx. 544 ppl	
	January 1, 2026 to end of closure (2041)	12 m3/day 0.24 m^3/person/day at approx. 50 ppl	
AsWTP (TSS and As)	2020 – end of operations	■ Maximum rate of 1200 m3/hr ■ Assumed maximum rate 22/hr days between June and September, inclusive ■ Assumed 24/hr days in winter at 84 m^3/h	■ 2020: Mammoth Lake, Whale Tail Lake (South Basin) ■ 2021 – end of operations: • Winter: Whale Tail Lake (South Basin) • Summer: Mammoth Lake

Table 13: Footprint Areas (m^2) for the Whale Tail WRSF, Marginal Ore Pile, NPAG/NML Stockpile IVR WRSF, and Underground WERP

Year	Whale Tail WRSF	Marginal Ore Pile	NPAG/NML Stockpile	IVR WRSF	Underground WERP
2018	108,388	0	0	0	11,461
2019	501,580	23,580	0	0	18,149
2020	768,674	92,590	0	127,500	37,627
2021	1,138,735	92,590	45,100	504,400	37,627
2022	1,138,735	92,590	161,900	504,400	37,627
2023	1,138,735	92,590	161,900	504,400	37,627
2024	1,138,735	92,590	161,900	504,400	37,627
2025	1,138,735	92,590	161,900	504,400	0

3.0 REFERENCES

Agnico Eagle (Agnico Eagle Mines Limited). 2016a. Meadowbank Mine – Amendment/Reconsideration of the Project Certificate (No. 004/ File No. 03MN107) and Amendment to the Type A Water Licence (No. 2AM-MEA1525). Volume 6, Appendix 6-C. Submitted to the Nunavut Impact Review Board, June 30, 2016.

Agnico Eagle. 2016b. Meadowbank Mine – Amendment/Reconsideration of the Project Certificate (No. 004/ File No. 03MN107) and Amendment to the Type A Water Licence (No. 2AM-MEA1525). Volume 8, Appendix 8-B.2. Submitted to the Nunavut Impact Review Board, June 30, 2016.

Agnico Eagle. 2019. Whale Tail Project Thermal Monitoring Plan. Dated March 2019.

Golder. 2019a. 2019 Mean Annual Water Balance Update Whale Tail Pit – Expansion Project. Prepared for Agnico Eagle Mines Limited. (Reference 18108905-294-RPT-Rev0). May 2019.

O'kane Consultants. 2019. Memorandum: Agnico Eagle Mines Ltd. – Landform Water Balance Modelling of Whale Tail and IVR WRSF. (Reference 948-011-M-006 Rev3) May 10, 2019)

APPENDIX B

Water Balance Results - Tabular

		Year 2020														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**29**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
WHALE TAIL (STARTER) PIT																
Natural Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Drilling Water	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**22,754**	**9,396**	**34,503**	**24,930**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**91,583**	**34,503**	**0**
Water Loss in Ore	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
To Quarry 1	(m^3)	22,754	9,396	34,503	24,930	0	0	0	0	0	0	0	0	**91,583**	**34,503**	**0**
Total Outflow (m^3)		**22,754**	**9,396**	**34,503**	**24,930**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**91,583**	**34,503**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		8,000	8,000	8,000	8,000	8,000	0	0	0	0	0	0	0	**40,000**	**8,000**	**0**
QUARRY 1																
Direct Precipitation	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Natural Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Pit Wall	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail (Starter) Pit	(m^3)	22,754	9,396	34,503	24,930	0	0	0	0	0	0	0	0	**91,583**	**34,503**	**0**
Whale Tail WRSF	(m^3)	36	0	0	0	0	0	0	0	0	0	0	0	**36**	**36**	**0**
Truck Shop	(m^3)	1,546	1,830	1,339	866	1,875	1	0	0	0	0	0	0	**7,458**	**1,875**	**0**
Ore Stockpile	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Industrial Sector	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Camp Sector	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**24,336**	**11,226**	**35,842**	**25,796**	**1,875**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**99,076**	**36,414**	**0**
Evaporation	(m^3)	0	0	0	0	0	74	7	0	0	0	0	0	**81**	**74**	**0**
Untreated Discharge to Mammoth	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
AsWTP to Mammoth Lake	(m^3)	0	0	0	74,812	0	0	0	0	0	0	0	0	**74,812**	**74,812**	**0**
Ore Losses	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Overflow to WT Pit	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**74,812**	**0**	**74**	**7**	**0**	**0**	**0**	**0**	**0**	**74,893**	**74,886**	**0**
Net Inflow	(m^3)	24,336	11,226	35,842	-49,016	1,875	-73	-7	0	0	0	0	0	**24,183**	**35,842**	**-49,016**
End-of-Month Volume	(m^3)	145,637	156,863	192,705	143,689	145,564	0	0	0	0	0	0	0	**784,458**	**192,705**	**0**
AP5																
Natural Runoff	(m^3)	0	0	0	0	0	1,751	492	665	193	0	0	0	**3,101**	**1,751**	**0**
UG WRSF	(m^3)	0	0	0	0	0	37	3	3	1	0	0	0	**44**	**37**	**0**
Portal Runoff	(m^3)	0	0	0	0	0	1,243	384	670	0	0	0	0	**2,297**	**1,243**	**0**
Whale Tail Att Pond	(m^3)[1]	0	0	0	0	0	38,207	0	0	0	0	0	0	**38,207**	**38,207**	**0**
U/G ore stockpile	(m^3)	0	0	0	0	0	113	32	44	13	0	0	0	**203**	**113**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,352**	**911**	**1,382**	**208**	**0**	**0**	**0**	**43,852**	**41,352**	**0**
Evaporation	(m^3)	0	0	0	0	0	120	1,416	1,403	520	0	0	0	**3,459**	**1,416**	**0**
Dust Suppression	(m^3)	0	0	0	0	0	0	8,150	9,550	0	0	0	0	**17,700**	**9,550**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	0	0	0	24,012	0	0	0	**24,012**	**24,012**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**120**	**9,566**	**10,953**	**24,532**	**0**	**0**	**0**	**45,171**	**34,978**	**0**
Net Inflow	(m^3)	0	0	0	0	0	41,231	-8,655	-9,571	-24,324	0	0	0	**-1,319**	**41,231**	**-24,324**
End-of-Month Volume	(m^3)	22,104	22,104	22,104	22,104	22,104	63,335	54,680	45,109	20,784	20,784	20,784	20,784	**356,780**	**63,335**	**20,784**
NORTHEAST SECTOR (Including A46, A47, and A49)																
Lake A49	(m^3)	0	0	0	0	0	0	0	43,663	25,353	0	0	0	**69,016**	**43,663**	**0**
Rain Runoff (Lake A47)	(m^3)	0	0	0	0	0	4,346	14,267	43,422	13,147	0	0	0	**75,182**	**43,422**	**0**
SWE Runoff (Lake A47)	(m^3)	0	0	0	0	0	81,188	0	0	0	0	0	0	**81,188**	**81,188**	**0**
Runoff (NE Channel)	(m^3)	0	0	0	0	0	117,283	15,501	45,220	68,667	0	0	0	**246,671**	**117,283**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**202,817**	**29,768**	**132,305**	**107,167**	**0**	**0**	**0**	**472,057**	**285,556**	**0**
Drill Water	(m^3)	0	148	730	537	179	0	0	0	0	0	0	0	**1,594**	**730**	**0**
C-Watershed	(m^3)	0	0	0	0	0	151,413	23,621	0	0	0	0	0	**175,034**	**151,413**	**0**
Evaporation	(m^3)	0	0	0	0	0	950	12,652	12,395	4,925	0	0	0	**30,922**	**12,652**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	0	0	120,999	94,389	0	0	0	**215,388**	**120,999**	**0**
Total Outflow (m^3)		**0**	**148**	**730**	**537**	**179**	**152,363**	**36,273**	**133,394**	**99,314**	**0**	**0**	**0**	**422,938**	**285,794**	**0**
Net Inflow (m^3)		0	-148	-730	-537	-179	50,454	-6,505	-1,089	7,853	0	0	0	**49,119**	**50,454**	**-6,505**
End-of-Month Volume (m^3)		69,963	69,815	69,085	68,548	68,369	118,725	111,783	110,694	118,725	118,725	118,725	118,725	**1,161,882**	**118,725**	**68,369**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	51,772	25,137	15,545	15,554	0	0	0	**108,008**	**51,772**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	1	0	0	0	0	0	**2**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	5,293	679	331	405	0	0	0	**6,709**	**5,293**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,210	90	90	30	0	0	0	**1,419**	**1,210**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**58,276**	**25,906**	**15,966**	**15,990**	**0**	**0**	**0**	**116,138**	**58,276**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Quarry 1	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	58,277	25,906	15,966	15,990	0	0	0	**116,139**	**58,277**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**58,277**	**25,907**	**15,967**	**15,990**	**0**	**0**	**0**	**116,142**	**58,278**	**0**
Net Inflow (m^3)		0	0	0	0	0	-1	-1	-1	-1	0	0	0	**-3**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,475	15,900	20,678	25,890	0	0	0	**64,943**	**25,890**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	46,229	0	0	0	0	0	0	**46,229**	**46,229**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**48,704**	**15,900**	**20,678**	**25,890**	**0**	**0**	**0**	**111,172**	**72,119**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	48,704	15,900	20,678	25,890	0	0	0	**111,172**	**48,704**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**48,704**	**15,900**	**20,678**	**25,890**	**0**	**0**	**0**	**111,172**	**48,704**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	-	-	-	-	-	4,034	10,295	25,625	9,088	0	0	0	**49,042**	**25,625**	**0**
Lake Runoff	(m^3)	-	-	-	-	-	65	32	276	68	0	0	0	**441**	**276**	**0**
Pit Wall Runoff	(m^3)	-	-	-	-	-	4,318	11,063	27,483	9,088	0	0	0	**51,952**	**27,483**	**0**
Groundwater	(m^3)	-	-	-	-	-	17,109	52,948	19,034	100,630	70,800	57,493	74,469	**392,483**	**100,630**	**17,109**
Drilling Water	(m^3)	-	-	-	-	-	0	0	0	204	210	0	0	**414**	**210**	**0**
Quarry 1	(m^3)	-	-	-	-	7,470	140,580	4,981	0	0	0	0	0			
Total Inflow (m^3)		**-**	**-**	**-**	**-**	**-**	**25,526**	**74,338**	**72,418**	**119,078**	**71,010**	**57,493**	**74,469**	**494,332**	**154,224**	**17,109**
Evaporation	(m^3)	-	-	-	-	-	41	355	455	182	0	0	0	**1,033**	**455**	**0**
Ore Losses	(m^3)	-	-	-	-	-	12,749	13,174	13,174	12,749	13,174	12,749	13,174	**90,943**	**13,174**	**12,749**
Mammoth DS	(m^3)	-	-	-	-	-	25,068	0	5,506	675	0	0	0	**31,249**	**25,068**	**0**
Whale Tail Att Pond	(m^3)	-	-	-	-	-	120,247	72,790	46,294	112,444	57,836	44,744	56,075	**510,430**	**120,247**	**44,744**
Total Outflow (m^3)		**-**	**-**	**-**	**-**	**-**	**158,105**	**86,319**	**65,429**	**126,050**	**71,010**	**57,493**	**69,249**	**633,655**	**158,944**	**57,493**
Net Inflow (m^3)		-	-	-	-	-	-132,580	-11,981	6,989	-6,972	0	0	5,220	**-139,323**	**6,989**	**-132,580**
End-of-Month Volume (m^3)		-	-	-	-	8,000	8,000	1,000	7,990	1,018	1,018	1,019	6,238	**34,283**	**8,000**	**1,000**

		Year 2020														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**29**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	2,323	20,448	8,596	13,611	0	0	0	**44,978**	**20,448**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	43,398	0	0	0	0	0	0	**43,398**	**43,398**	**0**
North Sector	(m^3)	0	0	0	0	0	48,704	15,900	20,678	25,890	0	0	0	**111,172**	**48,704**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	25,068	0	5,506	675	0	0	0	**31,249**	**25,068**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**119,493**	**36,348**	**34,780**	**40,176**	**0**	**0**	**0**	**230,797**	**119,493**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	119,492	36,348	34,779	40,176	0	0	0	**230,795**	**119,492**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**119,492**	**36,348**	**34,779**	**40,176**	**0**	**0**	**0**	**230,795**	**119,492**	**0**
Net Inflow (m^3)		0	0	0	0	0	1	0	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	47,102	26,484	24,800	0	0	0	0	**98,386**	**47,102**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	48,636	15,619	12,400	0	0	0	0	**76,655**	**48,636**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	4,679	1,442	1,340	0	0	0	0	**7,461**	**4,679**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	58,277	25,906	15,966	15,990	0	0	0	**116,139**	**58,277**	**0**
Groundwater	(m^3)	3,720	3,480	3,720	3,600	3,720	3,600	3,720	3,720	3,600	3,720	3,600	3,720	**43,920**	**3,720**	**3,480**
Dike Seepage	(m^3)	299,605	175,559	194,087	158,847	161,200	126,000	108,500	93,000	0	171,140	188,357	97,228	**1,773,523**	**299,605**	**0**
Truck Shop	(m^3)	0	0	0	0	0	1,060	504	1,547	1,935	1,261	1,031	1,050	**8,388**	**1,935**	**0**
Camp Biodisk	(m^3)	2,418	2,262	2,418	2,340	2,418	2,319	2,412	2,405	2,340	2,418	2,340	2,417	**28,507**	**2,418**	**2,262**
Industrial Sector	(m^3)	0	0	0	0	0	13,455	4,305	4,115	0	0	0	0	**21,875**	**13,455**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	34,552	11,057	10,568	0	0	0	0	**56,177**	**34,552**	**0**
Ore Stockpile	(m^3)	0	0	0	0	0	11,340	3,629	3,469	0	0	0	0	**18,438**	**11,340**	**0**
A53/IVR Att Pond	(m^3)	0	0	0	0	0	0	0	0	149,346	0	0	0	**149,346**	**149,346**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	120,247	72,790	46,294	112,444	57,836	44,744	56,075	**510,430**	**120,247**	**0**
IVR WRSF Pump	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit inflow	(m^3)	0	0	0	0	0	0	0	16,625	114,445	3,272	0	0	**134,342**	**114,445**	**0**
AP5 Pump	(m^3)	0	0	0	0	0	0	0	0	24,012	0	0	0	**24,012**	**24,012**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	119,492	36,348	34,779	40,176	0	0	0	**230,795**	**119,492**	**0**
NE Sector	(m^3)	0	0	0	0	0	0	0	120,999	94,211	0	0	0	**215,210**	**120,999**	**0**
Total Inflow (m^3)		**305,743**	**181,301**	**200,225**	**164,787**	**167,338**	**590,759**	**312,716**	**392,027**	**558,499**	**239,647**	**240,072**	**160,490**	**3,513,604**	**1,174,260**	**5,742**
AsWTP/IVR Att Pond	(m^3)	217,107	156,361	173,565	138,987	198,346	482,066	321,603	369,873	532,474	215,228	214,255	129,648	**3,149,513**	**532,474**	**129,648**
Groundwater	(m^3)	26,660	24,940	26,660	25,800	26,660	25,800	26,660	26,660	25,800	26,660	25,800	26,660	**314,760**	**26,660**	**24,940**
Evaporation	(m^3)	0	0	0	0	0	236	3,031	2,484	925	0	0	0	**6,676**	**3,031**	**0**
AP5/GSP1	(m^3)[1]	0	0	0	0	0	39,055	0	0	0	0	0	0	**39,055**	**39,055**	**0**
Total Outflow (m^3)		**243,767**	**181,301**	**200,225**	**164,787**	**225,006**	**547,157**	**351,294**	**399,017**	**559,199**	**241,888**	**240,055**	**156,308**	**3,510,004**	**601,220**	**154,588**
Net Inflow (m^3)		61,976	0	0	0	-57,668	43,603	-38,578	-6,990	-700	-2,241	17	4,182	**3,600**	**61,976**	**-57,668**
End-of-Month Volume (m^3)		120,070	120,071	120,070	120,070	62,402	106,004	67,427	60,436	59,737	57,496	57,513	61,696	**1,012,992**	**120,071**	**57,496**
IVR Pit (Including dewatering prior to Operations)																
Drilling water	(m^3)	0	0	0	0	0	0	0	0	181	230	0	0	**410**	**230**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	0	0	1,573	10,498	331	0	0	**12,402**	**10,498**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	0	0	11	71	2	0	0	**84**	**71**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	0	583	15,626	104,282	3,293	0	0	**0**	**104,282**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**0**	**584**	**17,210**	**115,032**	**3,856**	**0**	**0**	**12,897**	**115,081**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	0	0	21	0	0	0	**21**	**21**	**0**
Ore Losses	(m^3)	0	0	0	0	0	0	584	584	565	584	0	0	**2,316**	**584**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	0	0	16,625	114,445	3,272	0	0	**134,342**	**114,445**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**0**	**584**	**17,209**	**115,031**	**3,856**	**0**	**0**	**136,679**	**115,050**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	0	1	1	0	0	0	**2**	**1**	**0**
End-of-Month Volume		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	**12,000**	**1,000**	**1,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
NE Sector	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
LAKE A53 / IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	136,802	45,907	17,137	123,430	0	0	0	**323,276**	**136,802**	**0**
Direct Precip	(m^3)	0	0	0	0	0	20,375	6,837	2,552	7,294	0	0	0	**37,058**	**20,375**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	1,529	513	192	1,272	0	0	0	**3,506**	**1,529**	**0**
A50 Dewatering	(m^3)	0	0	0	0	0	0	0	0	16,142	0	0	0	**16,142**	**16,142**	**0**
A51 Dewatering	(m^3)	0	0	0	0	0	0	0	0	21,595	0	0	0	**21,595**	**21,595**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**158,706**	**53,257**	**19,881**	**169,733**	**0**	**0**	**0**	**401,577**	**196,443**	**0**
Evaporation	(m^3)	0	0	0	0	0	1,499	17,036	17,208	3,884	0	0	0	**39,627**	**17,208**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	0	0	0	149,346	0	0	0	**149,346**	**149,346**	**0**
Dewatering Whale Tail Lake (South Basin)	(m^3)	0	0	0	0	0	157,207	36,221	2,673	211,771	0	0	0	**407,872**	**211,771**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**158,706**	**53,257**	**19,881**	**365,001**	**0**	**0**	**0**	**596,845**	**378,325**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	0	0	-195,268	0	0	0	**-195,268**	**0**	**-195,268**
End-of-Month Volume		196,269	196,269	196,269	196,269	196,269	196,269	196,269	196,269	1,000	1,000	1,000	1,000	**1,574,152**	**196,269**	**1,000**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	6,849	346,021	496,253	189,702	0	0	0	**1,038,825**	**496,253**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	128,385	0	0	0	0	0	0	**128,385**	**128,385**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	25,451	68,833	101,940	38,969	0	0	0	**235,193**	**101,940**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	475,048	0	0	0	0	0	0	**475,048**	**475,048**	**0**
Lake A18	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Lake A53	(m^3)	0	0	0	0	0	157,207	36,221	2,673	211,771	0	0	0	**407,872**	**211,771**	**0**
Lake A55	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Lake A60	(m^3)	0	0	0	0	0	172,005	61,020	108,888	35,544	0	0	0	**377,457**	**172,005**	**0**
Lake A62	(m^3)	0	0	0	0	0	53,001	31,089	48,659	17,745	0	0	0	**150,494**	**53,001**	**0**
Lake A65	(m^3)	0	0	0	0	0	259,898	0	0	0	0	0	0	**259,898**	**259,898**	**0**
AsWTP Discharge	(m^3)[1]	219,908	157,973	173,358	139,953	102,172	212,403	297	0	27,351	145,583	211,981	132,608	**1,523,587**	**219,908**	**0**
Total Inflow (m^3)		**219,908**	**157,973**	**173,358**	**139,953**	**102,172**	**1,490,247**	**543,481**	**758,413**	**521,082**	**145,583**	**211,981**	**132,608**	**4,596,759**	**2,118,209**	**0**
Groundwater	(m^3)	31,310	29,290	31,310	30,300	31,310	30,300	31,310	31,310	30,300	31,310	30,300	31,310	**369,660**	**31,310**	**29,290**
Evaporation	(m^3)	0	0	0	0	0	35,873	405,359	409,453	158,498	0	0	0	**1,009,183**	**409,453**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	1,727,000	106,677	317,649	332,284	0	0	0	**2,483,610**	**1,727,000**	**0**
Total Outflow (m^3)		**31,310**	**29,290**	**31,310**	**30,300**	**31,310**	**1,793,173**	**543,346**	**758,412**	**521,082**	**31,310**	**30,300**	**31,310**	**3,862,453**	**2,167,763**	**29,290**
Net Inflow (m^3)		188,598	128,683	142,048	109,653	70,862	-302,926	135	1	0	114,273	181,681	101,298	**734,306**	**188,598**	**-302,926**
End-of-Month Volume (m^3)		5,191,000	5,320,000	5,462,000	5,571,000	5,642,000	9,155,000	9,155,000	9,155,000	9,155,000	9,270,000	5,419,000	5,521,000	**84,016,000**	**9,270,000**	**5,191,000**
WATER TREATMENT																
Quarry 1	(m^3)	0	0	0	74,812	0	0	0	0	0	0	0	0	**74,812**	**74,812**	**0**
Whale Tail Att Pond	(m^3)	217,107	156,361	173,565	138,987	198,346	482,051	321,603	369,873	532,474	215,228	214,272	129,648	**3,149,515**	**532,474**	**129,648**
Total Inflow (m^3)		**217,107**	**156,361**	**173,565**	**213,799**	**198,346**	**482,051**	**321,603**	**369,873**	**532,474**	**215,228**	**214,272**	**129,648**	**3,224,327**	**607,286**	**129,648**
AsWTP to Whale Tail Lake (South Basin)	(m^3)[1]	217,107	156,361	173,565	138,987	100,790	210,292	0	0	27,389	150,396	214,272	129,648	**1,518,807**	**217,107**	**0**
AsWTP to Mammoth Lake	(m^3)	0	0	0	74,812	97,556	271,758	321,603	369,873	505,085	64,832	0	0	**1,705,519**	**505,085**	**0**
Total Outflow (m^3)		**217,107**	**156,361**	**173,565**	**213,799**	**198,346**	**482,050**	**321,603**	**369,873**	**532,474**	**215,228**	**214,272**	**129,648**	**3,224,326**	**722,192**	**259,296**
Net Inflow (m^3)		0	0	0	0	0	1	0	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume (m^3)																

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2021														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
C-Watershed	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,414	6,485	7,855	10,867	0	0	0	**54,621**	**29,414**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**2**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	9,805	687	689	231	0	0	0	**11,411**	**9,805**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**40,506**	**7,262**	**8,634**	**11,128**	**0**	**0**	**0**	**67,530**	**40,506**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Att Pond	(m^3)[1]	0	0	0	0	0	40,505	7,261	8,633	11,127	0	0	0	**67,526**	**40,505**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**40,505**	**7,262**	**8,634**	**11,127**	**0**	**0**	**0**	**67,529**	**40,506**	**0**
Net Inflow (m^3)		0	0	0	0	0	1	0	0	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	5,819	3,304	3,634	4,517	0	0	0	**17,274**	**5,819**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	10,495	0	0	0	0	0	0	**10,495**	**10,495**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**17,421**	**3,395**	**3,740**	**4,557**	**0**	**0**	**0**	**29,113**	**17,421**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	17,420	3,395	3,739	4,557	0	0	0	**29,111**	**17,420**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**17,420**	**3,395**	**3,739**	**4,557**	**0**	**0**	**0**	**29,111**	**17,420**	**0**
Net Inflow (m^3)		0	0	0	0	0	1	0	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	32,718	7,278	8,896	12,419	0	0	0	**61,311**	**32,718**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	289	128	142	133	0	0	0	**692**	**289**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	56,635	12,598	15,398	21,497	0	0	0	**106,128**	**56,635**	**0**
Groundwater	(m^3)	40,920	36,960	40,920	39,600	40,920	39,600	40,920	40,920	39,600	40,920	39,600	40,920	**481,800**	**40,920**	**36,960**
Drilling Water	(m^3)	744	672	744	720	744	720	744	744	720	744	720	744	**8,760**	**744**	**672**
Total Inflow (m^3)		**41,664**	**37,632**	**41,664**	**40,320**	**41,664**	**129,962**	**61,668**	**66,100**	**74,369**	**41,664**	**40,320**	**41,664**	**658,691**	**131,306**	**37,632**
Evaporation	(m^3)	0	0	0	0	0	25	285	288	112	0	0	0	**710**	**288**	**0**
Ore Losses	(m^3)	12,662	11,436	12,662	12,253	12,662	12,253	12,662	12,662	12,253	12,662	12,253	12,662	**149,082**	**12,662**	**11,436**
Whale Tail Att Pond	(m^3)	27,241	26,196	29,002	28,067	29,002	0	0	0	0	0	0	0	**139,508**	**29,002**	**0**
IVR Att Pond	(m^3)[1]	0	0	0	0	0	117,685	48,721	53,150	62,004	29,002	28,067	29,002	**367,631**	**117,685**	**0**
Total Outflow (m^3)		**39,903**	**37,632**	**41,664**	**40,320**	**41,664**	**129,963**	**61,668**	**66,100**	**74,369**	**41,664**	**40,320**	**41,664**	**656,931**	**159,637**	**11,436**
Net Inflow (m^3)		1,761	0	0	0	0	-1	-1	-1	1	0	0	0	**1,759**	**1,761**	**-1**
End-of-Month Volume (m^3)		8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	**96,000**	**8,000**	**8,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	9,004	5,532	6,657	9,150	0	0	0	**30,343**	**9,150**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	16,241	0	0	0	0	0	0	**16,241**	**16,241**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	286	24	27	10	0	0	0	**347**	**286**	**0**
North Sector	(m^3)	0	0	0	0	0	17,420	3,395	3,739	4,557	0	0	0	**29,111**	**17,420**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**42,951**	**8,951**	**10,423**	**13,717**	**0**	**0**	**0**	**76,042**	**42,951**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Att Pond	(m^3)[1]	0	0	0	0	0	42,951	8,950	10,424	13,716	0	0	0	**76,041**	**42,951**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**42,951**	**8,950**	**10,424**	**13,716**	**0**	**0**	**0**	**76,041**	**42,951**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	-1	1	0	0	0	**1**	**1**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	52,133	11,597	14,174	19,788	0	0	0	**97,692**	**52,133**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	31,298	6,962	8,509	11,880	0	0	0	**58,649**	**31,298**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	2,334	1,029	1,142	1,073	0	0	0	**5,578**	**2,334**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Groundwater	(m^3)	2,790	2,520	2,790	2,700	2,790	2,700	2,790	2,790	2,700	2,790	2,700	2,790	**32,850**	**2,790**	**2,520**
Dike Seepage	(m^3)	97,228	87,819	97,228	94,092	97,228	94,092	97,228	97,228	94,092	97,228	94,092	97,228	**1,144,783**	**97,228**	**87,819**
Truck Shop	(m^3)	3,196	2,887	3,196	3,093	3,196	0	0	0	0	0	0	0	**15,568**	**3,196**	**0**
Camp Biodisk	(m^3)	4,047	3,656	4,047	3,917	4,047	0	0	0	0	0	0	0	**19,714**	**4,047**	**0**
Industrial Sector	(m^3)	0	0	0	0	0	4,291	955	1,167	1,629	0	0	0	**8,042**	**4,291**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	21,765	4,842	5,918	8,261	0	0	0	**40,786**	**21,765**	**0**
Ore Stockpile	(m^3)	0	0	0	0	0	11,328	2,520	3,080	4,300	0	0	0	**21,228**	**11,328**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Pit	(m^3)	27,241	26,196	29,002	28,067	29,002	0	0	0	0	0	0	0	**139,508**	**29,002**	**0**
IVR WRSF Pump	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit inflow	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**134,502**	**123,078**	**136,263**	**131,869**	**136,263**	**219,941**	**127,923**	**134,008**	**143,723**	**100,018**	**96,792**	**100,018**	**1,584,398**	**259,412**	**90,339**
AsWTP/IVR Att Pond	(m^3)	106,153	93,677	103,714	100,368	103,714	188,239	93,071	99,134	111,322	67,468	65,292	67,468	**1,199,620**	**188,239**	**65,292**
IVR Att Pond	(m^3)[1]	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Groundwater	(m^3)	32,550	29,400	32,550	31,500	32,550	31,500	32,550	32,550	31,500	32,550	31,500	32,550	**383,250**	**32,550**	**29,400**
Evaporation	(m^3)	0	0	0	0	0	202	2,301	2,324	900	0	0	0	**5,727**	**2,324**	**0**
Total Outflow (m^3)		**138,703**	**123,077**	**136,264**	**131,868**	**136,264**	**219,941**	**127,922**	**134,008**	**143,722**	**100,018**	**96,792**	**100,018**	**1,588,597**	**223,113**	**94,692**
Net Inflow (m^3)		-4,201	1	-1	1	-1	0	1	0	1	0	0	0	**-4,200**	**1**	**-4,201**
End-of-Month Volume (m^3)		57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	**689,952**	**57,496**	**57,496**

		Year 2021														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Drilling water	(m^3)	741	672	744	720	744	720	744	744	720	744	720	744	**8,757**	**744**	**672**
Pit Wall Runoff	(m^3)	0	0	0	0	0	17,506	3,894	4,760	6,645	0	0	0	**32,805**	**17,506**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	38	46	51	47	0	0	0	**182**	**51**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	65	0	0	0	0	0	0	**65**	**65**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	33,364	20,531	24,750	34,079	0	0	0	**0**	**34,079**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	60,176	0	0	0	0	0	0	**60,176**	**60,176**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	942	78	90	34	0	0	0	**1,144**	**942**	**0**
Total Inflow (m^3)		**741**	**672**	**744**	**720**	**744**	**112,812**	**25,292**	**30,395**	**41,525**	**744**	**720**	**744**	**103,129**	**113,563**	**672**
IVR Att Pond	(m^3)	0	0	0	0	0	111,062	23,392	28,493	39,744	0	0	0	**202,691**	**111,062**	**0**
Evaporation	(m^3)	0	0	0	0	0	9	102	103	40	0	0	0	**253**	**103**	**0**
Ore Losses	(m^3)	741	672	744	720	744	1,741	1,799	1,799	1,741	744	720	744	**12,909**	**1,799**	**672**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**741**	**672**	**744**	**720**	**744**	**112,812**	**25,293**	**30,395**	**41,525**	**744**	**720**	**744**	**215,853**	**112,964**	**672**
Net Inflow	(m^3)	0	0	0	0	0	0	-1	0	1	0	0	0	**0**	**1**	**-1**
End-of-Month Volume		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	**12,000**	**1,000**	**1,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	11,202	0	0	0	0	0	0	**11,202**	**11,202**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,419**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**40,777**	**24,817**	**0**
NE Sector	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Att Pond	(m^3)	0	0	0	0	0	24,419	4,362	5,223	6,772	0	0	0	**40,776**	**24,419**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,419**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**40,776**	**24,419**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	128,220	28,542	34,901	48,702	0	0	0	**240,365**	**128,220**	**0**
Direct Precip	(m^3)	0	0	0	0	0	2,433	1,032	1,118	1,076	0	0	0	**5,659**	**2,433**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	1,271	283	346	482	0	0	0	**2,381**	**1,271**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	24,419	4,362	5,223	6,772	0	0	0	**40,776**	**24,419**	**0**
IVR Pit	(m^3)	0	0	0	0	0	111,062	23,392	28,493	39,744	0	0	0	**202,691**	**111,062**	**0**
Whale Tail Att Pond	(m^3)[1]	0	0	0	0	0	188,315	90,404	99,030	110,936	69,007	65,292	67,468	**690,452**	**188,315**	**0**
Whale Tail WRSF	(m^3)[1]	0	0	0	0	0	40,449	7,084	8,589	11,035	369	0	0	**67,526**	**40,449**	**0**
Whale Tail Pit	(m^3)[1]	0	0	0	0	0	117,521	47,313	53,007	61,651	30,134	28,067	29,002	**366,695**	**117,521**	**0**
Camp Biodisk	(m^3)	0	0	0	0	0	3,917	4,047	4,047	3,917	4,047	3,917	4,047	**27,939**	**4,047**	**0**
Mammoth DS	(m^3)[1]	0	0	0	0	0	42,892	8,726	10,377	13,599	446	0	0	**76,040**	**42,892**	**0**
Truck Shop	(m^3)	0	0	0	0	0	3,093	3,196	3,196	3,093	3,196	3,093	3,196	**22,063**	**3,196**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**663,592**	**218,381**	**248,327**	**301,007**	**107,200**	**100,369**	**103,713**	**1,742,588**	**663,825**	**0**
Evaporation	(m^3)	0	0	0	0	0	211	2,306	2,275	903	0	0	0	**5,695**	**2,306**	**0**
AsWTP	(m^3)	0	0	0	0	0	650,994	228,463	246,053	300,107	107,199	100,368	103,714	**1,736,898**	**650,994**	**0**
Dewatering Whale Tail Lake (South Basin)	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**651,205**	**230,769**	**248,328**	**301,010**	**107,199**	**100,368**	**103,714**	**1,742,593**	**653,300**	**0**
Net Inflow	(m^3)	0	0	0	0	0	12,387	-12,388	-2	-2	1	1	-1	**-4**	**12,387**	**-12,388**
End-of-Month Volume		1,000	1,000	1,000	1,000	1,000	13,389	1,000	1,000	1,000	1,000	1,000	1,000	**24,389**	**13,389**	**1,000**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	164,796	208,080	254,526	355,606	0	0	0	**983,008**	**355,606**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	297,230	0	0	0	0	0	0	**297,230**	**297,230**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	151,042	181,989	201,614	188,971	0	0	0	**723,616**	**201,614**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	257,511	0	0	0	0	0	0	**257,511**	**257,511**	**0**
Lake A18	(m^3)	0	0	0	0	0	176,258	0	0	0	0	0	0	**176,258**	**176,258**	**0**
Lake A55	(m^3)	0	0	0	0	0	274,541	0	0	0	0	0	0	**274,541**	**274,541**	**0**
Lake A60	(m^3)	0	0	0	0	0	208,348	13,533	23,568	67,295	0	0	0	**312,744**	**208,348**	**0**
Lake A62	(m^3)	0	0	0	0	0	73,363	11,703	15,293	26,188	0	0	0	**126,547**	**73,363**	**0**
Lake A65	(m^3)	0	0	0	0	0	129,769	0	0	0	0	0	0	**129,769**	**129,769**	**0**
AsWTP Discharge	(m^3)[1]	107,707	93,677	103,714	100,368	103,714	3,346	0	0	0	103,854	100,368	103,714	**820,462**	**107,707**	**0**
Total Inflow (m^3)		**107,707**	**93,677**	**103,714**	**100,368**	**103,714**	**1,736,204**	**415,305**	**495,001**	**638,060**	**103,854**	**100,368**	**103,714**	**4,101,686**	**2,081,947**	**0**
Groundwater	(m^3)	31,620	28,560	31,620	30,600	31,620	30,600	31,620	31,620	30,600	31,620	30,600	31,620	**372,300**	**31,620**	**28,560**
Evaporation	(m^3)	0	0	0	0	0	35,434	406,825	410,193	158,498	0	0	0	**1,010,950**	**410,193**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	2,423,000	0	29,959	448,962	0	0	0	**2,901,921**	**2,423,000**	**0**
Total Outflow (m^3)		**31,620**	**28,560**	**31,620**	**30,600**	**31,620**	**2,489,034**	**438,445**	**471,772**	**638,060**	**31,620**	**30,600**	**31,620**	**4,285,171**	**2,864,813**	**28,560**
Net Inflow (m^3)		76,087	65,117	72,094	69,768	72,094	-752,830	-23,140	23,229	0	72,234	69,768	72,094	**-183,485**	**76,087**	**-752,830**
End-of-Month Volume (m^3)		5,597,000	5,662,000	5,734,000	5,804,000	5,876,000	9,155,000	9,132,000	9,155,000	5,339,000	5,412,000	5,481,000	5,554,000	**77,901,000**	**9,155,000**	**5,339,000**
WATER TREATMENT																
Whale Tail Att Pond	(m^3)	106,167	93,677	103,714	100,368	103,714	0	0	0	0	0	0	0	**507,640**	**106,167**	**0**
IVR Att Pond	(m^3)	0	0	0	0	0	650,994	228,463	246,053	300,107	107,199	100,368	103,714	**1,736,898**	**650,994**	**0**
Total Inflow (m^3)		**106,167**	**93,677**	**103,714**	**100,368**	**103,714**	**650,994**	**228,463**	**246,053**	**300,107**	**107,199**	**100,368**	**103,714**	**2,244,538**	**757,161**	**0**
AsWTP to Whale Tail Lake (South Basin)	(m^3)[1]	106,167	93,677	103,714	100,368	103,714	0	0	0	0	107,199	100,368	103,714	**818,921**	**107,199**	**0**
AsWTP to Mammoth Lake	(m^3)	0	0	0	0	0	650,994	228,463	246,053	300,107	0	0	0	**1,425,617**	**650,994**	**0**
Total Outflow (m^3)		**106,167**	**93,677**	**103,714**	**100,368**	**103,714**	**650,994**	**228,463**	**246,053**	**300,107**	**107,199**	**100,368**	**103,714**	**2,244,538**	**758,193**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)																

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2022														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
C-Watershed	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,768	6,167	7,538	10,523	0	0	0	**53,996**	**29,768**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,167**	**41,094**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Att Pond	(m^3)[1]	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,166**	**41,095**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,872	0	0	0	0	0	0	**4,872**	**4,872**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,054**	**9,878**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,055**	**9,722**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,131	7,278	8,896	12,419	0	0	0	**63,724**	**35,131**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	145	60	66	62	0	0	0	**333**	**145**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	60,973	12,632	15,439	21,554	0	0	0	**110,598**	**60,973**	**0**
Groundwater	(m^3)	42,160	38,080	42,160	40,800	42,160	40,800	42,160	42,160	40,800	42,160	40,800	42,160	**496,400**	**42,160**	**38,080**
Drilling Water	(m^3)	744	672	744	720	744	720	744	744	720	744	720	744	**8,760**	**744**	**672**
Total Inflow (m^3)		**42,904**	**38,752**	**42,904**	**41,520**	**42,904**	**137,769**	**62,874**	**67,305**	**75,555**	**42,904**	**41,520**	**42,904**	**679,815**	**139,153**	**38,752**
Evaporation	(m^3)	0	0	0	0	0	12	134	135	52	0	0	0	**332**	**135**	**0**
Ore Losses	(m^3)	12,574	11,358	12,574	12,169	12,574	12,169	12,574	12,574	12,169	12,574	12,169	12,574	**148,052**	**12,574**	**11,358**
IVR Att Pond	(m^3)[1]	30,330	27,394	30,330	29,351	30,330	125,589	50,166	54,596	63,334	30,330	29,351	30,330	**531,431**	**125,589**	**27,394**
Total Outflow (m^3)		**42,904**	**38,752**	**42,904**	**41,520**	**42,904**	**137,770**	**62,874**	**67,305**	**75,555**	**42,904**	**41,520**	**42,904**	**679,815**	**138,298**	**38,752**
Net Inflow (m^3)		0	0	0	0	0	-1	0	0	0	0	0	0	**0**	**0**	**-1**
End-of-Month Volume (m^3)		8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	**96,000**	**8,000**	**8,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,913	4,910	5,971	8,294	0	0	0	**27,088**	**8,294**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,907	0	0	0	0	0	0	**15,907**	**15,907**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	710	51	52	18	0	0	0	**830**	**710**	**0**
North Sector	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**34,252**	**6,642**	**8,040**	**10,947**	**0**	**0**	**0**	**59,880**	**34,252**	**0**
IVR Att Pond	(m^3)[1]	0	0	0	0	0	34,251	6,641	8,039	10,947	0	0	0	**59,878**	**34,251**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**34,251**	**6,641**	**8,039**	**10,947**	**0**	**0**	**0**	**59,878**	**34,251**	**0**
Net Inflow (m^3)		0	0	0	0	0	1	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	50,890	10,350	12,411	16,997	0	0	0	**90,648**	**50,890**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	33,606	6,962	8,509	11,880	0	0	0	**60,957**	**33,606**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	2,503	1,029	1,142	1,073	0	0	0	**5,747**	**2,503**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Groundwater	(m^3)	2,790	2,520	2,790	2,700	2,790	2,700	2,790	2,790	2,700	2,790	2,700	2,790	**32,850**	**2,790**	**2,520**
Dike Seepage	(m^3)	97,228	87,819	97,228	94,092	97,228	94,092	97,228	97,228	94,092	97,228	94,092	97,228	**1,144,783**	**97,228**	**87,819**
Industrial Sector	(m^3)	0	0	0	0	0	4,607	955	4,060	5,667	0	0	0	**15,289**	**5,667**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,370	4,842	5,918	8,261	0	0	0	**42,391**	**23,370**	**0**
Ore Stockpile	(m^3)	0	0	0	0	0	12,163	2,520	0	0	0	0	0	**14,683**	**12,163**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	657	54	63	24	0	0	0	**797**	**657**	**0**
Total Inflow (m^3)		**100,018**	**90,339**	**100,018**	**96,792**	**100,018**	**224,588**	**126,730**	**132,121**	**140,694**	**100,018**	**96,792**	**100,018**	**1,408,145**	**228,874**	**90,339**
AsWTP/IVR Att Pond	(m^3)	66,228	59,819	66,228	64,092	66,228	191,685	90,639	96,007	107,093	66,228	64,092	66,228	**1,004,567**	**191,685**	**59,819**
Groundwater	(m^3)	33,790	30,520	33,790	32,700	33,790	32,700	33,790	33,790	32,700	33,790	32,700	33,790	**397,850**	**33,790**	**30,520**
Evaporation	(m^3)	0	0	0	0	0	202	2,301	2,324	900	0	0	0	**5,727**	**2,324**	**0**
Total Outflow (m^3)		**100,018**	**90,339**	**100,018**	**96,792**	**100,018**	**224,587**	**126,730**	**132,121**	**140,693**	**100,018**	**96,792**	**100,018**	**1,408,144**	**227,799**	**90,339**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	1	0	0	0	**1**	**1**	**0**
End-of-Month Volume (m^3)		57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	**689,952**	**57,496**	**57,496**

		Year 2022														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Drilling water	(m^3)	744	672	744	720	744	720	744	744	720	744	720	744	**8,760**	**744**	**672**
Pit Wall Runoff	(m^3)	0	0	0	0	0	38,248	7,924	9,685	13,520	0	0	0	**69,377**	**38,248**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	20	24	27	25	0	0	0	**96**	**27**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	38	0	0	0	0	0	0	**38**	**38**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	14,986	18,317	25,571	0	0	0	**0**	**25,571**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,308	0	0	0	0	0	0	**48,308**	**48,308**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	144	144	48	0	0	0	**2,401**	**2,065**	**0**
Total Inflow (m^3)		**744**	**672**	**744**	**720**	**744**	**113,429**	**23,822**	**28,917**	**39,884**	**744**	**720**	**744**	**128,980**	**115,001**	**672**
IVR Att Pond	(m^3)	0	0	0	0	0	111,271	21,542	26,636	37,710	0	0	0	**197,159**	**111,271**	**0**
Evaporation	(m^3)	0	0	0	0	0	5	54	54	21	0	0	0	**134**	**54**	**0**
Ore Losses	(m^3)	744	672	744	720	744	2,154	2,226	2,226	2,154	744	720	744	**14,592**	**2,226**	**672**
Total Outflow (m^3)		**744**	**672**	**744**	**720**	**744**	**113,430**	**23,822**	**28,916**	**39,885**	**744**	**720**	**744**	**211,885**	**113,551**	**672**
Net Inflow	(m^3)	0	0	0	0	0	0	0	1	-1	0	0	0	**0**	**1**	**-1**
End-of-Month Volume		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	**12,000**	**1,000**	**1,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,486	0	0	0	0	0	0	**12,486**	**12,486**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,061**	**26,101**	**0**
IVR Att Pond	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,060**	**25,703**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	137,667	28,541	34,901	48,703	0	0	0	**249,812**	**137,667**	**0**
Direct Precip	(m^3)	0	0	0	0	0	2,618	1,035	1,118	1,075	0	0	0	**5,846**	**2,618**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	1,364	283	346	482	0	0	0	**2,474**	**1,364**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
IVR Pit	(m^3)	0	0	0	0	0	111,271	21,542	26,636	37,710	0	0	0	**197,159**	**111,271**	**0**
Whale Tail Att Pond	(m^3)[1]	66,268	59,819	66,228	64,092	66,228	193,920	88,057	96,107	107,008	67,669	64,092	66,228	**1,005,716**	**193,920**	**59,819**
Whale Tail WRSF	(m^3)[1]	0	0	0	0	0	41,036	6,789	8,283	10,695	360	0	0	**67,163**	**41,036**	**0**
Whale Tail Pit	(m^3)[1]	30,287	27,394	30,330	29,351	30,330	126,393	48,722	54,453	62,984	31,462	29,351	30,330	**531,387**	**126,393**	**27,394**
Camp Biodisk	(m^3)	4,047	3,656	4,047	3,917	4,047	3,917	4,047	4,047	3,917	4,047	3,917	4,047	**47,653**	**4,047**	**3,656**
Mammoth DS	(m^3)[1]	0	0	0	0	0	34,204	6,475	7,994	10,841	364	0	0	**59,878**	**34,204**	**0**
Truck Shop	(m^3)	3,196	2,887	3,196	3,093	3,196	3,093	3,196	3,196	3,093	3,196	3,093	3,196	**37,631**	**3,196**	**2,887**
Total Inflow (m^3)		**103,798**	**93,756**	**103,801**	**100,453**	**103,801**	**681,186**	**213,049**	**242,304**	**293,280**	**107,098**	**100,453**	**103,801**	**2,246,779**	**681,419**	**93,756**
Evaporation	(m^3)	0	0	0	0	0	212	2,314	2,275	902	0	0	0	**5,703**	**2,314**	**0**
AsWTP	(m^3)	103,798	93,756	103,801	100,453	103,801	668,465	223,244	240,030	292,378	107,099	100,453	103,801	**2,241,079**	**668,465**	**93,756**
Total Outflow (m^3)		**103,798**	**93,756**	**103,801**	**100,453**	**103,801**	**668,677**	**225,558**	**242,305**	**293,280**	**107,099**	**100,453**	**103,801**	**2,246,782**	**670,779**	**93,756**
Net Inflow	(m^3)	0	0	0	0	0	12,509	-12,509	-2	1	-1	0	0	**-2**	**12,509**	**-12,509**
End-of-Month Volume		1,000	1,000	1,000	1,000	1,000	13,508	1,000	1,000	1,000	1,000	1,000	1,000	**24,508**	**13,508**	**1,000**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	178,003	208,080	254,526	355,606	0	0	0	**996,215**	**355,606**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	357,847	0	0	0	0	0	0	**357,847**	**357,847**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	151,309	181,989	201,614	188,971	0	0	0	**723,883**	**201,614**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	287,533	0	0	0	0	0	0	**287,533**	**287,533**	**0**
Lake A18	(m^3)	0	0	0	0	0	137,006	0	0	0	0	0	0	**137,006**	**137,006**	**0**
Lake A55	(m^3)	0	0	0	0	0	287,439	0	0	0	0	0	0	**287,439**	**287,439**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,534	13,533	23,568	67,295	0	0	0	**328,930**	**224,534**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,888	11,703	15,293	26,188	0	0	0	**132,072**	**78,888**	**0**
Lake A65	(m^3)	0	0	0	0	0	125,402	0	0	0	0	0	0	**125,402**	**125,402**	**0**
AsWTP Discharge	(m^3)[1]	103,796	93,756	103,801	100,453	103,801	3,348	0	0	0	103,750	100,453	103,801	**816,959**	**103,801**	**0**
Total Inflow (m^3)		**103,796**	**93,756**	**103,801**	**100,453**	**103,801**	**1,831,309**	**415,305**	**495,001**	**638,060**	**103,750**	**100,453**	**103,801**	**4,193,286**	**2,159,670**	**0**
Groundwater	(m^3)	31,620	28,560	31,620	30,600	31,620	30,600	31,620	31,620	30,600	31,620	30,600	31,620	**372,300**	**31,620**	**28,560**
Evaporation	(m^3)	0	0	0	0	0	35,496	406,826	410,193	158,498	0	0	0	**1,011,013**	**410,193**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	2,331,000	0	29,957	448,962	0	0	0	**2,809,919**	**2,331,000**	**0**
Total Outflow (m^3)		**31,620**	**28,560**	**31,620**	**30,600**	**31,620**	**2,397,096**	**438,446**	**471,770**	**638,060**	**31,620**	**30,600**	**31,620**	**4,193,232**	**2,772,813**	**28,560**
Net Inflow (m^3)		72,176	65,196	72,181	69,853	72,181	-565,787	-23,141	23,231	0	72,130	69,853	72,181	**54**	**72,181**	**-565,787**
End-of-Month Volume (m^3)		5,626,000	5,691,000	5,763,000	5,833,000	5,905,000	9,155,000	9,132,000	9,155,000	5,339,000	5,412,000	5,481,000	5,554,000	**78,046,000**	**9,155,000**	**5,339,000**
WATER TREATMENT																
IVR Att Pond	(m^3)	103,798	93,756	103,801	100,453	103,801	668,465	223,244	240,030	292,378	107,099	100,453	103,801	**2,241,079**	**668,465**	**93,756**
Total Inflow (m^3)		**103,798**	**93,756**	**103,801**	**100,453**	**103,801**	**668,465**	**223,244**	**240,030**	**292,378**	**107,099**	**100,453**	**103,801**	**2,241,079**	**668,465**	**93,756**
AsWTP to Whale Tail Lake (South Basin)	(m^3)[1]	103,798	93,756	103,801	100,453	103,801	0	0	0	0	107,099	100,453	103,801	**816,962**	**107,099**	**0**
AsWTP to Mammoth Lake	(m^3)	0	0	0	0	0	668,465	223,244	240,030	292,378	0	0	0	**1,424,117**	**668,465**	**0**
Total Outflow (m^3)		**103,798**	**93,756**	**103,801**	**100,453**	**103,801**	**668,465**	**223,244**	**240,030**	**292,378**	**107,099**	**100,453**	**103,801**	**2,241,079**	**775,564**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)																

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2023														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
C-Watershed	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,768	6,167	7,538	10,523	0	0	0	**53,996**	**29,768**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,167**	**41,094**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Att Pond	(m^3)[1]	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,166**	**41,095**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,872	0	0	0	0	0	0	**4,872**	**4,872**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,054**	**9,878**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,055**	**9,722**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,131	7,278	8,896	12,419	0	0	0	**63,724**	**35,131**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	145	60	66	62	0	0	0	**333**	**145**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	60,973	12,632	15,439	21,554	0	0	0	**110,598**	**60,973**	**0**
Groundwater	(m^3)	42,160	38,080	42,160	40,800	42,160	40,800	42,160	42,160	40,800	42,160	40,800	42,160	**496,400**	**42,160**	**38,080**
Drilling Water	(m^3)	744	672	744	720	744	720	744	744	720	744	720	744	**8,760**	**744**	**672**
Total Inflow (m^3)		**42,904**	**38,752**	**42,904**	**41,520**	**42,904**	**137,769**	**62,874**	**67,305**	**75,555**	**42,904**	**41,520**	**42,904**	**679,815**	**139,153**	**38,752**
Evaporation	(m^3)	0	0	0	0	0	12	134	135	52	0	0	0	**332**	**135**	**0**
Ore Losses	(m^3)	10,931	9,873	10,931	10,579	10,931	10,579	10,931	10,931	10,579	10,931	10,579	10,931	**128,706**	**10,931**	**9,873**
IVR Att Pond	(m^3)[1]	31,973	28,879	31,973	30,941	31,973	127,179	51,809	56,239	64,924	31,973	30,941	31,973	**550,777**	**127,179**	**28,879**
Total Outflow (m^3)		**42,904**	**38,752**	**42,904**	**41,520**	**42,904**	**137,770**	**62,874**	**67,305**	**75,555**	**42,904**	**41,520**	**42,904**	**679,815**	**138,245**	**38,752**
Net Inflow (m^3)		0	0	0	0	0	-1	0	0	0	0	0	0	**0**	**0**	**-1**
End-of-Month Volume (m^3)		8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	**96,000**	**8,000**	**8,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,391	0	0	0	0	0	0	**15,391**	**15,391**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	810	57	57	19	0	0	0	**942**	**810**	**0**
North Sector	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**33,579**	**6,513**	**7,910**	**10,801**	**0**	**0**	**0**	**58,802**	**33,579**	**0**
IVR Att Pond	(m^3)[1]	0	0	0	0	0	33,579	6,512	7,909	10,801	0	0	0	**58,801**	**33,579**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**33,579**	**6,512**	**7,909**	**10,801**	**0**	**0**	**0**	**58,801**	**33,579**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,830	9,287	11,352	15,847	0	0	0	**81,316**	**44,830**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	33,606	6,962	8,509	11,880	0	0	0	**60,957**	**33,606**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	2,503	1,029	1,142	1,073	0	0	0	**5,747**	**2,503**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Groundwater	(m^3)	2,790	2,520	2,790	2,700	2,790	2,700	2,790	2,790	2,700	2,790	2,700	2,790	**32,850**	**2,790**	**2,520**
Dike Seepage	(m^3)	97,228	87,819	97,228	94,092	97,228	94,092	97,228	97,228	94,092	97,228	94,092	97,228	**1,144,783**	**97,228**	**87,819**
Industrial Sector	(m^3)	0	0	0	0	0	16,032	3,321	4,060	5,667	0	0	0	**29,080**	**16,032**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,370	4,842	5,918	8,261	0	0	0	**42,391**	**23,370**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	1,439	100	100	33	0	0	0	**1,673**	**1,439**	**0**
Total Inflow (m^3)		**100,018**	**90,339**	**100,018**	**96,792**	**100,018**	**218,572**	**125,559**	**131,099**	**139,553**	**100,018**	**96,792**	**100,018**	**1,398,797**	**221,798**	**90,339**
IVR Att Pond	(m^3)[1]	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Groundwater	(m^3)	33,790	30,520	33,790	32,700	33,790	32,700	33,790	33,790	32,700	33,790	32,700	33,790	**397,850**	**33,790**	**30,520**
Evaporation	(m^3)	0	0	0	0	0	202	2,301	2,324	900	0	0	0	**5,727**	**2,324**	**0**
Total Outflow (m^3)		**100,018**	**90,339**	**100,018**	**96,792**	**100,018**	**218,571**	**125,560**	**131,099**	**139,554**	**100,018**	**96,792**	**100,018**	**1,398,797**	**221,783**	**90,339**
Net Inflow (m^3)		0	0	0	0	0	1	-1	0	0	0	0	0	**0**	**1**	**-1**
End-of-Month Volume (m^3)		57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	**689,952**	**57,496**	**57,496**

		Year 2023														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Drilling water	(m^3)	744	672	744	720	744	720	744	744	720	744	720	744	**8,760**	**744**	**672**
Pit Wall Runoff	(m^3)	0	0	0	0	0	38,251	7,924	9,686	13,522	0	0	0	**69,383**	**38,251**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	19	23	25	24	0	0	0	**91**	**25**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	36	0	0	0	0	0	0	**36**	**36**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	14,986	18,317	25,571	0	0	0	**0**	**25,571**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,308	0	0	0	0	0	0	**48,308**	**48,308**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	144	144	48	0	0	0	**2,401**	**2,065**	**0**
Total Inflow (m^3)		**744**	**672**	**744**	**720**	**744**	**113,429**	**23,821**	**28,916**	**39,885**	**744**	**720**	**744**	**128,979**	**115,001**	**672**
IVR Att Pond	(m^3)	0	0	0	0	0	110,125	20,360	25,454	36,564	0	0	0	**192,503**	**110,125**	**0**
Evaporation	(m^3)	0	0	0	0	0	4	51	51	20	0	0	0	**127**	**51**	**0**
Ore Losses	(m^3)	744	672	744	720	744	3,301	3,411	3,411	3,301	744	720	744	**19,256**	**3,411**	**672**
Total Outflow (m^3)		**744**	**672**	**744**	**720**	**744**	**113,430**	**23,822**	**28,916**	**39,885**	**744**	**720**	**744**	**211,886**	**113,587**	**672**
Net Inflow	(m^3)	0	0	0	0	0	-1	-1	0	0	0	0	0	**-2**	**0**	**-1**
End-of-Month Volume		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	**12,000**	**1,000**	**1,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,486	0	0	0	0	0	0	**12,486**	**12,486**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,061**	**26,101**	**0**
IVR Att Pond	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,060**	**25,703**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	132,755	27,315	33,165	45,940	0	0	0	**239,175**	**132,755**	**0**
Direct Precip	(m^3)	0	0	0	0	0	2,520	1,032	1,118	1,093	0	0	0	**5,763**	**2,520**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	5,007	1,227	1,736	2,748	0	0	0	**10,718**	**5,007**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	1,364	283	346	482	0	0	0	**2,474**	**1,364**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
IVR Pit	(m^3)	0	0	0	0	0	110,125	20,360	25,454	36,564	0	0	0	**192,503**	**110,125**	**0**
Whale Tail Att Pond	(m^3)[1]	66,228	59,819	66,228	64,092	66,228	188,648	87,064	95,085	105,872	67,636	64,092	66,228	**997,220**	**188,648**	**59,819**
Whale Tail WRSF	(m^3)[1]	0	0	0	0	0	41,036	6,789	8,283	10,695	360	0	0	**67,163**	**41,036**	**0**
Whale Tail Pit	(m^3)[1]	31,920	28,879	31,973	30,941	31,973	128,034	50,314	56,096	64,574	33,105	30,941	31,973	**550,723**	**128,034**	**28,879**
Camp Biodisk	(m^3)	4,047	3,656	4,047	3,917	4,047	3,917	4,047	4,047	3,917	4,047	3,917	4,047	**47,653**	**4,047**	**3,656**
Mammoth DS	(m^3)[1]	0	0	0	0	0	33,532	6,348	7,864	10,696	360	0	0	**58,800**	**33,532**	**0**
Truck Shop	(m^3)	3,196	2,887	3,196	3,093	3,196	3,093	3,196	3,196	3,093	3,196	3,093	3,196	**37,631**	**3,196**	**2,887**
Total Inflow (m^3)		**105,391**	**95,241**	**105,444**	**102,043**	**105,444**	**675,734**	**212,337**	**241,613**	**292,446**	**108,704**	**102,043**	**105,444**	**2,251,883**	**675,967**	**95,241**
Evaporation	(m^3)	0	0	0	0	0	204	2,306	2,275	917	0	0	0	**5,702**	**2,306**	**0**
AsWTP	(m^3)	105,391	95,240	105,444	102,043	105,444	663,150	222,414	239,338	291,531	108,705	102,043	105,444	**2,246,187**	**663,150**	**95,240**
Total Outflow (m^3)		**105,391**	**95,240**	**105,444**	**102,043**	**105,444**	**663,354**	**224,720**	**241,613**	**292,448**	**108,705**	**102,043**	**105,444**	**2,251,889**	**665,456**	**95,240**
Net Inflow	(m^3)	0	1	0	0	0	12,380	-12,383	-1	-2	-2	0	0	**-6**	**12,380**	**-12,383**
End-of-Month Volume		1,000	1,000	1,000	1,000	1,000	13,382	1,000	1,000	1,000	1,000	1,000	1,000	**24,382**	**13,382**	**1,000**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	177,076	208,080	254,526	355,606	0	0	0	**995,288**	**355,606**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	355,984	0	0	0	0	0	0	**355,984**	**355,984**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	151,300	181,989	201,614	188,971	0	0	0	**723,874**	**201,614**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	287,516	0	0	0	0	0	0	**287,516**	**287,516**	**0**
Lake A18	(m^3)	0	0	0	0	0	136,859	0	0	0	0	0	0	**136,859**	**136,859**	**0**
Lake A55	(m^3)	0	0	0	0	0	294,905	0	0	0	0	0	0	**294,905**	**294,905**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,534	13,533	23,568	67,295	0	0	0	**328,930**	**224,534**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,888	11,703	15,293	26,188	0	0	0	**132,072**	**78,888**	**0**
Lake A65	(m^3)	0	0	0	0	0	127,842	0	0	0	0	0	0	**127,842**	**127,842**	**0**
AsWTP Discharge	(m^3)[1]	105,338	95,240	105,444	102,043	105,444	3,401	0	0	0	105,304	102,043	105,444	**829,701**	**105,444**	**0**
Total Inflow (m^3)		**105,338**	**95,240**	**105,444**	**102,043**	**105,444**	**1,838,305**	**415,305**	**495,001**	**638,060**	**105,304**	**102,043**	**105,444**	**4,212,971**	**2,169,192**	**0**
Pumping to Mammoth	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Groundwater	(m^3)	31,620	28,560	31,620	30,600	31,620	30,600	31,620	31,620	30,600	31,620	30,600	31,620	**372,300**	**31,620**	**28,560**
Evaporation	(m^3)	0	0	0	0	0	35,494	406,826	410,193	158,498	0	0	0	**1,011,011**	**410,193**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	2,346,000	0	29,957	448,962	0	0	0	**2,824,919**	**2,346,000**	**0**
Total Outflow (m^3)		**31,620**	**28,560**	**31,620**	**30,600**	**31,620**	**2,412,094**	**438,446**	**471,770**	**638,060**	**31,620**	**30,600**	**31,620**	**4,208,230**	**2,787,813**	**28,560**
Net Inflow (m^3)		73,718	66,680	73,824	71,443	73,824	-573,789	-23,141	23,231	0	73,684	71,443	73,824	**4,741**	**73,824**	**-573,789**
End-of-Month Volume (m^3)		5,627,000	5,694,000	5,768,000	5,839,000	5,913,000	9,155,000	9,132,000	9,155,000	5,339,000	5,413,000	5,485,000	5,558,000	**78,078,000**	**9,155,000**	**5,339,000**
WATER TREATMENT																
IVR Att Pond	(m^3)	105,391	95,240	105,444	102,043	105,444	663,150	222,414	239,338	291,531	108,705	102,043	105,444	**2,246,187**	**663,150**	**95,240**
Total Inflow (m^3)		**105,391**	**95,240**	**105,444**	**102,043**	**105,444**	**663,150**	**222,414**	**239,338**	**291,531**	**108,705**	**102,043**	**105,444**	**2,246,187**	**663,150**	**95,240**
AsWTP to Whale Tail Lake (South Basin)	(m^3)[1]	105,391	95,240	105,444	102,043	105,444	0	0	0	0	108,705	102,043	105,444	**829,754**	**108,705**	**0**
AsWTP to Mammoth Lake	(m^3)	0	0	0	0	0	663,150	222,414	239,338	291,531	0	0	0	**1,416,433**	**663,150**	**0**
Total Outflow (m^3)		**105,391**	**95,240**	**105,444**	**102,043**	**105,444**	**663,150**	**222,414**	**239,338**	**291,531**	**108,705**	**102,043**	**105,444**	**2,246,187**	**771,855**	**190,480**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)																

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2024														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**29**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
C-Watershed	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,774	6,167	7,538	10,523	0	0	0	**54,002**	**29,774**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,100**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,173**	**41,100**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Att Pond	(m^3)[1]	0	0	0	0	0	41,100	6,956	8,327	10,786	0	0	0	**67,169**	**41,100**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,100**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,172**	**41,101**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,873	0	0	0	0	0	0	**4,873**	**4,873**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,723**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,055**	**9,879**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	9,723	1,681	2,017	2,635	0	0	0	**16,056**	**9,723**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,723**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,056**	**9,723**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,138	7,278	8,896	12,419	0	0	0	**63,731**	**35,138**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	174	72	80	75	0	0	0	**400**	**174**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	60,957	12,626	15,432	21,544	0	0	0	**110,559**	**60,957**	**0**
Groundwater	(m^3)	41,850	39,150	41,850	40,500	41,850	40,500	41,850	41,850	40,500	41,850	40,500	41,850	**494,100**	**41,850**	**39,150**
Drilling Water	(m^3)	744	696	744	720	744	720	744	744	720	744	720	744	**8,784**	**744**	**696**
Total Inflow (m^3)		**42,594**	**39,846**	**42,594**	**41,220**	**42,594**	**137,489**	**62,570**	**67,002**	**75,258**	**42,594**	**41,220**	**42,594**	**677,574**	**138,863**	**39,846**
Evaporation	(m^3)	0	0	0	0	0	14	160	162	63	0	0	0	**399**	**162**	**0**
Ore Losses	(m^3)	7,471	6,989	7,471	7,230	7,471	7,230	7,471	7,471	7,230	7,471	7,230	7,471	**88,206**	**7,471**	**6,989**
IVR Att Pond	(m^3)[1]	35,123	32,857	35,123	33,990	35,123	130,246	54,938	59,368	67,965	35,123	33,990	35,123	**588,969**	**130,246**	**32,857**
Total Outflow (m^3)		**42,594**	**39,846**	**42,594**	**41,220**	**42,594**	**137,490**	**62,569**	**67,001**	**75,258**	**42,594**	**41,220**	**42,594**	**677,574**	**137,879**	**39,846**
Net Inflow (m^3)		0	0	0	0	0	-1	0	1	0	0	0	0	**0**	**1**	**-1**
End-of-Month Volume (m^3)		8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	**96,000**	**8,000**	**8,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,396	0	0	0	0	0	0	**15,396**	**15,396**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	810	57	57	19	0	0	0	**942**	**810**	**0**
North Sector	(m^3)	0	0	0	0	0	9,723	1,681	2,017	2,635	0	0	0	**16,056**	**9,723**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**33,585**	**6,513**	**7,910**	**10,801**	**0**	**0**	**0**	**58,808**	**33,585**	**0**
IVR Att Pond	(m^3)[1]	0	0	0	0	0	33,585	6,512	7,909	10,801	0	0	0	**58,807**	**33,585**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**33,585**	**6,512**	**7,909**	**10,801**	**0**	**0**	**0**	**58,807**	**33,585**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,840	9,287	11,352	15,847	0	0	0	**81,326**	**44,840**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	33,613	6,962	8,509	11,880	0	0	0	**60,964**	**33,613**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	2,503	1,029	1,142	1,073	0	0	0	**5,747**	**2,503**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Groundwater	(m^3)	2,790	2,610	2,790	2,700	2,790	2,700	2,790	2,790	2,700	2,790	2,700	2,790	**32,940**	**2,790**	**2,610**
Dike Seepage	(m^3)	97,228	90,955	97,228	94,092	97,228	94,092	97,228	97,228	94,092	97,228	94,092	97,228	**1,147,919**	**97,228**	**90,955**
Industrial Sector	(m^3)	0	0	0	0	0	16,035	3,321	4,060	5,667	0	0	0	**29,083**	**16,035**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,375	4,842	5,918	8,261	0	0	0	**42,396**	**23,375**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	1,439	100	100	33	0	0	0	**1,673**	**1,439**	**0**
Total Inflow (m^3)		**100,018**	**93,565**	**100,018**	**96,792**	**100,018**	**218,597**	**125,559**	**131,099**	**139,553**	**100,018**	**96,792**	**100,018**	**1,402,048**	**221,823**	**93,565**
IVR Att Pond	(m^3)[1]	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Groundwater	(m^3)	33,790	31,610	33,790	32,700	33,790	32,700	33,790	33,790	32,700	33,790	32,700	33,790	**398,940**	**33,790**	**31,610**
Evaporation	(m^3)	0	0	0	0	0	202	2,301	2,324	900	0	0	0	**5,727**	**2,324**	**0**
Total Outflow (m^3)		**100,018**	**93,565**	**100,018**	**96,792**	**100,018**	**218,596**	**125,560**	**131,099**	**139,554**	**100,018**	**96,792**	**100,018**	**1,402,048**	**221,808**	**93,565**
Net Inflow (m^3)		0	0	0	0	0	1	-1	0	0	0	0	0	**0**	**1**	**-1**
End-of-Month Volume (m^3)		57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	**689,952**	**57,496**	**57,496**

		Year 2024														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**29**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Drilling water	(m^3)	744	696	744	720	744	720	744	744	720	744	720	744	**8,784**	**744**	**696**
Pit Wall Runoff	(m^3)	0	0	0	0	0	38,258	7,924	9,686	13,522	0	0	0	**69,390**	**38,258**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	19	23	25	24	0	0	0	**91**	**25**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	36	0	0	0	0	0	0	**36**	**36**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	14,986	18,317	25,571	0	0	0	**0**	**25,571**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,323	0	0	0	0	0	0	**48,323**	**48,323**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	144	144	48	0	0	0	**2,401**	**2,065**	**0**
Total Inflow (m^3)		**744**	**696**	**744**	**720**	**744**	**113,451**	**23,821**	**28,916**	**39,885**	**744**	**720**	**744**	**129,025**	**115,023**	**696**
IVR Att Pond	(m^3)	0	0	0	0	0	109,261	19,444	24,538	35,678	0	0	0	**188,921**	**109,261**	**0**
Evaporation	(m^3)	0	0	0	0	0	4	51	51	20	0	0	0	**127**	**51**	**0**
Ore Losses	(m^3)	744	696	744	720	744	4,187	4,326	4,326	4,187	744	720	744	**22,882**	**4,326**	**696**
Total Outflow (m^3)		**744**	**696**	**744**	**720**	**744**	**113,452**	**23,821**	**28,915**	**39,885**	**744**	**720**	**744**	**211,930**	**113,638**	**696**
Net Inflow	(m^3)	0	0	0	0	0	-1	0	1	0	0	0	0	**0**	**1**	**-1**
End-of-Month Volume		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	**12,000**	**1,000**	**1,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,490	0	0	0	0	0	0	**12,490**	**12,490**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,707**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,065**	**26,105**	**0**
IVR Att Pond	(m^3)	0	0	0	0	0	25,707	4,362	5,223	6,772	0	0	0	**42,064**	**25,707**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,707**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,064**	**25,707**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	126,739	26,267	32,122	44,823	0	0	0	**229,951**	**126,739**	**0**
Direct Precip	(m^3)	0	0	0	0	0	2,596	1,035	1,118	1,076	0	0	0	**5,825**	**2,596**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	10,977	2,274	2,779	3,880	0	0	0	**19,910**	**10,977**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	1,365	283	346	482	0	0	0	**2,475**	**1,365**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,707	4,362	5,223	6,772	0	0	0	**42,064**	**25,707**	**0**
IVR Pit	(m^3)	0	0	0	0	0	109,261	19,444	24,538	35,678	0	0	0	**188,921**	**109,261**	**0**
Whale Tail Att Pond	(m^3)[1]	66,228	61,955	66,228	64,092	66,228	188,673	87,064	95,085	105,872	67,636	64,092	66,228	**999,381**	**188,673**	**61,955**
Whale Tail WRSF	(m^3)[1]	0	0	0	0	0	41,043	6,789	8,283	10,695	360	0	0	**67,170**	**41,043**	**0**
Whale Tail Pit	(m^3)[1]	35,021	32,857	35,123	33,990	35,123	131,198	53,347	59,225	67,614	36,255	33,990	35,123	**588,866**	**131,198**	**32,857**
Camp Biodisk	(m^3)	4,047	3,786	4,047	3,917	4,047	3,917	4,047	4,047	3,917	4,047	3,917	4,047	**47,783**	**4,047**	**3,786**
Mammoth DS	(m^3)[1]	0	0	0	0	0	33,539	6,348	7,864	10,696	360	0	0	**58,807**	**33,539**	**0**
Truck Shop	(m^3)	3,196	2,990	3,196	3,093	3,196	3,093	3,196	3,196	3,093	3,196	3,093	3,196	**37,734**	**3,196**	**2,990**
Total Inflow (m^3)		**108,492**	**101,588**	**108,594**	**105,092**	**108,594**	**678,108**	**214,456**	**243,826**	**294,598**	**111,854**	**105,092**	**108,594**	**2,288,887**	**678,341**	**101,588**
Evaporation	(m^3)	0	0	0	0	0	210	2,314	2,275	902	0	0	0	**5,701**	**2,314**	**0**
AsWTP	(m^3)	108,493	101,588	108,594	105,091	108,594	665,416	224,624	241,552	293,696	111,855	105,091	108,594	**2,283,188**	**665,416**	**101,588**
Total Outflow (m^3)		**108,493**	**101,588**	**108,594**	**105,091**	**108,594**	**665,626**	**226,938**	**243,827**	**294,598**	**111,855**	**105,091**	**108,594**	**2,288,889**	**667,730**	**101,588**
Net Inflow	(m^3)	-1	0	0	1	0	12,482	-12,482	-2	0	-2	1	0	**-2**	**12,482**	**-12,482**
End-of-Month Volume		1,000	1,000	1,000	1,000	1,000	13,482	1,000	1,000	1,000	1,000	1,000	1,000	**24,482**	**13,482**	**1,000**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	178,253	208,080	254,526	355,606	0	0	0	**996,465**	**355,606**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	358,462	0	0	0	0	0	0	**358,462**	**358,462**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	151,276	181,989	201,614	188,971	0	0	0	**723,850**	**201,614**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	287,559	0	0	0	0	0	0	**287,559**	**287,559**	**0**
Lake A18	(m^3)	0	0	0	0	0	136,493	0	0	0	0	0	0	**136,493**	**136,493**	**0**
Lake A55	(m^3)	0	0	0	0	0	294,965	0	0	0	0	0	0	**294,965**	**294,965**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,581	13,533	23,568	67,295	0	0	0	**328,977**	**224,581**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,904	11,703	15,293	26,188	0	0	0	**132,088**	**78,904**	**0**
Lake A65	(m^3)	0	0	0	0	0	124,910	0	0	0	0	0	0	**124,910**	**124,910**	**0**
AsWTP Discharge	(m^3)[1]	108,391	101,588	108,594	105,091	108,594	3,503	0	0	0	108,352	105,091	105,091	**854,295**	**108,594**	**0**
Total Inflow (m^3)		**108,391**	**101,588**	**108,594**	**105,091**	**108,594**	**1,838,906**	**415,305**	**495,001**	**638,060**	**108,352**	**105,091**	**105,091**	**4,238,064**	**2,171,688**	**0**
Pumping to Mammoth	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Groundwater	(m^3)	31,620	29,580	31,620	30,600	31,620	30,600	31,620	31,620	30,600	31,620	30,600	30,600	**372,300**	**31,620**	**29,580**
Evaporation	(m^3)	0	0	0	0	0	35,489	406,826	410,193	158,498	0	0	0	**1,011,006**	**410,193**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	2,369,000	0	29,957	448,962	0	0	0	**2,847,919**	**2,369,000**	**0**
Total Outflow (m^3)		**31,620**	**29,580**	**31,620**	**30,600**	**31,620**	**2,435,089**	**438,446**	**471,770**	**638,060**	**31,620**	**30,600**	**30,600**	**4,231,225**	**2,810,813**	**29,580**
Net Inflow (m^3)		76,771	72,008	76,974	74,491	76,974	-596,183	-23,141	23,231	0	76,732	74,491	74,491	**6,839**	**76,974**	**-596,183**
End-of-Month Volume (m^3)		5,635,000	5,707,000	5,784,000	5,859,000	5,936,000	9,155,000	9,132,000	9,155,000	5,339,000	5,416,000	5,491,000	5,565,000	**78,174,000**	**9,155,000**	**5,339,000**
WATER TREATMENT																
IVR Att Pond	(m^3)	108,493	101,588	108,594	105,091	108,594	665,416	224,624	241,552	293,696	111,855	105,091	108,594	**2,283,188**	**665,416**	**101,588**
Total Inflow (m^3)		**108,493**	**101,588**	**108,594**	**105,091**	**108,594**	**665,416**	**224,624**	**241,552**	**293,696**	**111,855**	**105,091**	**108,594**	**2,283,188**	**665,416**	**101,588**
AsWTP to Whale Tail Lake (South Basin)	(m^3)[1]	108,493	101,588	108,594	105,091	108,594	0	0	0	0	111,855	105,091	108,594	**857,900**	**111,855**	**0**
AsWTP to Mammoth Lake	(m^3)	0	0	0	0	0	665,416	224,624	241,552	293,696	0	0	0	**1,425,288**	**665,416**	**0**
Total Outflow (m^3)		**108,493**	**101,588**	**108,594**	**105,091**	**108,594**	**665,416**	**224,624**	**241,552**	**293,696**	**111,855**	**105,091**	**108,594**	**2,283,188**	**777,271**	**203,176**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)																

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2025														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
C-Watershed	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,768	6,167	7,538	10,523	0	0	0	**53,996**	**29,768**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,167**	**41,094**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Att Pond	(m^3)[1]	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,166**	**41,095**	**0**
Net Inflow (m^3)		0												**0**	**0**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,872	0	0	0	0	0	0	**4,872**	**4,872**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,054**	**9,878**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,055**	**9,722**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,131	7,278	8,896	12,419	0	0	0	**63,724**	**35,131**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	174	72	80	75	0	0	0	**400**	**174**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	60,945	12,626	15,432	21,544	0	0	0	**110,547**	**60,945**	**0**
Groundwater	(m^3)	41,850	37,800	41,850	40,500	41,850	40,500	41,850	41,850	40,500	41,850	40,500	41,850	**492,750**	**41,850**	**37,800**
Drilling Water	(m^3)	744	672	744	720	744	720	744	744	720	744	720	744	**8,760**	**744**	**672**
Total Inflow (m^3)		**42,594**	**38,472**	**42,594**	**41,220**	**42,594**	**137,470**	**62,570**	**67,002**	**75,258**	**42,594**	**41,220**	**42,594**	**676,181**	**138,844**	**38,472**
Evaporation	(m^3)	0	0	0	0	0	14	160	162	63	0	0	0	**399**	**162**	**0**
Ore Losses	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Att Pond	(m^3)[1]	42,594	38,472	42,594	41,220	42,594	137,456	62,409	66,839	75,195	42,594	41,220	42,594	**675,781**	**137,456**	**38,472**
Total Outflow (m^3)		**42,594**	**38,472**	**42,594**	**41,220**	**42,594**	**137,470**	**62,569**	**67,001**	**75,258**	**42,594**	**41,220**	**42,594**	**676,180**	**137,618**	**38,472**
Net Inflow (m^3)		0	0	0	0	0	0	0	1	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume (m^3)		8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	**96,000**	**8,000**	**8,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,391	0	0	0	0	0	0	**15,391**	**15,391**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	810	57	57	19	0	0	0	**942**	**810**	**0**
North Sector	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**33,579**	**6,513**	**7,910**	**10,801**	**0**	**0**	**0**	**58,802**	**33,579**	**0**
IVR Att Pond	(m^3)[1]	0	0	0	0	0	33,579	6,512	7,909	10,801	0	0	0	**58,801**	**33,579**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**33,579**	**6,512**	**7,909**	**10,801**	**0**	**0**	**0**	**58,801**	**33,579**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,830	9,287	11,352	15,847	0	0	0	**81,316**	**44,830**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	33,606	6,962	8,509	11,880	0	0	0	**60,957**	**33,606**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	2,503	1,029	1,142	1,073	0	0	0	**5,747**	**2,503**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Groundwater	(m^3)	2,790	2,520	2,790	2,700	2,790	2,700	2,790	2,790	2,700	2,790	2,700	2,790	**32,850**	**2,790**	**2,520**
Dike Seepage	(m^3)	97,228	87,819	97,228	94,092	97,228	94,092	97,228	97,228	94,092	97,228	94,092	97,228	**1,144,783**	**97,228**	**87,819**
Industrial Sector	(m^3)	0	0	0	0	0	16,032	3,321	4,060	5,667	0	0	0	**29,080**	**16,032**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,370	4,842	5,918	8,261	0	0	0	**42,391**	**23,370**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	1,439	100	100	33	0	0	0	**1,673**	**1,439**	**0**
Total Inflow (m^3)		**100,018**	**90,339**	**100,018**	**96,792**	**100,018**	**218,572**	**125,559**	**131,099**	**139,553**	**100,018**	**96,792**	**100,018**	**1,398,797**	**221,798**	**90,339**
IVR Att Pond	(m^3)[1]	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Groundwater	(m^3)	33,790	30,520	33,790	32,700	33,790	32,700	33,790	33,790	32,700	33,790	32,700	33,790	**397,850**	**33,790**	**30,520**
Evaporation	(m^3)	0	0	0	0	0	202	2,301	2,324	900	0	0	0	**5,727**	**2,324**	**0**
Total Outflow (m^3)		**100,018**	**90,339**	**100,018**	**96,792**	**100,018**	**218,571**	**125,560**	**131,099**	**139,554**	**100,018**	**96,792**	**100,018**	**1,398,797**	**221,783**	**90,339**
Net Inflow (m^3)		0	0	0	0	0	1	-1	0	0	0	0	0	**0**	**1**	**-1**
End-of-Month Volume (m^3)		57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	57,496	**689,952**	**57,496**	**57,496**

		Year 2025														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Drilling water	(m^3)	744	672	744	720	744	720	744	744	720	744	720	744	**8,760**	**744**	**672**
Pit Wall Runoff	(m^3)	0	0	0	0	0	38,278	7,930	9,692	13,531	0	0	0	**69,431**	**38,278**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	10	11	13	12	0	0	0	**46**	**13**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	18	0	0	0	0	0	0	**18**	**18**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	14,986	18,317	25,571	0	0	0	**0**	**25,571**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,308	0	0	0	0	0	0	**48,308**	**48,308**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	144	144	48	0	0	0	**2,401**	**2,065**	**0**
Total Inflow (m^3)		**744**	**672**	**744**	**720**	**744**	**113,429**	**23,816**	**28,910**	**39,882**	**744**	**720**	**744**	**128,964**	**114,997**	**672**
IVR Att Pond	(m^3)	135	122	135	131	135	112,838	23,181	28,276	39,283	135	131	135	**204,638**	**112,838**	**122**
Evaporation	(m^3)	0	0	0	0	0	2	26	26	10	0	0	0	**64**	**26**	**0**
Ore Losses	(m^3)	609	550	609	589	609	589	609	609	589	609	589	609	**7,168**	**609**	**550**
Total Outflow (m^3)		**744**	**672**	**744**	**720**	**744**	**113,429**	**23,815**	**28,911**	**39,882**	**744**	**720**	**744**	**211,870**	**113,473**	**672**
Net Inflow	(m^3)	0	0	0	0	0	-1	0	-1	0	0	0	0	**-2**	**0**	**-1**
End-of-Month Volume		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	**12,000**	**1,000**	**1,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,486	0	0	0	0	0	0	**12,486**	**12,486**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,061**	**26,101**	**0**
IVR Att Pond	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,060**	**25,703**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	126,562	26,267	32,122	44,819	0	0	0	**229,770**	**126,562**	**0**
Direct Precip	(m^3)	0	0	0	0	0	2,750	1,036	1,118	1,081	0	0	0			
Ore Stockpile 3	(m^3)	0	0	0	0	0	10,975	2,274	2,779	3,880	0	0	0			
Landfarm Runoff	(m^3)	0	0	0	0	0	1,364	283	346	482	0	0	0	**2,474**	**1,364**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
IVR Pit	(m^3)	135	122	135	131	135	112,838	23,181	28,276	39,283	135	131	135	**0**	**112,838**	**122**
Whale Tail Att Pond	(m^3)[1]	66,228	59,819	66,228	64,092	66,228	187,548	86,841	94,807	105,486	67,623	64,092	66,228	**995,220**	**187,548**	**59,819**
Whale Tail WRSF	(m^3)[1]	0	0	0	0	0	41,036	6,789	8,283	10,695	360	0	0	**67,163**	**41,036**	**0**
Whale Tail Pit	(m^3)[1]	42,353	38,472	42,594	41,220	42,594	138,639	60,587	66,696	74,844	43,726	41,220	42,594	**675,539**	**138,639**	**38,472**
Camp Biodisk	(m^3)	4,047	3,656	4,047	3,917	4,047	3,917	4,047	4,047	3,917	4,047	3,917	4,047	**47,653**	**4,047**	**3,656**
Mammoth DS	(m^3)[1]	0	0	0	0	0	33,532	6,348	7,864	10,696	360	0	0	**58,800**	**33,532**	**0**
Truck Shop	(m^3)	3,196	2,887	3,196	3,093	3,196	3,093	3,196	3,196	3,093	3,196	3,093	3,196	**37,631**	**3,196**	**2,887**
Total Inflow (m^3)		**115,959**	**104,956**	**116,200**	**112,453**	**116,200**	**687,957**	**225,211**	**254,757**	**305,048**	**119,447**	**112,453**	**116,200**	**2,156,310**	**674,465**	**104,956**
Evaporation	(m^3)	0	0	0	0	0	222	2,316	2,275	906	0	0	0	**5,720**	**2,316**	**0**
AsWTP	(m^3)	115,960	104,955	116,201	112,452	116,201	675,058	235,573	252,483	304,143	119,448	112,452	116,201			
Total Outflow (m^3)		**115,960**	**104,955**	**116,201**	**112,452**	**116,201**	**675,280**	**237,889**	**254,758**	**305,049**	**119,448**	**112,452**	**116,201**	**5,720**	**2,316**	**0**
Net Inflow	(m^3)	-1	1	-1	1	-1	12,677	-12,678	-2	-1	-1	1	-1	**-6**	**12,677**	**-12,678**
End-of-Month Volume		1,000	1,000	1,000	1,000	1,000	13,677	1,000	1,000	1,000	1,000	1,000	1,000	**24,677**	**13,677**	**1,000**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	178,049	208,080	254,526	355,606	0	0	0	**996,261**	**355,606**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	357,942	0	0	0	0	0	0	**357,942**	**357,942**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	151,248	181,989	201,614	188,971	0	0	0	**723,822**	**201,614**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	287,417	0	0	0	0	0	0	**287,417**	**287,417**	**0**
Lake A18	(m^3)	0	0	0	0	0	135,781	0	0	0	0	0	0	**135,781**	**135,781**	**0**
Lake A55	(m^3)	0	0	0	0	0	294,925	0	0	0	0	0	0	**294,925**	**294,925**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,534	13,533	23,568	67,295	0	0	0	**328,930**	**224,534**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,888	11,703	15,293	26,188	0	0	0	**132,072**	**78,888**	**0**
Lake A65	(m^3)	0	0	0	0	0	127,842	0	0	0	0	0	0	**127,842**	**127,842**	**0**
AsWTP Discharge	(m^3)[1]	115,714	104,955	116,201	112,452	116,201	3,748	0	0	0	115,700	112,452	116,201	**913,624**	**116,201**	**0**
Total Inflow (m^3)		**115,714**	**104,955**	**116,201**	**112,452**	**116,201**	**1,840,374**	**415,305**	**495,001**	**638,060**	**115,700**	**112,452**	**116,201**	**4,298,616**	**2,180,750**	**0**
Groundwater	(m^3)	31,620	28,560	31,620	30,600	31,620	30,600	31,620	31,620	30,600	31,620	30,600	31,620	**372,300**	**31,620**	**28,560**
Evaporation	(m^3)	0	0	0	0	0	35,482	406,826	410,193	158,498	0	0	0	**1,010,999**	**410,193**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	2,414,000	0	29,957	448,962	0	0	0	**2,892,919**	**2,414,000**	**0**
Total Outflow (m^3)		**31,620**	**28,560**	**31,620**	**30,600**	**31,620**	**2,480,082**	**438,446**	**471,770**	**638,060**	**31,620**	**30,600**	**31,620**	**4,276,218**	**2,855,813**	**28,560**
Net Inflow (m^3)		84,094	76,395	84,581	81,852	84,581	-639,708	-23,141	23,231	0	84,080	81,852	84,581	**22,398**	**84,581**	**-639,708**
End-of-Month Volume (m^3)		5,652,000	5,728,000	5,813,000	5,895,000	5,979,000	9,155,000	9,132,000	9,155,000	5,339,000	5,424,000	5,505,000	5,590,000	**78,367,000**	**9,155,000**	**5,339,000**
WATER TREATMENT																
IVR Att Pond	(m^3)	115,960	104,955	116,201	112,452	116,201	675,058	235,573	252,483	304,143	119,448	112,452	116,201	**2,381,127**	**675,058**	**104,955**
Total Inflow (m^3)		**115,960**	**104,955**	**116,201**	**112,452**	**116,201**	**675,058**	**235,573**	**252,483**	**304,143**	**119,448**	**112,452**	**116,201**	**2,381,127**	**675,058**	**104,955**
AsWTP to Whale Tail Lake (South Basin)	(m^3)[1]	115,960	104,955	116,201	112,452	116,201	0	0	0	0	119,448	112,452	116,201	**913,870**	**119,448**	**0**
AsWTP to Mammoth Lake	(m^3)	0	0	0	0	0	675,058	235,573	252,483	304,143	0	0	0	**1,467,257**	**675,058**	**0**
Total Outflow (m^3)		**115,960**	**104,955**	**116,201**	**112,452**	**116,201**	**675,058**	**235,573**	**252,483**	**304,143**	**119,448**	**112,452**	**116,201**	**2,381,127**	**794,506**	**209,910**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)																

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2026 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
C-Watershed	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,768	6,167	7,538	10,523	0	0	0	**53,996**	**29,768**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,167**	**41,094**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Att Pond	(m^3)[1]	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,166**	**41,095**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,872	0	0	0	0	0	0	**4,872**	**4,872**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,054**	**9,878**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,055**	**9,722**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,131	7,278	8,896	12,419	0	0	0	**63,724**	**35,131**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	1,198	1,045	1,414	1,451	0	0	0	**5,108**	**1,451**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	59,941	12,145	14,706	20,430	0	0	0	**107,222**	**59,941**	**0**
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Drilling Water	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**291,549**	**106,535**	**117,989**	**164,875**	**19,518**	**15,615**	**16,142**	**732,223**	**291,802**	**0**
Evaporation	(m^3)	0	0	0	0	0	97	2,336	2,877	1,217	0	0	0	**6,527**	**2,877**	**0**
Ore Losses	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**97**	**2,336**	**2,877**	**1,217**	**0**	**0**	**0**	**6,527**	**2,877**	**0**
Net Inflow (m^3)		0	0	0	0	0	291,452	104,199	115,112	163,658	19,518	15,615	16,142	**725,696**	**291,452**	**0**
End-of-Month Volume (m^3)		8,000	8,000	8,000	8,000	8,000	299,452	403,651	518,762	682,420	701,938	717,553	733,695	**4,097,471**	**733,695**	**8,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,391	0	0	0	0	0	0	**15,391**	**15,391**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	4,391	910	1,112	1,552	0	0	0	**7,965**	**4,391**	**0**
North Sector	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,438**	**5,685**	**6,948**	**9,699**	**0**	**0**	**0**	**49,770**	**27,929**	**0**
IVR Att Pond	(m^3)[1]	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,439**	**5,684**	**6,948**	**9,700**	**0**	**0**	**0**	**49,771**	**27,439**	**0**
Net Inflow (m^3)		0	0	0	0	0	-1	1	0	-1	0	0	0	**-1**	**1**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,830	9,287	11,352	15,847	0	0	0	**81,316**	**44,830**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	27,898	5,392	6,590	9,200	0	0	0	**49,080**	**27,898**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	8,320	4,207	4,669	4,384	0	0	0	**21,580**	**8,320**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Groundwater	(m^3)	4,607	4,161	4,607	4,458	4,607	4,605	4,971	5,029	4,927	5,133	4,974	5,146	**57,225**	**5,146**	**4,161**
Dike Seepage	(m^3)	10,633	9,604	10,633	10,290	10,633	10,287	10,627	10,626	10,282	10,624	10,281	10,624	**125,144**	**10,633**	**9,604**
Industrial Sector	(m^3)	0	0	0	0	0	16,032	3,321	4,060	5,667	0	0	0	**29,080**	**16,032**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,370	4,842	5,918	8,261	0	0	0	**42,391**	**23,370**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	7,803	1,617	1,976	2,758	0	0	0	**14,154**	**7,803**	**0**
Total Inflow (m^3)		**15,599**	**14,101**	**15,612**	**15,108**	**15,612**	**312,421**	**78,254**	**91,975**	**120,894**	**16,129**	**15,615**	**16,142**	**727,462**	**313,320**	**14,101**
IVR Att Pond	(m^3)[1]	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	673	9,404	9,499	3,677	0	0	0	**23,253**	**9,499**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**153,966**	**78,253**	**91,974**	**120,896**	**16,130**	**15,615**	**16,142**	**492,976**	**162,792**	**0**
Net Inflow (m^3)		15,599	14,101	15,612	15,108	15,612	158,455	1	1	-2	-1	0	0	**234,486**	**158,455**	**-2**
End-of-Month Volume (m^3)		73,094	87,195	102,807	117,915	133,526	291,982	291,982	291,982	291,982	291,982	291,982	291,982	**2,558,411**	**291,982**	**73,094**

		Year 2026 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Drilling water	(m^3)	24	0	0	0	0	0	0	0	0	0	0	0	**24**	**24**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	33,750	5,757	6,338	8,214	0	0	0	**54,059**	**33,750**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	1,601	4,409	6,177	6,583	0	0	0	**18,770**	**6,583**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	3,042	0	0	0	0	0	0	**3,042**	**3,042**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	14,986	18,317	25,571	0	0	0	**0**	**25,571**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,308	0	0	0	0	0	0	**48,308**	**48,308**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	144	144	48	0	0	0	**2,401**	**2,065**	**0**
Total Inflow (m^3)		**24**	**0**	**0**	**0**	**0**	**1,528,338**	**1,397,499**	**349,562**	**772,464**	**23,651**	**0**	**0**	**3,988,634**	**2,231,699**	**0**
IVR Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	376	9,856	12,567	5,522	0	0	0	**28,321**	**12,567**	**0**
Ore Losses	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**376**	**9,856**	**12,567**	**5,522**	**0**	**0**	**0**	**28,321**	**12,567**	**0**
Net Inflow	(m^3)	24	0	0	0	0	1,527,963	1,387,643	336,995	766,942	23,651	0	0	**4,043,218**	**1,527,963**	**0**
End-of-Month Volume		1,024	1,024	1,024	1,024	1,024	1,529,000	2,917,000	3,254,000	4,021,000	4,044,000	4,044,000	4,044,000	**23,858,120**	**4,044,000**	**1,024**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,486	0	0	0	0	0	0	**12,486**	**12,486**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,061**	**26,101**	**0**
IVR Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,060**	**25,703**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	127,327	26,378	32,241	45,010	0	0	0	**230,956**	**127,327**	**0**
Direct Precip	(m^3)	0	0	0	0	0	1,970	810	899	844	0	0	0	**4,523**	**1,970**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	10,975	2,274	2,779	3,880	0	0	0	**19,908**	**10,975**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	1,364	283	346	482	0	0	0	**2,474**	**1,364**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Att Pond	(m^3)[1]	2,136	0	0	0	0	0	0	0	0	0	0	0	**2,136**	**2,136**	**0**
Whale Tail WRSF	(m^3)[1]	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Pit	(m^3)[1]	1,374	0	0	0	0	0	0	0	0	0	0	0	**1,374**	**1,374**	**0**
Camp Biodisk	(m^3)	143	0	0	0	0	0	0	0	0	0	0	0	**143**	**143**	**0**
Mammoth DS	(m^3)[1]	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Truck Shop	(m^3)	103	0	0	0	0	0	0	0	0	0	0	0	**103**	**103**	**0**
Total Inflow (m^3)		**3,756**	**0**	**0**	**0**	**0**	**141,636**	**29,745**	**36,265**	**50,217**	**0**	**0**	**0**	**261,618**	**145,392**	**0**
Evaporation	(m^3)	0	0	0	0	0	159	1,811	1,829	708	0	0	0	**4,507**	**1,829**	**0**
AsWTP	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**4,756**	**0**	**0**	**0**	**0**	**283,113**	**57,679**	**70,699**	**99,724**	**0**	**0**	**0**	**515,971**	**289,539**	**0**
Net Inflow	(m^3)	-1,000	0	0	0	0	-141,477	-27,934	-34,434	-49,508	0	0	0	**-254,354**	**0**	**-141,477**
End-of-Month Volume		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	175,863	214,105	230,188	102,134	0	0	0	**722,290**	**230,188**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	353,545	0	0	0	0	0	0	**353,545**	**353,545**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	151,752	151,922	109,635	58,539	0	0	0	**471,848**	**151,922**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	288,374	0	0	0	0	0	0	**288,374**	**288,374**	**0**
Lake A18	(m^3)	0	0	0	0	0	158,041	0	0	60,022	0	0	0	**218,063**	**158,041**	**0**
Lake A55	(m^3)	0	0	0	0	0	294,905	4,431	81,292	138,852	0	0	0	**519,480**	**294,905**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,534	13,533	23,568	67,295	0	0	0	**328,930**	**224,534**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,888	11,703	15,293	26,188	0	0	0	**132,072**	**78,888**	**0**
Lake A65	(m^3)	0	0	0	0	0	127,842	0	1,285	105,667	0	0	0	**234,794**	**127,842**	**0**
AsWTP Discharge	(m^3)[1]	3,748	0	0	0	0	0	0	0	0	0	0	0	**3,748**	**3,748**	**0**
Total Inflow (m^3)		**3,748**	**0**	**0**	**0**	**0**	**1,853,744**	**395,694**	**461,261**	**558,697**	**0**	**0**	**0**	**3,273,144**	**1,911,987**	**0**
Groundwater	(m^3)	17,246	15,577	17,246	16,689	17,246	16,689	17,246	17,246	16,689	17,246	16,689	17,246	**203,055**	**17,246**	**15,577**
Evaporation	(m^3)	0	0	0	0	0	35,600	339,613	223,057	49,099	0	0	0	**647,369**	**339,613**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**19,106**	**17,257**	**19,106**	**18,489**	**19,106**	**2,014,949**	**1,753,719**	**1,637,163**	**1,417,588**	**19,106**	**18,489**	**19,106**	**6,973,184**	**2,364,579**	**17,257**
Net Inflow (m^3)		-15,358	-17,257	-19,106	-18,489	-19,106	-161,205	-1,358,025	-1,175,902	-858,891	-19,106	-18,489	-19,106	**-3,700,040**	**-15,358**	**-1,358,025**
End-of-Month Volume (m^3)		5,575,000	5,557,000	5,538,000	5,520,000	5,501,000	9,155,000	7,797,000	6,621,000	3,948,000	3,929,000	3,910,000	3,891,000	**66,942,000**	**9,155,000**	**3,891,000**
WATER TREATMENT																
IVR Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
AsWTP to Whale Tail Lake (South Basin)	(m^3)[1]	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
AsWTP to Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Net Inflow (m^3)														**0**	**0**	**0**
End-of-Month Volume (m^3)																

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2027 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
AP5																
Natural Runoff	(m^3)	0	0	0	0	0	11,016	2,282	2,789	3,894	0	0	0	**19,981**	**11,016**	**0**
UG WRSF	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Waste Rock Pad	(m^3)	0	0	0	0	0	4,037	836	1,022	1,427	0	0	0	**7,322**	**4,037**	**0**
Portal Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
NE Sector	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
U/G ore stockpile	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**15,053**	**3,118**	**3,811**	**5,321**	**0**	**0**	**0**	**27,303**	**15,053**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Underground	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C Watershed	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
AsWTP	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Underground (Closure)	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Pit (Closure)	(m^3)	0	0	0	0	0	15,053	3,119	3,812	5,321	0	0	0	**27,305**	**15,053**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**15,053**	**3,119**	**3,812**	**5,321**	**0**	**0**	**0**	**27,305**	**15,053**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	-1	-1	0	0	0	0	**-2**	**0**	**-1**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
IVR Pit	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,768	6,167	7,538	10,523	0	0	0	**53,996**	**29,768**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,167**	**41,094**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
IVR Pit (Closure)	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,166**	**41,095**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,872	0	0	0	0	0	0	**4,872**	**4,872**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,054**	**9,878**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,055**	**9,722**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,131	7,278	8,896	12,419	0	0	0	**63,724**	**35,131**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	4,401	2,244	2,583	2,519	0	0	0	**11,747**	**4,401**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	56,798	11,552	14,070	19,566	0	0	0	**101,986**	**56,798**	**0**
GSP1	(m^3)	0	0	0	0	0	15,053	3,119	3,812	5,321	0	0	0	**27,305**	**15,053**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
North Sector	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Whale Tail Att Pond	(m^3)	16,148	14,591	16,160	15,644	16,172	312,032	69,214	82,336	116,220	19,743	15,829	16,358	**710,447**	**312,032**	**14,591**
IVR Pit	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**16,148**	**14,591**	**16,160**	**15,644**	**16,172**	**458,840**	**99,450**	**118,937**	**165,452**	**19,743**	**15,829**	**16,358**	**973,324**	**458,840**	**14,591**
Evaporation	(m^3)	0	0	0	0	0	356	5,017	5,255	2,112	0	0	0	**12,740**	**5,255**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**356**	**5,017**	**5,255**	**2,112**	**0**	**0**	**0**	**12,740**	**5,255**	**0**
Net Inflow (m^3)		16,148	14,591	16,160	15,644	16,172	458,484	94,433	113,682	163,340	19,743	15,829	16,358	**960,584**	**458,484**	**14,591**
End-of-Month Volume (m^3)		749,843	764,433	780,593	796,237	812,409	1,271,000	1,365,000	1,479,000	1,642,000	1,662,000	1,678,000	1,694,000	**14,694,515**	**1,694,000**	**749,843**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,391	0	0	0	0	0	0	**15,391**	**15,391**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	4,391	910	1,112	1,552	0	0	0	**7,965**	**4,391**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,438**	**5,685**	**6,948**	**9,699**	**0**	**0**	**0**	**49,770**	**27,929**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,439**	**5,684**	**6,948**	**9,700**	**0**	**0**	**0**	**49,771**	**27,439**	**0**
Net Inflow (m^3)		0	0	0	0	0	-1	1	0	-1	0	0	0	**-1**	**1**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,830	9,287	11,352	15,847	0	0	0	**81,316**	**44,830**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	26,026	5,392	6,590	9,200	0	0	0	**47,208**	**26,026**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	10,228	4,207	4,669	4,384	0	0	0	**23,488**	**10,228**	**0**
Groundwater	(m^3)	5,152	4,659	5,164	5,004	5,177	5,085	5,318	5,330	5,173	5,356	5,185	5,359	**61,962**	**5,359**	**4,659**
Dike Seepage	(m^3)	10,624	9,596	10,624	10,281	10,624	10,280	10,623	10,624	10,283	10,627	10,284	10,627	**125,097**	**10,627**	**9,596**
Camp Biodisk	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Industrial Sector	(m^3)	0	0	0	0	0	16,032	3,321	4,060	5,667	0	0	0	**29,080**	**16,032**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,370	4,842	5,918	8,261	0	0	0	**42,391**	**23,370**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	7,803	1,617	1,976	2,758	0	0	0	**14,154**	**7,803**	**0**
A53/IVR Att Pond	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Inflow (m^3)		**16,148**	**14,591**	**16,160**	**15,645**	**16,173**	**312,930**	**78,597**	**92,274**	**121,141**	**16,355**	**15,829**	**16,358**	**732,201**	**313,563**	**14,591**
Evaporation	(m^3)	0	0	0	0	0	827	9,404	9,499	3,677	0	0	0	**23,407**	**9,499**	**0**
WTN to Pits	(m^3)	16,148	14,591	16,160	15,645	16,172	312,103	69,193	82,774	117,465	16,355	15,829	16,358	**708,793**	**312,103**	**14,591**
Total Outflow (m^3)		**16,148**	**14,591**	**16,160**	**15,645**	**16,172**	**312,930**	**78,597**	**92,273**	**121,142**	**16,355**	**15,829**	**16,358**	**732,200**	**321,602**	**14,591**
Net Inflow (m^3)		0	0	0	0	1	0	0	1	-1	0	0	0	**1**	**1**	**-1**
End-of-Month Volume (m^3)		291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	**3,503,784**	**291,982**	**291,982**

		Year 2027 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Drilling water	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	19,636	2,974	3,539	4,717	0	0	0	**30,866**	**19,636**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	6,561	10,040	11,319	10,905	0	0	0	**38,825**	**11,319**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	12,467	0	0	0	0	0	0	**12,467**	**12,467**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	14,986	18,317	25,571	0	0	0	**0**	**25,571**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,308	0	0	0	0	0	0	**48,308**	**48,308**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	144	144	48	0	0	0	**2,401**	**2,065**	**0**
NE Channel	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Whale Tail South Drawdown	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail South	(m^3)	0	0	0	0	0	2,180,000	180,415	288,750	696,670	23,698	0	0	**3,369,533**	**2,180,000**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,609**	**230,762**	**349,032**	**774,713**	**23,698**	**0**	**0**	**3,653,910**	**2,366,476**	**0**
IVR Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	1,539	22,445	23,030	9,146	0	0	0	**56,160**	**23,030**	**0**
Ore Losses	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**1,539**	**22,445**	**23,030**	**9,146**	**0**	**0**	**0**	**56,160**	**23,030**	**0**
Net Inflow	(m^3)	0	0	0	0	0	2,357,070	208,317	326,002	765,567	23,698	0	0	**3,680,654**	**2,357,070**	**0**
End-of-Month Volume		4,044,000	4,044,000	4,044,000	4,044,000	4,044,000	6,401,000	6,610,000	6,936,000	7,701,000	7,725,000	7,725,000	7,725,000	**71,043,000**	**7,725,000**	**4,044,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,486	0	0	0	0	0	0	**12,486**	**12,486**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,061**	**26,101**	**0**
WT Pit (Closure)	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,060**	**25,703**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	127,327	26,378	32,241	45,010	0	0	0	**230,956**	**127,327**	**0**
Direct Precip	(m^3)	0	0	0	0	0	1,970	810	899	844	0	0	0	**4,523**	**1,970**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	10,975	2,274	2,779	3,880	0	0	0	**19,908**	**10,975**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	1,364	283	346	482	0	0	0	**2,474**	**1,364**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Att Pond	(m^3)[1]	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail WRSF	(m^3)[1]	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Pit	(m^3)[1]	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Camp Biodisk	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Mammoth DS	(m^3)[1]	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**141,636**	**29,745**	**36,265**	**50,217**	**0**	**0**	**0**	**257,862**	**141,636**	**0**
Evaporation	(m^3)	0	0	0	0	0	159	1,811	1,829	708	0	0	0	**4,507**	**1,829**	**0**
Underground	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**283,113**	**57,679**	**70,699**	**99,724**	**0**	**0**	**0**	**511,215**	**284,783**	**0**
Net Inflow	(m^3)	0	0	0	0	0	-141,477	-27,934	-34,434	-49,508	0	0	0	**-253,354**	**0**	**-141,477**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	77,435	54,159	59,113	82,524	0	0	0	**273,231**	**82,524**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	155,672	0	0	0	0	0	0	**155,672**	**155,672**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	45,600	49,355	48,705	45,733	0	0	0	**189,393**	**49,355**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	86,654	0	0	0	0	0	0	**86,654**	**86,654**	**0**
Lake A18	(m^3)	0	0	0	0	0	726,987	61,662	143,387	300,109	0	0	0	**1,232,145**	**726,987**	**0**
Lake A55	(m^3)	0	0	0	0	0	421,181	59,851	78,992	138,852	0	0	0	**698,876**	**421,181**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,534	13,533	23,568	67,295	0	0	0	**328,930**	**224,534**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,888	11,703	15,293	26,188	0	0	0	**132,072**	**78,888**	**0**
Lake A65	(m^3)	0	0	0	0	0	348,659	24,212	39,824	105,667	0	0	0	**518,362**	**348,659**	**0**
AsWTP Discharge	(m^3)[1]	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,165,610**	**274,475**	**408,882**	**766,368**	**0**	**0**	**0**	**3,615,335**	**2,174,454**	**0**
Groundwater	(m^3)	17,246	15,577	17,246	16,689	17,246	16,690	17,253	17,257	16,706	17,267	16,711	17,269	**203,157**	**17,269**	**15,577**
Camp Use	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	10,698	110,330	99,092	38,358	0	0	0	**258,478**	**110,330**	**0**
Drawdown to IVR Pit	(m^3)	0	0	0	0	0	1,350,000	968,134	0	0	0	0	0	**2,318,134**	**1,350,000**	**0**
IVR Pit	(m^3)	0	0	0	0	0	0	57,043	292,160	710,943	0	0	0	**1,060,146**	**710,943**	**0**
Total Outflow (m^3)		**17,618**	**15,913**	**17,618**	**17,049**	**17,618**	**1,377,748**	**1,153,132**	**408,881**	**766,367**	**17,639**	**17,071**	**17,641**	**3,844,295**	**2,188,914**	**15,913**
Net Inflow (m^3)		-17,618	-15,913	-17,618	-17,049	-17,618	787,862	-878,657	1	1	-17,639	-17,071	-17,641	**-228,960**	**787,862**	**-878,657**
End-of-Month Volume (m^3)		3,873,000	3,857,000	3,840,000	3,823,000	3,805,000	6,408,000	5,529,000	5,529,000	3,763,000	3,746,000	3,728,000	3,711,000	**51,612,000**	**6,408,000**	**3,711,000**

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2028 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**29**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
IVR Pit	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,774	6,167	7,538	10,523	0	0	0	**54,002**	**29,774**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,100**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,173**	**41,100**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit (Closure)	(m^3)	0	0	0	0	0	41,100	6,956	8,327	10,786	0	0	0	**67,169**	**41,100**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,100**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,172**	**41,101**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,873	0	0	0	0	0	0	**4,873**	**4,873**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,723**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,055**	**9,723**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	9,723	1,681	2,017	2,635	0	0	0	**16,056**	**9,723**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,723**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,056**	**9,723**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,138	7,278	8,896	12,419	0	0	0	**63,731**	**35,138**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	7,084	3,336	3,895	4,020	0	0	0	**18,335**	**7,084**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	54,178	11,013	13,355	18,352	0	0	0	**96,898**	**54,178**	**0**
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
GSP1	(m^3)	0	0	0	0	0	15,056	3,119	3,812	5,321	0	0	0	**27,308**	**15,056**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,707	4,362	5,223	6,772	0	0	0	**42,064**	**25,707**	**0**
North Sector	(m^3)	0	0	0	0	0	9,723	1,681	2,017	2,635	0	0	0	**16,056**	**9,723**	**0**
Whale Tail Att Pond	(m^3)	16,360	15,307	16,364	15,838	16,368	312,233	69,357	82,466	116,379	19,928	16,007	16,541	**713,148**	**312,233**	**15,307**
IVR Pit	(m^3)	0	0	0	0	0	0	177,937	320,292	763,506	23,696	0	0	**1,285,431**	**763,506**	**0**
Drawdown from Whale Tail North	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**16,360**	**15,307**	**16,364**	**15,838**	**16,368**	**459,119**	**278,083**	**439,956**	**929,404**	**43,624**	**16,007**	**16,541**	**2,262,971**	**929,404**	**15,307**
Evaporation	(m^3)	0	0	0	0	0	573	7,457	7,925	3,372	0	0	0	**19,327**	**7,925**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**573**	**7,457**	**7,925**	**3,372**	**0**	**0**	**0**	**19,327**	**7,925**	**0**
Net Inflow (m^3)		16,360	15,307	16,364	15,838	16,368	458,546	270,626	432,031	926,032	43,624	16,007	16,541	**2,243,644**	**926,032**	**15,307**
End-of-Month Volume (m^3)		1,711,000	1,726,000	1,742,000	1,758,000	1,775,000	2,233,000	2,504,000	2,936,000	3,862,000	3,905,000	3,921,000	3,938,000	**32,011,000**	**3,938,000**	**1,711,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,396	0	0	0	0	0	0	**15,396**	**15,396**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	4,392	910	1,112	1,552	0	0	0	**7,966**	**4,392**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,444**	**5,685**	**6,948**	**9,699**	**0**	**0**	**0**	**49,776**	**27,935**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	27,444	5,684	6,948	9,700	0	0	0	**49,776**	**27,444**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,444**	**5,684**	**6,948**	**9,700**	**0**	**0**	**0**	**49,776**	**27,444**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	0	-1	0	0	0	**0**	**1**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,840	9,287	11,352	15,847	0	0	0	**81,326**	**44,840**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	26,031	5,392	6,590	9,200	0	0	0	**47,213**	**26,031**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	10,230	4,207	4,669	4,384	0	0	0	**23,490**	**10,230**	**0**
Groundwater	(m^3)	5,361	5,017	5,365	5,193	5,368	5,216	5,421	5,449	5,319	5,524	5,347	5,525	**64,105**	**5,525**	**5,017**
Dike Seepage	(m^3)	10,627	9,942	10,628	10,285	10,628	10,287	10,633	10,636	10,297	10,643	10,300	10,643	**125,549**	**10,643**	**9,942**
Camp Biodisk	(m^3)	372	348	372	360	372	360	372	372	360	372	360	372	**4,392**	**372**	**348**
Industrial Sector	(m^3)	0	0	0	0	0	16,035	3,321	4,060	5,667	0	0	0	**29,083**	**16,035**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,375	4,842	5,918	8,261	0	0	0	**42,396**	**23,375**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	7,805	1,617	1,976	2,758	0	0	0	**14,156**	**7,805**	**0**
A53/IVR Att Pond	(m^3)	0	0	0	0	0	141,506	27,934	34,435	49,508	0	0	0	**253,383**	**141,506**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	27,444	5,684	6,948	9,700	0	0	0	**49,776**	**27,444**	**0**
Total Inflow (m^3)		**16,360**	**15,307**	**16,365**	**15,838**	**16,368**	**313,129**	**78,710**	**92,405**	**121,301**	**16,539**	**16,007**	**16,540**	**734,869**	**313,806**	**15,307**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	827	9,404	9,499	3,677	0	0	0	**23,407**	**9,499**	**0**
WTN to Pits	(m^3)	16,360	15,307	16,364	15,838	16,368	312,302	69,306	82,905	117,625	16,540	16,007	16,541	**711,463**	**312,302**	**15,307**
Total Outflow (m^3)		**16,360**	**15,307**	**16,364**	**15,838**	**16,368**	**313,129**	**78,710**	**92,404**	**121,302**	**16,540**	**16,007**	**16,541**	**734,870**	**321,801**	**15,307**
Net Inflow (m^3)		0	0	1	0	0	0	0	1	-1	-1	0	-1	**-1**	**1**	**-1**
End-of-Month Volume (m^3)		291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	**3,503,784**	**291,982**	**291,982**

		Year 2028 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**29**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	10,144	1,299	1,586	2,214	0	0	0	**15,243**	**10,144**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	9,897	13,429	14,907	13,998	0	0	0	**52,231**	**14,907**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	18,814	0	0	0	0	0	0	**18,814**	**18,814**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	14,986	18,317	25,571	0	0	0	**0**	**25,571**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,323	0	0	0	0	0	0	**48,323**	**48,323**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	144	144	48	0	0	0	**2,401**	**2,065**	**0**
NE Channel	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Whale Tail South	(m^3)	0	0	0	0	0	2,181,000	181,237	288,704	696,613	23,696	0	0	**3,371,250**	**2,181,000**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	41,100	6,956	8,327	10,786	0	0	0	**67,169**	**41,100**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,359,821**	**233,298**	**350,621**	**775,246**	**23,696**	**0**	**0**	**3,659,778**	**2,367,940**	**0**
Evaporation	(m^3)	0	0	0	0	0	2,322	30,020	30,330	11,740	0	0	0	**74,412**	**30,330**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	0	177,937	320,292	763,506	23,696	0	0	**1,285,431**	**763,506**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,322**	**207,957**	**350,622**	**775,246**	**23,696**	**0**	**0**	**1,359,843**	**793,836**	**0**
Net Inflow	(m^3)	0	0	0	0	0	2,357,499	25,341	-1	0	0	0	0	**2,382,839**	**2,357,499**	**-1**
End-of-Month Volume		7,725,000	7,725,000	7,725,000	7,725,000	7,725,000	10,080,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	**109,365,000**	**10,110,000**	**7,725,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,490	0	0	0	0	0	0	**12,490**	**12,490**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
GSP 2	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,707**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,065**	**26,105**	**0**
WT Pit (Closure)	(m^3)	0	0	0	0	0	25,707	4,362	5,223	6,772	0	0	0	**42,064**	**25,707**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,707**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,064**	**25,707**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	127,354	26,378	32,241	45,010	0	0	0	**230,983**	**127,354**	**0**
Direct Precip	(m^3)	0	0	0	0	0	1,970	810	899	844	0	0	0	**4,523**	**1,970**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	10,977	2,274	2,779	3,880	0	0	0	**19,910**	**10,977**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	1,365	283	346	482	0	0	0	**2,475**	**1,365**	**0**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**141,666**	**29,745**	**36,265**	**50,217**	**0**	**0**	**0**	**257,892**	**141,666**	**0**
Evaporation	(m^3)	0	0	0	0	0	159	1,811	1,829	708	0	0	0	**4,507**	**1,829**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	141,506	27,934	34,435	49,508	0	0	0	**253,383**	**141,506**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**283,171**	**57,679**	**70,699**	**99,724**	**0**	**0**	**0**	**511,273**	**284,841**	**0**
Net Inflow	(m^3)	0	0	0	0	0	-141,505	-27,934	-34,434	-49,508	0	0	0	**-253,382**	**0**	**-141,505**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	77,523	48,364	59,113	82,524	0	0	0	**267,524**	**82,524**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	155,897	0	0	0	0	0	0	**155,897**	**155,897**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	36,817	43,884	48,705	45,733	0	0	0	**175,139**	**48,705**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	69,985	0	0	0	0	0	0	**69,985**	**69,985**	**0**
Lake A18	(m^3)	0	0	0	0	0	948,440	100,607	143,387	300,109	0	0	0	**1,492,543**	**948,440**	**0**
Lake A55	(m^3)	0	0	0	0	0	421,268	59,851	78,992	138,852	0	0	0	**698,963**	**421,268**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,581	13,533	23,568	67,295	0	0	0	**328,977**	**224,581**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,904	11,703	15,293	26,188	0	0	0	**132,088**	**78,904**	**0**
Lake A65	(m^3)	0	0	0	0	0	348,732	24,212	39,824	105,667	0	0	0	**518,435**	**348,732**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,362,147**	**302,154**	**408,882**	**766,368**	**0**	**0**	**0**	**3,839,551**	**2,362,147**	**0**
Groundwater	(m^3)	17,269	16,156	17,271	16,714	17,272	16,741	17,333	17,335	16,779	17,340	16,781	17,340	**204,331**	**17,340**	**16,156**
Camp Use	(m^3)	372	348	372	360	372	360	372	372	360	372	360	372	**4,392**	**372**	**348**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	8,637	98,101	99,092	38,358	0	0	0	**244,188**	**99,092**	**0**
IVR Pit	(m^3)	0	0	0	0	0	2,198,000	186,333	292,083	710,870	0	0	0	**3,387,286**	**2,198,000**	**0**
Total Outflow (m^3)		**17,641**	**16,504**	**17,643**	**17,074**	**17,644**	**2,223,738**	**302,139**	**408,882**	**766,367**	**17,712**	**17,141**	**17,712**	**3,840,197**	**2,314,804**	**16,504**
Net Inflow (m^3)		-17,641	-16,504	-17,643	-17,074	-17,644	138,409	15	0	1	-17,712	-17,141	-17,712	**-646**	**138,409**	**-17,712**
End-of-Month Volume (m^3)		3,693,000	3,677,000	3,659,000	3,642,000	3,624,000	5,529,000	5,529,000	5,529,000	3,763,000	3,745,000	3,728,000	3,711,000	**49,829,000**	**5,529,000**	**3,624,000**

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2029 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
IVR Pit	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,768	6,167	7,538	10,523	0	0	0	**53,996**	**29,768**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,167**	**41,094**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit (Closure)	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,166**	**41,095**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,872	0	0	0	0	0	0	**4,872**	**4,872**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,054**	**9,878**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,055**	**9,722**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,131	7,278	8,896	12,419	0	0	0	**63,724**	**35,131**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	12,622	6,285	7,274	7,065	0	0	0	**33,246**	**12,622**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	48,732	9,555	11,516	15,887	0	0	0	**85,690**	**48,732**	**0**
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
GSP1	(m^3)	0	0	0	0	0	15,053	3,119	3,812	5,321	0	0	0	**27,305**	**15,053**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
North Sector	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Whale Tail Att Pond	(m^3)	16,541	14,941	16,542	16,009	16,543	312,356	69,526	82,645	116,516	20,049	16,123	16,661	**714,452**	**312,356**	**14,941**
IVR Pit	(m^3)	0	0	0	0	0	2,356,000	202,362	320,248	763,480	23,695	0	0	**3,665,785**	**2,356,000**	**0**
Drawdown from Whale Tail North	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**16,541**	**14,941**	**16,542**	**16,009**	**16,543**	**2,815,319**	**304,168**	**441,631**	**930,095**	**43,744**	**16,123**	**16,661**	**4,648,317**	**2,815,319**	**14,941**
Evaporation	(m^3)	0	0	0	0	0	1,021	14,050	14,800	5,926	0	0	0	**35,797**	**14,800**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**1,021**	**14,050**	**14,800**	**5,926**	**0**	**0**	**0**	**35,797**	**14,800**	**0**
Net Inflow (m^3)		16,541	14,941	16,542	16,009	16,543	2,814,298	290,118	426,831	924,169	43,744	16,123	16,661	**4,612,520**	**2,814,298**	**14,941**
End-of-Month Volume (m^3)		3,954,000	3,969,000	3,986,000	4,002,000	4,018,000	6,833,000	7,123,000	7,550,000	8,474,000	8,518,000	8,534,000	8,551,000	**75,512,000**	**8,551,000**	**3,954,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,391	0	0	0	0	0	0	**15,391**	**15,391**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	4,391	910	1,112	1,552	0	0	0	**7,965**	**4,391**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,438**	**5,685**	**6,948**	**9,699**	**0**	**0**	**0**	**49,770**	**27,929**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,439**	**5,684**	**6,948**	**9,700**	**0**	**0**	**0**	**49,771**	**27,439**	**0**
Net Inflow (m^3)		0	0	0	0	0	-1	1	0	-1	0	0	0	**-1**	**1**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,830	9,287	11,352	15,847	0	0	0	**81,316**	**44,830**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	26,026	5,392	6,590	9,200	0	0	0	**47,208**	**26,026**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	10,228	4,207	4,669	4,384	0	0	0	**23,488**	**10,228**	**0**
Groundwater	(m^3)	5,526	4,992	5,527	5,349	5,528	5,385	5,606	5,614	5,446	5,638	5,457	5,639	**65,707**	**5,639**	**4,992**
Dike Seepage	(m^3)	10,643	9,613	10,643	10,300	10,643	10,302	10,648	10,649	10,306	10,650	10,306	10,650	**125,353**	**10,650**	**9,613**
Camp Biodisk	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Industrial Sector	(m^3)	0	0	0	0	0	16,032	3,321	4,060	5,667	0	0	0	**29,080**	**16,032**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,370	4,842	5,918	8,261	0	0	0	**42,391**	**23,370**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	7,803	1,617	1,976	2,758	0	0	0	**14,154**	**7,803**	**0**
A53/IVR Att Pond	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Inflow (m^3)		**16,541**	**14,941**	**16,542**	**16,009**	**16,543**	**313,252**	**78,910**	**92,583**	**121,437**	**16,660**	**16,123**	**16,661**	**736,202**	**313,866**	**14,941**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	827	9,404	9,499	3,677	0	0	0	**23,407**	**9,499**	**0**
WTN to Pits	(m^3)	16,541	14,941	16,542	16,009	16,543	312,426	69,506	83,083	117,761	16,660	16,123	16,661	**712,796**	**312,426**	**14,941**
Total Outflow (m^3)		**16,541**	**14,941**	**16,542**	**16,009**	**16,543**	**313,253**	**78,910**	**92,582**	**121,438**	**16,660**	**16,123**	**16,661**	**736,203**	**321,925**	**14,941**
Net Inflow (m^3)		0	0	0	0	0	-1	0	1	-1	0	0	0	**-1**	**1**	**-1**
End-of-Month Volume (m^3)		291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	**3,503,784**	**291,982**	**291,982**

		Year 2029 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	6,263	1,298	1,586	2,214	0	0	0	**11,361**	**6,263**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	11,260	13,432	14,907	13,998	0	0	0	**53,597**	**14,907**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	21,398	0	0	0	0	0	0	**21,398**	**21,398**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	14,986	18,317	25,571	0	0	0	**0**	**25,571**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,308	0	0	0	0	0	0	**48,308**	**48,308**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	144	144	48	0	0	0	**2,401**	**2,065**	**0**
NE Channel	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Whale Tail South	(m^3)	0	0	0	0	0	2,180,000	180,325	288,660	696,586	23,695	0	0	**3,369,266**	**2,180,000**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,866**	**232,388**	**350,577**	**775,219**	**23,695**	**0**	**0**	**3,657,841**	**2,365,622**	**0**
Evaporation	(m^3)	0	0	0	0	0	2,642	30,026	30,330	11,740	0	0	0	**74,738**	**30,330**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	2,356,000	202,362	320,248	763,480	23,695	0	0	**3,665,785**	**2,356,000**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,642**	**232,388**	**350,578**	**775,220**	**23,695**	**0**	**0**	**3,740,523**	**2,386,330**	**0**
Net Inflow	(m^3)	0	0	0	0	0	224	0	-1	-1	0	0	0	**222**	**224**	**-1**
End-of-Month Volume		10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	**121,320,000**	**10,110,000**	**10,110,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,486	0	0	0	0	0	0	**12,486**	**12,486**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
GSP 2	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,061**	**26,101**	**0**
WT Pit (Closure)	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,060**	**25,703**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Direct Precip	(m^3)	0	0	0	0	0	127,327	26,378	32,241	45,010	0	0	0	**230,956**	**127,327**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	1,970	810	899	844	0	0	0	**4,523**	**1,970**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	10,975	2,274	2,779	3,880	0	0	0	**19,908**	**10,975**	**0**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**141,636**	**29,745**	**36,265**	**50,217**	**0**	**0**	**0**	**257,862**	**141,636**	**0**
Evaporation	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**424,590**	**85,613**	**105,134**	**149,232**	**0**	**0**	**0**	**764,569**	**426,260**	**0**
Net Inflow	(m^3)	0	0	0	0	0	-282,954	-55,868	-68,869	-99,016	0	0	0	**-506,708**	**0**	**-282,954**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	77,523	48,364	59,113	82,524	0	0	0	**267,524**	**82,524**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	155,849	0	0	0	0	0	0	**155,849**	**155,849**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	36,817	43,884	48,705	45,733	0	0	0	**175,139**	**48,705**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	69,963	0	0	0	0	0	0	**69,963**	**69,963**	**0**
Lake A18	(m^3)	0	0	0	0	0	948,244	100,607	143,387	300,109	0	0	0	**1,492,347**	**948,244**	**0**
Lake A55	(m^3)	0	0	0	0	0	421,181	59,851	78,992	138,852	0	0	0	**698,876**	**421,181**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,534	13,533	23,568	67,295	0	0	0	**328,930**	**224,534**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,888	11,703	15,293	26,188	0	0	0	**132,072**	**78,888**	**0**
Lake A65	(m^3)	0	0	0	0	0	348,659	24,212	39,824	105,667	0	0	0	**518,362**	**348,659**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,361,658**	**302,154**	**408,882**	**766,368**	**0**	**0**	**0**	**3,839,062**	**2,361,658**	**0**
Groundwater	(m^3)	17,341	15,663	17,341	16,781	17,341	16,786	17,352	17,353	16,795	17,356	16,796	17,356	**204,261**	**17,356**	**15,663**
Camp Use	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	8,637	98,101	99,092	38,358	0	0	0	**244,188**	**99,092**	**0**
IVR Pit	(m^3)	0	0	0	0	0	2,197,000	186,322	292,065	710,854	0	0	0	**3,386,241**	**2,197,000**	**0**
Total Outflow (m^3)		**17,713**	**15,999**	**17,713**	**17,141**	**17,713**	**2,222,783**	**302,147**	**408,882**	**766,367**	**17,728**	**17,156**	**17,728**	**3,839,070**	**2,313,820**	**15,999**
Net Inflow (m^3)		-17,713	-15,999	-17,713	-17,141	-17,713	138,875	7	0	1	-17,728	-17,156	-17,728	**-8**	**138,875**	**-17,728**
End-of-Month Volume (m^3)		3,693,000	3,677,000	3,659,000	3,642,000	3,624,000	5,529,000	5,529,000	5,529,000	3,763,000	3,745,000	3,728,000	3,711,000	**49,829,000**	**5,529,000**	**3,624,000**

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2030 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
IVR Pit	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,768	6,167	7,538	10,523	0	0	0	**53,996**	**29,768**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,167**	**41,094**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit (Closure)	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,166**	**41,095**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,872	0	0	0	0	0	0	**4,872**	**4,872**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,054**	**9,878**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,055**	**9,722**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,131	7,278	8,896	12,419	0	0	0	**63,724**	**35,131**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	19,340	8,559	9,600	9,215	0	0	0	**46,714**	**19,340**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	42,140	8,431	10,251	14,148	0	0	0	**74,970**	**42,140**	**0**
Groundwater	(m^3)	0	0	0	0	0	134	374	424	499	584	567	588	**3,170**	**588**	**0**
GSP1	(m^3)	0	0	0	0	0	15,053	3,119	3,812	5,321	0	0	0	**27,305**	**15,053**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
North Sector	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Whale Tail Att Pond	(m^3)	16,661	15,049	16,662	16,125	16,663	312,470	69,665	82,771	116,642	20,182	16,252	16,795	**715,937**	**312,470**	**15,049**
IVR Pit	(m^3)	0	0	0	0	0	2,356,000	202,942	320,235	763,468	23,695	0	0	**3,666,340**	**2,356,000**	**0**
Drawdown from Whale Tail North	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**16,661**	**15,049**	**16,662**	**16,125**	**16,663**	**2,815,693**	**306,411**	**443,229**	**931,119**	**44,461**	**16,819**	**17,383**	**4,656,275**	**2,815,693**	**15,049**
Evaporation	(m^3)	0	0	0	0	0	1,564	19,134	19,531	7,729	0	0	0	**47,958**	**19,531**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**1,564**	**19,134**	**19,531**	**7,729**	**0**	**0**	**0**	**47,958**	**19,531**	**0**
Net Inflow (m^3)		16,661	15,049	16,662	16,125	16,663	2,814,129	287,277	423,698	923,390	44,461	16,819	17,383	**4,608,317**	**2,814,129**	**15,049**
End-of-Month Volume (m^3)		8,567,000	8,582,000	8,599,000	8,615,000	8,632,000	11,450,000	11,730,000	12,160,000	13,080,000	13,130,000	13,140,000	13,160,000	**130,845,000**	**13,160,000**	**8,567,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,391	0	0	0	0	0	0	**15,391**	**15,391**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	4,391	910	1,112	1,552	0	0	0	**7,965**	**4,391**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,438**	**5,685**	**6,948**	**9,699**	**0**	**0**	**0**	**49,770**	**27,929**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,439**	**5,684**	**6,948**	**9,700**	**0**	**0**	**0**	**49,771**	**27,439**	**0**
Net Inflow (m^3)		0	0	0	0	0	-1	1	0	-1	0	0	0	**-1**	**1**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,830	9,287	11,352	15,847	0	0	0	**81,316**	**44,830**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	26,026	5,392	6,590	9,200	0	0	0	**47,208**	**26,026**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	10,228	4,207	4,669	4,384	0	0	0	**23,488**	**10,228**	**0**
Groundwater	(m^3)	5,639	5,094	5,640	5,458	5,641	5,490	5,715	5,724	5,555	5,752	5,567	5,753	**67,028**	**5,753**	**5,094**
Dike Seepage	(m^3)	10,650	9,619	10,650	10,307	10,650	10,311	10,663	10,664	10,323	10,670	10,326	10,670	**125,503**	**10,670**	**9,619**
Camp Biodisk	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Industrial Sector	(m^3)	0	0	0	0	0	16,032	3,321	4,060	5,667	0	0	0	**29,080**	**16,032**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,370	4,842	5,918	8,261	0	0	0	**42,391**	**23,370**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	7,803	1,617	1,976	2,758	0	0	0	**14,154**	**7,803**	**0**
A53/IVR Att Pond	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Inflow (m^3)		**16,661**	**15,049**	**16,662**	**16,125**	**16,663**	**313,366**	**79,034**	**92,708**	**121,563**	**16,794**	**16,253**	**16,795**	**737,673**	**314,000**	**15,049**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	827	9,404	9,499	3,677	0	0	0	**23,407**	**9,499**	**0**
WTN to Pits	(m^3)	16,661	15,049	16,662	16,125	16,663	312,539	69,630	83,209	117,888	16,794	16,252	16,795	**714,267**	**312,539**	**15,049**
Total Outflow (m^3)		**16,661**	**15,049**	**16,662**	**16,125**	**16,663**	**313,366**	**79,034**	**92,708**	**121,565**	**16,794**	**16,252**	**16,795**	**737,674**	**322,038**	**15,049**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	-2	0	1	0	**-1**	**1**	**-2**
End-of-Month Volume (m^3)		291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	**3,503,784**	**291,982**	**291,982**

		Year 2030 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	6,263	1,298	1,586	2,214	0	0	0	**11,361**	**6,263**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	11,260	13,432	14,907	13,998	0	0	0	**53,597**	**14,907**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	21,398	0	0	0	0	0	0	**21,398**	**21,398**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	14,986	18,317	25,571	0	0	0	**0**	**25,571**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,308	0	0	0	0	0	0	**48,308**	**48,308**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	144	144	48	0	0	0	**2,401**	**2,065**	**0**
NE Channel	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Whale Tail South	(m^3)	0	0	0	0	0	2,180,000	180,905	288,647	696,574	23,695	0	0	**3,369,821**	**2,180,000**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,866**	**232,968**	**350,564**	**775,207**	**23,695**	**0**	**0**	**3,658,396**	**2,365,622**	**0**
Evaporation	(m^3)	0	0	0	0	0	2,642	30,026	30,330	11,740	0	0	0	**74,738**	**30,330**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	2,356,000	202,942	320,235	763,468	23,695	0	0	**3,666,340**	**2,356,000**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,642**	**232,968**	**350,565**	**775,208**	**23,695**	**0**	**0**	**3,741,078**	**2,386,330**	**0**
Net Inflow	(m^3)	0	0	0	0	0	224	0	-1	-1	0	0	0	**222**	**224**	**-1**
End-of-Month Volume		10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	**121,320,000**	**10,110,000**	**10,110,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,486	0	0	0	0	0	0	**12,486**	**12,486**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
GSP 2	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,061**	**26,101**	**0**
WT Pit (Closure)	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,060**	**25,703**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Direct Precip	(m^3)	0	0	0	0	0	127,327	26,378	32,241	45,010	0	0	0	**230,956**	**127,327**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	1,970	810	899	844	0	0	0	**4,523**	**1,970**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	10,975	2,274	2,779	3,880	0	0	0	**19,908**	**10,975**	**0**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**141,636**	**29,745**	**36,265**	**50,217**	**0**	**0**	**0**	**257,862**	**141,636**	**0**
Evaporation	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**424,590**	**85,613**	**105,134**	**149,232**	**0**	**0**	**0**	**764,569**	**426,260**	**0**
Net Inflow	(m^3)	0	0	0	0	0	-282,954	-55,868	-68,869	-99,016	0	0	0	**-506,708**	**0**	**-282,954**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	77,523	48,364	59,113	82,524	0	0	0	**267,524**	**82,524**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	155,849	0	0	0	0	0	0	**155,849**	**155,849**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	36,817	43,884	48,705	45,733	0	0	0	**175,139**	**48,705**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	69,963	0	0	0	0	0	0	**69,963**	**69,963**	**0**
Lake A18	(m^3)	0	0	0	0	0	948,244	100,607	143,387	300,109	0	0	0	**1,492,347**	**948,244**	**0**
Lake A55	(m^3)	0	0	0	0	0	421,181	59,851	78,992	138,852	0	0	0	**698,876**	**421,181**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,534	13,533	23,568	67,295	0	0	0	**328,930**	**224,534**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,888	11,703	15,293	26,188	0	0	0	**132,072**	**78,888**	**0**
Lake A65	(m^3)	0	0	0	0	0	348,659	24,212	39,824	105,667	0	0	0	**518,362**	**348,659**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,361,658**	**302,154**	**408,882**	**766,368**	**0**	**0**	**0**	**3,839,062**	**2,361,658**	**0**
Groundwater	(m^3)	17,356	15,676	17,356	16,796	17,356	16,799	17,363	17,364	16,806	17,367	16,807	17,367	**204,413**	**17,367**	**15,676**
Camp Use	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	8,637	98,101	99,092	38,358	0	0	0	**244,188**	**99,092**	**0**
IVR Pit	(m^3)	0	0	0	0	0	2,197,000	186,314	292,054	710,843	0	0	0	**3,386,211**	**2,197,000**	**0**
Total Outflow (m^3)		**17,728**	**16,012**	**17,728**	**17,156**	**17,728**	**2,222,796**	**302,150**	**408,882**	**766,367**	**17,739**	**17,167**	**17,739**	**3,839,192**	**2,313,831**	**16,012**
Net Inflow (m^3)		-17,728	-16,012	-17,728	-17,156	-17,728	138,862	4	0	1	-17,739	-17,167	-17,739	**-130**	**138,862**	**-17,739**
End-of-Month Volume (m^3)		3,693,000	3,677,000	3,659,000	3,642,000	3,624,000	5,529,000	5,529,000	5,529,000	3,763,000	3,745,000	3,728,000	3,711,000	**49,829,000**	**5,529,000**	**3,624,000**

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2031 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
IVR Pit	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,768	6,167	7,538	10,523	0	0	0	**53,996**	**29,768**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,167**	**41,094**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit (Closure)	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,166**	**41,095**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,872	0	0	0	0	0	0	**4,872**	**4,872**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,054**	**9,878**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,055**	**9,722**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,131	7,278	8,896	12,419	0	0	0	**63,724**	**35,131**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	24,199	10,477	11,831	11,571	0	0	0	**58,078**	**24,199**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	37,374	7,483	9,036	12,241	0	0	0	**66,134**	**37,374**	**0**
Groundwater	(m^3)	590	535	595	577	599	1,241	2,215	2,405	2,647	2,921	2,833	2,932	**20,090**	**2,932**	**535**
GSP1	(m^3)	0	0	0	0	0	15,053	3,119	3,812	5,321	0	0	0	**27,305**	**15,053**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
North Sector	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Whale Tail Att Pond	(m^3)	16,795	15,170	16,796	16,255	16,797	312,434	69,319	82,406	116,196	19,646	15,731	16,253	**713,798**	**312,434**	**15,170**
IVR Pit	(m^3)	0	0	0	0	0	2,356,000	202,337	320,223	763,456	23,694	0	0	**3,665,710**	**2,356,000**	**0**
Drawdown from Whale Tail North	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**17,385**	**15,705**	**17,391**	**16,832**	**17,396**	**2,816,857**	**308,271**	**445,849**	**933,258**	**46,261**	**18,564**	**19,185**	**4,672,954**	**2,816,857**	**15,705**
Evaporation	(m^3)	0	0	0	0	0	1,957	23,421	24,070	9,705	0	0	0	**59,153**	**24,070**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**1,957**	**23,421**	**24,070**	**9,705**	**0**	**0**	**0**	**59,153**	**24,070**	**0**
Net Inflow (m^3)		17,385	15,705	17,391	16,832	17,396	2,814,900	284,850	421,779	923,553	46,261	18,564	19,185	**4,613,801**	**2,814,900**	**15,705**
End-of-Month Volume (m^3)		13,180,000	13,190,000	13,210,000	13,230,000	13,240,000	16,060,000	16,340,000	16,770,000	17,690,000	17,740,000	17,750,000	17,770,000	**186,170,000**	**17,770,000**	**13,180,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,391	0	0	0	0	0	0	**15,391**	**15,391**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	4,391	910	1,112	1,552	0	0	0	**7,965**	**4,391**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,438**	**5,685**	**6,948**	**9,699**	**0**	**0**	**0**	**49,770**	**27,929**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,439**	**5,684**	**6,948**	**9,700**	**0**	**0**	**0**	**49,771**	**27,439**	**0**
Net Inflow (m^3)		0	0	0	0	0	-1	1	0	-1	0	0	0	**-1**	**1**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,830	9,287	11,352	15,847	0	0	0	**81,316**	**44,830**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	26,026	5,392	6,590	9,200	0	0	0	**47,208**	**26,026**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	10,228	4,207	4,669	4,384	0	0	0	**23,488**	**10,228**	**0**
Groundwater	(m^3)	5,753	5,197	5,754	5,569	5,755	5,432	5,410	5,368	5,123	5,244	5,074	5,241	**64,920**	**5,755**	**5,074**
Dike Seepage	(m^3)	10,670	9,637	10,670	10,326	10,670	10,320	10,655	10,653	10,305	10,641	10,297	10,640	**125,484**	**10,670**	**9,637**
Camp Biodisk	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Industrial Sector	(m^3)	0	0	0	0	0	16,032	3,321	4,060	5,667	0	0	0	**29,080**	**16,032**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,370	4,842	5,918	8,261	0	0	0	**42,391**	**23,370**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	7,803	1,617	1,976	2,758	0	0	0	**14,154**	**7,803**	**0**
A53/IVR Att Pond	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Inflow (m^3)		**16,795**	**15,170**	**16,796**	**16,255**	**16,797**	**313,317**	**78,721**	**92,341**	**121,113**	**16,257**	**15,731**	**16,253**	**735,546**	**314,002**	**15,047**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	827	9,404	9,499	3,677	0	0	0	**23,407**	**9,499**	**0**
WTN to Pits	(m^3)	16,795	15,170	16,796	16,255	16,797	312,490	69,317	82,842	117,438	16,257	15,731	16,253	**712,141**	**312,490**	**15,170**
Total Outflow (m^3)		**16,795**	**15,170**	**16,796**	**16,255**	**16,797**	**313,317**	**78,721**	**92,341**	**121,115**	**16,257**	**15,731**	**16,253**	**735,548**	**321,989**	**15,170**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	-2	0	0	0	**-2**	**0**	**-2**
End-of-Month Volume (m^3)		291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	**3,503,784**	**291,982**	**291,982**

		Year 2031 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	6,263	1,298	1,586	2,214	0	0	0	**11,361**	**6,263**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	11,260	13,432	14,907	13,998	0	0	0	**53,597**	**14,907**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	21,398	0	0	0	0	0	0	**21,398**	**21,398**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	14,986	18,317	25,571	0	0	0	**0**	**25,571**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,308	0	0	0	0	0	0	**48,308**	**48,308**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	144	144	48	0	0	0	**2,401**	**2,065**	**0**
NE Channel	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Whale Tail South	(m^3)	0	0	0	0	0	2,180,000	180,300	288,635	696,562	23,694	0	0	**3,369,191**	**2,180,000**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,866**	**232,363**	**350,552**	**775,195**	**23,694**	**0**	**0**	**3,657,766**	**2,365,622**	**0**
Evaporation	(m^3)	0	0	0	0	0	2,642	30,026	30,330	11,740	0	0	0	**74,738**	**30,330**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	2,356,000	202,337	320,223	763,456	23,694	0	0	**3,665,710**	**2,356,000**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,642**	**232,363**	**350,553**	**775,196**	**23,694**	**0**	**0**	**3,740,448**	**2,386,330**	**0**
Net Inflow	(m^3)	0	0	0	0	0	224	0	-1	-1	0	0	0	**222**	**224**	**-1**
End-of-Month Volume		10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	**121,320,000**	**10,110,000**	**10,110,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,486	0	0	0	0	0	0	**12,486**	**12,486**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
GSP 2	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,061**	**26,101**	**0**
WT Pit (Closure)	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,060**	**25,703**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Direct Precip	(m^3)	0	0	0	0	0	127,327	26,378	32,241	45,010	0	0	0	**230,956**	**127,327**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	1,970	810	899	844	0	0	0	**4,523**	**1,970**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	10,975	2,274	2,779	3,880	0	0	0	**19,908**	**10,975**	**0**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**141,636**	**29,745**	**36,265**	**50,217**	**0**	**0**	**0**	**257,862**	**141,636**	**0**
Evaporation	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**424,590**	**85,613**	**105,134**	**149,232**	**0**	**0**	**0**	**764,569**	**426,260**	**0**
Net Inflow	(m^3)	0	0	0	0	0	-282,954	-55,868	-68,869	-99,016	0	0	0	**-506,708**	**0**	**-282,954**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	77,523	48,364	59,113	82,524	0	0	0	**267,524**	**82,524**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	155,849	0	0	0	0	0	0	**155,849**	**155,849**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	36,817	43,884	48,705	45,733	0	0	0	**175,139**	**48,705**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	69,963	0	0	0	0	0	0	**69,963**	**69,963**	**0**
Lake A18	(m^3)	0	0	0	0	0	948,244	100,607	143,387	300,109	0	0	0	**1,492,347**	**948,244**	**0**
Lake A55	(m^3)	0	0	0	0	0	421,181	59,851	78,992	138,852	0	0	0	**698,876**	**421,181**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,534	13,533	23,568	67,295	0	0	0	**328,930**	**224,534**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,888	11,703	15,293	26,188	0	0	0	**132,072**	**78,888**	**0**
Lake A65	(m^3)	0	0	0	0	0	348,659	24,212	39,824	105,667	0	0	0	**518,362**	**348,659**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,361,658**	**302,154**	**408,882**	**766,368**	**0**	**0**	**0**	**3,839,062**	**2,361,658**	**0**
Groundwater	(m^3)	17,367	15,687	17,368	16,807	17,368	16,811	17,377	17,378	16,820	17,382	16,821	17,382	**204,568**	**17,382**	**15,687**
Camp Use	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	8,637	98,101	99,092	38,358	0	0	0	**244,188**	**99,092**	**0**
IVR Pit	(m^3)	0	0	0	0	0	2,197,000	186,311	292,040	710,829	0	0	0	**3,386,180**	**2,197,000**	**0**
Total Outflow (m^3)		**17,739**	**16,023**	**17,740**	**17,167**	**17,740**	**2,222,808**	**302,161**	**408,882**	**766,367**	**17,754**	**17,181**	**17,754**	**3,839,316**	**2,313,846**	**16,023**
Net Inflow (m^3)		-17,739	-16,023	-17,740	-17,167	-17,740	138,850	-7	0	1	-17,754	-17,181	-17,754	**-254**	**138,850**	**-17,754**
End-of-Month Volume (m^3)		3,693,000	3,677,000	3,659,000	3,642,000	3,624,000	5,529,000	5,529,000	5,529,000	3,763,000	3,745,000	3,728,000	3,710,000	**49,828,000**	**5,529,000**	**3,624,000**

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2032 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
IVR Pit	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,774	6,167	7,538	10,523	0	0	0	**54,002**	**29,774**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,100**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,173**	**41,100**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit (Closure)	(m^3)	0	0	0	0	0	41,100	6,956	8,327	10,786	0	0	0	**67,169**	**41,100**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,100**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,172**	**41,101**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,873	0	0	0	0	0	0	**4,873**	**4,873**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,723**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,055**	**9,879**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	9,723	1,681	2,017	2,635	0	0	0	**16,056**	**9,723**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,723**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,056**	**9,723**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,138	7,278	8,896	12,419	0	0	0	**63,731**	**35,138**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	29,015	12,262	13,688	12,993	0	0	0	**67,958**	**29,015**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	32,661	6,602	8,026	11,091	0	0	0	**58,380**	**32,661**	**0**
Groundwater	(m^3)	2,938	2,753	2,949	2,859	2,959	3,199	3,738	3,826	3,869	4,167	4,040	4,182	**41,479**	**4,182**	**2,753**
GSP1	(m^3)	0	0	0	0	0	15,056	3,119	3,812	5,321	0	0	0	**27,308**	**15,056**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,707	4,362	5,223	6,772	0	0	0	**42,064**	**25,707**	**0**
North Sector	(m^3)	0	0	0	0	0	9,723	1,681	2,017	2,635	0	0	0	**16,056**	**9,723**	**0**
Whale Tail Att Pond	(m^3)	16,251	15,201	16,247	15,721	16,243	311,974	69,651	81,932	115,754	19,202	15,301	15,810	**709,287**	**311,974**	**15,201**
IVR Pit	(m^3)	0	0	0	0	0	2,357,000	216,597	320,207	763,440	23,694	0	0	**3,680,938**	**2,357,000**	**0**
Drawdown from Whale Tail North	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**19,189**	**17,954**	**19,196**	**18,580**	**19,202**	**2,819,473**	**325,290**	**447,627**	**934,294**	**47,063**	**19,341**	**19,992**	**4,707,201**	**2,819,473**	**17,954**
Evaporation	(m^3)	0	0	0	0	0	2,346	27,410	27,849	10,898	0	0	0	**68,503**	**27,849**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,346**	**27,410**	**27,849**	**10,898**	**0**	**0**	**0**	**68,503**	**27,849**	**0**
Net Inflow (m^3)		19,189	17,954	19,196	18,580	19,202	2,817,127	297,880	419,778	923,396	47,063	19,341	19,992	**4,638,698**	**2,817,127**	**17,954**
End-of-Month Volume (m^3)		17,790,000	17,810,000	17,830,000	17,850,000	17,870,000	20,680,000	20,980,000	21,400,000	22,330,000	22,370,000	22,390,000	22,410,000	**241,710,000**	**22,410,000**	**17,790,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,396	0	0	0	0	0	0	**15,396**	**15,396**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	4,392	910	1,112	1,552	0	0	0	**7,966**	**4,392**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,444**	**5,685**	**6,948**	**9,699**	**0**	**0**	**0**	**49,776**	**27,935**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	27,444	5,684	6,948	9,700	0	0	0	**49,776**	**27,444**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,444**	**5,684**	**6,948**	**9,700**	**0**	**0**	**0**	**49,776**	**27,444**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	0	-1	0	0	0	**0**	**1**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,840	9,287	11,352	15,847	0	0	0	**81,326**	**44,840**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	26,031	5,392	6,590	9,200	0	0	0	**47,213**	**26,031**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	10,230	4,207	4,669	4,384	0	0	0	**23,490**	**10,230**	**0**
Groundwater	(m^3)	5,239	4,900	5,236	5,066	5,233	4,962	4,997	4,970	4,762	4,885	4,726	4,882	**59,858**	**5,239**	**4,726**
Dike Seepage	(m^3)	10,639	9,953	10,639	10,295	10,638	10,272	10,584	10,578	10,226	10,556	10,215	10,555	**125,150**	**10,639**	**9,953**
Camp Biodisk	(m^3)	372	348	372	360	372	360	372	372	360	372	360	372	**4,392**	**372**	**348**
Industrial Sector	(m^3)	0	0	0	0	0	16,035	3,321	4,060	5,667	0	0	0	**29,083**	**16,035**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,375	4,842	5,918	8,261	0	0	0	**42,396**	**23,375**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	7,805	1,617	1,976	2,758	0	0	0	**14,156**	**7,805**	**0**
A53/IVR Att Pond	(m^3)	0	0	0	0	0	141,506	27,934	34,435	49,508	0	0	0	**253,383**	**141,506**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	27,444	5,684	6,948	9,700	0	0	0	**49,776**	**27,444**	**0**
Total Inflow (m^3)		**16,250**	**15,201**	**16,247**	**15,721**	**16,243**	**312,860**	**78,237**	**91,868**	**120,673**	**15,813**	**15,301**	**15,809**	**730,223**	**313,516**	**15,027**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	827	9,404	9,499	3,677	0	0	0	**23,407**	**9,499**	**0**
WTN to Pits	(m^3)	16,251	15,200	16,247	15,721	16,243	312,033	68,833	82,368	116,997	15,813	15,301	15,810	**706,817**	**312,033**	**15,200**
Total Outflow (m^3)		**16,251**	**15,200**	**16,247**	**15,721**	**16,243**	**312,860**	**78,237**	**91,867**	**120,674**	**15,813**	**15,301**	**15,810**	**730,224**	**321,532**	**15,200**
Net Inflow (m^3)		-1	1	0	0	0	0	0	1	-1	0	0	-1	**-1**	**1**	**-1**
End-of-Month Volume (m^3)		291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	**3,503,784**	**291,982**	**291,982**

		Year 2032 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	6,264	1,298	1,586	2,214	0	0	0	**11,362**	**6,264**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	11,260	13,432	14,907	13,998	0	0	0	**53,597**	**14,907**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	21,405	0	0	0	0	0	0	**21,405**	**21,405**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	14,986	18,317	25,571	0	0	0	**0**	**25,571**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,323	0	0	0	0	0	0	**48,323**	**48,323**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	144	144	48	0	0	0	**2,401**	**2,065**	**0**
NE Channel	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Whale Tail South	(m^3)	0	0	0	0	0	2,180,000	194,560	288,619	696,547	23,694	0	0	**3,383,420**	**2,180,000**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	41,100	6,956	8,327	10,786	0	0	0	**67,169**	**41,100**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,895**	**246,623**	**350,536**	**775,180**	**23,694**	**0**	**0**	**3,672,024**	**2,365,651**	**0**
Evaporation	(m^3)	0	0	0	0	0	2,642	30,026	30,330	11,740	0	0	0	**74,738**	**30,330**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	2,357,000	216,597	320,207	763,440	23,694	0	0	**3,680,938**	**2,357,000**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,359,642**	**246,623**	**350,537**	**775,180**	**23,694**	**0**	**0**	**3,755,676**	**2,387,330**	**0**
Net Inflow	(m^3)	0	0	0	0	0	-747	0	-1	0	0	0	0	**-748**	**0**	**-747**
End-of-Month Volume		10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	**121,320,000**	**10,110,000**	**10,110,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,490	0	0	0	0	0	0	**12,490**	**12,490**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
GSP 2	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,707**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,065**	**26,105**	**0**
WT Pit (Closure)	(m^3)	0	0	0	0	0	25,707	4,362	5,223	6,772	0	0	0	**42,064**	**25,707**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,707**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,064**	**25,707**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Direct Precip	(m^3)	0	0	0	0	0	127,354	26,378	32,241	45,010	0	0	0	**230,983**	**127,354**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	1,970	810	899	844	0	0	0	**4,523**	**1,970**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	10,977	2,274	2,779	3,880	0	0	0	**19,910**	**10,977**	**0**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**141,666**	**29,745**	**36,265**	**50,217**	**0**	**0**	**0**	**257,892**	**141,666**	**0**
Evaporation	(m^3)	0	0	0	0	0	141,506	27,934	34,435	49,508	0	0	0	**253,383**	**141,506**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	141,506	27,934	34,435	49,508	0	0	0	**253,383**	**141,506**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**424,677**	**85,613**	**105,134**	**149,232**	**0**	**0**	**0**	**764,656**	**426,347**	**0**
Net Inflow	(m^3)	0	0	0	0	0	-283,011	-55,868	-68,869	-99,016	0	0	0	**-506,765**	**0**	**-283,011**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	77,523	48,364	59,113	82,524	0	0	0	**267,524**	**82,524**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	155,896	0	0	0	0	0	0	**155,896**	**155,896**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	36,817	43,884	48,705	45,733	0	0	0	**175,139**	**48,705**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	69,985	0	0	0	0	0	0	**69,985**	**69,985**	**0**
Lake A18	(m^3)	0	0	0	0	0	948,440	100,607	143,387	300,109	0	0	0	**1,492,543**	**948,440**	**0**
Lake A55	(m^3)	0	0	0	0	0	421,268	59,851	78,992	138,852	0	0	0	**698,963**	**421,268**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,581	13,533	23,568	67,295	0	0	0	**328,977**	**224,581**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,904	11,703	15,293	26,188	0	0	0	**132,088**	**78,904**	**0**
Lake A65	(m^3)	0	0	0	0	0	348,732	24,212	39,824	105,667	0	0	0	**518,435**	**348,732**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,362,146**	**302,154**	**408,882**	**766,368**	**0**	**0**	**0**	**3,839,550**	**2,362,146**	**0**
Groundwater	(m^3)	17,382	16,261	17,382	16,822	17,382	16,826	17,393	17,394	16,836	17,399	16,838	17,399	**205,314**	**17,399**	**16,261**
Camp Use	(m^3)	372	348	372	360	372	360	372	372	360	372	360	372	**4,392**	**372**	**348**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	8,637	98,101	99,092	38,358	0	0	0	**244,188**	**99,092**	**0**
IVR Pit	(m^3)	0	0	0	0	0	2,197,000	186,287	292,023	710,813	0	0	0	**3,386,123**	**2,197,000**	**0**
Total Outflow (m^3)		**17,754**	**16,609**	**17,754**	**17,182**	**17,754**	**2,222,823**	**302,153**	**408,881**	**766,367**	**17,771**	**17,198**	**17,771**	**3,840,017**	**2,313,863**	**16,609**
Net Inflow (m^3)		-17,754	-16,609	-17,754	-17,182	-17,754	139,323	1	1	1	-17,771	-17,198	-17,771	**-467**	**139,323**	**-17,771**
End-of-Month Volume (m^3)		3,693,000	3,676,000	3,658,000	3,641,000	3,623,000	5,529,000	5,529,000	5,529,000	3,763,000	3,745,000	3,728,000	3,710,000	**49,824,000**	**5,529,000**	**3,623,000**

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2033 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
IVR Pit	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,768	6,167	7,538	10,523	0	0	0	**53,996**	**29,768**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,167**	**41,094**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit (Closure)	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,166**	**41,095**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,872	0	0	0	0	0	0	**4,872**	**4,872**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,054**	**9,878**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,055**	**9,722**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,131	7,278	8,896	12,419	0	0	0	**63,724**	**35,131**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	32,525	14,165	15,782	14,929	0	0	0	**77,401**	**32,525**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	29,205	5,661	6,886	9,524	0	0	0	**51,276**	**29,205**	**0**
Groundwater	(m^3)	4,190	3,791	4,204	4,076	4,219	4,523	5,244	5,270	5,100	5,270	5,100	5,270	**56,257**	**5,270**	**3,791**
GSP1	(m^3)	0	0	0	0	0	15,053	3,119	3,812	5,321	0	0	0	**27,305**	**15,053**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
North Sector	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Whale Tail Att Pond	(m^3)	15,808	14,277	15,805	15,293	15,801	311,509	69,265	81,557	115,414	18,868	14,979	15,477	**704,053**	**311,509**	**14,277**
IVR Pit	(m^3)	0	0	0	0	0	2,356,000	216,573	320,190	763,423	23,693	0	0	**3,679,879**	**2,356,000**	**0**
Drawdown from Whale Tail North	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**19,998**	**18,068**	**20,009**	**19,369**	**20,020**	**2,819,371**	**327,348**	**449,633**	**935,537**	**47,831**	**20,079**	**20,747**	**4,718,010**	**2,819,371**	**18,068**
Evaporation	(m^3)	0	0	0	0	0	2,631	31,665	32,110	12,521	0	0	0	**78,927**	**32,110**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,631**	**31,665**	**32,110**	**12,521**	**0**	**0**	**0**	**78,927**	**32,110**	**0**
Net Inflow (m^3)		19,998	18,068	20,009	19,369	20,020	2,816,740	295,683	417,523	923,016	47,831	20,079	20,747	**4,639,083**	**2,816,740**	**18,068**
End-of-Month Volume (m^3)		22,430,000	22,450,000	22,470,000	22,490,000	22,510,000	25,330,000	25,620,000	26,040,000	26,960,000	27,010,000	27,030,000	27,050,000	**297,390,000**	**27,050,000**	**22,430,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,391	0	0	0	0	0	0	**15,391**	**15,391**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	4,391	910	1,112	1,552	0	0	0	**7,965**	**4,391**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,438**	**5,685**	**6,948**	**9,699**	**0**	**0**	**0**	**49,770**	**27,929**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,439**	**5,684**	**6,948**	**9,700**	**0**	**0**	**0**	**49,771**	**27,439**	**0**
Net Inflow (m^3)		0	0	0	0	0	-1	1	0	-1	0	0	0	**-1**	**1**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,830	9,287	11,352	15,847	0	0	0	**81,316**	**44,830**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	26,026	5,392	6,590	9,200	0	0	0	**47,208**	**26,026**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	10,228	4,207	4,669	4,384	0	0	0	**23,488**	**10,228**	**0**
Groundwater	(m^3)	4,881	4,407	4,878	4,720	4,876	4,644	4,701	4,687	4,512	4,644	4,493	4,642	**56,085**	**4,881**	**4,407**
Dike Seepage	(m^3)	10,555	9,533	10,554	10,213	10,553	10,188	10,495	10,488	10,136	10,463	10,126	10,463	**123,767**	**10,555**	**9,533**
Camp Biodisk	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Industrial Sector	(m^3)	0	0	0	0	0	16,032	3,321	4,060	5,667	0	0	0	**29,080**	**16,032**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,370	4,842	5,918	8,261	0	0	0	**42,391**	**23,370**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	7,803	1,617	1,976	2,758	0	0	0	**14,154**	**7,803**	**0**
A53/IVR Att Pond	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Inflow (m^3)		**15,808**	**14,276**	**15,804**	**15,293**	**15,801**	**312,397**	**77,852**	**91,495**	**120,333**	**15,479**	**14,979**	**15,477**	**724,994**	**313,013**	**14,276**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	827	9,404	9,499	3,677	0	0	0	**23,407**	**9,499**	**0**
WTN to Pits	(m^3)	15,808	14,277	15,805	15,293	15,801	311,569	68,447	81,994	116,658	15,479	14,979	15,477	**701,587**	**311,569**	**14,277**
Total Outflow (m^3)		**15,808**	**14,277**	**15,805**	**15,293**	**15,801**	**312,396**	**77,851**	**91,493**	**120,335**	**15,479**	**14,979**	**15,477**	**724,994**	**321,068**	**14,277**
Net Inflow (m^3)		0	-1	-1	0	0	1	1	2	-2	0	0	0	**0**	**2**	**-2**
End-of-Month Volume (m^3)		291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	**3,503,784**	**291,982**	**291,982**

		Year 2033 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	6,263	1,298	1,586	2,214	0	0	0	**11,361**	**6,263**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	11,260	13,432	14,907	13,998	0	0	0	**53,597**	**14,907**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	21,398	0	0	0	0	0	0	**21,398**	**21,398**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	14,986	18,317	25,571	0	0	0	**0**	**25,571**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,308	0	0	0	0	0	0	**48,308**	**48,308**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	144	144	48	0	0	0	**2,401**	**2,065**	**0**
NE Channel	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Whale Tail South	(m^3)	0	0	0	0	0	2,180,000	194,536	288,602	696,529	23,693	0	0	**3,383,360**	**2,180,000**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,866**	**246,599**	**350,519**	**775,162**	**23,693**	**0**	**0**	**3,671,935**	**2,365,622**	**0**
Evaporation	(m^3)	0	0	0	0	0	2,642	30,026	30,330	11,740	0	0	0	**74,738**	**30,330**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	2,356,000	216,573	320,190	763,423	23,693	0	0	**3,679,879**	**2,356,000**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,642**	**246,599**	**350,520**	**775,163**	**23,693**	**0**	**0**	**3,754,617**	**2,386,330**	**0**
Net Inflow	(m^3)	0	0	0	0	0	224	0	-1	-1	0	0	0	**222**	**224**	**-1**
End-of-Month Volume		10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	**121,320,000**	**10,110,000**	**10,110,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,486	0	0	0	0	0	0	**12,486**	**12,486**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
GSP 2	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,061**	**26,101**	**0**
WT Pit (Closure)	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,060**	**25,703**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Direct Precip	(m^3)	0	0	0	0	0	127,327	26,378	32,241	45,010	0	0	0	**230,956**	**127,327**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	1,970	810	899	844	0	0	0	**4,523**	**1,970**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	10,975	2,274	2,779	3,880	0	0	0	**19,908**	**10,975**	**0**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**141,636**	**29,745**	**36,265**	**50,217**	**0**	**0**	**0**	**257,862**	**141,636**	**0**
Evaporation	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**424,590**	**85,613**	**105,134**	**149,232**	**0**	**0**	**0**	**764,569**	**426,260**	**0**
Net Inflow	(m^3)	0	0	0	0	0	-282,954	-55,868	-68,869	-99,016	0	0	0	**-506,708**	**0**	**-282,954**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	77,523	48,363	59,113	82,524	0	0	0	**267,523**	**82,524**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	155,849	0	0	0	0	0	0	**155,849**	**155,849**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	36,817	43,885	48,705	45,733	0	0	0	**175,140**	**48,705**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	69,963	0	0	0	0	0	0	**69,963**	**69,963**	**0**
Lake A18	(m^3)	0	0	0	0	0	948,244	100,607	143,387	300,109	0	0	0	**1,492,347**	**948,244**	**0**
Lake A55	(m^3)	0	0	0	0	0	421,181	59,851	78,992	138,852	0	0	0	**698,876**	**421,181**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,534	13,533	23,568	67,295	0	0	0	**328,930**	**224,534**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,888	11,703	15,293	26,188	0	0	0	**132,072**	**78,888**	**0**
Lake A65	(m^3)	0	0	0	0	0	348,659	24,212	39,824	105,667	0	0	0	**518,362**	**348,659**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,361,658**	**302,154**	**408,882**	**766,368**	**0**	**0**	**0**	**3,839,062**	**2,361,658**	**0**
Groundwater	(m^3)	17,399	15,715	17,399	16,838	17,399	16,843	17,411	17,412	16,853	17,417	16,855	17,417	**204,958**	**17,417**	**15,715**
Camp Use	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	8,637	98,101	99,092	38,358	0	0	0	**244,188**	**99,092**	**0**
IVR Pit	(m^3)	0	0	0	0	0	2,197,000	186,212	292,005	710,796	0	0	0	**3,386,013**	**2,197,000**	**0**
Total Outflow (m^3)		**17,771**	**16,051**	**17,771**	**17,198**	**17,771**	**2,222,840**	**302,096**	**408,881**	**766,367**	**17,789**	**17,215**	**17,789**	**3,839,539**	**2,313,881**	**16,051**
Net Inflow (m^3)		-17,771	-16,051	-17,771	-17,198	-17,771	138,818	58	1	1	-17,789	-17,215	-17,789	**-477**	**138,818**	**-17,789**
End-of-Month Volume (m^3)		3,693,000	3,677,000	3,659,000	3,642,000	3,624,000	5,529,000	5,529,000	5,529,000	3,763,000	3,745,000	3,728,000	3,710,000	**49,828,000**	**5,529,000**	**3,624,000**

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2034 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
IVR Pit	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,768	6,167	7,538	10,523	0	0	0	**53,996**	**29,768**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,167**	**41,094**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit (Closure)	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,166**	**41,095**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,872	0	0	0	0	0	0	**4,872**	**4,872**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,054**	**9,878**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,055**	**9,722**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,131	7,278	8,896	12,419	0	0	0	**63,724**	**35,131**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	35,596	14,940	16,790	16,142	0	0	0	**83,468**	**35,596**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	26,191	5,278	6,337	8,543	0	0	0	**46,349**	**26,191**	**0**
Groundwater	(m^3)	5,270	4,760	5,270	5,100	5,270	5,100	5,534	6,711	8,704	10,810	10,550	10,990	**84,069**	**10,990**	**4,760**
GSP1	(m^3)	0	0	0	0	0	15,053	3,119	3,812	5,321	0	0	0	**27,305**	**15,053**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
North Sector	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Whale Tail Att Pond	(m^3)	15,476	13,977	15,474	14,973	15,471	311,218	68,993	81,498	115,001	18,353	14,477	14,954	**699,865**	**311,218**	**13,977**
IVR Pit	(m^3)	0	0	0	0	0	2,356,000	216,560	322,230	763,399	23,693	0	0	**3,681,882**	**2,356,000**	**0**
Drawdown from Whale Tail North	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**20,746**	**18,737**	**20,744**	**20,073**	**20,741**	**2,819,714**	**327,745**	**453,514**	**938,936**	**52,856**	**25,027**	**25,944**	**4,744,777**	**2,819,714**	**18,737**
Evaporation	(m^3)	0	0	0	0	0	2,879	33,398	34,160	13,539	0	0	0	**83,976**	**34,160**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,879**	**33,398**	**34,160**	**13,539**	**0**	**0**	**0**	**83,976**	**34,160**	**0**
Net Inflow (m^3)		20,746	18,737	20,744	20,073	20,741	2,816,835	294,347	419,354	925,397	52,856	25,027	25,944	**4,660,801**	**2,816,835**	**18,737**
End-of-Month Volume (m^3)		27,070,000	27,090,000	27,110,000	27,130,000	27,150,000	29,970,000	30,260,000	30,680,000	31,610,000	31,660,000	31,690,000	31,710,000	**353,130,000**	**31,710,000**	**27,070,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,391	0	0	0	0	0	0	**15,391**	**15,391**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	4,391	910	1,112	1,552	0	0	0	**7,965**	**4,391**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,438**	**5,685**	**6,948**	**9,699**	**0**	**0**	**0**	**49,770**	**27,929**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,439**	**5,684**	**6,948**	**9,700**	**0**	**0**	**0**	**49,771**	**27,439**	**0**
Net Inflow (m^3)		0	0	0	0	0	-1	1	0	-1	0	0	0	**-1**	**1**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,830	9,287	11,352	15,847	0	0	0	**81,316**	**44,830**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	26,026	5,392	6,590	9,200	0	0	0	**47,208**	**26,026**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	10,228	4,207	4,669	4,384	0	0	0	**23,488**	**10,228**	**0**
Groundwater	(m^3)	4,642	4,192	4,640	4,490	4,639	4,445	4,524	4,469	4,221	4,277	4,135	4,269	**52,943**	**4,642**	**4,135**
Dike Seepage	(m^3)	10,462	9,449	10,461	10,124	10,461	10,098	10,399	10,380	10,010	10,316	9,981	10,313	**122,454**	**10,462**	**9,449**
Camp Biodisk	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Industrial Sector	(m^3)	0	0	0	0	0	16,032	3,321	4,060	5,667	0	0	0	**29,080**	**16,032**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,370	4,842	5,918	8,261	0	0	0	**42,391**	**23,370**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	7,803	1,617	1,976	2,758	0	0	0	**14,154**	**7,803**	**0**
A53/IVR Att Pond	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Inflow (m^3)		**15,476**	**13,977**	**15,473**	**14,974**	**15,472**	**312,108**	**77,579**	**91,169**	**119,916**	**14,965**	**14,476**	**14,954**	**720,539**	**312,681**	**13,920**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	827	9,404	9,499	3,677	0	0	0	**23,407**	**9,499**	**0**
WTN to Pits	(m^3)	15,476	13,977	15,474	14,973	15,471	311,281	68,174	81,669	116,241	14,965	14,476	14,953	**697,130**	**311,281**	**13,977**
Total Outflow (m^3)		**15,476**	**13,977**	**15,474**	**14,973**	**15,471**	**312,108**	**77,578**	**91,168**	**119,918**	**14,965**	**14,476**	**14,953**	**720,537**	**320,780**	**13,977**
Net Inflow (m^3)		0	0	-1	1	1	0	1	1	-2	0	0	1	**2**	**1**	**-2**
End-of-Month Volume (m^3)		291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	**3,503,784**	**291,982**	**291,982**

		Year 2034 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	6,263	1,298	1,586	2,214	0	0	0	**11,361**	**6,263**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	11,260	13,432	14,907	13,998	0	0	0	**53,597**	**14,907**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	21,398	0	0	0	0	0	0	**21,398**	**21,398**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	14,986	18,317	25,571	0	0	0	**0**	**25,571**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,308	0	0	0	0	0	0	**48,308**	**48,308**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	144	144	48	0	0	0	**2,401**	**2,065**	**0**
NE Channel	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Whale Tail South	(m^3)	0	0	0	0	0	2,180,000	194,523	290,643	696,506	23,693	0	0	**3,385,365**	**2,180,000**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,866**	**246,586**	**352,560**	**775,139**	**23,693**	**0**	**0**	**3,673,940**	**2,365,622**	**0**
Evaporation	(m^3)	0	0	0	0	0	2,642	30,026	30,330	11,740	0	0	0	**74,738**	**30,330**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	2,356,000	216,560	322,230	763,399	23,693	0	0	**3,681,882**	**2,356,000**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,642**	**246,586**	**352,560**	**775,139**	**23,693**	**0**	**0**	**3,756,620**	**2,386,330**	**0**
Net Inflow	(m^3)	0	0	0	0	0	224	0	0	0	0	0	0	**224**	**224**	**0**
End-of-Month Volume		10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	**121,320,000**	**10,110,000**	**10,110,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,486	0	0	0	0	0	0	**12,486**	**12,486**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
GSP 2	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,061**	**26,101**	**0**
WT Pit (Closure)	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,060**	**25,703**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Direct Precip	(m^3)	0	0	0	0	0	127,327	26,378	32,241	45,010	0	0	0	**230,956**	**127,327**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	1,970	810	899	844	0	0	0	**4,523**	**1,970**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	10,975	2,274	2,779	3,880	0	0	0	**19,908**	**10,975**	**0**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**141,636**	**29,745**	**36,265**	**50,217**	**0**	**0**	**0**	**257,862**	**141,636**	**0**
Evaporation	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**424,590**	**85,613**	**105,134**	**149,232**	**0**	**0**	**0**	**764,569**	**426,260**	**0**
Net Inflow	(m^3)	0	0	0	0	0	-282,954	-55,868	-68,869	-99,016	0	0	0	**-506,708**	**0**	**-282,954**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	77,523	48,364	59,113	82,524	0	0	0	**267,524**	**82,524**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	155,849	0	0	0	0	0	0	**155,849**	**155,849**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	36,817	43,884	48,705	45,733	0	0	0	**175,139**	**48,705**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	69,963	0	0	0	0	0	0	**69,963**	**69,963**	**0**
Lake A18	(m^3)	0	0	0	0	0	948,244	100,607	143,387	300,109	0	0	0	**1,492,347**	**948,244**	**0**
Lake A55	(m^3)	0	0	0	0	0	421,181	59,851	78,992	138,852	0	0	0	**698,876**	**421,181**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,534	13,533	23,568	67,295	0	0	0	**328,930**	**224,534**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,888	11,703	15,293	26,188	0	0	0	**132,072**	**78,888**	**0**
Lake A65	(m^3)	0	0	0	0	0	348,659	24,212	39,824	105,667	0	0	0	**518,362**	**348,659**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,361,658**	**302,154**	**408,882**	**766,368**	**0**	**0**	**0**	**3,839,062**	**2,361,658**	**0**
Groundwater	(m^3)	17,417	15,732	17,417	16,856	17,417	16,863	17,440	17,444	16,887	17,455	16,892	17,455	**205,275**	**17,455**	**15,732**
Camp Use	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	8,637	98,101	99,092	38,358	0	0	0	**244,188**	**99,092**	**0**
IVR Pit	(m^3)	0	0	0	0	0	2,196,000	186,288	291,974	710,762	0	0	0	**3,385,024**	**2,196,000**	**0**
Total Outflow (m^3)		**17,789**	**16,068**	**17,789**	**17,216**	**17,789**	**2,221,860**	**302,201**	**408,882**	**766,367**	**17,827**	**17,252**	**17,827**	**3,838,867**	**2,312,919**	**16,068**
Net Inflow (m^3)		-17,789	-16,068	-17,789	-17,216	-17,789	139,798	-47	0	1	-17,827	-17,252	-17,827	**195**	**139,798**	**-17,827**
End-of-Month Volume (m^3)		3,693,000	3,677,000	3,659,000	3,642,000	3,624,000	5,529,000	5,529,000	5,529,000	3,763,000	3,745,000	3,728,000	3,710,000	**49,828,000**	**5,529,000**	**3,624,000**

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2035 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
IVR Pit	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,768	6,167	7,538	10,523	0	0	0	**53,996**	**29,768**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,167**	**41,094**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit (Closure)	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,166**	**41,095**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,872	0	0	0	0	0	0	**4,872**	**4,872**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,054**	**9,878**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,055**	**9,722**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,131	7,278	8,896	12,419	0	0	0	**63,724**	**35,131**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	39,877	16,769	18,672	17,680	0	0	0	**92,998**	**39,877**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	21,991	4,374	5,313	7,298	0	0	0	**38,976**	**21,991**	**0**
Groundwater	(m^3)	11,080	10,085	11,252	10,976	11,432	15,393	21,572	22,779	24,381	27,075	26,305	27,285	**219,615**	**27,285**	**10,085**
GSP1	(m^3)	0	0	0	0	0	15,053	3,119	3,812	5,321	0	0	0	**27,305**	**15,053**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
North Sector	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Whale Tail Att Pond	(m^3)	14,948	13,497	14,937	14,450	14,926	309,184	62,528	73,732	105,242	6,103	2,499	2,462	**634,508**	**309,184**	**2,462**
IVR Pit	(m^3)	0	0	0	0	0	2,356,000	216,543	320,121	763,330	23,690	0	0	**3,679,684**	**2,356,000**	**0**
Drawdown from Whale Tail North	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**26,028**	**23,582**	**26,189**	**25,426**	**26,358**	**2,828,054**	**338,226**	**460,565**	**945,078**	**56,868**	**28,804**	**29,747**	**4,814,925**	**2,828,054**	**23,582**
Evaporation	(m^3)	0	0	0	0	0	3,225	37,485	37,989	14,829	0	0	0	**93,528**	**37,989**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**3,225**	**37,485**	**37,989**	**14,829**	**0**	**0**	**0**	**93,528**	**37,989**	**0**
Net Inflow (m^3)		26,028	23,582	26,189	25,426	26,358	2,824,829	300,741	422,576	930,249	56,868	28,804	29,747	**4,721,397**	**2,824,829**	**23,582**
End-of-Month Volume (m^3)		31,740,000	31,760,000	31,790,000	31,810,000	31,840,000	34,670,000	34,970,000	35,390,000	36,320,000	36,380,000	36,400,000	36,430,000	**409,500,000**	**36,430,000**	**31,740,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,391	0	0	0	0	0	0	**15,391**	**15,391**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	4,391	910	1,112	1,552	0	0	0	**7,965**	**4,391**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,438**	**5,685**	**6,948**	**9,699**	**0**	**0**	**0**	**49,770**	**27,929**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,439**	**5,684**	**6,948**	**9,700**	**0**	**0**	**0**	**49,771**	**27,439**	**0**
Net Inflow (m^3)		0	0	0	0	0	-1	1	0	-1	0	0	0	**-1**	**1**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,830	9,287	11,352	15,847	0	0	0	**81,316**	**44,830**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	26,026	5,392	6,590	9,200	0	0	0	**47,208**	**26,026**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	10,228	4,207	4,669	4,384	0	0	0	**23,488**	**10,228**	**0**
Groundwater	(m^3)	4,264	3,848	4,256	4,115	4,248	3,908	3,774	3,708	3,401	3,361	3,244	3,344	**45,471**	**4,264**	**3,244**
Dike Seepage	(m^3)	10,311	9,312	10,309	9,975	10,306	9,905	10,147	10,114	9,635	9,829	9,505	9,815	**119,163**	**10,311**	**9,312**
Camp Biodisk	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Industrial Sector	(m^3)	0	0	0	0	0	16,032	3,321	4,060	5,667	0	0	0	**29,080**	**16,032**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,370	4,842	5,918	8,261	0	0	0	**42,391**	**23,370**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	7,803	1,617	1,976	2,758	0	0	0	**14,154**	**7,803**	**0**
A53/IVR Att Pond	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Inflow (m^3)		**14,947**	**13,496**	**14,937**	**14,450**	**14,926**	**311,378**	**76,577**	**90,142**	**118,721**	**13,562**	**13,109**	**13,531**	**709,776**	**312,152**	**12,892**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	827	9,404	9,499	3,677	0	0	0	**23,407**	**9,499**	**0**
WTN to Pits	(m^3)	14,948	13,496	14,937	14,450	14,926	309,078	61,684	74,124	106,388	2,703	2,495	2,458	**631,687**	**309,078**	**2,458**
Total Outflow (m^3)		**14,948**	**13,496**	**14,937**	**14,450**	**14,926**	**311,379**	**76,577**	**90,141**	**118,723**	**13,562**	**13,109**	**13,530**	**709,778**	**329,649**	**2,458**
Net Inflow (m^3)		-1	0	0	0	0	-1	0	1	-2	0	0	1	**-2**	**1**	**-2**
End-of-Month Volume (m^3)		291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	**3,503,784**	**291,982**	**291,982**

		Year 2035 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	6,263	1,298	1,586	2,214	0	0	0	**11,361**	**6,263**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	11,260	13,432	14,907	13,998	0	0	0	**53,597**	**14,907**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	21,398	0	0	0	0	0	0	**21,398**	**21,398**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	14,986	18,317	25,571	0	0	0	**0**	**25,571**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,308	0	0	0	0	0	0	**48,308**	**48,308**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	144	144	48	0	0	0	**2,401**	**2,065**	**0**
NE Channel	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Whale Tail South	(m^3)	0	0	0	0	0	2,180,000	194,506	288,534	696,437	23,690	0	0	**3,383,167**	**2,180,000**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,866**	**246,569**	**350,451**	**775,070**	**23,690**	**0**	**0**	**3,671,742**	**2,365,622**	**0**
Evaporation	(m^3)	0	0	0	0	0	2,642	30,026	30,330	11,740	0	0	0	**74,738**	**30,330**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	2,356,000	216,543	320,121	763,330	23,690	0	0	**3,679,684**	**2,356,000**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,642**	**246,569**	**350,451**	**775,070**	**23,690**	**0**	**0**	**3,754,422**	**2,386,330**	**0**
Net Inflow	(m^3)	0	0	0	0	0	224	0	0	0	0	0	0	**224**	**224**	**0**
End-of-Month Volume		10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	**121,320,000**	**10,110,000**	**10,110,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,486	0	0	0	0	0	0	**12,486**	**12,486**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
GSP 2	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,061**	**26,101**	**0**
WT Pit (Closure)	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,060**	**25,703**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Direct Precip	(m^3)	0	0	0	0	0	127,327	26,378	32,241	45,010	0	0	0	**230,956**	**127,327**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	1,970	810	899	844	0	0	0	**4,523**	**1,970**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	10,975	2,274	2,779	3,880	0	0	0	**19,908**	**10,975**	**0**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**141,636**	**29,745**	**36,265**	**50,217**	**0**	**0**	**0**	**257,862**	**141,636**	**0**
Evaporation	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**424,590**	**85,613**	**105,134**	**149,232**	**0**	**0**	**0**	**764,569**	**426,260**	**0**
Net Inflow	(m^3)	0	0	0	0	0	-282,954	-55,868	-68,869	-99,016	0	0	0	**-506,708**	**0**	**-282,954**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	77,523	48,363	59,113	82,524	0	0	0	**267,523**	**82,524**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	155,848	0	0	0	0	0	0	**155,848**	**155,848**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	36,817	43,885	48,705	45,733	0	0	0	**175,140**	**48,705**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	69,963	0	0	0	0	0	0	**69,963**	**69,963**	**0**
Lake A18	(m^3)	0	0	0	0	0	948,244	100,607	143,387	300,109	0	0	0	**1,492,347**	**948,244**	**0**
Lake A55	(m^3)	0	0	0	0	0	421,181	59,851	78,992	138,852	0	0	0	**698,876**	**421,181**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,534	13,533	23,568	67,295	0	0	0	**328,930**	**224,534**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,888	11,703	15,293	26,188	0	0	0	**132,072**	**78,888**	**0**
Lake A65	(m^3)	0	0	0	0	0	348,659	24,212	39,824	105,667	0	0	0	**518,362**	**348,659**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,361,657**	**302,154**	**408,882**	**766,368**	**0**	**0**	**0**	**3,839,061**	**2,361,657**	**0**
Groundwater	(m^3)	17,456	15,767	17,456	16,893	17,457	16,917	17,545	17,561	17,025	17,617	17,050	17,620	**206,364**	**17,620**	**15,767**
Camp Use	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	8,637	98,101	99,092	38,358	0	0	0	**244,188**	**99,092**	**0**
IVR Pit	(m^3)	0	0	0	0	0	2,196,000	186,090	291,856	710,624	0	0	0	**3,384,570**	**2,196,000**	**0**
Total Outflow (m^3)		**17,828**	**16,103**	**17,828**	**17,253**	**17,829**	**2,221,914**	**302,108**	**408,881**	**766,367**	**17,989**	**17,410**	**17,992**	**3,839,502**	**2,313,084**	**16,103**
Net Inflow (m^3)		-17,828	-16,103	-17,828	-17,253	-17,829	139,743	46	1	1	-17,989	-17,410	-17,992	**-441**	**139,743**	**-17,992**
End-of-Month Volume (m^3)		3,692,000	3,676,000	3,659,000	3,641,000	3,623,000	5,529,000	5,529,000	5,529,000	3,763,000	3,745,000	3,728,000	3,710,000	**49,824,000**	**5,529,000**	**3,623,000**

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2036 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
IVR Pit	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,774	6,167	7,538	10,523	0	0	0	**54,002**	**29,774**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,100**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,173**	**41,100**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit (Closure)	(m^3)	0	0	0	0	0	41,100	6,956	8,327	10,786	0	0	0	**67,169**	**41,100**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,100**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,172**	**41,101**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,873	0	0	0	0	0	0	**4,873**	**4,873**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,723**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,055**	**9,879**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	9,723	1,681	2,017	2,635	0	0	0	**16,056**	**9,723**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,723**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,056**	**9,723**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,138	7,278	8,896	12,419	0	0	0	**63,731**	**35,138**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	43,749	18,670	20,779	19,614	0	0	0	**102,812**	**43,749**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	18,204	3,435	4,166	5,733	0	0	0	**31,538**	**18,204**	**0**
Groundwater	(m^3)	27,390	25,717	27,592	26,802	27,798	31,245	35,401	34,886	32,815	33,126	32,010	33,028	**367,810**	**35,401**	**25,717**
GSP1	(m^3)	0	0	0	0	0	15,056	3,119	3,812	5,321	0	0	0	**27,308**	**15,056**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,707	4,362	5,223	6,772	0	0	0	**42,064**	**25,707**	**0**
North Sector	(m^3)	0	0	0	0	0	9,723	1,681	2,017	2,635	0	0	0	**16,056**	**9,723**	**0**
Whale Tail Att Pond	(m^3)	2,340	2,078	2,103	1,919	1,863	293,383	46,378	59,109	94,485	3,210	0	0	**506,868**	**293,383**	**0**
IVR Pit	(m^3)	0	0	0	0	0	2,357,000	216,366	319,945	763,190	23,686	0	0	**3,680,187**	**2,357,000**	**0**
Drawdown from Whale Tail North	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**29,730**	**27,795**	**29,695**	**28,721**	**29,661**	**2,829,205**	**336,690**	**458,833**	**942,984**	**60,022**	**32,010**	**33,028**	**4,838,374**	**2,829,205**	**27,795**
Evaporation	(m^3)	0	0	0	0	0	3,538	41,735	42,275	16,451	0	0	0	**103,999**	**42,275**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**3,538**	**41,735**	**42,275**	**16,451**	**0**	**0**	**0**	**103,999**	**42,275**	**0**
Net Inflow (m^3)		29,730	27,795	29,695	28,721	29,661	2,825,667	294,955	416,558	926,533	60,022	32,010	33,028	**4,734,375**	**2,825,667**	**27,795**
End-of-Month Volume (m^3)		36,460,000	36,490,000	36,520,000	36,550,000	36,580,000	39,400,000	39,700,000	40,120,000	41,040,000	41,100,000	41,140,000	41,170,000	**466,270,000**	**41,170,000**	**36,460,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,396	0	0	0	0	0	0	**15,396**	**15,396**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	4,392	910	1,112	1,552	0	0	0	**7,966**	**4,392**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,444**	**5,685**	**6,948**	**9,699**	**0**	**0**	**0**	**49,776**	**27,935**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	27,444	5,684	6,948	9,700	0	0	0	**49,776**	**27,444**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,444**	**5,684**	**6,948**	**9,700**	**0**	**0**	**0**	**49,776**	**27,444**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	0	-1	0	0	0	**0**	**1**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,840	9,287	11,352	15,847	0	0	0	**81,326**	**44,840**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	26,031	5,392	6,590	9,200	0	0	0	**47,213**	**26,031**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	10,230	4,207	4,669	4,384	0	0	0	**23,490**	**10,230**	**0**
Groundwater	(m^3)	3,335	3,112	3,319	3,203	3,302	2,838	2,624	2,632	2,563	2,662	2,577	2,663	**34,830**	**3,335**	**2,563**
Dike Seepage	(m^3)	9,808	9,168	9,794	9,471	9,780	9,168	9,211	9,214	8,922	9,224	8,927	9,224	**111,911**	**9,808**	**8,922**
Camp Biodisk	(m^3)	372	348	372	360	372	360	372	372	360	372	360	372	**4,392**	**372**	**348**
Industrial Sector	(m^3)	0	0	0	0	0	16,035	3,321	4,060	5,667	0	0	0	**29,083**	**16,035**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,375	4,842	5,918	8,261	0	0	0	**42,396**	**23,375**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	7,805	1,617	1,976	2,758	0	0	0	**14,156**	**7,805**	**0**
A53/IVR Att Pond	(m^3)	0	0	0	0	0	141,506	27,934	34,435	49,508	0	0	0	**253,383**	**141,506**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	27,444	5,684	6,948	9,700	0	0	0	**49,776**	**27,444**	**0**
Total Inflow (m^3)		**13,515**	**12,628**	**13,485**	**13,034**	**13,454**	**309,632**	**74,491**	**88,166**	**117,170**	**12,258**	**11,864**	**12,259**	**691,956**	**310,781**	**11,833**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	827	9,404	9,499	3,677	0	0	0	**23,407**	**9,499**	**0**
WTN to Pits	(m^3)	2,336	2,075	2,100	1,916	1,859	293,161	45,572	59,562	95,759	0	0	0	**504,340**	**293,161**	**0**
Total Outflow (m^3)		**13,515**	**12,629**	**13,485**	**13,035**	**13,453**	**309,632**	**74,491**	**88,166**	**117,172**	**17,705**	**17,095**	**17,627**	**708,005**	**322,175**	**10,554**
Net Inflow (m^3)		0	-1	0	-1	1	0	0	0	-2	-5,447	-5,231	-5,368	**-16,049**	**1**	**-5,447**
End-of-Month Volume (m^3)		291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	286,535	281,303	275,937	**3,471,613**	**291,982**	**275,937**

		Year 2036 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	6,264	1,298	1,586	2,214	0	0	0	**11,362**	**6,264**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	11,260	13,432	14,907	13,998	0	0	0	**53,597**	**14,907**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	21,405	0	0	0	0	0	0	**21,405**	**21,405**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	14,986	18,317	25,571	0	0	0	**0**	**25,571**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,323	0	0	0	0	0	0	**48,323**	**48,323**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	144	144	48	0	0	0	**2,401**	**2,065**	**0**
NE Channel	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Whale Tail South	(m^3)	0	0	0	0	0	2,180,000	194,329	288,357	696,296	23,686	0	0	**3,382,668**	**2,180,000**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	41,100	6,956	8,327	10,786	0	0	0	**67,169**	**41,100**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,895**	**246,392**	**350,274**	**774,929**	**23,686**	**0**	**0**	**3,671,272**	**2,365,651**	**0**
Evaporation	(m^3)	0	0	0	0	0	2,642	30,026	30,330	11,740	0	0	0	**74,738**	**30,330**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	2,357,000	216,366	319,945	763,190	23,686	0	0	**3,680,187**	**2,357,000**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,359,642**	**246,392**	**350,275**	**774,930**	**23,686**	**0**	**0**	**3,754,925**	**2,387,330**	**0**
Net Inflow	(m^3)	0	0	0	0	0	-747	0	-1	-1	0	0	0	**-749**	**0**	**-747**
End-of-Month Volume		10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	**121,320,000**	**10,110,000**	**10,110,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,490	0	0	0	0	0	0	**12,490**	**12,490**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
GSP 2	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,707**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,065**	**26,105**	**0**
WT Pit (Closure)	(m^3)	0	0	0	0	0	25,707	4,362	5,223	6,772	0	0	0	**42,064**	**25,707**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,707**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,064**	**25,707**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Direct Precip	(m^3)	0	0	0	0	0	127,354	26,378	32,241	45,010	0	0	0	**230,983**	**127,354**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	1,970	810	899	844	0	0	0	**4,523**	**1,970**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	10,977	2,274	2,779	3,880	0	0	0	**19,910**	**10,977**	**0**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**141,666**	**29,745**	**36,265**	**50,217**	**0**	**0**	**0**	**257,892**	**141,666**	**0**
Evaporation	(m^3)	0	0	0	0	0	141,506	27,934	34,435	49,508	0	0	0	**253,383**	**141,506**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	141,506	27,934	34,435	49,508	0	0	0	**253,383**	**141,506**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**424,677**	**85,613**	**105,134**	**149,232**	**0**	**0**	**0**	**764,656**	**426,347**	**0**
Net Inflow	(m^3)	0	0	0	0	0	-283,011	-55,868	-68,869	-99,016	0	0	0	**-506,765**	**0**	**-283,011**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	77,523	48,363	59,113	82,524	0	0	0	**267,523**	**82,524**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	155,896	0	0	0	0	0	0	**155,896**	**155,896**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	36,817	43,885	48,705	45,733	0	0	0	**175,140**	**48,705**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	69,986	0	0	0	0	0	0	**69,986**	**69,986**	**0**
Lake A18	(m^3)	0	0	0	0	0	948,440	100,607	143,387	300,109	0	0	0	**1,492,543**	**948,440**	**0**
Lake A55	(m^3)	0	0	0	0	0	421,268	59,851	78,992	138,852	0	0	0	**698,963**	**421,268**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,581	13,533	23,568	67,295	0	0	0	**328,977**	**224,581**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,904	11,703	15,293	26,188	0	0	0	**132,088**	**78,904**	**0**
Lake A65	(m^3)	0	0	0	0	0	348,732	24,212	39,824	105,667	0	0	0	**518,435**	**348,732**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,362,147**	**302,154**	**408,882**	**766,368**	**0**	**0**	**0**	**3,839,551**	**2,362,147**	**0**
Groundwater	(m^3)	17,622	16,486	17,625	17,058	17,628	17,077	17,647	17,646	17,076	17,644	17,075	17,644	**208,228**	**17,647**	**16,486**
Camp Use	(m^3)	372	348	372	360	372	360	372	372	360	372	360	372	**4,392**	**372**	**348**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	8,637	98,101	99,092	38,358	0	0	0	**244,188**	**99,092**	**0**
IVR Pit	(m^3)	0	0	0	0	0	2,194,000	186,003	291,771	710,573	0	0	0	**3,382,347**	**2,194,000**	**0**
Total Outflow (m^3)		**17,994**	**16,834**	**17,997**	**17,418**	**18,000**	**2,220,074**	**302,123**	**408,881**	**766,367**	**18,016**	**17,435**	**18,016**	**3,839,155**	**2,311,111**	**16,834**
Net Inflow (m^3)		-17,994	-16,834	-17,997	-17,418	-18,000	142,073	31	1	1	-18,016	-17,435	-18,016	**396**	**142,073**	**-18,016**
End-of-Month Volume (m^3)		3,692,000	3,675,000	3,657,000	3,640,000	3,622,000	5,529,000	5,529,000	5,529,000	3,763,000	3,745,000	3,728,000	3,710,000	**49,819,000**	**5,529,000**	**3,622,000**

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2037 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
IVR Pit	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,768	6,167	7,538	10,523	0	0	0	**53,996**	**29,768**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,167**	**41,094**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit (Closure)	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,166**	**41,095**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,872	0	0	0	0	0	0	**4,872**	**4,872**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,054**	**9,878**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,055**	**9,722**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,131	7,278	8,896	12,419	0	0	0	**63,724**	**35,131**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	46,482	19,345	21,522	20,300	0	0	0	**107,649**	**46,482**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	15,511	3,101	3,762	5,178	0	0	0	**27,552**	**15,511**	**0**
Groundwater	(m^3)	32,979	29,746	32,886	31,779	32,791	29,933	28,512	27,587	23,906	22,399	21,570	22,182	**336,270**	**32,979**	**21,570**
GSP1	(m^3)	0	0	0	0	0	15,053	3,119	3,812	5,321	0	0	0	**27,305**	**15,053**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
North Sector	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	244,171	59,371	65,098	101,954	7,125	3,718	3,937	**485,374**	**244,171**	**0**
IVR Pit	(m^3)	0	0	0	0	0	2,356,000	202,115	319,956	763,217	23,687	0	0	**3,664,975**	**2,356,000**	**0**
Drawdown from Whale Tail North	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**32,979**	**29,746**	**32,886**	**31,779**	**32,791**	**2,777,706**	**328,884**	**457,873**	**941,702**	**53,211**	**25,288**	**26,119**	**4,770,964**	**2,777,706**	**25,288**
Evaporation	(m^3)	0	0	0	0	0	3,760	43,245	43,787	17,027	0	0	0	**107,819**	**43,787**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**3,760**	**43,245**	**43,787**	**17,027**	**0**	**0**	**0**	**107,819**	**43,787**	**0**
Net Inflow (m^3)		32,979	29,746	32,886	31,779	32,791	2,773,946	285,639	414,086	924,675	53,211	25,288	26,119	**4,663,145**	**2,773,946**	**25,288**
End-of-Month Volume (m^3)		41,200,000	41,230,000	41,260,000	41,300,000	41,330,000	44,100,000	44,390,000	44,800,000	45,730,000	45,780,000	45,810,000	45,830,000	**522,760,000**	**45,830,000**	**41,200,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,391	0	0	0	0	0	0	**15,391**	**15,391**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	4,391	910	1,112	1,552	0	0	0	**7,965**	**4,391**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,438**	**5,685**	**6,948**	**9,699**	**0**	**0**	**0**	**49,770**	**27,929**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,439**	**5,684**	**6,948**	**9,700**	**0**	**0**	**0**	**49,771**	**27,439**	**0**
Net Inflow (m^3)		0	0	0	0	0	-1	1	0	-1	0	0	0	**-1**	**1**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,830	9,287	11,352	15,847	0	0	0	**81,316**	**44,830**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	26,207	5,392	6,590	9,200	0	0	0	**47,389**	**26,207**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	10,044	4,207	4,669	4,384	0	0	0	**23,304**	**10,044**	**0**
Groundwater	(m^3)	2,664	2,407	2,666	2,581	2,667	2,612	2,739	2,776	2,824	3,033	2,940	3,044	**32,953**	**3,044**	**2,407**
Dike Seepage	(m^3)	9,225	8,332	9,225	8,928	9,226	8,938	9,250	9,272	9,060	9,434	9,133	9,441	**109,464**	**9,441**	**8,332**
Camp Biodisk	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Industrial Sector	(m^3)	0	0	0	0	0	16,032	3,321	4,060	5,667	0	0	0	**29,080**	**16,032**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,370	4,842	5,918	8,261	0	0	0	**42,391**	**23,370**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	7,803	1,617	1,976	2,758	0	0	0	**14,154**	**7,803**	**0**
A53/IVR Att Pond	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Inflow (m^3)		**12,261**	**11,075**	**12,263**	**11,869**	**12,265**	**309,112**	**74,645**	**88,368**	**117,569**	**12,839**	**12,433**	**12,857**	**687,556**	**310,059**	**11,075**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	812	9,404	9,499	3,677	0	0	0	**23,392**	**9,499**	**0**
WTN to Pits	(m^3)	0	0	0	0	0	251,242	51,209	65,579	103,291	3,747	3,721	3,940	**482,729**	**251,242**	**0**
Total Outflow (m^3)		**17,588**	**15,852**	**17,514**	**16,912**	**17,437**	**267,497**	**74,646**	**88,367**	**117,570**	**12,838**	**12,433**	**12,856**	**671,510**	**278,329**	**8,712**
Net Inflow (m^3)		-5,327	-4,777	-5,251	-5,043	-5,172	41,615	-1	1	-1	1	0	1	**16,046**	**41,615**	**-5,327**
End-of-Month Volume (m^3)		270,610	265,833	260,582	255,539	250,367	291,982	291,982	291,982	291,982	291,982	291,982	291,982	**3,346,805**	**291,982**	**250,367**

		Year 2037 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	6,263	1,298	1,586	2,214	0	0	0	**11,361**	**6,263**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	11,260	13,432	14,907	13,998	0	0	0	**53,597**	**14,907**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	21,398	0	0	0	0	0	0	**21,398**	**21,398**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	14,986	18,317	25,571	0	0	0	**0**	**25,571**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,308	0	0	0	0	0	0	**48,308**	**48,308**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	144	144	48	0	0	0	**2,401**	**2,065**	**0**
NE Channel	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Whale Tail South	(m^3)	0	0	0	0	0	2,180,000	180,078	288,369	696,324	23,687	0	0	**3,368,458**	**2,180,000**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,866**	**232,141**	**350,286**	**774,957**	**23,687**	**0**	**0**	**3,657,033**	**2,365,622**	**0**
Evaporation	(m^3)	0	0	0	0	0	2,642	30,026	30,330	11,740	0	0	0	**74,738**	**30,330**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	2,356,000	202,115	319,956	763,217	23,687	0	0	**3,664,975**	**2,356,000**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,642**	**232,141**	**350,286**	**774,957**	**23,687**	**0**	**0**	**3,739,713**	**2,386,330**	**0**
Net Inflow	(m^3)	0	0	0	0	0	224	0	0	0	0	0	0	**224**	**224**	**0**
End-of-Month Volume		10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	**121,320,000**	**10,110,000**	**10,110,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,486	0	0	0	0	0	0	**12,486**	**12,486**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
GSP 2	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,061**	**26,101**	**0**
WT Pit (Closure)	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,060**	**25,703**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Direct Precip	(m^3)	0	0	0	0	0	127,327	26,378	32,241	45,010	0	0	0	**230,956**	**127,327**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	1,970	810	899	844	0	0	0	**4,523**	**1,970**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	10,975	2,274	2,779	3,880	0	0	0	**19,908**	**10,975**	**0**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**141,636**	**29,745**	**36,265**	**50,217**	**0**	**0**	**0**	**257,862**	**141,636**	**0**
Evaporation	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**424,590**	**85,613**	**105,134**	**149,232**	**0**	**0**	**0**	**764,569**	**426,260**	**0**
Net Inflow	(m^3)	0	0	0	0	0	-282,954	-55,868	-68,869	-99,016	0	0	0	**-506,708**	**0**	**-282,954**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	77,523	48,364	59,113	82,524	0	0	0	**267,524**	**82,524**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	155,848	0	0	0	0	0	0	**155,848**	**155,848**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	36,817	43,884	48,705	45,733	0	0	0	**175,139**	**48,705**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	69,964	0	0	0	0	0	0	**69,964**	**69,964**	**0**
Lake A18	(m^3)	0	0	0	0	0	948,244	100,607	143,387	300,109	0	0	0	**1,492,347**	**948,244**	**0**
Lake A55	(m^3)	0	0	0	0	0	421,181	59,851	78,992	138,852	0	0	0	**698,876**	**421,181**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,534	13,533	23,568	67,295	0	0	0	**328,930**	**224,534**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,888	11,703	15,293	26,188	0	0	0	**132,072**	**78,888**	**0**
Lake A65	(m^3)	0	0	0	0	0	348,659	24,212	39,824	105,667	0	0	0	**518,362**	**348,659**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,361,658**	**302,154**	**408,882**	**766,368**	**0**	**0**	**0**	**3,839,062**	**2,361,658**	**0**
Groundwater	(m^3)	17,644	15,937	17,644	17,075	17,644	17,064	17,596	17,587	17,003	17,556	16,989	17,555	**207,294**	**17,644**	**15,937**
Camp Use	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	8,637	98,101	99,092	38,358	0	0	0	**244,188**	**99,092**	**0**
IVR Pit	(m^3)	0	0	0	0	0	2,194,000	186,125	291,830	710,646	0	0	0	**3,382,601**	**2,194,000**	**0**
Total Outflow (m^3)		**18,016**	**16,273**	**18,016**	**17,435**	**18,016**	**2,220,061**	**302,194**	**408,881**	**766,367**	**17,928**	**17,349**	**17,927**	**3,838,463**	**2,311,108**	**16,273**
Net Inflow (m^3)		-18,016	-16,273	-18,016	-17,435	-18,016	141,597	-40	1	1	-17,928	-17,349	-17,927	**599**	**141,597**	**-18,016**
End-of-Month Volume (m^3)		3,692,000	3,675,000	3,657,000	3,640,000	3,622,000	5,529,000	5,529,000	5,529,000	3,763,000	3,745,000	3,728,000	3,710,000	**49,819,000**	**5,529,000**	**3,622,000**

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2038 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
IVR Pit	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,768	6,167	7,538	10,523	0	0	0	**53,996**	**29,768**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,167**	**41,094**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit (Closure)	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,166**	**41,095**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,872	0	0	0	0	0	0	**4,872**	**4,872**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,054**	**9,878**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,055**	**9,722**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,131	7,278	8,896	12,419	0	0	0	**63,724**	**35,131**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	49,319	21,092	23,590	22,328	0	0	0	**116,329**	**49,319**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	12,727	2,237	2,636	3,537	0	0	0	**21,137**	**12,727**	**0**
Groundwater	(m^3)	22,074	19,844	21,868	21,059	21,655	15,730	9,887	8,892	6,828	5,612	5,377	5,503	**164,329**	**22,074**	**5,377**
GSP1	(m^3)	0	0	0	0	0	15,053	3,119	3,812	5,321	0	0	0	**27,305**	**15,053**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
North Sector	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,635	0	0	0	**16,055**	**9,722**	**0**
Whale Tail Att Pond	(m^3)	4,033	3,726	4,217	4,173	4,406	304,915	66,673	79,802	113,786	17,245	13,411	13,859	**630,246**	**304,915**	**3,726**
IVR Pit	(m^3)	0	0	0	0	0	2,356,000	202,285	320,255	763,640	23,704	0	0	**3,665,884**	**2,356,000**	**0**
Drawdown from Whale Tail North	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**26,107**	**23,570**	**26,085**	**25,232**	**26,061**	**2,824,300**	**318,614**	**455,123**	**937,266**	**46,561**	**18,788**	**19,362**	**4,747,069**	**2,824,300**	**18,788**
Evaporation	(m^3)	0	0	0	0	0	3,989	47,150	47,996	18,728	0	0	0	**117,863**	**47,996**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**3,989**	**47,150**	**47,996**	**18,728**	**0**	**0**	**0**	**117,863**	**47,996**	**0**
Net Inflow (m^3)		26,107	23,570	26,085	25,232	26,061	2,820,311	271,464	407,127	918,538	46,561	18,788	19,362	**4,629,206**	**2,820,311**	**18,788**
End-of-Month Volume (m^3)		45,860,000	45,880,000	45,910,000	45,930,000	45,960,000	48,780,000	49,050,000	49,460,000	50,380,000	50,420,000	50,440,000	50,460,000	**578,530,000**	**50,460,000**	**45,860,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,391	0	0	0	0	0	0	**15,391**	**15,391**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	4,391	910	1,112	1,552	0	0	0	**7,965**	**4,391**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,438**	**5,685**	**6,948**	**9,699**	**0**	**0**	**0**	**49,770**	**27,929**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,439**	**5,684**	**6,948**	**9,700**	**0**	**0**	**0**	**49,771**	**27,439**	**0**
Net Inflow (m^3)		0	0	0	0	0	-1	1	0	-1	0	0	0	**-1**	**1**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,830	9,287	11,352	15,847	0	0	0	**81,316**	**44,830**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	26,026	5,392	6,590	9,200	0	0	0	**47,208**	**26,026**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	10,228	4,207	4,669	4,384	0	0	0	**23,488**	**10,228**	**0**
Groundwater	(m^3)	3,049	2,758	3,059	2,966	3,070	3,225	3,435	3,313	2,988	2,911	2,811	2,898	**36,483**	**3,435**	**2,758**
Dike Seepage	(m^3)	9,444	8,533	9,450	9,149	9,457	9,319	9,966	10,107	10,034	10,573	10,240	10,589	**116,861**	**10,589**	**8,533**
Camp Biodisk	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Industrial Sector	(m^3)	0	0	0	0	0	16,032	3,321	4,060	5,667	0	0	0	**29,080**	**16,032**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,370	4,842	5,918	8,261	0	0	0	**42,391**	**23,370**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	7,803	1,617	1,976	2,758	0	0	0	**14,154**	**7,803**	**0**
A53/IVR Att Pond	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Inflow (m^3)		**12,865**	**11,627**	**12,881**	**12,475**	**12,899**	**310,109**	**76,057**	**89,740**	**118,707**	**13,856**	**13,411**	**13,859**	**698,486**	**311,601**	**11,627**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	827	9,404	9,499	3,677	0	0	0	**23,407**	**9,499**	**0**
WTN to Pits	(m^3)	4,037	3,729	4,220	4,176	4,409	305,270	66,653	80,241	115,032	13,857	13,411	13,859	**628,894**	**305,270**	**3,729**
Total Outflow (m^3)		**12,865**	**11,628**	**12,882**	**12,475**	**12,898**	**310,109**	**76,057**	**89,740**	**118,709**	**13,857**	**13,411**	**13,859**	**698,490**	**323,597**	**3,729**
Net Inflow (m^3)		0	-1	-1	0	1	0	0	0	-2	-1	0	0	**-4**	**1**	**-2**
End-of-Month Volume (m^3)		291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	**3,503,784**	**291,982**	**291,982**

		Year 2038 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	6,263	1,298	1,586	2,214	0	0	0	**11,361**	**6,263**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	11,260	13,432	14,907	13,998	0	0	0	**53,597**	**14,907**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	21,398	0	0	0	0	0	0	**21,398**	**21,398**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	14,986	18,317	25,571	0	0	0	**0**	**25,571**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,308	0	0	0	0	0	0	**48,308**	**48,308**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	144	144	48	0	0	0	**2,401**	**2,065**	**0**
NE Channel	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Whale Tail South	(m^3)	0	0	0	0	0	2,180,000	180,248	288,667	696,746	23,704	0	0	**3,369,365**	**2,180,000**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,866**	**232,311**	**350,584**	**775,379**	**23,704**	**0**	**0**	**3,657,940**	**2,365,622**	**0**
Evaporation	(m^3)	0	0	0	0	0	2,642	30,026	30,330	11,740	0	0	0	**74,738**	**30,330**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	2,356,000	202,285	320,255	763,640	23,704	0	0	**3,665,884**	**2,356,000**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,358,642**	**232,311**	**350,585**	**775,380**	**23,704**	**0**	**0**	**3,740,622**	**2,386,330**	**0**
Net Inflow	(m^3)	0	0	0	0	0	224	0	-1	-1	0	0	0	**222**	**224**	**-1**
End-of-Month Volume		10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	**121,320,000**	**10,110,000**	**10,110,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,486	0	0	0	0	0	0	**12,486**	**12,486**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
GSP 2	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,061**	**26,101**	**0**
WT Pit (Closure)	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,060**	**25,703**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Direct Precip	(m^3)	0	0	0	0	0	127,327	26,378	32,241	45,010	0	0	0	**230,956**	**127,327**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	1,970	810	899	844	0	0	0	**4,523**	**1,970**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	10,975	2,274	2,779	3,880	0	0	0	**19,908**	**10,975**	**0**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**141,636**	**29,745**	**36,265**	**50,217**	**0**	**0**	**0**	**257,862**	**141,636**	**0**
Evaporation	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**424,590**	**85,613**	**105,134**	**149,232**	**0**	**0**	**0**	**764,569**	**426,260**	**0**
Net Inflow	(m^3)	0	0	0	0	0	-282,954	-55,868	-68,869	-99,016	0	0	0	**-506,708**	**0**	**-282,954**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	77,523	48,363	59,113	82,524	0	0	0	**267,523**	**82,524**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	155,848	0	0	0	0	0	0	**155,848**	**155,848**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	36,817	43,885	48,705	45,733	0	0	0	**175,140**	**48,705**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	69,964	0	0	0	0	0	0	**69,964**	**69,964**	**0**
Lake A18	(m^3)	0	0	0	0	0	948,244	100,607	143,387	300,109	0	0	0	**1,492,347**	**948,244**	**0**
Lake A55	(m^3)	0	0	0	0	0	421,181	59,851	78,992	138,852	0	0	0	**698,876**	**421,181**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,534	13,533	23,568	67,295	0	0	0	**328,930**	**224,534**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,888	11,703	15,293	26,188	0	0	0	**132,072**	**78,888**	**0**
Lake A65	(m^3)	0	0	0	0	0	348,659	24,212	39,824	105,667	0	0	0	**518,362**	**348,659**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,361,658**	**302,154**	**408,882**	**766,368**	**0**	**0**	**0**	**3,839,062**	**2,361,658**	**0**
Groundwater	(m^3)	17,554	15,855	17,553	16,986	17,552	16,791	16,967	16,887	16,191	16,606	16,067	16,599	**201,608**	**17,554**	**15,855**
Camp Use	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	8,637	98,101	99,092	38,358	0	0	0	**244,188**	**99,092**	**0**
IVR Pit	(m^3)	0	0	0	0	0	2,195,000	186,668	292,531	711,458	0	0	0	**3,385,657**	**2,195,000**	**0**
Total Outflow (m^3)		**17,926**	**16,191**	**17,925**	**17,346**	**17,924**	**2,220,788**	**302,108**	**408,882**	**766,367**	**16,978**	**16,427**	**16,971**	**3,835,833**	**2,312,018**	**16,191**
Net Inflow (m^3)		-17,926	-16,191	-17,925	-17,346	-17,924	140,870	46	0	1	-16,978	-16,427	-16,971	**3,229**	**140,870**	**-17,926**
End-of-Month Volume (m^3)		3,692,000	3,676,000	3,658,000	3,641,000	3,623,000	5,529,000	5,529,000	5,529,000	3,763,000	3,746,000	3,730,000	3,713,000	**49,829,000**	**5,529,000**	**3,623,000**

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2039 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
IVR Pit	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,768	6,167	7,538	10,523	0	0	0	**53,996**	**29,768**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,167**	**41,094**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit (Closure)	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,166**	**41,095**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,872	0	0	0	0	0	0	**4,872**	**4,872**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,054**	**9,878**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,510	0	0	0	**15,930**	**9,722**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,681**	**2,017**	**2,636**	**0**	**0**	**0**	**16,056**	**9,722**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,131	7,278	8,896	12,419	0	0	0	**63,724**	**35,131**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	53,021	22,191	24,779	23,543	0	0	0	**123,534**	**53,021**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	9,096	1,695	1,989	2,553	0	0	0	**15,333**	**9,096**	**0**
Groundwater	(m^3)	5,449	4,875	5,346	5,123	5,241	1,929	0	0	0	0	0	0	**27,963**	**5,449**	**0**
GSP1	(m^3)	0	0	0	0	0	15,053	3,119	3,812	5,321	0	0	0	**27,305**	**15,053**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
North Sector	(m^3)	0	0	0	0	0	9,722	1,681	2,017	2,510	0	0	0	**15,930**	**9,722**	**0**
Whale Tail Att Pond	(m^3)	13,860	12,519	13,862	13,416	13,864	309,640	64,570	75,570	103,635	0	0	0	**620,936**	**309,640**	**0**
IVR Pit	(m^3)	0	0	0	0	0	2,357,000	221,106	326,366	734,777	0	0	0	**3,639,249**	**2,357,000**	**0**
Drawdown from Whale Tail North	(m^3)	0	0	0	0	0	0	0	0	14	306	296	305	**921**	**306**	**0**
Total Inflow (m^3)		**19,309**	**17,394**	**19,208**	**18,539**	**19,105**	**2,816,295**	**326,002**	**448,652**	**891,544**	**306**	**296**	**305**	**4,576,955**	**2,816,295**	**296**
Evaporation	(m^3)	0	0	0	0	0	4,289	49,606	50,414	18,799	0	0	0	**123,108**	**50,414**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**4,496**	**50,315**	**51,030**	**19,218**	**306**	**296**	**305**	**125,965**	**51,123**	**0**
Net Inflow (m^3)		19,309	17,394	19,208	18,539	19,105	2,811,799	275,687	397,623	872,326	0	0	0	**4,450,990**	**2,811,799**	**0**
End-of-Month Volume (m^3)		50,480,000	50,500,000	50,520,000	50,540,000	50,550,000	53,370,000	53,640,000	54,040,000	54,910,000	54,910,000	54,910,000	54,910,000	**633,280,000**	**54,910,000**	**50,480,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,391	0	0	0	0	0	0	**15,391**	**15,391**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	4,391	910	1,112	1,552	0	0	0	**7,965**	**4,391**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,438**	**5,685**	**6,948**	**9,699**	**0**	**0**	**0**	**49,770**	**27,929**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,439**	**5,684**	**6,948**	**9,700**	**0**	**0**	**0**	**49,771**	**27,439**	**0**
Net Inflow (m^3)		0	0	0	0	0	-1	1	0	-1	0	0	0	**-1**	**1**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,830	9,287	11,352	15,847	0	0	0	**81,316**	**44,830**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	26,026	5,392	6,590	8,947	0	0	0	**46,955**	**26,026**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	10,228	4,207	4,669	4,747	0	0	0	**23,851**	**10,228**	**0**
Groundwater	(m^3)	2,891	2,606	2,879	2,780	2,866	2,309	1,357	1,040	406	0	0	0	**19,134**	**2,891**	**0**
Dike Seepage	(m^3)	10,596	9,578	10,611	10,276	10,626	10,593	9,109	8,100	5,931	4,732	4,573	4,719	**99,444**	**10,626**	**4,573**
Camp Biodisk	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Industrial Sector	(m^3)	0	0	0	0	0	16,032	3,321	4,060	5,667	0	0	0	**29,080**	**16,032**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,370	4,842	5,918	8,261	0	0	0	**42,391**	**23,370**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	7,803	1,617	1,976	2,758	0	0	0	**14,154**	**7,803**	**0**
A53/IVR Att Pond	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Inflow (m^3)		**13,859**	**12,520**	**13,862**	**13,416**	**13,864**	**310,467**	**73,122**	**85,460**	**152,619**	**5,931**	**4,933**	**5,091**	**705,144**	**351,581**	**4,909**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	827	9,404	9,499	3,982	0	0	0	**23,712**	**9,499**	**0**
WTN to Pits	(m^3)	13,860	12,520	13,862	13,416	13,864	309,640	63,718	75,960	103,269	0	0	0	**620,109**	**309,640**	**0**
Total Outflow (m^3)		**13,860**	**12,520**	**13,862**	**13,416**	**13,864**	**310,467**	**73,122**	**85,459**	**107,265**	**306**	**296**	**305**	**644,743**	**319,445**	**0**
Net Inflow (m^3)		-1	0	0	0	0	0	0	1	45,353	5,625	4,637	4,786	**60,401**	**45,353**	**-1**
End-of-Month Volume (m^3)		291,982	291,982	291,982	291,982	291,982	291,982	291,982	291,982	337,337	342,961	347,598	352,384	**3,716,136**	**352,384**	**291,982**

		Year 2039 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	6,263	1,298	1,586	2,214	0	0	0	**11,361**	**6,263**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	11,260	13,432	14,907	13,998	0	0	0	**53,597**	**14,907**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	21,398	0	0	0	0	0	0	**21,398**	**21,398**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	14,986	18,317	25,571	0	0	0	**0**	**25,571**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,308	0	0	0	0	0	0	**48,308**	**48,308**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	144	144	48	0	0	0	**2,401**	**2,065**	**0**
NE Channel	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Whale Tail South	(m^3)	0	0	0	0	0	2,181,000	199,069	294,779	705,438	827	0	0	**3,381,113**	**2,181,000**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	41,094	6,956	8,327	10,786	0	0	0	**67,163**	**41,094**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,359,866**	**251,132**	**356,696**	**784,071**	**827**	**0**	**0**	**3,669,688**	**2,366,622**	**0**
Evaporation	(m^3)	0	0	0	0	0	2,642	30,026	30,330	11,740	0	0	0	**74,738**	**30,330**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	2,357,000	221,106	326,366	734,777	0	0	0	**3,639,249**	**2,357,000**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	0	0	0	37,555	827	0	0	**38,382**	**37,555**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,359,642**	**251,132**	**356,696**	**784,072**	**827**	**0**	**0**	**3,752,369**	**2,424,885**	**0**
Net Inflow	(m^3)	0	0	0	0	0	224	0	0	-1	0	0	0	**223**	**224**	**-1**
End-of-Month Volume		10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	**121,320,000**	**10,110,000**	**10,110,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,486	0	0	0	0	0	0	**12,486**	**12,486**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
GSP 2	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,061**	**26,101**	**0**
WT Pit (Closure)	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,060**	**25,703**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Direct Precip	(m^3)	0	0	0	0	0	127,327	26,378	32,241	45,010	0	0	0	**230,956**	**127,327**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	1,970	810	899	844	0	0	0	**4,523**	**1,970**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	10,975	2,274	2,779	3,880	0	0	0	**19,908**	**10,975**	**0**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**141,636**	**29,745**	**36,265**	**50,217**	**0**	**0**	**0**	**257,862**	**141,636**	**0**
Evaporation	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**424,590**	**85,613**	**105,134**	**149,232**	**0**	**0**	**0**	**764,569**	**426,260**	**0**
Net Inflow	(m^3)	0	0	0	0	0	-282,954	-55,868	-68,869	-99,016	0	0	0	**-506,708**	**0**	**-282,954**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	77,522	48,362	59,113	82,524	0	0	0	**267,521**	**82,524**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	155,847	0	0	0	0	0	0	**155,847**	**155,847**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	36,818	43,888	48,705	45,733	0	0	0	**175,144**	**48,705**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	69,965	0	0	0	0	0	0	**69,965**	**69,965**	**0**
Lake A18	(m^3)	0	0	0	0	0	948,244	100,607	143,387	300,109	0	0	0	**1,492,347**	**948,244**	**0**
Lake A55	(m^3)	0	0	0	0	0	421,181	59,851	78,992	138,852	0	0	0	**698,876**	**421,181**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,534	13,533	23,568	67,295	0	0	0	**328,930**	**224,534**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,888	11,703	15,293	26,188	0	0	0	**132,072**	**78,888**	**0**
Lake A65	(m^3)	0	0	0	0	0	348,659	24,212	39,824	105,667	0	0	0	**518,362**	**348,659**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,361,658**	**302,156**	**408,882**	**766,368**	**0**	**0**	**0**	**3,839,064**	**2,361,658**	**0**
Groundwater	(m^3)	16,596	14,987	16,589	16,051	16,582	11,517	5,535	5,043	3,978	3,472	3,357	3,465	**117,172**	**16,596**	**3,357**
Camp Use	(m^3)	372	336	372	360	372	360	372	372	360	372	360	372	**4,380**	**372**	**336**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	8,637	98,110	99,092	38,358	0	0	0	**244,197**	**99,092**	**0**
IVR Pit	(m^3)	0	0	0	0	0	2,202,000	204,387	304,374	723,671	0	0	0	**3,434,432**	**2,202,000**	**0**
Total Outflow (m^3)		**16,968**	**15,323**	**16,961**	**16,411**	**16,954**	**2,222,514**	**308,404**	**408,881**	**766,367**	**3,844**	**3,717**	**3,837**	**3,800,181**	**2,318,060**	**3,693**
Net Inflow (m^3)		-16,968	-15,323	-16,961	-16,411	-16,954	139,144	-6,248	1	1	-3,844	-3,717	-3,837	**38,883**	**139,144**	**-16,968**
End-of-Month Volume (m^3)		3,696,000	3,681,000	3,664,000	3,647,000	3,630,000	5,535,000	5,529,000	5,529,000	3,763,000	3,759,000	3,756,000	3,752,000	**49,941,000**	**5,535,000**	**3,630,000**

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Year 2040 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
IVR Pit	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,774	6,167	7,538	10,523	0	0	0	**54,002**	**29,774**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,100**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,173**	**41,100**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit (Closure)	(m^3)	0	0	0	0	0	41,100	6,956	8,327	10,786	0	0	0	**67,169**	**41,100**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,100**	**6,957**	**8,328**	**10,786**	**0**	**0**	**0**	**67,172**	**41,101**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	1	0	0	0	0	**2**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,873	0	0	0	0	0	0	**4,873**	**4,873**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,723**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,055**	**9,879**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,723**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,056**	**9,723**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,138	7,278	8,896	12,419	0	0	0	**63,731**	**35,138**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	55,377	22,771	25,272	23,730	0	0	0	**127,150**	**55,377**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	6,797	1,408	1,721	2,402	0	0	0	**12,328**	**6,797**	**0**
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
GSP1	(m^3)	0	0	0	0	0	15,056	3,119	3,812	5,321	0	0	0	**27,308**	**15,056**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,707	4,362	5,223	6,772	0	0	0	**42,064**	**25,707**	**0**
North Sector	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Drawdown from Whale Tail North	(m^3)	305	285	304	294	303	213	135	120	88	70	67	69	**2,253**	**305**	**67**
Total Inflow (m^3)		**305**	**285**	**304**	**294**	**303**	**138,288**	**39,073**	**45,044**	**50,732**	**70**	**67**	**69**	**274,834**	**138,288**	**67**
Evaporation	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**305**	**285**	**304**	**294**	**303**	**213**	**135**	**120**	**88**	**70**	**67**	**69**	**2,253**	**305**	**67**
Net Inflow (m^3)		0	0	0	0	0	138,075	38,938	44,924	50,644	0	0	0	**272,581**	**138,075**	**0**
End-of-Month Volume (m^3)		54,910,000	54,910,000	54,910,000	54,910,000	54,910,000	54,910,000	54,910,000	54,910,000	54,910,000	54,910,000	54,910,000	54,910,000	**658,920,000**	**54,910,000**	**54,910,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,396	0	0	0	0	0	0	**15,396**	**15,396**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	4,392	910	1,112	1,552	0	0	0	**7,966**	**4,392**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,444**	**5,685**	**6,948**	**9,699**	**0**	**0**	**0**	**49,776**	**27,935**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	27,444	5,684	6,948	9,700	0	0	0	**49,776**	**27,444**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,444**	**5,684**	**6,948**	**9,700**	**0**	**0**	**0**	**49,776**	**27,444**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	1	0	-1	0	0	0	**0**	**1**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,840	9,287	11,352	15,847	0	0	0	**81,326**	**44,840**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	79,292	47,708	53,832	52,220	0	0	0	**233,052**	**79,292**	**0**
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Dike Seepage	(m^3)	4,713	4,403	4,700	4,543	4,688	3,223	1,946	1,702	1,178	877	848	875	**33,695**	**4,713**	**848**
Camp Biodisk	(m^3)	372	348	372	360	372	360	372	372	360	372	360	372	**4,392**	**372**	**348**
Industrial Sector	(m^3)	0	0	0	0	0	16,035	3,321	4,060	5,667	0	0	0	**29,083**	**16,035**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,375	4,842	5,918	8,261	0	0	0	**42,396**	**23,375**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	7,805	1,617	1,976	2,758	0	0	0	**14,156**	**7,805**	**0**
A53/IVR Att Pond	(m^3)	0	0	0	0	0	141,506	27,934	34,435	49,508	0	0	0	**253,383**	**141,506**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	27,444	5,684	6,948	9,700	0	0	0	**49,776**	**27,444**	**0**
Total Inflow (m^3)		**5,085**	**4,751**	**5,072**	**4,903**	**5,060**	**2,322,321**	**370,989**	**495,853**	**964,866**	**4,558**	**1,208**	**1,247**	**4,185,912**	**2,833,621**	**1,196**
Mammoth Lake	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	6,412	106,648	109,524	43,799	0	0	0	**266,383**	**109,524**	**0**
WTN to Pits	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**305**	**285**	**304**	**294**	**303**	**6,625**	**106,783**	**109,644**	**43,887**	**70**	**67**	**69**	**268,636**	**109,829**	**67**
Net Inflow (m^3)		4,780	4,466	4,768	4,609	4,757	2,315,696	264,206	386,209	920,979	4,488	1,140	1,178	**3,917,276**	**2,315,696**	**1,140**
End-of-Month Volume (m^3)		357,164	361,630	366,398	371,007	375,763	2,692,000	2,956,000	3,342,000	4,263,000	4,267,000	4,269,000	4,270,000	**27,890,962**	**4,270,000**	**357,164**

		Year 2040 (Closure)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	6,246	0	0	0	0	0	0	**6,246**	**6,246**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	9,670	0	0	0	0	0	0	**9,670**	**9,670**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	18,383	0	0	0	0	0	0	**18,383**	**18,383**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	24,030	0	0	0	0	0	0	**0**	**24,030**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	48,323	0	0	0	0	0	0	**48,323**	**48,323**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,065	0	0	0	0	0	0	**2,065**	**2,065**	**0**
NE Channel	(m^3)	0	0	0	0	0	24,448	0	0	0	0	0	0	**24,448**	**24,448**	**0**
Whale Tail South	(m^3)	0	0	0	0	0	1,714,000	0	0	0	0	0	0	**1,714,000**	**1,714,000**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	41,100	0	0	0	0	0	0	**41,100**	**41,100**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**1,888,265**	**0**	**0**	**0**	**0**	**0**	**0**	**1,864,235**	**1,888,265**	**0**
Evaporation	(m^3)	0	0	0	0	0	2,269	0	0	0	0	0	0	**2,269**	**2,269**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	1,606,000	0	0	0	0	0	0	**1,606,000**	**1,606,000**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**1,608,269**	**0**	**0**	**0**	**0**	**0**	**0**	**1,608,269**	**1,608,269**	**0**
Net Inflow	(m^3)	0	0	0	0	0	279,996	0	0	0	0	0	0	**279,996**	**279,996**	**0**
End-of-Month Volume		10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	**121,320,000**	**10,110,000**	**10,110,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,490	0	0	0	0	0	0	**12,490**	**12,490**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
GSP 2	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,707**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,065**	**26,105**	**0**
WT Pit (Closure)	(m^3)	0	0	0	0	0	25,707	4,362	5,223	6,772	0	0	0	**42,064**	**25,707**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,707**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,064**	**25,707**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Direct Precip	(m^3)	0	0	0	0	0	127,354	26,378	32,241	45,010	0	0	0	**230,983**	**127,354**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	1,970	810	899	844	0	0	0	**4,523**	**1,970**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	10,977	2,274	2,779	3,880	0	0	0	**19,910**	**10,977**	**0**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**141,666**	**29,745**	**36,265**	**50,217**	**0**	**0**	**0**	**257,892**	**141,666**	**0**
Evaporation	(m^3)	0	0	0	0	0	141,506	27,934	34,435	49,508	0	0	0	**253,383**	**141,506**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	141,506	27,934	34,435	49,508	0	0	0	**253,383**	**141,506**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**424,677**	**85,613**	**105,134**	**149,232**	**0**	**0**	**0**	**764,656**	**426,347**	**0**
Net Inflow	(m^3)	0	0	0	0	0	-283,011	-55,868	-68,869	-99,016	0	0	0	**-506,765**	**0**	**-283,011**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	77,495	48,363	59,113	82,524	0	0	0	**267,495**	**82,524**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	155,840	0	0	0	0	0	0	**155,840**	**155,840**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	36,847	43,885	48,705	45,733	0	0	0	**175,170**	**48,705**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	70,041	0	0	0	0	0	0	**70,041**	**70,041**	**0**
Lake A18	(m^3)	0	0	0	0	0	948,440	100,607	143,387	300,109	0	0	0	**1,492,543**	**948,440**	**0**
Lake A55	(m^3)	0	0	0	0	0	421,268	59,851	78,992	138,852	0	0	0	**698,963**	**421,268**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,581	13,533	23,568	67,295	0	0	0	**328,977**	**224,581**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,904	11,703	15,293	26,188	0	0	0	**132,088**	**78,904**	**0**
Lake A65	(m^3)	0	0	0	0	0	348,732	24,212	39,824	105,667	0	0	0	**518,435**	**348,732**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,362,148**	**302,154**	**408,882**	**766,368**	**0**	**0**	**0**	**3,839,552**	**2,362,148**	**0**
Groundwater	(m^3)	3,461	3,234	3,454	3,339	3,446	2,104	866	611	152	33	32	33	**20,766**	**3,461**	**32**
Camp Use	(m^3)	372	348	372	360	372	360	372	372	360	372	360	372	**4,392**	**372**	**348**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	8,644	98,103	99,092	38,358	0	0	0	**244,197**	**99,092**	**0**
IVR Pit	(m^3)	0	0	0	0	0	2,319,000	204,659	308,806	727,497	0	0	0	**3,559,962**	**2,319,000**	**0**
Total Outflow (m^3)		**3,833**	**3,582**	**3,826**	**3,699**	**3,818**	**2,330,108**	**304,000**	**408,881**	**766,367**	**405**	**392**	**405**	**3,829,317**	**2,421,925**	**380**
Net Inflow (m^3)		-3,833	-3,582	-3,826	-3,699	-3,818	32,040	-1,846	1	1	-405	-392	-405	**10,235**	**32,040**	**-3,833**
End-of-Month Volume (m^3)		3,748,000	3,744,000	3,741,000	3,737,000	3,733,000	5,531,000	5,529,000	5,529,000	3,763,000	3,763,000	3,762,000	3,762,000	**50,342,000**	**5,531,000**	**3,733,000**

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

		Post Closure (2041)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
NORTHEAST SECTOR																
Runoff (NE Channel)	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
IVR Pit	(m^3)	0	0	0	0	0	24,448	15,247	18,636	26,016	0	0	0	**84,347**	**26,016**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**24,448**	**15,247**	**18,636**	**26,016**	**0**	**0**	**0**	**84,347**	**26,016**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume (m^3)		118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	118,725	**1,424,700**	**118,725**	**118,725**
WHALE TAIL WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Natural Runoff	(m^3)	0	0	0	0	0	29,768	6,167	7,538	10,523	0	0	0	**53,996**	**29,768**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	1	0	1	0	0	0	0	**3**	**1**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	10,039	700	700	234	0	0	0	**11,673**	**10,039**	**0**
Whale Tail WRSF Seepage	(m^3)	0	0	0	0	0	1,286	90	90	30	0	0	0	**1,495**	**1,286**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,958**	**8,329**	**10,787**	**0**	**0**	**0**	**67,167**	**41,094**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	1	1	0	0	0	0	**3**	**1**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	0	2,408	8,327	10,786	0	0	0	**21,521**	**10,786**	**0**
IVR Pit (Closure)	(m^3)	0	0	0	0	0	41,094	4,549	0	0	0	0	0	**45,643**	**41,094**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**41,094**	**6,958**	**8,328**	**10,786**	**0**	**0**	**0**	**67,167**	**51,881**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	0	1	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
NORTH SECTOR																
Natural Rainfall Runoff	(m^3)	0	0	0	0	0	2,423	1,511	1,847	2,579	0	0	0	**8,360**	**2,579**	**0**
Natural SWE Runoff	(m^3)	0	0	0	0	0	4,872	0	0	0	0	0	0	**4,872**	**4,872**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	2,427	169	169	56	0	0	0	**2,822**	**2,427**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,680**	**2,016**	**2,635**	**0**	**0**	**0**	**16,054**	**9,878**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**9,722**	**1,681**	**2,017**	**2,635**	**0**	**0**	**0**	**16,055**	**9,722**	**0**
Net Inflow (m^3)		0	0	0	0	0	0	-1	-1	0	0	0	0	**-1**	**0**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL PIT																
Land Runoff	(m^3)	0	0	0	0	0	35,131	7,278	8,896	12,419	0	0	0	**63,724**	**35,131**	**0**
Lake Runoff	(m^3)	0	0	0	0	0	55,366	22,771	25,272	23,730	0	0	0	**127,139**	**55,366**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	6,795	1,408	1,721	2,402	0	0	0	**12,326**	**6,795**	**0**
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
GSP1	(m^3)	0	0	0	0	0	15,053	3,119	3,812	5,321	0	0	0	**27,305**	**15,053**	**0**
IVR WRSF	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
North Sector	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR Pit	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Drawdown from Whale Tail North	(m^3)	69	63	69	67	69	19	8	34	49	63	70	78	**658**	**78**	**8**
Total Inflow (m^3)		**69**	**63**	**69**	**67**	**69**	**138,067**	**38,946**	**44,958**	**50,693**	**63**	**70**	**78**	**273,212**	**138,067**	**63**
Evaporation	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**69**	**63**	**69**	**67**	**69**	**19**	**8**	**34**	**49**	**63**	**70**	**78**	**658**	**78**	**8**
Net Inflow (m^3)		0	0	0	0	0	138,048	38,938	44,924	50,644	0	0	0	**272,554**	**138,048**	**0**
End-of-Month Volume (m^3)		54,910,000	54,910,000	54,910,000	54,910,000	54,910,000	54,910,000	54,910,000	54,910,000	54,910,000	54,910,000	54,910,000	54,910,000	**658,920,000**	**54,910,000**	**54,910,000**
Mammoth DS																
Land Rain Runoff	(m^3)	0	0	0	0	0	7,656	4,775	5,836	8,147	0	0	0	**26,414**	**8,147**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	15,391	0	0	0	0	0	0	**15,391**	**15,391**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	4,391	910	1,112	1,552	0	0	0	**7,965**	**4,391**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,438**	**5,685**	**6,948**	**9,699**	**0**	**0**	**0**	**49,770**	**27,929**	**0**
Whale Tail Att Pond	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**27,439**	**5,684**	**6,948**	**9,700**	**0**	**0**	**0**	**49,771**	**27,439**	**0**
Net Inflow (m^3)		0	0	0	0	0	-1	1	0	-1	0	0	0	**-1**	**1**	**-1**
End-of-Month Volume (m^3)		1	1	1	1	1	1	1	1	1	1	1	1	**12**	**1**	**1**
WHALE TAIL LAKE (NORTH BASIN) & WHALE TAIL ATTENUATION POND																
Clean Area Runoff	(m^3)	0	0	0	0	0	44,830	9,287	11,352	15,847	0	0	0	**81,316**	**44,830**	**0**
Lakebed Sediment Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Direct Precipitation	(m^3)	0	0	0	0	0	133,152	58,185	64,722	60,773	0	0	0	**316,832**	**133,152**	**0**
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Dike Seepage	(m^3)	874	789	873	844	871	189	0	0	0	0	0	0	**4,439**	**874**	**0**
Camp Biodisk	(m^3)	372	336	372	360	372	360	243	0	0	0	0	0	**2,415**	**372**	**0**
Industrial Sector	(m^3)	0	0	0	0	0	16,032	3,321	4,060	5,667	0	0	0	**29,080**	**16,032**	**0**
Camp Sector Runoff	(m^3)	0	0	0	0	0	23,370	4,842	5,918	8,261	0	0	0	**42,391**	**23,370**	**0**
NPAG Runoff	(m^3)	0	0	0	0	0	7,803	1,617	1,976	2,758	0	0	0	**14,154**	**7,803**	**0**
A53/IVR Att Pond	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Mammoth DS	(m^3)	0	0	0	0	0	27,439	5,684	6,948	9,700	0	0	0	**49,771**	**27,439**	**0**
Total Inflow (m^3)		**1,246**	**1,125**	**1,245**	**1,204**	**1,243**	**2,745,056**	**374,379**	**498,784**	**962,865**	**0**	**0**	**0**	**4,587,147**	**3,473,730**	**0**
Mammoth Lake	(m^3)	0	0	0	0	0	0	81,418	366,878	911,671	0	0	0	**1,359,967**	**911,671**	**0**
Evaporation	(m^3)	0	0	0	0	0	10,770	130,069	131,681	50,973	0	0	0	**323,493**	**131,681**	**0**
WTN to Pits	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**69**	**63**	**69**	**67**	**69**	**10,941**	**211,763**	**498,784**	**962,866**	**235**	**232**	**235**	**1,685,393**	**1,043,697**	**8**
Net Inflow (m^3)		1,177	1,062	1,175	1,137	1,174	2,734,115	162,616	0	-1	-235	-232	-235	**2,901,754**	**2,734,115**	**-235**
End-of-Month Volume (m^3)		4,271,000	4,272,000	4,273,000	4,274,000	4,276,000	7,009,000	7,172,000	7,172,000	7,172,000	7,172,000	7,171,000	7,171,000	**71,405,000**	**7,172,000**	**4,271,000**

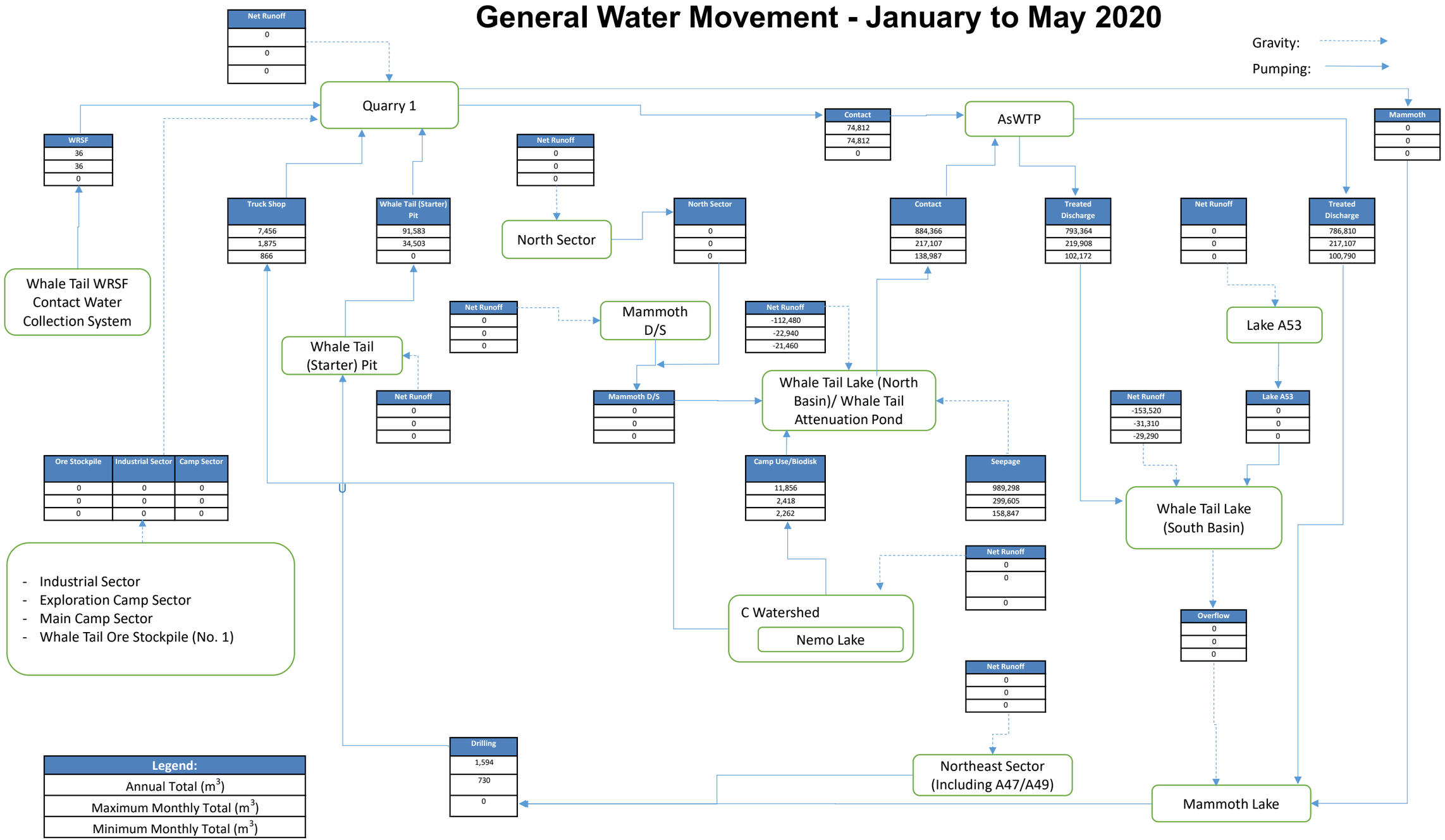
		Post Closure (2041)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Totals	Max. Monthly Totals	Min. Monthly Totals
No. of days		**31**	**28**	**31**	**30**	**31**	**30**	**31**	**31**	**30**	**31**	**30**	**31**			
IVR PIT																
Groundwater	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Pit Wall Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Direct Rain Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Direct Snow Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Land Rain Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Land Snow Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail WRSF Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
NE Channel	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail South	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail WRSF	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Pit	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
End-of-Month Volume		10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	10,110,000	**121,320,000**	**10,110,000**	**10,110,000**
IVR WASTE ROCK STORAGE FACILITY CONTACT WATER COLLECTION SYSTEM																
Rainfall Runoff	(m^3)	0	0	0	0	0	6,211	3,874	4,734	6,609	0	0	0	**21,428**	**6,609**	**0**
Snowfall Runoff	(m^3)	0	0	0	0	0	12,486	0	0	0	0	0	0	**12,486**	**12,486**	**0**
IVR WSRF Runoff	(m^3)	0	0	0	0	0	7,006	489	489	163	0	0	0	**8,147**	**7,006**	**0**
GSP 2	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,363**	**5,223**	**6,772**	**0**	**0**	**0**	**42,061**	**26,101**	**0**
WT Pit (Closure)	(m^3)	0	0	0	0	0	25,703	4,362	5,223	6,772	0	0	0	**42,060**	**25,703**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**25,703**	**4,362**	**5,223**	**6,772**	**0**	**0**	**0**	**42,060**	**25,703**	**0**
Net Inflow	(m^3)	0	0	0	0	0	0	1	0	0	0	0	0	**1**	**1**	**0**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
IVR ATTENUATION POND																
Natural Runoff	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Direct Precip	(m^3)	0	0	0	0	0	127,327	26,378	32,241	45,010	0	0	0	**230,956**	**127,327**	**0**
Ore Stockpile 3	(m^3)	0	0	0	0	0	1,970	810	899	844	0	0	0	**4,523**	**1,970**	**0**
Landfarm Runoff	(m^3)	0	0	0	0	0	10,975	2,274	2,779	3,880	0	0	0	**19,908**	**10,975**	**0**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**141,636**	**29,745**	**36,265**	**50,217**	**0**	**0**	**0**	**257,862**	**141,636**	**0**
Evaporation	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Whale Tail Lake (North Basin)	(m^3)	0	0	0	0	0	141,477	27,934	34,435	49,508	0	0	0	**253,354**	**141,477**	**0**
Total Outflow (m^3)		**0**	**0**	**0**	**0**	**0**	**424,590**	**85,613**	**105,134**	**149,232**	**0**	**0**	**0**	**764,569**	**426,260**	**0**
Net Inflow	(m^3)	0	0	0	0	0	-282,954	-55,868	-68,869	-99,016	0	0	0	**-506,708**	**0**	**-282,954**
End-of-Month Volume	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
WHALE TAIL LAKE (SOUTH BASIN)																
Rainfall Land Runoff	(m^3)	0	0	0	0	0	77,536	48,364	59,113	82,524	0	0	0	**267,537**	**82,524**	**0**
SWE Land Runoff	(m^3)	0	0	0	0	0	155,875	0	0	0	0	0	0	**155,875**	**155,875**	**0**
Rainfall Lake Runoff	(m^3)	0	0	0	0	0	36,803	43,884	48,705	45,733	0	0	0	**175,125**	**48,705**	**0**
SWE Lake Runoff	(m^3)	0	0	0	0	0	69,937	0	0	0	0	0	0	**69,937**	**69,937**	**0**
Lake A18	(m^3)	0	0	0	0	0	948,244	100,607	143,387	300,109	0	0	0	**1,492,347**	**948,244**	**0**
Lake A55	(m^3)	0	0	0	0	0	421,181	59,851	78,992	138,852	0	0	0	**698,876**	**421,181**	**0**
Lake A60	(m^3)	0	0	0	0	0	224,534	13,533	23,568	67,295	0	0	0	**328,930**	**224,534**	**0**
Lake A62	(m^3)	0	0	0	0	0	78,888	11,703	15,293	26,188	0	0	0	**132,072**	**78,888**	**0**
Lake A65	(m^3)	0	0	0	0	0	348,659	24,212	39,824	105,667	0	0	0	**518,362**	**348,659**	**0**
Total Inflow (m^3)		**0**	**0**	**0**	**0**	**0**	**2,361,657**	**302,154**	**408,882**	**766,368**	**0**	**0**	**0**	**3,839,061**	**2,361,657**	**0**
Groundwater	(m^3)	33	30	33	32	33	32	33	33	32	33	32	32	**390**	**33**	**30**
Camp Use	(m^3)	372	336	372	360	372	118	0	0	0	0	0	0	**1,930**	**372**	**0**
Truck Shop	(m^3)	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**
Evaporation	(m^3)	0	0	0	0	0	8,634	98,101	99,092	38,358	0	0	0	**244,185**	**99,092**	**0**
IVR Pit	(m^3)	0	0	0	0	0	766,179	0	0	0	0	0	0	**766,179**	**766,179**	**0**
Total Outflow (m^3)		**405**	**366**	**405**	**392**	**405**	**2,357,963**	**302,188**	**408,881**	**766,367**	**33**	**32**	**32**	**3,837,470**	**2,448,676**	**30**
Net Inflow (m^3)		-405	-366	-405	-392	-405	3,694	-34	1	1	-33	-32	-32	**1,591**	**3,694**	**-405**
End-of-Month Volume (m^3)		3,762,000	3,761,000	3,761,000	3,760,000	3,760,000	5,529,000	5,529,000	5,529,000	3,763,000	3,763,000	3,763,000	3,763,000	**50,443,000**	**5,529,000**	**3,760,000**

1 Previous value functions used to prevent recursive loop; therefore, inflow and outflows are slightly off

APPENDIX C

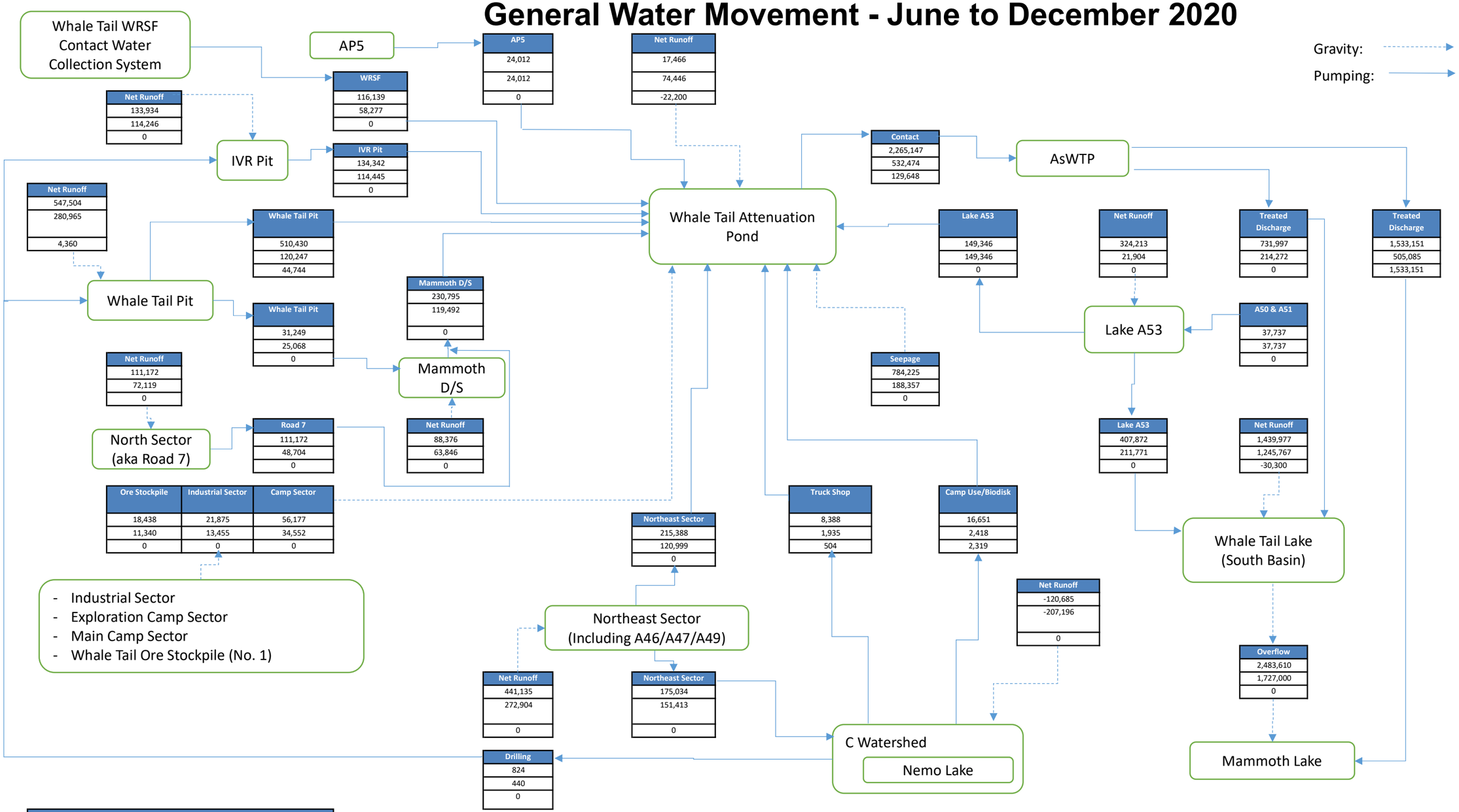
Water Balance Results – Flow Diagrams

General Water Movement - January to May 2020



Note: Net runoff is runoff and Precipitation minus evaporation, seepage and ore losses

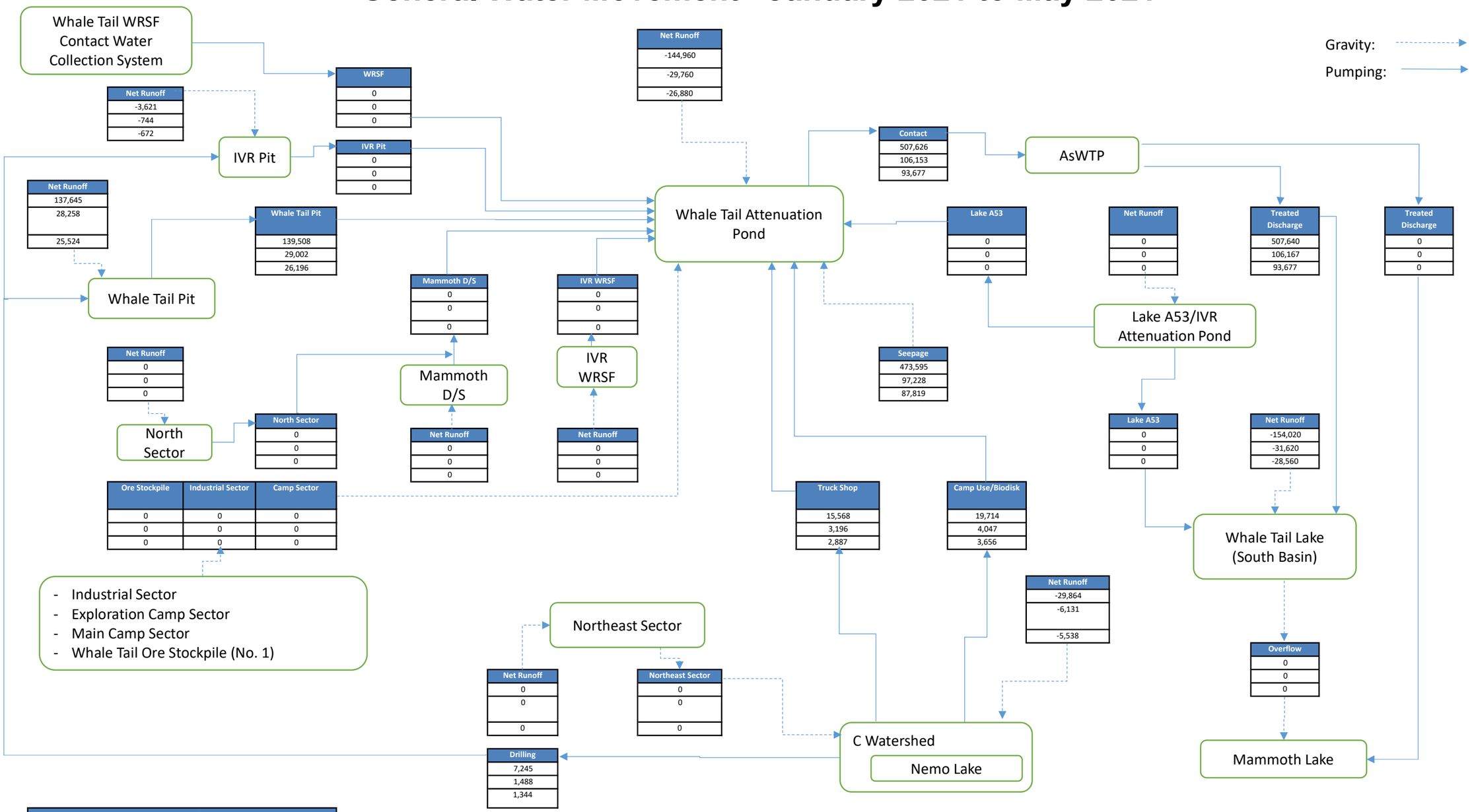
General Water Movement - June to December 2020



Legend:
Annual Total (m^3)
Maximum Monthly Total (m^3)
Minimum Monthly Total (m^3)

Note: Net runoff is runoff and Precipitation minus evaporation, seepage and ore losses

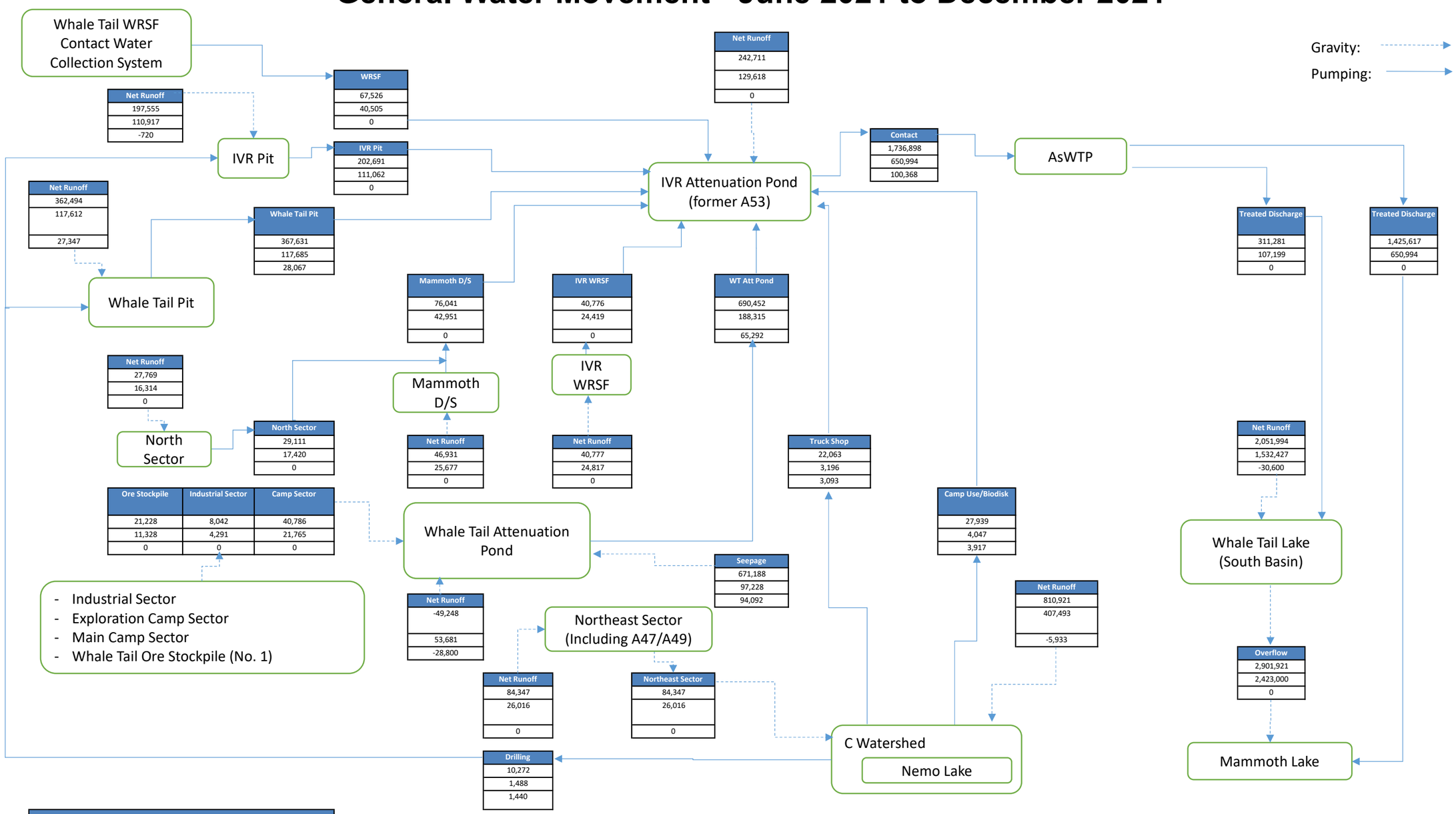
General Water Movement - January 2021 to May 2021



Legend:
Annual Total (m^3)
Maximum Monthly Total (m^3)
Minimum Monthly Total (m^3)

Note: Net runoff is runoff and Precipitation minus evaporation, seepage and ore losses

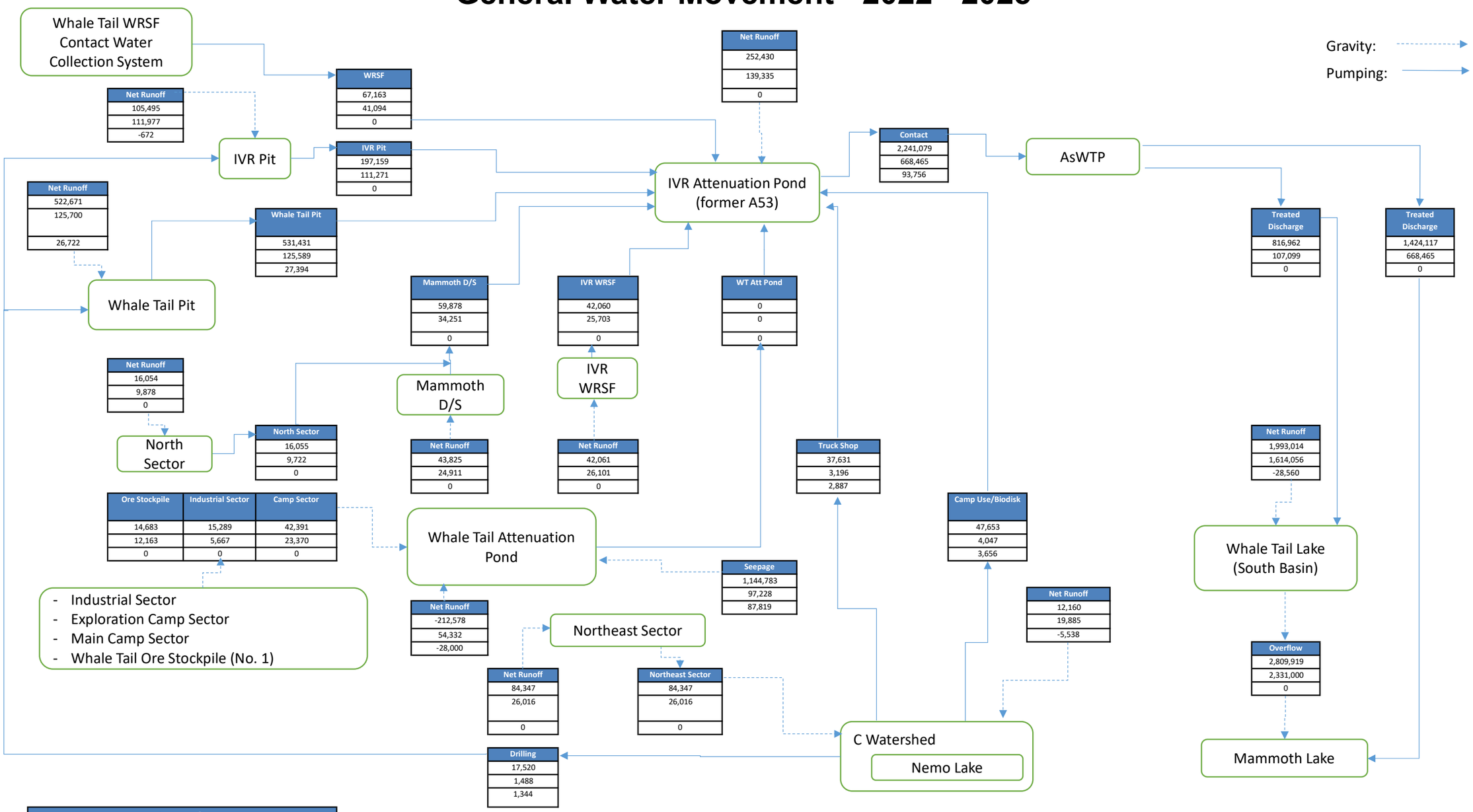
General Water Movement - June 2021 to December 2021



Legend:
Annual Total (m^3)
Maximum Monthly Total (m^3)
Minimum Monthly Total (m^3)

Note: Net runoff is runoff and Precipitation minus evaporation, seepage and ore losses

General Water Movement - 2022 - 2025



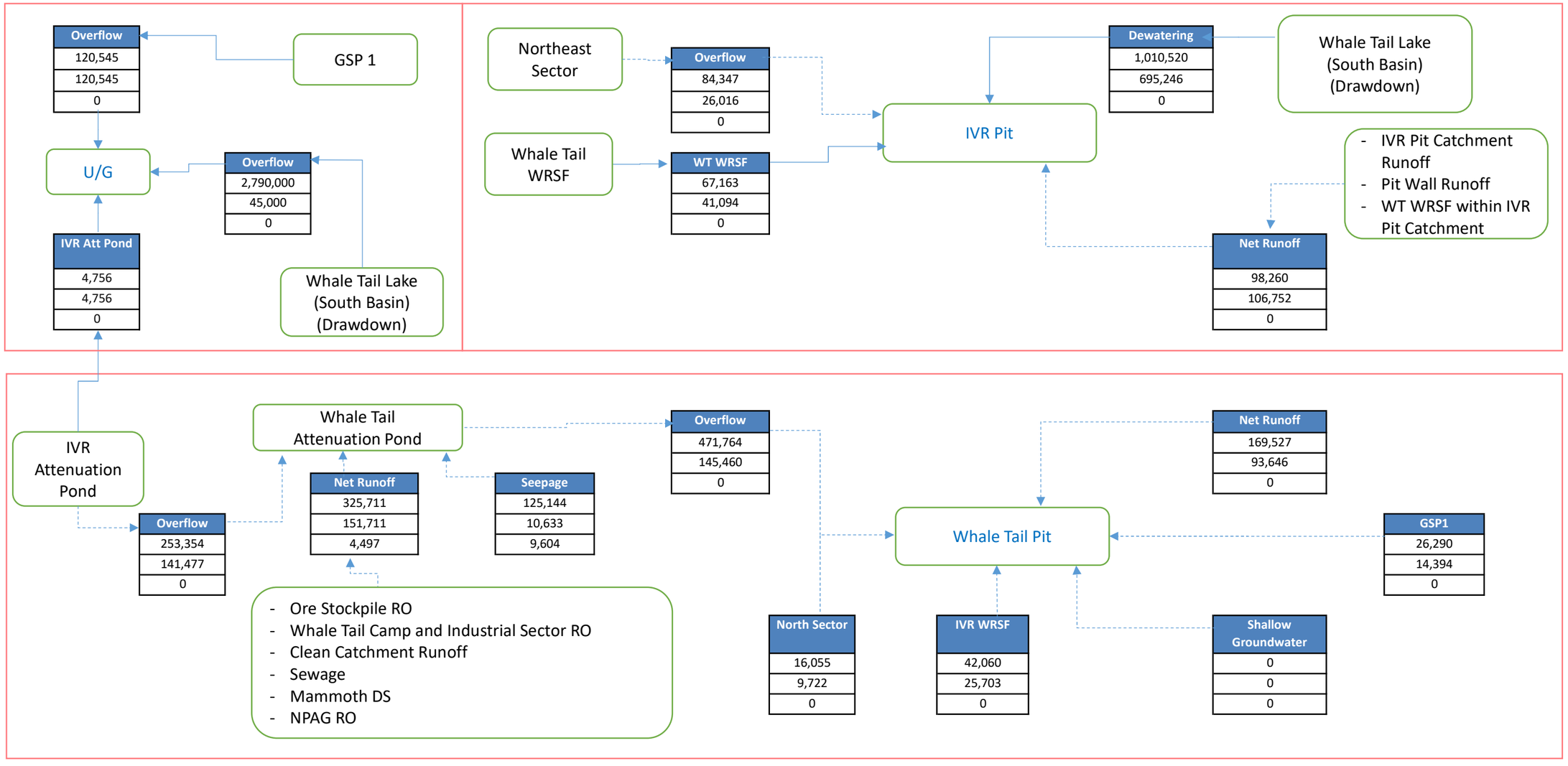
Legend:
Annual Total (m^3)
Maximum Monthly Total (m^3)
Minimum Monthly Total (m^3)

Note: Net runoff is runoff and Precipitation minus evaporation, seepage and ore losses

General Water Movement - Closure (Active Flooding): Underground Mine
(Values shown for 2026)

Gravity: ⇢

Pumping: →



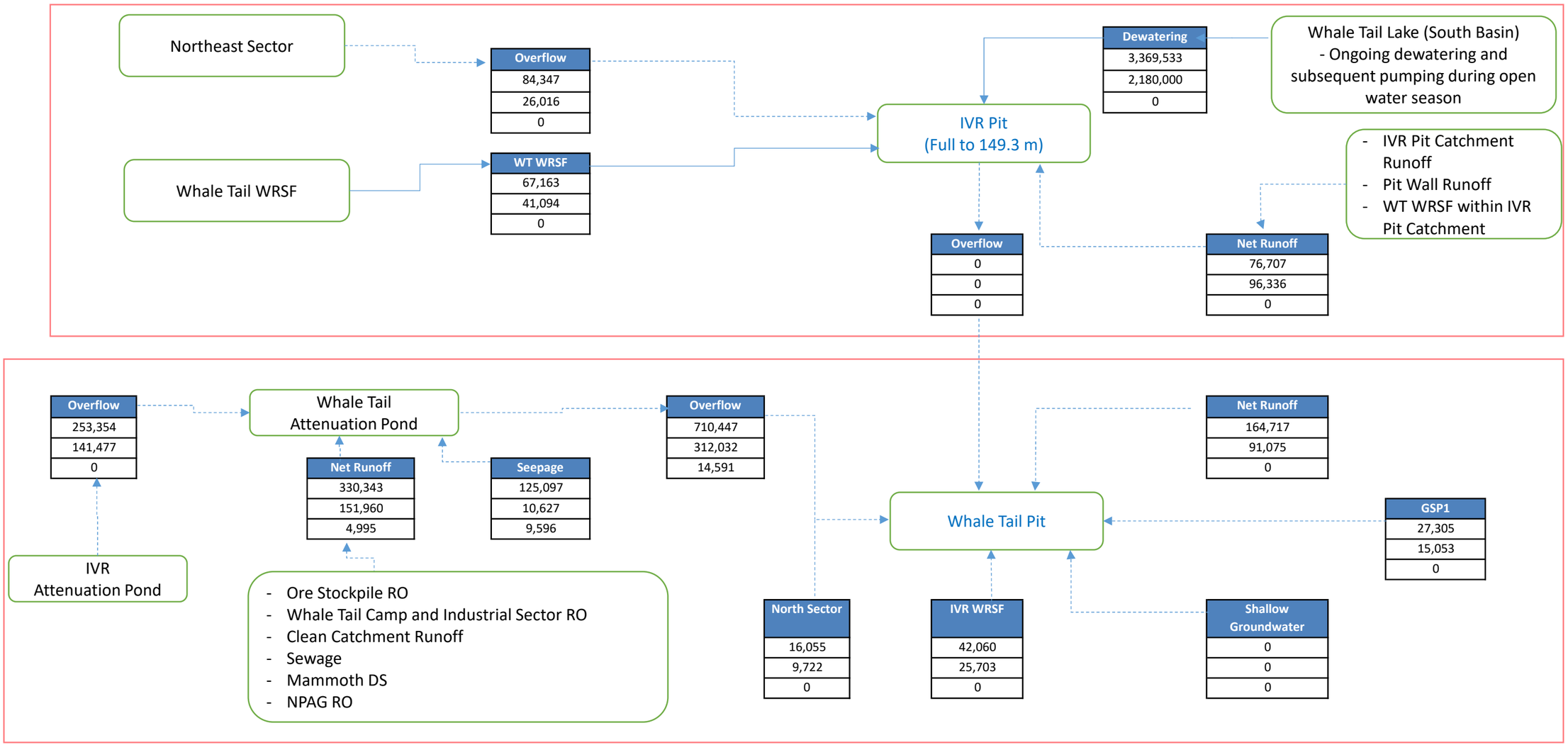
Legend:
Annual Total (m^3)
Maximum Monthly Total (m^3)
Minimum Monthly Total (m^3)

Note: Net runoff is runoff and Precipitation minus evaporation, seepage and ore losses

General Water Movement - Closure (Active Flooding): IVR and Whale Tail Pit
(Values shown for 2028)

Gravity: ⇢

Pumping: →



Legend:
Annual Total (m^3)
Maximum Monthly Total (m^3)
Minimum Monthly Total (m^3)

Note: Net runoff is runoff and Precipitation minus evaporation, seepage and ore losses

GOLDER

golder.com

APPENDIX D • WHALE TAIL WATER QUALITY FORECAST UPDATE

GOLDER
MEMBER OF WSP

REPORT

Whale Tail Project

2020 Annual Report - Site and Downstream Receiving Water Quality

Submitted to:

Eric Haley and Frederick Bolduc
Mines Agnico-Eagle, Meadowbank Division
10200, route de Preissac
Rouyn-Noranda (Québec) J0Y 1C0

Submitted by:

Golder Associates Ltd.
1931 Robertson Road, Ottawa, Ontario, K2H 5B7, Canada

+1 613 592 9600

20442330-517-RPT-Rev0

April 2021

Distribution List

1 e-copy - Mines Agnico-Eagle

1 e-copy - Golder Associates Ltd.

Table of Contents

TABLES

FIGURES

APPENDICES

List of Acronyms

Agnico Eagle	Agnico Eagle Mines Limited – Meadowbank Division
Approved Project	Whale Tail Pit and Haul Road
CEQG-PAL	Canadian Environmental Quality Guidelines for the Protection of Aquatic Life
CCME	Canadian Council of Ministers of the Environment
EA	Environmental Assessment
EQC	Effluent Quality Criteria
Expansion Project	Whale Tail Pit – Expansion Project
FEIS	Final Environmental Impact Statement
Golder	Golder Associates Ltd.
GSP	Groundwater Storage Pond
ML	Metal Leaching
NML	Non-Metal Leaching
NPAG	Non-potentially Acid Generating
NWB	Nunavut Water Board
AsWTP	Arsenic Water Treatment Plant
PAG	Potentially Acid Generating
SSWQO	Site Specific Water Quality Objective
STP	Sewage Treatment Plant
TDS	Total Dissolved Solids
TSS	Total Suspended Solids
WRSF	Waste Rock Storage Facility

1.0 INTRODUCTION

Agnico Eagle Mines Limited Meadowbank Division (Agnico Eagle) is currently operating the Whale Tail satellite deposit on the Amaruq exploration property, which is a 408-square kilometre (km^2) site located on Inuit-owned Land approximately 150 kilometres (km) north of the hamlet of Baker Lake and approximately 50 km northwest of the Meadowbank Mine, in the Kivalliq region of Nunavut (Figure 1). The property was acquired by Agnico Eagle in April 2013 subject to a mineral exploration agreement with Nunavut Tunngavik Incorporated.

The Expansion Project supports ore extraction from two open pits (i.e., Whale Tail Pit and IVR Pit), with underground mine development, over an eight-year mine life. Waste rock and overburden will be stored in the Whale Tail Waste Rock Storage Facility (WRSF), IVR WRSF, and Exploration Pad WRSF; excess non potentially acid generating or non-metal leaching (NPAG/NML) waste rock will be segregated and stockpiled separately (Agnico Eagle 2021). The ore is being trucked to the existing mill in the Portage area of the Meadowbank Mine for processing, and tailings are being deposited in the existing Meadowbank Mine tailings storage facility.

Golder Associates Ltd. (Golder) has completed the following water quality models:

- Approved Project, completed in 2016 (Agnico Eagle 2016a) and updated in 2017 (Golder 2017a), to support the Environmental Assessment (EA) and Water Licence Type A Application for the Whale Tail Pit;
- Water Licence B Application in 2016 for the Advanced Exploration and Bulk Sampling of the Amaruq Exploration Site (Golder 2016);
- EA for the Expansion Project (Golder 2018a), using the same modelling platform as the Approved Project, but informed by additional purpose-built and more detailed models to address issues raised during the Approved Project EA;
- Water Licence Type A Amendment Application for the Expansion Project (Golder 2019a); and,
- 2019 Annual Report (Golder 2020).

Agnico Eagle retained Golder to forecast the probable quality of mine contact water to support the 2020 Annual Report, as mandated in Part E, Items 5 and 6 of the Type A Water Licence 2AM-WTP1830:

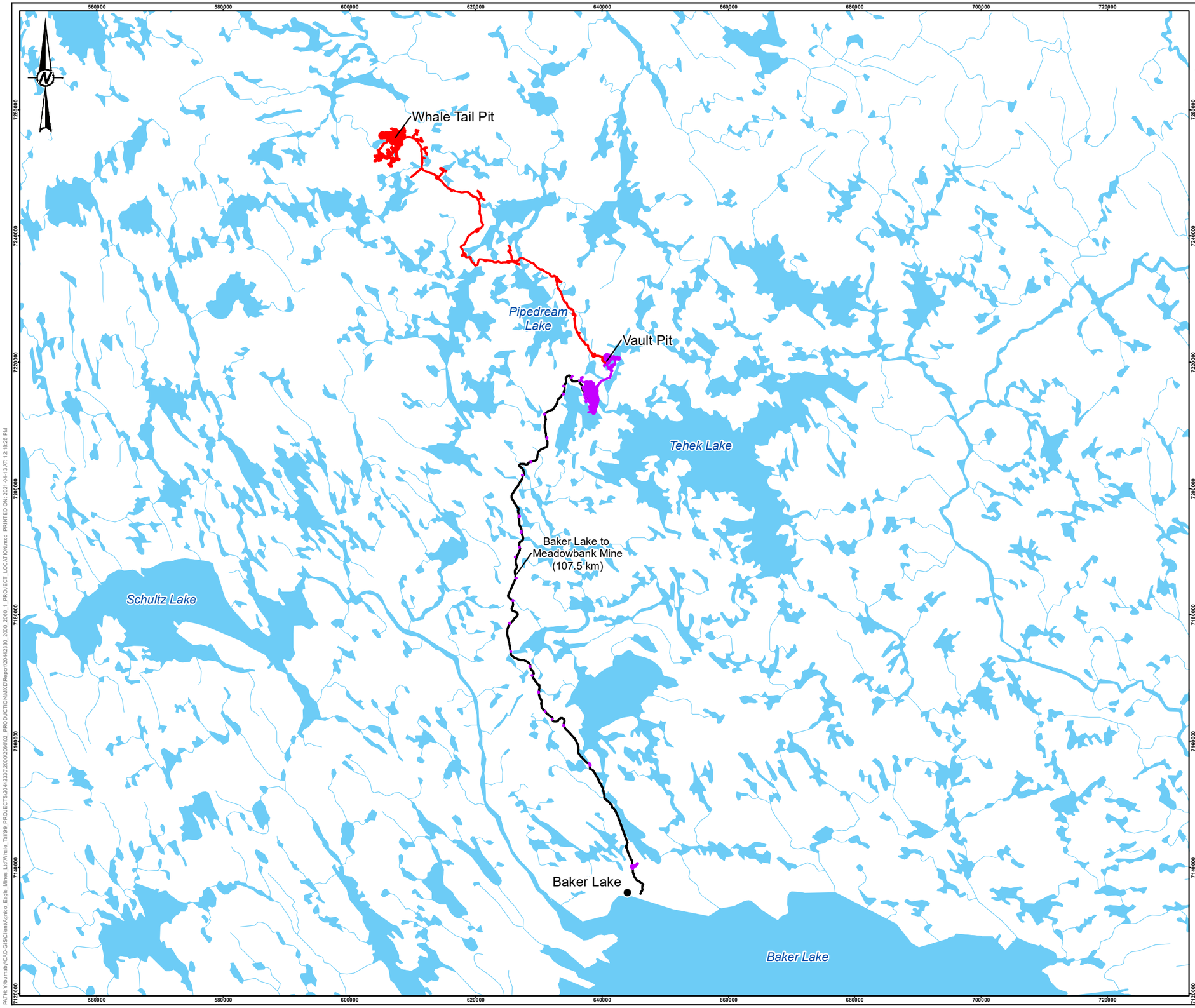
"5. The Licensee shall submit an updated Water Management Plan on an annual basis to the Board for review following the commencement of Operations. The Plan must include an updated Project Water Balance. The Water Management Plan shall include an action plan to be implemented if predicted re-flooded pits water quality indicates that treatment is necessary.

6. The Licensee shall submit a Water Quality Model for pits re-flooding and for Waste Rock Storage Facilities' contact water mixing into Mammoth Lake post-Closure as part of the Water Management Plan. The Water Quality Model shall be re-calibrated as necessary and updated annually following commencement of Operations. The results and implications of the predictive model shall be reported to the Board."

For the 2020 Annual Report the water balance model from the 2019 Annual Report was updated to include the following:

- Recorded water transfers in 2020;
- 2020 climate data from the Baker Lake weather station; and,
- Facilities that are part of the Expansion Project, as per the model used to support the Type A Water Licence Amendment for the Expansion Project (Golder 2019a).

This report documents a brief discussion of the water quality trends on site, the modelling approach, and a summary of the water quality forecasts of the Expansion Project components and downstream receiving environment.



LEGEND

- COMMUNITY
- HAUL ROAD
- ALL WEATHER ROAD
- WHALE TAIL PIT
- MEADOWBANK OPERATION AND INFRASTRUCTURE
- WATERCOURSE
- WATERBODY

0 12 24
1:600,000 KILOMETRES

REFERENCE(S)
1. HAUL ROAD OBTAINED FROM AGNICO EAGLE MINES LIMITED.
2. WATERCOURSE AND WATERBODY DATA OBTAINED FROM CANVEC © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.
3. INSET MAP DATA OBTAINED FROM ESRI.

DATUM: NAD 83 CSRS PROJECTION: UTM ZONE 14

CLIENT
AGNICO EAGLE
AGNICO EAGLE MINES LIMITED: MEADOWBANK DIVISION

PROJECT
WHALE TAIL PIT - EXPANSION PROJECT

TITLE
PROJECT LOCATION

CONSULTANT
GOLDER MEMBER OF WSP

YYYY-MM-DD	2021-04-13
DESIGNED	JR
PREPARED	CDB
REVIEWED	JR
APPROVED	DF

PROJECT NO.	CONTROL	REV.	FIGURE
20442330	2000/2060	0	1

2.0 MODELLING APPROACH

The water quality model was completed using GoldSim software version 12.1 (GoldSim 2018). GoldSim is a graphical, object-oriented mathematical model where all input constituents and functions are defined by the user and are built as individual objects or elements linked together by mathematical expressions. The object-based nature of the model is designed to facilitate understanding of the various factors, which control an engineered or natural system and predict the future performance of the system. The water quality model integrates a mass balance model with the water balance model for operations, closure, and post-closure (Golder 2021). Each flow that could influence site discharge water quality for the Expansion Project was itemized and assigned a source term chemical profile based on geochemical testing of waste rock materials, observed mine site facility water quality at the Meadowbank Mine surface operations (informed by existing explosives management practices), baseline surface water quality monitoring data, and site groundwater monitoring data.

In the water quality model, Expansion Project facilities that accumulate water (e.g., water management ponds, pits, and sumps) are treated as distinct collection ponds within the model. Inflow volumes and concentrations or mass loads are included as inputs to each collection pond to account for chemical loadings from natural areas, developed areas, waste rock runoff and seepage, pit wall rock runoff, and groundwater inflows, to project the chemistry of contact water quality that is sourced from each of these mine facilities.

The water quality model is designed to estimate these chemistries as a monthly average concentration, from construction (2018 – 2019), through operations (2019 – December 2025), closure (January 2026 – August 2041), into post-closure (September 2041+). It simulates the chemistry of the following water quality constituent groups:

- Major ions: calcium, chloride, fluoride, magnesium, potassium, sodium, and sulphate
- Nutrients: nitrate, total ammonia, and total phosphorus
- Dissolved metals: mercury, silver, aluminum, arsenic, barium, beryllium, boron, bismuth, cadmium, cobalt, chromium, copper, iron, lithium, manganese, molybdenum, nickel, lead, antimony, selenium, strontium, tin, thallium, uranium, vanadium, and zinc

Total dissolved solids (TDS) was not modelled but is calculated externally using the predictions of major ions as per the APHA (2017).

Total constituent concentrations are calculated based on modelled dissolved concentrations for on-site facilities, accounting for a particulate fraction for each constituent based on a total suspended solids (TSS) concentration and associated geochemical testing, which is added to the modelled dissolved concentrations. These total constituents were tracked as they mixed in the downstream receiving environment without accounting for any settling out of particulate matter.

This report focuses primarily on those modelled constituents that have Effluent Quality Criteria (EQCs) or Canadian Environmental Quality Guidelines for the Protection of Aquatic Health (CEQG-PAL) (CCME 2007).

2.1 Model Setup

The operational, closure, and post-closure mine site water balance for the Expansion Project was completed and documented in the Water Balance Report (Golder 2021). For operations, the following infrastructure components represent prediction nodes of mine site water quality:

- Open pit sumps:
  - Whale Tail Pit: Receives pit wall runoff, natural catchment runoff, direct precipitation on the sump pond surface, drilling fluids, and groundwater inflows, which are a combination of regional groundwater, Whale Tail Lake (South Basin) water, and Whale Tail Attenuation Pond water.
  - Quarry 1 (this becomes part of Whale Tail Pit in June 2020): Began development in late 2017 and acted as a collection point for all site contact water until June 2020. It also receives natural catchment runoff, pit wall runoff, and drilling fluids.
  - IVR Pit: Receives pit wall runoff, natural catchment runoff, direct precipitation on the sump pond surface, and drilling fluids. IVR Pit is located entirely within permafrost and is therefore assumed to have no groundwater inflows.
- Waste Rock Storage Facilities' Contact Water Collection Systems (WRSF Ponds):
  - Whale Tail WRSF Pond: Receives natural runoff from the catchment area, runoff from the Whale Tail WRSF and a submarginal ore stockpile, and direct precipitation.
  - IVR WRSF Pond: Receives natural runoff from the catchment area, runoff from the IVR WRSF, and direct precipitation.
- Attenuation Ponds:
  - Quarry 1 (until June 2020)
  - Whale Tail Lake (North Basin) / Whale Tail Attenuation Pond: Prior to May 2020, Whale Tail Lake (North Basin) was being dewatered and received only catchment inflows and dike seepage water. Once dewatered in May 2020, it began receiving all site contact water, which will continue through May 2021. During this period it also receives natural catchment runoff (natural runoff and lakebed sediment runoff), direct precipitation, treated sewage effluent, and groundwater inflows, which are a combination of regional groundwater and Whale Tail Lake (South Basin) water.
  - IVR Attenuation Pond: Receives all site contact water beginning in June 2021, through the end of operations. It also receives natural catchment runoff, direct precipitation, and treated sewage effluent. It does not receive any groundwater inflows
  - Groundwater Storage Pond -1 (GSP-1): Serves as temporary contact water storage in the summer months of 2020, but is subsequently dewatered, thereafter collecting contact water from the Exploration Pad WRSF and ore stockpiles, as well as excess saline water from the underground operations.
- The Operations Water Treatment Plant (AsWTP) effluent
- Receiving environment:
  - Mammoth Lake (Lake A16), see Figure 2
  - Whale Tail Lake (South Basin) (Lake A17)
  - Downstream (DS) Node 1 and DS Node 2, see Figure 2

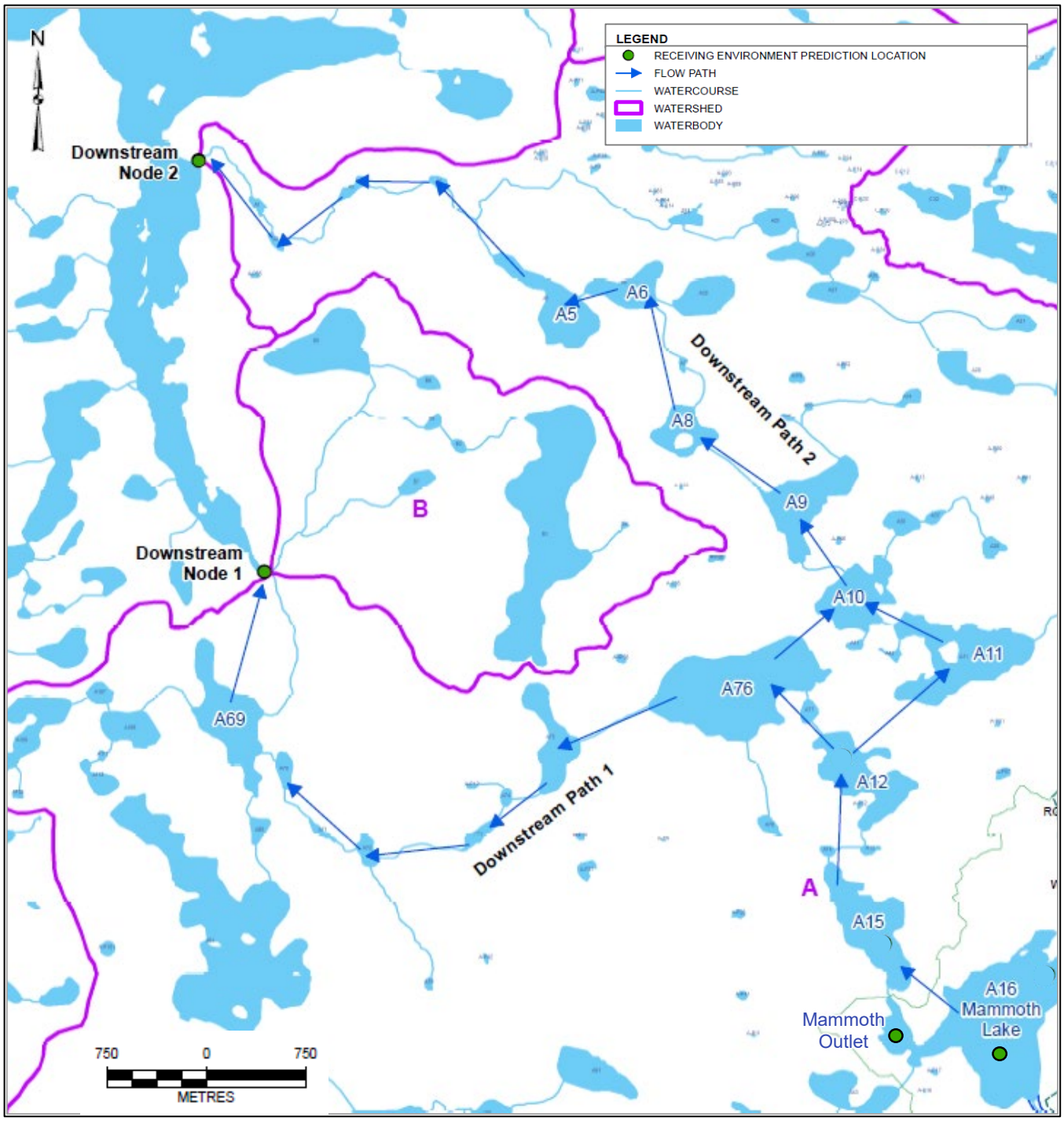


Figure 2: Receiving Environment Flow Paths and Prediction Locations

In general, water management on site can be separated into:

- Surface contact water flows, which are ultimately managed through the Whale Tail Attenuation Pond and the IVR Attenuation Pond:
  - Runoff from constructed pads
  - Runoff from ore stockpiles
  - Pit wall runoff in the Whale Tail and IVR Pits
  - Groundwater inflows to the Whale Tail Pit and to the Whale Tail Attenuation Pond
  - Runoff from the Whale Tail WRSF, IVR WRSF, and NPAG WRSF
  - Sewage Treatment Plant (STP) effluent
  - Landfarm runoff
- Saline water flows, managed in GSP-1:
  - Runoff from the Exploration Pad WRSF and underground ore stockpiles
  - Excess saline water from the underground operations
- Non-contact flows:
  - Diverted natural catchment runoff (i.e., Northeast Sector)
  - Lake dewatering flows (i.e., Whale Tail Lake [North Basin], Lake A47, Lake A49, Lake 50, Lake 51, Lake A53)
  - Dike seepage, which is collected separately and can be discharged directly without requiring treatment, if water quality criteria are met

The effect on water quality from materials present in ditches, dikes, berms, and other water retaining structures is expected to be insignificant compared to contact water sources; as such, loading from these sources was considered negligible and not accounted for in the site water quality model.

2.1.1 Updates Applied for 2020

General site water quality and chemical loading rate inputs and assumptions have been maintained from the 2019 Annual Report Water Quality Model update, with the following updates:

- General updates to the model were done to better align with monitoring data collected in 2020. The updates focussed on:
  - The Whale Tail WRSF Pond: Updated to represent seasonal processes as described in Section 3.1. The updates were also applied to the IVR WRSF Pond for predictions moving forward, under the assumption that similar seasonal processes would control the release of mass from the WRSF.
  - The Whale Tail Attenuation Pond: Because the Whale Tail Attenuation Pond collects all site contact water flows in 2020, the water quality was updated to reflect the overall effect of processes and trends occurring in facilities upstream of the Whale Tail Attenuation Pond (i.e., open pits, storage of water in Quarry 1 and GSP-1, intermediate sumps). This update was applied only to the active Attenuation Pond, that is, it was applied to the Whale Tail Attenuation Pond up to and including May 2021, and to the IVR Attenuation Pond thereafter.

- The AsWTP: In previous iterations of the water quality model, maximum concentrations for arsenic and phosphorus were applied at the AsWTP, at 0.1 mg/L and 0.05 mg/L, respectively. If predicted untreated concentrations were lower than these maximum limits, the model assumed no treatment would be applied. If the predicted untreated concentrations were higher than these maximum limits, the limits would be applied to the water entering the modelled downstream receiving lakes. Monitoring data for the AsWTP effluent generally show an increased treatment efficiency from what was previously assumed in the model. In order to align the predicted treated effluent concentrations with the monitored data, a treatment efficiency for each modelled constituent was developed based on monitoring data and applied to the modelled AsWTP influent. This treatment efficiency was applied to all water being discharged through the AsWTP, regardless of destination. The composition and lithological proportions of waste rock in the Whale Tail WRSF and exposed in the pit walls were updated to be consistent with the Expansion Project model.
- The delineation between groundwater quality sources (i.e., regional groundwater, lake-derived groundwater, or Whale Tail Attenuation Pond-derived groundwater) was updated to be consistent with the Expansion Project model.
- The areas of the WRSFs that contribute mass to the pond through runoff were updated to represent only the slope of the first bench. In previous iterations of the water quality model, it was assumed that the entire footprint of the WRSFs were interacting with the runoff collected in their respective collection ponds. However, a smaller area contributes mass to this runoff because the WRSF is designed to direct precipitation on the WRSF surface towards the centre of the pile where it becomes frozen, and only the runoff from the slope of the first bench is anticipated to flow to the pond (OKC 2019).
- The percentage of WRSF that is covered was updated to be reflective of the cover on the slope of the first bench. Cover material over the exposed waste rock controls how much of the pile runoff interacts with cover material relative to PAG/ML material. As a function of the entire footprint of the WRSF, the percentage cover material increases over the length of operations as progressive covering occurs. However, a small percentage of cover material over the full footprint in the first year may equate to nearly 100% coverage around the perimeter (the area that is being adjusted as per the point above).
- The application of TSS values from monitoring data, used to facilitate the calculation of total concentrations.
- Updated water quality inputs for the sewage treatment plant (STP) effluent, based on monitoring data from ST-WT-11 between January 1, 2020 and December 28, 2020 as noted in Table 1.

Table 1: Updated nitrate, ammonia, and total phosphorus concentrations for the STP Effluent.

Constituent	Unit	Previous Iterations	Current Iteration
Nitrate as N	mg/L as N	5.0	16.5
Ammonia as N	mg/L as N	Modelled freshwater quality	0.27
Total Phosphorus	mg/L	0.5	6.0

2.1.1.1 Updates to TSS Inputs

Much of the water quality data was only available for total concentrations. Therefore, to improve alignment of predicted and observed concentrations in the Whale Tail WRSF Pond, the Whale Tail Attenuation Pond, and the AsWTP effluent, observed TSS concentrations from monitoring data were applied directly into the model for 2020, with monthly TSS concentrations developed and applied for predictions (i.e., > 2020).

In previous iterations of the water quality model, a particulate fraction concentration for each constituent was applied to the predicted dissolved concentration in the effluent, as well as in the pit lake and Whale Tail WRSF runoff in post-closure, to estimate total concentrations. This particulate fraction was calculated based on solid geochemistry results and the anticipated proportion of each lithology that would be exposed over the entire length of operations. In the 2019 Annual Report, total concentrations in mine facilities were reported, based on an assumption of 15 mg/L of TSS, due to insufficient quantity of monitoring data. For effluent predictions moving forward, monthly average TSS concentrations, based on the available effluent monitoring data, were applied (Table 2).

Closure and post-closure assumptions of TSS concentrations remain consistent with previous iterations of the model, such that 10 mg/L of TSS is applied to the Whale Tail WRSF runoff in post-closure, and 1 mg/L of TSS is applied in the pit lake in post-closure.

Table 2: Updated TSS concentrations (mg/L) applied in the model after observed data ends, based on monitored data.

Month	Whale Tail WRSF Pond	Whale Tail Attenuation Pond	Treated Effluent
January	1	24	4.4
February	1	23	6.9
March	1	10	4.3
April	1	4.0	4.1
May	1	13	3.6
June	40	127	4.4
July	10	31	4.0
August	6.6	29	3.7
September	13	41	4.1
October	1	42	4.1
November	1	39	3.8
December	1	81	4.8

3.0 SUMMARY OF WATER QUALITY DATA

The following sections summarize water quality in the Whale Tail WRSF Pond, the Whale Tail Pit, GSP-1, and the Whale Tail Attenuation Pond. Constituents that are modelled and that have EQCs are discussed and compared to their respective EQCs. It should be noted that while this comparison has been provided for contextual purposes, it is not necessary for the EQCs to be met upstream of the AsWTP, as they apply only to the effluent discharge to the environment. Although not explicitly modelled, pH, TSS, and TDS are also provided in Figure 6 to provide context.

Water quality data on site for 2020 generally show that constituents follow two trends over the summer months, when site runoff occurs and interacts with waste rock, pit walls, and developed areas. The first trend is characterized by higher concentrations in June and decreasing concentrations through the summer; occasionally an increase in concentrations is also observed in September. This trend may be indicative of a flush of mass during peak flows of freshet and other periods of higher flow, due to either suspended particulate (increasing the total concentrations) or a re-dissolution of salts (increasing the dissolved concentrations) that may have precipitated on surfaces during lower flow conditions. This higher concentrations in spring are present in both dissolved and total concentrations, though are more pronounced in the total concentrations and sometimes not apparent in the dissolved concentrations. This trend tends to be more visible in iron, aluminum (Figure 3), and phosphorus – constituents whose total concentrations align with TSS concentrations, which show the same trend. However, the signature is also seen arsenic, chromium, copper, lead, and zinc, though to a lesser extent, and more often for contact water from waste rock piles than for the pit walls.

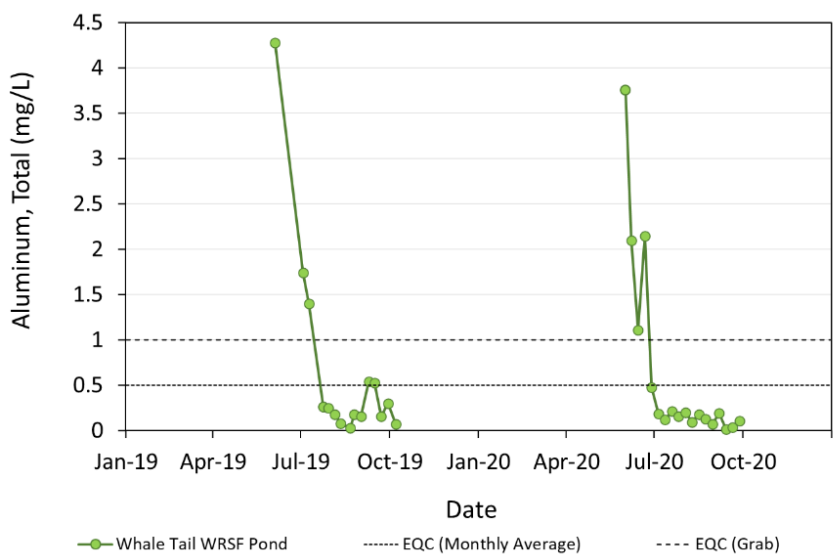


Figure 3: Total aluminum in the Whale Tail WRSF Pond, in 2019 and 2020. A seasonal trend displaying higher concentrations in June, and lower concentrations for the remainder of the summer months is visible.

The second trend is characterized by a consistent increase in concentrations over the summer months. Increased mass loads from freshet are either non-existent or muted, and concentrations at the end of the summer are greater than the start. This trend is noticeable in most major ions (alkalinity, sulphate [Figure 4], calcium, chloride, magnesium), barium, nickel, molybdenum, selenium, and explosives residues, such as nitrate and ammonia. Further investigation in the summer of 2021 is warranted, as it appears to be a seasonal trend but there is uncertainty regarding the mechanism of consistent release of these constituents.

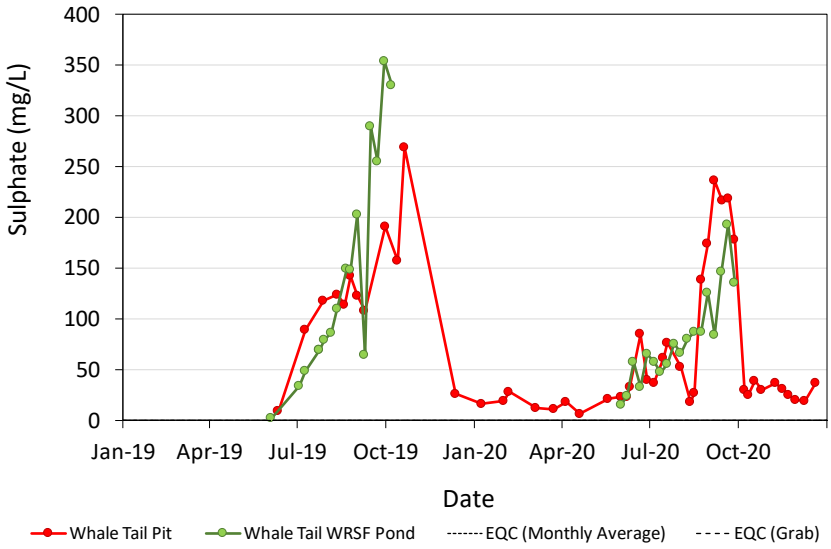


Figure 4: Sulphate in the Whale Tail WRSF Pond (green) and the Whale Tail Pit (red), in 2019 and 2020. A seasonal trend displaying increasing concentrations throughout the summer months is visible.

In contrast to these two major seasonal trends, some constituents do not show a visible trend throughout the summer months either due to all, or most, of the monitored data being below the detection limit, or due to a large degree of variability. In addition, some concentrations show a general trend over time that is not related to a seasonal influence. For example, fluoride concentrations do not show a strong seasonal variation (though there is some in June with freshet) but have been slowly and steadily increasing, particularly in the Whale Tail Pit (Figure 5).

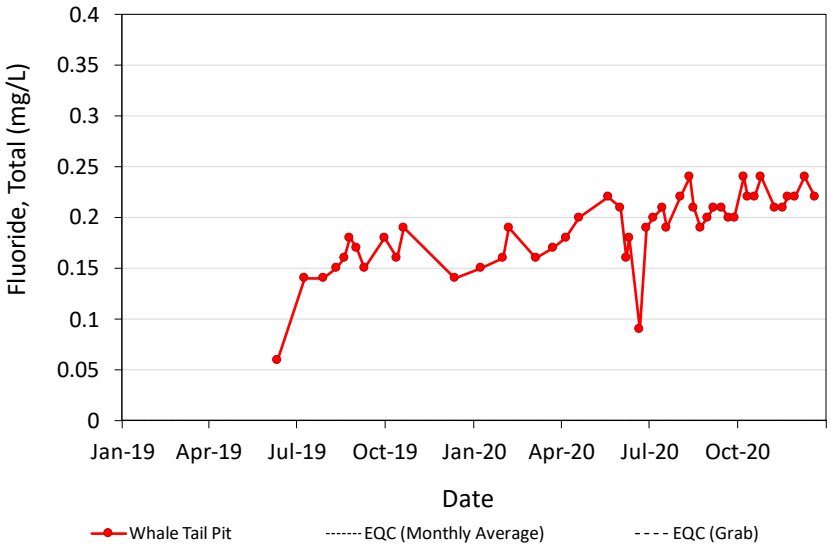


Figure 5: Fluoride in the Whale Tail Pit, in 2019 and 2020. A strong seasonal trend is not apparent, though concentrations are displaying a slow and steady increase.

Water quality for 2019 and 2020, for the Whale Tail WRSF Pond, Whale Tail Pit, Whale Tail Lake (North Basin), Whale Tail Attenuation Pond, and GSP-1, are presented in Figure 6. Modelled constituents that have EQCs are presented, with pH and TDS additionally shown.

3.1 Whale Tail WRSF Pond

In 2019, the Whale Tail WRSF had not reached its ultimate footprint, and a wet season resulted in a higher amount of water needing management in the Whale Tail WRSF Pond. As such, water accumulated over the summer of 2019. In 2020, there was less water throughout the summer, and the pond was managed as intended, with very little volume stored.

Water quality trends in the monitoring data from the Whale Tail WRSF Pond show the two distinct patterns mentioned above. Occasional concentrations greater than the EQCs occur for TSS, total aluminum, total chromium, and total iron. Total concentrations of aluminum, chromium, and iron are closely tied to TSS concentrations, as their particulate fractions tend to be elevated compared to other metals. All other constituents remain below their respective EQCs.

3.2 Whale Tail Pit

In the Whale Tail Pit, it is anticipated that monitored water quality will differ between the summer months and winter months. In the winter, water quality should be representative of groundwater inflows as surface runoff does not occur, whereas in the summer, the surface runoff would impart more of an influence on the water quality. Between 2019 and 2020 as the Whale Tail Pit progressed from overburden stripping to the first few mine benches, there was high variability in the water quality for most constituents, such that the seasonal trends as described above are not entirely discernable. As more data is collected, any trends should become more apparent.

Total alkalinity, calcium, chloride, barium, and manganese are among some of the constituents that show higher concentrations in winter months and are likely controlled by inflowing groundwater. However, it is, as of yet, uncertain as to the specific origins of the groundwater that is entering the pit. It is likely a combination of regional groundwater, water from Whale Tail Lake (South Basin), and water from the Whale Tail Attenuation Pond; however, the proportions of each are unknown and require further investigation.

Certain constituents, such as sulphate, chromium, arsenic, molybdenum, and selenium appear to increase, or show more variability, over the summer months and remain lower, relative to the summer months, in the winter, indicating they are more likely controlled by the runoff over the pit walls. Total aluminum, chromium, and iron show good agreement with TSS concentration trends, and are frequently above the EQCs.

Finally, many of the constituents show an increase in concentrations in September 2020, though there is uncertainty regarding the source or mechanism.

3.3 GSP-1

Between June and September 2020, GSP-1 received flows from the underground portal area, its immediate catchment area (Exploration Pad), and pumped flow from the Whale Tail Attenuation Pond (in June). In September, GSP-1 was emptied to the Whale Tail Attenuation Pond.

A few constituents in the monitoring data (arsenic, aluminum, chromium, copper, iron) show a decrease in concentration over the summer. These concentrations are likely more closely tied to suspended solids, which also shows a decreasing trend. It is also likely that the initially higher concentrations are reflective of the water that was pumped to GSP-1 from the Whale Tail Attenuation Pond, which had higher concentrations of these constituents than GSP-1 in June.

The remaining available constituents, including major ions, explosives residues, and some metals, show an increase in concentration throughout the summer. These more likely associated with flows from the underground portal and catchment runoff from the Exploration Pad WRSF and ore stockpiles. The increase in concentrations in most of these constituents is also seen in the Whale Tail WRSF Pond and the Whale Tail Pit.

3.4 Whale Tail Attenuation Pond

Once dewatering of Whale Tail Lake (North Basin) was complete, the Whale Tail Attenuation Pond collected water from contact water to the west of the Whale Tail Pit (collected just upstream of the Mammoth dike), the Whale Tail Pit, the Whale Tail WRSF Pond, IVR Pit (primarily dewatering flows from A47 and A49 as IVR Pit was initiated only in September), the STP effluent, runoff from its immediate catchment which includes developed areas, GSP-1 in September, and the dewatering of A53 in September. The water quality in Whale Tail Attenuation is reflective of the sources of contact water on site, and mirrors trends in the upstream facilities. Many constituents in the available data set show concentration trends that align with the trends seen in the Whale Tail Pit and the Whale Tail WRSF Pond. The Whale Tail Attenuation Pond appears to be primarily controlled by the water quality of the Whale Tail Pit.

Although GSP-1 was pumped to the Whale Tail Attenuation Pond in September, the Whale Tail Attenuation Pond does not appear to have been impacted by this water transfer, despite many of the constituents being of higher concentration in GSP-1 than any other source to the Whale Tail Attenuation Pond at the time of the transfer. Exceptions to this are manganese, which increases in concentration in September in the Whale Tail Attenuation Pond, higher than both the Whale Tail Pit and the Whale Tail WRSF, indicating that it is affected by the GSP-1 water transfer. For the remaining constituents, however, there is not a visible increase due solely to the transfer from GSP-1.

As there are only six months of monitoring data at the Whale Tail Attenuation Pond following dewatering of Whale Tail Lake (North Basin), it anticipated that seasonal variability in concentrations will become more apparent as more data is collected in future years.

Constituent concentrations greater than EQCs include TSS, total aluminum, total arsenic, total chromium, and total iron. Total iron and aluminum concentrations correlate well with TSS concentrations, while total chromium shows a moderate control by TSS concentrations, and total arsenic shows little correlation with TSS concentrations, and is more likely controlled by its dissolved form. The remaining constituents remain below their respective EQCs, including total phosphorus, although some concentrations approached the monthly average EQC of 0.3 mg/L, and this constituent should continue to be monitored closely, particularly if TSS concentrations are high.

Figure 6: Monitored concentrations of constituents compared to their respective Effluent Quality Criteria

4.0 WATER QUALITY PREDICTIONS

Water quality model results for the Whale Tail WRSF Pond, the Whale Tail Attenuation Pond, the IVR Attenuation Pond, final effluent, and downstream lakes during operations are presented Appendix C. Results for closure and post-closure are also presented in Appendix C for the Whale Tail WRSF Pond, Whale Tail and IVR Pits, and the downstream lakes. Time series figures comparing modelled concentrations to measured data and applicable guidelines are included in the following sections for arsenic and phosphorus as these constituents have historically been the main constituents of concern. The remaining constituents are presented in table format in Appendix C. Modelled water quality constituent predictions represent total constituent concentrations, based on TSS concentrations as described in Section 0, only for the purpose of comparing to monitored data, which is primarily in total concentrations. Once total constituents enter the downstream environment, they are treated conservatively and are only subject to dispersion (i.e., are assumed to remain in suspension and not settle out, be taken up as nutrients, or undergo geochemical reactions that would remove them from the water column).

Predicted concentrations have been compared to specific water quality criteria; constituents that are greater than their applicable criteria are highlighted in Appendix C. On-site water quality predictions are compared to the Water Licence effluent limits (or effluent quality criteria; EQC) (NWB 2020) in operations and closure, while the post-closure predictions are compared to the CEQG-PAL. The downstream receiving environment predictions throughout operations, closure, and post-closure, are also compared to the CEQG-PAL. Note that where applicable, arsenic concentrations are compared to the Site-Specific Water Quality Objective (SSWQO) of 0.025 mg/L in place of the CEQG-PAL.

Predicted concentrations are monthly mean values and are considered to be order-of-magnitude estimates. Actual water quality will largely depend on the mine plan and management practices followed during mining, and on-site conditions related to water movement and chemical loading. In that respect, the extent to which site water quality conditions are influenced by each of the source terms during operations and closure is bound by some uncertainty. Site water quality conditions will be influenced by the degree of contact between water and rock and dissolution kinetics. This will depend largely on climate, particularly the amount of precipitation and evaporation, and the ambient air temperature.

The modelling has assumed that site contact water streams will not be influenced by acid rock drainage inputs. It is assumed that PAG rock management is effective at preventing the development of acid rock drainage by segregating and progressively covering the Whale Tail WRSF with a cover of NPAG/NML waste rock that encompasses the full depth of the anticipated active thaw layer (4.7 m; Golder 2018c), allowing the centre of the pile to freeze. The pH of most contact water streams is therefore expected to be circum-neutral given the low sulphide content and ample carbonate mineral buffering capacity of mine wastes. The rock types that have been identified as PAG demonstrate slow reaction rates in kinetic testing (Golder 2018b).

The input of explosives by-products (i.e., ammonia and nitrate) to site contact water streams has been included in the modelling. The concentration of these nitrogen residuals in site contact water is sensitive to the management of blasting agents during their use. Given the proximity and similarity both in setting and operation of the site to the Meadowbank Mine (similar mining rate, explosives type and explosives usage rate), it was assumed that similar nitrogen and ammonia contents would occur in the waste rock, and open pit drainages.

Water quality predictions for on-site mine contact waters and downstream receiving lakes for the operations, closure, and post-closure phases are discussed in the next sections.

4.1 Operations Phase

4.1.1 Surface Operations

The modelled constituent concentrations in surface infrastructure contact waters indicate that treatment will likely be necessary through operations. Treatment of all constituents, including arsenic, phosphorus, and TSS, in the discharge was based on an assumed residual mass proportion as untreated site water passes through the AsWTP, and is carried into the receiving environment.

4.1.1.1 Whale Tail WRSF Pond

Phosphorus and arsenic concentration in the WRSF Pond are shown in Figure 7. Monitoring data to date supports an increased mass load during high flow periods (freshet) for certain constituents. This is contrary to previous model predictions that showed lower concentrations during freshet, owing to a higher volume of water providing a diluting effect.

Monitoring data support that total phosphorus concentrations are controlled by particulate phosphorus, as there is good agreement between TSS concentration trends and total phosphorus trends. This is also true of arsenic, though not as pronounced. Both total phosphorus and arsenic remain below their respective EQC throughout operations.

Modelled constituents that showed predicted concentrations beyond 2020 that were higher than their respective EQCs were total aluminum, chromium, and iron in June only, when TSS levels are highest. Predicted total iron concentrations also approached the EQC in September. Predicted total mercury, arsenic, cadmium, copper, nickel, phosphorus, lead, zinc, and ammonia did not increase above their respective EQCs in 2021 onwards, though total copper and nickel both showed higher concentrations in 2019 and 2020, respectively; both of these higher concentrations are overpredictions when compared to the monitoring data, which may warrant further investigation.

A subset of constituents, as discussed in Section 3.1, display an increase in concentration over the length of summer in the monitoring. The model was not able to replicate this trend once the waste rock runoff mixed with natural runoff and direct precipitation, and further investigation is warranted as more monitoring data is collected in future years.

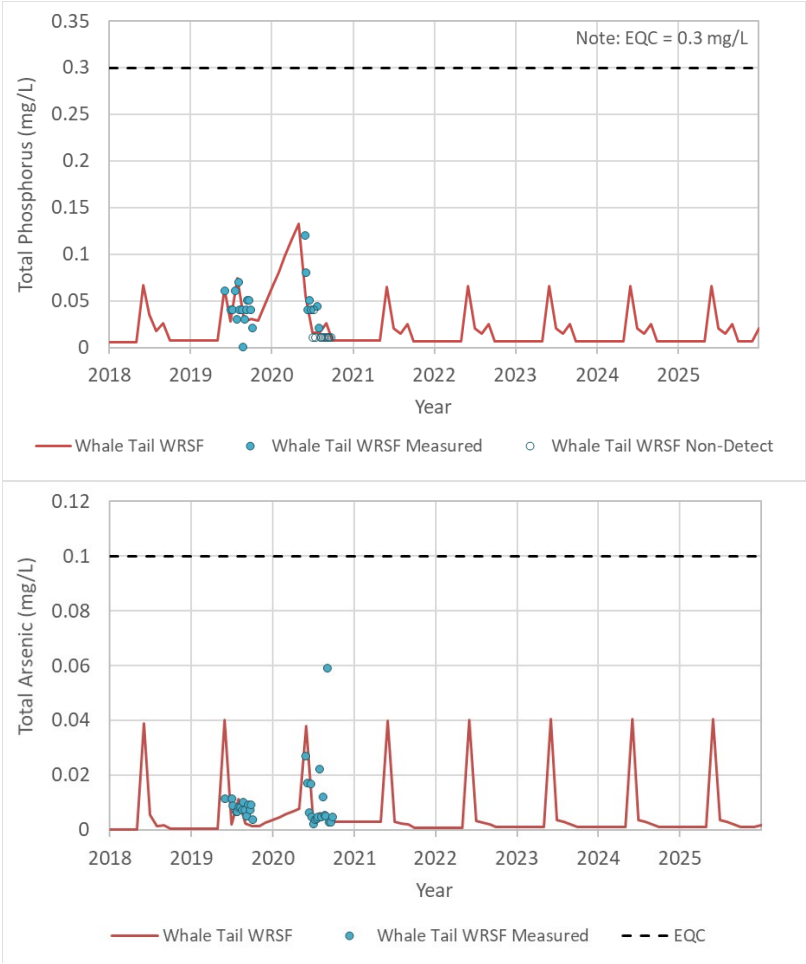


Figure 7: Projected total phosphorus (a) and total arsenic (b) concentrations for the Whale Tail WRSF Pond during operations. Open circles represent non-detected values at the detection limit for measured data.

4.1.1.2 Whale Tail Attenuation Pond

The mostly dewatered Whale Tail Attenuation Pond was used in 2019 to collect seepage water through the Whale Tail Dike; based on monitoring data this water discharged directly to the environment. In 2020 the Whale Tail Attenuation Pond was functional; collected site contact water was sent through the AsWTP and discharged to Whale Tail Lake (South Basin) and Mammoth Lake.

Generally, predicted concentrations in the Whale Tail Attenuation Pond increase in 2020, but decrease slightly and become stable for the remainder of operations. This trend occurs because in June 2021, when contact water is directed to the IVR Attenuation Pond, and the Whale Tail Attenuation Pond only continues receiving runoff from its immediate catchment area, and seepage through the Whale Tail Dike. Of those constituents with an applicable EQC, a slight increase in total arsenic, mercury, and nickel concentrations can be seen in 2022 relative to 2021; this is due to an increase of ore stockpile tonnage placed within the catchment area of the Whale Tail Attenuation Pond in that year.

The modelled Whale Tail Attenuation Pond arsenic concentrations increase from June through August and decrease again from September through the winter months, when there is no site runoff contact water. In the winter months, there is proportionally more contribution of groundwater and drilling water to the pit sumps, which have lower arsenic concentrations.

Predicted total phosphorus concentrations show a higher degree of variability throughout the year, and are affected both by the variation in TSS concentrations (higher in June, for example), groundwater inflows, and the STP effluent. As with arsenic, the predicted total phosphorus concentrations show a reduction in 2021; this is due the majority of contact water and STP effluent being directed to the IVR Attenuation Pond at that time, which reduces the loading to the Whale Tail Attenuation Pond.

Modelled constituents that showed concentrations consistently above their respective EQCs were total aluminum, iron, and chromium. Total mercury, cadmium, copper, nickel, lead, zinc, and ammonia remained below their respective EQCs.

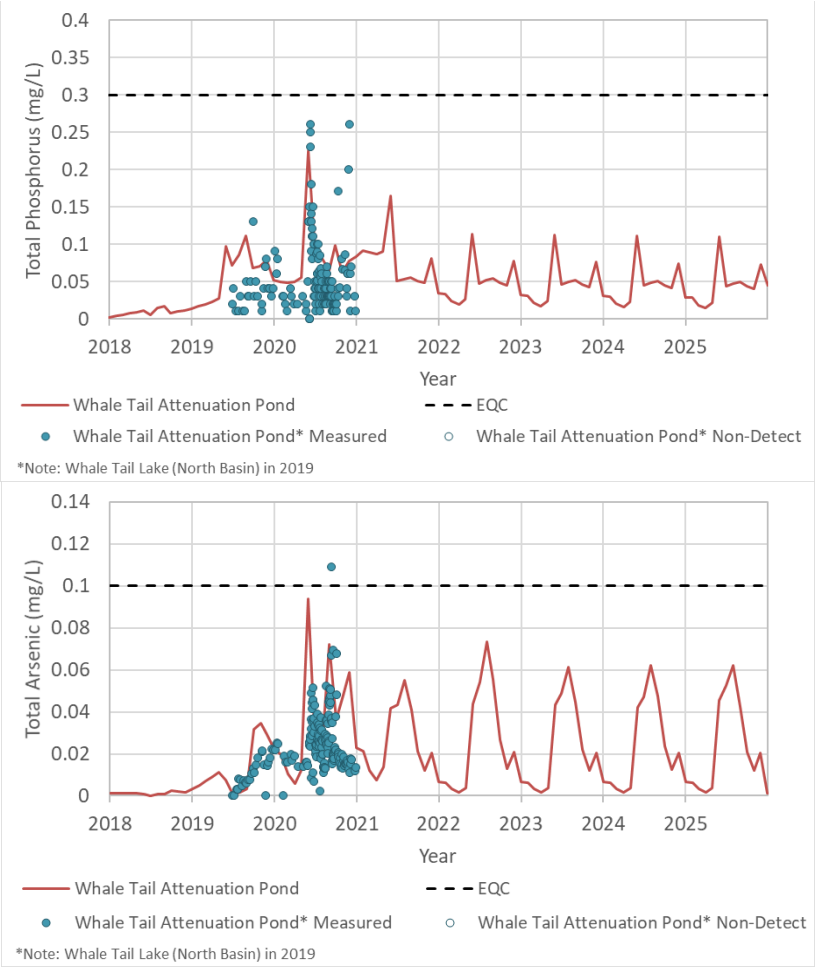


Figure 8: Projected total phosphorus (a) and total arsenic (b) concentrations for the Whale Tail Attenuation Pond during operations.

4.1.1.3 IVR Attenuation Pond

The IVR Attenuation Pond will collect all contact water on site and discharge to either Mammoth Lake or Whale Tail Lake (South Basin) via the AsWTP. As the IVR Attenuation Pond is anticipated to come online for freshet of 2021, no monitoring data exists and therefore the updates developed for the Whale Tail Attenuation Pond was applied. Total concentrations were calculated using the TSS concentrations in the Whale Tail Attenuation Pond as a proxy; this is considered conservative as the operational elevation of the IVR Attenuation Pond will result in a larger volume than the maintained volume of the Whale Tail Attenuation Pond, which will allow for more settling of particulate matter.

Predicted total arsenic concentrations show a large amount of variability (Figure 9), but are consistently at or above the EQC, particularly in June and October. Concentrations generally decrease during the winter months, and increase during the summer months, due to an increase in site runoff resulting in contact water. Concentrations show an increase from 2021 to 2022, reflective of the opening of the IVR Pit to its maximum footprint through that time period and an increased load from ore stockpiles. These predicted concentrations indicate that treatment for arsenic will be required for the remainder of operations.

Predicted total phosphorus concentrations show a seasonal increase in June, reflective of higher TSS concentrations. Concentrations decrease slightly but generally remain stable and within the range predicted for the Whale Tail Attenuation Pond for 2020. Predicted concentrations remain below the site EQC for the duration of operations, though daily variability in the monitoring data shows concentrations approaching the EQC and supports the continuation of treatment prior to discharge.

Other modelled constituents that showed concentrations consistently above their respective EQCs were total aluminum and iron. Total mercury, cadmium, chromium, copper, nickel, lead, zinc, and ammonia remained below their respective EQCs.

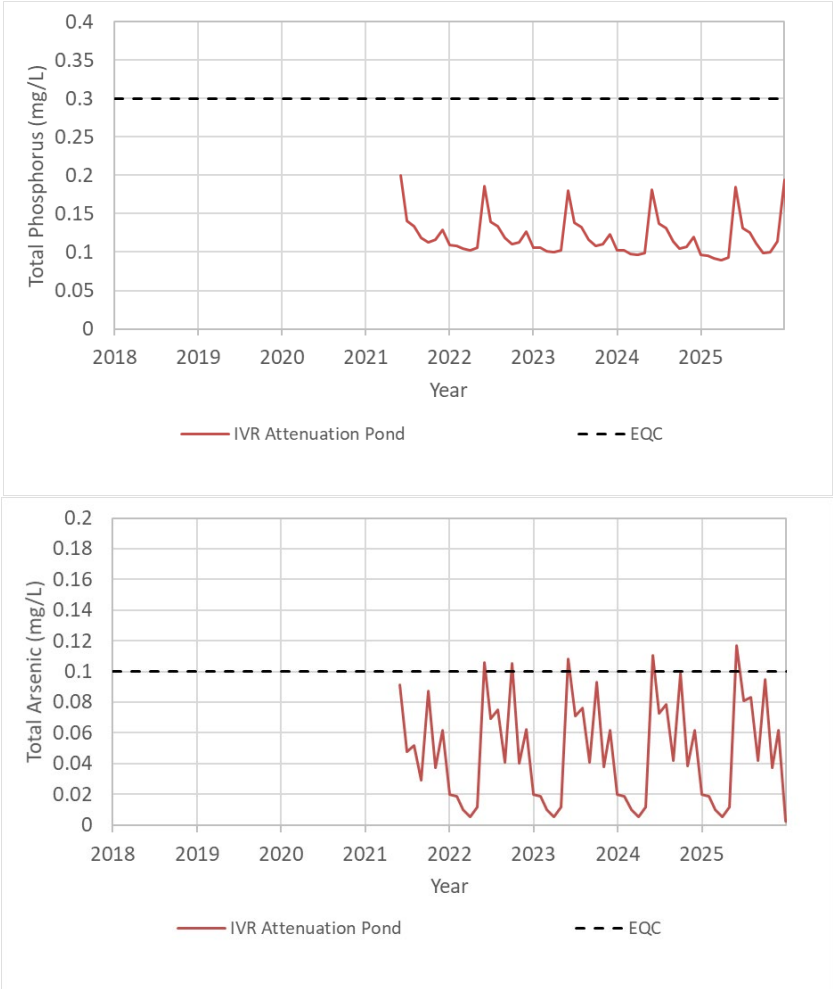


Figure 9: Projected total phosphorus (a) and total arsenic (b) concentrations for the IVR Attenuation Pond during operations.

4.1.1.4 AsWTP Effluent Discharge

The AsWTP effluent (Figure 10) is required to meet licence limits (NWB 2020). As discussed in Section 2.1.1, a treatment efficiency, based on differences in monitored concentrations in the Whale Tail Attenuation Pond and the AsWTP Effluent, was used to approximate treated effluent concentrations from the predicted water quality in the Whale Tail Attenuation Pond. These treatment efficiencies were applied through operations to all effluent, regardless of destination.

All modelled constituents that are regulated under the Water Licence A (NWB 2020) are predicted to be less than their respective effluent limits when passed through the AsWTP. As the predicted concentrations are monthly average concentrations, they do not show the daily variability that may occur; however, there were no exceedances in the monitoring data of maximum grab sample effluent limits.

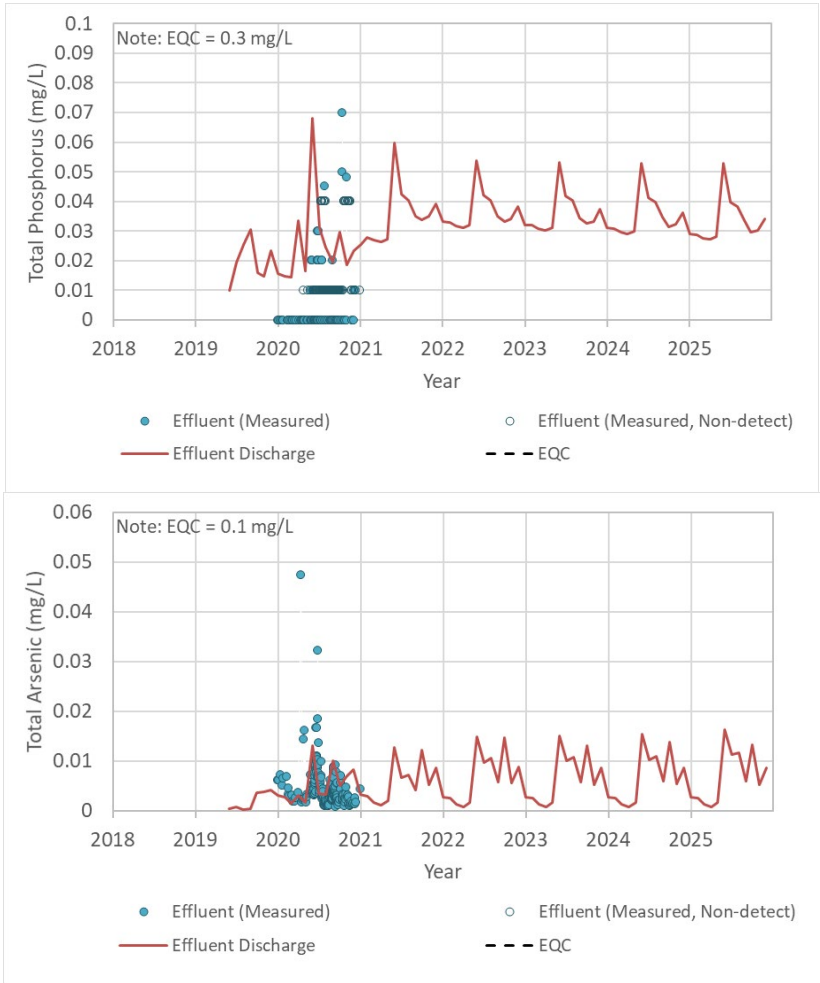


Figure 10: Projected total phosphorus (a) and total arsenic (b) concentrations for the treated AsWTP effluent discharge during operations. Open circles represent non-detected values at the detection limit for measured data.

4.1.2 Receiving Environment and Downstream Lakes

Results presented for the receiving environment and downstream lakes assume fully mixed conditions (as predicted for Mammoth Lake (Golder 2019c)), where the effluent and downstream lake overflow volumes and associated chemical loads are assumed to be transferred instantaneously. It is expected that changes in concentrations in the downstream lakes due to effluent discharge will show a lag, which will increase with distance from the discharge location. It should also be noted that predicted total concentrations in the downstream lakes do not account for any settling within the water column; the particulate fraction of total concentrations is assumed to remain suspended as it travels through the downstream pathways.

During the operations phase, treated water is discharged from the AsWTP, through a diffuser, to Mammoth Lake through the summer months and to Whale Tail Lake (South Basin) in the winter months.

Model results for the receiving and downstream environment were compared to the CEQG-PAL. Generally, concentrations are often over-predicted in Mammoth Lake and Whale Tail Lake (South Basin), despite fairly good alignment of predicted concentrations with monitored concentrations in the treated effluent. As these discrepancies occur to a larger degree through the winter months, it is likely that the coarse assumptions surrounding ice formation (instantaneous formation of 2 m of ice in the fall and melting over the month of June) are overly conservative. Ice records on Mammoth Lake and Whale Tail Lake (South Basin) support the use of 2 m

of ice formation; however, in reality the ice may take months to form, which could affect the evolution of water quality through the winter months. Mammoth Lake in particular is sensitive to ice formation as it has limited volume and depth, which may exacerbate the discrepancies between predicted and monitored concentrations. It is also possible that cryoconcentration is not occurring to the extent previously assumed (i.e., completely clean ice), or that some constituents may be incorporated into the ice more readily than others. Most likely it is a combination of gradual ice formation and particle settling that affect these discrepancies. The major ions, in particular, show better alignment with seasonal concentrations, but metals do not align as well.

Many constituents show an increase in predicted concentrations between 2020 and 2021 in Mammoth Lake as treated effluent is directed there annually during the summer months, with concentrations generally stabilizing or even decreasing between 2021 and 2025. The exceptions to this trend are total mercury, silver, arsenic, copper, nickel, thallium, and nitrate. Modelled constituents that are predicting exceedances of CEQG-PAL in Mammoth Lake are:

- Total aluminum: The exceedances are predicted to have previously occurred (i.e., in 2020), which measured data has demonstrated did not occur. Therefore, the model is over-predicting total aluminum concentrations in 2020 and is likely continuing throughout the modelled period.
- Total copper: The exceedances are predicted to occur only under ice, and there are no exceedances in the summer months. Further, the model is over-predicting total copper concentrations in 2020 and is likely continuing throughout the modelled period.
- Total iron: The exceedances are predicted to occur only under ice, and there are no exceedances in the summer months. Further, the model is over-predicting total iron in 2020 and is likely continuing throughout the modelled period.
- Total phosphorus: Predicted concentrations fall within the mesotrophic range (0.01 – 0.02 mg/L) in the summer months and fall within the meso-eutrophic range (0.02 – 0.035 mg/L) under ice. This is consistent with predictions provided from previous iterations. Concentrations are not predicted to attain levels within the eutrophic range (0.035 – 0.1 mg/L) or higher. Further, the model is generally overpredicting total phosphorus; it does not account for settling of particulate matter nor the uptake of phosphorus as a nutrient, which may result in some reduction in the concentrations in the water.
- Nitrate: The exceedances are predicted to occur only under ice, and there are no exceedances in the summer months.

Treated effluent is discharged to Whale Tail Lake (South Basin) in the winter months. Many constituents show an increase in predicted concentrations between 2019 and 2020 in Whale Tail Lake (South Basin), however predicted concentrations decrease throughout operations as the low flow winter discharge does not contribute enough mass to increase concentrations. Like Mammoth Lake, predicted concentrations in Whale Tail Lake (South Basin) are generally overpredicted. Some constituents are not well aligned for late-2019, and some constituents are slightly underpredicted in 2020. These include total nickel and lead (though data is limited as it is often below the detection limit).

Predicted concentrations of all constituents that have applicable CEQG-PAL (or SSWQO in the case of total arsenic) do not exceed their respective guidelines. Predicted concentrations of total phosphorus are within the oligotrophic range (0.004 – 0.01 mg/L) in the summer months, and the mesotrophic range (0.01 – 0.02 mg/L) in the winter months.

As discussed above, modelled constituents that have applicable CEQG-PAL (or SSWQO in the case of total arsenic) often are overpredicted by the model; however, both the monitored data and the model predictions remain well below the respective CEQG-PAL for the constituents not discussed above.

With respect to the furthest downstream model nodes, which are inlets to Lake DS1 (see Figure 2), no exceedances are propagated to Downstream Node 1 (DS1) or 2 (DS2). Predicted total phosphorus remains in the ultra-oligotrophic (< 0.004 mg/L) and oligotrophic ranges in DS1, and the oligotrophic and mesotrophic ranges in DS2.

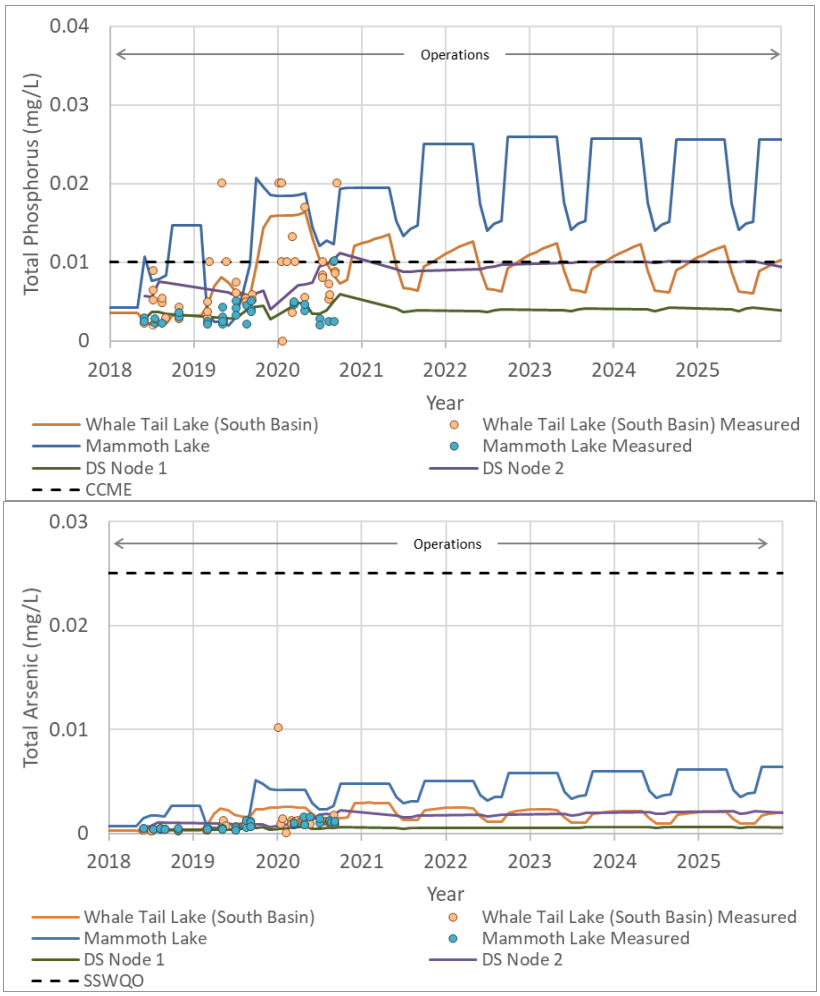


Figure 11: Projected total phosphorus (a) and total arsenic (b) concentrations for the receiving and downstream environment during operations. Open circles represent non-detected values at the detection limit in measured data.

4.2 Closure

4.2.1 Surface Operations

In early closure, all site contact water is transferred into the IVR Pit, which spills into Whale Tail Pit, until the pit lake is flooded to 153.5 masl (2041). During this time, site contact water quality improves as a result of closure activities including the removal of stockpiles with the eventual reclamation of all constructed pads.

As the pit lake is reflooding, a comprehensive water quality monitoring program may be undertaken based on monitoring data to ensure that both physical and chemical stability are achieved within the pit by the time it is fully flooded. The results from the monitoring program will be compared to model predictions, which in turn will inform the reflooding strategy if required, which may be adapted to achieve closure objectives. The closure objective is that pit lake water will meet water quality objectives concurrently with completed reflooding so that lake reconnection can occur once the pit lake reaches its full supply level.

Whale Tail WRSF

The WRSF contact water quality is predicted to show an improvement in closure due to the application of 10 mg/L of TSS, representing the covering of the Whale Tail WRSF (Figure 12). Total arsenic and phosphorus concentrations show seasonal variations based on the updates applied. Total phosphorus shows higher concentrations in June, with a decreasing trend through the summer. Total arsenic shows lower concentrations in June, with slightly higher concentrations in July and August. Both total arsenic and total phosphorus remain below their respective EQCs in the WRSF runoff. Basal seepage is not anticipated to occur, as per the results of the hydrological modelling of the WRSF (Appendix E of Golder 2019b).

Total aluminum, chromium, and iron concentrations are greater than the EQCs in June only, when TSS levels are also highest; all other modelled constituents with EQCs show no exceedances.

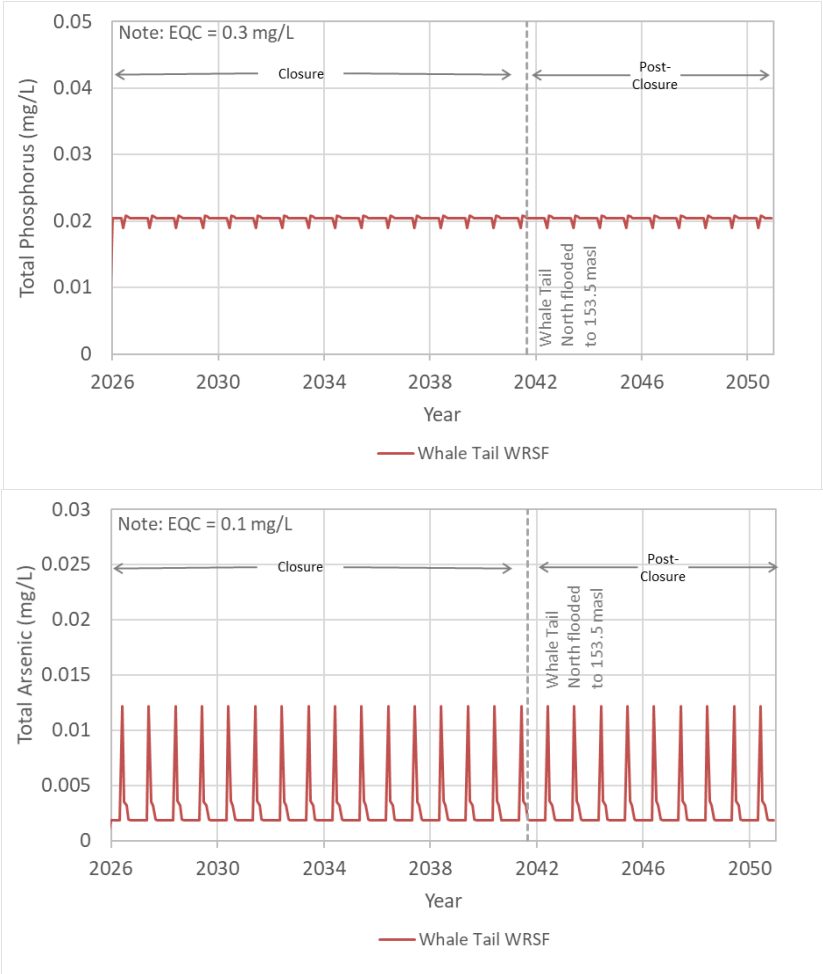


Figure 12: Projected total phosphorus (a) and total arsenic (b) concentrations for the Whale Tail WRSF pond in closure and post-closure.

IVR Pit

At the start of closure, IVR Pit receives a large volume of fresh water for flooding that is anticipated to input little to no loading of arsenic or any other constituent. The flooding therefore results in an improvement to water quality in the pit as it floods during closure (i.e., predictions of progressively lower constituent concentrations in the flooding lake as the pit fills).

Water quality in the IVR Pit (Figure 13) is predicted to have some elevated constituent concentrations initially during flooding. This results from the comparatively large mass load from the pit benches and floors compared to the relatively small volume of water present in the pit sump at the onset of flooding. This water remains in the pit and water quality improves with flooding inflows as the exposed pit wall surface area decreases with pumped inflows from Whale Tail (South Basin) and the contribution of natural runoff from the drainage basin. Total arsenic concentrations are predicted to decrease below the SSWQO within the first year of closure and continue to decrease into post-closure. Predicted total phosphorus shows the same decreasing trend and remains in the oligotrophic range throughout all of closure and post-closure.

No concentrations greater than the CEQG-PAL (chronic) were predicted for chloride, fluoride, nitrate, or total concentrations of mercury, silver, aluminum, boron, cadmium, copper, iron, molybdenum, nickel, lead, selenium, thallium, uranium, or zinc.

Whale Tail Pit

In closure, the primary sources of filling Whale Tail Pit are the overflow from IVR Pit and the overflow from the Whale Tail Attenuation Pond. Similar to the IVR Pit, the Whale Tail Pit (Figure 13) is predicted to have some elevated constituent concentrations initially during flooding, due to an initial mass load from the pit benches and floors compared to the small volume of water present. Throughout closure, however, the flooding results in an improvement to water quality in the pit as the IVR Pit improves in water quality. The Whale Tail Attenuation Pond is a source of some elevated concentrations to the Whale Tail Pit, but the flow is much less than from the IVR Pit overflow.

Total arsenic concentrations are predicted to decrease below the SSWQO prior to the completion of flooding and continue to decrease into post-closure. Total phosphorus concentrations decrease to within the oligotrophic range within a few years of post-closure.

No concentrations greater than the CEQG-PAL (chronic) were predicted for chloride, fluoride, nitrate, or total concentrations of mercury, silver, aluminum, boron, cadmium, copper, iron, molybdenum, nickel, lead, selenium, thallium, uranium, or zinc.

Whale Tail Attenuation Pond

Total phosphorus concentrations in the flooded Whale Tail Attenuation Pond show a decrease to the oligotrophic range between 2040 and 2042, as it merges with the flooded Whale Tail Pit and IVR Pit and begins receiving inflows from Whale Tail Lake (South Basin) following flooding up to 153.5 masl. Total arsenic is predicted to be below the SSWQO at the start of closure. Total copper is predicted to reach the CEQG-PAL during closure, but concentrations decrease as the Whale Tail Attenuation Pond merges with the pit lake.

No concentrations greater than the CEQG-PAL (chronic) were predicted for chloride, fluoride, nitrate, or total concentrations of mercury, silver, aluminum, boron, cadmium, iron, molybdenum, nickel, lead, selenium, thallium, uranium or zinc..

4.2.2 Receiving Environment and Downstream Lakes

During flooding of the Whale Tail Pit Lake, site discharges to the receiving environment cease and are redirected to the IVR open pit until a flooded elevation of 153.5 masl is reached (predicted to occur in 2041). Whale Tail Lake (South Basin) is drawn down to 153.5 masl and all flow through the Whale Tail Lake (South Basin) Diversion Channel to Mammoth Lake ceases. During active flooding, Mammoth Lake and all downstream lakes trend towards baseline conditions, since only natural runoff enters their systems. For the majority of the modelled constituents with applicable CEQG-PAL, this results in a steady decrease in concentrations. For total boron and lead concentrations increase slightly as baseline concentrations are above the predicted concentrations at the end of operations. Water quality constituent concentrations progressively decrease through the downstream environment during this time (Figure 13).

Phosphorus concentrations decrease to the oligotrophic range in open water conditions within a few years after the start of closure. Under-ice concentrations decrease to oligotrophic levels in 2033, approximately 8 years into closure. Under ice and open water total arsenic concentrations are predicted to be below the SSWQO in Mammoth Lake from the beginning of closure. Predicted total copper, iron, zinc, and nitrate concentrations exceed the CEQG-PAL under ice for the first couple of years into closure only.

No concentrations greater than the CEQG-PAL were predicted for chloride, fluoride, or for total concentrations of mercury, silver, aluminum, boron, cadmium, molybdenum, nickel, lead, selenium, thallium, or uranium.

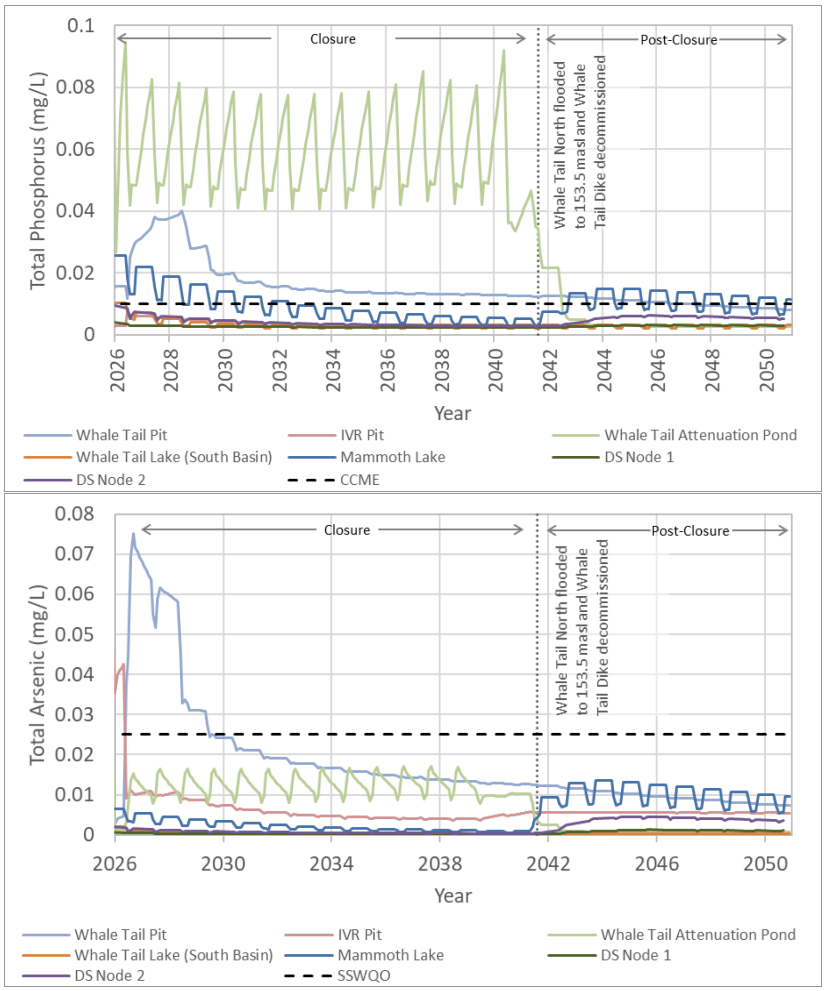


Figure 13: Projected total phosphorus (a) and total arsenic (b) concentrations for the Whale Tail Pit, the IVR Pit, the Whale Tail Attenuation Pond, and the receiving environment during closure and post-closure.

4.3 Post-Closure

Post-closure occurs when the Whale Tail Pit lake is fully flooded and water meets closure water quality objectives, which is predicted to occur prior the completion of flooding. At that time, both the Mammoth Dike and the Whale Tail Dike are decommissioned, the Whale Tail Lake North and South Basins are reconnected, and water naturally flows over the Mammoth sill into Mammoth Lake from the Whale Tail Lake (North Basin). Mammoth Lake also receives runoff directly from the Whale Tail WRSF.

Pit Lake

Concentrations of all water quality constituents throughout the pit lake are predicted to remain below receiving water quality objectives in post-closure. The Whale Tail Pit, IVR Pit, and the Whale Tail Attenuation Pond are connected at the surface and water is exchanged between them.

Downstream Water Quality

Water quality in Mammoth Lake and the downstream lakes show an initial increase in some predicted concentrations at the start of post-closure; this is due to a large volume of water flowing from the flooded pit lake, which has higher concentrations than Mammoth Lake at that point in time (for example, total arsenic). All predicted concentrations are predicted to meet the CEQG-PAL. Predicted total phosphorus concentrations increase slightly but remain within the oligotrophic range in open water conditions and begin decreasing again within a couple of years of post-closure. Predicted total arsenic remains below the SSWQO in post-closure, and continue to trend to conditions similar to baseline.

5.0 STUDY LIMITATIONS

Golder Associates Ltd. (Golder) has prepared this document in a manner consistent with that level of care and skill ordinarily exercised by members of the engineering and science professions currently practicing under similar conditions in the jurisdiction in which the services are provided, subject to the time limits and physical constraints applicable to this document. No warranty, express or implied, is made.

This document, including all text, data, tables, plans, figures, drawings and other documents contained herein, has been prepared by Golder for the sole benefit of Agnico Eagle Mines Limited. It represents Golder's professional judgement based on the knowledge and information available at the time of completion. Golder is not responsible for any unauthorized use or modification of this document. All third parties relying on this document do so at their own risk.

The factual data, interpretations, suggestions, recommendations and opinions expressed in this document pertain to the specific project, site conditions, design objective, development and purpose described to Golder by Agnico Eagle Mines Limited and are not applicable to any other project or site location. In order to properly understand the factual data, interpretations, suggestions, recommendations and opinions expressed in this document, reference must be made to the entire document.

This document, including all text, data, tables, plans, figures, drawings and other documents contained herein, as well as all electronic media prepared by Golder are considered its professional work product and shall remain the copyright property of Golder. Agnico Eagle Mines Limited may make copies of the document in such quantities as are reasonably necessary for those parties conducting business specifically related to the subject of this document or in support of or in response to regulatory inquiries and proceedings. Electronic media is susceptible to unauthorized modification, deterioration and incompatibility and therefore no party can rely solely on the electronic media versions of this document.

6.0 CLOSURE

Should you have any questions regarding this report, please do not hesitate to contact the undersigned.

Golder Associates Ltd.

Prepared by:

ORIGINAL SIGNED BY

Kristina Skeries, M.Sc.
Environmental Specialist

ORIGINAL SIGNED BY

David Brown
Principal, Senior Environmental Specialist

KS/DB/lc/sg

https://golderassociates.sharepoint.com/sites/138037/project files/5 technical work/01_wb_wq/02_reporting/wq/rev0/20442330-517-rpt-whaletail-2020annualrpt-waterquality_rev0_12april2021.docx

7.0 REFERENCES

Agnico Eagle. 2016a. Whale Tail Pit Project - Meadowbank Mine Final Environmental Impact Statement and Type A Water Licence Amendments. Amendment/Reconsideration of the Project Certificate (No. 004/ File No. 03MN107) and Amendment to the Type A Water Licence (No. 2AM-MEA1525). Submitted to the Nunavut Impact Review Board. June 2016.

Agnico Eagle. 2021. Whale Tail Pit – Water Management Plan. Version 6. April 2021.

APHA (American Public Health Association). 2017. Standard Methods for the Examination of Water and Wastewater: 23rd edition. Washington DC, USA.

CCME (Canadian Council of Ministers of Environment). 2007. Canadian Environmental Quality Guidelines (CEQG) for the Protection of Aquatic Life, accessed March 2020: http://st-ts.ccme.ca/en/index.html

Golder (Golder Associates Ltd). 2016. Water Management and Water Balance Related to Amaruq Exploration Portal/Ramp Program, Quarry and Advanced Underground Exploration and Bulk Sample, Amaruq Exploration Site, Nunvaut. Reference No. 069-1665859 Ver 0. November 2016.

Golder. 2017a. Addendum to Agnico Eagle Mines Whale Tail FEIS Appendix 6-H. Sensitivity Analyses on Water Quality Modelling in Support of Responses to Technical Commitments 30, 36, 37, and 42 and Intervenor Comment ECCC#15 and INAC-TRC #3 and #5, on the Water Licence Application to the Nunavut Water Board. Reference No 015 1658927/6100/6120 Revision 3. August 2017.

Golder. 2018a. Mine Site and Downstream Receiving Water Quality Predictions Whale Tail Pit – Expansion Project. Reference No. 1789310-237-RPT-Rev0. November 2018.

Golder. 2018b. Evaluation of the Geochemical Properties of Waste Rock, Ore, Tailings, Overburden and Sediment, Whale Tail Pit Project. Reference No. 1789310-182-RPT-Rev1. November 2018.

Golder. 2018c. Whale Tail Pit Project Waste Rock Storage Facility Cover Thermal Assessment. June 2018.

Golder. 2019a. Mine Site Downstream Receiving Water Quality Predictions. Whale Tail Pit – Expansion Project. Reference No. 18108905-308-RPT-Rev0. May 2019.

Golder. 2019b. 2019 Mean Annual Water Balance Update Whale Tail Pit – Expansion Project. Reference 18108905-294-RPT-Rev0. May 2019.

Golder. 2019c. Amaruq Mine - Hydrodynamic Modelling of Mammoth Lake, Whale Tail Approved Project. Reference No. 1789310-246-TM-Rev0. March 2019.

Golder. 2020. Whale Tail Pit – Approved Project, Mine Site and Downstream Receiving Water Quality Predictions – 2019 Annual Report. Reference No. 20136950-480-RPT-RevA. March 2020.

Golder. 2021. Whale Tail Project. 2020 Annual Report – Water Balance. Reference No. 20442330-514-RPT-RevA. April 2021.

NWB (Nunavut Water Board). 2020. Type A Amended Water licence #2AM-WTP1830. 47p.

APPENDIX A

Geochemical Source Terms and Water Quality Inputs

Geochemical Source Terms and Water Quality Inputs

Constituents	Whale Tail Lake		Natural Runoff		Mammoth Lake		Nemo Lake		Watershed A		Shallow Groundwater
	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Alkalinity as $CaCO_3$	4.5	4.5	4.9	4.9	5.2	5.2	7.5	7.5	5.6	5.6	102
Sulphate	1.4	1.4	1.4	1.4	2.3	2.3	3.3	3.3	2.1	2.1	46
Calcium	2.1	2.1	1.8	1.7	3.1	3.1	2.3	2.3	1.9	1.9	73
Chloride	2.6	2.6	2.3	2.3	4.2	4.2	0.56	0.56	1.2	1.2	255
Fluoride	0.026	0.026	0.032	0.032	0.026	0.026	0.024	0.024	0.027	0.027	0.37
Mercury	0.000005	0.000005	0.000005	0.000005	0.0000051	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005
Silver	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.000025
Aluminum	0.0053	0.011	0.019	0.17	0.0034	0.0078	0.0017	0.011	0.0037	0.012	0.04
Arsenic	0.00015	0.00017	0.00019	0.00027	0.00035	0.00039	0.00028	0.0003	0.00017	0.0002	0.003
Barium	0.0041	0.0041	0.0048	0.0045	0.0059	0.006	0.0042	0.0042	0.0055	0.0039	0.13
Beryllium	0.00002	0.00002	0.00002	0.000026	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.0001
Boron	0.01	0.01	0.01	0.01	0.010	0.010	0.010	0.010	0.01	0.01	0.46
Bismuth	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.0001
Cadmium	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.0000055	0.0000052	0.0000058	0.00012
Cobalt	0.0001	0.0001	0.0001	0.00016	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0018
Chromium	0.0001	0.00011	0.0002	0.00076	0.0001	0.00012	0.0001	0.00011	0.0001	0.00011	0.0012
Copper	0.00048	0.00051	0.00069	0.00095	0.0004	0.00052	0.00026	0.0005	0.0006	0.00052	0.0039
Iron	0.015	0.023	0.058	0.32	0.010	0.016	0.010	0.012	0.012	0.035	0.05
Potassium	0.4	0.4	0.42	0.42	0.59	0.6	0.61	0.61	0.48	0.48	6.4
Lithium	0.001	0.001	0.001	0.001	0.0011	0.0011	0.001	0.001	0.001	0.001	0.018
Magnesium	0.72	0.72	0.85	0.86	0.94	0.93	1.1	1.1	0.64	0.63	30
Manganese	0.0015	0.0029	0.0021	0.005	0.0011	0.0024	0.0019	0.0037	0.00066	0.0015	0.32
Molybdenum	0.00005	0.000059	0.00005	0.000066	0.000051	0.000056	0.000052	0.000061	0.000051	0.000051	0.027
Nickel	0.00063	0.00068	0.00096	0.0013	0.00074	0.00083	0.00058	0.00063	0.00054	0.00056	0.0058
Phosphorus	0.0021	0.0024	0.0022	0.0038	0.0022	0.0025	0.002	0.003	0.0021	0.0022	0.2
Lead	0.000054	0.00007	0.000081	0.00021	0.000066	0.000074	0.00009	0.00005	0.000062	0.00008	0.001
Antimony	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00028
Selenium	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00075
Strontium	0.014	0.014	0.011	0.011	0.02	0.02	0.0097	0.0099	0.0084	0.0087	0.62
Tin	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00011	0.0001	0.00013	0.0001	0.0001
Thallium	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
Uranium	0.000031	0.000037	0.000074	0.00014	0.00002	0.000024	0.00001	0.00001	0.000025	0.00003	0.0078
Vanadium	0.0005	0.0005	0.0005	0.0006	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.00053
Zinc	0.0011	0.003	0.0012	0.0031	0.001	0.003	0.0011	0.003	0.0011	0.003	0.012
Nitrate as N	0.0051	0.0051	0.0079	0.0079	0.0051	0.0051	0.005	0.005	0.0074	0.0074	0.13
Sodium	0.55	0.55	0.67	0.67	0.6	0.6	0.51	0.51	0.65	0.65	56
Ammonia as N	0.0061	0.0061	0.0055	0.0055	0.0065	0.0065	0.0051	0.0051	0.0053	0.0053	0.33

Geochemical Source Terms and Waste Rock Inputs

Constituents	Ore	South Greywacke (S3S)	Central Greywacke (S3C)	North Greywacke (S3N)	Chert (S10e)	Iron Formation (SE9)	Komatiite (0a)	Komatiite (0b)	Basalt (1b)	Diorite (8b)	Gabbro (I3)	Overburden	Lake Sediment	Developed Area and Cover Material
	mg/kg/mon	mg/kg/mon	mg/kg/mon	mg/kg/mon	mg/kg/mon	mg/kg/mon	mg/kg/mon	mg/kg/mon	mg/kg/mon	mg/kg/mon	mg/kg/mon	mg/kg/mon	mg/kg/yr	mg/kg/mon
Acidity	11	0.073	0.2	0.31	0.19	0.22	0.2	0.19	0.19	2.0	0.19	0	0	0.93
Alkalinity	5.8	1.2	4.4	2.8	6.2	3.4	3.3	3.8	3.9	3.2	3.9	65	254	2.1
Sulphate	19	1.6	22	34	34	4.1	2.1	3.2	2.3	1.8	2.3	4.1	170	1.7
Calcium	8.6	0.73	8.7	12	13	1.6	1.1	1.3	1.2	1.1	1.2	2.1	35	0.89
Chloride	6.1	0.072	0.26	0.33	0.33	0.54	0.29	0.27	0.19	0.98	0.19	7.1	15	0.48
Fluoride	0.064	0.0053	0.024	0.027	0.032	0.0074	0.008	0.0098	0.018	0.059	0.018	0.89	1.6	0.029
Mercury	0.0000098	0.00000037	0.00000094	0.00000096	0.00000098	0.00000099	0.000001	0.00000092	0.00000091	0.0000098	0.00000091	0.000058	0.00004	0.0000046
Silver	0.000052	0.00000073	0.0000012	0.0000045	0.0000029	0.0000035	0.0000016	0.0000025	0.0000022	0.0000028	0.0000022	0.000042	0.00024	0.0000017
Aluminum	0.025	0.0022	0.0024	0.00094	0.00075	0.0017	0.0016	0.0038	0.0028	0.039	0.0028	2.6	2.5	0.019
Arsenic	0.065	0.0021	0.0014	0.00025	0.0024	0.55	0.52	0.13	0.068	0.0048	0.068	0.014	0.7	0.0033
Barium	0.0067	0.0011	0.0014	0.00098	0.0025	0.0015	0.0029	0.0038	0.0094	0.0023	0.0094	0.033	0.48	0.0016
Beryllium	0.000011	0.00000025	0.00000067	0.00000063	0.00000067	0.00000067	0.00000072	0.00000064	0.00000064	0.0000069	0.00000064	0.00017	0.00015	0.0000032
Boron	0.0097	0.001	0.0033	0.0038	0.0055	0.003	0.0025	0.0013	0.0014	0.0017	0.0014	0.16	2.2	0.0013
Bismuth	0.000011	0.00000031	0.00000071	0.00000064	0.00000073	0.0000012	0.00000086	0.00000071	0.00000065	0.0000069	0.00000065	0.000063	0.00014	0.0000033
Cadmium	0.0000051	0.00000039	0.0000019	0.000016	0.0000047	0.00000033	0.00000056	0.00000048	0.00000066	0.0000031	0.00000066	0.000022	0.00054	0.0000016
Cobalt	0.00082	0.0000089	0.000057	0.00034	0.00021	0.000082	0.000088	0.000062	0.000049	0.00015	0.000049	0.0028	0.041	0.000074
Chromium	0.000069	0.0000045	0.0000037	0.00001	0.0000063	0.000013	0.000021	0.000017	0.000036	0.000029	0.000036	0.01	0.019	0.000016
Copper	0.00091	0.000025	0.000055	0.0001	0.000033	0.000042	0.000081	0.000045	0.00012	0.00021	0.00012	0.015	0.05	0.00011
Iron	0.24	0.00029	0.0010	0.00081	0.0011	0.00083	0.0014	0.00082	0.001	0.0074	0.001	2.9	6.5	0.0035
Potassium	3.7	0.54	3.6	2.5	4.7	2.2	1.7	2.0	2.0	1.0	2.0	2.0	8.5	0.76
Lithium	0.0014	0.00015	0.00045	0.00059	0.00052	0.00032	0.00031	0.00051	0.00075	0.00063	0.00075	0.0048	0.019	0.00036
Magnesium	1.0	0.14	0.65	1.8	1.2	0.49	0.48	0.59	0.54	0.13	0.54	1.2	7.1	0.14
Manganese	0.089	0.00042	0.0097	0.13	0.049	0.0017	0.001	0.0015	0.0013	0.0048	0.0013	0.069	12	0.0024
Molybdenum	0.0013	0.0002	0.00068	0.00011	0.0003	0.00014	0.00017	0.00043	0.00051	0.0013	0.00051	0.0014	0.0014	0.0007
Nickel	0.031	0.00004	0.00025	0.0013	0.0017	0.0024	0.0012	0.00057	0.00041	0.0003	0.00041	0.0096	0.48	0.00016
Phosphorus	0.0048	0.00017	0.00038	0.00039	0.00038	0.00048	0.0004	0.0004	0.0018	0.00058	0.0018	0.13	0.77	0.00036
Lead	0.000032	0.0000047	0.0000033	0.0000065	0.0000036	0.000002	0.000004	0.0000042	0.000016	0.000021	0.000016	0.0024	0.014	0.000012
Antimony	0.0017	0.000082	0.00026	0.00012	0.00028	0.0083	0.0046	0.0006	0.00043	0.00038	0.00043	0.0017	0.0077	0.00021
Selenium	0.00017	0.000031	0.00017	0.00026	0.00014	0.000054	0.000085	0.00012	0.00061	0.000075	0.00061	0.00063	0.0048	0.000051
Strontium	0.022	0.0046	0.017	0.023	0.038	0.0095	0.011	0.011	0.019	0.0031	0.019	0.011	0.18	0.0039
Tin	0.00013	0.000012	0.00018	0.000046	0.000016	0.0000046	0.0000075	0.000014	0.000024	0.00011	0.000024	0.00021	0.00099	0.000054
Thallium	0.000028	0.0000013	0.0000011	0.000002	0.0000014	0.0000013	0.0000045	0.000005	0.000004	0.0000052	0.000004	0.000021	0.000073	0.000003
Uranium	0.00004	0.00023	0.00078	0.00039	0.0003	0.000034	0.000081	0.00029	0.00032	0.00043	0.00032	0.0024	0.0027	0.00032
Vanadium	0.00026	0.000074	0.000016	0.0000068	0.0000083	0.00067	0.0011	0.00076	0.0018	0.00052	0.0018	0.0047	0.0039	0.00028
Zinc	0.002	0.000079	0.00019	0.00047	0.00025	0.00019	0.00019	0.00018	0.00018	0.002	0.00018	0.0086	0.027	0.00093
Nitrate	0	0	0	0	0	0	0	0	0	0	0	0	2.4	0
Sodium	1.1	0.064	1.0	0.53	2.1	0.39	0.18	0.17	0.18	0.1	0.18	35	148	0.082
Ammonia	0	0	0	0	0	0	0	0	0	0	0	0	0	0

APPENDIX B

Mass Balance Inputs and Assumptions

B1.0 WRSF PROPORTIONS, FACILITY FOOTPRINTS AND 3D AREAS, AND PIT WALL PROPORTIONS

Table B1: Proportions of Waste Rock by Lithology (tonnes/yr).

	2017	2018	2019	2020	2021	2022	2023	2024	2025
PAG Waste Rock Tonnages – Whale Tail Open Pit									
Gabbro (I3 [a1])	0	0	0	0	0	0	0	0	0
Chert (S10E)[1]	0	413,181	3,023,585	3,736,876	3,192,778	2,020,285	1,333,625	1,799,698	0
Greywacke North (S3N [3b])	0	0	1,882,560	1,913,837	1,490,626	1,071,617	1,953,700	70,875	0
Central Greywacke (S3C [3b])	0	123,228	1,664,112	731,393	973,546	1,107,403	764,477	913,790	0
Iron Formation (SE9 [0a])	0	0	1,859,364	3,407,999	4,208,083	3,285,456	2,421,373	735,236	0
Ultramafic South (V3-V4 [0b])	0	0	3,028,135	3,719,001	4,685,969	2,293,682	5,602,787	3,737,924	0
Ultramafic North (V4 [0a])[2]	104,746	135,053	771,571	2,558,408	2,395,456	2,967,071	2,311,356	2,180,328	0
Overburden	199,454	1,236,488	4,111,005	2,072,751	0	0	0	0	0
Basalt (V3 [1b])	877	264,871	1,416,093	2,756,511	2,487,564	3,519,548	1,589,521	2,454,306	0
NPAG Waste Rock Pile Proportions – Whale Tail Open Pit									
Diorite (I1-I2 [8b])	109,469	0	710,273	4,343,901	3,589,954	4,861,129	2,774,139	357,193	0
North Greywacke (S3N [3b])	0	0	806,811	820,216	638,840	459,264	837,300	30,375	0
South Greywacke (S3S [3b])	246,533	45,223	1,956,248	4,230,123	3,126,818	5,053,207	3,733,897	2,167,023	0
Developed Areas Material and Cover Waste Rock Proportions									
Diorite (I1-I2 [8b])	16,746,059								
South Greywacke(S3S [3b])	20,559,071								
Waste Rock Tonnages – IVR Open Pit									
Gabbro (I3 [a1])	0	0	0	0	887	41,050	4,146,705	4,317,181	366,453
Chert (S10E)[1]	0	0	0	14,759	2,483	6,681	32,613	138,534	22,048
Greywacke North (S3N [3b])	0	0	0	20,660	10,379	30,861	225,296	446,128	46,192
Central Greywacke (S3C [3b])	0	0	0	133	536,065	215,832	0	1,654	0
Iron Formation (SE9 [0a])	0	0	0	0	0	0	0	0	0
Ultramafic South (V3-V4 [0b])	0	0	0	793,695	1,753,494	3,763,583	2,300,751	3,594,053	617,992
Ultramafic North (V4 [0a])[2]	0	0	0	301,556	1,696,084	405,873	686,639	925,050	38,200
Overburden	0	0	0	874,398	1,342,271	281,150	1,226,057	0	0
Diorite (I1-I2 [8b])	0	0	0	0	0	0	0	0	0

Table B1: Proportions of Waste Rock by Lithology (tonnes/yr).

	2017	2018	2019	2020	2021	2022	2023	2024	2025
South Greywacke (S3S [3b])	0	0	0	0	0	0	0	0	0
Basalt (V3 [1b])	0	0	0	0	113,346	6,276	0	0	0
Waste Rock Proportions – Underground									
Gabbro (I3 [a1])	0	0	0	0	0	0	0	0	0
Chert (S10E)[1]	0	0	0	0	16,991	65,870	64,288	88,476	29,922
Greywacke North (S3N [3b])	0	0	0	0	0	0	0	0	0
Central Greywacke (S3C [3b])	0	0	0	0	349	11,226	12,490	13,990	23,229
Iron Formation (SE9 [0a])	0	0	0	0	724	9,159	8,895	4,904	3,460
Ultramafic South (V3-V4 [0b])	0	0	0	0	0	1,490	1,482	2,477	1,530
Ultramafic North (V4 [0a])[2]	0	0	2,424	28,113	106,720	113,390	65,785	51,265	15,217
Diorite (I1-I2 [8b])	0	0	17,664	20,497	11,771	0	0	0	0
South Greywacke (S3S [3b])	0	0	45,009	88,000	29,650	10,020	40,409	36,415	0
Basalt (V3 [1b])	0	0	0	92,662	200,148	66,890	58,195	90,904	14,431

Notes:

1. Includes Chert Central (S10C) and Chert zone R (S10R).
2. Includes Non-Defined Waste, Lamprophyre (LAM), and miscellaneous ultramafic (N_UL [0a]).

Table B2: Proportions of Waste Rock by Lithology (%)

	2017	2018	2019	2020	2021	2022	2023	2024	2025
PAG Waste Rock Proportions – Whale Tail Open Pit[1]									
Gabbro (I3 [a1])	0	0	0	0	0	0	0	0	0
Chert (S10E)[2]	0	19	17	18	16	12	8.3	15	0
Greywacke North (S3N [3b])	0	0	11	9.2	7.7	6.6	12	0.6	0
Central Greywacke (S3C [3b])	0	5.7	9.4	3.5	5	6.8	4.8	7.7	0
Iron Formation (SE9 [0a])	0	0	10	16	22	20	15	6.2	0
Ultramafic South (V3-V4 [0b])	0	0	17	18	24	14	35	31	0
Ultramafic North (V4 [0a])[3]	34	6.2	4.3	12	12	18	14	18	0
Overburden	65	57	23	9.9	0	0	0	0	0
Basalt (V3 [1b])	0.29	12	8	13	13	22	9.9	21	0
NPAG Waste Rock Pile Proportions – Whale Tail Open Pit[4]									
Diorite (I1-I2 [8b])	31	0	20	46	49	47	38	14	0
North Greywacke (S3N [3b])	0	0	23	8.7	8.7	4.4	11	1.2	0
South Greywacke (S3S [3b])	69	100	56	45	43	49	51	85	0
Developed Areas Material and Cover Waste Rock Proportions									
Diorite (I1-I2 [8b])	45								
South Greywacke (S3S [3b])	55								
Waste Rock Proportions – IVR Open Pit									
Gabbro (I3 [a1])	0	0	0	0	0.016	0.86	48	46	34
Chert (S10E)[2]	0	0	0	0.74	0.046	0.14	0.38	1.5	2
Greywacke North (S3N [3b])	0	0	0	1	0.19	0.65	2.6	4.7	4.2
Central Greywacke (S3C [3b])	0	0	0	0.0067	9.8	4.5	0	0.018	0
Iron Formation (SE9 [0a])	0	0	0	0	0	0	0	0	0
Ultramafic South (V3-V4 [0b])	0	0	0	40	32	79	27	38	57
Ultramafic North (V4 [0a])[3]	0	0	0	15	31	8.5	8	9.8	3.5
Overburden	0	0	0	44	25	5.9	14	0	0
Diorite (I1-I2 [8b])	0	0	0	0	0	0	0	0	0
South Greywacke (S3S [3b])	0	0	0	0	0	0	0	0	0
Basalt (V3 [1b])	0	0	0	0	2.1	0.13	0	0	0

Table B2: Proportions of Waste Rock by Lithology (%)

	2017	2018	2019	2020	2021	2022	2023	2024	2025
Waste Rock Proportions – Underground									
Gabbro (I3 [a1])	0	0	0	0	0	0	0	0	0
Chert (S10E)[2]	0	0	0	0	0.046	0.24	0.26	0.31	0.34
Greywacke North (S3N [3b])	0	0	0	0	0	0	0	0	0
Central Greywacke (S3C [3b])	0	0	0	0	0.00095	0.04	0.05	0.049	0.26
Iron Formation (SE9 [0a])	0	0	0	0	0.002	0.033	0.035	0.017	0.039
Ultramafic South (V3-V4 [0b])	0	0	0	0	0	0.0054	0.0059	0.0086	0.017
Ultramafic North (V4 [0a])[3]	0	0	0.037	0.12	0.29	0.41	0.26	0.18	0.17
Diorite (I1-I2 [8b])	0	0	0.27	0.089	0.032	0	0	0	0
South Greywacke (S3S [3b])	0	0	0.69	0.38	0.081	0.036	0.16	0.13	0
Basalt (V3 [1b])	0	0	0	0.4	0.55	0.24	0.23	0.32	0.16

Notes:

1. Proportions applied to PAG and/or moderate to high arsenic leachability waste stockpile within the Whale Tail WRSF.
2. Includes Chert Central (S10C) and Chert zone R (S10R).
3. Includes Non-Defined Waste, Lamprophyre (LAM), and miscellaneous ultramafic (N_UL [0a]).
4. Proportions applied to NPAG and/or low arsenic leachability waste stockpile.

Table B3: Proportional Area of PAG/ML Waste Rock in the Whale Tail and IVR WRSF that Interacts with runoff from the slope of the first bench. Covered areas are calculated as the inverse.

Year	Whale Tail WRSF	IVR WRSF
2018	1	-
2019	0.5	-
2020	0.1	0.5
2021	0	0.5
2022	0	0.1
2023	0	0
2024	0	0
2025	0	0
2026+	0	0

Table B4: Footprint Areas (m^2) for the Whale Tail WRSF, Marginal Ore Pile, NPAG/NML Stockpile IVR WRSF, and Underground WERP

Year	Whale Tail WRSF	Marginal Ore Pile	NPAG/NML Stockpile	IVR WRSF	Underground WERP
2018	108,388	0	0	0	11,461
2019	501,580	23,580	0	0	18,149
2020	768,674	92,590	0	127,500	37,627
2021	1,138,735	92,590	45,100	504,400	37,627
2022	1,138,735	92,590	161,900	504,400	37,627
2023	1,138,735	92,590	161,900	504,400	37,627
2024	1,138,735	92,590	161,900	504,400	37,627
2025	1,138,735	92,590	161,900	504,400	0

Table B5: 3D Surface Areas (m^2) for the Whale Tail WRSF[1], Marginal Ore Pile[1], NPAG/NML Stockpile[1], IVR WRSF[1], and Underground WERP

Year	Whale Tail WRSF	Marginal Ore Pile	NPAG/NML Stockpile	IVR WRSF	Underground WERP
2018	16,498	0	0	0	12,182
2019	64,420	5,592	11,150	0	19,160
2020	113,437	22,027	46,631	83,053	39,415
2021	201,459	31,305	51,721	112,139	40,937
2022	265,972	34,890	51,721	112,139	43,335
2023	265,972	34,890	51,721	112,139	41,351
2024	265,972	34,890	51,721	112,139	39,643
2025	265,972	34,890	51,721	112,139	0

Notes: [1] Areas represent slope of first bench only.

Table B6: Exposed pit wall proportions (%) by lithology for Whale Tail and IVR Pits

Lithology / Material Type	Whale Tail Pit	IVR Pit
Gabbro (I3)	0	22
Chert (S10)[1]	8.1	2.0
Greywacke North (S3N)	17	6.0
Central Greywacke (S3C)	7.3	1.8
Iron Formation (SE9)	5.7	0
Ultramafic (0b)	17	55
Ultramafic (0a)[2]	5.8	14
Basalt (1b)	6.6	0
Overburden[3]	0	0
Diorite (8b)	16	0
South Greywacke (S3S)	16	0

Notes:

1. Includes Chert Central (S10C) and Chert zone R (S10R)
2. Includes Non-Defined Waste
3. In the pit wall, the overburden is pushed back from the pit wall and does not contribute chemical load to the runoff flowing into the Whale Tail Pit.

Table B7: Pit Wall Areas in m^2 (year end) used to Calculate Mass Loading Rates. Values are linearly interpolated in the model

Year	Quarry 1	Starter Pit	Whale Tail Pit	IVR Pit
2017	28,077	-	-	-
2018	45,579[1]	52,387	-	-
2019	-	132,990[2]	-	-
2020	-	-	563,667	77,773
2021	-	-	565,171	174,691
2022	-	-	565,171	355,467
2023	-	-	565,171	355,495
2024	-	-	565,171	355,495
2025	-	-	565,171	355,747

Notes:

1. Ultimate area achieved by mid-July 2018.
2. Becomes Whale Tail Pit when Whale Tail Lake (North Basin) is dewatered.

B2.0 LOADING RATES AND CONCENTRATIONS

B2.1 Exposed Rock in Pit Walls, WRSFs, Pads, and Stockpiles

Table B8 through Table B13 summarizes the water quality related input parameters used in the water quality model. Loading rates are calculated for waste rock (based on large column leaching tests[1]), ore (based on humidity cell tests [HCT] leach), and overburden, esker material, and lakebed sediments (based on shake flask extraction [SFE] leach test results). All leach tests (large columns, HCTs, SFE) are described in the Geochemistry Report (Golder 2018a). Loading rates and concentrations (Appendix A) were normalized and adjusted to field conditions in the model, and further scaling factors were applied as per Table B8.

The weekly analytical results were used to calculate an average weekly leaching rate per unit mass for each constituent and each leaching cell or column as reported in the Geochemistry Report. Laboratory leaching rates are more aggressive than what would be observed in the field. This is usually a function of two factors:

- The higher liquid to solid ratios used in testing compared to much drier site conditions maximizes the amount of material that interacts with the liquid; and,
- Laboratory tests carried out at room temperature accelerates oxidation rates. Laboratory temperature is not representative of colder temperature at the project site, which will slow the oxidation rates based on chemical principles and is documented at other northern sites (Davé and Clulow 1996; Davé and Blanchette 1999).

The laboratory-derived leaching rates were applied as a monthly loading rate in the model in consideration of the drier climate at site where much less precipitation falls on a unit surface area than in the laboratory leaching column. One weekly leaching cycle in the laboratory represents the volume of water that is received in 2 to 3 months of exposure in the pile for the same unit surface area[2]. The laboratory leaching rate is repeated 4 times in one month; therefore, time in the laboratory test does not correspond to mine waste exposure time in the field. Based on the liquid to solid ratio of one laboratory leaching cycle relative to the monthly average precipitation, the chemical load associated with one laboratory leaching cycle was conservatively assumed to represent the load released from one month of precipitation in the field. Loading rates were calculated from the large column leachate water quality data as follows:

$$Loading\ Rate\left(\frac{\frac{mg}{kg}}{week}\right) = average\ of\ weekly\ rate, as: \Big/ \frac{\left(concentration\ \left(\frac{mg}{L}\right) \times\ leachate\ volume\ (L)\right)}{\left(mass\ of\ charge\ material\ (kg)\right)}$$

As the Whale Tail and IVR Pits become flooded, mass is expected to be released from the pit benches and pit floors under water. This process results from the mobilisation of sulphur salts created upon exposure of the rock to air prior to flooding. Submergence is expected to stop oxidation but will allow salts to dissolve. Thus, the amount of salts available to be released from of the pit benches and floors will be a finite source. To capture the effects on water quality of the slow release of these stored salts, a finite release of mass from the pit benches and floors was applied in the model (Golder 2018b). Following the depletion of the mass due to remobilisation into the

[1] With the exception of the diorite unit, which is based on humidity cell test results

[2] Based on an average climate year, total precipitations (rain and snow) for frost-free months of June to September when rock storage facility contact water may be released. This applies to the surface area of all mine wastes: rock storage facilities, pads and stockpiles.

flooded pits, mass release from the pit benches and floors was assumed to be driven by equilibrium processes with groundwater concentrations.

Mass release rates from the submerged pit benches and floors were derived from diffusion modeling described in Golder (2018b). A mass release rate was estimated for all lithologies; however, only the komatiite, iron formation, and greywacke rocks provide mass release upon submersion; all other lithologies provide negligible mass release upon submersion.

B2.2 Overburden, Esker Material, and Exposed Lakebed Sediment

No kinetic leaching tests were carried out on overburden, esker material, or lakebed sediments. To calculate average leaching rates per unit mass of material, SFE static leaching test results were used as described in the Geochemistry Report. SFE static leaching tests are more aggressive than leaching rates in the field, as material is shaken for 24 hours in water with a liquid to solid ratio of 4:1. This results in a higher release of constituents per unit mass of testing material than would be observed in the field. Loading rates were calculated from the SFE data as follows:

$$Loading\ Rate\ \left(\frac{mg}{kg}\right) = \left\{\frac{\left(concentration\ \left(\frac{mg}{L}\right) \times\ leachate\ volume\ (L)\right)}{\left(mass\ of\ charge\ material\ (kg)\right)}\right\}$$

Overburden and esker material will be piled and exposed to precipitation. As such, a conservative approach of applying the loading rates on a monthly basis was used. Scaling factors were applied as per Table B8 and Table B11.

A different approach was used for the lakebed sediment, as they will remain *in situ* and undisturbed. According to the annual net runoff depth per unit area used in the model, and under the assumption of a 5 cm interaction depth of lakebed sediments, the liquid to solid ratio for lakebed sediments on site is calculated to be approximately 2:1. When considering the entire volume of natural runoff within the catchment plus runoff over the exposed lakebed sediments, this ratio becomes approximately 4:1, which is consistent with the water to rock ratio of the SFE test. Therefore, the average loading rate was assumed to be released on an annual basis, and reports to runoff, which occurs entirely between June and September. Scaling factors were applied as per Table B11.

B3.0 MASS BALANCE INPUTS AND ASSUMPTIONS

Table B8: Water Quality and Chemical Loading Input Parameters

Modelled Flow	Type	Source	Reference	Operations	Closure	Post-Closure
Natural Runoff to Site	Concentration	Average water quality of Watershed A tributaries upstream of Mammoth Lake. n=3; data only available in 2015. ■ A16-A14 ■ A34-A16	Azimuth Consulting, 2014-2016 Golder 2019b, Appendix A	X	X	X
Initial lake concentrations and natural runoff downstream of Mammoth Lake	Concentration	Average water quality of Watershed A tributaries downstream of Mammoth Lake. n=7; data available from 2015. ■ A81-A80 ■ A14-A13 ■ A15-A14 ■ A69-DS1 ■ A76-A75 ■ A5-A4	Azimuth Consulting, 2014-2016 Golder 2019b, Appendix A	X	X	X
Initial Mammoth Lake concentrations and natural runoff	Concentration	Average water quality of Mammoth Lake. n=14; data from 2015 and 2016. ■ MAM-1-S through MAM-14-S	Azimuth Consulting, 2014-2016 Golder 2019b, Appendix A	X	X	X
Initial Whale Tail Lake (North and South Basins) concentrations and natural runoff to Whale Tail Lake (South Basin)	Concentration	Average water quality of Mammoth Lake. n=20; data from 2015 and 2016. ■ WTN-1-S through WTN-06-S ■ WTS-1-S through WTN-14-S	Azimuth Consulting, 2014-2016 Appendix A	X	X	X
Nemo Lake concentrations	Concentration	Average water quality of Mammoth Lake. n=14; data from 2015 and 2016. ■ NEM-1-S through NEM-06-S ■ NEM-7 through NEM-14	Azimuth Consulting, 2014-2016 Appendix A	X	X	X
Direct Precipitation	Concentration	Assumed pristine water (0 mg/L for all constituents)	n.a.	X	X	X
Shallow Groundwater	Concentration	Based on 75th percentile of Meadowbank groundwater quality	Knight Piésold, 2015	X	X	

Table B8: Water Quality and Chemical Loading Input Parameters

Modelled Flow	Type	Source	Reference	Operations	Closure	Post-Closure
Exploration Ramp Dewatering	Loading	Average of humidity cell test data for intermediate intrusive (8b) which is the predominant rock type in ramp	Appendix A	X		
Lake Sediment Runoff	Loading	Average load from SFE results. Assumed to be the loading rate equivalent to one full year of precipitation but released entirely over the open water season (June through September, a total of 122 days).	Appendix A	X	X	
Construction Material Stockpile Runoff (pile west of Whale Tail Attenuation Pond)	Loading	Average load from SFE leach results for esker samples; applied to the full quantity of esker material stockpile. Being a rolling stockpile, it is assumed to not freeze at the core.	Appendix A	X		
Developed Areas Runoff	Loading	Weighted average load of waste rock lithologies used in construction south greywacke (S3S), and intermediate intrusive (8b) mixed based on NPAG proportion). Switch to natural runoff concentration at start of post-closure period.	Appendix A	X	X	
Waste Rock Storage Facility Runoff	Loading	Weighted average load from overburden, waste rock types for each mined area (Whale Tail and IVR open pits) based on the total annual tonnage reporting to each WRSF (does not account for material used in construction), and cover material. Proportions of cover for Whale Tail WRSF assumed to increase to 100% by 2021; cover assumed to increase to 100% on the IVR WRSF by 2022. No cover on underground WRSF. As per modelling done by Okane Consultants (OKC 2019), only the area of the slope of the first bench is considered, which is assumed to be covered to 100% prior to the end of operations.		X	X	X
Pit Wall Runoff	Loading	Weighted average load from exposed rock types on the final pit shell over entire surface area of the Whale Tail Pit in operations, and over high wall in post-closure (same proportion throughout mine life and closure/post-closure)		X	X	X
Ore Stockpile Runoff	Loading	Average load from composite humidity cell test sample of ore.		X		
WERP and underground ore stockpile runoff	Loading	Weighted average load from waste rock types based on the total annual tonnage reporting to the WERP		x		

Table B8: Water Quality and Chemical Loading Input Parameters

Modelled Flow	Type	Source	Reference	Operations	Closure	Post-Closure
Landfarm Runoff	Loading	Represented by developed area loading inputs	Appendix A	X	X	
Flooded Pit Wall Diffusion	Loading	Arsenic is the only parameter considered as per the Diffusion Model, with refined assumptions of mass depletion over time	Golder 2018b		X	X
Residual explosives (nitrate and ammonia) in all WRSF ponds and open pit sumps	Concentration	Average of monitoring values observed in operating open pits at the Meadowbank Mine. Reduced values are used for closure and post-closure to account for decreasing residual explosive content once operations cease. WRSF Ponds: ■ Operations: ○ Nitrate as N: 12 mg/L ○ Ammonia as N: 0.3 mg/L ■ Closure: ○ Nitrate as N: 0.02 mg/L ○ Ammonia as N: 0.01 mg/L Pit Sumps: ■ Operations: ○ Nitrate as N: 12 mg/L ○ Ammonia as N: 0.3 mg/L ■ Closure: ○ No concentrations applied as pits will have concentrations reflective of filling sources	Meadowbank Mine 2016 water quality monitoring data (NWB)	X	X	X
Residual explosives (nitrate and ammonia) in Underground Sump	Concentration	Residual explosives in underground sump. Average of monitoring values observed in Sump 125 at the Meliadine Mine. ■ Nitrate as N: 321 mg/L ■ Ammonia as N: 321 mg/L	Meliadine Mine 2016/2017 water quality monitoring data	X	X	X

Table B8: Water Quality and Chemical Loading Input Parameters

Modelled Flow	Type	Source	Reference	Operations	Closure	Post-Closure
Whale Tail Dike Well Sump	Concentration	Water collected by the Whale Tail dike well sump assumes the modelled water quality of Whale Tail Lake (South Basin) as it will be primarily seepage under the dike that is collected. However, site data from Meliadine shows that an increase in nitrogen species concentrations is possible due to explosives residues within the collection ditch. Calculated as the difference between the average concentrations of the East Dike Seepage (ST-8) monitoring results (2016) and the average TPS Reference Area (2016). ■ Nitrate as N: 0.31 mg/L ■ Ammonia as N: 0.13 mg/L	Meadowbank Gold Project – 2016 Annual Report on NWB website	X		
STP nitrate and phosphorous	Concentration	Replaces NH_3, NO_3 and P values in STP Load. ■ Nitrate as N = 16.5 mg/L ■ Ammonia as N = 0.27 mg/L ■ Phosphorous = 6.0 mg/L.	Monitored data from ST-WT-11, between January 1, 2020, and December 28, 2020	X	X	
Open Pit Drilling Water	Concentration	Whale Tail South modelled water quality and Nemo baseline water quality	Nemo Lake: Azimuth Consulting Baseline, 2014-2016. Appendix A	X		
Brined Drilling Water	Concentration	To bring total dissolved solids (TDS) concentration close to 200,000 mg/L, assume underground sump contains: ■ Calcium: 71,000 mg/L ■ Chloride: 125,848 mg/L		X		
Truck shop	Concentration	Whale Tail (South Basin) modelled water quality		X		

Table B8: Water Quality and Chemical Loading Input Parameters

Modelled Flow	Type	Source	Reference	Operations	Closure	Post-Closure
Solubility Limits	Concentration	Solubility limits for dissolved iron: ■ WRSF sumps: 0.06 mg/L ■ Water management ponds: 0.3 mg/L ■ Open Pits: 0.7 mg/L Solubility limits for dissolved aluminum: ■ WRSF sumps: 0.0003 mg/L ■ Water management ponds: 0.0001 mg/L ■ Open Pit: 0.0002 mg/L	Golder 2019a (NWB WQ model report)	X	X	X
Site Effluent	Particulate Concentration	■ Changes by month, ranging between 4.0 and 6.9 mg/L	Based on observed AsWTP data	X		
Flooded Pit Lake Overflow	Particulate Concentration	TSS of flooded pit lake overflow to Mammoth Lake: 1 mg/L	Based on baseline TSS concentrations of lakes in regional study area		X	X
Whale Tail and IVR WRSF Runoff	Particulate Concentration	TSS of Whale Tail and IVR WRSF Runoff in closure and post-closure: 10 mg/L	Based on monitoring data in similar channels at Meadowbank and Meliadine			X

Table B9: Factors, Proportions, and Assumptions

Controlled Item	Value / Assumption	Comments	Operations	Closure	Post-Closure
Grain size/ channelization factor	Channelling factor of 0.3 applied to loading rate of construction material, ore, developed pads, the landfarm, and waste rock stockpiles, including the cover.	Represents the percentage of rock with grain size small enough that its surface contributes to the mass load and movement or flow of mass through the material. (Kempton 2012; Beddoes et al. 2013)	X	X	X
Seasonal Load Multiplier	June through Sept. = 1 Oct. through May = 0	To prevent release of load during winter.	X	X	X
Site Temperature Loading Factor	Loading rates are multiplied by: 0.5 for July and August 0.25 for June and September 0 for October to May	Arrhenius Equation: Loading rates are halved for every 10˚C decrease in temperature from 25˚C[a], based on monthly average temperatures[b]. Factor is 0 in winter months as average monthly temperatures are below 0°C (Diavik, 1998; Davé and Clulow, 1996; Davé and Blanchette, 1999)	X	X	X
Diffusion and Sub-flush Temperature Factor	0.25	Arrhenius Equation : Assumes temperature of water at depth in contact with pit walls is 5˚C all year (does not freeze but is not affected by warming surface temperatures).	X	X	X
Effective Interaction Depth of WRSFs and NPAG pile	0.3 m	OKC 2019	x	x	x
Developed Areas Interaction Depth	2 m, natural ground thaw depth and pad thickness	Measured; pad thickness provided by Agnico Eagle (SNC)	X	X	
Landfarm Interaction Depth	2 m, to remain consistent with developed areas	Measured; pad thickness provided by Agnico Eagle (SNC)	X	X	
Pit Wall Areas that Contribute Loadings	Benches only, not walls. Calculated by using the progressive footprint of the pits, not by using the extracted 3D surface area curves.	Vertical faces are not anticipated to contribute significant loading.			
Pit Wall Interaction Depth	1 m	Represents the depth of penetration of blasting-induced fractures. This was assumed to have the porosity of waste rock in consideration of the rubble that will remain on pit wall benches (blast damage zone depth from Siskind, and Fumanti. 1974). Only pit benches are accounted for in surface area. Mass loading from vertical faces is assumed to be negligible.	X	X	X

Table B9: Factors, Proportions, and Assumptions

Controlled Item	Value / Assumption	Comments	Operations	Closure	Post-Closure
Lakebed Sediment Interaction Depth	5 cm	Geochemical testing done on 5 cm of material. Lakebed sediments consist of silty clays that are hard packed and will provide a relatively impermeable surface.	X	X	
Lakebed Sediment Density	1.5 g/cm^3	Lakebed sediments consist primarily of silty clay. USDA estimate of moist bulk density by texture (USDA, 2019)	X	X	
Waste Rock Density	2 tonnes/m^3 applied to all stockpiled rock material and pit walls	"Loose Density" of Whale Tail WRSF, SNC Design Criteria for Geotechnical and Water Management Infrastructure, Table 3.2.42015)	X	X	X
Whale Tail to IVR Conversion Factor for north wall komatiite (V3-V4 [0b]) lithology	1.75	Used as a conversion as no kinetic testing had been completed on the 0b lithology from IVR Pit, though static testing showed a higher propensity to leach arsenic than the same lithology in the Whale Tail Pit. Recommend updating when new kinetic data is available.	X	X	X

Table B10: Water Treatment

Treatment Type	Dates	Water Flow	Water Quality	Discharge Location
Sewage Treatment Plant (STP)	Model start to December 31, 2020	77.8 m^3/day 0.24 m^3/person/day at approx. 325 ppl	▪ Nitrate as N = 16.5 mg/L ▪ Ammonia as N = 0.27 mg/L ▪ Phosphorous = 6.0 mg/L.	▪ Prior to WTN dewatered: Whale Tail Lake (North Basin) ▪ June 2019 – May 2022: Whale Tail Attenuation Pond ▪ June 2022 – December 2025: IVR Attenuation Pond ▪ Closure: Whale Tail Attenuation Pond/Whale Tail Lake (North Basin)
	January 1, 2021 to December 31, 2025	130.56 m^3/day 0.24 m^3/person/day at approx. 544 ppl		
	January 1, 2026 to end of closure (2041)	12 m3/day 0.24 m^3/person/day at approx. 50 ppl		
AsWTP (TSS and As)	2020 – end of operations	▪ Maximum rate of 1200 m3/hr ▪ Assumed maximum rate 22/hr days between June and September, inclusive ▪ Assumed 24/hr days in winter at 84 m^3/h	▪ Assumed residual mass rates based on monitoring data – Monthly concentration based on monitoring of AsWTP effluent; ranges between 4.0 and 6.9 mg/L	▪ 2020: Mammoth Lake, Whale Tail Lake (South Basin) ▪ 2021 – end of operations: – Winter: Whale Tail Lake (South Basin) – Summer: Mammoth Lake

Table B11: Inputs and Assumptions for Other Loadings Sources

Facility	Property	Input / Assumption	Rational	Reference	Operations	Closure	Post-Closure
Attenuation Pond Exposed Lakebed Sediments	Runoff over lakebed sediments	Input as a loading. Assumed to be the loading rate equivalent to one full year of precipitation but released entirely over the open water season (June through September, a total of 122 days).	Whale Tail Lake (North Basin) dewatering will expose lakebed sediment area. Lakebeds will be submerged once Whale Tail Lake (North Basin) is full in closure. Water-rock ratios of the geochemical testing (SFE tests) indicates that applying the loading as an annual rate is conservative, based on the average annual precipitation (Appendix B, Section B2.2).	Appendix A	X	X	
	Interaction depth of runoff water on lakebed sediments	5 cm	Geochemical testing done on 5 cm of material. Lakebed sediments consist of silty clays that are hard packed and will provide a relatively impermeable surface.		X		
	Density of lakebed sediments	1.5 g/cm^3	Lakebed sediments consist primarily of silty clay.	USDA estimate of moist bulk density by texture (USDA, 2019)	X		
	Temperature effect	■ 0.5 for July and August ■ 0.25 for June and September ■ 0 for October to May	Loading rates are halved for every 10˚C decrease in temperature from 25˚C, based on monthly average temperatures. Factor is 0 in winter months as average monthly temperatures are below 0°C	Diavik (1998); Davé and Clulow (1996); Davé and Blanchette (1999)	X		
Attenuation Pond Natural Runoff	Runoff from natural watershed areas	If lakebed sediments are exposed, assumed to not contain mass as it will acquire mass from lakebed sediments. If lakebed sediments are not exposed, it is represented by natural runoff water quality.	The runoff flow from the natural areas will flow over the exposed lakebed sediments and acquire mass. This is anticipated to be a greater mass than natural runoff water quality.	Appendix A	X	X	X

B4.0 GEOCHEMICAL CONTROLS ON WATER QUALITY

B4.1 Solubility Limits

Evaporation and recirculation of water increase concentrations of some constituents to beyond their solubility limits. Geochemical modelling was carried out on the modelled water quality of Whale Tail WRSF Contact Water Collection System, Whale Tail Attenuation Pond water, and Whale Tail Pit sump water to define the likely upper concentration limit for constituents controlled by solubility for the Approved Project site water quality model. The same solubility limits were applied to the current model as pH and oxidizing conditions are expected to be similar for all inflows, assuming acid rock drainage (ARD) is prevented from PAG rock.

The United States Geological Society mass transfer and speciation modelling code PhreeqC (Version 2.15.0) (Parkhurst and Appelo 1999) was used for this purpose. PhreeqC calculates aqueous speciation and solubility indices of solutions using the thermodynamic equations of mineral phases, assuming equilibrium conditions between mineral and soluble phases. The user specifies credible mineral phases that are allowed to precipitate. PhreeqC returns concentrations remaining after precipitation of the specified mineral phases and solubility indices for all mineral phases in the PhreeqC database. This code is widely used and accepted by the scientific and regulatory community.

GoldSim water quality results consisting of the water quality output from distinct time-steps for each of the stated ponds were used as input to PhreeqC. Pond waters were assumed to have a pH of 7 based on observed pH ranges in kinetic testing (Golder 2018a), and to be fully oxidizing.

The PhreeqC results identified iron and aluminum as being supersaturated in predicted water quality, and subject to solubility control through the precipitation of diaspore [AlO(OH)], and ferrihydrite in the expected neutral pH and oxidizing conditions in the ponds. The precipitates formed were assumed to be permanently removed from the mass balance and the remaining aqueous concentration of iron and aluminum were considered to represent maximum concentrations in these ponds at any time. These solubility limits were applied to aluminum and iron as summarized in Table B12 and were hardwired into the GoldSim model as upper concentration limits for these constituents in water. The GoldSim model was then re-run with these fixed upper concentration limits.

Table B12: Solubility Limits Applied in the Water Quality Model

Constituent	Unit	Whale Tail Waste Rock Storage Facility Pond	Whale Tail Pit Sump	Whale Tail Attenuation Pond
Aluminum	mg/L	0.0003	0.0002	0.0001
Iron	mg/L	0.06	0.7	0.3

Notes: mg/L = milligrams per litre

B4.2 Effect of Total Suspended Solids on Total Constituent Concentrations

Though Total Suspended Solids (TSS) are not explicitly modelled, concentrations of TSS are assumed for sources into Mammoth and Whale Tail Lake (South Basin) and carried downstream conservatively (i.e., does not settle out but is subject to dilution effects). Using the assumed TSS concentrations, based on monitoring data and as described in Section 2.1.1.1 of the report, total metal concentrations for Project on-site facilities and discharges were estimated by adding a calculated particulate fraction to the dissolved concentration results from the model. Particulate fractions for the relevant constituents were based on solid phase geochemistry of each rock type and the proportion of each rock type in the final waste rock mass.

Total concentrations could differ from predicted if TSS with variability of TSS concentrations in the Expansion Project or if the TSS has a different chemical composition.

During operations, the addition of the particulate fraction did not produce any substantial change from the dissolved concentrations for most constituents except aluminum, chromium, and iron, and phosphorus, which showed a substantial increase in total concentration. This is expected for aluminum and iron as they were assumed to constitute the bulk of the chemical make up of TSS. Any presence of total aluminum or iron in effluent would be attributed to particulates rather than the dissolved phase given the anticipated neutral pH and oxidative environment of all site surface waters. Calcium and magnesium also comprise an important part of the suspended solids chemical composition, but their concentration is predicted to be elevated such that the additional contribution from TSS does not cause significant change.

In closure and post-closure, it was assumed that TSS concentrations in the flooded pit lake would drop to approximately 1 mg/L, as particulate matter settles out of the water column. This is consistent with baseline TSS values from the area. An assumed TSS concentration of 10 mg/L was applied to runoff that enters Mammoth Lake from the Whale Tail WRSF Pond in post-closure. This is consistent with baseline stream values as well as channel values at Meadowbank (Golder 2019b). Table B13 presents modelled particulate concentrations for TSS concentrations of 1 mg/L, 7.5 mg/L, 10 mg/L, and 15 mg/L. Total concentrations are calculated by multiplying the values for 1 mg/L of TSS by the assumed TSS concentration and adding these particulate concentrations. This is applied to the predicted dissolved concentrations for any water being discharged, as well as the Whale Tail Attenuation Pond, Whale Tail Pit, IVR Pit, and Whale Tail WRSF in closure and post-closure.

This sensitivity analysis suggests that the presence of suspended solids to a maximum concentration of 15 mg/L is not likely to affect trace constituent concentrations such as arsenic because the concentration in the original mass is too low to result in a significant change in constituent concentrations. Conversely, rock forming elements such as iron, aluminum, potassium, magnesium and calcium can impart a measurable concentration to the total constituent concentration. Aluminum, iron and phosphorus maximum contributions from TSS are close to their effluent limit values. This exercise informs the need for TSS control in order to meet effluent criteria for these constituents. TSS control will occur at the discharge point during operation via the AsWTP.

Table B13: Particulate Concentrations at 1 mg/L, 7.5 mg/L, 10 mg/L, and 15 mg/L TSS. Bolded and underlined values reflect exceedances of the CEQG-PAL (developed for Mammoth Lake), and shaded values represent exceedances of the effluent quality guidelines (NWB 2020)

Constituent	Unit	Amaruq Effluent Quality Guideline	CEQG-AL	Particulate Concentration Added to Dissolved Concentrations			
				1 mg/L TSS	7.5 mg/L TSS	10 mg/L TSS	15 mg/L TSS
Cl	mg/L		120	0	0	0	0
F	mg/L		0.12	0.00019	0.0014	0.0019	0.0028
SO4	mg/L			0.0032	0.024	0.032	0.049
NH3	mg/L	16	12.6	0	0	0	0
NO3	mg/L		2.93	0	0	0	0
P	mg/L	0.30	0.010	0.00078	0.0059	0.0078	0.012
Al	mg/L	0.50	0.10	0.022	0.17	0.22	0.33
Sb	mg/L			0.0000011	0.0000081	0.000011	0.000016
As	mg/L	0.10	0.025 a	0.00024	0.0018	0.0024	0.0036
Ba	mg/L			0.00022	0.0016	0.0022	0.0033
Be	mg/L			0.00000047	0.0000035	0.0000047	0.000007
Bi	mg/L			0.00000016	0.0000012	0.0000016	0.0000024
B	mg/L		1.5	0.0000028	0.000021	0.000028	0.000042
Cd	mg/L	0.0020	0.00011	0.00000011	0.00000083	0.0000011	0.0000017
Ca	mg/L			0.018	0.14	0.18	0.28
Cr	mg/L	0.020		0.00054	0.0041	0.0054	0.0082
Co	mg/L			0.000032	0.00024	0.00032	0.00048
Cu	mg/L	0.10	0.0020	0.000034	0.00025	0.00034	0.0005
Fe	mg/L	1.0	0.30	0.046	0.35	0.46	0.7
Pb	mg/L	0.050	0.0017	0.0000087	0.000066	0.000087	0.00013
Li	mg/L			0.00002	0.00015	0.0002	0.00029
Mg	mg/L			0.027	0.2	0.27	0.4
Mn	mg/L		0.49	0.00074	0.0055	0.0074	0.011
Hg	mg/L	0.0040	0.000026	4.5E-09	3.4E-08	4.5E-08	6.8E-08
Mo	mg/L		0.073	0.0000014	0.00001	0.000014	0.000021
Ni	mg/L	0.25	0.066	0.00024	0.0018	0.0024	0.0036
K	mg/L			0.011	0.086	0.11	0.17
Se	mg/L		0.0010	0.0000003	0.0000022	0.000003	0.0000045
Ag	mg/L		0.00025	0.0000014	0.00001	0.000014	0.000021
Na	mg/L			0.0003	0.0022	0.003	0.0044
Sr	mg/L			0.000089	0.00067	0.00089	0.0013
Tl	mg/L		0.00080	0.00000037	0.0000028	0.0000037	0.0000055
Sn	mg/L			0.00000048	0.0000036	0.0000048	0.0000072
U	mg/L		0.015	0.0000011	0.0000084	0.000011	0.000017
V	mg/L			0.000059	0.00044	0.00059	0.00089
Zn	mg/L	0.10	0.028	0.000049	0.00036	0.00049	0.00073

Notes: [a] Arsenic is compared to the SSWQO of 0.025 mg/L.

B5.0 REFERENCES

Azimuth (Azimuth Consulting Group Partnership). 2016. Whale Tail Pit Core Receiving Environment Monitoring Program (CREMP): 2014-2015 Baseline Studies. January 2016.

Beddoes, P., Herrell M., and Vandenberg J. 2013. Role of Professional Judgement and Scaling in Interpretation of Water Quality Model Results. Proceedings of the International Mine Water Association conference on "Reliable Mine Water Technology", Golden, Colorado, USA. Wolkersdorfer, Brown, and Figueroa (Eds).

Davé, N.K. and Clulow, V. 1996. Column Leaching Characteristics of Cullaton Lake B and Shear(S)-Zone Tailings, Phase 2: Cold Temperature Leaching Final Report. Mine Environment Neutral Drainage (MEND) Project 1.61.3. Natural Resources Canada.

Davé, N.K. and Blanchette, M. 1999. Role of Cold Climatic Conditions in Management of Reactive Mining Waste in Northern Canada. Mining in the Arctic. Udd & Keen Editors. Balkema. Rotterdam. pp. 115-124.

Diavik (Diavik Diamond Mines). 1998. Site Water Quality Estimates for the Proposed Diavik Project. Prepared for Diavik Diamond Mines. September 1998.

Golder 2018a. Addendum Evaluation of the Geochemical Properties of Waste Rock, Ore, Tailings, Overburden, and Sediment. Final Environmental Impact Statement Addendum. Whale Tail Pit – Expansion Project. Volume 5, Appendix 5-E. December 2018.

Golder 2018b. Arsenic Diffusion Model – Description of Methods. Ref. 1789310-233-TM-Rev0. Submitted to Agnico Eagle Mines Limited November 2018.

Golder. 2019a. Mine Site and Downstream Receiving Water Quality Prediction – Whale Tail Pit - Expansion Project. Prepared for Agnico Eagle Mines Limited. (Reference 18108905-308-RPT-Rev0). May 2019.

Golder. 2019b. Application of TSS Concentrations at Meliadine and Meadowbank Mines as an Analogue to TSS Concentrations from the Whale Tail WRSF in Post-closure. Reference No. 19115196-335-TM-Rev0. 11 July 2019.

Kempton, H. 2012. A Review of Scale Factors for Estimating Waste Rock Weathering from Laboratory Tests. Proceedings of the 9th International Conference on Acid Rock Drainage (ICARD), Ottawa, Ontario, Canada. May 20-26, 2012.

Knight Piésold Consulting. 2015. Agnico Eagle Mines Ltd.: Meadowbank Division – Whale Tail Pit – Permafrost and Hydrogeological Characterization. Submitted November 24, 2015.

Okane Consultants (OKC) 2019. Memorandum: Agnico Eagle Mines Ltd. – Landform Water Balance Modelling of Whale Tail and IVR WRSF. (Reference 948-011-M-006 Rev3) May 10, 2019.

Parkhurst, D.L., and Appelo C.A.J. 1999. User's Guide to PHREEQC (Version 2) - A Computer Program for Speciation, Batch-Reaction, One-Dimensional Transport, and Inverse Geochemical Calculations, U.S. Geological Survey Water-Resources Investigations Report 99-4259, Denver, CO.

Siskind, D.E., and Fumanti R.R. 1974. Blast-Produced Fractures in Lithonia granite. U.S. Bureau of Mines.

United States Department of Agriculture (USDA). Estimating Moist Bulk Density by Texture. Accessed April 25, 2019: https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/office/ssr10/tr/?cid=nrcs144p2_074844

APPENDIX C

Site and Downstream Water Quality

APPENDIX C-1
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
Constituent				TDS	Cl	F	NH_3 (as N)	NO_3 (as N)	P	Al	As	B	Cd	Ca	Cr	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	Se	Ag	Tl	U	Zn
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Waste Rock Storage Facility Pond	*Construction and Operations*	January	2018	170	25	0.031	0.085	0.051	0.0059	0.029	0.00024	0.01	0.00001	47	0.00039	0.0011	0.085	0.000074	12	0.092	0.0000051	0.00026	0.02	0.00075	0.000011	0.00001	0.000021	0.00086
		February		170	25	0.031	0.085	0.051	0.0059	0.029	0.00024	0.01	0.00001	47	0.00039	0.0011	0.085	0.000074	12	0.092	0.0000051	0.00026	0.02	0.00075	0.000011	0.00001	0.000021	0.00086
		March		170	25	0.031	0.085	0.051	0.0059	0.029	0.00024	0.01	0.00001	47	0.00039	0.0011	0.085	0.000074	12	0.092	0.0000051	0.00026	0.02	0.00075	0.000011	0.00001	0.000021	0.00086
		April		170	25	0.031	0.085	0.051	0.0059	0.029	0.00024	0.01	0.00001	47	0.00039	0.0011	0.085	0.000074	12	0.092	0.0000051	0.00026	0.02	0.00075	0.000011	0.00001	0.000021	0.00086
		May		170	25	0.031	0.085	0.051	0.0059	0.029	0.00024	0.01	0.00001	47	0.00039	0.0011	0.085	0.000074	12	0.092	0.0000051	0.00026	0.02	0.00075	0.000011	0.00001	0.000021	0.00086
		June		175	25	0.05	0.16	0.0051	0.066	4.8	0.039	0.01	0.000019	58	0.087	0.0069	7.4	0.0025	12	3.0	0.0000053	0.00053	0.21	0.0012	0.000065	0.000025	0.000064	0.012
		July		232	16	0.1	0.54	14	0.036	0.29	0.0056	0.02	0.000015	34	0.0038	0.0048	0.76	0.00031	14	0.7	0.0000085	0.00078	0.08	0.0015	0.000027	0.000015	0.00023	0.0017
		August		129	14	0.053	0.076	0.24	0.018	0.19	0.0015	0.012	0.000012	30	0.0023	0.0027	0.52	0.00017	12	0.39	0.0000057	0.00039	0.053	0.00091	0.00002	0.000013	0.00011	0.0013
		September		127	14	0.047	0.073	0.12	0.026	0.38	0.0016	0.011	0.000013	31	0.0045	0.003	0.98	0.00021	14	0.61	0.0000053	0.00038	0.084	0.00086	0.000029	0.000015	0.00010	0.0015
		October		119	14	0.044	0.072	0.12	0.0072	0.029	0.00043	0.011	0.00001	28	0.00047	0.002	0.13	0.0001	11	0.16	0.0000053	0.0003	0.025	0.00081	0.000012	0.00001	0.000086	0.001
		November		119	14	0.044	0.072	0.12	0.0072	0.029	0.00043	0.011	0.00001	28	0.00047	0.002	0.13	0.0001	11	0.16	0.0000053	0.0003	0.025	0.00081	0.000012	0.00001	0.000086	0.001
		December		119	14	0.044	0.072	0.12	0.0072	0.029	0.00043	0.011	0.00001	28	0.00047	0.002	0.13	0.0001	11	0.16	0.0000053	0.0003	0.025	0.00081	0.000012	0.00001	0.000086	0.001
		January	2019	119	14	0.044	0.072	0.12	0.0072	0.029	0.00043	0.011	0.00001	28	0.00047	0.002	0.13	0.0001	11	0.16	0.0000053	0.0003	0.025	0.00081	0.000012	0.00001	0.000086	0.001
		February		119	14	0.044	0.072	0.12	0.0072	0.029	0.00043	0.011	0.00001	28	0.00047	0.002	0.13	0.0001	11	0.16	0.0000053	0.0003	0.025	0.00081	0.000012	0.00001	0.000086	0.001
		March		119	14	0.044	0.072	0.12	0.0072	0.029	0.00043	0.011	0.00001	28	0.00047	0.002	0.13	0.0001	11	0.16	0.0000053	0.0003	0.025	0.00081	0.000012	0.00001	0.000086	0.001
		April		119	14	0.044	0.072	0.12	0.0072	0.029	0.00043	0.011	0.00001	28	0.00047	0.002	0.13	0.0001	11	0.16	0.0000053	0.0003	0.025	0.00081	0.000012	0.00001	0.000086	0.001
		May		119	14	0.044	0.072	0.12	0.0072	0.029	0.00043	0.011	0.00001	28	0.00047	0.002	0.13	0.0001	11	0.16	0.0000053	0.0003	0.025	0.00081	0.000012	0.00001	0.000086	0.001
		June		122	13	0.063	0.59	0.75	0.064	4.5	0.04	0.01	0.000018	36	0.082	0.0079	6.9	0.0025	11	3.0	0.0000051	0.00057	0.2	0.0013	0.000061	0.000023	0.00013	0.012
		July		156	13	0.051	0.24	5.3	0.028	0.38	0.0022	0.011	0.000013	31	0.0045	0.0031	0.98	0.00022	14	0.64	0.0000054	0.00048	0.084	0.00093	0.000028	0.000015	0.00012	0.0015
		August		1,113	114	0.43	0.77	6.9	0.074	0.23	0.011	0.097	0.000087	241	0.0042	0.018	0.63	0.00096	87	1.8	0.000046	0.0036	0.22	0.0077	0.000096	0.000086	0.00096	0.0085
		September		140	14	0.052	0.081	0.4	0.028	0.4	0.0024	0.011	0.000014	33	0.0047	0.0032	1.0	0.00022	15	0.67	0.0000056	0.00049	0.088	0.00096	0.00003	0.000015	0.00012	0.0015
		October		496	59	0.17	0.31	0.45	0.03	0.2	0.0013	0.043	0.000044	118	0.0028	0.008	0.55	0.00041	46	0.73	0.000022	0.0012	0.12	0.0033	0.000052	0.000045	0.00033	0.0043
		November		125	14	0.042	0.071	0.079	0.029	0.45	0.0015	0.01	0.000013	31	0.0052	0.003	1.1	0.00022	15	0.67	0.0000051	0.00036	0.094	0.00082	0.000032	0.000016	0.000091	0.0015
		December		132	14	0.045	0.071	0.079	0.046	0.77	0.0026	0.01	0.000016	34	0.0088	0.004	1.9	0.00031	19	1.1	0.0000051	0.00044	0.15	0.00087	0.000047	0.00002	0.0001	0.002
		January	2020	140	14	0.047	0.071	0.079	0.064	1.1	0.0037	0.01	0.000018	37	0.013	0.0049	2.7	0.00041	22	1.5	0.0000052	0.00052	0.2	0.00092	0.000063	0.000024	0.00012	0.0024
		February		148	14	0.05	0.071	0.079	0.081	1.4	0.0047	0.01	0.000021	40	0.016	0.0058	3.5	0.00051	26	1.9	0.0000052	0.00059	0.26	0.00097	0.000078	0.000028	0.00013	0.0028
		March		155	14	0.052	0.071	0.079	0.098	1.7	0.0058	0.01	0.000023	43	0.02	0.0068	4.2	0.0006	29	2.3	0.0000053	0.00067	0.31	0.001	0.000094	0.000032	0.00014	0.0033
		April		163	14	0.055	0.071	0.079	0.12	2.0	0.0068	0.01	0.000026	47	0.023	0.0077	5.0	0.0007	33	2.7	0.0000053	0.00075	0.36	0.0011	0.00011	0.000036	0.00015	0.0037
		May		170	14	0.057	0.071	0.079	0.13	2.4	0.0079	0.01	0.000028	50	0.027	0.0086	5.8	0.0008	36	3.1	0.0000054	0.00082	0.42	0.0011	0.00012	0.00004	0.00017	0.0041
		June		122	12	0.057	0.95	1.3	0.055	4.0	0.038	0.0094	0.000016	35	0.071	0.0069	6.1	0.0022	9.8	2.6	0.0000049	0.00065	0.17	0.0012	0.000054	0.000021	0.00013	0.011
		July		182	14	0.056	0.18	3.6	0.016	0.18	0.004	0.012	0.000012	37	0.0022	0.0025	0.48	0.00015	13	0.44	0.0000062	0.0013	0.051	0.0012	0.000019	0.000013	0.00022	0.0013
		August		212	15	0.065	0.17	3.3	0.016	0.15	0.0062	0.013	0.000013	42	0.0018	0.0027	0.41	0.00016	14	0.46	0.000007	0.0018	0.048	0.0015	0.000018	0.000013	0.00031	0.0014
		September		176	14	0.054	0.18	3.3	0.026	0.36	0.0043	0.011	0.000014	37	0.0043	0.003	0.94	0.0002	15	0.65	0.000006	0.0011	0.082	0.0011	0.000028	0.000015	0.0002	0.0016
		October		167	14	0.05	0.18	3.3	0.0074	0.029	0.0031	0.011	0.000011	34	0.00048	0.002	0.13	0.0001	11	0.22	0.0000059	0.001	0.026	0.0011	0.000012	0.000011	0.00019	0.0011
		November		167	14	0.05	0.18	3.3	0.0074	0.029	0.0031	0.011	0.000011	34	0.00048	0.002	0.13	0.0001	11	0.22	0.0000059	0.001	0.026	0.0011	0.000012	0.000011	0.00019	0.0011
		December		167	14	0.05	0.18	3.3	0.0074	0.029	0.0031	0.011	0.000011	34	0.00048	0.002	0.13	0.0001	11	0.22	0.0000059	0.001	0.026	0.0011	0.000012	0.000011	0.00019	0.0011
		January	2021	167	14	0.05	0.18	3.3	0.0074	0.029	0.0031	0.011	0.000011	34	0.00048	0.002	0.13	0.0001	11	0.22	0.0000059	0.001	0.026	0.0011	0.000012	0.000011	0.00019	0.0011
		February		167	14	0.05	0.18	3.3	0.0074	0.029	0.0031	0.011	0.000011	34	0.00048	0.002	0.13	0.0001	11	0.22	0.0000059	0.001	0.026	0.0011	0.000012	0.000011	0.00019	0.0011
		March		167	14	0.05	0.18	3.3	0.0074	0.029	0.0031	0.011	0.000011	34	0.00048	0.002	0.13	0.0001	11	0.22	0.0000059	0.001	0.026	0.0011	0.000012	0.000011	0.00019	0.0011
		April		167	14	0.05	0.18	3.3	0.0074	0.029	0.0031	0.011	0.000011	34	0.00048	0.002	0.13	0.0001	11	0.22	0.0000059	0.001	0.026	0.0011	0.000012	0.000011	0.00019	0.0011
		May		167	14	0.05	0.18	3.3	0.0074	0.029	0.0031	0.011	0.000011	34	0.00048	0.002	0.13	0.0001	11	0.22	0.0000059	0.001	0.026	0.0011	0.000012	0.000011	0.00019	0.0011
		June		118	10	0.05	2.2	3.3	0.065	4.8	0.04	0.0076	0.000016	33	0.087	0.0074	7.4	0.0024	10	3.1	0.0000041	0.00079	0.21	0.0011	0.000063	0.000022	0.00014	0.011
		July		289	15	0.07	0.5	14	0.02	0.29	0.0029	0.011	0.000014	49	0.0034	0.0026	0.76	0.00017	15	0.57	0.0000083	0.004	0.069	0.0018	0.000025	0.000016	0.00058	0.0018
		August		263	15	0.066	0.42	11	0.015	0.19	0.0024	0.011	0.000013	46	0.0023	0.0024	0.52	0.00014	14	0.44	0.0000079	0.0035	0.052	0.0017	0.00002	0.000015	0.00052	0.0016
		September		176	14	0.052	0.17	3.2	0.025	0.38	0.002	0.011	0.000014	38	0.0044	0.0029	0.98	0.0002	15	0.63	0.0000063	0.0016	0.084	0.0012	0.000029	0.000016	0.00026	0.0016
		October		165	14	0.049	0.16	2.9	0.0062	0.029	0.00081	0.01	0.000011	34	0.00045	0.0019	0.13	0.000092	11	0.18	0.0000062	0.0015	0.025	0.0011	0.000012	0.000011	0.00024	0.0012
		November		165	14	0.049	0.16	2.9	0.0062	0.029	0.00081	0.01	0.000011	34	0.00045	0.0019	0.13	0.000092	11	0.18	0.0000062	0.0015	0.025	0.0011	0.000012	0.000011	0.00024	0.0012
		December		165	14	0.049	0.16	2.9	0.0062	0.029	0.00081	0.01	0.000011	34	0.00045	0.0019	0.13	0.000092	11	0.18	0.0000062	0.0015	0.025	0.0011	0.000012	0.000011	0.00024	0.0012
		January	2022	165	14	0.049	0.16	2.9	0.0062	0.029	0.00081	0.01	0.000011	34	0.00045	0.0019	0.13	0.000092	11	0.18	0.0000062	0.0015	0.025	0.0011	0.000012	0.000011	0.00024	0.0012
		February		165	14	0.049	0.16	2.9	0.0062	0.029	0.00081	0.01	0.000011	34	0.00045	0.0019	0.13	0.000092	11	0.18	0.0000062	0.0015	0.025	0.0011	0.000012	0.000011	0.00024	0.0012
		March		165	14	0.049	0.16	2.9	0.0062	0.029	0.00081	0.01	0.000011	34	0.00045	0.0019	0.13	0.000092	11	0.18	0.0000062	0.0015	0.025	0.0011	0.000012	0.000011	0.00024	0.0012
		April		165	14	0.049	0.16	2.9	0.0062	0.029	0.00081	0.01	0.000011	34	0.00045	0.0019	0.13	0.000092	11	0.18	0.0000062	0.0015	0.025	0.0011	0.000012	0.000011	0.00024	0.0012
		May		165	14	0.049	0.16	2.9	0.0062	0.029	0.00081	0.01	0.000011	34	0.00045	0.0019	0.13	0.000092	11	0.18	0.0000062	0.0015	0.025	0.0011	0.000012	0.000011	0.00024	0.0012
		June		120	10	0.051	2.2	3.3	0.065	4.8	0.04	0.0076	0.000016	33	0.087	0.0074	7.4	0.0024	10	3.1	0.0000042	0.00084	0.21	0.0011	0.000063	0.000022	0.00015	0.011
		July		318	15	0.077	0.53	14	0.021	0.29	0.0034	0.011	0.000015	54	0.0034	0.0027	0.76	0.00018	16	0.6	0.0000091	0.0048	0.069	0.002	0.000025	0.000017	0.00069	0.002
		August		288	15	0.072	0.44	12	0.015	0.19	0.0027	0.011	0.000014	50	0.0023	0.0024	0.52	0.00015	15	0.46	0.0000086	0.0042	0.052	0.0019	0.00002	0.000015	0.00061	0.0018
		September		186	14	0.055	0.17	3.3	0.025	0.38	0.0021	0.011	0.000014	39	0.0044	0.0029	0.98	0.0002	15	0.64	0.0000065	0.0019	0.084	0.0013	0.000029	0.000016	0.0003	0.0017
		October		174	14	0.051	0.16	3.0	0.0062	0.029	0.00095	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000064	0.0017	0.025	0.0012	0.000012	0.000012	0.00028	0.0012
		November		174	14	0.051	0.16	3.0	0.0062	0.029	0.00095	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000064	0.0017	0.025	0.0012	0.000012	0.000012	0.00028	0.0012
		December		174	14	0.051	0.16	3.0	0.0062	0.029	0.00095	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000064	0.0017	0.025	0.0012	0.000012	0.000012	0.00028	0.0012
		January	2023	174	14	0.051	0.16	3.0	0.0062	0.029	0.00095	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000064	0.0017	0.025	0.0012	0.000012	0.000012	0.00028	0.0012
		February		174	14	0.051	0.16	3.0	0.0062	0.029	0.00095	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000064	0.0017	0.025	0.0012	0.000012	0.000012	0.00028	0.0012
		March		174	14	0.051	0.16	3.0	0.0062	0.029	0.00095	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000064	0.0017	0.025	0.0012	0.000012	0.000012	0.00028	0.0012
		April		174	14	0.051	0.16	3.0	0.0062	0.029	0.00095	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000064	0.0017	0.025	0.0012	0.000012	0.000012	0.00028	0.0012
		May		174	14	0.051	0.16	3.0	0.0062	0.029	0.00095	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000064	0.0017	0.025	0.0012	0.000012	0.000012	0.00028	0.0012
		June		121	10	0.051	2.2	3.3	0.065	4.8	0.04	0.0076	0.000016	33	0.087	0.0074	7.4	0.0024	10	3.1	0.0000042	0.00088	0.21	0.0011	0.000063	0.000022	0.00015	0.011
		July		330	16	0.08	0.53	14	0.021	0.29	0.0035	0.012	0.000015	56	0.0034	0.0027	0.76	0.00018	16	0.61	0.0000094	0.0051	0.069	0.0021	0.000025	0.000017	0.00074	0.002
		August		296	15	0.074	0.44	12	0.015	0.19	0.0029	0.012	0.000014	52	0.0023	0.0024	0.52	0.00015	15	0.46	0.0000089	0.0045	0.053	0.0019	0.000021	0.000016	0.00065	0.0018
		September		188	15	0.055	0.17	3.3	0.025	0.38	0.0022	0.011	0.000014	40	0.0044	0.0029	0.98	0.0002	16	0.64	0.0000066	0.002	0.084	0.0013	0.000029	0.000016	0.00031	0.0017
		October		176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012
		November		176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012
		December		176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012

APPENDIX C-1
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
Constituent				TDS	Cl	F	NH_3 (as N)	NO_3 (as N)	P	Al	As	B	Cd	Ca	Cr	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	Se	Ag	Tl	U	Zn
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Waste Rock Storage Facility Pond	*Construction and Operations*	January	2024	176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012
		February		176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012
		March		176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012
		April		176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012
		May		176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012
		June		121	10	0.051	2.2	3.3	0.065	**4.8**	0.04	0.0076	0.000016	33	**0.087**	0.0074	**7.4**	0.0024	10	3.1	0.0000042	0.00088	0.21	0.0011	0.000063	0.000022	0.00015	0.011
		July		330	16	0.08	0.53	14	0.021	0.29	0.0035	0.012	0.000015	56	0.0034	0.0027	0.76	0.00018	16	0.61	0.0000094	0.0051	0.069	0.0021	0.000025	0.000017	0.00074	0.002
		August		296	15	0.074	0.44	12	0.015	0.19	0.0029	0.012	0.000014	52	0.0023	0.0024	0.52	0.00015	15	0.46	0.0000089	0.0045	0.053	0.0019	0.000021	0.000016	0.00065	0.0018
		September		188	15	0.055	0.17	3.3	0.025	0.38	0.0022	0.011	0.000014	40	0.0044	0.0029	0.98	0.0002	16	0.64	0.0000066	0.002	0.084	0.0013	0.000029	0.000016	0.00031	0.0017
		October		176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012
		November		176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012
		December		176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012
		January	2025	176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012
		February		176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012
		March		176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012
		April		176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012
		May		176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012
		June		121	10	0.051	2.2	3.3	0.065	**4.8**	0.04	0.0076	0.000016	33	**0.087**	0.0074	**7.4**	0.0024	10	3.1	0.0000042	0.00088	0.21	0.0011	0.000063	0.000022	0.00016	0.011
		July		330	16	0.08	0.53	14	0.021	0.29	0.0035	0.012	0.000015	56	0.0034	0.0027	0.76	0.00018	16	0.61	0.0000094	0.0051	0.069	0.0021	0.000025	0.000017	0.00074	0.002
		August		296	15	0.074	0.44	12	0.015	0.19	0.0029	0.012	0.000014	52	0.0023	0.0024	0.52	0.00015	15	0.46	0.0000089	0.0045	0.053	0.0019	0.000021	0.000016	0.00065	0.0018
		September		188	15	0.055	0.17	3.3	0.025	0.38	0.0022	0.011	0.000014	40	0.0044	0.0029	0.98	0.0002	16	0.64	0.0000066	0.002	0.084	0.0013	0.000029	0.000016	0.00031	0.0017
		October		176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012
		November		176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012
		December		176	14	0.052	0.16	3.0	0.0062	0.029	0.00098	0.011	0.000011	36	0.00045	0.0019	0.13	0.000093	12	0.19	0.0000065	0.0018	0.025	0.0012	0.000012	0.000012	0.00029	0.0012
			MINIMUM	118	10	0.031	0.071	0.0051	0.0059	0.029	0.00024	0.0076	0.00001	28	0.00039	0.0011	0.085	0.000074	9.8	0.092	0.0000041	0.00026	0.02	0.00075	0.000011	0.00001	0.000021	0.00086
			MAXIMUM	1,113	114	0.43	2.2	14	0.13	**4.8**	0.04	0.097	0.000087	241	**0.087**	0.018	**7.4**	0.0025	87	3.1	0.000046	0.0051	**0.42**	0.0077	0.00012	0.000086	0.00096	0.012
			AVERAGE	189	16	0.058	0.31	3.5	0.021	**0.58**	0.0052	0.012	0.000014	41	0.0094	0.0031	**1.1**	0.00035	14	0.66	0.0000068	0.0015	0.07	0.0013	0.000025	0.000016	0.00026	0.0024
Whale Tail Waste Rock Storage Facility Pond	*Closure and Post-Closure*	January	≥2026	182	14	0.054	0.16	3.0	0.02	0.29	0.0018	0.011	0.000013	39	0.0034	0.0026	0.76	0.00017	14	0.52	0.0000065	0.0019	0.068	0.0012	0.000025	0.000015	0.0003	0.0016
		February		182	14	0.054	0.16	3.0	0.02	0.29	0.0018	0.011	0.000013	39	0.0034	0.0026	0.76	0.00017	14	0.52	0.0000065	0.0019	0.068	0.0012	0.000025	0.000015	0.0003	0.0016
		March		182	14	0.054	0.16	3.0	0.02	0.29	0.0018	0.011	0.000013	39	0.0034	0.0026	0.76	0.00017	14	0.52	0.0000065	0.0019	0.068	0.0012	0.000025	0.000015	0.0003	0.0016
		April		182	14	0.054	0.16	3.0	0.02	0.29	0.0018	0.011	0.000013	39	0.0034	0.0026	0.76	0.00017	14	0.52	0.0000065	0.0019	0.068	0.0012	0.000025	0.000015	0.0003	0.0016
		May		182	14	0.054	0.16	3.0	0.02	0.29	0.0018	0.011	0.000013	39	0.0034	0.0026	0.76	0.00017	14	0.52	0.0000065	0.0019	0.068	0.0012	0.000025	0.000015	0.0003	0.0016
		June		90	10	0.043	0.17	0.011	0.019	**1.2**	0.012	0.0075	0.0000098	25	**0.022**	0.0034	**1.9**	0.00088	5.5	0.91	0.0000041	0.00066	0.063	0.00094	0.000021	0.000011	0.00012	0.0057
		July		267	16	0.08	0.078	0.094	0.021	0.29	0.0035	0.012	0.000015	56	0.0034	0.0027	0.76	0.00018	16	0.61	0.0000094	0.0051	0.069	0.0021	0.000025	0.000017	0.00074	0.002
		August		248	15	0.075	0.077	0.091	0.021	0.29	0.0032	0.012	0.000015	53	0.0034	0.0027	0.76	0.00018	16	0.59	0.0000089	0.0045	0.069	0.002	0.000025	0.000017	0.00065	0.0019
		September		172	15	0.055	0.073	0.083	0.02	0.29	0.0019	0.011	0.000013	39	0.0034	0.0026	0.76	0.00017	15	0.52	0.0000066	0.002	0.068	0.0013	0.000025	0.000015	0.00031	0.0016
		October		169	14	0.054	0.073	0.082	0.02	0.29	0.0018	0.011	0.000013	39	0.0034	0.0026	0.76	0.00017	14	0.52	0.0000065	0.0019	0.068	0.0012	0.000025	0.000015	0.0003	0.0016
		November		169	14	0.054	0.073	0.082	0.02	0.29	0.0018	0.011	0.000013	39	0.0034	0.0026	0.76	0.00017	14	0.52	0.0000065	0.0019	0.068	0.0012	0.000025	0.000015	0.0003	0.0016
		December		169	14	0.054	0.073	0.082	0.02	0.29	0.0018	0.011	0.000013	39	0.0034	0.0026	0.76	0.00017	14	0.52	0.0000065	0.0019	0.068	0.0012	0.000025	0.000015	0.0003	0.0016
			MINIMUM	90	10	0.043	0.073	0.011	0.019	0.29	0.0018	0.0075	0.0000098	25	0.0034	0.0026	0.76	0.00017	5.5	0.52	0.0000041	0.00066	0.063	0.00094	0.000021	0.000011	0.00012	0.0016
			MAXIMUM	272	16	0.081	0.17	0.093	0.021	**1.2**	0.012	0.012	0.000015	57	**0.022**	0.0034	**1.9**	0.00088	17	0.91	0.0000096	0.0053	0.07	0.0022	0.000026	0.000018	0.00076	0.0057
			AVERAGE	178	14	0.057	0.081	0.078	0.02	0.37	0.003	0.011	0.000013	40	0.005	0.0027	0.85	0.00023	14	0.57	0.0000068	0.0023	0.068	0.0014	0.000024	0.000015	0.00035	0.002

Notes:
[1] Water Licence No: 2AM-WTP1830. Maximum average. Exceedances shown as bold-underlined-highlighted cells

APPENDIX C-2
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
		CEQG aquatic life (long-term)[2] (mg/L)			120	0.12	12.6	2.93	0.01	0.1	*0.025*	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008	0.015	0.028
		Constituent		TDS	Cl	F	NH_3 (as N)[3]	NO_3 (as N)	P[4]	Al[5]	As[6]	B	Cd[7]	Ca	Cr	Cu[7]	Fe	Pb[7]	Mg	Mn[8]	Hg	Mo	Ni[7]	Se	Ag	Tl	U	Zn[9]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Attenuation Pond	*Construction and Operations*	January	2018	11	1.3	0.034	0.0093	0.0024	0.0021	0.011	0.0012	0.01	0.000002	2.1	0.00013	0.00026	0.046	0.000032	0.45	0.0045	0.000005	0.000026	0.00035	0.00011	0.0000091	0.00001	0.000033	0.00012
		February		11	1.3	0.034	0.0096	0.0049	0.004	0.011	0.0012	0.01	0.000002	2.1	0.00013	0.00026	0.046	0.000032	0.45	0.0045	0.000005	0.000026	0.00035	0.00011	0.0000091	0.00001	0.000033	0.00012
		March		11	1.3	0.034	0.0099	0.0074	0.0058	0.011	0.0012	0.01	0.000002	2.1	0.00013	0.00026	0.046	0.000032	0.45	0.0045	0.000005	0.000026	0.00035	0.00011	0.0000091	0.00001	0.000033	0.00012
		April		11	1.3	0.034	0.01	0.010	0.0077	0.011	0.0012	0.01	0.000002	2.1	0.00013	0.00026	0.046	0.000032	0.45	0.0045	0.000005	0.000026	0.00035	0.00011	0.0000091	0.00001	0.000033	0.00012
		May		11	1.3	0.034	0.011	0.013	0.0095	0.011	0.0012	0.01	0.000002	2.1	0.00013	0.00026	0.046	0.000032	0.45	0.0045	0.000005	0.000026	0.00035	0.00011	0.0000091	0.00001	0.000033	0.00012
		June		20	6.1	0.035	0.095	0.024	0.011	0.0045	0.0007	0.01	0.0000021	5.8	0.000067	0.0004	0.021	0.000014	0.81	0.0057	0.0000052	0.00012	0.00053	0.00012	0.0000035	0.000011	0.000039	0.00061
		July		18	3.6	0.028	0.088	0.025	0.0058	0.011	0.00016	0.0091	0.0000028	4.7	0.00033	0.00067	0.07	0.000034	1.3	0.012	0.0000046	0.000086	0.0024	0.00016	0.000013	0.0000094	0.000038	0.0012
		August		19	3.7	0.031	0.093	0.045	0.015	0.087	0.00081	0.0094	0.0000033	5.2	0.0022	0.00098	0.39	0.000065	1.7	0.028	0.0000047	0.00011	0.0062	0.00018	0.000024	0.000012	0.000049	0.0016
		September		20	3.8	0.033	0.098	0.062	0.017	0.072	0.00069	0.0097	0.0000033	5.4	0.0019	0.00098	0.34	0.000062	1.7	0.027	0.0000048	0.00011	0.0058	0.00019	0.000022	0.000012	0.000054	0.0016
		October		13	1.3	0.039	0.012	0.010	0.0081	0.028	0.0024	0.0098	0.000002	2.3	0.00031	0.00034	0.12	0.000046	0.55	0.012	0.0000049	0.000029	0.00066	0.00014	0.00001	0.00001	0.000054	0.00012
		November		13	1.3	0.039	0.012	0.013	0.0097	0.021	0.0019	0.0098	0.000002	2.3	0.00023	0.00033	0.092	0.000043	0.53	0.011	0.0000049	0.000028	0.00059	0.00014	0.0000096	0.00001	0.000053	0.00012
		December		13	1.3	0.038	0.012	0.015	0.011	0.014	0.0015	0.0098	0.000002	2.3	0.00017	0.00032	0.072	0.00004	0.53	0.011	0.0000049	0.000028	0.00053	0.00014	0.000009	0.0000099	0.000052	0.00012
		January	2019	13	1.3	0.039	0.013	0.018	0.014	0.041	0.0032	0.0098	0.0000021	2.4	0.00043	0.00036	0.16	0.000051	0.56	0.014	0.0000049	0.00003	0.00077	0.00014	0.000012	0.000011	0.000055	0.00013
		February		13	1.3	0.04	0.013	0.02	0.017	0.071	0.0051	0.0098	0.0000022	2.4	0.00073	0.0004	0.25	0.000063	0.61	0.018	0.0000049	0.000032	0.001	0.00014	0.000015	0.000012	0.000058	0.00014
		March		13	1.3	0.04	0.013	0.023	0.019	0.1	0.0071	0.0098	0.0000023	2.5	0.001	0.00045	0.34	0.000075	0.65	0.022	0.0000049	0.000033	0.0013	0.00015	0.000018	0.000013	0.000061	0.00015
		April		13	1.3	0.041	0.014	0.027	0.023	0.13	0.0091	0.0098	0.0000025	2.5	0.0013	0.00049	0.44	0.000087	0.7	0.026	0.0000049	0.000035	0.0016	0.00015	0.000021	0.000014	0.000064	0.00017
		May		13	1.3	0.042	0.014	0.032	0.028	0.16	0.011	0.0099	0.0000026	2.6	0.0016	0.00054	0.54	0.000099	0.74	0.03	0.0000049	0.000037	0.0018	0.00015	0.000024	0.000015	0.000067	0.00018
		June		65	30	0.062	0.32	0.17	0.098	0.075	0.0077	0.03	0.0000047	14	0.00095	0.00095	0.25	0.000054	2.6	0.048	0.0000051	0.0028	0.0027	0.00021	0.00001	0.000016	0.00041	0.0012
		July		115	46	0.083	0.61	0.25	0.072	0.07	0.00085	0.061	0.000011	24	0.0019	0.0016	0.36	0.00013	7.6	0.14	0.0000053	0.0053	0.0076	0.00047	0.000024	0.000012	0.00094	0.003
		August		181	76	0.11	0.95	0.25	0.086	0.13	0.0015	0.097	0.000017	37	0.0034	0.0022	0.61	0.00019	12	0.23	0.0000054	0.0089	0.012	0.00065	0.000035	0.000014	0.0015	0.0042
		September		261	111	0.15	1.4	0.25	0.11	0.33	0.0035	0.14	0.000025	53	0.0084	0.0034	1.5	0.00031	18	0.38	0.0000053	0.013	0.024	0.00088	0.000067	0.00002	0.0023	0.0062
		October		180	49	0.22	0.21	0.046	0.068	0.41	0.032	0.18	0.000021	31	0.0042	0.0016	1.3	0.00039	8.0	0.33	0.0000053	0.0051	0.0051	0.00082	0.000054	0.000023	0.003	0.0007
		November		254	58	0.33	0.35	0.043	0.071	0.39	0.035	0.26	0.000023	43	0.0039	0.0016	1.2	0.00039	9.4	0.55	0.0000059	0.006	0.0046	0.0016	0.000053	0.000024	0.0043	0.00065
		December		281	79	0.33	0.34	0.044	0.078	0.36	0.029	0.29	0.000032	47	0.0037	0.0019	1.2	0.00047	12	0.47	0.0000062	0.0082	0.0047	0.0012	0.000053	0.000024	0.0049	0.00095
		January	2020	156	40	0.21	0.21	0.038	0.052	0.3	0.023	0.14	0.000017	27	0.003	0.0013	0.96	0.00029	6.5	0.3	0.0000071	0.004	0.0035	0.00076	0.000045	0.000024	0.0024	0.00059
		February		120	28	0.18	0.18	0.043	0.049	0.27	0.02	0.10	0.000013	21	0.0027	0.0011	0.86	0.00023	4.9	0.26	0.0000073	0.0027	0.0031	0.00064	0.000041	0.000023	0.0017	0.00047
		March		119	28	0.17	0.18	0.049	0.049	0.12	0.01	0.098	0.000012	21	0.0012	0.00085	0.4	0.00017	4.6	0.25	0.0000073	0.0027	0.0018	0.00063	0.000026	0.000018	0.0017	0.0004
		April		120	28	0.18	0.19	0.055	0.05	0.053	0.006	0.098	0.000012	21	0.00058	0.00075	0.19	0.00014	4.6	0.25	0.0000072	0.0027	0.0012	0.00063	0.000019	0.000016	0.0017	0.00037
		May		123	29	0.18	0.19	0.069	0.055	0.15	0.012	0.098	0.000012	21	0.0015	0.00089	0.49	0.00018	4.8	0.27	0.0000073	0.0027	0.002	0.00064	0.000029	0.000019	0.0017	0.00042
		June		238	99	0.17	2.6	2.8	0.23	0.69	0.094	0.082	0.000016	57	0.0085	0.0047	2.2	0.00033	10	0.39	0.0000062	0.01	0.023	0.0009	0.00007	0.000068	0.0015	0.0054
		July		255	69	0.14	2.1	5.4	0.1	0.49	0.024	0.096	0.000019	56	0.012	0.0041	2.2	0.00035	15	0.83	0.0000075	0.0091	0.056	0.0017	0.000099	0.00003	0.0016	0.0062
		August		168	39	0.11	1.3	3.4	0.082	0.36	0.023	0.064	0.000014	37	0.0089	0.0032	1.6	0.00026	10	0.67	0.0000078	0.0053	0.047	0.0012	0.000079	0.000027	0.0010	0.0046
		September		161	19	0.14	1.9	5.2	0.065	1.3	0.072	0.049	0.000014	28	0.04	0.0045	2.9	0.0013	9.0	0.52	0.0000069	0.0039	0.037	0.0006	0.000096	0.000029	0.00085	0.007
		October		246	44	0.19	1.9	4.2	0.099	1.2	0.036	0.1	0.000022	46	0.036	0.0044	2.6	0.0014	15	0.75	0.0000054	0.0091	0.031	0.00063	0.000089	0.000026	0.0017	0.0086
		November		141	32	0.19	0.28	0.55	0.063	0.66	0.048	0.12	0.000015	24	0.0065	0.0017	2.1	0.0004	6.0	0.41	0.0000051	0.0033	0.0066	0.00074	0.000077	0.000031	0.002	0.00065
		December		168	37	0.23	0.35	0.79	0.078	0.82	0.059	0.14	0.000017	28	0.0081	0.002	2.6	0.00048	6.8	0.48	0.0000064	0.0037	0.008	0.00099	0.000095	0.000039	0.0025	0.00075
		January	2021	143	28	0.21	0.37	0.73	0.085	0.26	0.023	0.11	0.000012	24	0.0026	0.0011	0.85	0.00022	4.9	0.41	0.0000074	0.0027	0.0031	0.00094	0.00004	0.000023	0.0019	0.00046
		February		116	20	0.18	0.36	0.67	0.092	0.25	0.021	0.071	0.0000091	19	0.0025	0.00094	0.82	0.00019	3.8	0.37	0.0000077	0.0019	0.0029	0.00082	0.000038	0.000023	0.0013	0.00039
		March		111	19	0.17	0.37	0.66	0.09	0.11	0.012	0.064	0.0000082	18	0.0012	0.00071	0.38	0.00013	3.5	0.35	0.0000077	0.0017	0.0016	0.00078	0.000024	0.000019	0.0012	0.00032
		April		110	19	0.17	0.37	0.66	0.088	0.044	0.0075	0.063	0.0000078	18	0.00048	0.0006	0.16	0.000097	3.3	0.35	0.0000077	0.0017	0.001	0.00077	0.000017	0.000016	0.0011	0.00029
		May		111	19	0.18	0.37	0.66	0.091	0.14	0.014	0.062	0.0000082	18	0.0015	0.00075	0.48	0.00014	3.5	0.37	0.0000077	0.0017	0.0019	0.00077	0.000027	0.00002	0.0012	0.00033
		June		75	20	0.11	0.12	1.0	0.17	2.8	0.042	0.043	0.000027	13	0.07	0.0052	6.0	0.0013	6.4	0.25	0.0000064	0.0021	0.037	0.00024	0.00019	0.000058	0.00078	0.0081
		July		70	17	0.11	0.08	0.19	0.051	0.69	0.044	0.064	0.000023	11	0.017	0.0027	1.6	0.00058	3.5	0.3	0.0000089	0.0022	0.027	0.00027	0.000072	0.00003	0.00074	0.0042
		August		84	20	0.14	0.088	0.19	0.054	0.63	0.055	0.082	0.000027	14	0.016	0.003	1.6	0.00065	3.9	0.39	0.000011	0.0026	0.032	0.00034	0.000077	0.000034	0.00089	0.0047
		September		68	18	0.11	0.081	0.15	0.056	0.9	0.041	0.061	0.000023	11	0.023	0.0029	2.1	0.00064	3.8	0.28	0.0000084	0.0022	0.027	0.00026	0.000083	0.000032	0.00073	0.0045
		October		72	22	0.1	0.13	0.21	0.053	0.93	0.021	0.046	0.00002	12	0.023	0.0025	2.0	0.00054	4.5	0.18	0.0000073	0.0022	0.017	0.00022	0.000076	0.00003	0.00072	0.0044
		November		82	27	0.11	0.17	0.27	0.051	0.87	0.012	0.043	0.00002	14	0.022	0.0023	1.9	0.00048	5.1	0.15	0.0000076	0.0024	0.012	0.00022	0.000071	0.000029	0.00078	0.0044
		December		86	28	0.12	0.18	0.29	0.084	1.8	0.02	0.043	0.000025	15	0.044	0.0037	3.8	0.00084	6.4	0.18	0.0000079	0.0025	0.021	0.00023	0.00013	0.000044	0.00084	0.0065
		January	2022	79	26	0.11	0.18	0.3	0.038	0.53	0.0065	0.038	0.000017	14	0.013	0.0018	1.1	0.00033	4.6	0.14	0.0000077	0.0022	0.0072	0.00021	0.000049	0.000023	0.00071	0.0036
		February		76	24	0.1	0.18	0.31	0.036	0.5	0.0062	0.034	0.000016	13	0.013	0.0017	1.1	0.00031	4.4	0.14	0.0000077	0.002	0.0069	0.00021	0.000047	0.000023	0.00066	0.0034
		March		75	24	0.1	0.19	0.32	0.026	0.23	0.0032	0.034	0.000015	13	0.0058	0.0013	0.51	0.0002	4.0	0.13	0.0000076	0.0019	0.0038	0.0002	0.00003	0.000019	0.00063	0.0028
		April		75	23	0.1	0.19	0.33	0.022	0.089	0.0017	0.033	0.000014	13	0.0023	0.001	0.22	0.00014	3.8	0.13	0.0000076	0.0019	0.0023	0.0002	0.000021	0.000016	0.00062	0.0025
		May		76	23	0.1	0.19	0.34	0.029	0.29	0.0039	0.033	0.000015	13	0.0072	0.0013	0.63	0.00022	4.1	0.13	0.0000076	0.0019	0.0045	0.00021	0.000033	0.00002	0.00063	0.0029
		June		57	13	0.097	0.096	0.19	0.11	2.8	0.044	0.031	0.000025	11	0.07	0.0051	6.0	0.0012	5.6	0.23	0.0000066	0.0015	0.038	0.0002	0.00019	0.000059	0.00056	0.0079
		July		67	14	0.12	0.065	0.15	0.048	0.69	0.054	0.059	0.000021	11	0.017	0.0027	1.7	0.00057	3.1	0.31	0.00001	0.002	0.032	0.00029	0.000081	0.000034	0.00061	0.0043
		August		85	17	0.15	0.072	0.18	0.053	0.63	0.073	0.077	0.000027	14	0.016	0.0032	1.6	0.00065	3.6	0.41	0.000014	0.0025	0.041	0.00038	0.000092	0.000042	0.00077	0.0051
		September		68	14	0.12	0.067	0.15	0.055	0.9	0.055	0.057	0.000022	12	0.023	0.003	2.1	0.00063	3.5	0.3	0.000011	0.002	0.033	0.00028	0.000094	0.000038	0.00062	0.0048
		October		62	17	0.096	0.11	0.2	0.05	0.93	0.027	0.038	0.000018	11	0.023	0.0025	2.0	0.00052	3.8	0.18	0.0000081	0.0017	0.019	0.00021	0.00008	0.000032	0.00055	0.0042
		November		65	19	0.095	0.14	0.26	0.048	0.87	0.013	0.032	0.000017	11	0.022	0.0022	1.9	0.00046	4.2	0.14	0.0000077	0.0017	0.012	0.00019	0.000071	0.000029	0.00057	0.004
		December		69	20	0.1	0.15	0.28	0.081	1.8	0.021	0.031	0.000022	12	0.044	0.0036	3.8	0.00081	5.4	0.16	0.0000078	0.0017	0.021	0.0002	0.00013	0.000045	0.00062	0.006
		January	2023	63	19	0.092	0.15	0.29	0.035	0.53	0.0066	0.028	0.000014	11	0.013	0.0016	1.1	0.0003	3.7	0.12	0.0000076	0.0015	0.007	0.00018	0.000048	0.000023	0.00051	0.0032
		February		61	18	0.091	0.15	0.3	0.034	0.5	0.0062	0.026	0.000014	11	0.012	0.0016	1.1	0.00029	3.6	0.12	0.0000076	0.0014	0.0067	0.00018	0.000047	0.000023	0.00048	0.0031
		March		60	17	0.089	0.16	0.31	0.024	0.23	0.0033	0.026	0.000012	11	0.0057	0.0012	0.5	0.00018	3.2	0.12	0.0000075	0.0013	0.0037	0.00017	0.000029	0.000018	0.00046	0.0024
		April		60	17	0.089	0.16	0.32	0.019	0.089	0.0018	0.025	0.000012	10	0.0023	0.00093	0.21	0.00012	3.0	0.11	0.0000075	0.0013	0.0022	0.00017	0.00002	0.000016	0.00045	0.0021
		May		61	17	0.091	0.16	0.33	0.027	0.29	0.0039	0.025	0.000012	11	0.0072	0.0012	0.63	0.0002	3.3	0.12	0.0000075	0.0013	0.0043	0.00018	0.000033	0.000019	0.00046	0.0025
		June		49	10	0.091	0.083	0.18	0.11	2.8	0.044	0.027	0.000023	9.3	0.07	0.0051	6.0	0.0012	5.2	0.22	0.0000065	0.0012	0.038	0.00019	0.00019	0.000059	0.00047	0.0077
		July		57	10	0.11	0.055	0.15	0.046	0.69	0.049	0.054	0.00002	9.5	0.017	0.0026	1.7	0.00056	2.7	0.3	0.0000096	0.0016	0.029	0.00026	0.000076	0.000032	0.00053	0.004
		August		70	12	0.13	0.061	0.18	0.051	0.63	0.061	0.071	0.000025	12	0.016	0.003	1.6	0.00063	3.0	0.39	0.000012	0.0019	0.035	0.00033	0.000082	0.000036	0.00066	0.0045
		September		54	10	0.1	0.056	0.15	0.053	0.9	0.044	0.051	0.00002	9.1	0.023	0.0028	2.1	0.00062	2.9	0.28	0.0000089	0.0015	0.028	0.00024	0.000085	0.000033	0.00052	0.0043
		October		49	12	0.083	0.09	0.2	0.048	0.93	0.022	0.032	0.000016	8.7	0.023	0.0023	2.0	0.00051	3.2	0.17	0.0000074	0.0012	0.017	0.00018	0.000076	0.00003	0.00043	0.0039
		November		53	14	0.084	0.12	0.25	0.045	0.87	0.012	0.026	0.000015	9.4	0.022	0.0021	1.9	0.00044	3.5	0.13	0.0000075	0.0012	0.012	0.00017	0.00007	0.000029	0.00042	0.0037
		December		56	15	0.093	0.13	0.27	0.078	1.8	0.02	0.024	0.000019	10	0.044	0.0035	3.8	0.0008	4.7	0.15	0.0000077	0.0012	0.021	0.00018	0.00013	0.000044	0.00047	0.0058

APPENDIX C-2
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
CEQG aquatic life (long-term)[2] (mg/L)					120	0.12	12.6	2.93	0.01	0.1	0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008	0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[3]	NO_3 (as N)	P[4]	Al[5]	As[6]	B	Cd[7]	Ca	Cr	Cu[7]	Fe	Pb[7]	Mg	Mn[8]	Hg	Mo	Ni[7]	Se	Ag	Tl	U	Zn[9]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Attenuation Pond	*Construction and Operations*	January	2024	51	14	0.082	0.13	0.29	0.033	0.53	0.0065	0.022	0.000012	9.0	0.013	0.0015	1.1	0.00029	3.1	0.11	0.0000075	0.001	0.0069	0.00016	0.000048	0.000023	0.00037	0.0029
		February		49	13	0.081	0.13	0.3	0.032	0.5	0.0062	0.02	0.000012	8.8	0.012	0.0015	1.1	0.00027	2.9	0.11	0.0000075	0.00094	0.0066	0.00015	0.000046	0.000023	0.00034	0.0028
		March		49	13	0.079	0.13	0.31	0.022	0.23	0.0032	0.02	0.00001	8.6	0.0057	0.0011	0.5	0.00016	2.6	0.1	0.0000074	0.0009	0.0036	0.00015	0.000029	0.000018	0.00032	0.0022
		April		48	13	0.078	0.14	0.32	0.018	0.089	0.0017	0.019	0.0000096	8.5	0.0023	0.00085	0.21	0.00011	2.4	0.1	0.0000074	0.00089	0.002	0.00015	0.00002	0.000016	0.00032	0.0018
		May		49	13	0.08	0.14	0.33	0.025	0.29	0.0039	0.019	0.000011	8.7	0.0072	0.0011	0.63	0.00019	2.6	0.11	0.0000074	0.00089	0.0042	0.00015	0.000032	0.000019	0.00033	0.0023
		June		42	7.5	0.083	0.072	0.19	0.11	2.8	0.042	0.023	0.000022	8.1	0.07	0.005	6.0	0.0012	4.8	0.22	0.0000063	0.00091	0.037	0.00017	0.00019	0.000058	0.00039	0.0075
		July		50	8.0	0.099	0.048	0.15	0.045	0.69	0.047	0.05	0.000019	8.4	0.017	0.0026	1.7	0.00055	2.4	0.29	0.0000093	0.0013	0.028	0.00024	0.000075	0.000031	0.00046	0.0038
		August		64	9.9	0.13	0.053	0.18	0.049	0.63	0.062	0.067	0.000024	11	0.016	0.003	1.6	0.00062	2.7	0.38	0.000012	0.0017	0.036	0.00032	0.000082	0.000037	0.00058	0.0044
		September		50	8.3	0.098	0.048	0.15	0.051	0.9	0.047	0.048	0.000019	8.6	0.023	0.0028	2.1	0.00061	2.7	0.28	0.0000093	0.0013	0.029	0.00024	0.000087	0.000034	0.00045	0.0042
		October		43	9.1	0.078	0.078	0.2	0.047	0.93	0.024	0.028	0.000015	7.6	0.023	0.0023	2.0	0.0005	2.8	0.16	0.0000075	0.00092	0.018	0.00017	0.000077	0.00003	0.00034	0.0037
		November		44	10	0.077	0.1	0.26	0.044	0.87	0.013	0.021	0.000013	7.9	0.022	0.0021	1.9	0.00043	3.0	0.12	0.0000075	0.00081	0.012	0.00015	0.00007	0.000029	0.00031	0.0035
		December		46	11	0.085	0.11	0.28	0.077	1.8	0.021	0.019	0.000018	8.7	0.044	0.0034	3.8	0.00078	4.2	0.14	0.0000077	0.00085	0.021	0.00016	0.00013	0.000044	0.00035	0.0056
		January	2025	42	9.9	0.073	0.11	0.29	0.031	0.53	0.0065	0.017	0.000011	7.5	0.013	0.0015	1.1	0.00028	2.6	0.1	0.0000075	0.00068	0.0068	0.00014	0.000047	0.000023	0.00026	0.0027
		February		40	9.3	0.073	0.12	0.31	0.03	0.5	0.0062	0.016	0.00001	7.3	0.012	0.0014	1.1	0.00026	2.4	0.1	0.0000075	0.00061	0.0065	0.00014	0.000046	0.000023	0.00024	0.0026
		March		40	9.1	0.071	0.12	0.32	0.021	0.23	0.0032	0.015	0.000009	7.1	0.0057	0.001	0.5	0.00015	2.1	0.094	0.0000074	0.00057	0.0035	0.00013	0.000028	0.000018	0.00022	0.002
		April		39	9.0	0.07	0.12	0.33	0.016	0.089	0.0017	0.015	0.0000082	6.9	0.0023	0.00079	0.21	0.000098	1.9	0.091	0.0000074	0.00056	0.0019	0.00013	0.00002	0.000016	0.00021	0.0016
		May		40	9.0	0.072	0.13	0.35	0.024	0.29	0.0039	0.015	0.0000091	7.1	0.0072	0.0011	0.62	0.00018	2.2	0.099	0.0000074	0.00057	0.0041	0.00013	0.000032	0.000019	0.00022	0.0021
		June		39	5.8	0.082	0.066	0.19	0.11	2.8	0.046	0.021	0.000022	7.7	0.07	0.005	6.0	0.0012	4.6	0.22	0.0000068	0.00079	0.039	0.00017	0.0002	0.00006	0.00034	0.0075
		July		50	6.9	0.1	0.043	0.16	0.045	0.69	0.052	0.049	0.000019	8.5	0.017	0.0026	1.7	0.00055	2.3	0.3	0.00001	0.0013	0.031	0.00025	0.000079	0.000033	0.00041	0.0039
		August		60	8.0	0.12	0.047	0.18	0.048	0.63	0.062	0.065	0.000023	9.9	0.016	0.003	1.6	0.00062	2.5	0.38	0.000012	0.0015	0.036	0.00031	0.000082	0.000037	0.00052	0.0043
		September		43	6.0	0.09	0.044	0.15	0.05	0.9	0.042	0.045	0.000018	7.2	0.023	0.0027	2.1	0.00061	2.4	0.27	0.0000085	0.001	0.027	0.00022	0.000083	0.000032	0.00039	0.004
		October		35	6.4	0.07	0.071	0.21	0.045	0.93	0.021	0.024	0.000014	6.3	0.023	0.0022	2.0	0.00049	2.5	0.15	0.0000071	0.00063	0.016	0.00015	0.000075	0.000029	0.00027	0.0035
		November		36	7.5	0.07	0.095	0.27	0.042	0.87	0.012	0.017	0.000012	6.6	0.022	0.002	1.9	0.00042	2.6	0.11	0.0000074	0.00053	0.011	0.00013	0.000069	0.000029	0.00023	0.0034
		December		39	7.7	0.078	0.1	0.29	0.075	1.8	0.02	0.015	0.000016	7.4	0.044	0.0034	3.8	0.00078	3.8	0.14	0.0000077	0.00056	0.021	0.00014	0.00013	0.000044	0.00027	0.0054
			MINIMUM	11	1.3	0.028	0.0093	0.0024	0.0021	0.0045	0.00016	0.0091	0.000002	2.1	0.000067	0.00026	0.021	0.000014	0.45	0.0045	0.0000046	0.000026	0.00035	0.00011	0.0000035	0.0000094	0.000033	0.00012
			MAXIMUM	281	111	0.33	2.6	5.4	0.23	2.8	0.094	0.29	0.000032	57	0.07	0.0052	6.0	0.0014	18	0.83	0.000014	0.013	0.056	0.0017	0.0002	0.000068	0.0049	0.0086
			AVERAGE	77	19	0.11	0.25	0.43	0.052	0.62	0.021	0.049	0.000014	14	0.015	0.002	1.5	0.00039	4.1	0.21	0.0000072	0.0021	0.014	0.00035	0.00006	0.000026	0.00075	0.003

APPENDIX C-2
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
		CEQG aquatic life (long-term)[2] (mg/L)			120	0.12	12.6	2.93	0.01	0.1	0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008	0.015	0.028
		Constituent		TDS	Cl	F	NH_3 (as N)[3]	NO_3 (as N)	P[4]	Al[5]	As[6]	B	Cd[7]	Ca	Cr	Cu[7]	Fe	Pb[7]	Mg	Mn[8]	Hg	Mo	Ni[7]	Se	Ag	Tl	U	Zn[9]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Attenuation Pond	Closure	January	2026	38	9.7	0.066	0.11	0.34	0.029	0.022	0.0012	0.018	0.0000085	6.5	0.00067	0.00071	0.067	0.000081	1.9	0.078	0.0000073	0.00066	0.0013	0.00012	0.000015	0.000015	0.00024	0.0016
		February		45	13	0.069	0.11	0.41	0.055	0.022	0.0012	0.024	0.0000098	7.3	0.00068	0.00074	0.067	0.000092	2.2	0.081	0.0000073	0.00097	0.0014	0.00013	0.000016	0.000015	0.00033	0.0017
		March		49	15	0.072	0.11	0.45	0.073	0.022	0.0012	0.027	0.000011	7.9	0.00069	0.00077	0.067	0.0001	2.4	0.083	0.0000072	0.0012	0.0014	0.00014	0.000016	0.000015	0.00039	0.0018
		April		52	16	0.074	0.12	0.48	0.086	0.022	0.0012	0.03	0.000011	8.3	0.00069	0.00079	0.068	0.00011	2.6	0.085	0.0000072	0.0013	0.0014	0.00014	0.000016	0.000015	0.00044	0.0018
		May		55	17	0.075	0.12	0.51	0.097	0.022	0.0012	0.032	0.000012	8.6	0.0007	0.00081	0.068	0.00011	2.8	0.086	0.0000072	0.0015	0.0014	0.00014	0.000016	0.000015	0.00047	0.0019
		June		36	11	0.061	0.065	0.29	0.06	0.022	0.0031	0.027	0.0000094	5.5	0.00078	0.00082	0.1	0.00013	1.8	0.074	0.000006	0.00098	0.0022	0.00011	0.000013	0.000011	0.00038	0.0016
		July		30	6.8	0.073	0.035	0.17	0.042	0.022	0.0074	0.032	0.00001	4.2	0.00098	0.0011	0.15	0.00021	1.4	0.1	0.000007	0.00089	0.0041	0.00014	0.000012	0.000011	0.00048	0.0017
		August		37	7.0	0.11	0.031	0.18	0.049	0.022	0.014	0.047	0.000014	4.9	0.0013	0.0017	0.2	0.00033	1.5	0.17	0.0000097	0.0012	0.007	0.0002	0.000015	0.000013	0.00076	0.0023
		September		37	6.5	0.12	0.026	0.16	0.049	0.022	0.015	0.051	0.000015	4.9	0.0014	0.0019	0.22	0.00036	1.5	0.18	0.00001	0.0013	0.0077	0.00022	0.000015	0.000013	0.00082	0.0025
		October		36	6.5	0.11	0.025	0.16	0.049	0.022	0.014	0.048	0.000014	4.7	0.0013	0.0018	0.22	0.00034	1.4	0.17	0.0000097	0.0012	0.0071	0.0002	0.000015	0.000012	0.00077	0.0023
		November		37	7.2	0.11	0.028	0.18	0.054	0.022	0.013	0.047	0.000014	4.9	0.0013	0.0017	0.21	0.00033	1.5	0.16	0.0000096	0.0013	0.0068	0.0002	0.000015	0.000012	0.00076	0.0023
		December		38	7.9	0.1	0.031	0.2	0.06	0.022	0.013	0.047	0.000014	5.1	0.0012	0.0017	0.2	0.00032	1.6	0.16	0.0000094	0.0013	0.0065	0.00019	0.000015	0.000012	0.00075	0.0023
		January	2027	39	8.6	0.1	0.034	0.22	0.065	0.022	0.012	0.046	0.000014	5.2	0.0012	0.0016	0.2	0.00031	1.7	0.15	0.0000092	0.0013	0.0063	0.00019	0.000015	0.000012	0.00074	0.0023
		February		40	9.2	0.1	0.037	0.24	0.07	0.022	0.011	0.046	0.000014	5.4	0.0012	0.0016	0.19	0.0003	1.7	0.15	0.000009	0.0014	0.006	0.00019	0.000015	0.000012	0.00073	0.0023
		March		40	9.8	0.099	0.039	0.25	0.074	0.022	0.011	0.046	0.000014	5.6	0.0012	0.0015	0.18	0.00029	1.8	0.14	0.0000089	0.0014	0.0058	0.00018	0.000015	0.000012	0.00073	0.0022
		April		41	10	0.097	0.042	0.27	0.079	0.022	0.01	0.045	0.000014	5.7	0.0011	0.0015	0.18	0.00028	1.9	0.14	0.0000088	0.0014	0.0055	0.00018	0.000015	0.000012	0.00072	0.0022
		May		42	11	0.096	0.044	0.28	0.083	0.022	0.0099	0.045	0.000014	5.9	0.0011	0.0015	0.17	0.00027	1.9	0.13	0.0000086	0.0014	0.0053	0.00018	0.000015	0.000012	0.00071	0.0022
		June		32	7.9	0.076	0.031	0.2	0.059	0.022	0.0078	0.035	0.000011	4.4	0.001	0.0012	0.16	0.00022	1.5	0.1	0.0000071	0.001	0.0043	0.00014	0.000012	0.000011	0.00054	0.0018
		July		28	5.6	0.081	0.019	0.13	0.043	0.022	0.0096	0.036	0.000011	3.7	0.0011	0.0013	0.17	0.00025	1.2	0.12	0.0000075	0.00092	0.0051	0.00015	0.000012	0.00001	0.00056	0.0018
		August		35	5.9	0.11	0.018	0.14	0.049	0.022	0.015	0.05	0.000014	4.5	0.0014	0.0019	0.22	0.00036	1.4	0.18	0.00001	0.0012	0.0078	0.00021	0.000015	0.000012	0.00081	0.0024
		September		36	5.6	0.12	0.016	0.13	0.049	0.022	0.016	0.053	0.000015	4.5	0.0014	0.002	0.24	0.00039	1.4	0.19	0.000011	0.0013	0.0083	0.00022	0.000015	0.000013	0.00086	0.0025
		October		34	5.6	0.11	0.016	0.13	0.048	0.022	0.015	0.049	0.000014	4.3	0.0013	0.0018	0.23	0.00036	1.3	0.17	0.00001	0.0012	0.0076	0.00021	0.000015	0.000012	0.00079	0.0024
		November		35	6.3	0.11	0.018	0.15	0.054	0.022	0.014	0.048	0.000014	4.5	0.0013	0.0018	0.22	0.00034	1.4	0.16	0.0000098	0.0012	0.0072	0.0002	0.000015	0.000012	0.00078	0.0024
		December		35	6.9	0.11	0.02	0.17	0.059	0.022	0.013	0.048	0.000014	4.6	0.0013	0.0017	0.21	0.00033	1.5	0.16	0.0000096	0.0012	0.0069	0.0002	0.000015	0.000012	0.00076	0.0023
		January	2028	36	7.5	0.1	0.022	0.19	0.064	0.022	0.013	0.047	0.000014	4.8	0.0012	0.0017	0.21	0.00032	1.5	0.15	0.0000095	0.0013	0.0066	0.00019	0.000015	0.000012	0.00075	0.0023
		February		37	8.1	0.1	0.024	0.2	0.069	0.022	0.012	0.047	0.000014	4.9	0.0012	0.0016	0.2	0.00031	1.6	0.15	0.0000093	0.0013	0.0063	0.00019	0.000015	0.000012	0.00073	0.0023
		March		37	8.6	0.099	0.026	0.22	0.073	0.022	0.012	0.046	0.000014	5.1	0.0012	0.0016	0.19	0.0003	1.7	0.14	0.0000092	0.0013	0.0061	0.00018	0.000015	0.000013	0.00072	0.0023
		April		38	9.1	0.097	0.028	0.23	0.078	0.022	0.011	0.046	0.000014	5.2	0.0012	0.0015	0.18	0.00029	1.7	0.13	0.000009	0.0013	0.0058	0.00018	0.000015	0.000013	0.00071	0.0023
		May		38	9.6	0.095	0.03	0.24	0.082	0.022	0.01	0.045	0.000014	5.3	0.0011	0.0015	0.18	0.00028	1.8	0.13	0.0000089	0.0013	0.0056	0.00018	0.000015	0.000013	0.0007	0.0023
		June		29	7.0	0.075	0.021	0.17	0.058	0.022	0.0081	0.035	0.000011	4.0	0.001	0.0012	0.16	0.00023	1.4	0.098	0.0000073	0.00096	0.0044	0.00014	0.000013	0.000011	0.00053	0.0018
		July		26	5.0	0.08	0.013	0.12	0.042	0.022	0.0098	0.035	0.000011	3.5	0.0011	0.0013	0.17	0.00025	1.1	0.11	0.0000076	0.00087	0.0052	0.00015	0.000012	0.00001	0.00055	0.0019
		August		33	5.2	0.11	0.013	0.13	0.049	0.022	0.015	0.05	0.000014	4.2	0.0014	0.0019	0.22	0.00037	1.3	0.17	0.00001	0.0012	0.0078	0.00021	0.000015	0.000013	0.0008	0.0024
		September		34	5.0	0.12	0.011	0.12	0.048	0.022	0.017	0.052	0.000015	4.3	0.0014	0.002	0.24	0.00039	1.3	0.19	0.000011	0.0012	0.0083	0.00022	0.000016	0.000013	0.00084	0.0025
		October		32	4.9	0.11	0.011	0.12	0.048	0.022	0.015	0.048	0.000014	4.1	0.0013	0.0018	0.23	0.00036	1.2	0.17	0.00001	0.0011	0.0076	0.0002	0.000015	0.000012	0.00077	0.0024
		November		32	5.4	0.11	0.013	0.14	0.053	0.022	0.014	0.047	0.000014	4.2	0.0013	0.0018	0.22	0.00034	1.3	0.16	0.0000099	0.0011	0.0072	0.0002	0.000015	0.000012	0.00075	0.0023
		December		33	5.9	0.1	0.014	0.15	0.058	0.022	0.013	0.046	0.000014	4.3	0.0013	0.0017	0.21	0.00033	1.3	0.15	0.0000097	0.0011	0.0069	0.00019	0.000015	0.000012	0.00073	0.0023
		January	2029	33	6.3	0.1	0.016	0.17	0.063	0.022	0.013	0.045	0.000013	4.4	0.0012	0.0017	0.21	0.00032	1.4	0.15	0.0000095	0.0011	0.0066	0.00019	0.000015	0.000013	0.00071	0.0023
		February		33	6.7	0.098	0.017	0.18	0.067	0.022	0.012	0.045	0.000013	4.5	0.0012	0.0016	0.2	0.00031	1.4	0.14	0.0000094	0.0011	0.0063	0.00018	0.000015	0.000013	0.00069	0.0023
		March		34	7.1	0.096	0.018	0.2	0.072	0.022	0.011	0.044	0.000013	4.5	0.0012	0.0016	0.19	0.0003	1.5	0.13	0.0000092	0.0011	0.006	0.00018	0.000015	0.000013	0.00067	0.0023
		April		34	7.5	0.093	0.02	0.21	0.076	0.022	0.011	0.043	0.000013	4.6	0.0012	0.0015	0.18	0.00029	1.5	0.13	0.0000091	0.0011	0.0058	0.00017	0.000015	0.000013	0.00066	0.0022
		May		34	7.8	0.091	0.021	0.22	0.08	0.022	0.01	0.043	0.000013	4.7	0.0011	0.0015	0.18	0.00028	1.6	0.12	0.0000089	0.0011	0.0055	0.00017	0.000015	0.000013	0.00064	0.0022
		June		26	5.8	0.072	0.015	0.15	0.056	0.022	0.008	0.033	0.00001	3.6	0.001	0.0012	0.16	0.00022	1.2	0.094	0.0000073	0.00084	0.0044	0.00013	0.000013	0.000011	0.00049	0.0018
		July		24	4.3	0.078	0.01	0.11	0.041	0.022	0.0098	0.034	0.00001	3.2	0.0011	0.0013	0.17	0.00025	1.1	0.11	0.0000076	0.0008	0.0052	0.00014	0.000012	0.00001	0.00053	0.0018
		August		32	4.6	0.11	0.0098	0.12	0.048	0.022	0.015	0.049	0.000014	4.0	0.0014	0.0019	0.22	0.00036	1.2	0.17	0.00001	0.0011	0.0078	0.00021	0.000015	0.000013	0.00078	0.0024
		September		33	4.5	0.12	0.009	0.12	0.047	0.022	0.016	0.051	0.000015	4.1	0.0014	0.002	0.24	0.00038	1.2	0.18	0.000011	0.0012	0.0083	0.00022	0.000016	0.000013	0.00082	0.0025
		October		31	4.5	0.11	0.0091	0.12	0.047	0.022	0.015	0.047	0.000014	3.9	0.0013	0.0018	0.23	0.00035	1.2	0.17	0.00001	0.0011	0.0076	0.0002	0.000015	0.000012	0.00076	0.0024
		November		31	4.9	0.11	0.01	0.13	0.052	0.022	0.014	0.046	0.000013	4.0	0.0013	0.0018	0.22	0.00034	1.2	0.16	0.0000099	0.0011	0.0072	0.0002	0.000015	0.000012	0.00073	0.0023
		December		31	5.3	0.1	0.011	0.15	0.057	0.022	0.013	0.045	0.000013	4.1	0.0013	0.0017	0.21	0.00033	1.3	0.15	0.0000097	0.0011	0.0069	0.00019	0.000015	0.000012	0.00071	0.0023
		January	2030	31	5.7	0.099	0.013	0.16	0.062	0.022	0.013	0.045	0.000013	4.1	0.0012	0.0017	0.21	0.00032	1.3	0.14	0.0000095	0.0011	0.0066	0.00018	0.000015	0.000013	0.00069	0.0023
		February		32	6.1	0.097	0.014	0.17	0.067	0.022	0.012	0.044	0.000013	4.2	0.0012	0.0016	0.2	0.00031	1.4	0.14	0.0000094	0.0011	0.0063	0.00018	0.000015	0.000013	0.00067	0.0023
		March		32	6.4	0.094	0.015	0.19	0.071	0.022	0.011	0.043	0.000013	4.3	0.0012	0.0016	0.19	0.0003	1.4	0.13	0.0000092	0.0011	0.006	0.00017	0.000015	0.000013	0.00065	0.0022
		April		32	6.7	0.092	0.016	0.2	0.075	0.022	0.011	0.042	0.000013	4.3	0.0012	0.0015	0.18	0.00029	1.4	0.12	0.0000091	0.0011	0.0058	0.00017	0.000015	0.000013	0.00063	0.0022
		May		32	7.0	0.089	0.016	0.21	0.079	0.022	0.01	0.041	0.000013	4.4	0.0011	0.0015	0.18	0.00028	1.5	0.12	0.0000089	0.0011	0.0055	0.00017	0.000015	0.000013	0.00062	0.0022
		June		25	5.2	0.071	0.012	0.15	0.056	0.022	0.008	0.032	0.00001	3.4	0.001	0.0012	0.16	0.00022	1.2	0.091	0.0000073	0.00078	0.0044	0.00013	0.000013	0.000011	0.00047	0.0018
		July		24	4.0	0.078	0.0084	0.1	0.041	0.022	0.0097	0.034	0.00001	3.1	0.0011	0.0013	0.17	0.00025	1.0	0.11	0.0000076	0.00076	0.0052	0.00014	0.000012	0.00001	0.00052	0.0018
		August		31	4.3	0.11	0.0082	0.12	0.048	0.022	0.015	0.048	0.000014	3.9	0.0014	0.0019	0.22	0.00036	1.2	0.17	0.00001	0.0011	0.0078	0.00021	0.000015	0.000013	0.00077	0.0024
		September		32	4.1	0.12	0.0076	0.11	0.047	0.022	0.016	0.051	0.000014	4.0	0.0014	0.002	0.24	0.00038	1.2	0.18	0.000011	0.0011	0.0083	0.00022	0.000016	0.000013	0.00081	0.0025
		October		30	4.1	0.11	0.0077	0.11	0.047	0.022	0.015	0.047	0.000013	3.8	0.0013	0.0018	0.23	0.00035	1.1	0.16	0.00001	0.001	0.0075	0.0002	0.000015	0.000012	0.00075	0.0023
		November		30	4.4	0.1	0.0087	0.13	0.052	0.022	0.014	0.046	0.000013	3.8	0.0013	0.0018	0.22	0.00034	1.2	0.16	0.0000099	0.001	0.0072	0.00019	0.000015	0.000012	0.00072	0.0023
		December		30	4.7	0.1	0.0096	0.14	0.057	0.022	0.013	0.044	0.000013	3.9	0.0013	0.0017	0.21	0.00033	1.2	0.15	0.0000097	0.001	0.0069	0.00019	0.000015	0.000012	0.00069	0.0023
		January	2031	30	5.0	0.098	0.01	0.16	0.062	0.022	0.013	0.043	0.000013	3.9	0.0012	0.0017	0.21	0.00031	1.2	0.14	0.0000095	0.0010	0.0066	0.00018	0.000015	0.000013	0.00067	0.0023
		February		30	5.3	0.095	0.011	0.17	0.066	0.022	0.012	0.042	0.000013	4.0	0.0012	0.0016	0.2	0.0003	1.3	0.13	0.0000094	0.00098	0.0063	0.00018	0.000015	0.000013	0.00065	0.0022
		March		30	5.5	0.093	0.012	0.18	0.07	0.022	0.011	0.041	0.000013	4.0	0.0012	0.0016	0.19	0.00029	1.3	0.13	0.0000092	0.00097	0.006	0.00017	0.000015	0.000013	0.00062	0.0022
		April		30	5.7	0.09	0.013	0.19	0.074	0.022	0.011	0.041	0.000012	4.0	0.0012	0.0015	0.18	0.00028	1.3	0.12	0.0000091	0.00096	0.0057	0.00017	0.000015	0.000013	0.0006	0.0022
		May		30	6.0	0.088	0.013	0.2	0.078	0.022	0.01	0.04	0.000012	4.1	0.0011	0.0015	0.18	0.00027	1.3	0.12	0.000009	0.00095	0.0055	0.00016	0.000015	0.000013	0.00058	0.0022
		June		23	4.5	0.07	0.01	0.14	0.055	0.022	0.008	0.031	0.0000097	3.2	0.001	0.0012	0.16	0.00022	1.1	0.089	0.0000073	0.0007	0.0044	0.00013	0.000013	0.000011	0.00045	0.0018
		July		22	3.5	0.077	0.0071	0.1	0.041	0.022	0.0097	0.033	0.00001	3.0	0.0011	0.0013	0.18	0.00025	0.97	0.11	0.0000077	0.00071	0.0052	0.00014	0.000012	0.00001	0.0005	0.0018
		August		30	3.7	0.11	0.007	0.11	0.047	0.022	0.015	0.047	0.000014	3.7	0.0014	0.0019	0.22	0.00036	1.1	0.17	0.00001	0.001	0.0078	0.0002	0.000015	0.000013	0.00075	0.0024
		September		31	3.6	0.12	0.0065	0.11	0.047	0.022	0.016	0.05	0.000014	3.8	0.0014	0.002	0.24	0.00038	1.1	0.18	0.000011	0.0011	0.0083	0.00022	0.000016	0.000013	0.0008	0.0025
		October		29	3.6	0.11	0.0066	0.11	0.047	0.022	0.015	0.046	0.000013	3.6	0.0013	0.0018	0.23	0.00035	1.1	0.16	0.00001	0.00099	0.0076	0.0002	0.000015	0.000012	0.00073	0.0023
		November		29	3.8	0.1	0.0074	0.13	0.052	0.022	0.014	0.045	0.000013	3.7	0.0013	0.0018	0.22	0.00034	1.1	0.16	0.0000099	0.00097	0.0072	0.00019	0.000015	0.000012	0.0007	0.0023
		December		29	4.0	0.1	0.0081	0.14	0.057	0.022	0.013	0.043	0.000013	3.7	0.0013	0.0017	0.21	0.00033	1.1	0.15	0.0000097	0.00095	0.0069	0.00019	0.000015	0.000013	0.00068	0.0023

APPENDIX C-2
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
		CEQG aquatic life (long-term)[2] (mg/L)			120	0.12	12.6	2.93	0.01	0.1	0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008	0.015	0.028
		Constituent		TDS	Cl	F	NH_3 (as N)[3]	NO_3 (as N)	P[4]	Al[5]	As[6]	B	Cd[7]	Ca	Cr	Cu[7]	Fe	Pb[7]	Mg	Mn[8]	Hg	Mo	Ni[7]	Se	Ag	Tl	U	Zn[9]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Attenuation Pond	Closure	January	2032	28	4.2	0.098	0.0088	0.16	0.062	0.022	0.013	0.042	0.000013	3.7	0.0012	0.0017	0.21	0.00031	1.1	0.14	0.0000096	0.00092	0.0066	0.00018	0.000015	0.000013	0.00065	0.0022
		February		28	4.4	0.095	0.0095	0.17	0.066	0.022	0.012	0.041	0.000012	3.7	0.0012	0.0016	0.2	0.0003	1.2	0.13	0.0000094	0.0009	0.0063	0.00018	0.000015	0.000013	0.00062	0.0022
		March		28	4.6	0.092	0.01	0.18	0.07	0.022	0.012	0.04	0.000012	3.7	0.0012	0.0016	0.19	0.00029	1.2	0.13	0.0000093	0.00088	0.006	0.00017	0.000015	0.000013	0.0006	0.0022
		April		28	4.8	0.089	0.011	0.19	0.074	0.022	0.011	0.039	0.000012	3.8	0.0012	0.0015	0.19	0.00028	1.2	0.12	0.0000091	0.00087	0.0058	0.00017	0.000015	0.000013	0.00058	0.0022
		May		28	4.9	0.087	0.011	0.2	0.078	0.022	0.01	0.038	0.000012	3.8	0.0011	0.0015	0.18	0.00027	1.2	0.12	0.000009	0.00085	0.0055	0.00016	0.000015	0.000013	0.00056	0.0021
		June		22	3.8	0.069	0.0086	0.14	0.055	0.022	0.0081	0.03	0.0000095	3.0	0.001	0.0012	0.16	0.00022	1.0	0.089	0.0000074	0.00064	0.0044	0.00013	0.000013	0.000011	0.00043	0.0018
		July		22	3.1	0.077	0.0063	0.1	0.041	0.022	0.0098	0.032	0.0000099	2.9	0.0011	0.0013	0.18	0.00025	0.92	0.11	0.0000077	0.00067	0.0052	0.00014	0.000012	0.00001	0.00049	0.0018
		August		29	3.4	0.11	0.0063	0.11	0.047	0.022	0.015	0.047	0.000014	3.7	0.0014	0.0019	0.22	0.00036	1.1	0.17	0.00001	0.0010	0.0078	0.0002	0.000015	0.000013	0.00075	0.0024
		September		30	3.4	0.12	0.0059	0.11	0.047	0.022	0.017	0.05	0.000014	3.8	0.0014	0.002	0.24	0.00038	1.1	0.18	0.000011	0.0011	0.0083	0.00021	0.000016	0.000013	0.00079	0.0025
		October		28	3.3	0.11	0.0061	0.11	0.047	0.022	0.015	0.046	0.000013	3.6	0.0013	0.0018	0.23	0.00035	1.1	0.16	0.00001	0.00097	0.0076	0.0002	0.000015	0.000012	0.00073	0.0023
		November		28	3.5	0.1	0.0068	0.13	0.052	0.022	0.014	0.044	0.000013	3.6	0.0013	0.0018	0.22	0.00034	1.1	0.16	0.0000099	0.00095	0.0073	0.00019	0.000015	0.000012	0.0007	0.0023
		December		28	3.7	0.1	0.0075	0.14	0.057	0.022	0.014	0.043	0.000013	3.6	0.0013	0.0017	0.22	0.00033	1.1	0.15	0.0000098	0.00092	0.0069	0.00019	0.000015	0.000013	0.00067	0.0023
		January	2033	28	3.9	0.098	0.0082	0.16	0.062	0.022	0.013	0.042	0.000013	3.6	0.0013	0.0017	0.21	0.00032	1.1	0.14	0.0000096	0.0009	0.0066	0.00018	0.000015	0.000013	0.00065	0.0022
		February		28	4.1	0.095	0.0088	0.17	0.066	0.022	0.012	0.041	0.000012	3.6	0.0012	0.0016	0.2	0.0003	1.1	0.14	0.0000095	0.00088	0.0064	0.00018	0.000015	0.000013	0.00062	0.0022
		March		27	4.3	0.092	0.0093	0.18	0.07	0.022	0.012	0.04	0.000012	3.7	0.0012	0.0016	0.19	0.00029	1.1	0.13	0.0000093	0.00086	0.0061	0.00017	0.000015	0.000013	0.0006	0.0022
		April		27	4.4	0.09	0.0099	0.19	0.074	0.022	0.011	0.039	0.000012	3.7	0.0012	0.0015	0.19	0.00028	1.2	0.12	0.0000092	0.00084	0.0059	0.00017	0.000015	0.000013	0.00058	0.0022
		May		27	4.6	0.087	0.01	0.2	0.078	0.022	0.011	0.038	0.000012	3.7	0.0011	0.0015	0.18	0.00027	1.2	0.12	0.0000091	0.00082	0.0056	0.00016	0.000015	0.000013	0.00056	0.0021
		June		21	3.6	0.07	0.008	0.14	0.055	0.022	0.0082	0.03	0.0000094	2.9	0.001	0.0012	0.16	0.00022	0.97	0.09	0.0000074	0.00062	0.0045	0.00013	0.000013	0.000011	0.00043	0.0018
		July		21	2.9	0.077	0.006	0.1	0.041	0.022	0.0099	0.032	0.0000099	2.8	0.0011	0.0013	0.18	0.00025	0.91	0.11	0.0000077	0.00066	0.0052	0.00014	0.000012	0.00001	0.00049	0.0018
		August		29	3.3	0.11	0.006	0.11	0.047	0.022	0.016	0.047	0.000014	3.6	0.0014	0.0019	0.22	0.00036	1.1	0.17	0.00001	0.00099	0.0078	0.0002	0.000015	0.000013	0.00074	0.0024
		September		30	3.2	0.12	0.0057	0.11	0.047	0.022	0.017	0.05	0.000014	3.7	0.0014	0.002	0.24	0.00038	1.1	0.18	0.000011	0.001	0.0083	0.00022	0.000016	0.000013	0.00079	0.0025
		October		28	3.2	0.11	0.0058	0.11	0.047	0.022	0.015	0.046	0.000013	3.5	0.0013	0.0018	0.23	0.00035	1.0	0.17	0.00001	0.00096	0.0076	0.0002	0.000015	0.000012	0.00073	0.0023
		November		28	3.4	0.1	0.0065	0.13	0.052	0.022	0.014	0.044	0.000013	3.5	0.0013	0.0018	0.22	0.00034	1.1	0.16	0.000010	0.00093	0.0073	0.00019	0.000015	0.000012	0.0007	0.0023
		December		28	3.6	0.1	0.0072	0.14	0.057	0.022	0.014	0.043	0.000013	3.6	0.0013	0.0017	0.22	0.00033	1.1	0.15	0.0000098	0.00091	0.007	0.00019	0.000015	0.000013	0.00067	0.0023
		January	2034	28	3.7	0.098	0.0078	0.16	0.062	0.022	0.013	0.042	0.000012	3.6	0.0013	0.0017	0.21	0.00032	1.1	0.14	0.0000096	0.00088	0.0067	0.00018	0.000015	0.000013	0.00064	0.0022
		February		27	3.9	0.095	0.0083	0.17	0.066	0.022	0.012	0.041	0.000012	3.6	0.0012	0.0016	0.2	0.00031	1.1	0.14	0.0000095	0.00086	0.0064	0.00018	0.000015	0.000013	0.00062	0.0022
		March		27	4.0	0.092	0.0089	0.18	0.07	0.022	0.012	0.04	0.000012	3.6	0.0012	0.0016	0.2	0.0003	1.1	0.13	0.0000094	0.00084	0.0061	0.00017	0.000015	0.000013	0.0006	0.0022
		April		27	4.2	0.09	0.0094	0.19	0.074	0.022	0.011	0.039	0.000012	3.6	0.0012	0.0015	0.19	0.00028	1.1	0.12	0.0000092	0.00082	0.0059	0.00017	0.000015	0.000013	0.00057	0.0022
		May		27	4.3	0.087	0.0099	0.2	0.078	0.022	0.011	0.038	0.000012	3.6	0.0012	0.0015	0.18	0.00028	1.1	0.12	0.0000091	0.0008	0.0057	0.00016	0.000015	0.000013	0.00055	0.0021
		June		21	3.4	0.07	0.0076	0.14	0.055	0.022	0.0082	0.03	0.0000094	2.9	0.001	0.0012	0.16	0.00022	0.95	0.09	0.0000074	0.0006	0.0045	0.00013	0.000013	0.000011	0.00043	0.0017
		July		21	2.8	0.077	0.0058	0.1	0.041	0.022	0.0099	0.032	0.0000098	2.8	0.0011	0.0013	0.18	0.00025	0.89	0.11	0.0000077	0.00065	0.0052	0.00014	0.000012	0.00001	0.00049	0.0018
		August		29	3.2	0.11	0.0058	0.12	0.048	0.022	0.016	0.047	0.000014	3.6	0.0014	0.0019	0.22	0.00036	1.1	0.17	0.00001	0.00098	0.0079	0.0002	0.000015	0.000013	0.00074	0.0024
		September		30	3.1	0.12	0.0055	0.11	0.047	0.022	0.017	0.049	0.000014	3.7	0.0014	0.002	0.24	0.00038	1.1	0.18	0.000011	0.001	0.0084	0.00022	0.000016	0.000013	0.00079	0.0025
		October		28	3.1	0.11	0.0056	0.11	0.047	0.022	0.015	0.046	0.000013	3.5	0.0014	0.0018	0.23	0.00036	1.0	0.17	0.00001	0.00096	0.0077	0.0002	0.000015	0.000012	0.00073	0.0023
		November		28	3.3	0.1	0.0063	0.13	0.052	0.022	0.014	0.044	0.000013	3.5	0.0013	0.0018	0.23	0.00034	1.0	0.16	0.000010	0.00093	0.0073	0.00019	0.000015	0.000012	0.0007	0.0023
		December		28	3.4	0.1	0.0069	0.14	0.057	0.022	0.014	0.043	0.000013	3.5	0.0013	0.0017	0.22	0.00033	1.1	0.15	0.0000098	0.0009	0.007	0.00019	0.000015	0.000013	0.00067	0.0023
		January	2035	27	3.6	0.099	0.0075	0.16	0.062	0.022	0.013	0.042	0.000012	3.5	0.0013	0.0017	0.21	0.00032	1.1	0.14	0.0000097	0.00088	0.0068	0.00018	0.000015	0.000013	0.00065	0.0022
		February		27	3.7	0.096	0.008	0.17	0.067	0.022	0.013	0.041	0.000012	3.5	0.0012	0.0016	0.2	0.00031	1.1	0.14	0.0000095	0.00086	0.0065	0.00018	0.000015	0.000013	0.00062	0.0022
		March		27	3.9	0.093	0.0085	0.18	0.071	0.022	0.012	0.04	0.000012	3.6	0.0012	0.0016	0.2	0.0003	1.1	0.13	0.0000094	0.00084	0.0063	0.00017	0.000015	0.000013	0.0006	0.0022
		April		27	4.0	0.091	0.009	0.19	0.075	0.022	0.011	0.039	0.000012	3.6	0.0012	0.0016	0.19	0.00029	1.1	0.13	0.0000093	0.00081	0.006	0.00017	0.000015	0.000013	0.00058	0.0022
		May		27	4.1	0.088	0.0095	0.21	0.079	0.022	0.011	0.038	0.000012	3.6	0.0012	0.0015	0.19	0.00028	1.1	0.12	0.0000092	0.00079	0.0058	0.00016	0.000015	0.000013	0.00056	0.0021
		June		21	3.2	0.07	0.0074	0.14	0.056	0.022	0.0084	0.03	0.0000094	2.9	0.001	0.0012	0.17	0.00022	0.94	0.092	0.0000075	0.0006	0.0046	0.00013	0.000013	0.000011	0.00043	0.0018
		July		21	2.7	0.077	0.0056	0.1	0.041	0.022	0.01	0.032	0.0000098	2.8	0.0011	0.0013	0.18	0.00025	0.88	0.11	0.0000077	0.00065	0.0053	0.00014	0.000012	0.00001	0.00049	0.0018
		August		29	3.1	0.11	0.0056	0.12	0.048	0.022	0.016	0.047	0.000014	3.6	0.0014	0.0019	0.23	0.00037	1.0	0.17	0.00001	0.00098	0.0079	0.00021	0.000015	0.000013	0.00075	0.0024
		September		30	3.0	0.12	0.0053	0.11	0.048	0.022	0.017	0.05	0.000014	3.7	0.0014	0.002	0.24	0.00039	1.1	0.18	0.000011	0.001	0.0084	0.00022	0.000016	0.000013	0.0008	0.0025
		October		28	3.0	0.11	0.0054	0.12	0.048	0.022	0.015	0.046	0.000013	3.5	0.0014	0.0019	0.24	0.00036	1.0	0.17	0.00001	0.00096	0.0078	0.0002	0.000015	0.000012	0.00074	0.0023
		November		28	3.1	0.11	0.006	0.13	0.053	0.022	0.015	0.045	0.000013	3.5	0.0013	0.0018	0.23	0.00035	1.0	0.16	0.00001	0.00093	0.0075	0.0002	0.000015	0.000012	0.00071	0.0023
		December		28	3.2	0.1	0.0066	0.15	0.059	0.022	0.014	0.044	0.000013	3.5	0.0013	0.0018	0.22	0.00034	1.0	0.16	0.0000099	0.00091	0.0072	0.00019	0.000015	0.000013	0.00068	0.0023
		January	2036	27	3.3	0.1	0.0072	0.16	0.064	0.022	0.014	0.043	0.000013	3.5	0.0013	0.0017	0.22	0.00033	1.1	0.15	0.0000098	0.00088	0.0069	0.00019	0.000015	0.000013	0.00066	0.0023
		February		27	3.5	0.098	0.0077	0.18	0.07	0.022	0.013	0.042	0.000012	3.5	0.0013	0.0017	0.21	0.00032	1.1	0.14	0.0000097	0.00086	0.0067	0.00018	0.000015	0.000013	0.00064	0.0022
		March		27	3.6	0.095	0.0082	0.19	0.075	0.022	0.012	0.04	0.000012	3.5	0.0012	0.0016	0.2	0.00031	1.1	0.14	0.0000095	0.00083	0.0064	0.00018	0.000015	0.000013	0.00061	0.0022
		April		27	3.7	0.093	0.0087	0.21	0.08	0.022	0.012	0.039	0.000012	3.5	0.0012	0.0016	0.2	0.0003	1.1	0.13	0.0000094	0.00081	0.0062	0.00017	0.000015	0.000013	0.00059	0.0022
		May		26	3.8	0.09	0.0092	0.22	0.085	0.022	0.011	0.038	0.000012	3.5	0.0012	0.0015	0.19	0.00029	1.1	0.12	0.0000093	0.00079	0.006	0.00017	0.000015	0.000013	0.00057	0.0022
		June		21	3.0	0.071	0.0072	0.15	0.059	0.022	0.0087	0.03	0.0000094	2.8	0.001	0.0013	0.17	0.00023	0.91	0.095	0.0000075	0.00059	0.0047	0.00013	0.000013	0.000011	0.00044	0.0018
		July		21	2.6	0.078	0.0055	0.11	0.043	0.022	0.01	0.032	0.0000098	2.7	0.0011	0.0014	0.18	0.00025	0.87	0.11	0.0000078	0.00065	0.0053	0.00014	0.000012	0.00001	0.00049	0.0018
		August		29	2.9	0.11	0.0054	0.12	0.05	0.022	0.016	0.047	0.000014	3.5	0.0014	0.0019	0.23	0.00037	1.0	0.17	0.00001	0.00097	0.008	0.00021	0.000015	0.000013	0.00075	0.0024
		September		30	2.9	0.12	0.0052	0.12	0.049	0.022	0.017	0.05	0.000014	3.7	0.0014	0.002	0.24	0.00039	1.0	0.19	0.000011	0.001	0.0085	0.00022	0.000016	0.000013	0.0008	0.0025
		October		28	2.9	0.11	0.0053	0.12	0.049	0.022	0.016	0.046	0.000013	3.5	0.0014	0.0019	0.24	0.00036	1.0	0.17	0.00001	0.00096	0.0078	0.0002	0.000015	0.000012	0.00074	0.0024
		November		28	3.0	0.11	0.0059	0.13	0.054	0.022	0.015	0.045	0.000013	3.5	0.0013	0.0018	0.23	0.00035	1.0	0.16	0.00001	0.00093	0.0075	0.0002	0.000015	0.000012	0.00071	0.0023
		December		28	3.1	0.1	0.0065	0.15	0.06	0.022	0.014	0.044	0.000013	3.5	0.0013	0.0018	0.22	0.00034	1.0	0.16	0.000010	0.0009	0.0073	0.00019	0.000015	0.000013	0.00069	0.0023
		January	2037	27	3.2	0.1	0.007	0.16	0.065	0.022	0.014	0.043	0.000013	3.5	0.0013	0.0017	0.22	0.00033	1.0	0.15	0.0000098	0.00088	0.007	0.00019	0.000015	0.000013	0.00066	0.0023
		February		27	3.3	0.099	0.0075	0.18	0.07	0.022	0.013	0.042	0.000012	3.5	0.0013	0.0017	0.21	0.00032	1.1	0.14	0.0000097	0.00086	0.0068	0.00018	0.000015	0.000013	0.00064	0.0022
		March		27	3.5	0.096	0.008	0.19	0.075	0.022	0.013	0.041	0.000012	3.5	0.0012	0.0016	0.21	0.00031	1.1	0.14	0.0000096	0.00084	0.0065	0.00018	0.000015	0.000013	0.00062	0.0022
		April		27	3.6	0.094	0.0085	0.21	0.08	0.022	0.012	0.04	0.000012	3.5	0.0012	0.0016	0.2	0.0003	1.1	0.13	0.0000095	0.00081	0.0063	0.00017	0.000015	0.000013	0.0006	0.0022
		May		26	3.7	0.091	0.009	0.22	0.084	0.022	0.012	0.039	0.000012	3.5	0.0012	0.0016	0.19	0.00029	1.1	0.13	0.0000093	0.00079	0.0061	0.00017	0.000015	0.000013	0.00058	0.0022
		June		21	2.9	0.072	0.007	0.15	0.06	0.022	0.0089	0.03	0.0000095	2.8	0.0011	0.0013	0.17	0.00023	0.91	0.097	0.0000076	0.0006	0.0048	0.00013	0.000013	0.000011	0.00044	0.0018
		July		21	2.5	0.078	0.0054	0.11	0.043	0.022	0.01	0.033	0.0000099	2.7	0.0011	0.0014	0.18	0.00025	0.86	0.11	0.0000078	0.00065	0.0054	0.00014	0.000012	0.00001	0.0005	0.0018
		August		29	2.9	0.11	0.0054	0.12	0.049	0.022	0.016	0.047	0.000014	3.5	0.0014	0.0019	0.23	0.00037	1.0	0.17	0.00001	0.00097	0.008	0.00021	0.000015	0.000013	0.00075	0.0024
		September		30	2.9	0.12	0.0052	0.12	0.049	0.022	0.017	0.05	0.000014	3.7	0.0014	0.002	0.24	0.00039	1.0	0.19	0.000011	0.001	0.0085	0.00022	0.000016	0.000013	0.0008	0.0025
		October		28	2.9	0.11	0.0053	0.12	0.048	0.022	0.016	0.046	0.000013	3.5	0.0014	0.0019	0.24	0.00036	1.0	0.17	0.00001	0.00095	0.0078	0.0002	0.000015	0.000012	0.00074	0.0023
		November		28	3.0	0.11	0.0059	0.13	0.054	0.022	0.015	0.045	0.000013	3.5	0.0013	0.0018	0.23	0.00035	1.0	0.16	0.00001	0.00092	0.0075	0.0002	0.000015	0.000012	0.00071	0.0023
		December		27	3.1	0.1	0.0065	0.15	0.059	0.022	0.014	0.044	0.000013	3.5	0.0013	0.0018	0.22	0.00034	1.0	0.16	0.0000099	0.0009	0.0072	0.00019	0.000015	0.000013	0.00068	0.0023

APPENDIX C-2
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
		CEQG aquatic life (long-term)[2] (mg/L)			120	0.12	12.6	2.93	0.01	0.1	0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008	0.015	0.028
		Constituent		TDS	Cl	F	NH_3 (as N)[3]	NO_3 (as N)	P[4]	Al[5]	As[6]	B	Cd[7]	Ca	Cr	Cu[7]	Fe	Pb[7]	Mg	Mn[8]	Hg	Mo	Ni[7]	Se	Ag	Tl	U	Zn[9]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Attenuation Pond	*Closure*	January	2038	27	3.3	0.1	0.007	0.16	0.064	0.022	0.014	0.042	0.000013	3.5	0.0013	0.0017	0.22	0.00033	1.0	0.15	0.0000098	0.00087	0.0069	0.00019	0.000015	0.000013	0.00066	0.0023
		February		27	3.4	0.098	0.0075	0.17	0.069	0.022	0.013	0.041	0.000012	3.5	0.0013	0.0017	0.21	0.00032	1.1	0.14	0.0000097	0.00085	0.0067	0.00018	0.000015	0.000013	0.00063	0.0022
		March		27	3.5	0.095	0.008	0.19	0.073	0.022	0.012	0.04	0.000012	3.5	0.0012	0.0016	0.2	0.00031	1.1	0.14	0.0000095	0.00083	0.0065	0.00018	0.000015	0.000013	0.00061	0.0022
		April		26	3.6	0.093	0.0085	0.2	0.077	0.022	0.012	0.039	0.000012	3.5	0.0012	0.0016	0.2	0.0003	1.1	0.13	0.0000094	0.0008	0.0062	0.00017	0.000015	0.000013	0.00059	0.0022
		May		26	3.7	0.09	0.0089	0.21	0.081	0.022	0.011	0.038	0.000012	3.5	0.0012	0.0015	0.19	0.00029	1.1	0.13	0.0000093	0.00078	0.006	0.00017	0.000015	0.000013	0.00057	0.0022
		June		21	3.0	0.072	0.007	0.15	0.058	0.022	0.0087	0.03	0.0000094	2.8	0.0011	0.0013	0.17	0.00023	0.91	0.095	0.0000075	0.00059	0.0047	0.00013	0.000013	0.000011	0.00044	0.0018
		July		21	2.6	0.078	0.0054	0.1	0.042	0.022	0.01	0.032	0.0000099	2.7	0.0011	0.0014	0.18	0.00025	0.87	0.11	0.0000078	0.00065	0.0053	0.00014	0.000012	0.00001	0.00049	0.0018
		August		29	3.0	0.11	0.0054	0.12	0.049	0.022	0.016	0.047	0.000014	3.5	0.0014	0.0019	0.23	0.00037	1.0	0.17	0.00001	0.00097	0.008	0.00021	0.000015	0.000013	0.00075	0.0024
		September		30	3.0	0.12	0.0052	0.11	0.048	0.022	0.017	0.05	0.000014	3.7	0.0014	0.002	0.24	0.00039	1.1	0.19	0.000011	0.001	0.0085	0.00022	0.000016	0.000013	0.0008	0.0025
		October		28	2.9	0.11	0.0054	0.12	0.048	0.022	0.015	0.046	0.000013	3.5	0.0014	0.0019	0.24	0.00036	1.0	0.17	0.00001	0.00095	0.0077	0.0002	0.000015	0.000012	0.00073	0.0023
		November		28	3.1	0.11	0.006	0.13	0.053	0.022	0.015	0.045	0.000013	3.5	0.0013	0.0018	0.23	0.00035	1.0	0.16	0.00001	0.00092	0.0074	0.0002	0.000015	0.000012	0.00071	0.0023
		December		27	3.2	0.1	0.0066	0.15	0.058	0.022	0.014	0.043	0.000013	3.5	0.0013	0.0018	0.22	0.00033	1.0	0.15	0.0000099	0.0009	0.0072	0.00019	0.000015	0.000013	0.00068	0.0023
		January	2039	27	3.4	0.10	0.0072	0.16	0.063	0.022	0.013	0.042	0.000013	3.5	0.0013	0.0017	0.21	0.00032	1.1	0.15	0.0000098	0.00087	0.0069	0.00018	0.000015	0.000013	0.00065	0.0022
		February		27	3.5	0.097	0.0077	0.17	0.068	0.022	0.013	0.041	0.000012	3.5	0.0012	0.0017	0.21	0.00031	1.1	0.14	0.0000096	0.00085	0.0066	0.00018	0.000015	0.000013	0.00063	0.0022
		March		27	3.6	0.094	0.0082	0.18	0.072	0.022	0.012	0.04	0.000012	3.5	0.0012	0.0016	0.2	0.0003	1.1	0.13	0.0000095	0.00083	0.0064	0.00017	0.000015	0.000013	0.00061	0.0022
		April		27	3.8	0.092	0.0087	0.2	0.076	0.022	0.012	0.039	0.000012	3.5	0.0012	0.0016	0.2	0.00029	1.1	0.13	0.0000094	0.00081	0.0061	0.00017	0.000015	0.000013	0.00059	0.0022
		May		26	3.9	0.089	0.0091	0.21	0.081	0.022	0.011	0.038	0.000012	3.5	0.0012	0.0015	0.19	0.00028	1.1	0.12	0.0000092	0.00079	0.0059	0.00017	0.000015	0.000013	0.00056	0.0021
		June		21	3.1	0.071	0.0072	0.15	0.057	0.022	0.0086	0.03	0.0000095	2.8	0.001	0.0013	0.17	0.00023	0.93	0.094	0.0000075	0.0006	0.0047	0.00013	0.000013	0.000011	0.00044	0.0018
		July		20	2.7	0.071	0.0063	0.097	0.039	0.022	0.0078	0.024	0.000008	2.7	0.001	0.0012	0.16	0.0002	0.88	0.066	0.0000076	0.00064	0.0036	0.00013	0.000012	0.00001	0.00048	0.0017
		August		23	2.9	0.093	0.0063	0.099	0.042	0.022	0.0093	0.026	0.0000085	3.3	0.0012	0.0014	0.17	0.00023	0.99	0.059	0.0000098	0.00091	0.0034	0.00016	0.000013	0.000012	0.00069	0.0021
		September		24	3.0	0.093	0.0077	0.092	0.038	0.022	0.0098	0.024	0.0000082	3.4	0.0012	0.0014	0.16	0.00022	1.0	0.05	0.0000099	0.00092	0.0031	0.00016	0.000013	0.000012	0.00069	0.0021
		October		23	3.0	0.085	0.0088	0.09	0.036	0.022	0.0098	0.022	0.0000078	3.4	0.0011	0.0013	0.16	0.0002	1.0	0.045	0.0000093	0.00084	0.0028	0.00015	0.000013	0.000012	0.00062	0.002
		November		23	3.0	0.085	0.009	0.098	0.039	0.022	0.0098	0.022	0.0000078	3.4	0.0011	0.0013	0.16	0.0002	1.0	0.045	0.0000093	0.00083	0.0028	0.00015	0.000013	0.000012	0.00062	0.002
		December		23	3.0	0.085	0.0091	0.11	0.042	0.022	0.0097	0.022	0.0000078	3.4	0.0011	0.0013	0.16	0.0002	1.0	0.045	0.0000093	0.00083	0.0028	0.00015	0.000013	0.000012	0.00061	0.002
		January	2040	23	3.0	0.085	0.0093	0.12	0.045	0.022	0.0097	0.022	0.0000078	3.4	0.0011	0.0013	0.15	0.0002	1.0	0.044	0.0000093	0.00083	0.0028	0.00015	0.000013	0.000012	0.00061	0.002
		February		23	3.0	0.085	0.0094	0.12	0.049	0.022	0.0096	0.022	0.0000078	3.4	0.0011	0.0013	0.15	0.0002	1.0	0.044	0.0000093	0.00083	0.0028	0.00015	0.000013	0.000012	0.00061	0.002
		March		23	3.1	0.084	0.0096	0.13	0.052	0.022	0.0096	0.022	0.0000078	3.4	0.0011	0.0013	0.15	0.0002	1.0	0.044	0.0000093	0.00082	0.0028	0.00015	0.000013	0.000012	0.00061	0.002
		April		23	3.1	0.084	0.0097	0.14	0.055	0.022	0.0096	0.022	0.0000078	3.4	0.0011	0.0013	0.15	0.0002	1.0	0.044	0.0000093	0.00082	0.0028	0.00015	0.000013	0.000012	0.00061	0.002
		May		23	3.1	0.084	0.0099	0.15	0.058	0.022	0.0095	0.022	0.0000078	3.4	0.0011	0.0013	0.15	0.0002	1.0	0.044	0.0000093	0.00082	0.0028	0.00015	0.000013	0.000012	0.0006	0.002
		June		21	3.0	0.066	0.012	0.11	0.04	0.022	0.0095	0.018	0.0000069	3.3	0.00094	0.001	0.13	0.00016	1.0	0.037	0.0000077	0.00061	0.0024	0.00013	0.000012	0.000011	0.00044	0.0017
		July		19	3.0	0.055	0.013	0.084	0.028	0.022	0.0099	0.016	0.0000065	3.3	0.00085	0.00086	0.11	0.00013	0.99	0.033	0.0000069	0.00052	0.0022	0.00012	0.000012	0.000011	0.00036	0.0015
		August		20	3.0	0.057	0.013	0.086	0.029	0.022	0.01	0.016	0.0000066	3.4	0.00084	0.00087	0.11	0.00013	1.0	0.032	0.0000073	0.0006	0.0022	0.00013	0.000012	0.000011	0.00041	0.0016
		September		20	3.0	0.057	0.013	0.084	0.028	0.022	0.01	0.016	0.0000066	3.5	0.00083	0.00085	0.11	0.00013	1.0	0.031	0.0000074	0.00063	0.0021	0.00013	0.000012	0.000011	0.00043	0.0017
		October		20	3.0	0.057	0.013	0.084	0.028	0.022	0.01	0.015	0.0000066	3.5	0.00082	0.00084	0.1	0.00012	1.0	0.031	0.0000073	0.00062	0.0021	0.00013	0.000012	0.000011	0.00042	0.0016
		November		20	3.0	0.057	0.013	0.088	0.029	0.022	0.01	0.015	0.0000066	3.5	0.00082	0.00084	0.1	0.00012	1.0	0.031	0.0000073	0.00062	0.0021	0.00013	0.000012	0.000011	0.00042	0.0016
		December		20	3.0	0.057	0.013	0.092	0.031	0.022	0.01	0.015	0.0000066	3.5	0.00082	0.00084	0.1	0.00012	1.0	0.031	0.0000073	0.00062	0.0021	0.00013	0.000012	0.000011	0.00042	0.0016
		January	2041	20	3.0	0.057	0.013	0.095	0.032	0.022	0.01	0.015	0.0000066	3.5	0.00082	0.00084	0.1	0.00012	1.0	0.031	0.0000073	0.00062	0.0021	0.00013	0.000012	0.000011	0.00042	0.0016
		February		20	3.0	0.057	0.013	0.099	0.033	0.022	0.01	0.015	0.0000066	3.5	0.00082	0.00084	0.1	0.00012	1.0	0.031	0.0000073	0.00062	0.0021	0.00013	0.000012	0.000011	0.00042	0.0016
		March		20	3.0	0.057	0.013	0.1	0.035	0.022	0.01	0.015	0.0000066	3.5	0.00082	0.00084	0.1	0.00012	1.0	0.031	0.0000073	0.00062	0.0021	0.00013	0.000012	0.000011	0.00042	0.0016
		April		20	3.0	0.057	0.013	0.11	0.036	0.022	0.01	0.015	0.0000066	3.5	0.00082	0.00084	0.1	0.00012	1.0	0.031	0.0000073	0.00062	0.0021	0.00013	0.000012	0.000011	0.00042	0.0016
		May		20	3.0	0.057	0.013	0.11	0.037	0.022	0.01	0.015	0.0000066	3.5	0.00082	0.00084	0.1	0.00012	1.0	0.031	0.0000073	0.00062	0.0021	0.00013	0.000012	0.000011	0.00042	0.0016
		June		18	2.9	0.048	0.011	0.081	0.028	0.022	0.0078	0.014	0.0000061	3.1	0.00077	0.00075	0.094	0.00011	0.95	0.023	0.0000066	0.00046	0.0018	0.00011	0.000011	0.000011	0.00031	0.0015
		July		14	2.6	0.036	0.0083	0.04	0.014	0.022	0.0039	0.011	0.0000054	2.5	0.00071	0.00061	0.078	0.000083	0.82	0.012	0.0000056	0.00025	0.0013	0.000076	0.000011	0.00001	0.00017	0.0013
		August		13	2.6	0.035	0.0079	0.035	0.012	0.022	0.0036	0.011	0.0000054	2.5	0.0007	0.0006	0.077	0.00008	0.82	0.011	0.0000056	0.00025	0.0012	0.000074	0.000011	0.00001	0.00017	0.0013
			MINIMUM	13	2.5	0.035	0.0052	0.035	0.012	0.022	0.0036	0.011	0.0000054	2.5	0.0007	0.0006	0.077	0.00008	0.82	0.011	0.0000056	0.00025	0.0012	0.000074	0.000011	0.00001	0.00017	0.0013
			MAXIMUM	42	11	0.12	0.044	0.28	0.085	0.022	0.017	0.053	0.000015	5.9	0.0014	0.002	0.24	0.00039	1.9	0.19	0.000011	0.0014	0.0085	0.00022	0.000016	0.000013	0.00086	0.0025
			AVERAGE	28	4.2	0.093	0.011	0.15	0.056	0.022	0.012	0.039	0.000012	3.7	0.0012	0.0015	0.19	0.00029	1.1	0.13	0.0000092	0.00091	0.0059	0.00017	0.000014	0.000012	0.00063	0.0021

APPENDIX C-2
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
		CEQG aquatic life (long-term)[2] (mg/L)			120	0.12	12.6	2.93	0.01	0.1	*0.025*	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008	0.015	0.028
		Constituent		TDS	Cl	F	NH_3 (as N)[3]	NO_3 (as N)	P[4]	Al[5]	As[6]	B	Cd[7]	Ca	Cr	Cu[7]	Fe	Pb[7]	Mg	Mn[8]	Hg	Mo	Ni[7]	Se	Ag	Tl	U	Zn[9]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Attenuation Pond	*Post-Closure*	September	2041	13	2.5	0.033	0.0073	0.027	0.0099	0.022	0.0028	0.011	0.0000052	2.3	0.00068	0.00057	0.074	0.000075	0.79	0.0085	0.0000054	0.00021	0.0011	0.000068	0.000011	0.00001	0.00015	0.0012
		October		12	2.5	0.031	0.0069	0.022	0.0084	0.022	0.0024	0.01	0.0000051	2.3	0.00068	0.00056	0.072	0.000072	0.77	0.0072	0.0000052	0.00018	0.0011	0.000064	0.000011	0.000010	0.00013	0.0012
		November		12	2.5	0.031	0.0069	0.022	0.0084	0.022	0.0024	0.01	0.0000051	2.3	0.00068	0.00056	0.072	0.000072	0.77	0.0072	0.0000052	0.00018	0.0011	0.000064	0.000011	0.000010	0.00013	0.0012
		December		12	2.5	0.031	0.0069	0.022	0.0084	0.022	0.0024	0.01	0.0000051	2.3	0.00068	0.00056	0.072	0.000072	0.77	0.0072	0.0000052	0.00018	0.0011	0.000064	0.000011	0.000010	0.00013	0.0012
		January	2042	12	2.5	0.031	0.0069	0.022	0.0084	0.022	0.0024	0.01	0.0000051	2.3	0.00068	0.00056	0.072	0.000072	0.77	0.0072	0.0000052	0.00018	0.0011	0.000064	0.000011	0.000010	0.00013	0.0012
		February		12	2.5	0.031	0.0069	0.022	0.0084	0.022	0.0024	0.01	0.0000051	2.3	0.00068	0.00056	0.072	0.000072	0.77	0.0072	0.0000052	0.00018	0.0011	0.000064	0.000011	0.000010	0.00013	0.0012
		March		12	2.5	0.031	0.0069	0.022	0.0084	0.022	0.0024	0.01	0.0000051	2.3	0.00068	0.00056	0.072	0.000072	0.77	0.0072	0.0000052	0.00018	0.0011	0.000064	0.000011	0.000010	0.00013	0.0012
		April		12	2.5	0.031	0.0069	0.022	0.0084	0.022	0.0024	0.01	0.0000051	2.3	0.00068	0.00056	0.072	0.000072	0.77	0.0072	0.0000052	0.00018	0.0011	0.000064	0.000011	0.000010	0.00013	0.0012
		May		12	2.5	0.031	0.0069	0.022	0.0084	0.022	0.0024	0.01	0.0000051	2.3	0.00068	0.00056	0.072	0.000072	0.77	0.0072	0.0000052	0.00018	0.0011	0.000064	0.000011	0.000010	0.00013	0.0012
		June		12	2.6	0.03	0.0067	0.015	0.006	0.022	0.0015	0.011	0.0000053	2.3	0.00067	0.00056	0.069	0.000071	0.79	0.0051	0.0000054	0.00013	0.001	0.00006	0.000011	0.000011	0.00009	0.0012
		July		11	2.5	0.028	0.0061	0.0092	0.0041	0.022	0.00097	0.0099	0.000005	2.1	0.00066	0.00053	0.067	0.000066	0.75	0.0035	0.0000051	0.000099	0.00093	0.000054	0.000011	0.00001	0.000069	0.0012
		August		11	2.5	0.029	0.006	0.0086	0.0039	0.022	0.001	0.0099	0.000005	2.2	0.00066	0.00053	0.067	0.000066	0.75	0.0034	0.0000051	0.00012	0.00093	0.000055	0.000011	0.00001	0.000081	0.0012
		September		11	2.5	0.028	0.0059	0.0077	0.0036	0.022	0.00097	0.0097	0.000005	2.1	0.00065	0.00052	0.066	0.000065	0.74	0.0031	0.0000051	0.00011	0.00091	0.000054	0.000011	0.00001	0.000079	0.0012
		October		11	2.4	0.027	0.0058	0.0071	0.0034	0.022	0.00088	0.0095	0.0000049	2.1	0.00065	0.00051	0.066	0.000064	0.73	0.0029	0.000005	0.00011	0.00089	0.000053	0.000011	0.0000099	0.000074	0.0011
		November		11	2.4	0.027	0.0058	0.0071	0.0034	0.022	0.00088	0.0095	0.0000049	2.1	0.00065	0.00051	0.066	0.000064	0.73	0.0029	0.000005	0.00011	0.00089	0.000053	0.000011	0.0000099	0.000074	0.0011
		December		11	2.4	0.027	0.0058	0.0071	0.0034	0.022	0.00088	0.0095	0.0000049	2.1	0.00065	0.00051	0.066	0.000064	0.73	0.0029	0.000005	0.00011	0.00089	0.000053	0.000011	0.0000099	0.000074	0.0011
		January	2043	11	2.4	0.027	0.0058	0.0071	0.0034	0.022	0.00088	0.0095	0.0000049	2.1	0.00065	0.00051	0.066	0.000064	0.73	0.0029	0.000005	0.00011	0.00089	0.000053	0.000011	0.0000099	0.000074	0.0011
		February		11	2.4	0.027	0.0058	0.0071	0.0034	0.022	0.00088	0.0095	0.0000049	2.1	0.00065	0.00051	0.066	0.000064	0.73	0.0029	0.000005	0.00011	0.00089	0.000053	0.000011	0.0000099	0.000074	0.0011
		March		11	2.4	0.027	0.0058	0.0071	0.0034	0.022	0.00088	0.0095	0.0000049	2.1	0.00065	0.00051	0.066	0.000064	0.73	0.0029	0.000005	0.00011	0.00089	0.000053	0.000011	0.0000099	0.000074	0.0011
		April		11	2.4	0.027	0.0058	0.0071	0.0034	0.022	0.00088	0.0095	0.0000049	2.1	0.00065	0.00051	0.066	0.000064	0.73	0.0029	0.000005	0.00011	0.00089	0.000053	0.000011	0.0000099	0.000074	0.0011
		May		11	2.4	0.027	0.0058	0.0071	0.0034	0.022	0.00088	0.0095	0.0000049	2.1	0.00065	0.00051	0.066	0.000064	0.73	0.0029	0.000005	0.00011	0.00089	0.000053	0.000011	0.0000099	0.000074	0.0011
		June		11	2.6	0.028	0.0061	0.0065	0.0033	0.022	0.00069	0.01	0.0000052	2.2	0.00066	0.00054	0.066	0.000067	0.77	0.0027	0.0000052	0.000087	0.00092	0.000054	0.000011	0.000011	0.000061	0.0012
		July		11	2.5	0.027	0.0059	0.0057	0.003	0.022	0.00062	0.0097	0.000005	2.1	0.00065	0.00052	0.065	0.000064	0.74	0.0025	0.000005	0.000082	0.00089	0.000052	0.000011	0.00001	0.000057	0.0012
		August		11	2.5	0.028	0.0058	0.0056	0.003	0.022	0.00074	0.0097	0.000005	2.1	0.00065	0.00052	0.066	0.000065	0.75	0.0025	0.0000051	0.0001	0.00089	0.000053	0.000011	0.00001	0.00007	0.0012
		September		11	2.5	0.027	0.0057	0.0054	0.0029	0.022	0.00075	0.0096	0.0000049	2.1	0.00065	0.00052	0.066	0.000064	0.74	0.0025	0.000005	0.0001	0.00088	0.000053	0.000011	0.00001	0.000072	0.0012
		October		10	2.4	0.027	0.0056	0.0053	0.0028	0.022	0.00071	0.0095	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000097	0.00087	0.000052	0.000011	0.0000099	0.000068	0.0011
		November		10	2.4	0.027	0.0056	0.0053	0.0028	0.022	0.00071	0.0095	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000097	0.00087	0.000052	0.000011	0.0000099	0.000068	0.0011
		December		10	2.4	0.027	0.0056	0.0053	0.0028	0.022	0.00071	0.0095	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000097	0.00087	0.000052	0.000011	0.0000099	0.000068	0.0011
		January	2044	10	2.4	0.027	0.0056	0.0053	0.0028	0.022	0.00071	0.0095	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000097	0.00087	0.000052	0.000011	0.0000099	0.000068	0.0011
		February		10	2.4	0.027	0.0056	0.0053	0.0028	0.022	0.00071	0.0095	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000097	0.00087	0.000052	0.000011	0.0000099	0.000068	0.0011
		March		10	2.4	0.027	0.0056	0.0053	0.0028	0.022	0.00071	0.0095	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000097	0.00087	0.000052	0.000011	0.0000099	0.000068	0.0011
		April		10	2.4	0.027	0.0056	0.0053	0.0028	0.022	0.00071	0.0095	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000097	0.00087	0.000052	0.000011	0.0000099	0.000068	0.0011
		May		10	2.4	0.027	0.0056	0.0053	0.0028	0.022	0.00071	0.0095	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000097	0.00087	0.000052	0.000011	0.0000099	0.000068	0.0011
		June		11	2.6	0.028	0.0061	0.0055	0.0029	0.022	0.0006	0.01	0.0000052	2.2	0.00065	0.00054	0.066	0.000066	0.77	0.0024	0.0000052	0.000082	0.00091	0.000053	0.000011	0.000011	0.000057	0.0012
		July		11	2.5	0.027	0.0058	0.0053	0.0028	0.022	0.00058	0.0097	0.000005	2.1	0.00065	0.00052	0.065	0.000064	0.74	0.0024	0.000005	0.00008	0.00088	0.000051	0.000011	0.00001	0.000056	0.0012
		August		11	2.5	0.028	0.0058	0.0052	0.0028	0.022	0.00071	0.0097	0.000005	2.1	0.00065	0.00052	0.066	0.000064	0.75	0.0024	0.0000051	0.000099	0.00089	0.000053	0.000011	0.00001	0.000069	0.0012
		September		11	2.5	0.027	0.0057	0.0052	0.0028	0.022	0.00073	0.0096	0.0000049	2.1	0.00065	0.00051	0.066	0.000064	0.74	0.0024	0.000005	0.0001	0.00088	0.000053	0.000011	0.00001	0.000071	0.0012
		October		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		November		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		December		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		January	2045	10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		February		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		March		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		April		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		May		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		June		11	2.6	0.028	0.006	0.0054	0.0029	0.022	0.00059	0.01	0.0000052	2.2	0.00065	0.00054	0.066	0.000066	0.77	0.0024	0.0000052	0.000082	0.0009	0.000053	0.000011	0.000011	0.000057	0.0012
		July		11	2.5	0.027	0.0058	0.0052	0.0028	0.022	0.00058	0.0097	0.000005	2.1	0.00065	0.00052	0.065	0.000064	0.74	0.0024	0.000005	0.000079	0.00088	0.000051	0.000011	0.00001	0.000055	0.0012
		August		11	2.5	0.028	0.0058	0.0052	0.0028	0.022	0.0007	0.0097	0.000005	2.1	0.00065	0.00052	0.066	0.000064	0.75	0.0024	0.0000051	0.000098	0.00089	0.000053	0.000011	0.00001	0.000069	0.0012
		September		11	2.5	0.027	0.0057	0.0051	0.0028	0.022	0.00072	0.0096	0.0000049	2.1	0.00065	0.00051	0.066	0.000064	0.74	0.0024	0.000005	0.0001	0.00088	0.000053	0.000011	0.00001	0.000071	0.0012
		October		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.0	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		November		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.0	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		December		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.0	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		January	2046	10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.0	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		February		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.0	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		March		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.0	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		April		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.0	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		May		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.0	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		June		11	2.6	0.028	0.006	0.0054	0.0029	0.022	0.00059	0.01	0.0000052	2.2	0.00065	0.00054	0.066	0.000066	0.77	0.0024	0.0000052	0.000082	0.0009	0.000053	0.000011	0.00001	0.000057	0.0012
		July		11	2.5	0.027	0.0058	0.0052	0.0028	0.022	0.00058	0.0097	0.000005	2.1	0.00065	0.00052	0.065	0.000064	0.74	0.0024	0.000005	0.000079	0.00088	0.000051	0.000011	0.00001	0.000055	0.0012
		August		11	2.5	0.028	0.0058	0.0052	0.0028	0.022	0.0007	0.0097	0.000005	2.1	0.00065	0.00052	0.066	0.000064	0.75	0.0024	0.0000051	0.000098	0.00089	0.000053	0.000011	0.00001	0.000069	0.0012
		September		11	2.5	0.027	0.0057	0.0051	0.0028	0.022	0.00072	0.0096	0.0000049	2.1	0.00065	0.00051	0.066	0.000064	0.74	0.0024	0.000005	0.0001	0.00088	0.000053	0.000011	0.00001	0.000071	0.0012
		October		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		November		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		December		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011

APPENDIX C-2
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
CEQG aquatic life (long-term)[2] (mg/L)					120	0.12	12.6	2.93	0.01	0.1	*0.025*	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008	0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[3]	NO_3 (as N)	P[4]	Al[5]	As[6]	B	Cd[7]	Ca	Cr	Cu[7]	Fe	Pb[7]	Mg	Mn[8]	Hg	Mo	Ni[7]	Se	Ag	Tl	U	Zn[9]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Attenuation Pond	Post-Closure	January	2047	10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		February		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		March		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		April		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		May		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		June		11	2.6	0.028	0.006	0.0054	0.0029	0.022	0.00059	0.01	0.0000052	2.2	0.00065	0.00054	0.066	0.000066	0.77	0.0024	0.0000052	0.000082	0.0009	0.000053	0.000011	0.00001	0.000057	0.0012
		July		11	2.5	0.027	0.0058	0.0052	0.0028	0.022	0.00058	0.0097	0.000005	2.1	0.00065	0.00052	0.065	0.000064	0.74	0.0024	0.000005	0.000079	0.00088	0.000051	0.000011	0.00001	0.000055	0.0012
		August		11	2.5	0.028	0.0058	0.0052	0.0028	0.022	0.0007	0.0097	0.000005	2.1	0.00065	0.00052	0.066	0.000064	0.75	0.0024	0.0000051	0.000098	0.00089	0.000053	0.000011	0.00001	0.000069	0.0012
		September		11	2.5	0.027	0.0057	0.0051	0.0028	0.022	0.00072	0.0096	0.0000049	2.1	0.00065	0.00051	0.066	0.000064	0.74	0.0024	0.000005	0.0001	0.00088	0.000053	0.000011	0.00001	0.000071	0.0012
		October		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		November		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		December		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		January	2048	10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		February		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		March		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		April		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		May		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		June		11	2.6	0.028	0.006	0.0054	0.0029	0.022	0.00059	0.01	0.0000052	2.2	0.00065	0.00054	0.066	0.000066	0.77	0.0024	0.0000052	0.000082	0.0009	0.000053	0.000011	0.000011	0.000057	0.0012
		July		11	2.5	0.027	0.0058	0.0052	0.0028	0.022	0.00058	0.0097	0.000005	2.1	0.00065	0.00052	0.065	0.000064	0.74	0.0024	0.000005	0.000079	0.00088	0.000051	0.000011	0.00001	0.000055	0.0012
		August		11	2.5	0.028	0.0058	0.0052	0.0028	0.022	0.0007	0.0097	0.000005	2.1	0.00065	0.00052	0.066	0.000064	0.75	0.0024	0.0000051	0.000098	0.00089	0.000053	0.000011	0.00001	0.000069	0.0012
		September		11	2.5	0.027	0.0057	0.0051	0.0028	0.022	0.00072	0.0096	0.0000049	2.1	0.00065	0.00051	0.066	0.000064	0.74	0.0024	0.000005	0.0001	0.00088	0.000053	0.000011	0.00001	0.000071	0.0012
		October		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		November		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		December		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		January	2049	10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		February		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		March		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		April		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		May		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		June		11	2.6	0.028	0.006	0.0054	0.0029	0.022	0.00059	0.01	0.0000052	2.2	0.00065	0.00054	0.066	0.000066	0.77	0.0024	0.0000052	0.000082	0.0009	0.000053	0.000011	0.00001	0.000057	0.0012
		July		11	2.5	0.027	0.0058	0.0052	0.0028	0.022	0.00058	0.0097	0.000005	2.1	0.00065	0.00052	0.065	0.000064	0.74	0.0024	0.000005	0.000079	0.00088	0.000051	0.000011	0.00001	0.000055	0.0012
		August		11	2.5	0.028	0.0058	0.0052	0.0028	0.022	0.0007	0.0097	0.000005	2.1	0.00065	0.00052	0.066	0.000064	0.75	0.0024	0.0000051	0.000098	0.00089	0.000053	0.000011	0.00001	0.000069	0.0012
		September		11	2.5	0.027	0.0057	0.0051	0.0028	0.022	0.00072	0.0096	0.0000049	2.1	0.00065	0.00051	0.066	0.000064	0.74	0.0024	0.000005	0.0001	0.00088	0.000053	0.000011	0.00001	0.000071	0.0012
		October		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		November		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		December		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		January	≥2050	10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		February		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		March		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		April		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		May		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		June		11	2.6	0.028	0.006	0.0054	0.0029	0.022	0.00059	0.01	0.0000052	2.2	0.00065	0.00054	0.066	0.000066	0.77	0.0024	0.0000052	0.000082	0.0009	0.000053	0.000011	0.00001	0.000057	0.0012
		July		11	2.5	0.027	0.0058	0.0052	0.0028	0.022	0.00058	0.0097	0.000005	2.1	0.00065	0.00052	0.065	0.000064	0.74	0.0024	0.000005	0.000079	0.00088	0.000051	0.000011	0.00001	0.000055	0.0012
		August		11	2.5	0.028	0.0058	0.0052	0.0028	0.022	0.0007	0.0097	0.000005	2.1	0.00065	0.00052	0.066	0.000064	0.75	0.0024	0.0000051	0.000098	0.00089	0.000053	0.000011	0.00001	0.000069	0.0012
		September		11	2.5	0.027	0.0057	0.0051	0.0028	0.022	0.00072	0.0096	0.0000049	2.1	0.00065	0.00051	0.066	0.000064	0.74	0.0024	0.000005	0.0001	0.00088	0.000053	0.000011	0.00001	0.000071	0.0012
		October		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		November		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		December		10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00069	0.0094	0.0000049	2.1	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000096	0.00087	0.000052	0.000011	0.0000099	0.000067	0.0011
		Post Closure	MINIMUM	10	2.4	0.027	0.0056	0.0051	0.0028	0.022	0.00058	0.0094	0.0000049	2.0	0.00065	0.00051	0.065	0.000063	0.73	0.0024	0.0000049	0.000079	0.00087	0.000051	0.000011	0.0000099	0.000055	0.0011
			MAXIMUM	13	2.6	0.033	0.0073	0.027	0.0099	0.022	0.0028	0.011	0.0000053	2.3	0.00068	0.00057	0.074	0.000075	0.79	0.0085	0.0000054	0.00021	0.0011	0.000068	0.000011	0.000011	0.00015	0.0012
			AVERAGE	11	2.5	0.028	0.0058	0.0069	0.0034	0.022	0.00085	0.0096	0.0000049	2.1	0.00065	0.00052	0.066	0.000064	0.74	0.0029	0.000005	0.0001	0.00089	0.000053	0.000011	0.00001	0.000072	0.0012

Notes:
[1] Water Licence No: 2AM-WTP1830. Maximum average. Exceedances shown as bold-underlined-highlighted cells
[2] Canadian Council of Ministers of the Environment CEQG (2002) freshwater guidelines. Values above the freshwater CEQG's shown in bold-underlined typ
[3] CEQG Freshwater Aquatic Life criterion for total ammonia is pH and temperature dependent (5C used based on hydrodynamic modelling)
[4] CEQG Freshwater Aquatic Life Trigger Ranges are dependent on trophic status; oligotrophic status assume
[5] CEQG Freshwater Aquatic Life Criterion for aluminum is pH dependant.
[6] The CEQG aquatic life criterion for Arsenic is replaced by the Site Specific Water Quality Objective of 0.025 mg/L developed for the Whale Tail Pit Project (Volume 6, Appendix 6-N
[7] CEQG Freshwater Aquatic Life Criteria are hardness dependant
[8] CEQG Freshwater Aquatic Life criterion for manganese is pH and hardness dependent.
[9] CEQG Freshwater Aquatic Life criterion is for dissolved zinc and is hardness, pH and DOC dependent
* Variable guidelines based on average values in Mammoth 2020 CREMP monitoring data (pH=6.85, hardness=61 mg/L, DOC=2.7 mg/L)

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
CEQG aquatic life (long-term)[2] (mg/L)					120	0.12	12.6	2.93	0.01	0.1	*0.025*	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008	0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[3]	NO_3 (as N)	P[4]	Al[5]	As[6]	B	Cd[7]	Ca	Cr	Cu[7]	Fe	Pb[7]	Mg	Mn[8]	Hg	Mo	Ni[7]	Se	Ag	Tl	U	Zn[9]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
IVR Attenuation Pond	*Operations*	June	2021	114	28	0.11	4.9	4.9	0.2	**0.56**	0.091	0.028	0.0000095	28	0.007	0.0037	**1.8**	0.00026	5.8	0.27	0.0000061	0.003	0.018	0.00058	0.000057	0.000057	0.00057	0.004
		July		176	26	0.14	2.4	8.3	0.14	0.34	0.048	0.055	0.000013	33	0.0088	0.0036	**1.7**	0.00029	8.2	0.63	0.00001	0.0043	0.045	0.0014	0.000079	0.000029	0.00098	0.0047
		August		187	28	0.16	2.2	8.0	0.14	0.32	0.052	0.064	0.000015	36	0.0082	0.0038	**1.6**	0.0003	8.6	0.76	0.000012	0.0047	0.051	0.0015	0.000081	0.00003	0.0011	0.0049
		September		147	24	0.11	2.0	7.4	0.12	0.45	0.029	0.047	0.000012	28	0.011	0.0035	**2.0**	0.00029	7.9	0.56	0.0000082	0.0035	0.047	0.001	0.000092	0.00003	0.00076	0.0047
		October		83	15	0.14	0.26	0.83	0.11	0.46	0.087	0.06	0.0000094	14	0.0046	0.0013	**1.5**	0.00028	3.2	0.36	0.000007	0.0015	0.0067	0.00054	0.000061	0.000029	0.00097	0.00046
		November		93	18	0.15	0.31	0.83	0.12	0.44	0.037	0.061	0.0000098	16	0.0043	0.0012	**1.4**	0.00026	3.7	0.3	0.0000073	0.0017	0.0049	0.00052	0.000057	0.000028	0.0011	0.00048
		December		98	18	0.16	0.32	0.84	0.13	**0.9**	0.062	0.061	0.000012	17	0.0089	0.0019	**2.9**	0.00044	4.4	0.36	0.0000076	0.0017	0.0086	0.00056	0.0001	0.000044	0.0011	0.00068
		January	2022	88	16	0.14	0.32	0.87	0.11	0.26	0.02	0.051	0.0000081	15	0.0026	0.0009	0.85	0.00018	3.2	0.27	0.0000074	0.0014	0.0029	0.00049	0.000039	0.000023	0.00091	0.00038
		February		83	14	0.14	0.32	0.87	0.11	0.25	0.019	0.045	0.0000075	14	0.0025	0.00086	0.81	0.00017	3.0	0.26	0.0000074	0.0013	0.0028	0.00048	0.000037	0.000023	0.00081	0.00036
		March		82	14	0.13	0.33	0.87	0.11	0.11	0.0098	0.044	0.0000068	14	0.0012	0.00065	0.38	0.00011	2.7	0.25	0.0000074	0.0012	0.0016	0.00047	0.000024	0.000018	0.00079	0.0003
		April		82	14	0.13	0.33	0.87	0.1	0.044	0.0053	0.043	0.0000065	14	0.00047	0.00054	0.16	0.000082	2.6	0.24	0.0000073	0.0012	0.00095	0.00046	0.000017	0.000016	0.00078	0.00026
		May		83	14	0.14	0.33	0.87	0.11	0.14	0.012	0.043	0.0000069	14	0.0015	0.00069	0.47	0.00012	2.8	0.26	0.0000074	0.0012	0.0018	0.00047	0.000027	0.000019	0.00079	0.00031
		June		102	22	0.1	5.0	4.9	0.18	**0.56**	**0.11**	0.022	0.0000091	26	0.007	0.0037	**1.8**	0.00025	5.5	0.26	0.0000061	0.0024	0.018	0.00054	0.000057	0.000058	0.00049	0.004
		July		173	20	0.15	2.4	8.5	0.14	0.34	0.069	0.048	0.000012	33	0.0088	0.0036	**1.7**	0.00028	7.5	0.64	0.000011	0.0039	0.05	0.0016	0.000085	0.000032	0.00095	0.0047
		August		189	22	0.16	2.1	8.2	0.14	0.32	0.075	0.058	0.000014	37	0.0082	0.0039	**1.6**	0.00029	8.1	0.79	0.000013	0.0045	0.061	0.0017	0.00009	0.000036	0.001	0.0051
		September		144	18	0.11	1.9	7.6	0.12	0.45	0.041	0.042	0.000011	27	0.011	0.0035	**2.1**	0.00029	7.2	0.58	0.0000094	0.0031	0.054	0.0011	0.000099	0.000033	0.00068	0.0048
		October		70	10	0.13	0.25	0.86	0.11	0.46	**0.11**	0.046	0.000008	12	0.0046	0.0012	**1.5**	0.00027	2.6	0.35	0.0000078	0.0011	0.0076	0.0005	0.000064	0.000031	0.0007	0.00044
		November		74	12	0.13	0.28	0.86	0.11	0.44	0.04	0.043	0.0000078	13	0.0043	0.0011	**1.4**	0.00024	2.9	0.28	0.0000075	0.0011	0.005	0.00044	0.000057	0.000029	0.00073	0.00042
		December		77	13	0.14	0.29	0.87	0.13	**0.9**	0.062	0.042	0.0000096	13	0.0089	0.0018	**2.9**	0.00042	3.6	0.33	0.0000076	0.0012	0.0085	0.00047	0.0001	0.000044	0.00078	0.00063
		January	2023	70	11	0.12	0.29	0.89	0.11	0.26	0.02	0.036	0.0000065	12	0.0026	0.00083	0.85	0.00016	2.5	0.24	0.0000073	0.00096	0.0028	0.00041	0.000038	0.000023	0.00063	0.00033
		February		68	10	0.12	0.3	0.89	0.11	0.25	0.019	0.033	0.0000061	11	0.0025	0.00079	0.81	0.00015	2.3	0.24	0.0000074	0.00086	0.0027	0.0004	0.000037	0.000023	0.00057	0.00032
		March		67	10	0.12	0.3	0.89	0.1	0.11	0.0098	0.032	0.0000055	11	0.0011	0.00058	0.38	0.000097	2.1	0.22	0.0000073	0.00084	0.0015	0.0004	0.000023	0.000018	0.00055	0.00025
		April		67	10	0.12	0.3	0.89	0.1	0.044	0.0053	0.032	0.0000052	11	0.00047	0.00047	0.16	0.000069	2.0	0.22	0.0000073	0.00083	0.00088	0.00039	0.000016	0.000016	0.00054	0.00022
		May		68	10	0.12	0.3	0.9	0.1	0.14	0.012	0.032	0.0000055	11	0.0014	0.00062	0.47	0.00011	2.2	0.23	0.0000073	0.00084	0.0017	0.0004	0.000026	0.000019	0.00055	0.00026
		June		94	17	0.099	4.9	4.8	0.18	**0.56**	**0.11**	0.018	0.0000087	24	0.007	0.0036	**1.8**	0.00025	5.2	0.25	0.0000062	0.002	0.018	0.00053	0.000057	0.000058	0.00043	0.0039
		July		174	17	0.15	2.4	8.6	0.14	0.34	0.071	0.045	0.000012	34	0.0088	0.0037	**1.7**	0.00028	7.2	0.66	0.000013	0.0038	0.059	0.0016	0.000092	0.000035	0.00087	0.0048
		August		185	18	0.17	2.1	8.3	0.13	0.32	0.076	0.054	0.000013	36	0.0082	0.0039	**1.6**	0.00029	7.6	0.8	0.000014	0.0041	0.066	0.0017	0.000094	0.000038	0.00095	0.0051
		September		137	15	0.11	1.9	7.7	0.12	0.45	0.041	0.038	0.000011	26	0.011	0.0035	**2.1**	0.00029	6.7	0.58	0.0000093	0.0027	0.053	0.0011	0.000098	0.000033	0.00061	0.0046
		October		57	7.1	0.11	0.23	0.88	0.11	0.46	0.093	0.036	0.0000069	9.4	0.0046	0.0012	**1.5**	0.00026	2.1	0.32	0.0000072	0.00075	0.0068	0.00043	0.000061	0.000029	0.00053	0.0004
		November		60	8.7	0.11	0.26	0.89	0.11	0.44	0.038	0.032	0.0000066	10.0	0.0043	0.0011	**1.4**	0.00023	2.3	0.25	0.0000073	0.00076	0.0047	0.00038	0.000056	0.000029	0.00052	0.00039
		December		63	8.9	0.12	0.27	0.89	0.12	**0.9**	0.062	0.031	0.0000083	11	0.0089	0.0018	**2.8**	0.00041	3.0	0.3	0.0000075	0.00079	0.0084	0.0004	0.0001	0.000044	0.00057	0.00059
		January	2024	58	8.1	0.11	0.28	0.93	0.1	0.26	0.02	0.027	0.0000055	9.5	0.0026	0.00078	0.84	0.00015	2.0	0.21	0.0000073	0.00067	0.0028	0.00036	0.000038	0.000023	0.00045	0.0003
		February		56	7.5	0.1	0.28	0.94	0.1	0.25	0.019	0.025	0.0000052	9.2	0.0025	0.00075	0.81	0.00014	1.9	0.21	0.0000073	0.0006	0.0026	0.00035	0.000037	0.000023	0.00041	0.00029
		March		56	7.4	0.1	0.28	0.94	0.099	0.11	0.0097	0.024	0.0000046	8.9	0.0011	0.00054	0.37	0.000088	1.7	0.2	0.0000072	0.00058	0.0014	0.00034	0.000023	0.000018	0.00039	0.00022
		April		55	7.3	0.1	0.29	0.94	0.097	0.044	0.0052	0.024	0.0000043	8.8	0.00046	0.00043	0.16	0.00006	1.6	0.19	0.0000072	0.00057	0.00082	0.00034	0.000016	0.000016	0.00039	0.00019
		May		56	7.3	0.1	0.29	0.94	0.10	0.14	0.012	0.024	0.0000046	9.0	0.0014	0.00058	0.47	0.000099	1.7	0.21	0.0000072	0.00057	0.0017	0.00034	0.000026	0.000019	0.00039	0.00023
		June		90	14	0.096	4.9	4.9	0.18	**0.56**	**0.11**	0.017	0.0000085	23	0.007	0.0036	**1.8**	0.00025	5.0	0.25	0.0000064	0.0018	0.018	0.00052	0.000057	0.000058	0.00039	0.0039
		July		175	15	0.15	2.3	8.7	0.14	0.34	0.073	0.043	0.000012	34	0.0088	0.0038	**1.7**	0.00028	7.0	0.68	0.000014	0.0037	0.066	0.0016	0.000098	0.000038	0.00081	0.0049
		August		186	16	0.17	2.1	8.4	0.13	0.32	0.079	0.052	0.000013	37	0.0082	0.004	**1.6**	0.00029	7.3	0.83	0.000015	0.004	0.074	0.0018	0.0001	0.000041	0.00089	0.0052
		September		134	12	0.11	1.9	7.7	0.12	0.45	0.042	0.035	0.000011	25	0.011	0.0035	**2.1**	0.00028	6.4	0.58	0.0000098	0.0025	0.057	0.0011	0.0001	0.000035	0.00056	0.0046
		October		51	5.3	0.1	0.23	0.92	0.11	0.46	0.099	0.031	0.0000063	8.2	0.0046	0.0012	**1.5**	0.00025	1.9	0.31	0.0000073	0.00058	0.007	0.00041	0.000061	0.00003	0.00042	0.00038
		November		51	6.3	0.1	0.26	0.93	0.11	0.44	0.039	0.026	0.0000058	8.3	0.0043	0.001	**1.4**	0.00022	2.0	0.23	0.0000073	0.00054	0.0048	0.00034	0.000056	0.000029	0.00038	0.00036
		December		53	6.5	0.11	0.26	0.93	0.12	**0.9**	0.062	0.024	0.0000075	9.2	0.0089	0.0017	**2.8**	0.0004	2.7	0.28	0.0000075	0.00056	0.0084	0.00036	0.0001	0.000044	0.00043	0.00056
		January	2025	50	6.1	0.096	0.28	1.0	0.097	0.26	0.02	0.022	0.0000048	7.9	0.0026	0.00075	0.84	0.00015	1.7	0.2	0.0000073	0.00047	0.0027	0.00031	0.000038	0.000023	0.00034	0.00028
		February		48	5.6	0.095	0.28	1.0	0.096	0.25	0.019	0.02	0.0000046	7.7	0.0025	0.00072	0.8	0.00014	1.6	0.2	0.0000073	0.00042	0.0026	0.00031	0.000036	0.000022	0.00031	0.00027
		March		48	5.6	0.092	0.28	1.0	0.092	0.11	0.0097	0.02	0.000004	7.4	0.0011	0.00051	0.37	0.000083	1.4	0.18	0.0000072	0.00041	0.0014	0.0003	0.000023	0.000018	0.00029	0.00021
		April		48	5.5	0.091	0.29	1.0	0.09	0.044	0.0052	0.019	0.0000037	7.3	0.00046	0.0004	0.15	0.000055	1.3	0.17	0.0000072	0.0004	0.00079	0.0003	0.000016	0.000016	0.00028	0.00017
		May		48	5.5	0.094	0.29	1.0	0.093	0.14	0.012	0.019	0.000004	7.5	0.0014	0.00055	0.47	0.000094	1.4	0.19	0.0000072	0.0004	0.0017	0.0003	0.000026	0.000019	0.00029	0.00022
		June		90	13	0.098	5.0	5.2	0.18	**0.56**	**0.12**	0.016	0.0000085	23	0.007	0.0037	**1.8**	0.00025	5.0	0.26	0.0000068	0.0017	0.019	0.00054	0.000058	0.00006	0.00037	0.004
		July		178	13	0.16	2.4	9.2	0.13	0.34	0.081	0.041	0.000012	35	0.0088	0.0038	**1.7**	0.00027	6.9	0.69	0.000014	0.0037	0.07	0.0017	0.0001	0.00004	0.00081	0.005
		August		182	14	0.16	2.1	8.9	0.13	0.32	0.083	0.049	0.000013	36	0.0081	0.0039	**1.6**	0.00028	7.0	0.8	0.000015	0.0038	0.071	0.0018	0.000099	0.00004	0.00088	0.0051
		September		126	9.8	0.1	1.9	8.1	0.11	0.45	0.042	0.032	0.000010	23	0.011	0.0034	**2.1**	0.00028	6.0	0.55	0.000009	0.0021	0.052	0.001	0.000096	0.000032	0.00053	0.0044
		October		44	4.0	0.092	0.24	1.0	0.099	0.46	0.095	0.027	0.0000058	7.0	0.0046	0.0011	**1.5**	0.00025	1.7	0.3	0.0000069	0.00044	0.0065	0.00037	0.00006	0.000029	0.00036	0.00036
		November		44	4.8	0.091	0.26	1.0	0.1	0.44	0.037	0.021	0.0000053	7.0	0.0043	0.001	**1.4**	0.00022	1.7	0.22	0.0000072	0.00039	0.0046	0.0003	0.000056	0.000028	0.0003	0.00035
		December		47	4.9	0.1	0.27	1.0	0.11	**0.9**	0.062	0.02	0.000007	7.9	0.0089	0.0017	**2.8**	0.00039	2.4	0.27	0.0000075	0.00041	0.0083	0.00033	0.0001	0.000044	0.00034	0.00055
			MINIMUM	44	4.0	0.091	0.23	0.83	0.09	0.044	0.0052	0.016	0.0000037	7.0	0.00046	0.0004	0.15	0.000055	1.3	0.17	0.0000061	0.00039	0.00079	0.0003	0.000016	0.000016	0.00028	0.00017
			MAXIMUM	189	28	0.17	5.0	9.2	0.2	**0.9**	**0.12**	0.064	0.000015	37	0.011	0.004	**2.9**	0.00044	8.6	0.83	0.000015	0.0047	0.074	0.0018	0.0001	0.00006	0.0011	0.0052
			AVERAGE	95	13	0.12	1.2	3.3	0.12	0.38	0.049	0.036	0.0000082	18	0.0054	0.0019	**1.4**	0.00023	4.0	0.37	0.0000084	0.0017	0.02	0.0007	0.000061	0.000031	0.00062	0.0019

Notes:

[1] Water Licence No: 2AM-WTP1830. Maximum average. Exceedances shown as bold-underlined-highlighted cells

[2] Canadian Council of Ministers of the Environment CEQG (2002) freshwater guidelines. Values above the freshwater CEQG's shown in bold-underlined type

[3] CEQG Freshwater Aquatic Life criterion for total ammonia is pH and temperature dependent (5C used based on hydrodynamic modelling)

[4] CEQG Freshwater Aquatic Life Trigger Ranges are dependent on trophic status; oligotrophic status assume

[5] CEQG Freshwater Aquatic Life Criterion for aluminum is pH dependant.

[6] The CEQG aquatic life criterion for Arsenic is replaced by the Site Specific Water Quality Objective of 0.025 mg/L developed for the Whale Tail Pit Project (Volume 6, Appendix 6-N

[7] CEQG Freshwater Aquatic Life Criteria are hardness dependant

[8] CEQG Freshwater Aquatic Life criterion for manganese is pH and hardness dependent.

[9] CEQG Freshwater Aquatic Life criterion is for dissolved zinc and is hardness, pH and DOC dependent

* Variable guidelines based on average values in Mammoth 2020 CREMP monitoring data (pH=6.85, hardness=61 mg/L, DOC=2.7 mg/L)

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
CEQG aquatic life (long-term)[2] (mg/L)					120	0.12	12.6	2.93	0.01	0.1	*0.025*	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008	0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[3]	NO_3 (as N)	P[4]	Al[5]	As[6]	B	Cd[7]	Ca	Cr	Cu[7]	Fe	Pb[7]	Mg	Mn[8]	Hg	Mo	Ni[7]	Se	Ag	Tl	U	Zn[9]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
IVR Attenuation Pond	*Operations*	June	2021	114	28	0.11	4.9	4.9	0.2	0.56	0.091	0.028	0.0000095	28	0.007	0.0037	1.8	0.00026	5.8	0.27	0.0000061	0.003	0.018	0.00058	0.000057	0.000057	0.00057	0.004
		July		176	26	0.14	2.4	8.3	0.14	0.34	0.048	0.055	0.000013	33	0.0088	0.0036	1.7	0.00029	8.2	0.63	0.00001	0.0043	0.045	0.0014	0.000079	0.000029	0.00098	0.0047
		August		187	28	0.16	2.2	8.0	0.14	0.32	0.052	0.064	0.000015	36	0.0082	0.0038	1.6	0.0003	8.6	0.76	0.000012	0.0047	0.051	0.0015	0.000081	0.00003	0.0011	0.0049
		September		147	24	0.11	2.0	7.4	0.12	0.45	0.029	0.047	0.000012	28	0.011	0.0035	2.0	0.00029	7.9	0.56	0.0000082	0.0035	0.047	0.001	0.000092	0.00003	0.00076	0.0047
		October		83	15	0.14	0.26	0.83	0.11	0.46	0.087	0.06	0.0000094	14	0.0046	0.0013	1.5	0.00028	3.2	0.36	0.000007	0.0015	0.0067	0.00054	0.000061	0.000029	0.00097	0.00046
		November		93	18	0.15	0.31	0.83	0.12	0.44	0.037	0.061	0.0000098	16	0.0043	0.0012	1.4	0.00026	3.7	0.3	0.0000073	0.0017	0.0049	0.00052	0.000057	0.000028	0.0011	0.00048
		December		98	18	0.16	0.32	0.84	0.13	0.9	0.062	0.061	0.000012	17	0.0089	0.0019	2.9	0.00044	4.4	0.36	0.0000076	0.0017	0.0086	0.00056	0.0001	0.000044	0.0011	0.00068
		January	2022	88	16	0.14	0.32	0.87	0.11	0.26	0.02	0.051	0.0000081	15	0.0026	0.0009	0.85	0.00018	3.2	0.27	0.0000074	0.0014	0.0029	0.00049	0.000039	0.000023	0.00091	0.00038
		February		83	14	0.14	0.32	0.87	0.11	0.25	0.019	0.045	0.0000075	14	0.0025	0.00086	0.81	0.00017	3.0	0.26	0.0000074	0.0013	0.0028	0.00048	0.000037	0.000023	0.00081	0.00036
		March		82	14	0.13	0.33	0.87	0.11	0.11	0.0098	0.044	0.0000068	14	0.0012	0.00065	0.38	0.00011	2.7	0.25	0.0000074	0.0012	0.0016	0.00047	0.000024	0.000018	0.00079	0.0003
		April		82	14	0.13	0.33	0.87	0.1	0.044	0.0053	0.043	0.0000065	14	0.00047	0.00054	0.16	0.000082	2.6	0.24	0.0000073	0.0012	0.00095	0.00046	0.000017	0.000016	0.00078	0.00026
		May		83	14	0.14	0.33	0.87	0.11	0.14	0.012	0.043	0.0000069	14	0.0015	0.00069	0.47	0.00012	2.8	0.26	0.0000074	0.0012	0.0018	0.00047	0.000027	0.000019	0.00079	0.00031
		June		102	22	0.1	5.0	4.9	0.18	0.56	0.11	0.022	0.0000091	26	0.007	0.0037	1.8	0.00025	5.5	0.26	0.0000061	0.0024	0.018	0.00054	0.000057	0.000058	0.00049	0.004
		July		173	20	0.15	2.4	8.5	0.14	0.34	0.069	0.048	0.000012	33	0.0088	0.0036	1.7	0.00028	7.5	0.64	0.000011	0.0039	0.05	0.0016	0.000085	0.000032	0.00095	0.0047
		August		189	22	0.16	2.1	8.2	0.14	0.32	0.075	0.058	0.000014	37	0.0082	0.0039	1.6	0.00029	8.1	0.79	0.000013	0.0045	0.061	0.0017	0.00009	0.000036	0.001	0.0051
		September		144	18	0.11	1.9	7.6	0.12	0.45	0.041	0.042	0.000011	27	0.011	0.0035	2.1	0.00029	7.2	0.58	0.0000094	0.0031	0.054	0.0011	0.000099	0.000033	0.00068	0.0048
		October		70	10	0.13	0.25	0.86	0.11	0.46	0.11	0.046	0.000008	12	0.0046	0.0012	1.5	0.00027	2.6	0.35	0.0000078	0.0011	0.0076	0.0005	0.000064	0.000031	0.0007	0.00044
		November		74	12	0.13	0.28	0.86	0.11	0.44	0.04	0.043	0.0000078	13	0.0043	0.0011	1.4	0.00024	2.9	0.28	0.0000075	0.0011	0.005	0.00044	0.000057	0.000029	0.00073	0.00042
		December		77	13	0.14	0.29	0.87	0.13	0.9	0.062	0.042	0.0000096	13	0.0089	0.0018	2.9	0.00042	3.6	0.33	0.0000076	0.0012	0.0085	0.00047	0.0001	0.000044	0.00078	0.00063
		January	2023	70	11	0.12	0.29	0.89	0.11	0.26	0.02	0.036	0.0000065	12	0.0026	0.00083	0.85	0.00016	2.5	0.24	0.0000073	0.00096	0.0028	0.00041	0.000038	0.000023	0.00063	0.00033
		February		68	10	0.12	0.3	0.89	0.11	0.25	0.019	0.033	0.0000061	11	0.0025	0.00079	0.81	0.00015	2.3	0.24	0.0000074	0.00086	0.0027	0.0004	0.000037	0.000023	0.00057	0.00032
		March		67	10	0.12	0.3	0.89	0.1	0.11	0.0098	0.032	0.0000055	11	0.0011	0.00058	0.38	0.000097	2.1	0.22	0.0000073	0.00084	0.0015	0.0004	0.000023	0.000018	0.00055	0.00025
		April		67	10	0.12	0.3	0.89	0.1	0.044	0.0053	0.032	0.0000052	11	0.00047	0.00047	0.16	0.000069	2.0	0.22	0.0000073	0.00083	0.00088	0.00039	0.000016	0.000016	0.00054	0.00022
		May		68	10	0.12	0.3	0.9	0.1	0.14	0.012	0.032	0.0000055	11	0.0014	0.00062	0.47	0.00011	2.2	0.23	0.0000073	0.00084	0.0017	0.0004	0.000026	0.000019	0.00055	0.00026
		June		94	17	0.099	4.9	4.8	0.18	0.56	0.11	0.018	0.0000087	24	0.007	0.0036	1.8	0.00025	5.2	0.25	0.0000062	0.002	0.018	0.00053	0.000057	0.000058	0.00043	0.039
		July		174	17	0.15	2.4	8.6	0.14	0.34	0.071	0.045	0.000012	34	0.0088	0.0037	1.7	0.00028	7.2	0.66	0.000013	0.0038	0.059	0.0016	0.000092	0.000035	0.00087	0.0048
		August		185	18	0.17	2.1	8.3	0.13	0.32	0.076	0.054	0.000013	36	0.0082	0.0039	1.6	0.00029	7.6	0.8	0.000014	0.0041	0.066	0.0017	0.000094	0.000038	0.00095	0.0051
		September		137	15	0.11	1.9	7.7	0.12	0.45	0.041	0.038	0.000011	26	0.011	0.0035	2.1	0.00029	6.7	0.58	0.0000093	0.0027	0.053	0.0011	0.000098	0.000033	0.00061	0.0046
		October		57	7.1	0.11	0.23	0.88	0.11	0.46	0.093	0.036	0.0000069	9.4	0.0046	0.0012	1.5	0.00026	2.1	0.32	0.0000072	0.00075	0.0068	0.00043	0.000061	0.000029	0.00053	0.0004
		November		60	8.7	0.11	0.26	0.89	0.11	0.44	0.038	0.032	0.0000066	10.0	0.0043	0.0011	1.4	0.00023	2.3	0.25	0.0000073	0.00076	0.0047	0.00038	0.000056	0.000029	0.00052	0.00039
		December		63	8.9	0.12	0.27	0.89	0.12	0.9	0.062	0.031	0.0000083	11	0.0089	0.0018	2.8	0.00041	3.0	0.3	0.0000075	0.00079	0.0084	0.0004	0.0001	0.000044	0.00057	0.00059
		January	2024	58	8.1	0.11	0.28	0.93	0.1	0.26	0.02	0.027	0.0000055	9.5	0.0026	0.00078	0.84	0.00015	2.0	0.21	0.0000073	0.00067	0.0028	0.00036	0.000038	0.000023	0.00045	0.0003
		February		56	7.5	0.1	0.28	0.94	0.1	0.25	0.019	0.025	0.0000052	9.2	0.0025	0.00075	0.81	0.00014	1.9	0.21	0.0000073	0.0006	0.0026	0.00035	0.000037	0.000023	0.00041	0.00029
		March		56	7.4	0.1	0.28	0.94	0.099	0.11	0.0097	0.024	0.0000046	8.9	0.0011	0.00054	0.37	0.000088	1.7	0.2	0.0000072	0.00058	0.0014	0.00034	0.000023	0.000018	0.00039	0.00022
		April		55	7.3	0.1	0.29	0.94	0.097	0.044	0.0052	0.024	0.0000043	8.8	0.00046	0.00043	0.16	0.00006	1.6	0.19	0.0000072	0.00057	0.00082	0.00034	0.000016	0.000016	0.00039	0.00019
		May		56	7.3	0.1	0.29	0.94	0.10	0.14	0.012	0.024	0.0000046	9.0	0.0014	0.00058	0.47	0.000099	1.7	0.21	0.0000072	0.00057	0.0017	0.00034	0.000026	0.000019	0.00039	0.00023
		June		90	14	0.096	4.9	4.9	0.18	0.56	0.11	0.017	0.0000085	23	0.007	0.0036	1.8	0.00025	5.0	0.25	0.0000064	0.0018	0.018	0.00052	0.000057	0.000058	0.00039	0.0039
		July		175	15	0.15	2.3	8.7	0.14	0.34	0.073	0.043	0.000012	34	0.0088	0.0038	1.7	0.00028	7.0	0.68	0.000014	0.0037	0.066	0.0016	0.000098	0.000038	0.00081	0.0049
		August		186	16	0.17	2.1	8.4	0.13	0.32	0.079	0.052	0.000013	37	0.0082	0.004	1.6	0.00029	7.3	0.83	0.000015	0.004	0.074	0.0018	0.0001	0.000041	0.00089	0.0052
		September		134	12	0.11	1.9	7.7	0.12	0.45	0.042	0.035	0.000011	25	0.011	0.0035	2.1	0.00028	6.4	0.58	0.0000098	0.0025	0.057	0.0011	0.0001	0.000035	0.00056	0.0046
		October		51	5.3	0.1	0.23	0.92	0.11	0.46	0.099	0.031	0.0000063	8.2	0.0046	0.0012	1.5	0.00025	1.9	0.31	0.0000073	0.00058	0.007	0.00041	0.000061	0.00003	0.00042	0.00038
		November		51	6.3	0.1	0.26	0.93	0.11	0.44	0.039	0.026	0.0000058	8.3	0.0043	0.001	1.4	0.00022	2.0	0.23	0.0000073	0.00054	0.0048	0.00034	0.000056	0.000029	0.00038	0.00036
		December		53	6.5	0.11	0.26	0.93	0.12	0.9	0.062	0.024	0.0000075	9.2	0.0089	0.0017	2.8	0.0004	2.7	0.28	0.0000075	0.00056	0.0084	0.00036	0.0001	0.000044	0.00043	0.00056
		January	2025	50	6.1	0.096	0.28	1.0	0.097	0.26	0.02	0.022	0.0000048	7.9	0.0026	0.00075	0.84	0.00015	1.7	0.2	0.0000073	0.00047	0.0027	0.00031	0.000038	0.000023	0.00034	0.00028
		February		48	5.6	0.095	0.28	1.0	0.096	0.25	0.019	0.02	0.0000046	7.7	0.0025	0.00072	0.8	0.00014	1.6	0.2	0.0000073	0.00042	0.0026	0.00031	0.000036	0.000022	0.00031	0.00027
		March		48	5.6	0.092	0.28	1.0	0.092	0.11	0.0097	0.02	0.000004	7.4	0.0011	0.00051	0.37	0.000083	1.4	0.18	0.0000072	0.00041	0.0014	0.0003	0.000023	0.000018	0.00029	0.00021
		April		48	5.5	0.091	0.29	1.0	0.09	0.044	0.0052	0.019	0.0000037	7.3	0.00046	0.0004	0.15	0.000055	1.3	0.17	0.0000072	0.0004	0.00079	0.0003	0.000016	0.000016	0.00028	0.00017
		May		48	5.5	0.094	0.29	1.0	0.093	0.14	0.012	0.019	0.000004	7.5	0.0014	0.00055	0.47	0.000094	1.4	0.19	0.0000072	0.0004	0.0017	0.0003	0.000026	0.000019	0.00029	0.00022
		June		90	13	0.098	5.0	5.2	0.18	0.56	0.12	0.016	0.0000085	23	0.007	0.0037	1.8	0.00025	5.0	0.26	0.0000068	0.0017	0.019	0.00054	0.000058	0.00006	0.00037	0.004
		July		178	13	0.16	2.4	9.2	0.13	0.34	0.081	0.041	0.000012	35	0.0088	0.0038	1.7	0.00027	6.9	0.69	0.000014	0.0037	0.07	0.0017	0.0001	0.00004	0.00081	0.005
		August		182	14	0.16	2.1	8.9	0.13	0.32	0.083	0.049	0.000013	36	0.0081	0.0039	1.6	0.00028	7.0	0.8	0.000015	0.0038	0.071	0.0018	0.000099	0.00004	0.00088	0.0051
		September		126	9.8	0.1	1.9	8.1	0.11	0.45	0.042	0.032	0.000010	23	0.011	0.0034	2.1	0.00028	6.0	0.55	0.000009	0.0021	0.052	0.001	0.000096	0.000032	0.00053	0.0044
		October		44	4.0	0.092	0.24	1.0	0.099	0.46	0.095	0.027	0.0000058	7.0	0.0046	0.0011	1.5	0.00025	1.7	0.3	0.0000069	0.00044	0.0065	0.00037	0.00006	0.000029	0.00036	0.00036
		November		44	4.8	0.091	0.26	1.0	0.1	0.44	0.037	0.021	0.0000053	7.0	0.0043	0.001	1.4	0.00022	1.7	0.22	0.0000072	0.00039	0.0046	0.0003	0.000056	0.000028	0.0003	0.00035
		December		47	4.9	0.1	0.27	1.0	0.11	0.9	0.062	0.02	0.000007	7.9	0.0089	0.0017	2.8	0.00039	2.4	0.27	0.0000075	0.00041	0.0083	0.00033	0.0001	0.000044	0.00034	0.00055
			MINIMUM	44	4.0	0.091	0.23	0.83	0.09	0.044	0.0052	0.016	0.0000037	7.0	0.00046	0.0004	0.15	0.000055	1.3	0.17	0.0000061	0.00039	0.00079	0.0003	0.000016	0.000016	0.00028	0.00017
			MAXIMUM	189	28	0.17	5.0	9.2	0.2	0.9	0.12	0.064	0.000015	37	0.011	0.004	2.9	0.00044	8.6	0.83	0.000015	0.0047	0.074	0.0018	0.0001	0.00006	0.0011	0.0052
			AVERAGE	95	13	0.12	1.2	3.3	0.12	0.38	0.049	0.036	0.0000082	18	0.0054	0.0019	1.4	0.00023	4.0	0.37	0.0000084	0.0017	0.02	0.0007	0.000061	0.000031	0.00062	0.0019

Notes:

[1] Water Licence No: 2AM-WTP1830. Maximum average. Exceedances shown as bold-underlined-highlighted cells

[2] Canadian Council of Ministers of the Environment CEQG (2002) freshwater guidelines. Values above the freshwater CEQG's shown in bold-underlined type

[3] CEQG Freshwater Aquatic Life criterion for total ammonia is pH and temperature dependent (5C used based on hydrodynamic modelling)

[4] CEQG Freshwater Aquatic Life Trigger Ranges are dependent on trophic status; oligotrophic status assume

[5] CEQG Freshwater Aquatic Life Criterion for aluminum is pH dependant.

[6] The CEQG aquatic life criterion for Arsenic is replaced by the Site Specific Water Quality Objective of 0.025 mg/L developed for the Whale Tail Pit Project (Volume 6, Appendix 6-N

[7] CEQG Freshwater Aquatic Life Criteria are hardness dependant

[8] CEQG Freshwater Aquatic Life criterion for manganese is pH and hardness dependent.

[9] CEQG Freshwater Aquatic Life criterion is for dissolved zinc and is hardness, pH and DOC dependent

* Variable guidelines based on average values in Mammoth 2020 CREMP monitoring data (pH=6.85, hardness=61 mg/L, DOC=2.7 mg/L)

APPENDIX C-4
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

			Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)	1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
			Constituent	TDS	Cl	F	NH_3 (as N)	NO_3 (as N)	P	Al	As	B	Cd	Ca	Cr	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	Se	Ag	Tl	U	Zn
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Effluent Discharge	*Construction and Operations*	June	2019	29	15	0.025	0.14	0.055	0.01	0.0015	0.00036	0.0019	0.0000019	6.3	0.000013	0.00032	0.025	0.000002	1.2	0.022	0.0000017	0.0010	0.00084	0.000041	0.0000034	0.0000052	0.0001	0.0012
		July		119	44	0.086	0.52	1.9	0.02	0.007	0.00073	0.0088	0.000013	22	0.00012	0.0015	0.13	0.000016	7.9	0.14	0.0000056	0.0038	0.0081	0.00022	0.000028	0.000013	0.0005	0.0085
		August		172	73	0.11	0.92	0.37	0.025	0.0097	0.0003	0.013	0.000017	36	0.00017	0.0021	0.2	0.00002	13	0.25	0.0000053	0.0061	0.011	0.00032	0.000036	0.000014	0.00075	0.011
		September		234	103	0.14	1.3	0.24	0.03	0.017	0.00041	0.018	0.000023	49	0.00028	0.0028	0.37	0.000028	18	0.38	0.0000049	0.0086	0.018	0.00041	0.000057	0.000018	0.0011	0.015
		October		129	39	0.18	0.16	0.035	0.016	0.02	0.0037	0.02	0.000017	24	0.00014	0.0012	0.33	0.000031	7.0	0.29	0.0000043	0.0029	0.0037	0.00033	0.000044	0.000019	0.0012	0.0016
		November		174	41	0.26	0.28	0.028	0.015	0.017	0.0038	0.028	0.000017	33	0.00012	0.0011	0.28	0.000029	7.5	0.5	0.0000048	0.003	0.003	0.00065	0.00004	0.000019	0.0017	0.0017
		December		254	79	0.33	0.34	0.044	0.023	0.022	0.0041	0.041	0.000032	47	0.00015	0.0018	0.35	0.000047	13	0.52	0.0000062	0.0058	0.0042	0.0006	0.000053	0.000024	0.0024	0.0026
		January	2020	143	40	0.21	0.21	0.038	0.016	0.018	0.0032	0.02	0.000017	27	0.00012	0.0012	0.29	0.000029	7.2	0.33	0.0000071	0.0028	0.0032	0.00038	0.000045	0.000024	0.0012	0.0016
		February		111	28	0.18	0.18	0.043	0.015	0.016	0.0028	0.014	0.000013	21	0.00011	0.001	0.26	0.000023	5.4	0.29	0.0000073	0.0019	0.0028	0.00032	0.000041	0.000023	0.00086	0.0013
		March		111	28	0.17	0.18	0.049	0.015	0.0071	0.0014	0.014	0.000012	21	0.000049	0.00079	0.12	0.000017	5.1	0.27	0.0000073	0.0019	0.0016	0.00031	0.000026	0.000018	0.00084	0.0011
		April		187	59	0.2	0.23	4.2	0.034	0.082	0.003	0.02	0.000034	29	0.0013	0.0031	0.88	0.000079	11	0.31	0.0000074	0.0044	0.016	0.00032	0.0001	0.000037	0.0012	0.014
		May		115	29	0.18	0.19	0.069	0.016	0.0089	0.0017	0.014	0.000012	21	0.000061	0.00083	0.15	0.000018	5.3	0.29	0.0000073	0.0019	0.0018	0.00032	0.000029	0.000019	0.00086	0.0012
		June		234	99	0.17	2.6	2.8	0.068	0.041	0.013	0.012	0.000016	57	0.00034	0.0044	0.66	0.000033	11	0.43	0.0000062	0.0074	0.02	0.00045	0.00007	0.000068	0.00076	0.015
		July		261	69	0.14	2.1	5.4	0.031	0.029	0.0034	0.013	0.000019	56	0.00049	0.0038	0.65	0.000035	17	0.91	0.0000075	0.0064	0.051	0.00083	0.000099	0.00003	0.0008	0.017
		August		174	39	0.11	1.3	3.4	0.024	0.021	0.0032	0.009	0.000014	37	0.00036	0.003	0.49	0.000026	11	0.74	0.0000078	0.0037	0.042	0.0006	0.000079	0.000027	0.0005	0.013
		September		171	19	0.14	1.9	5.2	0.02	0.077	0.01	0.0069	0.000014	28	0.0016	0.0042	0.88	0.00013	9.9	0.57	0.0000069	0.0028	0.034	0.0003	0.000096	0.000029	0.00042	0.019
		October		255	44	0.19	1.9	4.2	0.03	0.07	0.0051	0.014	0.000022	46	0.0015	0.0041	0.78	0.00014	16	0.82	0.0000054	0.0064	0.028	0.00032	0.000089	0.000026	0.00086	0.024
		November		131	32	0.19	0.28	0.55	0.019	0.04	0.0067	0.016	0.000015	24	0.00026	0.0015	0.63	0.00004	6.6	0.45	0.0000051	0.0023	0.0059	0.00037	0.000077	0.000031	0.001	0.0018
		December		155	37	0.23	0.35	0.79	0.023	0.049	0.0082	0.02	0.000017	28	0.00033	0.0019	0.78	0.000048	7.5	0.53	0.0000064	0.0026	0.0072	0.0005	0.000095	0.000039	0.0012	0.0021
		January	2021	134	28	0.21	0.37	0.73	0.025	0.016	0.0032	0.015	0.000012	24	0.00011	0.00099	0.26	0.000022	5.4	0.45	0.0000074	0.0019	0.0028	0.00047	0.00004	0.000023	0.00093	0.0013
		February		110	20	0.18	0.36	0.67	0.028	0.015	0.003	0.010	0.0000091	19	0.0001	0.00088	0.24	0.000019	4.2	0.41	0.0000077	0.0013	0.0026	0.00041	0.000038	0.000023	0.00065	0.0011
		March		106	19	0.17	0.37	0.66	0.027	0.0068	0.0017	0.009	0.0000082	18	0.000046	0.00067	0.11	0.000013	3.8	0.39	0.0000077	0.0012	0.0015	0.00039	0.000024	0.000019	0.00059	0.00089
		April		105	19	0.17	0.37	0.66	0.026	0.0027	0.001	0.0088	0.0000078	18	0.000019	0.00056	0.049	0.0000097	3.7	0.39	0.0000077	0.0012	0.00092	0.00038	0.000017	0.000016	0.00057	0.00079
		May		106	19	0.18	0.37	0.66	0.027	0.0086	0.0019	0.0087	0.0000082	18	0.000058	0.0007	0.14	0.000014	3.8	0.41	0.0000077	0.0012	0.0017	0.00039	0.000027	0.00002	0.00058	0.00091
		June		114	28	0.11	4.9	4.9	0.06	0.034	0.013	0.0039	0.0000095	28	0.00028	0.0035	0.54	0.000026	6.4	0.3	0.0000061	0.0021	0.016	0.00029	0.000057	0.000057	0.00029	0.011
		July		183	26	0.14	2.4	8.3	0.042	0.021	0.0067	0.0077	0.000013	33	0.00035	0.0034	0.5	0.000029	9.0	0.69	0.00001	0.003	0.041	0.0007	0.000079	0.000029	0.00049	0.013
		August		195	28	0.16	2.2	8.0	0.04	0.019	0.0072	0.0089	0.000015	36	0.00033	0.0036	0.47	0.00003	9.4	0.83	0.000012	0.0033	0.046	0.00075	0.000081	0.00003	0.00053	0.014
		September		152	24	0.11	2.0	7.4	0.035	0.027	0.0041	0.0066	0.000012	28	0.00045	0.0033	0.61	0.000029	8.6	0.62	0.0000082	0.0024	0.042	0.0005	0.000092	0.00003	0.00038	0.013
		October		79	15	0.14	0.26	0.83	0.034	0.028	0.012	0.0084	0.0000094	14	0.00018	0.0012	0.45	0.000028	3.5	0.39	0.000007	0.0011	0.006	0.00027	0.000061	0.000029	0.00048	0.0013
		November		89	18	0.15	0.31	0.83	0.035	0.026	0.0052	0.0086	0.0000098	16	0.00017	0.0011	0.42	0.000026	4.0	0.33	0.0000073	0.0012	0.0044	0.00026	0.000057	0.000028	0.00053	0.0013
		December		93	18	0.16	0.32	0.84	0.039	0.054	0.0086	0.0085	0.000012	17	0.00036	0.0018	0.86	0.000044	4.9	0.39	0.0000076	0.0012	0.0077	0.00028	0.0001	0.000044	0.00056	0.0019
		January	2022	85	16	0.14	0.32	0.87	0.033	0.016	0.0028	0.0071	0.0000081	15	0.00011	0.00085	0.26	0.000018	3.5	0.29	0.0000074	0.001	0.0026	0.00025	0.000039	0.000023	0.00046	0.001
		February		81	14	0.14	0.32	0.87	0.033	0.015	0.0026	0.0063	0.0000075	14	0.0001	0.00081	0.24	0.000017	3.3	0.29	0.0000074	0.0009	0.0025	0.00024	0.000037	0.000023	0.00041	0.00099
		March		80	14	0.13	0.33	0.87	0.032	0.0068	0.0014	0.0061	0.0000068	14	0.000046	0.00061	0.11	0.000011	3.0	0.27	0.0000074	0.00088	0.0014	0.00023	0.000024	0.000018	0.00039	0.00082
		April		80	14	0.13	0.33	0.87	0.031	0.0027	0.00074	0.0061	0.0000065	14	0.000019	0.0005	0.048	0.0000082	2.9	0.27	0.0000073	0.00087	0.00086	0.00023	0.000017	0.000016	0.00039	0.00073
		May		81	14	0.14	0.33	0.87	0.032	0.0086	0.0016	0.0061	0.0000069	14	0.000058	0.00064	0.14	0.000012	3.0	0.29	0.0000074	0.00087	0.0016	0.00024	0.000027	0.000019	0.00039	0.00084
		June		103	22	0.1	5.0	4.9	0.054	0.034	0.015	0.003	0.0000091	26	0.00028	0.0034	0.54	0.000025	6.0	0.28	0.0000061	0.0017	0.016	0.00027	0.000057	0.000058	0.00024	0.011
		July		183	20	0.15	2.4	8.5	0.042	0.021	0.0097	0.0067	0.000012	33	0.00035	0.0034	0.51	0.000028	8.3	0.7	0.000011	0.0028	0.045	0.00079	0.000085	0.000032	0.00047	0.013
		August		200	22	0.16	2.1	8.2	0.041	0.019	0.011	0.0081	0.000014	37	0.00033	0.0036	0.48	0.000029	8.9	0.87	0.000013	0.0032	0.055	0.00086	0.00009	0.000036	0.00052	0.014
		September		151	18	0.11	1.9	7.6	0.035	0.027	0.0057	0.0058	0.000011	27	0.00045	0.0033	0.62	0.000029	8.0	0.64	0.0000094	0.0022	0.049	0.00055	0.000099	0.000033	0.00034	0.013
		October		68	10	0.13	0.25	0.86	0.033	0.028	0.015	0.0064	0.000008	12	0.00018	0.0012	0.46	0.000027	2.8	0.39	0.0000078	0.00076	0.0069	0.00025	0.000064	0.000031	0.00035	0.0012
		November		71	12	0.13	0.28	0.86	0.034	0.026	0.0056	0.006	0.0000078	13	0.00017	0.0011	0.42	0.000024	3.1	0.3	0.0000075	0.00079	0.0045	0.00022	0.000057	0.000029	0.00037	0.0012
		December		74	13	0.14	0.29	0.87	0.038	0.054	0.0087	0.0059	0.0000096	13	0.00036	0.0017	0.85	0.000042	3.9	0.36	0.0000076	0.00081	0.0077	0.00023	0.0001	0.000044	0.00039	0.0017
		January	2023	68	11	0.12	0.29	0.89	0.032	0.016	0.0028	0.0051	0.0000065	12	0.0001	0.00077	0.25	0.000016	2.7	0.26	0.0000073	0.00068	0.0026	0.00021	0.000038	0.000023	0.00032	0.00091
		February		66	10	0.12	0.3	0.89	0.032	0.015	0.0026	0.0046	0.0000061	11	0.0001	0.00074	0.24	0.000015	2.6	0.26	0.0000074	0.00061	0.0024	0.0002	0.000037	0.000023	0.00029	0.00087
		March		65	10	0.12	0.3	0.89	0.031	0.0068	0.0014	0.0045	0.0000055	11	0.000046	0.00054	0.11	0.0000097	2.3	0.24	0.0000073	0.00059	0.0013	0.0002	0.000023	0.000018	0.00028	0.0007
		April		65	10	0.12	0.3	0.89	0.03	0.0027	0.00074	0.0044	0.0000052	11	0.000019	0.00044	0.047	0.0000069	2.2	0.24	0.0000073	0.00059	0.00079	0.0002	0.000016	0.000016	0.00027	0.00061
		May		66	10	0.12	0.3	0.9	0.031	0.0086	0.0016	0.0044	0.0000055	11	0.000058	0.00058	0.14	0.000011	2.4	0.26	0.0000073	0.00059	0.0016	0.0002	0.000026	0.000019	0.00028	0.00072
		June		95	17	0.099	4.9	4.8	0.053	0.034	0.015	0.0026	0.0000087	24	0.00028	0.0034	0.54	0.000025	5.7	0.28	0.0000062	0.0014	0.016	0.00026	0.000057	0.000058	0.00021	0.011
		July		186	17	0.15	2.4	8.6	0.042	0.021	0.010	0.0063	0.000012	34	0.00035	0.0035	0.51	0.000028	7.9	0.73	0.000013	0.0027	0.053	0.00081	0.000092	0.000035	0.00044	0.013
		August		197	18	0.17	2.1	8.3	0.04	0.019	0.011	0.0076	0.000013	36	0.00033	0.0036	0.49	0.000029	8.3	0.88	0.000014	0.0029	0.06	0.00087	0.000094	0.000038	0.00048	0.014
		September		144	15	0.11	1.9	7.7	0.034	0.027	0.0057	0.0053	0.000011	26	0.00045	0.0033	0.62	0.000029	7.4	0.64	0.0000093	0.0019	0.048	0.00055	0.000098	0.000033	0.00031	0.013
		October		56	7.1	0.11	0.23	0.88	0.032	0.028	0.013	0.0051	0.0000069	9.4	0.00018	0.0011	0.45	0.000026	2.3	0.36	0.0000072	0.00053	0.0061	0.00022	0.000061	0.000029	0.00027	0.0011
		November		58	8.7	0.11	0.26	0.89	0.033	0.026	0.0053	0.0045	0.0000066	10.0	0.00017	0.001	0.42	0.000023	2.6	0.28	0.0000073	0.00054	0.0043	0.00019	0.000056	0.000029	0.00026	0.0011
		December		61	8.9	0.12	0.27	0.89	0.037	0.054	0.0086	0.0043	0.0000083	11	0.00036	0.0016	0.85	0.000041	3.3	0.33	0.0000075	0.00056	0.0076	0.0002	0.0001	0.000044	0.00028	0.0016
		January	2024	57	8.1	0.11	0.28	0.93	0.031	0.016	0.0027	0.0038	0.0000055	9.5	0.0001	0.00073	0.25	0.000015	2.2	0.24	0.0000073	0.00047	0.0025	0.00018	0.000038	0.000023	0.00023	0.00083
		February		55	7.5	0.1	0.28	0.94	0.031	0.015	0.0026	0.0035	0.0000052	9.2	0.00010	0.0007	0.24	0.000014	2.1	0.23	0.0000073	0.00042	0.0024	0.00017	0.000037	0.000023	0.00021	0.00079
		March		55	7.4	0.1	0.28	0.94	0.03	0.0068	0.0014	0.0034	0.0000046	8.9	0.000046	0.0005	0.11	0.0000088	1.9	0.22	0.0000072	0.00041	0.0013	0.00017	0.000023	0.000018	0.0002	0.00062
		April		55	7.3	0.1	0.29	0.94	0.029	0.0027	0.00073	0.0034	0.0000043	8.8	0.000019	0.0004	0.047	0.000006	1.8	0.21	0.0000072	0.0004	0.00074	0.00017	0.000016	0.000016	0.00019	0.00053
		May		55	7.3	0.1	0.29	0.94	0.03	0.0086	0.0016	0.0034	0.0000046	9.0	0.000058	0.00054	0.14	0.0000099	1.9	0.23	0.0000072	0.00041	0.0015	0.00017	0.000026	0.000019	0.0002	0.00064
		June		91	14	0.096	4.9	4.9	0.053	0.034	0.015	0.0023	0.0000085	23	0.00028	0.0034	0.54	0.000025	5.5	0.28	0.0000064	0.0013	0.016	0.00026	0.000057	0.000058	0.00019	0.011
		July		188	15	0.15	2.3	8.7	0.041	0.021	0.01	0.006	0.000012	34	0.00035	0.0035	0.52	0.000028	7.7	0.75	0.000014	0.0026	0.059	0.00082	0.000098	0.000038	0.00041	0.014
		August		200	16	0.17	2.1	8.4	0.04	0.019	0.011	0.0073	0.000013	37	0.00033	0.0037	0.49	0.000029	8.1	0.91	0.000015	0.0029	0.067	0.00089	0.0001	0.000041	0.00045	0.014
		September		142	12	0.11	1.9	7.7	0.035	0.027	0.0059	0.0049	0.000011	25	0.00045	0.0033	0.62	0.000028	7.0	0.64	0.0000098	0.0017	0.052	0.00055	0.0001	0.000035	0.00028	0.013
		October		50	5.3	0.1	0.23	0.92	0.032	0.028	0.014	0.0043	0.0000063	8.2	0.00018	0.0011	0.46	0.000025	2.1	0.35	0.0000073	0.00041	0.0063	0.00021	0.000061	0.00003	0.00021	0.001
		November		49	6.3	0.1	0.26	0.93	0.032	0.026	0.0054	0.0036	0.0000058	8.3	0.00017	0.00097	0.42	0.000022	2.2	0.26	0.0000073	0.00038	0.0043	0.00017	0.000056	0.000029	0.00019	0.001
		December		52	6.5	0.11	0.26	0.93	0.036	0.054	0.0086	0.0034	0.0000075	9.2	0.00035	0.0016	0.85	0.00004	2.9	0.31	0.0000075	0.00039	0.0075	0.00018	0.0001	0.000044	0.00021	0.0016

APPENDIX C-4
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

			Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)	1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
			Constituent	TDS	Cl	F	NH_3 (as N)	NO_3 (as N)	P	Al	As	B	Cd	Ca	Cr	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	Se	Ag	Tl	U	Zn
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Effluent Discharge	*Construction and Operations*	January	2025	49	6.1	0.096	0.28	1.0	0.029	0.016	0.0028	0.0031	0.0000048	7.9	0.0001	0.0007	0.25	0.000015	1.9	0.22	0.0000073	0.00033	0.0025	0.00016	0.000038	0.000023	0.00017	0.00077
		February		48	5.6	0.095	0.28	1.0	0.029	0.015	0.0026	0.0028	0.0000046	7.7	0.00010	0.00067	0.24	0.000014	1.8	0.21	0.0000073	0.0003	0.0023	0.00015	0.000036	0.000022	0.00015	0.00074
		March		47	5.6	0.092	0.28	1.0	0.028	0.0068	0.0014	0.0028	0.000004	7.4	0.000046	0.00047	0.11	0.0000083	1.5	0.2	0.0000072	0.00029	0.0013	0.00015	0.000023	0.000018	0.00014	0.00057
		April		47	5.5	0.091	0.29	1.0	0.027	0.0027	0.00073	0.0027	0.0000037	7.3	0.000018	0.00037	0.046	0.0000055	1.4	0.19	0.0000072	0.00028	0.00071	0.00015	0.000016	0.000016	0.00014	0.00048
		May		48	5.5	0.094	0.29	1.0	0.028	0.0086	0.0016	0.0027	0.000004	7.5	0.000058	0.00051	0.14	0.0000094	1.6	0.21	0.0000072	0.00029	0.0015	0.00015	0.000026	0.000019	0.00015	0.00059
		June		91	13	0.098	5.0	5.2	0.053	0.034	0.016	0.0022	0.0000085	23	0.00028	0.0034	0.54	0.000025	5.5	0.28	0.0000068	0.0012	0.017	0.00027	0.000058	0.00006	0.00018	0.011
		July		192	13	0.16	2.4	9.2	0.04	0.021	0.011	0.0058	0.000012	35	0.00035	0.0035	0.52	0.000027	7.6	0.76	0.000014	0.0026	0.063	0.00085	0.0001	0.00004	0.0004	0.014
		August		196	14	0.16	2.1	8.9	0.038	0.019	0.012	0.0069	0.000013	36	0.00033	0.0036	0.49	0.000028	7.7	0.89	0.000015	0.0027	0.064	0.00089	0.000099	0.00004	0.00044	0.014
		September		133	9.8	0.1	1.9	8.1	0.033	0.027	0.0059	0.0045	0.000010	23	0.00045	0.0032	0.62	0.000028	6.6	0.6	0.000009	0.0015	0.047	0.00052	0.000096	0.000032	0.00026	0.012
		October		44	4.0	0.092	0.24	1.0	0.03	0.028	0.013	0.0038	0.0000058	7.0	0.00018	0.001	0.45	0.000025	1.8	0.33	0.0000069	0.00031	0.0058	0.00019	0.00006	0.000029	0.00018	0.00099
		November		43	4.8	0.091	0.26	1.0	0.03	0.026	0.0052	0.003	0.0000053	7.0	0.00017	0.00094	0.42	0.000022	1.9	0.24	0.0000072	0.00027	0.0042	0.00015	0.000056	0.000028	0.00015	0.00095
		December		45	4.9	0.1	0.27	1.0	0.034	0.054	0.0086	0.0028	0.000007	7.9	0.00035	0.0016	0.85	0.000039	2.7	0.29	0.0000075	0.00029	0.0075	0.00016	0.0001	0.000044	0.00017	0.0015
			MINIMUM	29	4.0	0.025	0.14	0.028	0.01	0.0015	0.0003	0.0019	0.0000019	6.3	0.000013	0.00032	0.025	0.000002	1.2	0.022	0.0000017	0.00027	0.00071	0.000041	0.0000034	0.0000052	0.0001	0.00048
			MAXIMUM	261	103	0.33	5.0	9.2	0.068	0.082	0.016	0.041	0.000034	57	0.0016	0.0044	0.88	0.00014	18	0.91	0.000015	0.0086	0.067	0.00089	0.0001	0.000068	0.0024	0.024
			AVERAGE	114	22	0.14	1.1	2.7	0.032	0.023	0.0058	0.008	0.00001	21	0.00025	0.0018	0.4	0.000027	5.6	0.41	0.0000078	0.0019	0.016	0.00037	0.000058	0.000029	0.00049	0.0057

Notes:

[1] Water Licence No: 2AM-WTP1830. Maximum average. Exceedances shown as bold-underlined-highlighted cells

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5		0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
		CEQG aquatic life (long-term)[1] (mg/L)			120	0.12	12.6	2.93	0.01	0.1		0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008		0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	Sb	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Pit	Closure	January	2026	48	15	0.071	0.11	0.29	0.018	0.022	0.00014	0.0026	0.028	0.000011	7.9	0.00069	0.00077	0.068	0.0001	2.5	0.082	0.0000072	0.0012	0.0014	0.00014	0.000016	0.000015	0.00011	0.0004	0.0018
		February		49	15	0.072	0.11	0.29	0.018	0.022	0.00015	0.0041	0.028	0.000011	8.0	0.00069	0.00077	0.068	0.0001	2.5	0.083	0.0000073	0.0012	0.0014	0.00014	0.000016	0.000015	0.00011	0.0004	0.0018
		March		49	15	0.072	0.11	0.29	0.018	0.022	0.00015	0.0043	0.028	0.000011	8.0	0.00069	0.00077	0.068	0.0001	2.5	0.083	0.0000073	0.0012	0.0014	0.00014	0.000016	0.000015	0.00011	0.0004	0.0018
		April		49	15	0.072	0.11	0.29	0.018	0.022	0.00015	0.0045	0.028	0.000011	8.0	0.00069	0.00077	0.068	0.0001	2.5	0.083	0.0000073	0.0012	0.0014	0.00014	0.000016	0.000015	0.00011	0.0004	0.0018
		May		49	15	0.072	0.11	0.29	0.018	0.022	0.00015	0.0047	0.028	0.000011	8.0	0.00069	0.00077	0.068	0.0001	2.5	0.083	0.0000073	0.0012	0.0014	0.00014	0.000016	0.000015	0.00011	0.0004	0.0018
		June		38	6.2	0.044	0.055	0.088	0.012	0.022	0.00049	0.038	0.013	0.0000071	7.9	0.00075	0.0008	0.082	0.00012	1.8	0.067	0.0000048	0.00064	0.0036	0.00026	0.0000097	0.0000089	0.000086	0.0003	0.0016
		July		39	6.2	0.053	0.045	0.12	0.025	0.022	0.00059	0.044	0.017	0.0000082	7.5	0.00079	0.00084	0.099	0.00013	1.8	0.073	0.0000055	0.00079	0.0036	0.00025	0.00001	0.0000096	0.000096	0.00039	0.0016
		August		47	6.3	0.066	0.041	0.12	0.028	0.022	0.0009	0.069	0.021	0.00001	9.1	0.00084	0.00096	0.11	0.00015	2.1	0.092	0.0000068	0.0011	0.0043	0.00031	0.000012	0.000011	0.00012	0.00055	0.0019
		September		51	6.3	0.077	0.038	0.12	0.03	0.022	0.0010	0.075	0.025	0.000011	9.4	0.00091	0.0011	0.13	0.00018	2.2	0.11	0.0000077	0.0012	0.005	0.00033	0.000013	0.000012	0.00013	0.00065	0.002
		October		50	6.3	0.08	0.035	0.12	0.031	0.022	0.00097	0.072	0.027	0.000012	9.1	0.00095	0.0012	0.13	0.0002	2.2	0.12	0.000008	0.0012	0.0053	0.00032	0.000013	0.000012	0.00013	0.00067	0.002
		November		50	6.3	0.081	0.035	0.12	0.031	0.022	0.00096	0.07	0.028	0.000012	9.0	0.00095	0.0012	0.14	0.0002	2.1	0.12	0.000008	0.0012	0.0054	0.00032	0.000013	0.000012	0.00013	0.00067	0.002
		December		49	6.3	0.082	0.035	0.13	0.032	0.022	0.00095	0.069	0.028	0.000012	8.9	0.00096	0.0012	0.14	0.0002	2.1	0.12	0.000008	0.0012	0.0054	0.00032	0.000013	0.000012	0.00013	0.00067	0.002
		January	2027	49	6.3	0.082	0.035	0.13	0.032	0.022	0.00094	0.068	0.029	0.000012	8.9	0.00097	0.0012	0.14	0.0002	2.1	0.12	0.0000081	0.0012	0.0054	0.00032	0.000013	0.000012	0.00013	0.00067	0.002
		February		49	6.4	0.083	0.035	0.13	0.033	0.022	0.00093	0.067	0.029	0.000012	8.8	0.00097	0.0012	0.14	0.00021	2.1	0.12	0.0000081	0.0012	0.0054	0.00031	0.000013	0.000012	0.00013	0.00067	0.002
		March		49	6.5	0.083	0.035	0.13	0.034	0.022	0.00092	0.066	0.029	0.000012	8.7	0.00097	0.0012	0.14	0.00021	2.1	0.12	0.0000081	0.0012	0.0055	0.00031	0.000013	0.000012	0.00013	0.00068	0.0021
		April		49	6.5	0.083	0.035	0.13	0.035	0.022	0.00091	0.065	0.03	0.000012	8.7	0.00098	0.0012	0.14	0.00021	2.1	0.12	0.0000081	0.0012	0.0055	0.00031	0.000013	0.000012	0.00013	0.00068	0.0021
		May		48	6.6	0.083	0.035	0.14	0.036	0.022	0.0009	0.064	0.03	0.000012	8.6	0.00098	0.0012	0.14	0.00021	2.1	0.12	0.0000081	0.0012	0.0055	0.00031	0.000013	0.000012	0.00013	0.00068	0.0021
		June		46	6.8	0.08	0.036	0.14	0.038	0.022	0.00079	0.055	0.03	0.000012	8.1	0.00098	0.0012	0.14	0.00021	2.0	0.12	0.0000078	0.0012	0.0053	0.00028	0.000013	0.000011	0.00012	0.00064	0.002
		July		44	6.6	0.077	0.035	0.14	0.038	0.022	0.00075	0.052	0.029	0.000011	7.8	0.00096	0.0012	0.14	0.0002	1.9	0.11	0.0000075	0.0011	0.0051	0.00027	0.000012	0.000011	0.00012	0.00061	0.002
		August		46	6.6	0.08	0.034	0.14	0.038	0.022	0.00084	0.059	0.029	0.000012	8.2	0.00097	0.0012	0.14	0.00021	2.0	0.11	0.0000078	0.0012	0.0053	0.00029	0.000013	0.000011	0.00013	0.00065	0.002
		September		47	6.5	0.083	0.032	0.13	0.038	0.022	0.00088	0.062	0.03	0.000012	8.4	0.00099	0.0012	0.15	0.00022	2.0	0.12	0.0000081	0.0012	0.0055	0.0003	0.000013	0.000012	0.00013	0.00068	0.0021
		October		47	6.4	0.084	0.031	0.13	0.038	0.022	0.00088	0.061	0.031	0.000012	8.3	0.001	0.0013	0.15	0.00022	2.0	0.12	0.0000082	0.0012	0.0056	0.0003	0.000013	0.000012	0.00013	0.00069	0.0021
		November		47	6.4	0.085	0.031	0.13	0.038	0.022	0.00087	0.061	0.031	0.000012	8.3	0.001	0.0013	0.15	0.00022	2.0	0.12	0.0000082	0.0012	0.0056	0.0003	0.000013	0.000012	0.00013	0.00069	0.0021
		December		47	6.4	0.085	0.031	0.13	0.038	0.022	0.00087	0.06	0.031	0.000012	8.2	0.001	0.0013	0.15	0.00022	2.0	0.12	0.0000082	0.0012	0.0056	0.0003	0.000013	0.000012	0.00013	0.00069	0.0021
		January	2028	47	6.4	0.085	0.031	0.13	0.038	0.022	0.00086	0.06	0.031	0.000012	8.2	0.001	0.0013	0.15	0.00022	2.0	0.12	0.0000082	0.0012	0.0057	0.0003	0.000013	0.000012	0.00013	0.00069	0.0021
		February		47	6.4	0.085	0.031	0.13	0.038	0.022	0.00086	0.059	0.032	0.000012	8.2	0.001	0.0013	0.15	0.00022	2.0	0.12	0.0000082	0.0012	0.0057	0.0003	0.000013	0.000012	0.00013	0.00069	0.0021
		March		47	6.4	0.085	0.031	0.13	0.039	0.022	0.00086	0.059	0.032	0.000012	8.1	0.001	0.0013	0.15	0.00023	2.0	0.12	0.0000083	0.0012	0.0057	0.0003	0.000013	0.000012	0.00013	0.00069	0.0021
		April		47	6.5	0.085	0.031	0.13	0.039	0.022	0.00085	0.059	0.032	0.000012	8.1	0.001	0.0013	0.15	0.00023	2.0	0.12	0.0000083	0.0012	0.0057	0.00029	0.000013	0.000012	0.00013	0.00069	0.0021
		May		46	6.5	0.086	0.031	0.14	0.039	0.022	0.00085	0.058	0.032	0.000012	8.1	0.001	0.0013	0.15	0.00023	2.0	0.12	0.0000083	0.0012	0.0057	0.00029	0.000013	0.000012	0.00013	0.00069	0.0021
		June		40	5.9	0.074	0.033	0.13	0.034	0.022	0.00067	0.046	0.027	0.000011	7.0	0.00094	0.0011	0.13	0.00019	1.8	0.1	0.0000074	0.00099	0.0047	0.00025	0.000013	0.000011	0.00012	0.00056	0.0019
		July		32	5.1	0.06	0.036	0.13	0.024	0.022	0.00048	0.033	0.021	0.0000084	5.7	0.00083	0.0009	0.11	0.00014	1.5	0.078	0.0000064	0.00071	0.0035	0.00019	0.000012	0.000011	0.0001	0.00039	0.0016
		August		32	5.0	0.06	0.036	0.12	0.023	0.022	0.00049	0.034	0.02	0.0000084	5.7	0.00083	0.00089	0.11	0.00014	1.5	0.077	0.0000065	0.0007	0.0034	0.00019	0.000012	0.000011	0.0001	0.00039	0.0016
		September		31	4.9	0.058	0.036	0.12	0.022	0.022	0.00047	0.033	0.02	0.0000082	5.6	0.00082	0.00087	0.11	0.00014	1.5	0.075	0.0000064	0.00067	0.0033	0.00019	0.000012	0.000011	0.0001	0.00037	0.0015
		October		31	4.8	0.057	0.036	0.12	0.021	0.022	0.00045	0.031	0.019	0.0000081	5.5	0.00081	0.00086	0.1	0.00013	1.4	0.073	0.0000063	0.00064	0.0032	0.00018	0.000012	0.000011	0.0001	0.00036	0.0015
		November		31	4.8	0.057	0.036	0.12	0.021	0.022	0.00045	0.031	0.019	0.0000081	5.5	0.00081	0.00086	0.1	0.00014	1.4	0.073	0.0000063	0.00065	0.0032	0.00018	0.000012	0.000011	0.0001	0.00036	0.0015
		December		31	4.8	0.057	0.035	0.12	0.021	0.022	0.00045	0.031	0.019	0.0000081	5.4	0.00082	0.00086	0.1	0.00014	1.4	0.073	0.0000063	0.00065	0.0032	0.00018	0.000012	0.000011	0.0001	0.00036	0.0015
		January	2029	31	4.8	0.058	0.035	0.12	0.021	0.022	0.00045	0.031	0.019	0.0000081	5.4	0.00082	0.00086	0.11	0.00014	1.4	0.073	0.0000063	0.00065	0.0032	0.00018	0.000012	0.000011	0.0001	0.00036	0.0015
		February		31	4.8	0.058	0.035	0.12	0.021	0.022	0.00045	0.031	0.019	0.0000081	5.4	0.00082	0.00087	0.11	0.00014	1.4	0.074	0.0000064	0.00065	0.0033	0.00018	0.000012	0.000011	0.0001	0.00036	0.0015
		March		31	4.8	0.058	0.035	0.12	0.021	0.022	0.00045	0.031	0.02	0.0000081	5.4	0.00082	0.00087	0.11	0.00014	1.4	0.074	0.0000064	0.00065	0.0033	0.00018	0.000012	0.000011	0.0001	0.00036	0.0015
		April		31	4.8	0.058	0.035	0.12	0.022	0.022	0.00045	0.031	0.02	0.0000081	5.4	0.00082	0.00087	0.11	0.00014	1.4	0.074	0.0000064	0.00065	0.0033	0.00018	0.000012	0.000011	0.0001	0.00036	0.0015
		May		31	4.8	0.058	0.035	0.12	0.022	0.022	0.00045	0.031	0.02	0.0000082	5.4	0.00082	0.00087	0.11	0.00014	1.4	0.074	0.0000064	0.00065	0.0033	0.00018	0.000012	0.000011	0.0001	0.00037	0.0015
		June		29	4.6	0.055	0.035	0.12	0.02	0.022	0.0004	0.027	0.018	0.0000077	5.1	0.0008	0.00083	0.1	0.00013	1.4	0.068	0.0000062	0.00059	0.003	0.00017	0.000012	0.000011	0.0001	0.00033	0.0015
		July		27	4.4	0.051	0.035	0.11	0.018	0.022	0.00036	0.024	0.017	0.0000073	4.9	0.00078	0.00078	0.096	0.00012	1.3	0.062	0.0000059	0.00053	0.0028	0.00016	0.000011	0.00001	0.000098	0.00029	0.0014
		August		27	4.4	0.052	0.035	0.11	0.018	0.022	0.00037	0.025	0.017	0.0000073	4.9	0.00078	0.00078	0.096	0.00012	1.3	0.062	0.000006	0.00053	0.0028	0.00016	0.000011	0.00001	0.000099	0.00029	0.0014
		September		27	4.4	0.051	0.034	0.11	0.018	0.022	0.00037	0.025	0.017	0.0000073	4.9	0.00078	0.00078	0.095	0.00012	1.3	0.061	0.000006	0.00052	0.0028	0.00016	0.000011	0.00001	0.000099	0.00029	0.0014
		October		27	4.3	0.051	0.034	0.11	0.017	0.022	0.00036	0.024	0.017	0.0000073	4.8	0.00077	0.00078	0.095	0.00012	1.3	0.061	0.000006	0.00051	0.0027	0.00016	0.000011	0.00001	0.000099	0.00029	0.0014
		November		27	4.3	0.051	0.034	0.11	0.017	0.022	0.00036	0.024	0.017	0.0000073	4.8	0.00078	0.00078	0.095	0.00012	1.3	0.061	0.000006	0.00052	0.0027	0.00016	0.000011	0.00001	0.000099	0.00029	0.0014
		December		27	4.3	0.051	0.034	0.11	0.017	0.022	0.00036	0.024	0.017	0.0000073	4.8	0.00078	0.00078	0.095	0.00012	1.3	0.061	0.000006	0.00052	0.0027	0.00016	0.000011	0.00001	0.000099	0.00029	0.0014
		January	2030	27	4.3	0.051	0.034	0.11	0.017	0.022	0.00036	0.024	0.017	0.0000073	4.8	0.00078	0.00078	0.096	0.00012	1.3	0.061	0.000006	0.00052	0.0027	0.00016	0.000011	0.00001	0.000099	0.00029	0.0014
		February		27	4.3	0.051	0.034	0.11	0.018	0.022	0.00036	0.024	0.017	0.0000073	4.8	0.00078	0.00078	0.096	0.00012	1.3	0.061	0.000006	0.00052	0.0028	0.00016	0.000011	0.00001	0.000099	0.00029	0.0014
		March		27	4.3	0.051	0.034	0.11	0.018	0.022	0.00036	0.024	0.017	0.0000073	4.8	0.00078	0.00079	0.096	0.00012	1.3	0.061	0.000006	0.00052	0.0028	0.00016	0.000011	0.00001	0.000099	0.00029	0.0014
		April		27	4.4	0.051	0.034	0.11	0.018	0.022	0.00036	0.024	0.017	0.0000073	4.8	0.00078	0.00079	0.096	0.00012	1.3	0.061	0.000006	0.00052	0.0028	0.00016	0.000012	0.00001	0.000099	0.00029	0.0014
		May		27	4.4	0.052	0.034	0.11	0.018	0.022	0.00036	0.024	0.017	0.0000073	4.8	0.00078	0.00079	0.096	0.00012	1.3	0.061	0.000006	0.00052	0.0028	0.00016	0.000012	0.00001	0.000099	0.00029	0.0014
		June		26	4.3	0.05	0.033	0.11	0.017	0.022	0.00034	0.023	0.017	0.0000072	4.7	0.00077	0.00077	0.094	0.00012	1.3	0.059	0.0000059	0.0005	0.0027	0.00015	0.000011	0.00001	0.000098	0.00027	0.0014
		July		25	4.2	0.048	0.032	0.1	0.016	0.022	0.00032	0.021	0.016	0.000007	4.5	0.00076	0.00075	0.092	0.00011	1.2	0.055	0.0000058	0.00046	0.0025	0.00014	0.000011	0.00001	0.000098	0.00026	0.0014
		August		25	4.2	0.048	0.032	0.1	0.016	0.022	0.00033	0.022	0.016	0.000007	4.6	0.00076	0.00075	0.092	0.00011	1.2	0.055	0.0000058	0.00047	0.0026	0.00015	0.000011	0.00001	0.000098	0.00026	0.0014
		September		25	4.1	0.048	0.032	0.1	0.016	0.022	0.00033	0.021	0.016	0.000007	4.5	0.00076	0.00075	0.092	0.00011	1.2	0.055	0.0000058	0.00046	0.0026	0.00015	0.000011	0.00001	0.000098	0.00026	0.0014
		October		25	4.1	0.048	0.032	0.10	0.016	0.022	0.00032	0.021	0.016	0.000007	4.5	0.00076	0.00075	0.092	0.00011	1.2	0.055	0.0000058	0.00046	0.0025	0.00014	0.000011	0.00001	0.000098	0.00025	0.0014
		November		25	4.1	0.048	0.032	0.10	0.016	0.022	0.00032	0.021	0.016	0.000007	4.5	0.00076	0.00075	0.092	0.00011	1.2	0.055	0.0000058	0.00046	0.0026	0.00014	0.000011	0.00001	0.000098	0.00026	0.0014
		December		25	4.1	0.048	0.032	0.10	0.016	0.022	0.00032	0.021	0.016	0.000007	4.5	0.00076	0.00075	0.092	0.00011	1.2	0.055	0.0000059	0.00046	0.0026	0.00014	0.000011	0.00001	0.000099	0.00026	0.0014
		January	2031	25	4.1	0.048	0.031	0.10	0.016	0.022	0.00032	0.021	0.016	0.000007	4.5	0.00076	0.00075	0.092	0.00011	1.2	0.055	0.0000059	0.00046	0.0026	0.00014	0.000011	0.00001	0.000099	0.00026	0.0014
		February		25	4.1	0.049	0.031	0.1	0.016	0.022	0.00032	0.021	0.016	0.000007	4.5	0.00076	0.00076	0.092	0.00011	1.2	0.055	0.0000059	0.00046	0.0026	0.00014	0.000011	0.00001	0.000099	0.00026	0.0014
		March		25	4.1	0.049	0.031	0.1	0.016	0.022	0.00032	0.021	0.016	0.000007	4.5	0.00076	0.00076	0.092	0.00011	1.2	0.055	0.0000059	0.00046	0.0026	0.00014	0.000011	0.00001	0.000099	0.00026	0.0014
		April		25	4.1	0.049	0.031	0.1	0.016	0.022	0.00032	0.021	0.016	0.000007	4.5	0.00076	0.00076	0.092	0.00011	1.2	0.055	0.0000059	0.00047	0.0026	0.00014	0.000011	0.00001	0.000099	0.00026	0.0014
		May		25	4.1	0.049	0.031	0.1	0.016	0.022	0.00032	0.021	0.016	0.000007	4.5	0.00076	0.00076	0.093	0.00011	1.2	0.055	0.0000059	0.00047	0.0026	0.00014	0.000011	0.00001	0.000099	0.00026	0.0014
		June		24	4.1	0.048	0.031	0.098	0.016	0.022	0.00031	0.02	0.016	0.0000069	4.4	0.00076	0.00075	0.091	0.00011	1.2	0.053	0.0000058	0.00045	0.0025	0.00014	0.000011	0.00001	0.000098	0.00025	0.0014
		July		24	4.0	0.047	0.03	0.094	0.015	0.022	0.0003	0.019	0.016	0.0000068	4.3	0.00075	0.00074	0.09	0.00011	1.2	0.051	0.0000058	0.00043	0.0024	0.00014	0.000011	0.00001	0.000098	0.00024	0.0014
		August		24	4.0	0.047	0.03	0.094	0.015	0.022	0.0003	0.019	0.016	0.0000068	4.4	0.00075	0.00074	0.09	0.00011	1.2	0.051	0.0000058	0.00043	0.0024	0.00014	0.000011	0.00001	0.000098	0.00024	0.0014
		September		24	4.0	0.047	0.03	0.092	0.015	0.022	0.0003	0.019	0.016	0.0000068	4.3	0.00075	0.00074	0.09	0.00011	1.2	0.051	0.0000058	0.00043	0.0025	0.00014	0.000011	0.00001	0.000099	0.00024	0.0014
		October		24	4.0	0.047	0.029	0.091	0.015	0.022	0.0003	0.019	0.016	0.0000068	4.3	0.00075	0.00074	0.09	0.00011	1.2	0.051	0.0000058	0.00043	0.0025	0.00014	0.000011	0.00001	0.000099	0.00024	0.0014
		November		24	4.0	0.047	0.029	0.091	0.015	0.022	0.0003	0.019	0.016	0.0000068	4.3	0.00076	0.00074	0.09	0.00011	1.2	0.051	0.0000058	0.00043	0.0025	0.00014	0.000011	0.00001	0.000099	0.00024	0.0014
		December		24	4.0	0.047	0.029	0.091	0.015	0.022	0.0003	0.019	0.016	0.0000068	4.3	0.00076	0.00074	0.09	0.00011	1.2	0.051	0.0000058	0.00043	0.0025	0.00014	0.000011	0.00001	0.000099	0.00024	0.0014

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5		0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
		CEQG aquatic life (long-term)[1] (mg/L)			120	0.12	12.6	2.93	0.01	0.1		0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008		0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	Sb	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Pit	Closure	January	2032	24	4.0	0.047	0.029	0.091	0.015	0.022	0.0003	0.019	0.016	0.0000068	4.3	0.00076	0.00074	0.09	0.00011	1.2	0.051	0.0000058	0.00043	0.0025	0.00014	0.000011	0.00001	0.000099	0.00024	0.0014
		February		24	4.0	0.047	0.029	0.092	0.015	0.022	0.0003	0.019	0.016	0.0000068	4.3	0.00076	0.00074	0.091	0.00011	1.2	0.051	0.0000058	0.00043	0.0025	0.00014	0.000011	0.00001	0.000099	0.00024	0.0014
		March		24	4.0	0.047	0.029	0.092	0.015	0.022	0.0003	0.019	0.016	0.0000069	4.3	0.00076	0.00074	0.091	0.00011	1.2	0.051	0.0000058	0.00043	0.0025	0.00014	0.000011	0.00001	0.000099	0.00024	0.0014
		April		24	4.0	0.047	0.029	0.092	0.015	0.022	0.0003	0.019	0.016	0.0000069	4.3	0.00076	0.00074	0.091	0.00011	1.2	0.051	0.0000058	0.00043	0.0025	0.00014	0.000011	0.00001	0.000099	0.00024	0.0014
		May		24	4.0	0.047	0.029	0.092	0.015	0.022	0.0003	0.019	0.016	0.0000069	4.3	0.00076	0.00074	0.091	0.00011	1.2	0.051	0.0000058	0.00043	0.0025	0.00014	0.000011	0.00001	0.000099	0.00024	0.0014
		June		23	4.0	0.046	0.029	0.09	0.015	0.022	0.00029	0.018	0.016	0.0000068	4.3	0.00075	0.00074	0.09	0.00011	1.2	0.05	0.0000058	0.00042	0.0024	0.00014	0.000011	0.00001	0.000099	0.00023	0.0014
		July		23	3.9	0.045	0.028	0.087	0.014	0.022	0.00028	0.018	0.015	0.0000067	4.2	0.00075	0.00073	0.089	0.00011	1.2	0.048	0.0000057	0.0004	0.0024	0.00013	0.000011	0.00001	0.000099	0.00022	0.0014
		August		23	3.9	0.045	0.028	0.086	0.014	0.022	0.00029	0.018	0.015	0.0000067	4.2	0.00075	0.00073	0.089	0.00011	1.2	0.048	0.0000057	0.00041	0.0024	0.00013	0.000011	0.00001	0.000099	0.00023	0.0014
		September		23	3.9	0.045	0.027	0.085	0.014	0.022	0.00029	0.018	0.015	0.0000067	4.2	0.00075	0.00073	0.089	0.00011	1.2	0.048	0.0000058	0.0004	0.0024	0.00013	0.000011	0.00001	0.000099	0.00022	0.0014
		October		23	3.9	0.045	0.027	0.084	0.014	0.022	0.00029	0.018	0.015	0.0000067	4.2	0.00075	0.00073	0.089	0.00011	1.2	0.048	0.0000058	0.0004	0.0024	0.00013	0.000011	0.00001	0.000099	0.00022	0.0014
		November		23	3.9	0.045	0.027	0.084	0.014	0.022	0.00029	0.018	0.015	0.0000067	4.2	0.00075	0.00073	0.089	0.00011	1.2	0.048	0.0000058	0.0004	0.0024	0.00013	0.000011	0.00001	0.000099	0.00022	0.0014
		December		23	3.9	0.045	0.027	0.084	0.014	0.022	0.00029	0.018	0.015	0.0000067	4.2	0.00075	0.00073	0.089	0.00011	1.2	0.048	0.0000058	0.0004	0.0024	0.00013	0.000011	0.00001	0.000099	0.00022	0.0014
		January	2033	23	3.9	0.045	0.027	0.084	0.014	0.022	0.00029	0.018	0.015	0.0000067	4.2	0.00075	0.00074	0.089	0.00011	1.2	0.048	0.0000058	0.0004	0.0024	0.00013	0.000011	0.00001	0.000099	0.00022	0.0014
		February		23	3.9	0.046	0.027	0.084	0.014	0.022	0.00029	0.018	0.015	0.0000067	4.2	0.00075	0.00074	0.09	0.00011	1.2	0.048	0.0000058	0.0004	0.0024	0.00013	0.000011	0.00001	0.00010	0.00023	0.0014
		March		23	3.9	0.046	0.027	0.084	0.014	0.022	0.00029	0.018	0.015	0.0000068	4.2	0.00075	0.00074	0.09	0.00011	1.2	0.048	0.0000058	0.0004	0.0024	0.00013	0.000011	0.00001	0.00010	0.00023	0.0014
		April		23	3.9	0.046	0.027	0.084	0.014	0.022	0.00029	0.018	0.015	0.0000068	4.2	0.00075	0.00074	0.09	0.00011	1.2	0.048	0.0000058	0.0004	0.0024	0.00013	0.000011	0.00001	0.00010	0.00023	0.0014
		May		23	3.9	0.046	0.027	0.084	0.014	0.022	0.00029	0.018	0.015	0.0000068	4.2	0.00075	0.00074	0.09	0.00011	1.2	0.048	0.0000058	0.0004	0.0024	0.00013	0.000011	0.00001	0.00010	0.00023	0.0014
		June		23	3.8	0.045	0.027	0.083	0.014	0.022	0.00028	0.017	0.015	0.0000067	4.1	0.00075	0.00073	0.089	0.00011	1.2	0.047	0.0000058	0.00039	0.0024	0.00013	0.000011	0.00001	0.00010	0.00022	0.0014
		July		22	3.8	0.044	0.026	0.08	0.014	0.022	0.00027	0.017	0.015	0.0000066	4.1	0.00075	0.00073	0.088	0.00011	1.1	0.045	0.0000057	0.00038	0.0023	0.00013	0.000011	0.00001	0.000099	0.00021	0.0014
		August		22	3.8	0.044	0.026	0.08	0.014	0.022	0.00028	0.017	0.015	0.0000067	4.1	0.00075	0.00073	0.089	0.00011	1.2	0.045	0.0000057	0.00038	0.0024	0.00013	0.000011	0.00001	0.00010	0.00021	0.0014
		September		22	3.8	0.044	0.025	0.079	0.014	0.022	0.00028	0.017	0.015	0.0000067	4.1	0.00075	0.00073	0.089	0.00011	1.1	0.045	0.0000057	0.00038	0.0024	0.00013	0.000011	0.00001	0.00010	0.00021	0.0014
		October		22	3.8	0.044	0.025	0.078	0.014	0.022	0.00027	0.017	0.015	0.0000067	4.1	0.00075	0.00073	0.089	0.00011	1.1	0.045	0.0000057	0.00038	0.0024	0.00013	0.000011	0.00001	0.0001	0.00021	0.0014
		November		22	3.8	0.044	0.025	0.078	0.014	0.022	0.00027	0.017	0.015	0.0000067	4.1	0.00075	0.00073	0.089	0.00011	1.1	0.045	0.0000057	0.00038	0.0024	0.00013	0.000011	0.00001	0.0001	0.00021	0.0014
		December		22	3.8	0.044	0.025	0.078	0.014	0.022	0.00027	0.017	0.015	0.0000067	4.1	0.00075	0.00073	0.089	0.00011	1.1	0.045	0.0000057	0.00038	0.0024	0.00013	0.000011	0.00001	0.0001	0.00021	0.0014
		January	2034	22	3.8	0.045	0.025	0.078	0.014	0.022	0.00027	0.017	0.015	0.0000067	4.1	0.00075	0.00073	0.089	0.00011	1.1	0.045	0.0000058	0.00038	0.0024	0.00013	0.000011	0.00001	0.0001	0.00021	0.0014
		February		22	3.8	0.045	0.025	0.078	0.014	0.022	0.00028	0.017	0.015	0.0000067	4.1	0.00075	0.00073	0.089	0.00011	1.1	0.045	0.0000058	0.00038	0.0024	0.00013	0.000011	0.00001	0.0001	0.00022	0.0014
		March		22	3.8	0.045	0.025	0.078	0.014	0.022	0.00028	0.017	0.015	0.0000067	4.1	0.00075	0.00073	0.089	0.00011	1.1	0.045	0.0000058	0.00038	0.0024	0.00013	0.000011	0.00001	0.0001	0.00022	0.0014
		April		22	3.8	0.045	0.025	0.078	0.014	0.022	0.00028	0.017	0.015	0.0000067	4.1	0.00075	0.00073	0.089	0.00011	1.1	0.046	0.0000058	0.00038	0.0024	0.00013	0.000012	0.00001	0.0001	0.00022	0.0014
		May		22	3.8	0.045	0.025	0.078	0.014	0.022	0.00028	0.017	0.015	0.0000067	4.1	0.00075	0.00073	0.089	0.00011	1.1	0.046	0.0000058	0.00038	0.0024	0.00013	0.000012	0.00001	0.0001	0.00022	0.0014
		June		22	3.7	0.044	0.025	0.077	0.014	0.022	0.00027	0.016	0.015	0.0000066	4.0	0.00075	0.00073	0.089	0.00011	1.1	0.045	0.0000057	0.00038	0.0023	0.00013	0.000011	0.00001	0.0001	0.00021	0.0014
		July		22	3.7	0.044	0.024	0.074	0.014	0.022	0.00027	0.016	0.015	0.0000066	4.0	0.00075	0.00073	0.088	0.00011	1.1	0.043	0.0000057	0.00037	0.0023	0.00013	0.000011	0.00001	0.0001	0.00021	0.0014
		August		22	3.7	0.044	0.024	0.074	0.014	0.022	0.00027	0.016	0.015	0.0000066	4.0	0.00075	0.00073	0.088	0.00011	1.1	0.044	0.0000057	0.00037	0.0023	0.00013	0.000011	0.00001	0.0001	0.00021	0.0014
		September		22	3.7	0.044	0.024	0.073	0.014	0.022	0.00027	0.016	0.015	0.0000066	4.0	0.00075	0.00073	0.088	0.00011	1.1	0.043	0.0000057	0.00037	0.0023	0.00013	0.000012	0.00001	0.0001	0.00021	0.0014
		October		22	3.7	0.044	0.024	0.073	0.013	0.022	0.00027	0.016	0.015	0.0000066	4.0	0.00075	0.00073	0.088	0.00011	1.1	0.043	0.0000057	0.00036	0.0023	0.00013	0.000012	0.00001	0.0001	0.00021	0.0014
		November		22	3.7	0.044	0.024	0.073	0.013	0.022	0.00027	0.016	0.015	0.0000066	4.0	0.00075	0.00073	0.088	0.00011	1.1	0.043	0.0000057	0.00037	0.0023	0.00013	0.000012	0.00001	0.0001	0.00021	0.0014
		December		22	3.7	0.044	0.024	0.073	0.013	0.022	0.00027	0.016	0.015	0.0000066	4.0	0.00075	0.00073	0.089	0.00011	1.1	0.044	0.0000057	0.00037	0.0023	0.00013	0.000012	0.00001	0.0001	0.00021	0.0014
		January	2035	22	3.7	0.044	0.024	0.073	0.014	0.022	0.00027	0.016	0.015	0.0000066	4.0	0.00075	0.00073	0.089	0.00011	1.1	0.044	0.0000057	0.00037	0.0023	0.00013	0.000012	0.00001	0.0001	0.00021	0.0014
		February		22	3.7	0.044	0.024	0.073	0.014	0.022	0.00027	0.016	0.015	0.0000066	4.0	0.00075	0.00073	0.089	0.00011	1.1	0.044	0.0000057	0.00037	0.0023	0.00013	0.000012	0.00001	0.0001	0.00021	0.0014
		March		22	3.7	0.044	0.024	0.073	0.014	0.022	0.00027	0.016	0.015	0.0000066	4.0	0.00075	0.00073	0.089	0.00011	1.1	0.044	0.0000058	0.00037	0.0023	0.00013	0.000012	0.00001	0.0001	0.00021	0.0014
		April		22	3.7	0.044	0.024	0.073	0.014	0.022	0.00027	0.016	0.015	0.0000066	4.0	0.00075	0.00073	0.089	0.00011	1.1	0.044	0.0000058	0.00037	0.0023	0.00013	0.000012	0.00001	0.0001	0.00021	0.0014
		May		22	3.7	0.044	0.024	0.073	0.014	0.022	0.00027	0.016	0.015	0.0000066	4.0	0.00075	0.00073	0.089	0.00011	1.1	0.044	0.0000058	0.00037	0.0024	0.00013	0.000012	0.00001	0.0001	0.00021	0.0014
		June		21	3.6	0.044	0.023	0.072	0.014	0.022	0.00026	0.015	0.015	0.0000066	3.9	0.00075	0.00073	0.089	0.00011	1.1	0.043	0.0000057	0.00036	0.0023	0.00013	0.000012	0.00001	0.0001	0.0002	0.0014
		July		21	3.6	0.043	0.023	0.07	0.013	0.022	0.00026	0.015	0.015	0.0000066	3.9	0.00075	0.00073	0.088	0.00011	1.1	0.042	0.0000057	0.00035	0.0023	0.00012	0.000012	0.00001	0.0001	0.0002	0.0014
		August		21	3.6	0.043	0.023	0.07	0.013	0.022	0.00026	0.015	0.015	0.0000066	3.9	0.00075	0.00073	0.088	0.00011	1.1	0.042	0.0000057	0.00035	0.0023	0.00013	0.000012	0.00001	0.0001	0.0002	0.0014
		September		21	3.6	0.043	0.022	0.069	0.013	0.022	0.00026	0.015	0.015	0.0000066	3.9	0.00075	0.00073	0.088	0.00011	1.1	0.042	0.0000057	0.00035	0.0023	0.00013	0.000012	0.00001	0.0001	0.0002	0.0014
		October		21	3.6	0.043	0.022	0.068	0.013	0.022	0.00026	0.015	0.015	0.0000066	3.9	0.00075	0.00073	0.088	0.00011	1.1	0.042	0.0000057	0.00035	0.0023	0.00013	0.000012	0.000011	0.0001	0.0002	0.0014
		November		21	3.6	0.043	0.022	0.068	0.013	0.022	0.00026	0.015	0.015	0.0000066	3.9	0.00075	0.00073	0.088	0.00011	1.1	0.042	0.0000057	0.00035	0.0023	0.00013	0.000012	0.000011	0.0001	0.0002	0.0014
		December		21	3.6	0.043	0.022	0.068	0.013	0.022	0.00026	0.015	0.015	0.0000066	3.9	0.00075	0.00073	0.089	0.00011	1.1	0.042	0.0000057	0.00035	0.0023	0.00013	0.000012	0.000011	0.0001	0.0002	0.0014
		January	2036	21	3.6	0.043	0.022	0.069	0.013	0.022	0.00026	0.015	0.015	0.0000066	3.9	0.00075	0.00073	0.089	0.00011	1.1	0.042	0.0000057	0.00035	0.0023	0.00013	0.000012	0.000011	0.0001	0.0002	0.0014
		February		21	3.6	0.043	0.022	0.069	0.013	0.022	0.00026	0.015	0.015	0.0000066	3.9	0.00075	0.00073	0.089	0.00011	1.1	0.042	0.0000057	0.00035	0.0023	0.00013	0.000012	0.000011	0.0001	0.0002	0.0014
		March		21	3.6	0.043	0.022	0.069	0.013	0.022	0.00026	0.015	0.015	0.0000066	3.9	0.00075	0.00073	0.089	0.00011	1.1	0.042	0.0000058	0.00035	0.0023	0.00013	0.000012	0.000011	0.0001	0.0002	0.0014
		April		21	3.6	0.043	0.022	0.069	0.013	0.022	0.00026	0.015	0.015	0.0000066	3.9	0.00075	0.00073	0.089	0.00011	1.1	0.042	0.0000058	0.00035	0.0023	0.00013	0.000012	0.000011	0.0001	0.0002	0.0014
		May		21	3.6	0.043	0.022	0.069	0.014	0.022	0.00026	0.015	0.015	0.0000066	3.9	0.00075	0.00073	0.089	0.00011	1.1	0.042	0.0000058	0.00035	0.0023	0.00013	0.000012	0.000011	0.0001	0.0002	0.0014
		June		21	3.6	0.043	0.022	0.068	0.013	0.022	0.00026	0.015	0.015	0.0000066	3.9	0.00075	0.00073	0.089	0.00011	1.1	0.042	0.0000057	0.00035	0.0023	0.00012	0.000012	0.000011	0.0001	0.0002	0.0014
		July		21	3.5	0.043	0.021	0.066	0.013	0.022	0.00025	0.014	0.015	0.0000065	3.8	0.00075	0.00073	0.088	0.00011	1.1	0.041	0.0000057	0.00034	0.0023	0.00012	0.000012	0.00001	0.0001	0.0002	0.0014
		August		21	3.5	0.043	0.021	0.066	0.013	0.022	0.00025	0.014	0.015	0.0000065	3.8	0.00075	0.00073	0.088	0.00011	1.1	0.041	0.0000057	0.00034	0.0023	0.00012	0.000012	0.000011	0.0001	0.0002	0.0014
		September		21	3.5	0.043	0.021	0.065	0.013	0.022	0.00025	0.014	0.015	0.0000066	3.8	0.00075	0.00073	0.088	0.00011	1.1	0.041	0.0000057	0.00034	0.0023	0.00012	0.000012	0.000011	0.0001	0.0002	0.0014
		October		21	3.5	0.043	0.021	0.065	0.013	0.022	0.00025	0.014	0.015	0.0000066	3.8	0.00075	0.00073	0.088	0.00011	1.1	0.041	0.0000057	0.00034	0.0023	0.00012	0.000012	0.000011	0.0001	0.0002	0.0014
		November		21	3.5	0.043	0.021	0.065	0.013	0.022	0.00025	0.014	0.015	0.0000066	3.8	0.00075	0.00073	0.088	0.00011	1.1	0.041	0.0000057	0.00034	0.0023	0.00012	0.000012	0.000011	0.0001	0.0002	0.0014
		December		21	3.5	0.043	0.021	0.065	0.013	0.022	0.00025	0.014	0.015	0.0000066	3.8	0.00075	0.00073	0.088	0.00011	1.1	0.041	0.0000057	0.00034	0.0023	0.00012	0.000012	0.000011	0.0001	0.0002	0.0014
		January	2037	21	3.5	0.043	0.021	0.065	0.013	0.022	0.00025	0.014	0.015	0.0000066	3.8	0.00075	0.00073	0.089	0.00011	1.1	0.041	0.0000057	0.00034	0.0023	0.00012	0.000012	0.000011	0.0001	0.0002	0.0014
		February		21	3.5	0.043	0.021	0.065	0.013	0.022	0.00025	0.014	0.015	0.0000066	3.8	0.00075	0.00073	0.089	0.00011	1.1	0.041	0.0000057	0.00034	0.0023	0.00012	0.000012	0.000011	0.0001	0.0002	0.0014
		March		21	3.5	0.043	0.021	0.065	0.013	0.022	0.00025	0.014	0.015	0.0000066	3.8	0.00075	0.00073	0.089	0.00011	1.1	0.041	0.0000057	0.00034	0.0023	0.00012	0.000012	0.000011	0.0001	0.0002	0.0014
		April		21	3.5	0.043	0.021	0.065	0.013	0.022	0.00025	0.014	0.015	0.0000066	3.8	0.00075	0.00073	0.089	0.00011	1.1	0.041	0.0000058	0.00034	0.0023	0.00012	0.000012	0.000011	0.0001	0.0002	0.0014
		May		21	3.5	0.043	0.021	0.065	0.013	0.022	0.00025	0.014	0.015	0.0000066	3.8	0.00075	0.00073	0.089	0.00011	1.1	0.041	0.0000058	0.00034	0.0023	0.00012	0.000012	0.000011	0.0001	0.0002	0.0014
		June		21	3.5	0.043	0.021	0.064	0.013	0.022	0.00025	0.014	0.015	0.0000066	3.8	0.00075	0.00073	0.088	0.00011	1.1	0.041	0.0000057	0.00034	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		July		20	3.5	0.042	0.02	0.063	0.013	0.022	0.00025	0.014	0.015	0.0000065	3.8	0.00075	0.00073	0.088	0.00011	1.1	0.04	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		August		20	3.5	0.042	0.02	0.063	0.013	0.022	0.00025	0.014	0.015	0.0000065	3.8	0.00075	0.00073	0.088	0.00011	1.1	0.04	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		September		20	3.5	0.042	0.02	0.062	0.013	0.022	0.00025	0.014	0.015	0.0000065	3.8	0.00075	0.00073	0.088	0.00011	1.1	0.04	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		October		20	3.5	0.042	0.02	0.062	0.013	0.022	0.00025	0.014	0.015	0.0000065	3.8	0.00075	0.00073	0.088	0.00011	1.1	0.04	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		November		20	3.5	0.042	0.02	0.062	0.013	0.022	0.00025	0.014	0.015	0.0000065	3.8	0.00075	0.00073	0.088	0.00011	1.1	0.04	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		December		20	3.5	0.042	0.02	0.062	0.013	0.022	0.00025	0.014	0.015	0.0000065	3.8	0.00075	0.00073	0.088	0.00011	1.1	0.04	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5		0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
		CEQG aquatic life (long-term)[1] (mg/L)			120	0.12	12.6	2.93	0.01	0.1		0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008		0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	Sb	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Pit	Closure	January	2038	20	3.5	0.043	0.02	0.062	0.013	0.022	0.00025	0.014	0.015	0.0000065	3.8	0.00075	0.00073	0.089	0.00011	1.1	0.04	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		February		20	3.5	0.043	0.02	0.062	0.013	0.022	0.00025	0.014	0.015	0.0000065	3.8	0.00075	0.00073	0.089	0.00011	1.1	0.04	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		March		20	3.5	0.043	0.02	0.062	0.013	0.022	0.00025	0.014	0.015	0.0000065	3.8	0.00075	0.00073	0.089	0.00011	1.1	0.04	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		April		20	3.5	0.043	0.02	0.062	0.013	0.022	0.00025	0.014	0.015	0.0000065	3.8	0.00075	0.00073	0.089	0.00011	1.1	0.04	0.0000058	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		May		20	3.5	0.043	0.02	0.062	0.013	0.022	0.00025	0.014	0.015	0.0000066	3.8	0.00075	0.00073	0.089	0.00011	1.1	0.04	0.0000058	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		June		20	3.4	0.042	0.02	0.061	0.013	0.022	0.00025	0.014	0.015	0.0000065	3.7	0.00075	0.00073	0.089	0.00011	1.1	0.04	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		July		20	3.4	0.042	0.02	0.06	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.088	0.00011	1.1	0.039	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		August		20	3.4	0.042	0.019	0.06	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.088	0.00011	1.1	0.039	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		September		20	3.4	0.042	0.019	0.059	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.088	0.00011	1.1	0.039	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		October		20	3.4	0.042	0.019	0.059	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.088	0.00011	1.1	0.039	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		November		20	3.4	0.042	0.019	0.059	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.088	0.00011	1.1	0.039	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		December		20	3.4	0.042	0.019	0.059	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.088	0.00011	1.1	0.039	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		January	2039	20	3.4	0.042	0.019	0.059	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.088	0.00011	1.1	0.039	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		February		20	3.4	0.042	0.019	0.059	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.088	0.00011	1.1	0.039	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		March		20	3.5	0.042	0.019	0.059	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.088	0.00011	1.1	0.039	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		April		20	3.5	0.042	0.019	0.059	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.089	0.00011	1.1	0.039	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		May		20	3.5	0.042	0.019	0.059	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.089	0.00011	1.1	0.039	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		June		20	3.4	0.042	0.019	0.059	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.088	0.00011	1.1	0.039	0.0000057	0.00033	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		July		20	3.4	0.042	0.019	0.057	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.088	0.00011	1.1	0.038	0.0000057	0.00032	0.0023	0.00012	0.000012	0.000011	0.0001	0.00019	0.0014
		August		20	3.4	0.042	0.019	0.057	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.088	0.00011	1.1	0.038	0.0000057	0.00032	0.0023	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		September		20	3.4	0.042	0.019	0.057	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.088	0.00011	1.1	0.038	0.0000057	0.00032	0.0023	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		October		20	3.4	0.041	0.019	0.056	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.087	0.00011	1.1	0.038	0.0000057	0.00032	0.0023	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		November		20	3.4	0.041	0.019	0.056	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.087	0.00011	1.1	0.038	0.0000057	0.00032	0.0023	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		December		20	3.4	0.041	0.019	0.056	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.087	0.00011	1.1	0.038	0.0000057	0.00032	0.0023	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		January	2040	20	3.4	0.041	0.019	0.056	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.087	0.00011	1.1	0.038	0.0000057	0.00032	0.0023	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		February		20	3.4	0.042	0.019	0.056	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.087	0.00011	1.1	0.038	0.0000057	0.00032	0.0023	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		March		20	3.4	0.042	0.019	0.056	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.088	0.00011	1.1	0.038	0.0000057	0.00032	0.0023	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		April		20	3.4	0.042	0.019	0.056	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.088	0.00011	1.1	0.038	0.0000057	0.00032	0.0023	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		May		20	3.4	0.042	0.019	0.056	0.013	0.022	0.00024	0.013	0.015	0.0000065	3.7	0.00075	0.00073	0.088	0.00011	1.1	0.038	0.0000057	0.00032	0.0023	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		June		20	3.4	0.041	0.018	0.056	0.013	0.022	0.00023	0.013	0.015	0.0000065	3.7	0.00075	0.00072	0.087	0.00011	1.1	0.037	0.0000057	0.00032	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		July		20	3.4	0.041	0.018	0.055	0.012	0.022	0.00023	0.013	0.015	0.0000064	3.7	0.00075	0.00072	0.087	0.00011	1.1	0.037	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		August		20	3.4	0.041	0.018	0.055	0.012	0.022	0.00023	0.013	0.015	0.0000064	3.7	0.00074	0.00072	0.087	0.00011	1.1	0.037	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		September		20	3.4	0.041	0.018	0.055	0.012	0.022	0.00023	0.013	0.015	0.0000064	3.7	0.00074	0.00072	0.087	0.0001	1.1	0.036	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		October		20	3.4	0.041	0.018	0.055	0.012	0.022	0.00023	0.013	0.015	0.0000064	3.7	0.00074	0.00072	0.087	0.0001	1.1	0.036	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		November		20	3.4	0.041	0.018	0.055	0.012	0.022	0.00023	0.013	0.015	0.0000064	3.7	0.00074	0.00072	0.087	0.0001	1.1	0.036	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		December		20	3.4	0.041	0.018	0.055	0.012	0.022	0.00023	0.013	0.015	0.0000064	3.7	0.00074	0.00072	0.087	0.0001	1.1	0.036	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		January	2041	20	3.4	0.041	0.018	0.055	0.012	0.022	0.00023	0.013	0.015	0.0000064	3.7	0.00074	0.00072	0.087	0.0001	1.1	0.036	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		February		20	3.4	0.041	0.018	0.055	0.012	0.022	0.00023	0.013	0.015	0.0000064	3.7	0.00074	0.00072	0.087	0.0001	1.1	0.036	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		March		20	3.4	0.041	0.018	0.055	0.012	0.022	0.00023	0.013	0.015	0.0000064	3.7	0.00074	0.00072	0.087	0.0001	1.1	0.036	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		April		20	3.4	0.041	0.018	0.055	0.012	0.022	0.00023	0.013	0.015	0.0000064	3.7	0.00074	0.00072	0.087	0.0001	1.1	0.036	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		May		20	3.4	0.041	0.018	0.055	0.012	0.022	0.00023	0.013	0.015	0.0000064	3.7	0.00074	0.00072	0.087	0.0001	1.1	0.036	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		June		20	3.4	0.041	0.018	0.055	0.012	0.022	0.00023	0.013	0.014	0.0000064	3.7	0.00074	0.00072	0.087	0.0001	1.1	0.036	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		July		20	3.4	0.041	0.018	0.055	0.013	0.022	0.00023	0.012	0.014	0.0000064	3.6	0.00074	0.00072	0.087	0.0001	1.1	0.036	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		August		20	3.4	0.041	0.018	0.054	0.013	0.022	0.00023	0.012	0.014	0.0000064	3.7	0.00074	0.00072	0.087	0.0001	1.1	0.035	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
			MINIMUM	20	3.4	0.041	0.018	0.054	0.012	0.017	0.00013	0.0015	0.013	0.0000064	3.6	0.00055	0.00072	0.058	0.0001	1.1	0.035	0.0000048	0.00031	0.0014	0.00012	0.0000097	0.0000089	0.000086	0.00018	0.0014
			MAXIMUM	387	118	0.27	0.3	12	0.31	5.9	0.0037	0.31	0.25	0.000066	56	0.15	0.01	12	0.0026	21	0.57	0.000015	0.015	0.066	0.0012	0.00039	0.00011	0.00032	0.0043	0.016
			AVERAGE	31	5.3	0.053	0.038	0.52	0.02	0.078	0.00038	0.025	0.019	0.0000081	5.2	0.0022	0.0009	0.21	0.00015	1.5	0.062	0.0000062	0.00063	0.0035	0.00016	0.000016	0.000012	0.00011	0.00032	0.0016

APPENDIX C-5
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5		0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1		0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008		0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	Sb	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Pit	Post-Closure	September	2041	20	3.4	0.041	0.018	0.054	0.013	0.022	0.00023	0.012	0.014	0.0000064	3.6	0.00074	0.00072	0.087	0.0001	1.1	0.035	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		October		20	3.4	0.041	0.018	0.054	0.013	0.022	0.00023	0.012	0.014	0.0000064	3.6	0.00074	0.00072	0.086	0.0001	1.1	0.035	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		November		20	3.4	0.041	0.018	0.054	0.013	0.022	0.00023	0.012	0.014	0.0000064	3.6	0.00074	0.00072	0.086	0.0001	1.1	0.035	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		December		20	3.4	0.041	0.018	0.054	0.013	0.022	0.00023	0.012	0.014	0.0000064	3.6	0.00074	0.00072	0.086	0.0001	1.1	0.035	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		January	2042	20	3.4	0.041	0.018	0.054	0.013	0.022	0.00023	0.012	0.014	0.0000064	3.6	0.00074	0.00072	0.086	0.0001	1.1	0.035	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		February		20	3.4	0.041	0.018	0.054	0.013	0.022	0.00023	0.012	0.014	0.0000064	3.6	0.00074	0.00072	0.086	0.0001	1.1	0.035	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		March		20	3.4	0.041	0.018	0.054	0.013	0.022	0.00023	0.012	0.014	0.0000064	3.6	0.00074	0.00072	0.086	0.0001	1.1	0.035	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		April		20	3.4	0.041	0.018	0.054	0.013	0.022	0.00023	0.012	0.014	0.0000064	3.6	0.00074	0.00072	0.086	0.0001	1.1	0.035	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		May		20	3.4	0.041	0.018	0.054	0.013	0.022	0.00023	0.012	0.014	0.0000064	3.6	0.00074	0.00072	0.086	0.0001	1.1	0.035	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		June		19	3.3	0.041	0.018	0.053	0.012	0.022	0.00023	0.012	0.014	0.0000064	3.6	0.00074	0.00071	0.086	0.0001	1.1	0.034	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
		July		19	3.3	0.04	0.017	0.052	0.012	0.022	0.00023	0.012	0.014	0.0000063	3.6	0.00074	0.00071	0.086	0.0001	1.1	0.034	0.0000057	0.0003	0.0021	0.00012	0.000012	0.000011	0.0001	0.00018	0.0013
		August		19	3.3	0.04	0.017	0.052	0.012	0.022	0.00023	0.012	0.014	0.0000063	3.6	0.00074	0.00071	0.086	0.0001	1.1	0.034	0.0000057	0.0003	0.0021	0.00012	0.000012	0.000011	0.0001	0.00018	0.0013
		September		19	3.3	0.04	0.017	0.051	0.012	0.022	0.00023	0.012	0.014	0.0000063	3.6	0.00074	0.00071	0.085	0.0001	1.1	0.033	0.0000057	0.0003	0.0021	0.00012	0.000012	0.000011	0.0001	0.00018	0.0013
		October		19	3.3	0.04	0.017	0.051	0.012	0.022	0.00022	0.012	0.014	0.0000063	3.6	0.00074	0.00071	0.085	0.0001	1.1	0.033	0.0000057	0.0003	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		November		19	3.3	0.04	0.017	0.051	0.012	0.022	0.00022	0.012	0.014	0.0000063	3.6	0.00074	0.00071	0.085	0.0001	1.1	0.033	0.0000057	0.0003	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		December		19	3.3	0.04	0.017	0.051	0.012	0.022	0.00022	0.012	0.014	0.0000063	3.6	0.00074	0.00071	0.085	0.0001	1.1	0.033	0.0000057	0.0003	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		January	2043	19	3.3	0.04	0.017	0.051	0.012	0.022	0.00022	0.012	0.014	0.0000063	3.6	0.00074	0.00071	0.085	0.0001	1.1	0.033	0.0000057	0.0003	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		February		19	3.3	0.04	0.017	0.051	0.012	0.022	0.00022	0.012	0.014	0.0000063	3.6	0.00074	0.00071	0.085	0.0001	1.1	0.033	0.0000057	0.0003	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		March		19	3.3	0.04	0.017	0.051	0.012	0.022	0.00022	0.012	0.014	0.0000063	3.6	0.00074	0.00071	0.085	0.0001	1.1	0.033	0.0000057	0.0003	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		April		19	3.3	0.04	0.017	0.051	0.012	0.022	0.00022	0.012	0.014	0.0000063	3.6	0.00074	0.00071	0.085	0.0001	1.1	0.033	0.0000057	0.0003	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		May		19	3.3	0.04	0.017	0.051	0.012	0.022	0.00022	0.012	0.014	0.0000063	3.6	0.00074	0.00071	0.085	0.0001	1.1	0.033	0.0000057	0.0003	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		June		19	3.3	0.04	0.017	0.05	0.012	0.022	0.00022	0.011	0.014	0.0000063	3.5	0.00074	0.0007	0.085	0.0001	1.1	0.032	0.0000057	0.0003	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		July		19	3.3	0.04	0.017	0.049	0.012	0.022	0.00022	0.011	0.014	0.0000062	3.5	0.00073	0.0007	0.084	0.00010	1.0	0.032	0.0000057	0.00029	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		August		19	3.3	0.04	0.017	0.049	0.012	0.022	0.00022	0.011	0.014	0.0000062	3.5	0.00073	0.0007	0.084	0.00010	1.0	0.032	0.0000057	0.00029	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		September		19	3.3	0.039	0.016	0.048	0.011	0.022	0.00022	0.011	0.014	0.0000062	3.5	0.00073	0.0007	0.084	0.000099	1.0	0.031	0.0000057	0.00029	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		October		19	3.3	0.039	0.016	0.048	0.011	0.022	0.00022	0.011	0.014	0.0000062	3.5	0.00073	0.0007	0.084	0.000099	1.0	0.031	0.0000056	0.00029	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		November		19	3.3	0.039	0.016	0.048	0.011	0.022	0.00022	0.011	0.014	0.0000062	3.5	0.00073	0.0007	0.084	0.000099	1.0	0.031	0.0000056	0.00029	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		December		19	3.3	0.039	0.016	0.048	0.011	0.022	0.00022	0.011	0.014	0.0000062	3.5	0.00073	0.0007	0.084	0.000099	1.0	0.031	0.0000056	0.00029	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		January	2044	19	3.3	0.039	0.016	0.048	0.011	0.022	0.00022	0.011	0.014	0.0000062	3.5	0.00073	0.0007	0.084	0.000099	1.0	0.031	0.0000056	0.00029	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		February		19	3.3	0.039	0.016	0.048	0.011	0.022	0.00022	0.011	0.014	0.0000062	3.5	0.00073	0.0007	0.084	0.000099	1.0	0.031	0.0000056	0.00029	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		March		19	3.3	0.039	0.016	0.048	0.011	0.022	0.00022	0.011	0.014	0.0000062	3.5	0.00073	0.0007	0.084	0.000099	1.0	0.031	0.0000056	0.00029	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		April		19	3.3	0.039	0.016	0.048	0.011	0.022	0.00022	0.011	0.014	0.0000062	3.5	0.00073	0.0007	0.084	0.000099	1.0	0.031	0.0000056	0.00029	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		May		19	3.3	0.039	0.016	0.048	0.011	0.022	0.00022	0.011	0.014	0.0000062	3.5	0.00073	0.0007	0.084	0.000099	1.0	0.031	0.0000056	0.00029	0.0021	0.00011	0.000012	0.000011	0.0001	0.00017	0.0013
		June		19	3.3	0.039	0.016	0.047	0.011	0.022	0.00022	0.011	0.014	0.0000062	3.5	0.00073	0.00069	0.084	0.000098	1.0	0.03	0.0000056	0.00028	0.002	0.00011	0.000012	0.000011	0.0001	0.00016	0.0013
		July		18	3.2	0.039	0.016	0.046	0.011	0.022	0.00021	0.01	0.014	0.0000062	3.5	0.00073	0.00069	0.083	0.000098	1.0	0.03	0.0000056	0.00028	0.002	0.00011	0.000012	0.000011	0.0001	0.00016	0.0013
		August		18	3.2	0.039	0.016	0.046	0.011	0.022	0.00021	0.01	0.014	0.0000062	3.5	0.00073	0.00069	0.083	0.000098	1.0	0.03	0.0000056	0.00028	0.002	0.00011	0.000012	0.000011	0.0001	0.00016	0.0013
		September		18	3.2	0.039	0.016	0.045	0.011	0.022	0.00021	0.01	0.014	0.0000062	3.4	0.00073	0.00069	0.083	0.000097	1.0	0.029	0.0000056	0.00028	0.002	0.00011	0.000012	0.000011	0.0001	0.00016	0.0013
		October		18	3.2	0.039	0.016	0.045	0.011	0.022	0.00021	0.01	0.013	0.0000062	3.4	0.00073	0.00069	0.083	0.000097	1.0	0.029	0.0000056	0.00028	0.002	0.00011	0.000012	0.000011	0.0001	0.00016	0.0013
		November		18	3.2	0.039	0.016	0.045	0.011	0.022	0.00021	0.01	0.013	0.0000062	3.4	0.00073	0.00069	0.083	0.000097	1.0	0.029	0.0000056	0.00028	0.002	0.00011	0.000012	0.000011	0.0001	0.00016	0.0013
		December		18	3.2	0.039	0.016	0.045	0.011	0.022	0.00021	0.01	0.013	0.0000062	3.4	0.00073	0.00069	0.083	0.000097	1.0	0.029	0.0000056	0.00028	0.002	0.00011	0.000012	0.000011	0.0001	0.00016	0.0013
		January	2045	18	3.2	0.039	0.016	0.045	0.011	0.022	0.00021	0.01	0.013	0.0000062	3.4	0.00073	0.00069	0.083	0.000097	1.0	0.029	0.0000056	0.00028	0.002	0.00011	0.000012	0.000011	0.0001	0.00016	0.0013
		February		18	3.2	0.039	0.016	0.045	0.011	0.022	0.00021	0.01	0.013	0.0000062	3.4	0.00073	0.00069	0.083	0.000097	1.0	0.029	0.0000056	0.00028	0.002	0.00011	0.000012	0.000011	0.0001	0.00016	0.0013
		March		18	3.2	0.039	0.016	0.045	0.011	0.022	0.00021	0.01	0.013	0.0000062	3.4	0.00073	0.00069	0.083	0.000097	1.0	0.029	0.0000056	0.00028	0.002	0.00011	0.000012	0.000011	0.0001	0.00016	0.0013
		April		18	3.2	0.039	0.016	0.045	0.011	0.022	0.00021	0.01	0.013	0.0000062	3.4	0.00073	0.00069	0.083	0.000097	1.0	0.029	0.0000056	0.00028	0.002	0.00011	0.000012	0.000011	0.0001	0.00016	0.0013
		May		18	3.2	0.039	0.016	0.045	0.011	0.022	0.00021	0.01	0.013	0.0000062	3.4	0.00073	0.00069	0.083	0.000097	1.0	0.029	0.0000056	0.00028	0.002	0.00011	0.000012	0.000011	0.0001	0.00016	0.0013
		June		18	3.2	0.038	0.016	0.044	0.011	0.022	0.00021	0.010	0.013	0.0000061	3.4	0.00072	0.00068	0.082	0.000096	1.0	0.029	0.0000056	0.00027	0.002	0.00011	0.000012	0.000011	0.0001	0.00016	0.0013
		July		18	3.2	0.038	0.015	0.043	0.01	0.022	0.00021	0.0098	0.013	0.0000061	3.4	0.00072	0.00068	0.082	0.000096	1.0	0.028	0.0000056	0.00027	0.0019	0.00011	0.000012	0.000011	0.0001	0.00016	0.0013
		August		18	3.2	0.038	0.015	0.043	0.01	0.022	0.00021	0.0098	0.013	0.0000061	3.4	0.00072	0.00068	0.082	0.000095	1.0	0.028	0.0000056	0.00027	0.0019	0.00011	0.000012	0.000011	0.0001	0.00016	0.0013
		September		18	3.2	0.038	0.015	0.042	0.01	0.022	0.00021	0.0097	0.013	0.0000061	3.4	0.00072	0.00068	0.082	0.000095	1.0	0.028	0.0000056	0.00027	0.0019	0.00011	0.000012	0.000011	0.0001	0.00015	0.0013
		October		18	3.2	0.038	0.015	0.042	0.01	0.022	0.00021	0.0096	0.013	0.0000061	3.4	0.00072	0.00068	0.082	0.000095	1.0	0.028	0.0000056	0.00027	0.0019	0.00011	0.000012	0.000011	0.0001	0.00015	0.0013
		November		18	3.2	0.038	0.015	0.042	0.01	0.022	0.00021	0.0096	0.013	0.0000061	3.4	0.00072	0.00068	0.082	0.000095	1.0	0.028	0.0000056	0.00027	0.0019	0.00011	0.000012	0.000011	0.0001	0.00015	0.0013
		December		18	3.2	0.038	0.015	0.042	0.01	0.022	0.00021	0.0096	0.013	0.0000061	3.4	0.00072	0.00068	0.082	0.000095	1.0	0.028	0.0000056	0.00027	0.0019	0.00011	0.000012	0.000011	0.0001	0.00015	0.0013
		January	2046	18	3.2	0.038	0.015	0.042	0.01	0.022	0.00021	0.0096	0.013	0.0000061	3.4	0.00072	0.00068	0.082	0.000095	1.0	0.028	0.0000056	0.00027	0.0019	0.00011	0.000012	0.000011	0.0001	0.00015	0.0013
		February		18	3.2	0.038	0.015	0.042	0.01	0.022	0.00021	0.0096	0.013	0.0000061	3.4	0.00072	0.00068	0.082	0.000095	1.0	0.028	0.0000056	0.00027	0.0019	0.00011	0.000012	0.000011	0.0001	0.00015	0.0013
		March		18	3.2	0.038	0.015	0.042	0.01	0.022	0.00021	0.0096	0.013	0.0000061	3.4	0.00072	0.00068	0.082	0.000095	1.0	0.028	0.0000056	0.00027	0.0019	0.00011	0.000012	0.000011	0.0001	0.00015	0.0013
		April		18	3.2	0.038	0.015	0.042	0.01	0.022	0.00021	0.0096	0.013	0.0000061	3.4	0.00072	0.00068	0.082	0.000095	1.0	0.028	0.0000056	0.00027	0.0019	0.00011	0.000012	0.000011	0.0001	0.00015	0.0013
		May		18	3.2	0.038	0.015	0.042	0.01	0.022	0.00021	0.0096	0.013	0.0000061	3.4	0.00072	0.00068	0.082	0.000095	1.0	0.028	0.0000056	0.00027	0.0019	0.00011	0.000012	0.000011	0.0001	0.00015	0.0013
		June		18	3.2	0.038	0.015	0.041	0.01	0.022	0.0002	0.0094	0.013	0.0000061	3.4	0.00072	0.00067	0.081	0.000094	1.0	0.027	0.0000056	0.00026	0.0019	0.00011	0.000012	0.000011	0.0001	0.00015	0.0013
		July		18	3.2	0.037	0.015	0.04	0.0098	0.022	0.0002	0.0092	0.013	0.000006	3.3	0.00072	0.00067	0.081	0.000094	1.0	0.026	0.0000056	0.00026	0.0019	0.0001	0.000012	0.00001	0.0001	0.00015	0.0013
		August		18	3.2	0.037	0.015	0.04	0.0098	0.022	0.0002	0.0092	0.013	0.000006	3.3	0.00072	0.00067	0.081	0.000093	1.0	0.026	0.0000056	0.00026	0.0019	0.0001	0.000012	0.000011	0.0001	0.00015	0.0013
		September		18	3.2	0.037	0.015	0.04	0.0097	0.022	0.0002	0.0091	0.013	0.000006	3.3	0.00072	0.00067	0.081	0.000093	1.0	0.026	0.0000056	0.00026	0.0019	0.0001	0.000012	0.000011	0.0001	0.00015	0.0013
		October		18	3.2	0.037	0.015	0.039	0.0097	0.022	0.0002	0.0091	0.013	0.000006	3.3	0.00072	0.00067	0.081	0.000093	1.0	0.026	0.0000056	0.00025	0.0019	0.0001	0.000012	0.000011	0.0001	0.00015	0.0013
		November		18	3.2	0.037	0.015	0.039	0.0097	0.022	0.0002	0.0091	0.013	0.000006	3.3	0.00072	0.00067	0.081	0.000093	1.0	0.026	0.0000056	0.00025	0.0019	0.0001	0.000012	0.000011	0.0001	0.00015	0.0013
		December		18	3.2	0.037	0.015	0.039	0.0097	0.022	0.0002	0.0091	0.013	0.000006	3.3	0.00072	0.00067	0.081	0.000093	1.0	0.026	0.0000056	0.00025	0.0019	0.0001	0.000012	0.000011	0.0001	0.00015	0.0013

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5		0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1		0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008		0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	Sb	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Pit	Post-Closure	January	2047	18	3.2	0.037	0.015	0.039	0.0097	0.022	0.0002	0.0091	0.013	0.000006	3.3	0.00072	0.00067	0.081	0.000093	1.0	0.026	0.0000056	0.00025	0.0019	0.0001	0.000012	0.000011	0.0001	0.00015	0.0013
		February		18	3.2	0.037	0.015	0.039	0.0097	0.022	0.0002	0.0091	0.013	0.000006	3.3	0.00072	0.00067	0.081	0.000093	1.0	0.026	0.0000056	0.00025	0.0019	0.0001	0.000012	0.000011	0.0001	0.00015	0.0013
		March		18	3.2	0.037	0.015	0.039	0.0097	0.022	0.0002	0.0091	0.013	0.000006	3.3	0.00072	0.00067	0.081	0.000093	1.0	0.026	0.0000056	0.00025	0.0019	0.0001	0.000012	0.000011	0.0001	0.00015	0.0013
		April		18	3.2	0.037	0.015	0.039	0.0097	0.022	0.0002	0.0091	0.013	0.000006	3.3	0.00072	0.00067	0.081	0.000093	1.0	0.026	0.0000056	0.00025	0.0019	0.0001	0.000012	0.000011	0.0001	0.00015	0.0013
		May		18	3.2	0.037	0.015	0.039	0.0097	0.022	0.0002	0.0091	0.013	0.000006	3.3	0.00072	0.00067	0.081	0.000093	1.0	0.026	0.0000056	0.00025	0.0019	0.0001	0.000012	0.000011	0.0001	0.00015	0.0013
		June		17	3.1	0.037	0.015	0.039	0.0095	0.022	0.0002	0.0089	0.013	0.000006	3.3	0.00072	0.00067	0.08	0.000092	1.0	0.025	0.0000055	0.00025	0.0019	0.0001	0.000011	0.00001	0.0001	0.00015	0.0013
		July		17	3.1	0.037	0.014	0.038	0.0093	0.022	0.0002	0.0087	0.013	0.000006	3.3	0.00071	0.00066	0.08	0.000092	1.0	0.025	0.0000055	0.00025	0.0018	0.0001	0.000011	0.00001	0.0001	0.00014	0.0013
		August		17	3.1	0.037	0.014	0.038	0.0093	0.022	0.0002	0.0087	0.013	0.000006	3.3	0.00071	0.00066	0.08	0.000092	1.0	0.025	0.0000055	0.00025	0.0018	0.0001	0.000011	0.000011	0.0001	0.00014	0.0013
		September		17	3.1	0.037	0.014	0.037	0.0092	0.022	0.00019	0.0086	0.013	0.000006	3.3	0.00071	0.00066	0.08	0.000091	1.0	0.025	0.0000055	0.00025	0.0018	0.0001	0.000011	0.000011	0.0001	0.00014	0.0013
		October		17	3.1	0.037	0.014	0.037	0.0092	0.022	0.00019	0.0086	0.013	0.000006	3.3	0.00071	0.00066	0.08	0.000091	1.0	0.024	0.0000055	0.00025	0.0018	0.0001	0.000011	0.00001	0.0001	0.00014	0.0013
		November		17	3.1	0.037	0.014	0.037	0.0092	0.022	0.00019	0.0086	0.013	0.000006	3.3	0.00071	0.00066	0.08	0.000091	1.0	0.024	0.0000055	0.00025	0.0018	0.0001	0.000011	0.00001	0.0001	0.00014	0.0013
		December		17	3.1	0.037	0.014	0.037	0.0092	0.022	0.00019	0.0086	0.013	0.000006	3.3	0.00071	0.00066	0.08	0.000091	1.0	0.024	0.0000055	0.00025	0.0018	0.0001	0.000011	0.00001	0.0001	0.00014	0.0013
		January	2048	17	3.1	0.037	0.014	0.037	0.0092	0.022	0.00019	0.0086	0.013	0.000006	3.3	0.00071	0.00066	0.08	0.000091	1.0	0.024	0.0000055	0.00025	0.0018	0.0001	0.000011	0.00001	0.0001	0.00014	0.0013
		February		17	3.1	0.037	0.014	0.037	0.0092	0.022	0.00019	0.0086	0.013	0.000006	3.3	0.00071	0.00066	0.08	0.000091	1.0	0.024	0.0000055	0.00025	0.0018	0.0001	0.000011	0.00001	0.0001	0.00014	0.0013
		March		17	3.1	0.037	0.014	0.037	0.0092	0.022	0.00019	0.0086	0.013	0.000006	3.3	0.00071	0.00066	0.08	0.000091	1.0	0.024	0.0000055	0.00025	0.0018	0.0001	0.000011	0.00001	0.0001	0.00014	0.0013
		April		17	3.1	0.037	0.014	0.037	0.0092	0.022	0.00019	0.0086	0.013	0.000006	3.3	0.00071	0.00066	0.08	0.000091	1.0	0.024	0.0000055	0.00025	0.0018	0.0001	0.000011	0.00001	0.0001	0.00014	0.0013
		May		17	3.1	0.037	0.014	0.037	0.0092	0.022	0.00019	0.0086	0.013	0.000006	3.3	0.00071	0.00066	0.08	0.000091	1.0	0.024	0.0000055	0.00025	0.0018	0.0001	0.000011	0.00001	0.0001	0.00014	0.0013
		June		17	3.1	0.036	0.014	0.036	0.009	0.022	0.00019	0.0084	0.013	0.0000059	3.3	0.00071	0.00066	0.079	0.000091	0.99	0.024	0.0000055	0.00024	0.0018	0.0001	0.000011	0.00001	0.0001	0.00014	0.0013
		July		17	3.1	0.036	0.014	0.035	0.0089	0.022	0.00019	0.0082	0.013	0.0000059	3.2	0.00071	0.00065	0.079	0.00009	0.99	0.023	0.0000055	0.00024	0.0018	0.00010	0.000011	0.00001	0.0001	0.00014	0.0013
		August		17	3.1	0.036	0.014	0.035	0.0088	0.022	0.00019	0.0082	0.013	0.0000059	3.2	0.00071	0.00065	0.079	0.00009	0.99	0.023	0.0000055	0.00024	0.0018	0.00010	0.000011	0.00001	0.0001	0.00014	0.0013
		September		17	3.1	0.036	0.014	0.035	0.0088	0.022	0.00019	0.0082	0.013	0.0000059	3.2	0.00071	0.00065	0.079	0.00009	0.99	0.023	0.0000055	0.00024	0.0018	0.00010	0.000011	0.00001	0.0001	0.00014	0.0013
		October		17	3.1	0.036	0.014	0.035	0.0087	0.022	0.00019	0.0081	0.013	0.0000059	3.2	0.00071	0.00065	0.079	0.00009	0.99	0.023	0.0000055	0.00024	0.0018	0.000099	0.000011	0.00001	0.0001	0.00014	0.0013
		November		17	3.1	0.036	0.014	0.035	0.0087	0.022	0.00019	0.0081	0.013	0.0000059	3.2	0.00071	0.00065	0.079	0.00009	0.99	0.023	0.0000055	0.00024	0.0018	0.000099	0.000011	0.00001	0.0001	0.00014	0.0013
		December		17	3.1	0.036	0.014	0.035	0.0087	0.022	0.00019	0.0081	0.013	0.0000059	3.2	0.00071	0.00065	0.079	0.00009	0.99	0.023	0.0000055	0.00024	0.0018	0.000099	0.000011	0.00001	0.0001	0.00014	0.0013
		January	2049	17	3.1	0.036	0.014	0.035	0.0087	0.022	0.00019	0.0081	0.013	0.0000059	3.2	0.00071	0.00065	0.079	0.00009	0.99	0.023	0.0000055	0.00024	0.0018	0.000099	0.000011	0.00001	0.0001	0.00014	0.0013
		February		17	3.1	0.036	0.014	0.035	0.0087	0.022	0.00019	0.0081	0.013	0.0000059	3.2	0.00071	0.00065	0.079	0.00009	0.99	0.023	0.0000055	0.00024	0.0018	0.000099	0.000011	0.00001	0.0001	0.00014	0.0013
		March		17	3.1	0.036	0.014	0.035	0.0087	0.022	0.00019	0.0081	0.013	0.0000059	3.2	0.00071	0.00065	0.079	0.00009	0.99	0.023	0.0000055	0.00024	0.0018	0.000099	0.000011	0.00001	0.0001	0.00014	0.0013
		April		17	3.1	0.036	0.014	0.035	0.0087	0.022	0.00019	0.0081	0.013	0.0000059	3.2	0.00071	0.00065	0.079	0.00009	0.99	0.023	0.0000055	0.00024	0.0018	0.000099	0.000011	0.00001	0.0001	0.00014	0.0013
		May		17	3.1	0.036	0.014	0.035	0.0087	0.022	0.00019	0.0081	0.013	0.0000059	3.2	0.00071	0.00065	0.079	0.00009	0.99	0.023	0.0000055	0.00024	0.0018	0.000099	0.000011	0.00001	0.0001	0.00014	0.0013
		June		17	3.1	0.036	0.014	0.034	0.0086	0.022	0.00019	0.0079	0.013	0.0000059	3.2	0.00071	0.00065	0.078	0.000089	0.98	0.023	0.0000055	0.00023	0.0018	0.000099	0.000011	0.00001	0.0001	0.00014	0.0013
		July		17	3.1	0.036	0.013	0.033	0.0084	0.022	0.00019	0.0078	0.012	0.0000059	3.2	0.00071	0.00065	0.078	0.000089	0.98	0.022	0.0000055	0.00023	0.0017	0.000098	0.000011	0.00001	0.0001	0.00013	0.0013
		August		17	3.1	0.036	0.013	0.033	0.0084	0.022	0.00019	0.0078	0.012	0.0000059	3.2	0.00071	0.00065	0.078	0.000088	0.98	0.022	0.0000055	0.00023	0.0017	0.000098	0.000011	0.00001	0.0001	0.00013	0.0013
		September		17	3.1	0.036	0.013	0.033	0.0084	0.022	0.00019	0.0077	0.012	0.0000059	3.2	0.00071	0.00065	0.078	0.000088	0.98	0.022	0.0000055	0.00023	0.0017	0.000098	0.000011	0.00001	0.0001	0.00013	0.0013
		October		17	3.1	0.035	0.013	0.033	0.0083	0.022	0.00019	0.0077	0.012	0.0000059	3.2	0.00071	0.00065	0.078	0.000088	0.98	0.022	0.0000055	0.00023	0.0017	0.000097	0.000011	0.00001	0.0001	0.00013	0.0013
		November		17	3.1	0.035	0.013	0.033	0.0083	0.022	0.00019	0.0077	0.012	0.0000059	3.2	0.00071	0.00065	0.078	0.000088	0.98	0.022	0.0000055	0.00023	0.0017	0.000097	0.000011	0.00001	0.0001	0.00013	0.0013
		December		17	3.1	0.035	0.013	0.033	0.0083	0.022	0.00019	0.0077	0.012	0.0000059	3.2	0.00071	0.00065	0.078	0.000088	0.98	0.022	0.0000055	0.00023	0.0017	0.000097	0.000011	0.00001	0.0001	0.00013	0.0013
		January	≥2050	17	3.1	0.035	0.013	0.033	0.0083	0.022	0.00019	0.0077	0.012	0.0000059	3.2	0.00071	0.00065	0.078	0.000088	0.98	0.022	0.0000055	0.00023	0.0017	0.000097	0.000011	0.00001	0.0001	0.00013	0.0013
		February		17	3.1	0.035	0.013	0.033	0.0083	0.022	0.00019	0.0077	0.012	0.0000059	3.2	0.00071	0.00065	0.078	0.000088	0.98	0.022	0.0000055	0.00023	0.0017	0.000097	0.000011	0.00001	0.0001	0.00013	0.0013
		March		17	3.1	0.035	0.013	0.033	0.0083	0.022	0.00019	0.0077	0.012	0.0000059	3.2	0.00071	0.00065	0.078	0.000088	0.98	0.022	0.0000055	0.00023	0.0017	0.000097	0.000011	0.00001	0.0001	0.00013	0.0013
		April		17	3.1	0.035	0.013	0.033	0.0083	0.022	0.00019	0.0077	0.012	0.0000059	3.2	0.00071	0.00065	0.078	0.000088	0.98	0.022	0.0000055	0.00023	0.0017	0.000097	0.000011	0.00001	0.0001	0.00013	0.0013
		May		17	3.1	0.035	0.013	0.033	0.0083	0.022	0.00019	0.0077	0.012	0.0000059	3.2	0.00071	0.00065	0.078	0.000088	0.98	0.022	0.0000055	0.00023	0.0017	0.000097	0.000011	0.00001	0.0001	0.00013	0.0013
		June		16	3.1	0.035	0.013	0.032	0.0082	0.022	0.00018	0.0075	0.012	0.0000058	3.2	0.0007	0.00064	0.078	0.000088	0.97	0.021	0.0000055	0.00022	0.0017	0.000097	0.000011	0.00001	0.0001	0.00013	0.0013
		July		16	3.0	0.035	0.013	0.031	0.008	0.022	0.00018	0.0074	0.012	0.0000058	3.1	0.0007	0.00064	0.077	0.000087	0.97	0.021	0.0000055	0.00022	0.0017	0.000096	0.000011	0.00001	0.0001	0.00013	0.0013
		August		16	3.0	0.035	0.013	0.031	0.008	0.022	0.00018	0.0074	0.012	0.0000058	3.2	0.0007	0.00064	0.077	0.000087	0.97	0.021	0.0000055	0.00022	0.0017	0.000096	0.000011	0.00001	0.0001	0.00013	0.0013
		September		16	3.0	0.035	0.013	0.031	0.008	0.022	0.00018	0.0073	0.012	0.0000058	3.1	0.0007	0.00064	0.077	0.000087	0.97	0.021	0.0000055	0.00022	0.0017	0.000096	0.000011	0.00001	0.0001	0.00013	0.0013
		October		16	3.0	0.035	0.013	0.031	0.0079	0.022	0.00018	0.0073	0.012	0.0000058	3.1	0.0007	0.00064	0.077	0.000087	0.97	0.021	0.0000055	0.00022	0.0017	0.000096	0.000011	0.00001	0.0001	0.00013	0.0013
		November		16	3.0	0.035	0.013	0.031	0.0079	0.022	0.00018	0.0073	0.012	0.0000058	3.1	0.0007	0.00064	0.077	0.000087	0.97	0.021	0.0000055	0.00022	0.0017	0.000096	0.000011	0.00001	0.0001	0.00013	0.0013
		December		16	3.0	0.035	0.013	0.031	0.0079	0.022	0.00018	0.0073	0.012	0.0000058	3.1	0.0007	0.00064	0.077	0.000087	0.97	0.021	0.0000055	0.00022	0.0017	0.000096	0.000011	0.00001	0.0001	0.00013	0.0013
			MINIMUM	16	3.0	0.035	0.013	0.031	0.0079	0.022	0.00018	0.0073	0.012	0.0000058	3.1	0.0007	0.00064	0.077	0.000087	0.97	0.021	0.0000055	0.00022	0.0017	0.000096	0.000011	0.00001	0.0001	0.00013	0.0013
			MAXIMUM	20	3.4	0.041	0.018	0.054	**0.013**	0.022	0.00023	0.012	0.014	0.0000064	3.6	0.00074	0.00072	0.086	0.0001	1.1	0.035	0.0000057	0.00031	0.0022	0.00012	0.000012	0.000011	0.0001	0.00018	0.0014
			AVERAGE	18	3.2	0.038	0.015	0.041	**0.01**	0.022	0.0002	0.0095	0.013	0.0000061	3.4	0.00072	0.00067	0.081	0.000094	1.0	0.027	0.0000056	0.00026	0.0019	0.00011	0.000012	0.000011	0.0001	0.00015	0.0013

Notes:

[1] Canadian Council of Ministers of the Environment CEQG (2002) freshwater guidelines. Values above the freshwater CEQG's shown in bold-underlined type

[2] CEQG Freshwater Aquatic Life criterion for total ammonia is pH and temperature dependent (5C used based on hydrodynamic modelling).

[3] CEQG Freshwater Aquatic Life Trigger Ranges are dependent on trophic status; oligotrophic status assumed

[4] CEQG Freshwater Aquatic Life Criterion for aluminum is pH dependant.

[5] The CEQG aquatic life criterion for Arsenic is replaced by the Site Specific Water Quality Objective of 0.025 mg/L developed for the Whale Tail Pit Project (Volume 6, Appendix 6-N)

[6] CEQG Freshwater Aquatic Life Criteria are hardness dependant.

[7] CEQG Freshwater Aquatic Life criterion for manganese is pH and hardness dependent.

[8] CEQG Freshwater Aquatic Life criterion is for dissolved zinc and is hardness, pH and DOC dependent.

* Variable guidelines based on average values in Mammoth 2020 CREMP monitoring data (pH=6.85, hardness=61 mg/L, DOC=2.7 mg/L)

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5		0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
		CEQG aquatic life (long-term)[1] (mg/L)			120	0.12	12.6	2.93	0.01	0.1		0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008		0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	Sb	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
IVR Pit	Closure	January	2026	16	0.86	0.028	0.0073	0.014	0.0031	0.022	0.00031	0.035	0.01	0.0000053	2.8	0.00065	0.00034	0.06	0.000095	1.2	0.006	0.0000051	0.00015	0.00099	0.000095	0.000012	0.000011	0.00011	0.000085	0.0012
		February		16	0.87	0.028	0.0074	0.014	0.0031	0.022	0.00034	0.04	0.01	0.0000053	2.8	0.00065	0.00034	0.06	0.000096	1.2	0.0063	0.0000051	0.00016	0.001	0.0001	0.000012	0.000011	0.00011	0.000093	0.0012
		March		16	0.87	0.028	0.0074	0.014	0.0031	0.022	0.00034	0.041	0.01	0.0000053	2.8	0.00065	0.00034	0.06	0.000096	1.2	0.0063	0.0000051	0.00016	0.001	0.0001	0.000012	0.000011	0.00011	0.000093	0.0012
		April		16	0.87	0.028	0.0074	0.014	0.0031	0.022	0.00034	0.042	0.01	0.0000053	2.8	0.00065	0.00034	0.06	0.000096	1.2	0.0063	0.0000051	0.00016	0.001	0.0001	0.000012	0.000011	0.00011	0.000093	0.0012
		May		16	0.87	0.028	0.0074	0.014	0.0031	0.022	0.00034	0.043	0.01	0.0000053	2.8	0.00065	0.00034	0.06	0.000096	1.2	0.0063	0.0000051	0.00016	0.001	0.0001	0.000012	0.000011	0.00011	0.000093	0.0012
		June		27	5.2	0.049	0.081	0.22	0.0091	0.022	0.00014	0.009	0.01	0.0000059	5.0	0.00066	0.0006	0.066	0.000069	1.3	0.059	0.000006	0.00028	0.0014	0.00012	0.000013	0.000012	0.000091	0.00012	0.0013
		July		22	4.2	0.04	0.062	0.17	0.0073	0.022	0.00014	0.01	0.0086	0.0000049	4.0	0.00064	0.0005	0.063	0.000058	1.1	0.046	0.0000049	0.00023	0.0012	0.0001	0.000011	0.00001	0.000076	0.00011	0.0011
		August		20	3.9	0.037	0.056	0.16	0.0068	0.022	0.00014	0.011	0.0081	0.0000046	3.7	0.00063	0.00047	0.061	0.000053	1.0	0.042	0.0000046	0.00022	0.0011	0.000096	0.00001	0.0000097	0.000072	0.0001	0.00098
		September		20	3.8	0.036	0.053	0.15	0.0066	0.022	0.00013	0.011	0.008	0.0000045	3.6	0.00062	0.00045	0.061	0.000051	0.99	0.04	0.0000045	0.00022	0.0011	0.000092	0.00001	0.0000095	0.000071	0.000097	0.00096
		October		19	3.7	0.036	0.052	0.15	0.0065	0.022	0.00013	0.010	0.008	0.0000045	3.5	0.00062	0.00045	0.061	0.000051	0.98	0.039	0.0000045	0.00021	0.001	0.000089	0.00001	0.0000094	0.000072	0.000095	0.00095
		November		19	3.7	0.036	0.052	0.15	0.0065	0.022	0.00013	0.01	0.008	0.0000045	3.5	0.00062	0.00045	0.061	0.000051	0.98	0.039	0.0000045	0.00021	0.001	0.000089	0.00001	0.0000094	0.000072	0.000095	0.00095
		December		19	3.7	0.036	0.052	0.15	0.0065	0.022	0.00013	0.01	0.008	0.0000045	3.5	0.00062	0.00045	0.061	0.000051	0.98	0.039	0.0000045	0.00021	0.001	0.000089	0.00001	0.0000094	0.000072	0.000095	0.00095
		January	2027	19	3.7	0.036	0.052	0.15	0.0065	0.022	0.00013	0.01	0.008	0.0000045	3.5	0.00062	0.00045	0.061	0.000051	0.98	0.039	0.0000045	0.00021	0.001	0.000089	0.00001	0.0000094	0.000072	0.000095	0.00095
		February		19	3.7	0.036	0.052	0.15	0.0065	0.022	0.00013	0.011	0.008	0.0000045	3.5	0.00062	0.00045	0.061	0.000051	0.98	0.039	0.0000045	0.00021	0.001	0.000089	0.00001	0.0000094	0.000072	0.000095	0.00095
		March		19	3.7	0.036	0.052	0.15	0.0065	0.022	0.00013	0.011	0.008	0.0000045	3.5	0.00062	0.00045	0.061	0.000051	0.98	0.039	0.0000045	0.00021	0.001	0.000089	0.00001	0.0000094	0.000072	0.000095	0.00095
		April		19	3.7	0.036	0.052	0.15	0.0065	0.022	0.00013	0.011	0.008	0.0000045	3.5	0.00062	0.00045	0.061	0.000051	0.98	0.039	0.0000045	0.00021	0.001	0.000089	0.00001	0.0000094	0.000072	0.000095	0.00095
		May		19	3.7	0.036	0.052	0.15	0.0065	0.022	0.00013	0.011	0.008	0.0000045	3.5	0.00062	0.00045	0.061	0.000051	0.98	0.039	0.0000045	0.00021	0.001	0.000089	0.00001	0.0000094	0.000072	0.000095	0.00095
		June		19	3.8	0.036	0.052	0.15	0.0065	0.022	0.00013	0.01	0.0081	0.0000046	3.6	0.00063	0.00046	0.061	0.000053	0.99	0.038	0.0000046	0.00021	0.0011	0.00009	0.00001	0.0000096	0.000073	0.000093	0.00098
		July		19	3.7	0.035	0.049	0.14	0.0062	0.022	0.00012	0.0095	0.0082	0.0000046	3.5	0.00063	0.00047	0.061	0.000054	0.97	0.036	0.0000046	0.0002	0.0011	0.000088	0.00001	0.0000095	0.000074	0.000089	0.00099
		August		19	3.6	0.035	0.048	0.13	0.0061	0.022	0.00013	0.0099	0.0082	0.0000046	3.5	0.00063	0.00047	0.062	0.000054	0.97	0.035	0.0000046	0.0002	0.0011	0.000089	0.00001	0.0000095	0.000075	0.000089	0.00099
		September		19	3.6	0.034	0.047	0.13	0.006	0.022	0.00013	0.01	0.0082	0.0000046	3.5	0.00063	0.00047	0.062	0.000054	0.98	0.034	0.0000046	0.0002	0.0011	0.000089	0.00001	0.0000096	0.000075	0.000089	0.00099
		October		19	3.6	0.034	0.046	0.13	0.0059	0.022	0.00013	0.0099	0.0082	0.0000046	3.4	0.00063	0.00047	0.062	0.000054	0.97	0.034	0.0000046	0.00019	0.0011	0.000089	0.00001	0.0000096	0.000076	0.000088	0.00099
		November		19	3.6	0.034	0.046	0.13	0.0059	0.022	0.00013	0.01	0.0082	0.0000046	3.4	0.00063	0.00047	0.062	0.000054	0.97	0.034	0.0000046	0.00019	0.0011	0.000089	0.00001	0.0000096	0.000076	0.000088	0.00099
		December		19	3.6	0.034	0.046	0.13	0.0059	0.022	0.00013	0.01	0.0082	0.0000046	3.4	0.00063	0.00047	0.062	0.000054	0.97	0.034	0.0000046	0.00019	0.0011	0.000089	0.00001	0.0000096	0.000076	0.000088	0.00099
		January	2028	19	3.6	0.034	0.046	0.13	0.0059	0.022	0.00013	0.01	0.0082	0.0000046	3.4	0.00063	0.00047	0.062	0.000054	0.97	0.034	0.0000046	0.00019	0.0011	0.000089	0.00001	0.0000096	0.000076	0.000088	0.00099
		February		19	3.6	0.034	0.046	0.13	0.0059	0.022	0.00013	0.01	0.0082	0.0000046	3.4	0.00063	0.00047	0.062	0.000054	0.97	0.034	0.0000046	0.00019	0.0011	0.000089	0.00001	0.0000096	0.000076	0.000088	0.00099
		March		19	3.6	0.034	0.046	0.13	0.0059	0.022	0.00013	0.01	0.0082	0.0000046	3.4	0.00063	0.00047	0.062	0.000054	0.97	0.034	0.0000046	0.00019	0.0011	0.000089	0.00001	0.0000096	0.000076	0.000088	0.00099
		April		19	3.6	0.034	0.046	0.13	0.0059	0.022	0.00013	0.011	0.0082	0.0000046	3.4	0.00063	0.00047	0.062	0.000054	0.97	0.034	0.0000046	0.00019	0.0011	0.000089	0.00001	0.0000096	0.000076	0.000088	0.00099
		May		19	3.6	0.034	0.046	0.13	0.0059	0.022	0.00013	0.011	0.0082	0.0000046	3.4	0.00063	0.00047	0.062	0.000054	0.97	0.034	0.0000046	0.00019	0.0011	0.000089	0.00001	0.0000096	0.000076	0.000088	0.00099
		June		18	3.6	0.034	0.044	0.12	0.0058	0.022	0.00013	0.0099	0.0084	0.0000047	3.4	0.00063	0.00048	0.062	0.000055	0.97	0.033	0.0000047	0.00019	0.0011	0.000088	0.00001	0.0000097	0.000078	0.000085	0.001
		July		18	3.5	0.034	0.041	0.11	0.0056	0.022	0.00012	0.0089	0.0085	0.0000047	3.3	0.00063	0.00048	0.062	0.000056	0.96	0.03	0.0000047	0.00018	0.0011	0.000086	0.00001	0.0000097	0.00008	0.000081	0.001
		August		18	3.5	0.034	0.041	0.11	0.0055	0.022	0.00013	0.0091	0.0085	0.0000047	3.4	0.00063	0.00049	0.062	0.000057	0.96	0.03	0.0000047	0.00018	0.0011	0.000087	0.00001	0.0000097	0.00008	0.000081	0.001
		September		18	3.5	0.033	0.04	0.11	0.0054	0.022	0.00013	0.009	0.0086	0.0000047	3.3	0.00063	0.00049	0.062	0.000057	0.96	0.029	0.0000047	0.00018	0.0011	0.000087	0.00001	0.0000097	0.00008	0.00008	0.001
		October		18	3.4	0.033	0.039	0.1	0.0054	0.022	0.00012	0.0087	0.0086	0.0000047	3.3	0.00063	0.00049	0.063	0.000057	0.96	0.029	0.0000047	0.00017	0.0011	0.000086	0.00001	0.0000097	0.000081	0.000079	0.001
		November		18	3.4	0.033	0.039	0.1	0.0054	0.022	0.00012	0.0087	0.0086	0.0000047	3.3	0.00063	0.00049	0.063	0.000057	0.96	0.029	0.0000047	0.00017	0.0011	0.000086	0.00001	0.0000097	0.000081	0.000079	0.001
		December		18	3.4	0.033	0.039	0.1	0.0054	0.022	0.00012	0.0087	0.0086	0.0000047	3.3	0.00063	0.00049	0.063	0.000057	0.96	0.029	0.0000047	0.00017	0.0011	0.000086	0.00001	0.0000097	0.000081	0.000079	0.001
		January	2029	18	3.4	0.033	0.039	0.1	0.0054	0.022	0.00012	0.0087	0.0086	0.0000047	3.3	0.00063	0.00049	0.063	0.000057	0.96	0.029	0.0000047	0.00017	0.0011	0.000086	0.00001	0.0000097	0.000081	0.000079	0.001
		February		18	3.4	0.033	0.039	0.1	0.0054	0.022	0.00012	0.0087	0.0086	0.0000047	3.3	0.00063	0.00049	0.063	0.000057	0.96	0.029	0.0000047	0.00017	0.0011	0.000086	0.00001	0.0000097	0.000081	0.000079	0.001
		March		18	3.4	0.033	0.039	0.1	0.0054	0.022	0.00012	0.0087	0.0086	0.0000047	3.3	0.00063	0.00049	0.063	0.000057	0.96	0.029	0.0000047	0.00017	0.0011	0.000086	0.00001	0.0000097	0.000081	0.000079	0.001
		April		18	3.4	0.033	0.039	0.1	0.0054	0.022	0.00012	0.0087	0.0086	0.0000047	3.3	0.00063	0.00049	0.063	0.000057	0.96	0.029	0.0000047	0.00017	0.0011	0.000086	0.00001	0.0000097	0.000081	0.000079	0.001
		May		18	3.4	0.033	0.039	0.1	0.0054	0.022	0.00012	0.0087	0.0086	0.0000047	3.3	0.00063	0.00049	0.063	0.000057	0.96	0.029	0.0000047	0.00017	0.0011	0.000086	0.00001	0.0000097	0.000081	0.000079	0.001
		June		17	3.4	0.033	0.037	0.097	0.0052	0.022	0.00012	0.008	0.0088	0.0000048	3.3	0.00064	0.0005	0.063	0.000058	0.96	0.027	0.0000047	0.00017	0.0011	0.000085	0.000011	0.0000099	0.000083	0.000076	0.0011
		July		17	3.3	0.032	0.034	0.088	0.005	0.022	0.00012	0.0073	0.0089	0.0000048	3.2	0.00064	0.0005	0.063	0.000059	0.94	0.025	0.0000048	0.00016	0.0011	0.000083	0.000011	0.0000099	0.000084	0.000072	0.0011
		August		17	3.3	0.032	0.033	0.086	0.0049	0.022	0.00012	0.0075	0.0089	0.0000048	3.2	0.00064	0.0005	0.063	0.000059	0.95	0.025	0.0000048	0.00016	0.0011	0.000085	0.000011	0.0000099	0.000085	0.000073	0.0011
		September		17	3.3	0.032	0.032	0.083	0.0048	0.022	0.00012	0.0074	0.0089	0.0000048	3.2	0.00064	0.0005	0.063	0.000059	0.95	0.024	0.0000048	0.00016	0.0011	0.000084	0.000011	0.0000099	0.000085	0.000072	0.0011
		October		17	3.3	0.032	0.031	0.08	0.0048	0.022	0.00012	0.0072	0.0089	0.0000048	3.2	0.00064	0.0005	0.063	0.000059	0.94	0.023	0.0000048	0.00016	0.0011	0.000084	0.000011	0.0000099	0.000085	0.000071	0.0011
		November		17	3.3	0.032	0.031	0.08	0.0048	0.022	0.00012	0.0072	0.0089	0.0000048	3.2	0.00064	0.0005	0.063	0.000059	0.94	0.023	0.0000048	0.00016	0.0011	0.000084	0.000011	0.0000099	0.000085	0.000071	0.0011
		December		17	3.3	0.032	0.031	0.08	0.0048	0.022	0.00012	0.0072	0.0089	0.0000048	3.2	0.00064	0.0005	0.063	0.000059	0.94	0.023	0.0000048	0.00016	0.0011	0.000084	0.000011	0.0000099	0.000085	0.000071	0.0011
		January	2030	17	3.3	0.032	0.031	0.08	0.0048	0.022	0.00012	0.0072	0.0089	0.0000048	3.2	0.00064	0.0005	0.063	0.000059	0.94	0.023	0.0000048	0.00016	0.0011	0.000084	0.000011	0.0000099	0.000085	0.000071	0.0011
		February		17	3.3	0.032	0.031	0.08	0.0048	0.022	0.00012	0.0073	0.0089	0.0000048	3.2	0.00064	0.0005	0.063	0.000059	0.94	0.023	0.0000048	0.00016	0.0011	0.000084	0.000011	0.0000099	0.000085	0.000071	0.0011
		March		17	3.3	0.032	0.031	0.08	0.0048	0.022	0.00012	0.0073	0.0089	0.0000048	3.2	0.00064	0.0005	0.063	0.000059	0.94	0.023	0.0000048	0.00016	0.0011	0.000084	0.000011	0.0000099	0.000085	0.000071	0.0011
		April		17	3.3	0.032	0.031	0.08	0.0048	0.022	0.00012	0.0073	0.0089	0.0000048	3.2	0.00064	0.0005	0.063	0.000059	0.94	0.023	0.0000048	0.00016	0.0011	0.000084	0.000011	0.0000099	0.000085	0.000071	0.0011
		May		17	3.3	0.032	0.031	0.08	0.0048	0.022	0.00012	0.0073	0.0089	0.0000048	3.2	0.00064	0.0005	0.063	0.000059	0.94	0.023	0.0000048	0.00016	0.0011	0.000084	0.000011	0.0000099	0.000085	0.000071	0.0011
		June		16	3.3	0.031	0.03	0.074	0.0046	0.022	0.00012	0.0067	0.0091	0.0000049	3.1	0.00064	0.00051	0.063	0.000061	0.94	0.022	0.0000048	0.00015	0.0011	0.000083	0.000011	0.000010	0.000087	0.000068	0.0011
		July		16	3.2	0.031	0.027	0.067	0.0045	0.022	0.00012	0.0061	0.0091	0.0000049	3.1	0.00064	0.00051	0.064	0.000062	0.92	0.02	0.0000048	0.00014	0.0011	0.000081	0.000011	0.000010	0.000088	0.000065	0.0011
		August		16	3.2	0.031	0.027	0.065	0.0044	0.022	0.00012	0.0064	0.0091	0.0000049	3.1	0.00064	0.00051	0.064	0.000062	0.93	0.02	0.0000048	0.00014	0.0012	0.000082	0.000011	0.00001	0.000089	0.000066	0.0011
		September		16	3.2	0.031	0.026	0.063	0.0043	0.022	0.00012	0.0064	0.0091	0.0000049	3.1	0.00064	0.00051	0.064	0.000062	0.93	0.019	0.0000048	0.00014	0.0012	0.000082	0.000011	0.000010	0.000089	0.000065	0.0011
		October		16	3.1	0.03	0.025	0.061	0.0043	0.022	0.00012	0.0062	0.0092	0.0000049	3.0	0.00064	0.00051	0.064	0.000062	0.93	0.019	0.0000048	0.00014	0.0012	0.000081	0.000011	0.000010	0.000089	0.000064	0.0011
		November		16	3.1	0.03	0.025	0.061	0.0043	0.022	0.00012	0.0062	0.0092	0.0000049	3.0	0.00064	0.00051	0.064	0.000062	0.93	0.019	0.0000048	0.00014	0.0012	0.000081	0.000011	0.000010	0.000089	0.000064	0.0011
		December		16	3.1	0.03	0.025	0.061	0.0043	0.022	0.00012	0.0062	0.0092	0.0000049	3.0	0.00064	0.00051	0.064	0.000062	0.93	0.019	0.0000048	0.00014	0.0012	0.000081	0.000011	0.000010	0.000089	0.000064	0.0011
		January	2031	16	3.1	0.03	0.025	0.061	0.0043	0.022	0.00012	0.0062	0.0092	0.0000049	3.0	0.00064	0.00051	0.064	0.000062	0.93	0.019	0.0000048	0.00014	0.0012	0.000081	0.000011	0.000010	0.000089	0.000064	0.0011
		February		16	3.1	0.03	0.025	0.061	0.0043	0.022	0.00012	0.0062	0.0092	0.0000049	3.0	0.00064	0.00051	0.064	0.000062	0.93	0.019	0.0000048	0.00014	0.0012	0.000081	0.000011	0.000010	0.000089	0.000064	0.0011
		March		16	3.1	0.03	0.025	0.061	0.0043	0.022	0.00012	0.0062	0.0092	0.0000049	3.0	0.00064	0.00051	0.064	0.000062	0.93	0.019	0.0000048	0.00014	0.0012	0.000081	0.000011	0.000010	0.000089	0.000064	0.0011
		April		16	3.1	0.03	0.025	0.061	0.0043	0.022	0.00012	0.0062	0.0092	0.0000049	3.0	0.00064	0.00051	0.064	0.000062	0.93	0.019	0.0000048	0.00014	0.0012	0.000081	0.000011	0.000010	0.000089	0.000064	0.0011
		May		16	3.1	0.03	0.025	0.061	0.0043	0.022	0.00012	0.0062	0.0092	0.0000049	3.0	0.00064	0.00051	0.064	0.000062	0.93	0.019	0.0000048	0.00014	0.0012	0.000081	0.000011	0.000010	0.000089	0.000064	0.0011
		June		15	3.1	0.03	0.024	0.056	0.0042	0.022	0.00012	0.0058	0.0093	0.000005	3.0	0.00065	0.00052	0.064	0.000063	0.92	0.018	0.0000049	0.00013	0.0012	0.000081	0.000011	0.00001	0.000091	0.000062	0.0011
		July		15	3.1	0.03	0.022	0.05	0.004	0.022	0.00012	0.0053	0.0093	0.000005	2.9	0.00065	0.00052	0.064	0.000063	0.91	0.016	0.0000049	0.00013	0.0012	0.000079	0.000011	0.00001	0.000092	0.00006	0.0011
		August		15	3.1	0.03	0.022	0.049	0.004	0.022	0.00012	0.0056	0.0094	0.000005	3.0	0.00065	0.00052	0.064	0.000063	0.92	0.016	0.0000049	0.00013	0.0012	0.00008	0.000011	0.00001	0.000092	0.00006	0.0011
		September		15	3.0	0.03	0.021	0.047	0.0039	0.022	0.00012	0.0056	0.0093	0.000005	3.0	0.00065	0.00052	0.064	0.000063	0.92	0.016	0.0000049	0.00013	0.0012	0.00008	0.000011	0.00001	0.000092	0.00006	0.0011
		October		15	3.0	0.029	0.021	0.046	0.0039	0.022	0.00012	0.0055	0.0093	0.000005	2.9	0.00065	0.00052	0.064	0.000063	0.91	0.015	0.0000049	0.00013	0.0012	0.00008	0.000011	0.00001	0.000092	0.000059	0.0011
		November		15	3.0	0.029	0.021	0.046	0.0039	0.022	0.00012	0.0055	0.0093	0.000005	2.9	0.00065	0.00052	0.064	0.000063	0.91	0.015	0.0000049	0.00013	0.0012	0.00008	0.000011	0.00001	0.000092	0.000059	0.0011
		December		15	3.0	0.029	0.021	0.046	0.0039	0.022	0.00012	0.0055	0.0093	0.000005	2.9	0.00065	0.00052	0.064	0.000063	0.91	0.015	0.0000049	0.00013	0.0012	0.00008	0.000011	0.00001	0.000092	0.000059	0.0011

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5		0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1		0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008		0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	Sb	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
IVR Pit	Closure	January	2032	15	3.0	0.029	0.021	0.046	0.0039	0.022	0.00012	0.0055	0.0093	0.000005	2.9	0.00065	0.00052	0.064	0.000063	0.91	0.015	0.0000049	0.00013	0.0012	0.00008	0.000011	0.00001	0.000092	0.000059	0.0011
		February		15	3.0	0.029	0.021	0.046	0.0039	0.022	0.00012	0.0055	0.0093	0.000005	2.9	0.00065	0.00052	0.064	0.000063	0.91	0.015	0.0000049	0.00013	0.0012	0.00008	0.000011	0.00001	0.000092	0.000059	0.0011
		March		15	3.0	0.029	0.021	0.046	0.0039	0.022	0.00012	0.0055	0.0093	0.000005	2.9	0.00065	0.00052	0.064	0.000063	0.91	0.015	0.0000049	0.00013	0.0012	0.00008	0.000011	0.00001	0.000092	0.000059	0.0011
		April		15	3.0	0.029	0.021	0.046	0.0039	0.022	0.00012	0.0055	0.0093	0.000005	2.9	0.00065	0.00052	0.064	0.000063	0.91	0.015	0.0000049	0.00013	0.0012	0.00008	0.000011	0.00001	0.000092	0.000059	0.0011
		May		15	3.0	0.029	0.021	0.046	0.0039	0.022	0.00012	0.0055	0.0093	0.000005	2.9	0.00065	0.00052	0.064	0.000063	0.91	0.015	0.0000049	0.00013	0.0012	0.00008	0.000011	0.00001	0.000092	0.000059	0.0011
		June		15	3.0	0.029	0.02	0.042	0.0038	0.022	0.00012	0.0051	0.0095	0.000005	2.9	0.00065	0.00053	0.064	0.000064	0.91	0.014	0.0000049	0.00012	0.0012	0.000079	0.000011	0.00001	0.000094	0.000058	0.0011
		July		14	3.0	0.029	0.018	0.037	0.0037	0.022	0.00012	0.0048	0.0095	0.000005	2.9	0.00065	0.00053	0.064	0.000065	0.9	0.013	0.0000049	0.00012	0.0012	0.000078	0.000011	0.00001	0.000094	0.000055	0.0011
		August		15	3.0	0.029	0.018	0.037	0.0037	0.022	0.00012	0.005	0.0095	0.000005	2.9	0.00065	0.00053	0.064	0.000065	0.9	0.013	0.0000049	0.00012	0.0012	0.000079	0.000011	0.00001	0.000094	0.000056	0.0011
		September		14	3.0	0.029	0.017	0.035	0.0036	0.022	0.00012	0.0051	0.0095	0.000005	2.9	0.00065	0.00053	0.064	0.000064	0.91	0.013	0.0000049	0.00012	0.0012	0.000079	0.000011	0.00001	0.000094	0.000056	0.0011
		October		14	2.9	0.029	0.017	0.034	0.0036	0.022	0.00012	0.005	0.0095	0.000005	2.9	0.00065	0.00053	0.064	0.000064	0.9	0.012	0.0000049	0.00012	0.0012	0.000078	0.000011	0.00001	0.000094	0.000056	0.0011
		November		14	2.9	0.029	0.017	0.034	0.0036	0.022	0.00012	0.005	0.0095	0.000005	2.9	0.00065	0.00053	0.064	0.000064	0.9	0.012	0.0000049	0.00012	0.0012	0.000078	0.000011	0.00001	0.000094	0.000056	0.0011
		December		14	2.9	0.029	0.017	0.034	0.0036	0.022	0.00012	0.005	0.0095	0.000005	2.9	0.00065	0.00053	0.064	0.000064	0.9	0.012	0.0000049	0.00012	0.0012	0.000078	0.000011	0.00001	0.000094	0.000056	0.0011
		January	2033	14	2.9	0.029	0.017	0.034	0.0036	0.022	0.00012	0.005	0.0095	0.000005	2.9	0.00065	0.00053	0.064	0.000064	0.9	0.012	0.0000049	0.00012	0.0012	0.000078	0.000011	0.00001	0.000094	0.000056	0.0011
		February		14	2.9	0.029	0.017	0.034	0.0036	0.022	0.00012	0.005	0.0095	0.000005	2.9	0.00065	0.00053	0.064	0.000064	0.9	0.012	0.0000049	0.00012	0.0012	0.000078	0.000011	0.00001	0.000094	0.000056	0.0011
		March		14	2.9	0.029	0.017	0.034	0.0036	0.022	0.00012	0.005	0.0095	0.000005	2.9	0.00065	0.00053	0.064	0.000064	0.9	0.012	0.0000049	0.00012	0.0012	0.000078	0.000011	0.00001	0.000094	0.000056	0.0011
		April		14	2.9	0.029	0.017	0.034	0.0036	0.022	0.00012	0.005	0.0095	0.000005	2.9	0.00065	0.00053	0.064	0.000064	0.9	0.012	0.0000049	0.00012	0.0012	0.000078	0.000011	0.00001	0.000094	0.000056	0.0011
		May		14	2.9	0.029	0.017	0.034	0.0036	0.022	0.00012	0.005	0.0095	0.000005	2.9	0.00065	0.00053	0.064	0.000064	0.9	0.012	0.0000049	0.00012	0.0012	0.000078	0.000011	0.00001	0.000094	0.000056	0.0011
		June		14	3.0	0.029	0.016	0.032	0.0036	0.022	0.00012	0.0047	0.0096	0.0000051	2.8	0.00065	0.00054	0.065	0.000065	0.9	0.012	0.000005	0.00011	0.0012	0.000078	0.000011	0.00001	0.000096	0.000054	0.0012
		July		14	2.9	0.028	0.015	0.028	0.0035	0.022	0.00012	0.0044	0.0096	0.0000051	2.8	0.00065	0.00054	0.064	0.000066	0.89	0.011	0.0000049	0.00011	0.0012	0.000077	0.000011	0.00001	0.000096	0.000052	0.0012
		August		14	2.9	0.028	0.015	0.028	0.0035	0.022	0.00012	0.0047	0.0096	0.0000051	2.8	0.00065	0.00054	0.065	0.000066	0.9	0.011	0.0000049	0.00011	0.0012	0.000078	0.000011	0.00001	0.000096	0.000053	0.0012
		September		14	2.9	0.028	0.015	0.027	0.0034	0.022	0.00012	0.0047	0.0096	0.0000051	2.8	0.00065	0.00054	0.065	0.000065	0.9	0.011	0.0000049	0.00011	0.0012	0.000078	0.000011	0.00001	0.000096	0.000053	0.0012
		October		14	2.9	0.028	0.014	0.026	0.0034	0.022	0.00012	0.0046	0.0096	0.0000051	2.8	0.00065	0.00053	0.065	0.000065	0.9	0.011	0.0000049	0.00011	0.0012	0.000077	0.000011	0.00001	0.000096	0.000053	0.0012
		November		14	2.9	0.028	0.014	0.026	0.0034	0.022	0.00012	0.0046	0.0096	0.0000051	2.8	0.00065	0.00053	0.065	0.000065	0.9	0.011	0.0000049	0.00011	0.0012	0.000077	0.000011	0.00001	0.000096	0.000053	0.0012
		December		14	2.9	0.028	0.014	0.026	0.0034	0.022	0.00012	0.0046	0.0096	0.0000051	2.8	0.00065	0.00053	0.065	0.000065	0.9	0.011	0.0000049	0.00011	0.0012	0.000077	0.000011	0.00001	0.000096	0.000053	0.0012
		January	2034	14	2.9	0.028	0.014	0.026	0.0034	0.022	0.00012	0.0046	0.0096	0.0000051	2.8	0.00065	0.00053	0.065	0.000065	0.9	0.011	0.0000049	0.00011	0.0012	0.000077	0.000011	0.00001	0.000096	0.000053	0.0012
		February		14	2.9	0.028	0.014	0.026	0.0034	0.022	0.00012	0.0047	0.0096	0.0000051	2.8	0.00065	0.00053	0.065	0.000065	0.9	0.011	0.0000049	0.00011	0.0012	0.000077	0.000011	0.00001	0.000096	0.000053	0.0012
		March		14	2.9	0.028	0.014	0.026	0.0034	0.022	0.00012	0.0047	0.0096	0.0000051	2.8	0.00065	0.00053	0.065	0.000065	0.9	0.011	0.0000049	0.00011	0.0012	0.000077	0.000011	0.00001	0.000096	0.000053	0.0012
		April		14	2.9	0.028	0.014	0.026	0.0034	0.022	0.00012	0.0047	0.0096	0.0000051	2.8	0.00065	0.00053	0.065	0.000065	0.9	0.011	0.0000049	0.00011	0.0012	0.000077	0.000011	0.00001	0.000096	0.000053	0.0012
		May		14	2.9	0.028	0.014	0.026	0.0034	0.022	0.00012	0.0047	0.0096	0.0000051	2.8	0.00065	0.00053	0.065	0.000065	0.9	0.011	0.0000049	0.00011	0.0012	0.000077	0.000011	0.00001	0.000096	0.000053	0.0012
		June		14	2.9	0.028	0.014	0.024	0.0034	0.022	0.00012	0.0043	0.0097	0.0000051	2.8	0.00065	0.00054	0.065	0.000066	0.89	0.01	0.000005	0.00011	0.0012	0.000077	0.000011	0.00001	0.000097	0.000052	0.0012
		July		14	2.9	0.028	0.013	0.022	0.0033	0.022	0.00012	0.0041	0.0097	0.0000051	2.8	0.00065	0.00054	0.065	0.000066	0.88	0.0095	0.000005	0.0001	0.0012	0.000076	0.000011	0.00001	0.000097	0.00005	0.0012
		August		14	2.9	0.028	0.013	0.021	0.0033	0.022	0.00012	0.0044	0.0097	0.0000051	2.8	0.00065	0.00054	0.065	0.000066	0.89	0.0095	0.000005	0.00011	0.0012	0.000077	0.000011	0.00001	0.000097	0.000051	0.0012
		September		14	2.9	0.028	0.013	0.021	0.0033	0.022	0.00012	0.0045	0.0097	0.0000051	2.8	0.00065	0.00054	0.065	0.000066	0.89	0.0093	0.000005	0.00011	0.0012	0.000077	0.000011	0.00001	0.000097	0.000051	0.0012
		October		14	2.8	0.028	0.013	0.02	0.0033	0.022	0.00012	0.0044	0.0097	0.0000051	2.8	0.00065	0.00054	0.065	0.000066	0.89	0.0091	0.0000049	0.00011	0.0012	0.000077	0.000011	0.00001	0.000097	0.000051	0.0012
		November		14	2.8	0.028	0.013	0.02	0.0033	0.022	0.00012	0.0044	0.0097	0.0000051	2.8	0.00065	0.00054	0.065	0.000066	0.89	0.0091	0.0000049	0.00011	0.0012	0.000077	0.000011	0.00001	0.000097	0.000051	0.0012
		December		14	2.8	0.028	0.013	0.02	0.0033	0.022	0.00012	0.0044	0.0097	0.0000051	2.8	0.00065	0.00054	0.065	0.000066	0.89	0.0091	0.0000049	0.00011	0.0012	0.000077	0.000011	0.00001	0.000097	0.000051	0.0012
		January	2035	14	2.8	0.028	0.013	0.02	0.0033	0.022	0.00012	0.0044	0.0097	0.0000051	2.8	0.00065	0.00054	0.065	0.000066	0.89	0.0091	0.0000049	0.00011	0.0012	0.000077	0.000011	0.00001	0.000097	0.000051	0.0012
		February		14	2.8	0.028	0.013	0.02	0.0033	0.022	0.00012	0.0044	0.0097	0.0000051	2.8	0.00065	0.00054	0.065	0.000066	0.89	0.0091	0.0000049	0.00011	0.0012	0.000077	0.000011	0.00001	0.000097	0.000051	0.0012
		March		14	2.8	0.028	0.013	0.02	0.0033	0.022	0.00012	0.0044	0.0097	0.0000051	2.8	0.00065	0.00054	0.065	0.000066	0.89	0.0091	0.0000049	0.00011	0.0012	0.000077	0.000011	0.00001	0.000097	0.000051	0.0012
		April		14	2.8	0.028	0.013	0.02	0.0033	0.022	0.00012	0.0044	0.0097	0.0000051	2.8	0.00065	0.00054	0.065	0.000066	0.89	0.0091	0.0000049	0.00011	0.0012	0.000077	0.000011	0.00001	0.000097	0.000051	0.0012
		May		14	2.8	0.028	0.013	0.02	0.0033	0.022	0.00012	0.0044	0.0097	0.0000051	2.8	0.00065	0.00054	0.065	0.000066	0.89	0.0091	0.0000049	0.00011	0.0012	0.000077	0.000011	0.00001	0.000097	0.000051	0.0012
		June		14	2.9	0.028	0.012	0.019	0.0032	0.022	0.00012	0.0041	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.89	0.0088	0.000005	0.0001	0.0012	0.000076	0.000011	0.00001	0.000098	0.00005	0.0012
		July		13	2.8	0.028	0.012	0.017	0.0032	0.022	0.00012	0.0039	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0084	0.000005	0.000098	0.0012	0.000075	0.000011	0.00001	0.000098	0.000049	0.0012
		August		14	2.8	0.028	0.012	0.017	0.0032	0.022	0.00012	0.0042	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.89	0.0084	0.000005	0.0001	0.0012	0.000077	0.000011	0.00001	0.000098	0.00005	0.0012
		September		14	2.8	0.028	0.011	0.016	0.0032	0.022	0.00012	0.0043	0.0097	0.0000051	2.7	0.00065	0.00054	0.065	0.000066	0.89	0.0083	0.000005	0.0001	0.0012	0.000077	0.000011	0.00001	0.000098	0.00005	0.0012
		October		14	2.8	0.028	0.011	0.016	0.0031	0.022	0.00012	0.0042	0.0097	0.0000051	2.7	0.00065	0.00054	0.065	0.000066	0.89	0.0081	0.000005	0.0001	0.0012	0.000076	0.000011	0.00001	0.000098	0.000049	0.0012
		November		14	2.8	0.028	0.011	0.016	0.0031	0.022	0.00012	0.0042	0.0097	0.0000051	2.7	0.00065	0.00054	0.065	0.000066	0.89	0.0081	0.000005	0.0001	0.0012	0.000076	0.000011	0.00001	0.000098	0.000049	0.0012
		December		14	2.8	0.028	0.011	0.016	0.0031	0.022	0.00012	0.0042	0.0097	0.0000051	2.7	0.00065	0.00054	0.065	0.000066	0.89	0.0081	0.000005	0.0001	0.0012	0.000076	0.000011	0.00001	0.000098	0.000049	0.0012
		January	2036	14	2.8	0.028	0.011	0.016	0.0031	0.022	0.00012	0.0042	0.0097	0.0000051	2.7	0.00065	0.00054	0.065	0.000066	0.89	0.0081	0.000005	0.0001	0.0012	0.000076	0.000011	0.00001	0.000098	0.000049	0.0012
		February		14	2.8	0.028	0.011	0.016	0.0031	0.022	0.00012	0.0042	0.0097	0.0000051	2.7	0.00065	0.00054	0.065	0.000066	0.89	0.0081	0.000005	0.0001	0.0012	0.000076	0.000011	0.00001	0.000098	0.000049	0.0012
		March		14	2.8	0.028	0.011	0.016	0.0031	0.022	0.00012	0.0042	0.0097	0.0000051	2.7	0.00065	0.00054	0.065	0.000066	0.89	0.0081	0.000005	0.0001	0.0012	0.000076	0.000011	0.00001	0.000098	0.000049	0.0012
		April		14	2.8	0.028	0.011	0.016	0.0031	0.022	0.00012	0.0043	0.0097	0.0000051	2.7	0.00065	0.00054	0.065	0.000066	0.89	0.0081	0.000005	0.0001	0.0012	0.000076	0.000011	0.00001	0.000098	0.000049	0.0012
		May		14	2.8	0.028	0.011	0.016	0.0031	0.022	0.00012	0.0043	0.0097	0.0000051	2.7	0.00065	0.00054	0.065	0.000066	0.89	0.0081	0.000005	0.0001	0.0012	0.000076	0.000011	0.00001	0.000098	0.000049	0.0012
		June		13	2.8	0.028	0.011	0.015	0.0031	0.022	0.00012	0.004	0.0098	0.0000051	2.7	0.00065	0.00055	0.065	0.000067	0.89	0.0079	0.000005	0.000098	0.0012	0.000076	0.000011	0.00001	0.000099	0.000049	0.0012
		July		13	2.8	0.028	0.011	0.014	0.0031	0.022	0.00012	0.0038	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0076	0.000005	0.000096	0.0012	0.000075	0.000011	0.00001	0.000099	0.000048	0.0012
		August		13	2.8	0.028	0.011	0.013	0.0031	0.022	0.00012	0.0041	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0077	0.000005	0.000099	0.0012	0.000076	0.000011	0.00001	0.000099	0.000049	0.0012
		September		13	2.8	0.028	0.011	0.013	0.0031	0.022	0.00012	0.0042	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.89	0.0076	0.000005	0.0001	0.0012	0.000076	0.000011	0.00001	0.000098	0.000049	0.0012
		October		13	2.8	0.027	0.01	0.013	0.0031	0.022	0.00012	0.0041	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0074	0.000005	0.000099	0.0012	0.000076	0.000011	0.00001	0.000098	0.000048	0.0012
		November		13	2.8	0.027	0.01	0.013	0.0031	0.022	0.00012	0.0041	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0074	0.000005	0.000099	0.0012	0.000076	0.000011	0.00001	0.000098	0.000048	0.0012
		December		13	2.8	0.027	0.01	0.013	0.0031	0.022	0.00012	0.0041	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0074	0.000005	0.000099	0.0012	0.000076	0.000011	0.00001	0.000098	0.000048	0.0012
		January	2037	13	2.8	0.027	0.01	0.013	0.0031	0.022	0.00012	0.0041	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0074	0.000005	0.000099	0.0012	0.000076	0.000011	0.00001	0.000098	0.000048	0.0012
		February		13	2.8	0.027	0.01	0.013	0.0031	0.022	0.00012	0.0041	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0074	0.000005	0.000099	0.0012	0.000076	0.000011	0.00001	0.000098	0.000048	0.0012
		March		13	2.8	0.027	0.01	0.013	0.0031	0.022	0.00012	0.0041	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0074	0.000005	0.000099	0.0012	0.000076	0.000011	0.00001	0.000098	0.000048	0.0012
		April		13	2.8	0.027	0.01	0.013	0.0031	0.022	0.00012	0.0041	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0074	0.000005	0.000099	0.0012	0.000076	0.000011	0.00001	0.000098	0.000048	0.0012
		May		13	2.8	0.027	0.01	0.013	0.0031	0.022	0.00012	0.0041	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0074	0.000005	0.000099	0.0012	0.000076	0.000011	0.00001	0.000098	0.000048	0.0012
		June		13	2.8	0.028	0.01	0.012	0.0031	0.022	0.00012	0.0039	0.0099	0.0000052	2.7	0.00065	0.00055	0.065	0.000067	0.88	0.0073	0.000005	0.000096	0.0012	0.000075	0.000011	0.00001	0.000099	0.000048	0.0012
		July		13	2.8	0.027	0.01	0.011	0.003	0.022	0.00012	0.0037	0.0098	0.0000051	2.7	0.00065	0.00055	0.065	0.000067	0.87	0.0071	0.000005	0.000094	0.0012	0.000075	0.000011	0.00001	0.000099	0.000047	0.0012
		August		13	2.8	0.027	0.01	0.011	0.003	0.022	0.00012	0.004	0.0098	0.0000051	2.7	0.00065	0.00055	0.065	0.000067	0.88	0.0071	0.000005	0.000097	0.0012	0.000076	0.000011	0.00001	0.000099	0.000048	0.0012
		September		13	2.8	0.027	0.0098	0.011	0.003	0.022	0.00012	0.0041	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0071	0.000005	0.000098	0.0012	0.000076	0.000011	0.00001	0.000099	0.000048	0.0012
		October		13	2.8	0.027	0.0097	0.011	0.003	0.022	0.00012	0.004	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.007	0.000005	0.000097	0.0012	0.000076	0.000011	0.00001	0.000099	0.000048	0.0012
		November		13	2.8	0.027	0.0097	0.011	0.003	0.022	0.00012	0.004	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.007	0.000005	0.000097	0.0012	0.000076	0.000011	0.00001	0.000099	0.000048	0.0012
		December		13	2.8	0.027	0.0097	0.011	0.003	0.022	0.00012	0.004	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.007	0.000005	0.000097	0.0012	0.000076	0.000011	0.00001	0.000099	0.000048	0.0012

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5		0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25							0.1
		CEQG aquatic life (long-term)[1] (mg/L)			120	0.12	12.6	2.93	0.01	0.1		0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008			0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	Sb	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
IVR Pit	*Closure*	January	2038	13	2.8	0.027	0.0097	0.011	0.003	0.022	0.00012	0.004	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.007	0.000005	0.000097	0.0012	0.000076	0.000011	0.00001	0.000099	0.000048	0.0012
		February		13	2.8	0.027	0.0097	0.011	0.003	0.022	0.00012	0.004	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.007	0.000005	0.000097	0.0012	0.000076	0.000011	0.00001	0.000099	0.000048	0.0012
		March		13	2.8	0.027	0.0097	0.011	0.003	0.022	0.00012	0.0041	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.007	0.000005	0.000097	0.0012	0.000076	0.000011	0.00001	0.000099	0.000048	0.0012
		April		13	2.8	0.027	0.0097	0.011	0.003	0.022	0.00012	0.0041	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.007	0.000005	0.000097	0.0012	0.000076	0.000011	0.00001	0.000099	0.000048	0.0012
		May		13	2.8	0.027	0.0097	0.011	0.003	0.022	0.00012	0.0041	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.007	0.000005	0.000097	0.0012	0.000076	0.000011	0.00001	0.000099	0.000048	0.0012
		June		13	2.8	0.027	0.0097	0.01	0.003	0.022	0.00012	0.0038	0.0099	0.0000052	2.7	0.00065	0.00055	0.065	0.000068	0.88	0.0068	0.000005	0.000095	0.0012	0.000075	0.000011	0.00001	0.00010	0.000047	0.0012
		July		13	2.8	0.027	0.0095	0.0096	0.003	0.022	0.00012	0.0036	0.0099	0.0000051	2.7	0.00065	0.00055	0.065	0.000067	0.87	0.0067	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.000099	0.000046	0.0012
		August		13	2.8	0.027	0.0095	0.0096	0.003	0.022	0.00012	0.0039	0.0098	0.0000051	2.7	0.00065	0.00055	0.065	0.000067	0.88	0.0068	0.000005	0.000096	0.0012	0.000076	0.000011	0.00001	0.000099	0.000047	0.0012
		September		13	2.8	0.027	0.0094	0.0094	0.003	0.022	0.00012	0.004	0.0098	0.0000051	2.7	0.00065	0.00055	0.065	0.000067	0.88	0.0067	0.000005	0.000097	0.0012	0.000076	0.000011	0.00001	0.000099	0.000048	0.0012
		October		13	2.8	0.027	0.0092	0.0093	0.003	0.022	0.00012	0.004	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0066	0.000005	0.000096	0.0012	0.000075	0.000011	0.00001	0.000099	0.000047	0.0012
		November		13	2.8	0.027	0.0092	0.0093	0.003	0.022	0.00012	0.004	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0066	0.000005	0.000096	0.0012	0.000075	0.000011	0.00001	0.000099	0.000047	0.0012
		December		13	2.8	0.027	0.0092	0.0093	0.003	0.022	0.00012	0.004	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0066	0.000005	0.000096	0.0012	0.000075	0.000011	0.00001	0.000099	0.000047	0.0012
		January	2039	13	2.8	0.027	0.0092	0.0093	0.003	0.022	0.00012	0.004	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0066	0.000005	0.000096	0.0012	0.000075	0.000011	0.00001	0.000099	0.000047	0.0012
		February		13	2.8	0.027	0.0092	0.0093	0.003	0.022	0.00012	0.004	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0066	0.000005	0.000096	0.0012	0.000075	0.000011	0.00001	0.000099	0.000047	0.0012
		March		13	2.8	0.027	0.0092	0.0093	0.003	0.022	0.00012	0.004	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0066	0.000005	0.000096	0.0012	0.000075	0.000011	0.00001	0.000099	0.000047	0.0012
		April		13	2.8	0.027	0.0092	0.0093	0.003	0.022	0.00012	0.004	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0066	0.000005	0.000096	0.0012	0.000075	0.000011	0.00001	0.000099	0.000047	0.0012
		May		13	2.8	0.027	0.0092	0.0093	0.003	0.022	0.00012	0.004	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0066	0.000005	0.000096	0.0012	0.000075	0.000011	0.00001	0.000099	0.000047	0.0012
		June		13	2.8	0.027	0.0093	0.009	0.003	0.022	0.00012	0.0037	0.0099	0.0000052	2.7	0.00066	0.00055	0.065	0.000068	0.88	0.0065	0.000005	0.000093	0.0012	0.000075	0.000011	0.00001	0.00010	0.000047	0.0012
		July		13	2.8	0.027	0.0092	0.0085	0.003	0.022	0.00012	0.0037	0.0099	0.0000051	2.7	0.00065	0.00055	0.065	0.000068	0.87	0.0064	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.00010	0.000046	0.0012
		August		13	2.8	0.027	0.0091	0.0085	0.003	0.022	0.00012	0.0041	0.0099	0.0000051	2.7	0.00065	0.00055	0.065	0.000068	0.88	0.0065	0.000005	0.000095	0.0012	0.000076	0.000011	0.00001	0.00010	0.000047	0.0012
		September		13	2.8	0.027	0.009	0.0084	0.003	0.022	0.00012	0.0043	0.0098	0.0000051	2.7	0.00065	0.00055	0.065	0.000067	0.88	0.0065	0.000005	0.000096	0.0012	0.000076	0.000011	0.00001	0.000099	0.000047	0.0012
		October		13	2.8	0.027	0.0089	0.0083	0.003	0.022	0.00012	0.0043	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0064	0.000005	0.000095	0.0012	0.000075	0.000011	0.00001	0.000099	0.000047	0.0012
		November		13	2.8	0.027	0.0089	0.0083	0.003	0.022	0.00012	0.0044	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0064	0.000005	0.000095	0.0012	0.000075	0.000011	0.00001	0.000099	0.000047	0.0012
		December		13	2.8	0.027	0.0089	0.0083	0.003	0.022	0.00012	0.0045	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0064	0.000005	0.000095	0.0012	0.000075	0.000011	0.00001	0.000099	0.000047	0.0012
		January	2040	13	2.8	0.027	0.0089	0.0083	0.003	0.022	0.00012	0.0047	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0064	0.000005	0.000095	0.0012	0.000075	0.000011	0.00001	0.000099	0.000047	0.0012
		February		13	2.8	0.027	0.0089	0.0083	0.003	0.022	0.00012	0.0048	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0064	0.000005	0.000095	0.0012	0.000075	0.000011	0.00001	0.000099	0.000047	0.0012
		March		13	2.8	0.027	0.0089	0.0083	0.003	0.022	0.00012	0.0049	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0064	0.000005	0.000095	0.0012	0.000075	0.000011	0.00001	0.000099	0.000047	0.0012
		April		13	2.8	0.027	0.0089	0.0083	0.003	0.022	0.00012	0.005	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0064	0.000005	0.000095	0.0012	0.000075	0.000011	0.00001	0.000099	0.000047	0.0012
		May		13	2.8	0.027	0.0089	0.0083	0.003	0.022	0.00012	0.0051	0.0098	0.0000051	2.7	0.00065	0.00054	0.065	0.000067	0.88	0.0064	0.000005	0.000095	0.0012	0.000075	0.000011	0.00001	0.000099	0.000047	0.0012
		June		13	2.8	0.027	0.009	0.008	0.003	0.022	0.00012	0.0049	0.0099	0.0000052	2.7	0.00066	0.00055	0.065	0.000068	0.88	0.0063	0.000005	0.000093	0.0012	0.000075	0.000011	0.00001	0.00010	0.000046	0.0012
		July		13	2.8	0.027	0.009	0.0078	0.003	0.022	0.00012	0.0047	0.0099	0.0000052	2.7	0.00066	0.00055	0.065	0.000068	0.87	0.0063	0.000005	0.000091	0.0012	0.000075	0.000011	0.00001	0.00010	0.000046	0.0012
		August		13	2.8	0.027	0.009	0.0078	0.003	0.022	0.00012	0.005	0.0099	0.0000052	2.7	0.00066	0.00055	0.065	0.000068	0.88	0.0064	0.000005	0.000094	0.0012	0.000076	0.000011	0.00001	0.00010	0.000047	0.0012
		September		13	2.8	0.027	0.0088	0.0077	0.0029	0.022	0.00012	0.005	0.0098	0.0000051	2.7	0.00065	0.00055	0.065	0.000067	0.88	0.0063	0.000005	0.000095	0.0012	0.000076	0.000011	0.00001	0.000099	0.000047	0.0012
		October		13	2.8	0.027	0.0088	0.0076	0.0029	0.022	0.00012	0.005	0.0098	0.0000051	2.7	0.00065	0.00055	0.065	0.000067	0.88	0.0063	0.000005	0.000094	0.0012	0.000075	0.000011	0.00001	0.000099	0.000046	0.0012
		November		13	2.8	0.027	0.0088	0.0076	0.0029	0.022	0.00012	0.0051	0.0098	0.0000051	2.7	0.00065	0.00055	0.065	0.000067	0.88	0.0063	0.000005	0.000094	0.0012	0.000075	0.000011	0.00001	0.000099	0.000046	0.0012
		December		13	2.8	0.027	0.0088	0.0076	0.0029	0.022	0.00012	0.0052	0.0098	0.0000051	2.7	0.00065	0.00055	0.065	0.000067	0.88	0.0063	0.000005	0.000094	0.0012	0.000075	0.000011	0.00001	0.000099	0.000046	0.0012
		January	2041	13	2.8	0.027	0.0088	0.0076	0.0029	0.022	0.00012	0.0053	0.0098	0.0000051	2.7	0.00065	0.00055	0.065	0.000067	0.88	0.0063	0.000005	0.000094	0.0012	0.000075	0.000011	0.00001	0.000099	0.000046	0.0012
		February		13	2.8	0.027	0.0088	0.0076	0.0029	0.022	0.00012	0.0055	0.0098	0.0000051	2.7	0.00065	0.00055	0.065	0.000067	0.88	0.0063	0.000005	0.000094	0.0012	0.000075	0.000011	0.00001	0.000099	0.000046	0.0012
		March		13	2.8	0.027	0.0088	0.0076	0.0029	0.022	0.00012	0.0056	0.0098	0.0000051	2.7	0.00065	0.00055	0.065	0.000067	0.88	0.0063	0.000005	0.000094	0.0012	0.000075	0.000011	0.00001	0.000099	0.000046	0.0012
		April		13	2.8	0.027	0.0088	0.0076	0.0029	0.022	0.00012	0.0057	0.0098	0.0000051	2.7	0.00065	0.00055	0.065	0.000067	0.88	0.0063	0.000005	0.000094	0.0012	0.000075	0.000011	0.00001	0.000099	0.000046	0.0012
		May		13	2.8	0.027	0.0088	0.0076	0.0029	0.022	0.00012	0.0058	0.0098	0.0000051	2.7	0.00065	0.00055	0.065	0.000067	0.88	0.0063	0.000005	0.000094	0.0012	0.000075	0.000011	0.00001	0.000099	0.000046	0.0012
		June		13	2.8	0.027	0.0088	0.0076	0.003	0.022	0.00012	0.0056	0.0099	0.0000052	2.7	0.00066	0.00055	0.065	0.000068	0.88	0.0062	0.000005	0.000093	0.0012	0.000075	0.000011	0.00001	0.0001	0.000046	0.0012
		July		13	2.8	0.027	0.0088	0.0075	0.003	0.022	0.00012	0.0055	0.0099	0.0000052	2.7	0.00066	0.00055	0.065	0.000068	0.88	0.0062	0.000005	0.000093	0.0012	0.000075	0.000011	0.00001	0.0001	0.000046	0.0012
		August		13	2.8	0.027	0.0088	0.0075	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.7	0.00066	0.00055	0.066	0.000068	0.88	0.0062	0.000005	0.000093	0.0012	0.000075	0.000011	0.00001	0.0001	0.000047	0.0012
			MINIMUM	9.6	0.57	0.026	0.005	0.0051	0.0026	0.017	0.000093	0.00039	0.0076	0.0000045	1.7	0.00052	0.00034	0.05	0.000051	0.75	0.0023	0.0000039	0.000047	0.00087	0.000046	0.00001	0.0000094	0.000071	0.000033	0.00095
			MAXIMUM	136	5.2	0.098	0.3	12	0.21	5.9	0.0058	0.93	0.017	0.000035	14	0.15	0.0093	12	0.0024	8.2	0.2	0.0000093	0.0026	0.065	0.0012	0.00038	0.00011	0.00024	0.0018	0.014
			AVERAGE	17	2.9	0.03	0.029	0.39	0.0058	0.075	0.00018	0.016	0.0094	0.0000053	3.0	0.0019	0.00059	0.17	0.000085	1.0	0.017	0.0000049	0.00015	0.0017	0.000091	0.000014	0.000011	0.000094	0.000078	0.0012

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5		0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1		0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008		0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	Sb	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
IVR Pit	Post-Closure	September	2041	13	2.8	0.027	0.0088	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.7	0.00066	0.00055	0.066	0.000068	0.88	0.0062	0.000005	0.000093	0.0012	0.000075	0.000011	0.00001	0.0001	0.000047	0.0012
		October		13	2.8	0.028	0.0088	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.7	0.00066	0.00055	0.066	0.000068	0.88	0.0062	0.000005	0.000093	0.0012	0.000075	0.000011	0.00001	0.0001	0.000047	0.0012
		November		13	2.8	0.028	0.0088	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.7	0.00066	0.00055	0.066	0.000068	0.88	0.0062	0.000005	0.000093	0.0012	0.000075	0.000011	0.00001	0.0001	0.000047	0.0012
		December		13	2.8	0.028	0.0088	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.7	0.00066	0.00055	0.066	0.000068	0.88	0.0062	0.000005	0.000093	0.0012	0.000075	0.000011	0.00001	0.0001	0.000047	0.0012
		January	2042	13	2.8	0.028	0.0088	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.7	0.00066	0.00055	0.066	0.000068	0.88	0.0062	0.000005	0.000093	0.0012	0.000075	0.000011	0.00001	0.0001	0.000047	0.0012
		February		13	2.8	0.028	0.0088	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.7	0.00066	0.00055	0.066	0.000068	0.88	0.0062	0.000005	0.000093	0.0012	0.000075	0.000011	0.00001	0.0001	0.000047	0.0012
		March		13	2.8	0.028	0.0088	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.7	0.00066	0.00055	0.066	0.000068	0.88	0.0062	0.000005	0.000093	0.0012	0.000075	0.000011	0.00001	0.0001	0.000047	0.0012
		April		13	2.8	0.028	0.0088	0.0076	0.003	0.022	0.00012	0.0056	0.010	0.0000052	2.7	0.00066	0.00055	0.066	0.000068	0.88	0.0062	0.000005	0.000093	0.0012	0.000075	0.000011	0.00001	0.0001	0.000047	0.0012
		May		13	2.8	0.028	0.0088	0.0076	0.003	0.022	0.00012	0.0056	0.010	0.0000052	2.7	0.00066	0.00055	0.066	0.000068	0.88	0.0062	0.000005	0.000093	0.0012	0.000075	0.000011	0.00001	0.0001	0.000047	0.0012
		June		13	2.8	0.027	0.0088	0.0075	0.003	0.022	0.00012	0.0055	0.0099	0.0000052	2.7	0.00066	0.00055	0.066	0.000068	0.88	0.0062	0.000005	0.000092	0.0012	0.000075	0.000011	0.00001	0.0001	0.000047	0.0012
		July		13	2.8	0.028	0.0088	0.0075	0.003	0.022	0.00012	0.0055	0.0099	0.0000052	2.7	0.00066	0.00056	0.066	0.000068	0.88	0.0061	0.000005	0.000092	0.0012	0.000075	0.000011	0.00001	0.0001	0.000047	0.0012
		August		13	2.8	0.028	0.0088	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.7	0.00066	0.00056	0.066	0.000069	0.88	0.0061	0.000005	0.000092	0.0012	0.000075	0.000011	0.00001	0.0001	0.000047	0.0012
		September		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.7	0.00066	0.00056	0.067	0.000069	0.88	0.0061	0.000005	0.000092	0.0012	0.000075	0.000011	0.00001	0.0001	0.000048	0.0012
		October		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.7	0.00066	0.00056	0.067	0.000069	0.88	0.0061	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000048	0.0012
		November		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.7	0.00066	0.00056	0.067	0.000069	0.88	0.0061	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000048	0.0012
		December		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.7	0.00066	0.00056	0.067	0.000069	0.88	0.0061	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000048	0.0012
		January	2043	13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.7	0.00066	0.00056	0.067	0.000069	0.88	0.0061	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000048	0.0012
		February		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.7	0.00066	0.00056	0.067	0.000069	0.88	0.0061	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000048	0.0012
		March		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.7	0.00066	0.00056	0.067	0.000069	0.88	0.0061	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000048	0.0012
		April		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.7	0.00066	0.00056	0.067	0.000069	0.88	0.0061	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000048	0.0012
		May		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0056	0.010	0.0000052	2.7	0.00066	0.00056	0.067	0.000069	0.88	0.0061	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000048	0.0012
		June		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.0099	0.0000052	2.7	0.00066	0.00056	0.067	0.000069	0.88	0.0061	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000048	0.0012
		July		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.0099	0.0000052	2.6	0.00066	0.00056	0.067	0.000069	0.88	0.0061	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000048	0.0012
		August		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.067	0.000069	0.88	0.0061	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000048	0.0012
		September		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.067	0.000069	0.88	0.0061	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000048	0.0012
		October		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.067	0.000069	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		November		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.067	0.000069	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		December		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.067	0.000069	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		January	2044	13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.067	0.000069	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		February		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.067	0.000069	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		March		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.067	0.000069	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		April		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.067	0.000069	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		May		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.067	0.000069	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		June		13	2.8	0.028	0.0087	0.0076	0.003	0.022	0.00012	0.0055	0.0099	0.0000052	2.6	0.00066	0.00056	0.067	0.000069	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		July		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.0099	0.0000052	2.6	0.00066	0.00056	0.068	0.000069	0.88	0.006	0.000005	0.000091	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		August		13	2.8	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.068	0.000069	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		September		13	2.8	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.068	0.00007	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		October		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.068	0.00007	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		November		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.068	0.00007	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		December		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.068	0.00007	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		January	2045	13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.068	0.00007	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		February		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.068	0.00007	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		March		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.068	0.00007	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		April		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.068	0.00007	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		May		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00056	0.068	0.00007	0.88	0.006	0.000005	0.000092	0.0012	0.000074	0.000011	0.00001	0.0001	0.000049	0.0012
		June		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.0099	0.0000052	2.6	0.00066	0.00056	0.068	0.00007	0.88	0.006	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.000049	0.0012
		July		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.0099	0.0000052	2.6	0.00066	0.00056	0.068	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.00005	0.0012
		August		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.00005	0.0012
		September		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.00005	0.0012
		October		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.00005	0.0012
		November		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.00005	0.0012
		December		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.00005	0.0012
		January	2046	13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.00005	0.0012
		February		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.00005	0.0012
		March		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.00005	0.0012
		April		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.00005	0.0012
		May		13	2.7	0.028	0.0086	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.00005	0.0012
		June		13	2.7	0.028	0.0085	0.0076	0.003	0.022	0.00012	0.0055	0.0099	0.0000052	2.6	0.00066	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.00005	0.0012
		July		13	2.7	0.028	0.0085	0.0076	0.003	0.022	0.00012	0.0055	0.0099	0.0000052	2.6	0.00066	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.00005	0.0012
		August		13	2.7	0.028	0.0085	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.000051	0.0012
		September		13	2.7	0.028	0.0085	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.000051	0.0012
		October		13	2.7	0.028	0.0085	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.000051	0.0012
		November		13	2.7	0.028	0.0085	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.000051	0.0012
		December		13	2.7	0.028	0.0085	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.000051	0.0012

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5		0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1		0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008		0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	Sb	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
IVR Pit	*Post-Closure*	January	2047	13	2.7	0.028	0.0085	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.000051	0.0012
		February		13	2.7	0.028	0.0085	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.000051	0.0012
		March		13	2.7	0.028	0.0085	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.000051	0.0012
		April		13	2.7	0.028	0.0085	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.000051	0.0012
		May		13	2.7	0.028	0.0085	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.000051	0.0012
		June		13	2.7	0.028	0.0085	0.0076	0.003	0.022	0.00012	0.0055	0.0099	0.0000052	2.6	0.00067	0.00057	0.07	0.00007	0.88	0.0058	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.000051	0.0012
		July		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.0099	0.0000052	2.6	0.00067	0.00057	0.07	0.00007	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000051	0.0012
		August		13	2.7	0.028	0.0085	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.07	0.000071	0.88	0.0058	0.000005	0.000091	0.0012	0.000072	0.000011	0.00001	0.0001	0.000051	0.0012
		September		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.07	0.000071	0.88	0.0058	0.000005	0.000091	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		October		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.07	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		November		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.07	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		December		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.07	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		January	2048	13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.07	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		February		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.07	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		March		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.07	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		April		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.07	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		May		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.07	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		June		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.0099	0.0000052	2.6	0.00067	0.00057	0.07	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		July		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.0099	0.0000052	2.6	0.00067	0.00057	0.07	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		August		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00057	0.071	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		September		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0058	0.0000051	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		October		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		November		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		December		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		January	2049	13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		February		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		March		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		April		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		May		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0058	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		June		13	2.7	0.028	0.0084	0.0076	0.003	0.022	0.00012	0.0055	0.0099	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0057	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000052	0.0012
		July		13	2.7	0.028	0.0083	0.0076	0.003	0.022	0.00012	0.0055	0.0099	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0057	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000053	0.0012
		August		13	2.7	0.028	0.0083	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0057	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000053	0.0012
		September		13	2.7	0.028	0.0083	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0057	0.0000051	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000053	0.0012
		October		13	2.7	0.028	0.0083	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0057	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000053	0.0012
		November		13	2.7	0.028	0.0083	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0057	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000053	0.0012
		December		13	2.7	0.028	0.0083	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0057	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000053	0.0012
		January	≥2050	13	2.7	0.028	0.0083	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0057	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000053	0.0012
		February		13	2.7	0.028	0.0083	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0057	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000053	0.0012
		March		13	2.7	0.028	0.0083	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0057	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000053	0.0012
		April		13	2.7	0.028	0.0083	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0057	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000053	0.0012
		May		13	2.7	0.028	0.0083	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00067	0.00058	0.071	0.000071	0.88	0.0057	0.000005	0.00009	0.0012	0.000072	0.000011	0.00001	0.0001	0.000053	0.0012
		June		13	2.7	0.028	0.0083	0.0076	0.003	0.022	0.00012	0.0055	0.0099	0.0000052	2.5	0.00067	0.00058	0.072	0.000071	0.88	0.0057	0.000005	0.00009	0.0012	0.000071	0.000011	0.00001	0.0001	0.000053	0.0012
		July		13	2.7	0.028	0.0083	0.0076	0.003	0.022	0.00012	0.0055	0.0123	0.0000052	2.5	0.00067	0.00058	0.072	0.000071	0.88	0.0057	0.000005	0.000089	0.0012	0.000071	0.000011	0.00001	0.0001	0.000053	0.0012
		August		13	2.7	0.028	0.0083	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.5	0.00067	0.00058	0.072	0.000072	0.88	0.0057	0.000005	0.00009	0.0012	0.000071	0.000011	0.00001	0.0001	0.000053	0.0012
		September		13	2.7	0.028	0.0083	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.5	0.00067	0.00058	0.072	0.000072	0.88	0.0057	0.0000051	0.00009	0.0012	0.000071	0.000011	0.00001	0.0001	0.000054	0.0012
		October		13	2.7	0.028	0.0083	0.0076	0.003	0.022	0.00012	0.0054	0.010	0.0000052	2.5	0.00067	0.00058	0.072	0.000072	0.88	0.0056	0.0000051	0.000089	0.0012	0.000071	0.000011	0.00001	0.0001	0.000054	0.0012
		November		13	2.7	0.028	0.0083	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.5	0.00067	0.00058	0.072	0.000072	0.88	0.0056	0.0000051	0.000089	0.0012	0.000071	0.000011	0.00001	0.0001	0.000054	0.0012
		December		13	2.7	0.028	0.0083	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.5	0.00067	0.00058	0.072	0.000072	0.88	0.0056	0.0000051	0.000089	0.0012	0.000071	0.000011	0.00001	0.0001	0.000054	0.0012
			MINIMUM	13	2.7	0.027	0.0083	0.0075	0.003	0.022	0.00012	0.0054	0.0099	0.0000052	2.5	0.00066	0.00055	0.066	0.000068	0.88	0.0056	0.000005	0.000089	0.0012	0.000071	0.000011	0.00001	0.0001	0.000047	0.0012
			MAXIMUM	13	2.8	0.028	0.0088	0.0076	0.003	0.022	0.00012	0.0056	0.0123	0.0000052	2.7	0.00067	0.00058	0.072	0.000072	0.88	0.0062	0.0000051	0.000093	0.0012	0.000075	0.000011	0.00001	0.0001	0.000054	0.0012
			AVERAGE	13	2.7	0.028	0.0085	0.0076	0.003	0.022	0.00012	0.0055	0.010	0.0000052	2.6	0.00066	0.00057	0.069	0.00007	0.88	0.0059	0.000005	0.000091	0.0012	0.000073	0.000011	0.00001	0.0001	0.00005	0.0012

Notes:

[1] Canadian Council of Ministers of the Environment CEQG (2002) freshwater guidelines. Values above the freshwater CEQG's shown in bold-underlined type

[2] CEQG Freshwater Aquatic Life criterion for total ammonia is pH and temperature dependent (5C used based on hydrodynamic modelling).

[3] CEQG Freshwater Aquatic Life Trigger Ranges are dependent on trophic status; oligotrophic status assumed

[4] CEQG Freshwater Aquatic Life Criterion for aluminum is pH dependant.

[5] The CEQG aquatic life criterion for Arsenic is replaced by the Site Specific Water Quality Objective of 0.025 mg/L developed for the Whale Tail Pit Project (Volume 6, Appendix 6-N)

[6] CEQG Freshwater Aquatic Life Criteria are hardness dependant.

[7] CEQG Freshwater Aquatic Life criterion for manganese is pH and hardness dependent.

[8] CEQG Freshwater Aquatic Life criterion is for dissolved zinc and is hardness, pH and DOC dependent.

* Variable guidelines based on average values in Mammoth 2020 CREMP monitoring data (pH=6.85, hardness=61 mg/L, DOC=2.7 mg/L)

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5		0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
		CEQG aquatic life (long-term)[1] (mg/L)			120	0.12	12.6	2.93	0.01	0.1		0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008		0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	Sb	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Mammoth Lake	Construction and Operations	January	2018	25	7.1	0.044	0.011	0.0087	0.0042	0.013	0.00017	0.00067	0.017	0.0000086	5.3	0.00021	0.00088	0.028	0.00013	1.6	0.0041	0.0000085	0.000095	0.0014	0.000085	0.000017	0.000017	0.00017	0.000041	0.0051
		February		25	7.1	0.044	0.011	0.0087	0.0042	0.013	0.00017	0.00067	0.017	0.0000086	5.3	0.00021	0.00088	0.028	0.00013	1.6	0.0041	0.0000085	0.000095	0.0014	0.000085	0.000017	0.000017	0.00017	0.000041	0.0051
		March		25	7.1	0.044	0.011	0.0087	0.0042	0.013	0.00017	0.00067	0.017	0.0000086	5.3	0.00021	0.00088	0.028	0.00013	1.6	0.0041	0.0000085	0.000095	0.0014	0.000085	0.000017	0.000017	0.00017	0.000041	0.0051
		April		25	7.1	0.044	0.011	0.0087	0.0042	0.013	0.00017	0.00067	0.017	0.0000086	5.3	0.00021	0.00088	0.028	0.00013	1.6	0.0041	0.0000085	0.000095	0.0014	0.000085	0.000017	0.000017	0.00017	0.000041	0.0051
		May		25	7.1	0.044	0.011	0.0087	0.0042	0.013	0.00017	0.00067	0.017	0.0000086	5.3	0.00021	0.00088	0.028	0.00013	1.6	0.0041	0.0000085	0.000095	0.0014	0.000085	0.000017	0.000017	0.00017	0.000041	0.0051
		June		23	6.1	0.034	0.064	0.02	0.011	0.11	0.00011	0.0015	0.011	0.000004	6.2	0.002	0.00063	0.18	0.000097	1.2	0.071	0.0000055	0.00011	0.0053	0.00012	0.0000081	0.000012	0.00011	0.000036	0.002
		July		21	5.5	0.03	0.076	0.061	0.0077	0.14	0.000089	0.0017	0.0087	0.0000025	6.2	0.0025	0.00055	0.23	0.000088	1.0	0.092	0.0000044	0.00011	0.0065	0.00013	0.0000054	0.0000093	0.000087	0.000034	0.0011
		August		22	5.6	0.03	0.077	0.062	0.0079	0.14	0.000091	0.0017	0.0088	0.0000027	6.4	0.0025	0.00058	0.23	0.000089	1.1	0.093	0.0000044	0.00011	0.0068	0.00014	0.0000058	0.0000095	0.000089	0.000035	0.0011
		September		23	5.6	0.03	0.076	0.062	0.0084	0.14	0.000093	0.0016	0.009	0.0000029	6.5	0.0025	0.00062	0.24	0.000089	1.3	0.093	0.0000045	0.00012	0.0073	0.00014	0.0000071	0.0000097	0.00009	0.000037	0.0012
		October		40	9.4	0.052	0.13	0.1	0.015	0.23	0.00016	0.0026	0.015	0.0000051	11	0.0041	0.0011	0.42	0.00015	2.3	0.16	0.0000077	0.0002	0.013	0.00025	0.000013	0.000017	0.00015	0.000064	0.0021
		November		40	9.4	0.052	0.13	0.1	0.015	0.23	0.00016	0.0026	0.015	0.0000051	11	0.0041	0.0011	0.42	0.00015	2.3	0.16	0.0000077	0.0002	0.013	0.00025	0.000013	0.000017	0.00015	0.000064	0.0021
		December		40	9.4	0.052	0.13	0.1	0.015	0.23	0.00016	0.0026	0.015	0.0000051	11	0.0041	0.0011	0.42	0.00015	2.3	0.16	0.0000077	0.0002	0.013	0.00025	0.000013	0.000017	0.00015	0.000064	0.0021
		January	2019	40	9.4	0.052	0.13	0.1	0.015	0.23	0.00016	0.0026	0.015	0.0000051	11	0.0041	0.0011	0.42	0.00015	2.3	0.16	0.0000077	0.0002	0.013	0.00025	0.000013	0.000017	0.00015	0.000064	0.0021
		February		40	9.4	0.052	0.13	0.1	0.015	0.23	0.00016	0.0026	0.015	0.0000051	11	0.0041	0.0011	0.42	0.00015	2.3	0.16	0.0000077	0.0002	0.013	0.00025	0.000013	0.000017	0.00015	0.000064	0.0021
		March		73	33	0.046	0.034	0.056	0.0037	0.034	0.00011	0.0007	0.011	0.000005	19	0.00049	0.0006	0.049	0.00006	3.2	0.017	0.0000053	0.00039	0.0031	0.000069	0.00001	0.000011	0.00011	0.000044	0.0029
		April		77	36	0.045	0.024	0.051	0.0025	0.014	0.0001	0.00049	0.01	0.000005	20	0.0001	0.00055	0.01	0.00005	3.3	0.0018	0.000005	0.00041	0.002	0.00005	0.00001	0.00001	0.0001	0.000042	0.003
		May		77	36	0.045	0.024	0.051	0.0025	0.014	0.0001	0.00049	0.01	0.000005	20	0.0001	0.00055	0.01	0.00005	3.3	0.0018	0.000005	0.00041	0.002	0.00005	0.00001	0.00001	0.0001	0.000042	0.003
		June		56	26	0.034	0.019	0.037	0.002	0.01	0.000077	0.00038	0.0077	0.0000039	15	0.000079	0.00043	0.0084	0.00004	2.4	0.0017	0.0000039	0.00031	0.0015	0.000039	0.0000077	0.0000078	0.000077	0.000032	0.0023
		July		44	20	0.029	0.043	0.081	0.003	0.0076	0.000059	0.00032	0.0062	0.0000035	11	0.000066	0.0004	0.014	0.000032	2.1	0.0083	0.0000032	0.00041	0.0014	0.00004	0.0000072	0.0000067	0.000059	0.000048	0.0022
		August		61	25	0.04	0.12	0.34	0.0061	0.022	0.00007	0.00072	0.0078	0.0000055	14	0.00042	0.00067	0.059	0.000043	3.4	0.036	0.0000039	0.00096	0.0033	0.00011	0.000011	0.0000084	0.000061	0.00013	0.0031
		September		72	27	0.051	0.21	0.5	0.01	0.045	0.000096	0.0018	0.011	0.0000077	16	0.00093	0.00095	0.14	0.000064	4.5	0.07	0.0000046	0.0016	0.0053	0.00016	0.000017	0.000011	0.000071	0.00023	0.0042
		October		130	48	0.1	0.4	1.1	0.022	0.13	0.00019	0.0051	0.023	0.000016	27	0.0028	0.0018	0.41	0.00013	8.3	0.16	0.0000079	0.0034	0.01	0.0003	0.00004	0.000021	0.00012	0.00057	0.0076
		November		113	41	0.097	0.32	0.95	0.02	0.12	0.00018	0.0048	0.024	0.000015	23	0.0026	0.0017	0.38	0.00014	7.1	0.14	0.0000078	0.0029	0.0087	0.00027	0.000037	0.00002	0.00012	0.00054	0.0068
		December		97	35	0.091	0.26	0.74	0.019	0.1	0.00018	0.0043	0.024	0.000014	19	0.0021	0.0015	0.33	0.00013	6.1	0.12	0.0000078	0.0025	0.0071	0.00025	0.000034	0.00002	0.00013	0.0005	0.0063
		January	2020	96	34	0.09	0.26	0.72	0.019	0.1	0.00018	0.0042	0.025	0.000014	19	0.002	0.0015	0.32	0.00013	6.0	0.12	0.0000078	0.0025	0.007	0.00024	0.000033	0.00002	0.00013	0.0005	0.0062
		February		96	34	0.09	0.26	0.72	0.019	0.1	0.00018	0.0042	0.025	0.000014	19	0.002	0.0015	0.32	0.00013	6.0	0.12	0.0000078	0.0025	0.007	0.00024	0.000033	0.00002	0.00013	0.0005	0.0062
		March		96	34	0.09	0.26	0.72	0.019	0.1	0.00018	0.0042	0.025	0.000014	19	0.002	0.0015	0.32	0.00013	6.0	0.12	0.0000078	0.0025	0.007	0.00024	0.000033	0.00002	0.00013	0.0005	0.0062
		April		96	34	0.092	0.26	0.76	0.019	0.1	0.00017	0.0042	0.025	0.000014	19	0.002	0.0015	0.33	0.00013	6.0	0.12	0.0000078	0.0025	0.007	0.00024	0.000034	0.00002	0.00013	0.00051	0.0063
		May		98	35	0.094	0.26	0.79	0.019	0.10	0.00017	0.0041	0.024	0.000014	19	0.002	0.0015	0.33	0.00013	6.1	0.12	0.0000077	0.0025	0.0071	0.00025	0.000035	0.00002	0.00012	0.00052	0.0063
		June		69	24	0.072	0.21	0.5	0.014	0.061	0.00012	0.0029	0.018	0.00001	14	0.0011	0.0011	0.22	0.000093	4.2	0.095	0.0000058	0.0017	0.0047	0.00018	0.000025	0.000016	0.000091	0.00039	0.0046
		July		57	20	0.057	0.25	0.51	0.012	0.04	0.000089	0.0023	0.014	0.000008	12	0.00071	0.00094	0.17	0.000068	3.4	0.094	0.0000045	0.0015	0.0046	0.00015	0.000021	0.000013	0.000069	0.0003	0.0039
		August		66	22	0.062	0.32	0.72	0.013	0.038	0.000093	0.0023	0.014	0.0000086	14	0.00067	0.0011	0.19	0.000067	3.9	0.14	0.0000048	0.0016	0.0068	0.00018	0.000024	0.000014	0.000068	0.00032	0.0045
		September		71	21	0.065	0.39	0.91	0.013	0.038	0.000094	0.0026	0.013	0.0000089	14	0.00068	0.0012	0.23	0.000069	4.2	0.17	0.000005	0.0017	0.0088	0.00019	0.000029	0.000015	0.000066	0.00032	0.0053
		October		125	35	0.12	0.77	1.8	0.022	0.065	0.00016	0.0048	0.022	0.000015	25	0.0012	0.0023	0.41	0.00012	7.4	0.3	0.0000085	0.0028	0.016	0.00033	0.000052	0.000026	0.00011	0.00054	0.0098
		November		126	35	0.12	0.78	1.9	0.022	0.065	0.00015	0.0048	0.022	0.000015	25	0.0012	0.0023	0.42	0.00012	7.5	0.31	0.0000085	0.0029	0.016	0.00033	0.000052	0.000026	0.00011	0.00055	0.0099
		December		126	35	0.12	0.78	1.9	0.022	0.065	0.00015	0.0048	0.022	0.000015	25	0.0012	0.0023	0.42	0.00012	7.5	0.31	0.0000085	0.0029	0.016	0.00033	0.000052	0.000026	0.00011	0.00055	0.0099
		January	2021	126	35	0.12	0.78	1.9	0.022	0.065	0.00015	0.0048	0.022	0.000015	25	0.0012	0.0023	0.42	0.00012	7.5	0.31	0.0000085	0.0029	0.016	0.00033	0.000052	0.000026	0.00011	0.00055	0.0099
		February		126	35	0.12	0.78	1.9	0.022	0.065	0.00015	0.0048	0.022	0.000015	25	0.0012	0.0023	0.42	0.00012	7.5	0.31	0.0000085	0.0029	0.016	0.00033	0.000052	0.000026	0.00011	0.00055	0.0099
		March		126	35	0.12	0.78	1.9	0.022	0.065	0.00015	0.0048	0.022	0.000015	25	0.0012	0.0023	0.42	0.00012	7.5	0.31	0.0000085	0.0029	0.016	0.00033	0.000052	0.000026	0.00011	0.00055	0.0099
		April		126	35	0.12	0.78	1.9	0.022	0.065	0.00015	0.0048	0.022	0.000015	25	0.0012	0.0023	0.42	0.00012	7.5	0.31	0.0000085	0.0029	0.016	0.00033	0.000052	0.000026	0.00011	0.00055	0.0099
		May		126	35	0.12	0.78	1.9	0.022	0.065	0.00015	0.0048	0.022	0.000015	25	0.0012	0.0023	0.42	0.00012	7.5	0.31	0.0000085	0.0029	0.016	0.00033	0.000052	0.000026	0.00011	0.00055	0.0099
		June		81	22	0.085	0.66	1.2	0.017	0.04	0.00011	0.0035	0.016	0.000011	16	0.00065	0.0015	0.27	0.000086	4.7	0.19	0.0000062	0.0018	0.009	0.00022	0.000034	0.00002	0.000082	0.00038	0.0063
		July		59	16	0.064	0.69	1.1	0.015	0.027	0.000083	0.0029	0.011	0.0000077	12	0.00041	0.0012	0.2	0.000062	3.4	0.14	0.0000048	0.0012	0.0067	0.00016	0.000026	0.000017	0.000062	0.00027	0.0048
		August		65	16	0.068	0.75	1.4	0.016	0.026	0.000089	0.0031	0.011	0.000008	13	0.0004	0.0013	0.21	0.000062	3.6	0.17	0.0000051	0.0013	0.0082	0.00019	0.000028	0.000017	0.000062	0.00028	0.0052
		September		67	16	0.069	0.77	1.6	0.016	0.026	0.000094	0.0031	0.011	0.0000082	13	0.00039	0.0014	0.22	0.000061	3.7	0.19	0.0000053	0.0013	0.0094	0.0002	0.00003	0.000018	0.000062	0.00028	0.0054
		October		114	27	0.12	1.3	2.8	0.027	0.043	0.00016	0.0051	0.019	0.000014	22	0.00065	0.0023	0.37	0.0001	6.3	0.32	0.0000091	0.0022	0.016	0.00034	0.000052	0.00003	0.0001	0.00047	0.0092
		November		114	27	0.12	1.3	2.8	0.027	0.043	0.00016	0.0051	0.019	0.000014	22	0.00065	0.0023	0.37	0.0001	6.3	0.32	0.0000091	0.0022	0.016	0.00034	0.000052	0.00003	0.0001	0.00047	0.0092
		December		114	27	0.12	1.3	2.8	0.027	0.043	0.00016	0.0051	0.019	0.000014	22	0.00065	0.0023	0.37	0.0001	6.3	0.32	0.0000091	0.0022	0.016	0.00034	0.000052	0.00003	0.0001	0.00047	0.0092
		January	2022	114	27	0.12	1.3	2.8	0.027	0.043	0.00016	0.0051	0.019	0.000014	22	0.00065	0.0023	0.37	0.0001	6.3	0.32	0.0000091	0.0022	0.016	0.00034	0.000052	0.00003	0.0001	0.00047	0.0092
		February		114	27	0.12	1.3	2.8	0.027	0.043	0.00016	0.0051	0.019	0.000014	22	0.00065	0.0023	0.37	0.0001	6.3	0.32	0.0000091	0.0022	0.016	0.00034	0.000052	0.00003	0.0001	0.00047	0.0092
		March		114	27	0.12	1.3	2.8	0.027	0.043	0.00016	0.0051	0.019	0.000014	22	0.00065	0.0023	0.37	0.0001	6.3	0.32	0.0000091	0.0022	0.016	0.00034	0.000052	0.00003	0.0001	0.00047	0.0092
		April		114	27	0.12	1.3	2.8	0.027	0.043	0.00016	0.0051	0.019	0.000014	22	0.00065	0.0023	0.37	0.0001	6.3	0.32	0.0000091	0.0022	0.016	0.00034	0.000052	0.00003	0.0001	0.00047	0.0092
		May		114	27	0.12	1.3	2.8	0.027	0.043	0.00016	0.0051	0.019	0.000014	22	0.00065	0.0023	0.37	0.0001	6.3	0.32	0.0000091	0.0022	0.016	0.00034	0.000052	0.00003	0.0001	0.00047	0.0092
		June		73	17	0.081	0.92	1.7	0.019	0.028	0.00011	0.0037	0.014	0.0000094	14	0.00039	0.0015	0.24	0.000074	4.0	0.19	0.0000064	0.0014	0.0093	0.00022	0.000034	0.000022	0.000078	0.00032	0.006
		July		53	12	0.06	0.83	1.3	0.015	0.02	0.000083	0.0032	0.0097	0.0000069	11	0.00026	0.0012	0.18	0.000054	2.9	0.14	0.0000049	0.00095	0.0068	0.00016	0.000026	0.000018	0.000059	0.00022	0.0045
		August		58	12	0.065	0.88	1.6	0.016	0.02	0.000093	0.0035	0.0098	0.0000072	12	0.00027	0.0013	0.2	0.000054	3.1	0.17	0.0000053	0.001	0.0085	0.00019	0.000028	0.000018	0.000059	0.00023	0.0049
		September		62	12	0.067	0.88	1.8	0.017	0.02	0.000099	0.0035	0.0097	0.0000074	12	0.00027	0.0013	0.2	0.000054	3.3	0.19	0.0000055	0.0011	0.01	0.0002	0.00003	0.000019	0.00006	0.00024	0.0052
		October		104	21	0.11	1.5	3.1	0.028	0.033	0.00017	0.0058	0.016	0.000012	20	0.00045	0.0023	0.35	0.000091	5.5	0.32	0.0000094	0.0018	0.018	0.00035	0.000052	0.000031	0.0001	0.0004	0.0088
		November		104	21	0.11	1.5	3.1	0.028	0.033	0.00017	0.0058	0.016	0.000012	20	0.00045	0.0023	0.35	0.000091	5.5	0.32	0.0000094	0.0018	0.018	0.00035	0.000052	0.000031	0.0001	0.0004	0.0088
		December		104	21	0.11	1.5	3.1	0.028	0.033	0.00017	0.0058	0.016	0.000012	20	0.00045	0.0023	0.35	0.000091	5.5	0.32	0.0000094	0.0018	0.018	0.00035	0.000052	0.000031	0.0001	0.0004	0.0088
		January	2023	104	21	0.11	1.5	3.1	0.028	0.033	0.00017	0.0058	0.016	0.000012	20	0.00045	0.0023	0.35	0.000091	5.5	0.32	0.0000094	0.0018	0.018	0.00035	0.000052	0.000031	0.0001	0.0004	0.0088
		February		104	21	0.11	1.5	3.1	0.028	0.033	0.00017	0.0058	0.016	0.000012	20	0.00045	0.0023	0.35	0.000091	5.5	0.32	0.0000094	0.0018	0.018	0.00035	0.000052	0.000031	0.0001	0.0004	0.0088
		March		104	21	0.11	1.5	3.1	0.028	0.033	0.00017	0.0058	0.016	0.000012	20	0.00045	0.0023	0.35	0.000091	5.5	0.32	0.0000094	0.0018	0.018	0.00035	0.000052	0.000031	0.0001	0.0004	0.0088
		April		104	21	0.11	1.5	3.1	0.028	0.033	0.00017	0.0058	0.016	0.000012	20	0.00045	0.0023	0.35	0.000091	5.5	0.32	0.0000094	0.0018	0.018	0.00035	0.000052	0.000031	0.0001	0.0004	0.0088
		May		104	21	0.11	1.5	3.1	0.028	0.033	0.00017	0.0058	0.016	0.000012	20	0.00045	0.0023	0.35	0.000091	5.5	0.32	0.0000094	0.0018	0.018	0.00035	0.000052	0.000031	0.0001	0.0004	0.0088
		June		66	14	0.077	0.99	1.8	0.019	0.023	0.00011	0.004	0.012	0.0000085	13	0.00028	0.0015	0.23	0.000066	3.5	0.19	0.0000066	0.0011	0.0098	0.00022	0.000034	0.000022	0.000076	0.00026	0.0057
		July		48	9.5	0.057	0.85	1.4	0.015	0.017	0.000086	0.0033	0.0084	0.0000063	9.6	0.0002	0.0011	0.17	0.000049	2.6	0.14	0.000005	0.00076	0.0072	0.00016	0.000026	0.000018	0.000058	0.00018	0.0043
		August		54	9.8	0.062	0.9	1.7	0.016	0.017	0.000096	0.0036	0.0085	0.0000066	11	0.00021	0.0012	0.19	0.00005	2.8	0.16	0.0000054	0.00084	0.0091	0.00019	0.000028	0.000019	0.000058	0.00019	0.0047
		September		57	9.9	0.064	0.9	1.8	0.017	0.017	0.0001	0.0037	0.0085	0.0000068	11	0.00021	0.0013	0.2	0.00005	2.9	0.18	0.0000056	0.00087	0.011	0.0002	0.00003	0.000019	0.000058	0.0002	0.005
		October		96	16	0.11	1.5	3.2	0.028	0.029	0.00017	0.006	0.014	0.000011	19	0.00036	0.0022	0.34	0.000084	5.0	0.31	0.0000096	0.0015	0.019	0.00034	0.000053	0.000032	0.000099	0.00033	0.0085
		November		96	16	0.11	1.5	3.2	0.028	0.029	0.00017	0.006	0.014	0.000011	19	0.00036	0.0022	0.34	0.000084	5.0	0.31	0.0000096	0.0015	0.019	0.00034	0.000053	0.000032	0.000099	0.00033	0.0085
		December		96	16	0.11	1.5	3.2	0.028	0.029	0.00017	0.006	0.014	0.000011	19	0.00036	0.0022	0.34	0.000084	5.0	0.31	0.0000096	0.0015	0.019	0.00034	0.000053	0.000032	0.000099	0.00033	0.0085

APPENDIX C-7
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5		0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1		0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008		0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	Sb	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Mammoth Lake	*Construction and Operations*	January	2024	96	16	0.11	1.5	3.2	0.028	0.029	0.00017	0.006	0.014	0.000011	19	0.00036	0.0022	0.34	0.000084	5.0	0.31	0.0000096	0.0015	0.019	0.00034	0.000053	0.000032	0.000099	0.00033	0.0085
		February		96	16	0.11	1.5	3.2	0.028	0.029	0.00017	0.006	0.014	0.000011	19	0.00036	0.0022	0.34	0.000084	5.0	0.31	0.0000096	0.0015	0.019	0.00034	0.000053	0.000032	0.000099	0.00033	0.0085
		March		96	16	0.11	1.5	3.2	0.028	0.029	0.00017	0.006	0.014	0.000011	19	0.00036	0.0022	0.34	0.000084	5.0	0.31	0.0000096	0.0015	0.019	0.00034	0.000053	0.000032	0.000099	0.00033	0.0085
		April		96	16	0.11	1.5	3.2	0.028	0.029	0.00017	0.006	0.014	0.000011	19	0.00036	0.0022	0.34	0.000084	5.0	0.31	0.0000096	0.0015	0.019	0.00034	0.000053	0.000032	0.000099	0.00033	0.0085
		May		96	16	0.11	1.5	3.2	0.028	0.029	0.00017	0.006	0.014	0.000011	19	0.00036	0.0022	0.34	0.000084	5.0	0.31	0.0000096	0.0015	0.019	0.00034	0.000053	0.000032	0.000099	0.00033	0.0085
		June		60	11	0.073	0.99	1.9	0.019	0.02	0.00011	0.0041	0.01	0.0000078	12	0.00023	0.0014	0.22	0.000061	3.1	0.19	0.0000066	0.00088	0.01	0.00021	0.000034	0.000023	0.000074	0.00022	0.0055
		July		44	7.7	0.054	0.86	1.4	0.015	0.015	0.000087	0.0034	0.0075	0.0000058	8.9	0.00017	0.0011	0.17	0.000046	2.3	0.14	0.000005	0.00062	0.0075	0.00015	0.000026	0.000018	0.000057	0.00015	0.0042
		August		50	8.0	0.059	0.9	1.7	0.016	0.015	0.000098	0.0037	0.0076	0.0000062	10	0.00018	0.0012	0.18	0.000047	2.6	0.16	0.0000055	0.00071	0.0097	0.00018	0.000029	0.000019	0.000057	0.00016	0.0046
		September		54	8.1	0.061	0.9	1.9	0.016	0.016	0.00011	0.0037	0.0077	0.0000064	11	0.00019	0.0013	0.19	0.000047	2.7	0.18	0.0000058	0.00075	0.011	0.0002	0.000031	0.000019	0.000057	0.00017	0.0049
		October		91	14	0.1	1.5	3.3	0.028	0.026	0.00018	0.0061	0.013	0.000011	18	0.00032	0.0022	0.33	0.00008	4.6	0.31	0.0000098	0.0013	0.02	0.00034	0.000054	0.000033	0.000098	0.00028	0.0084
		November		91	14	0.1	1.5	3.3	0.028	0.026	0.00018	0.0061	0.013	0.000011	18	0.00032	0.0022	0.33	0.00008	4.6	0.31	0.0000098	0.0013	0.02	0.00034	0.000054	0.000033	0.000098	0.00028	0.0084
		December		91	14	0.1	1.5	3.3	0.028	0.026	0.00018	0.0061	0.013	0.000011	18	0.00032	0.0022	0.33	0.00008	4.6	0.31	0.0000098	0.0013	0.02	0.00034	0.000054	0.000033	0.000098	0.00028	0.0084
		January	2025	91	14	0.1	1.5	3.3	0.028	0.026	0.00018	0.0061	0.013	0.000011	18	0.00032	0.0022	0.33	0.00008	4.6	0.31	0.0000098	0.0013	0.02	0.00034	0.000054	0.000033	0.000098	0.00028	0.0084
		February		91	14	0.1	1.5	3.3	0.028	0.026	0.00018	0.0061	0.013	0.000011	18	0.00032	0.0022	0.33	0.00008	4.6	0.31	0.0000098	0.0013	0.02	0.00034	0.000054	0.000033	0.000098	0.00028	0.0084
		March		91	14	0.1	1.5	3.3	0.028	0.026	0.00018	0.0061	0.013	0.000011	18	0.00032	0.0022	0.33	0.00008	4.6	0.31	0.0000098	0.0013	0.02	0.00034	0.000054	0.000033	0.000098	0.00028	0.0084
		April		91	14	0.1	1.5	3.3	0.028	0.026	0.00018	0.0061	0.013	0.000011	18	0.00032	0.0022	0.33	0.00008	4.6	0.31	0.0000098	0.0013	0.02	0.00034	0.000054	0.000033	0.000098	0.00028	0.0084
		May		91	14	0.1	1.5	3.3	0.028	0.026	0.00018	0.0061	0.013	0.000011	18	0.00032	0.0022	0.33	0.00008	4.6	0.31	0.0000098	0.0013	0.02	0.00034	0.000054	0.000033	0.000098	0.00028	0.0084
		June		56	8.9	0.07	0.99	1.9	0.019	0.019	0.00012	0.0042	0.0093	0.0000073	11	0.00021	0.0014	0.21	0.000058	2.9	0.18	0.0000067	0.00075	0.011	0.0002	0.000034	0.000023	0.000073	0.00018	0.0054
		July		42	6.5	0.052	0.87	1.5	0.015	0.014	0.000089	0.0035	0.0069	0.0000055	8.5	0.00016	0.0011	0.17	0.000044	2.2	0.13	0.0000051	0.00054	0.0079	0.00015	0.000026	0.000018	0.000056	0.00013	0.0042
		August		49	6.8	0.057	0.92	1.8	0.016	0.015	0.0001	0.0039	0.007	0.0000059	9.7	0.00017	0.0012	0.18	0.000045	2.4	0.16	0.0000056	0.00063	0.01	0.00018	0.000029	0.000019	0.000056	0.00014	0.0046
		September		52	6.9	0.059	0.92	2.0	0.016	0.015	0.00011	0.0039	0.0071	0.0000061	10	0.00017	0.0013	0.19	0.000045	2.5	0.18	0.0000058	0.00067	0.012	0.0002	0.000031	0.00002	0.000057	0.00015	0.0049
		October		88	12	0.10	1.5	3.5	0.027	0.025	0.00018	0.0064	0.012	0.00001	17	0.0003	0.0022	0.33	0.000076	4.3	0.31	0.0000099	0.0011	0.02	0.00034	0.000054	0.000033	0.000096	0.00025	0.0083
		November		88	12	0.10	1.5	3.5	0.027	0.025	0.00018	0.0064	0.012	0.00001	17	0.0003	0.0022	0.33	0.000076	4.3	0.31	0.0000099	0.0011	0.02	0.00034	0.000054	0.000033	0.000096	0.00025	0.0083
		December		88	12	0.10	1.5	3.5	0.027	0.025	0.00018	0.0064	0.012	0.00001	17	0.0003	0.0022	0.33	0.000076	4.3	0.31	0.0000099	0.0011	0.02	0.00034	0.000054	0.000033	0.000096	0.00025	0.0083
			MINIMUM	21	5.5	0.029	0.011	0.0087	0.002	0.0076	0.000059	0.00032	0.0062	0.0000025	5.3	0.000066	0.0004	0.0084	0.000032	1.0	0.0017	0.0000032	0.000095	0.0014	0.000039	0.0000054	0.0000067	0.000056	0.000032	0.0011
			MAXIMUM	130	48	0.12	1.5	3.5	0.028	0.23	0.00019	0.0064	0.025	0.000016	27	0.0041	0.0023	0.42	0.00015	8.3	0.32	0.0000099	0.0034	0.02	0.00035	0.000054	0.000033	0.00017	0.00057	0.0099
			AVERAGE	80	19	0.083	0.82	1.8	0.019	0.052	0.00014	0.004	0.015	0.0000099	16	0.00087	0.0016	0.28	0.00009	4.4	0.2	0.0000076	0.0014	0.012	0.00025	0.000036	0.000023	0.000099	0.00029	0.0064

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5		0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1		0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008		0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	Sb	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Mammoth Lake	Closure	January	2026	88	12	0.10	1.5	3.5	0.027	0.025	0.00018	0.0064	0.012	0.00001	17	0.0003	0.0022	0.33	0.000076	4.3	0.31	0.0000099	0.0011	0.02	0.00034	0.000054	0.000033	0.000096	0.00025	0.0083
		February		88	12	0.10	1.5	3.5	0.027	0.025	0.00018	0.0064	0.012	0.00001	17	0.0003	0.0022	0.33	0.000076	4.3	0.31	0.0000099	0.0011	0.02	0.00034	0.000054	0.000033	0.000096	0.00025	0.0083
		March		88	12	0.10	1.5	3.5	0.027	0.025	0.00018	0.0064	0.012	0.00001	17	0.0003	0.0022	0.33	0.000076	4.3	0.31	0.0000099	0.0011	0.02	0.00034	0.000054	0.000033	0.000096	0.00025	0.0083
		April		88	12	0.10	1.5	3.5	0.027	0.025	0.00018	0.0064	0.012	0.00001	17	0.0003	0.0022	0.33	0.000076	4.3	0.31	0.0000099	0.0011	0.02	0.00034	0.000054	0.000033	0.000096	0.00025	0.0083
		May		88	12	0.10	1.5	3.5	0.027	0.025	0.00018	0.0064	0.012	0.00001	17	0.0003	0.0022	0.33	0.000076	4.3	0.31	0.0000099	0.0011	0.02	0.00034	0.000054	0.000033	0.000096	0.00025	0.0083
		June		64	8.4	0.073	1.1	2.5	0.02	0.018	0.00014	0.0046	0.0091	0.0000076	12	0.00022	0.0016	0.23	0.000059	3.1	0.22	0.0000073	0.00079	0.014	0.00024	0.000039	0.000024	0.000074	0.00018	0.0061
		July		46	6.3	0.053	0.77	1.8	0.014	0.014	0.0001	0.0033	0.0072	0.0000058	9.0	0.00016	0.0011	0.17	0.000047	2.3	0.16	0.0000055	0.00057	0.01	0.00018	0.000028	0.000018	0.00006	0.00013	0.0045
		August		46	6.3	0.054	0.77	1.8	0.014	0.014	0.0001	0.0033	0.0073	0.0000058	9.0	0.00017	0.0012	0.17	0.000048	2.3	0.16	0.0000056	0.00057	0.01	0.00018	0.000029	0.000018	0.000061	0.00013	0.0046
		September		46	6.3	0.053	0.75	1.7	0.014	0.014	0.00011	0.0032	0.0074	0.0000058	8.9	0.00017	0.0011	0.16	0.000049	2.3	0.15	0.0000056	0.00056	0.01	0.00017	0.000028	0.000018	0.000062	0.00013	0.0046
		October		77	11	0.089	1.3	2.9	0.023	0.023	0.00018	0.0054	0.013	0.0000099	15	0.00028	0.0019	0.27	0.000083	3.8	0.26	0.0000095	0.00093	0.017	0.00029	0.000047	0.00003	0.00011	0.00021	0.0077
		November		77	11	0.089	1.3	2.9	0.023	0.023	0.00018	0.0054	0.013	0.0000099	15	0.00028	0.0019	0.27	0.000083	3.8	0.26	0.0000095	0.00093	0.017	0.00029	0.000047	0.00003	0.00011	0.00021	0.0077
		December		77	11	0.089	1.3	2.9	0.023	0.023	0.00018	0.0054	0.013	0.0000099	15	0.00028	0.0019	0.27	0.000083	3.8	0.26	0.0000095	0.00093	0.017	0.00029	0.000047	0.00003	0.00011	0.00021	0.0077
		January	2027	77	11	0.089	1.3	2.9	0.023	0.023	0.00018	0.0054	0.013	0.0000099	15	0.00028	0.0019	0.27	0.000083	3.8	0.26	0.0000095	0.00093	0.017	0.00029	0.000047	0.00003	0.00011	0.00021	0.0077
		February		77	11	0.089	1.3	2.9	0.023	0.023	0.00018	0.0054	0.013	0.0000099	15	0.00028	0.0019	0.27	0.000083	3.8	0.26	0.0000095	0.00093	0.017	0.00029	0.000047	0.00003	0.00011	0.00021	0.0077
		March		77	11	0.089	1.3	2.9	0.023	0.023	0.00018	0.0054	0.013	0.0000099	15	0.00028	0.0019	0.27	0.000083	3.8	0.26	0.0000095	0.00093	0.017	0.00029	0.000047	0.00003	0.00011	0.00021	0.0077
		April		77	11	0.089	1.3	2.9	0.023	0.023	0.00018	0.0054	0.013	0.0000099	15	0.00028	0.0019	0.27	0.000083	3.8	0.26	0.0000095	0.00093	0.017	0.00029	0.000047	0.00003	0.00011	0.00021	0.0077
		May		77	11	0.089	1.3	2.9	0.023	0.023	0.00018	0.0054	0.013	0.0000099	15	0.00028	0.0019	0.27	0.000083	3.8	0.26	0.0000095	0.00093	0.017	0.00029	0.000047	0.00003	0.00011	0.00021	0.0077
		June		56	7.8	0.065	0.89	2.0	0.017	0.017	0.00013	0.0039	0.0096	0.0000073	11	0.00021	0.0014	0.2	0.000064	2.8	0.18	0.0000071	0.00067	0.012	0.00021	0.000034	0.000022	0.000082	0.00015	0.0056
		July		40	5.8	0.048	0.63	1.5	0.012	0.012	0.0001	0.0028	0.0075	0.0000056	7.9	0.00016	0.001	0.14	0.00005	2.0	0.13	0.0000054	0.00048	0.0087	0.00015	0.000025	0.000016	0.000065	0.00011	0.0042
		August		41	5.9	0.048	0.63	1.5	0.012	0.013	0.0001	0.0028	0.0076	0.0000056	8.0	0.00016	0.001	0.14	0.000051	2.0	0.13	0.0000054	0.00048	0.0087	0.00015	0.000025	0.000016	0.000066	0.00011	0.0043
		September		40	5.9	0.048	0.62	1.4	0.012	0.013	0.0001	0.0027	0.0077	0.0000056	7.9	0.00016	0.001	0.14	0.000052	2.0	0.13	0.0000054	0.00047	0.0085	0.00015	0.000025	0.000016	0.000067	0.00011	0.0042
		October		68	9.9	0.081	1.0	2.4	0.02	0.021	0.00017	0.0046	0.013	0.0000095	13	0.00027	0.0017	0.23	0.000089	3.4	0.21	0.0000092	0.00079	0.014	0.00025	0.000042	0.000027	0.00012	0.00018	0.0072
		November		68	9.9	0.081	1.0	2.4	0.02	0.021	0.00017	0.0046	0.013	0.0000095	13	0.00027	0.0017	0.23	0.000089	3.4	0.21	0.0000092	0.00079	0.014	0.00025	0.000042	0.000027	0.00012	0.00018	0.0072
		December		68	9.9	0.081	1.0	2.4	0.02	0.021	0.00017	0.0046	0.013	0.0000095	13	0.00027	0.0017	0.23	0.000089	3.4	0.21	0.0000092	0.00079	0.014	0.00025	0.000042	0.000027	0.00012	0.00018	0.0072
		January	2028	68	9.9	0.081	1.0	2.4	0.02	0.021	0.00017	0.0046	0.013	0.0000095	13	0.00027	0.0017	0.23	0.000089	3.4	0.21	0.0000092	0.00079	0.014	0.00025	0.000042	0.000027	0.00012	0.00018	0.0072
		February		68	9.9	0.081	1.0	2.4	0.02	0.021	0.00017	0.0046	0.013	0.0000095	13	0.00027	0.0017	0.23	0.000089	3.4	0.21	0.0000092	0.00079	0.014	0.00025	0.000042	0.000027	0.00012	0.00018	0.0072
		March		68	9.9	0.081	1.0	2.4	0.02	0.021	0.00017	0.0046	0.013	0.0000095	13	0.00027	0.0017	0.23	0.000089	3.4	0.21	0.0000092	0.00079	0.014	0.00025	0.000042	0.000027	0.00012	0.00018	0.0072
		April		68	9.9	0.081	1.0	2.4	0.02	0.021	0.00017	0.0046	0.013	0.0000095	13	0.00027	0.0017	0.23	0.000089	3.4	0.21	0.0000092	0.00079	0.014	0.00025	0.000042	0.000027	0.00012	0.00018	0.0072
		May		68	9.9	0.081	1.0	2.4	0.02	0.021	0.00017	0.0046	0.013	0.0000095	13	0.00027	0.0017	0.23	0.000089	3.4	0.21	0.0000092	0.00079	0.014	0.00025	0.000042	0.000027	0.00012	0.00018	0.0072
		June		49	7.3	0.059	0.74	1.7	0.014	0.015	0.00013	0.0033	0.010	0.0000071	9.6	0.0002	0.0013	0.17	0.000068	2.5	0.15	0.0000069	0.00056	0.01	0.00018	0.00003	0.00002	0.000088	0.00013	0.0053
		July		36	5.5	0.044	0.53	1.2	0.01	0.012	0.000099	0.0023	0.0077	0.0000054	7.0	0.00015	0.00093	0.12	0.000053	1.8	0.11	0.0000052	0.0004	0.0073	0.00013	0.000022	0.000015	0.000069	0.000093	0.004
		August		36	5.5	0.044	0.53	1.2	0.01	0.012	0.0001	0.0024	0.0079	0.0000054	7.1	0.00015	0.00094	0.12	0.000054	1.8	0.11	0.0000053	0.0004	0.0073	0.00013	0.000022	0.000015	0.000071	0.000094	0.004
		September		36	5.5	0.044	0.52	1.2	0.01	0.012	0.0001	0.0023	0.008	0.0000055	7.0	0.00015	0.00093	0.12	0.000055	1.8	0.11	0.0000053	0.0004	0.0072	0.00013	0.000022	0.000015	0.000072	0.000093	0.004
		October		60	9.3	0.074	0.86	2.0	0.017	0.02	0.00017	0.0039	0.014	0.0000092	12	0.00025	0.0016	0.2	0.000093	3.1	0.18	0.000009	0.00067	0.012	0.00022	0.000037	0.000025	0.00012	0.00016	0.0067
		November		60	9.3	0.074	0.86	2.0	0.017	0.02	0.00017	0.0039	0.014	0.0000092	12	0.00025	0.0016	0.2	0.000093	3.1	0.18	0.000009	0.00067	0.012	0.00022	0.000037	0.000025	0.00012	0.00016	0.0067
		December		60	9.3	0.074	0.86	2.0	0.017	0.02	0.00017	0.0039	0.014	0.0000092	12	0.00025	0.0016	0.2	0.000093	3.1	0.18	0.000009	0.00067	0.012	0.00022	0.000037	0.000025	0.00012	0.00016	0.0067
		January	2029	60	9.3	0.074	0.86	2.0	0.017	0.02	0.00017	0.0039	0.014	0.0000092	12	0.00025	0.0016	0.2	0.000093	3.1	0.18	0.000009	0.00067	0.012	0.00022	0.000037	0.000025	0.00012	0.00016	0.0067
		February		60	9.3	0.074	0.86	2.0	0.017	0.02	0.00017	0.0039	0.014	0.0000092	12	0.00025	0.0016	0.2	0.000093	3.1	0.18	0.000009	0.00067	0.012	0.00022	0.000037	0.000025	0.00012	0.00016	0.0067
		March		60	9.3	0.074	0.86	2.0	0.017	0.02	0.00017	0.0039	0.014	0.0000092	12	0.00025	0.0016	0.2	0.000093	3.1	0.18	0.000009	0.00067	0.012	0.00022	0.000037	0.000025	0.00012	0.00016	0.0067
		April		60	9.3	0.074	0.86	2.0	0.017	0.02	0.00017	0.0039	0.014	0.0000092	12	0.00025	0.0016	0.2	0.000093	3.1	0.18	0.000009	0.00067	0.012	0.00022	0.000037	0.000025	0.00012	0.00016	0.0067
		May		60	9.3	0.074	0.86	2.0	0.017	0.02	0.00017	0.0039	0.014	0.0000092	12	0.00025	0.0016	0.2	0.000093	3.1	0.18	0.000009	0.00067	0.012	0.00022	0.000037	0.000025	0.00012	0.00016	0.0067
		June		43	6.9	0.054	0.61	1.4	0.012	0.014	0.00013	0.0028	0.01	0.0000069	8.6	0.00019	0.0011	0.14	0.000071	2.2	0.13	0.0000067	0.00048	0.0086	0.00016	0.000027	0.000019	0.000093	0.00011	0.005
		July		32	5.2	0.04	0.44	0.99	0.0089	0.011	0.000098	0.002	0.008	0.0000052	6.3	0.00014	0.00085	0.1	0.000055	1.7	0.089	0.0000051	0.00034	0.0062	0.00012	0.00002	0.000014	0.000073	0.000081	0.0037
		August		32	5.2	0.041	0.44	0.99	0.009	0.011	0.000099	0.002	0.0081	0.0000053	6.3	0.00014	0.00086	0.1	0.000056	1.7	0.089	0.0000052	0.00034	0.0062	0.00012	0.00002	0.000014	0.000074	0.000081	0.0038
		September		32	5.2	0.04	0.43	0.98	0.0089	0.011	0.000099	0.002	0.0082	0.0000053	6.3	0.00014	0.00085	0.099	0.000057	1.7	0.088	0.0000052	0.00034	0.0061	0.00012	0.00002	0.000014	0.000075	0.00008	0.0038
		October		53	8.8	0.068	0.71	1.6	0.015	0.018	0.00017	0.0033	0.014	0.000009	11	0.00024	0.0014	0.17	0.000097	2.8	0.15	0.0000088	0.00056	0.01	0.0002	0.000034	0.000024	0.00013	0.00013	0.0064
		November		53	8.8	0.068	0.71	1.6	0.015	0.018	0.00017	0.0033	0.014	0.000009	11	0.00024	0.0014	0.17	0.000097	2.8	0.15	0.0000088	0.00056	0.01	0.0002	0.000034	0.000024	0.00013	0.00013	0.0064
		December		53	8.8	0.068	0.71	1.6	0.015	0.018	0.00017	0.0033	0.014	0.000009	11	0.00024	0.0014	0.17	0.000097	2.8	0.15	0.0000088	0.00056	0.01	0.0002	0.000034	0.000024	0.00013	0.00013	0.0064
		January	2030	53	8.8	0.068	0.71	1.6	0.015	0.018	0.00017	0.0033	0.014	0.000009	11	0.00024	0.0014	0.17	0.000097	2.8	0.15	0.0000088	0.00056	0.01	0.0002	0.000034	0.000024	0.00013	0.00013	0.0064
		February		53	8.8	0.068	0.71	1.6	0.015	0.018	0.00017	0.0033	0.014	0.000009	11	0.00024	0.0014	0.17	0.000097	2.8	0.15	0.0000088	0.00056	0.01	0.0002	0.000034	0.000024	0.00013	0.00013	0.0064
		March		53	8.8	0.068	0.71	1.6	0.015	0.018	0.00017	0.0033	0.014	0.000009	11	0.00024	0.0014	0.17	0.000097	2.8	0.15	0.0000088	0.00056	0.01	0.0002	0.000034	0.000024	0.00013	0.00013	0.0064
		April		53	8.8	0.068	0.71	1.6	0.015	0.018	0.00017	0.0033	0.014	0.000009	11	0.00024	0.0014	0.17	0.000097	2.8	0.15	0.0000088	0.00056	0.01	0.0002	0.000034	0.000024	0.00013	0.00013	0.0064
		May		53	8.8	0.068	0.71	1.6	0.015	0.018	0.00017	0.0033	0.014	0.000009	11	0.00024	0.0014	0.17	0.000097	2.8	0.15	0.0000088	0.00056	0.01	0.0002	0.000034	0.000024	0.00013	0.00013	0.0064
		June		39	6.5	0.05	0.51	1.2	0.011	0.013	0.00013	0.0024	0.011	0.0000067	7.7	0.00018	0.0011	0.12	0.000074	2.0	0.1	0.0000065	0.0004	0.0073	0.00014	0.000024	0.000017	0.000097	0.000097	0.0047
		July		29	4.9	0.037	0.36	0.82	0.0078	0.01	0.000096	0.0017	0.0081	0.0000051	5.7	0.00014	0.00078	0.086	0.000057	1.5	0.074	0.000005	0.00029	0.0052	0.00011	0.000018	0.000013	0.000076	0.000071	0.0036
		August		29	5.0	0.038	0.36	0.82	0.0078	0.01	0.000098	0.0017	0.0083	0.0000052	5.7	0.00014	0.00079	0.086	0.000058	1.5	0.074	0.0000051	0.00029	0.0052	0.00011	0.000018	0.000013	0.000077	0.000071	0.0036
		September		29	5.0	0.038	0.35	0.81	0.0077	0.01	0.000098	0.0017	0.0084	0.0000052	5.7	0.00014	0.00079	0.085	0.000059	1.5	0.073	0.0000051	0.00029	0.0051	0.00011	0.000018	0.000013	0.000078	0.00007	0.0036
		October		48	8.4	0.063	0.59	1.3	0.013	0.017	0.00017	0.0028	0.014	0.0000088	9.6	0.00023	0.0013	0.14	0.0001	2.6	0.12	0.0000086	0.00048	0.0086	0.00018	0.00003	0.000022	0.00013	0.00012	0.0061
		November		48	8.4	0.063	0.59	1.3	0.013	0.017	0.00017	0.0028	0.014	0.0000088	9.6	0.00023	0.0013	0.14	0.0001	2.6	0.12	0.0000086	0.00048	0.0086	0.00018	0.00003	0.000022	0.00013	0.00012	0.0061
		December		48	8.4	0.063	0.59	1.3	0.013	0.017	0.00017	0.0028	0.014	0.0000088	9.6	0.00023	0.0013	0.14	0.0001	2.6	0.12	0.0000086	0.00048	0.0086	0.00018	0.00003	0.000022	0.00013	0.00012	0.0061
		January	2031	48	8.4	0.063	0.59	1.3	0.013	0.017	0.00017	0.0028	0.014	0.0000088	9.6	0.00023	0.0013	0.14	0.0001	2.6	0.12	0.0000086	0.00048	0.0086	0.00018	0.00003	0.000022	0.00013	0.00012	0.0061
		February		48	8.4	0.063	0.59	1.3	0.013	0.017	0.00017	0.0028	0.014	0.0000088	9.6	0.00023	0.0013	0.14	0.0001	2.6	0.12	0.0000086	0.00048	0.0086	0.00018	0.00003	0.000022	0.00013	0.00012	0.0061
		March		48	8.4	0.063	0.59	1.3	0.013	0.017	0.00017	0.0028	0.014	0.0000088	9.6	0.00023	0.0013	0.14	0.0001	2.6	0.12	0.0000086	0.00048	0.0086	0.00018	0.00003	0.000022	0.00013	0.00012	0.0061
		April		48	8.4	0.063	0.59	1.3	0.013	0.017	0.00017	0.0028	0.014	0.0000088	9.6	0.00023	0.0013	0.14	0.0001	2.6	0.12	0.0000086	0.00048	0.0086	0.00018	0.00003	0.000022	0.00013	0.00012	0.0061
		May		48	8.4	0.063	0.59	1.3	0.013	0.017	0.00017	0.0028	0.014	0.0000088	9.6	0.00023	0.0013	0.14	0.0001	2.6	0.12	0.0000086	0.00048	0.0086	0.00018	0.00003	0.000022	0.00013	0.00012	0.0061
		June		35	6.2	0.047	0.42	0.96	0.0093	0.013	0.00012	0.002	0.011	0.0000066	7.0	0.00017	0.00098	0.1	0.000076	1.9	0.087	0.0000064	0.00035	0.0062	0.00013	0.000022	0.000016	0.0001	0.000085	0.0045
		July		26	4.7	0.035	0.3	0.68	0.0068	0.0095	0.000095	0.0015	0.0083	0.000005	5.2	0.00013	0.00073	0.073	0.000059	1.4	0.062	0.0000049	0.00025	0.0044	0.000095	0.000016	0.000012	0.000078	0.000062	0.0034
		August		26	4.8	0.035	0.3	0.68	0.0068	0.0096	0.000096	0.0015	0.0084	0.0000051	5.2	0.00013	0.00074	0.073	0.00006	1.4	0.062	0.000005	0.00025	0.0044	0.000096	0.000017	0.000012	0.00008	0.000062	0.0034
		September		26	4.8	0.035	0.29	0.67	0.0068	0.0096	0.000097	0.0015	0.0085	0.0000051	5.2	0.00013	0.00073	0.072	0.000061	1.4	0.061	0.000005	0.00025	0.0044	0.000095	0.000017	0.000013	0.000081	0.000062	0.0035
		October		44	8.1	0.059	0.49	1.1	0.011	0.016	0.00016	0.0025	0.014	0.0000087	8.8	0.00023	0.0012	0.12	0.0001	2.4	0.1	0.0000085	0.00041	0.0073	0.00016	0.000028	0.000021	0.00014	0.0001	0.0058
		November		44	8.1	0.059	0.49	1.1	0.011	0.016	0.00016	0.0025	0.014	0.0000087	8.8	0.00023	0.0012	0.12	0.0001	2.4	0.1	0.0000085	0.00041	0.0073	0.00016	0.000028	0.000021	0.00014	0.0001	0.0058
		December		44	8.1	0.059	0.49	1.1	0.011	0.016	0.00016	0.0025	0.014	0.0000087	8.8	0.00023	0.0012	0.12	0.0001	2.4	0.1	0.0000085	0.00041	0.0073	0.00016	0.000028	0.000021	0.00014	0.0001	0.0058

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5		0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1		0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008		0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	Sb	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Mammoth Lake	Closure	January	2032	44	8.1	0.059	0.49	1.1	0.011	0.016	0.00016	0.0025	0.014	0.0000087	8.8	0.00023	0.0012	0.12	0.0001	2.4	0.1	0.0000085	0.00041	0.0073	0.00016	0.000028	0.000021	0.00014	0.0001	0.0058
		February		44	8.1	0.059	0.49	1.1	0.011	0.016	0.00016	0.0025	0.014	0.0000087	8.8	0.00023	0.0012	0.12	0.0001	2.4	0.1	0.0000085	0.00041	0.0073	0.00016	0.000028	0.000021	0.00014	0.0001	0.0058
		March		44	8.1	0.059	0.49	1.1	0.011	0.016	0.00016	0.0025	0.014	0.0000087	8.8	0.00023	0.0012	0.12	0.0001	2.4	0.1	0.0000085	0.00041	0.0073	0.00016	0.000028	0.000021	0.00014	0.0001	0.0058
		April		44	8.1	0.059	0.49	1.1	0.011	0.016	0.00016	0.0025	0.014	0.0000087	8.8	0.00023	0.0012	0.12	0.0001	2.4	0.1	0.0000085	0.00041	0.0073	0.00016	0.000028	0.000021	0.00014	0.0001	0.0058
		May		44	8.1	0.059	0.49	1.1	0.011	0.016	0.00016	0.0025	0.014	0.0000087	8.8	0.00023	0.0012	0.12	0.0001	2.4	0.1	0.0000085	0.00041	0.0073	0.00016	0.000028	0.000021	0.00014	0.0001	0.0058
		June		32	6.0	0.044	0.35	0.79	0.0082	0.012	0.00012	0.0018	0.011	0.0000065	6.4	0.00017	0.00091	0.087	0.000078	1.7	0.072	0.0000063	0.0003	0.0053	0.00012	0.00002	0.000016	0.0001	0.000075	0.0043
		July		24	4.5	0.033	0.25	0.56	0.006	0.0091	0.000094	0.0013	0.0084	0.0000049	4.8	0.00013	0.00068	0.063	0.00006	1.3	0.051	0.0000048	0.00021	0.0038	0.000086	0.000015	0.000012	0.00008	0.000055	0.0033
		August		24	4.6	0.033	0.25	0.56	0.006	0.0092	0.000096	0.0013	0.0085	0.000005	4.8	0.00013	0.00069	0.063	0.000061	1.3	0.051	0.0000049	0.00022	0.0038	0.000087	0.000015	0.000012	0.000082	0.000055	0.0033
		September		24	4.6	0.033	0.24	0.55	0.006	0.0092	0.000096	0.0013	0.0086	0.000005	4.8	0.00013	0.00069	0.062	0.000062	1.3	0.051	0.0000049	0.00021	0.0038	0.000087	0.000015	0.000012	0.000082	0.000055	0.0033
		October		40	7.8	0.056	0.41	0.92	0.01	0.016	0.00016	0.0021	0.015	0.0000085	8.1	0.00022	0.0012	0.1	0.00011	2.2	0.084	0.0000084	0.00036	0.0063	0.00015	0.000026	0.00002	0.00014	0.000092	0.0056
		November		40	7.8	0.056	0.41	0.92	0.01	0.016	0.00016	0.0021	0.015	0.0000085	8.1	0.00022	0.0012	0.1	0.00011	2.2	0.084	0.0000084	0.00036	0.0063	0.00015	0.000026	0.00002	0.00014	0.000092	0.0056
		December		40	7.8	0.056	0.41	0.92	0.01	0.016	0.00016	0.0021	0.015	0.0000085	8.1	0.00022	0.0012	0.1	0.00011	2.2	0.084	0.0000084	0.00036	0.0063	0.00015	0.000026	0.00002	0.00014	0.000092	0.0056
		January	2033	40	7.8	0.056	0.41	0.92	0.01	0.016	0.00016	0.0021	0.015	0.0000085	8.1	0.00022	0.0012	0.1	0.00011	2.2	0.084	0.0000084	0.00036	0.0063	0.00015	0.000026	0.00002	0.00014	0.000092	0.0056
		February		40	7.8	0.056	0.41	0.92	0.01	0.016	0.00016	0.0021	0.015	0.0000085	8.1	0.00022	0.0012	0.1	0.00011	2.2	0.084	0.0000084	0.00036	0.0063	0.00015	0.000026	0.00002	0.00014	0.000092	0.0056
		March		40	7.8	0.056	0.41	0.92	0.01	0.016	0.00016	0.0021	0.015	0.0000085	8.1	0.00022	0.0012	0.1	0.00011	2.2	0.084	0.0000084	0.00036	0.0063	0.00015	0.000026	0.00002	0.00014	0.000092	0.0056
		April		40	7.8	0.056	0.41	0.92	0.01	0.016	0.00016	0.0021	0.015	0.0000085	8.1	0.00022	0.0012	0.1	0.00011	2.2	0.084	0.0000084	0.00036	0.0063	0.00015	0.000026	0.00002	0.00014	0.000092	0.0056
		May		40	7.8	0.056	0.41	0.92	0.01	0.016	0.00016	0.0021	0.015	0.0000085	8.1	0.00022	0.0012	0.1	0.00011	2.2	0.084	0.0000084	0.00036	0.0063	0.00015	0.000026	0.00002	0.00014	0.000092	0.0056
		June		30	5.8	0.041	0.29	0.66	0.0073	0.012	0.00012	0.0015	0.011	0.0000064	5.9	0.00016	0.00086	0.075	0.000079	1.6	0.06	0.0000062	0.00026	0.0045	0.00011	0.000019	0.000015	0.00011	0.000067	0.0042
		July		22	4.4	0.031	0.21	0.47	0.0054	0.0087	0.000093	0.0011	0.0085	0.0000049	4.4	0.00012	0.00065	0.055	0.000061	1.2	0.043	0.0000048	0.00019	0.0033	0.000079	0.000014	0.000011	0.000082	0.000049	0.0032
		August		22	4.5	0.032	0.21	0.47	0.0054	0.0088	0.000095	0.0011	0.0086	0.0000049	4.5	0.00013	0.00065	0.055	0.000062	1.2	0.043	0.0000048	0.00019	0.0033	0.00008	0.000014	0.000011	0.000083	0.00005	0.0032
		September		22	4.5	0.032	0.2	0.46	0.0053	0.0088	0.000095	0.0011	0.0087	0.000005	4.5	0.00013	0.00065	0.054	0.000063	1.2	0.042	0.0000049	0.00018	0.0032	0.000079	0.000014	0.000011	0.000084	0.000049	0.0032
		October		37	7.6	0.053	0.34	0.76	0.009	0.015	0.00016	0.0019	0.015	0.0000084	7.5	0.00022	0.0011	0.091	0.00011	2.1	0.07	0.0000083	0.00031	0.0054	0.00013	0.000024	0.000019	0.00014	0.000083	0.0055
		November		37	7.6	0.053	0.34	0.76	0.009	0.015	0.00016	0.0019	0.015	0.0000084	7.5	0.00022	0.0011	0.091	0.00011	2.1	0.07	0.0000083	0.00031	0.0054	0.00013	0.000024	0.000019	0.00014	0.000083	0.0055
		December		37	7.6	0.053	0.34	0.76	0.009	0.015	0.00016	0.0019	0.015	0.0000084	7.5	0.00022	0.0011	0.091	0.00011	2.1	0.07	0.0000083	0.00031	0.0054	0.00013	0.000024	0.000019	0.00014	0.000083	0.0055
		January	2034	37	7.6	0.053	0.34	0.76	0.009	0.015	0.00016	0.0019	0.015	0.0000084	7.5	0.00022	0.0011	0.091	0.00011	2.1	0.07	0.0000083	0.00031	0.0054	0.00013	0.000024	0.000019	0.00014	0.000083	0.0055
		February		37	7.6	0.053	0.34	0.76	0.009	0.015	0.00016	0.0019	0.015	0.0000084	7.5	0.00022	0.0011	0.091	0.00011	2.1	0.07	0.0000083	0.00031	0.0054	0.00013	0.000024	0.000019	0.00014	0.000083	0.0055
		March		37	7.6	0.053	0.34	0.76	0.009	0.015	0.00016	0.0019	0.015	0.0000084	7.5	0.00022	0.0011	0.091	0.00011	2.1	0.07	0.0000083	0.00031	0.0054	0.00013	0.000024	0.000019	0.00014	0.000083	0.0055
		April		37	7.6	0.053	0.34	0.76	0.009	0.015	0.00016	0.0019	0.015	0.0000084	7.5	0.00022	0.0011	0.091	0.00011	2.1	0.07	0.0000083	0.00031	0.0054	0.00013	0.000024	0.000019	0.00014	0.000083	0.0055
		May		37	7.6	0.053	0.34	0.76	0.009	0.015	0.00016	0.0019	0.015	0.0000084	7.5	0.00022	0.0011	0.091	0.00011	2.1	0.07	0.0000083	0.00031	0.0054	0.00013	0.000024	0.000019	0.00014	0.000083	0.0055
		June		27	5.6	0.04	0.24	0.54	0.0065	0.011	0.00012	0.0014	0.011	0.0000063	5.6	0.00016	0.00082	0.066	0.000081	1.5	0.05	0.0000062	0.00022	0.0039	0.000098	0.000018	0.000014	0.00011	0.00006	0.0041
		July		20	4.3	0.03	0.17	0.39	0.0048	0.0084	0.000093	0.00099	0.0086	0.0000048	4.2	0.00012	0.00062	0.048	0.000062	1.2	0.036	0.0000047	0.00016	0.0028	0.000073	0.000013	0.000011	0.000083	0.000045	0.0031
		August		21	4.3	0.03	0.17	0.39	0.0048	0.0085	0.000094	0.00099	0.0087	0.0000049	4.2	0.00012	0.00062	0.048	0.000063	1.2	0.036	0.0000048	0.00016	0.0028	0.000074	0.000013	0.000011	0.000085	0.000045	0.0031
		September		21	4.4	0.03	0.17	0.38	0.0048	0.0085	0.000095	0.00098	0.0088	0.0000049	4.2	0.00012	0.00062	0.047	0.000064	1.2	0.035	0.0000048	0.00016	0.0028	0.000074	0.000013	0.000011	0.000086	0.000045	0.0032
		October		35	7.4	0.051	0.28	0.63	0.0081	0.014	0.00016	0.0017	0.015	0.0000083	7.1	0.00021	0.0011	0.079	0.00011	2.0	0.059	0.0000082	0.00027	0.0047	0.00012	0.000023	0.000019	0.00015	0.000075	0.0053
		November		35	7.4	0.051	0.28	0.63	0.0081	0.014	0.00016	0.0017	0.015	0.0000083	7.1	0.00021	0.0011	0.079	0.00011	2.0	0.059	0.0000082	0.00027	0.0047	0.00012	0.000023	0.000019	0.00015	0.000075	0.0053
		December		35	7.4	0.051	0.28	0.63	0.0081	0.014	0.00016	0.0017	0.015	0.0000083	7.1	0.00021	0.0011	0.079	0.00011	2.0	0.059	0.0000082	0.00027	0.0047	0.00012	0.000023	0.000019	0.00015	0.000075	0.0053
		January	2035	35	7.4	0.051	0.28	0.63	0.0081	0.014	0.00016	0.0017	0.015	0.0000083	7.1	0.00021	0.0011	0.079	0.00011	2.0	0.059	0.0000082	0.00027	0.0047	0.00012	0.000023	0.000019	0.00015	0.000075	0.0053
		February		35	7.4	0.051	0.28	0.63	0.0081	0.014	0.00016	0.0017	0.015	0.0000083	7.1	0.00021	0.0011	0.079	0.00011	2.0	0.059	0.0000082	0.00027	0.0047	0.00012	0.000023	0.000019	0.00015	0.000075	0.0053
		March		35	7.4	0.051	0.28	0.63	0.0081	0.014	0.00016	0.0017	0.015	0.0000083	7.1	0.00021	0.0011	0.079	0.00011	2.0	0.059	0.0000082	0.00027	0.0047	0.00012	0.000023	0.000019	0.00015	0.000075	0.0053
		April		35	7.4	0.051	0.28	0.63	0.0081	0.014	0.00016	0.0017	0.015	0.0000083	7.1	0.00021	0.0011	0.079	0.00011	2.0	0.059	0.0000082	0.00027	0.0047	0.00012	0.000023	0.000019	0.00015	0.000075	0.0053
		May		35	7.4	0.051	0.28	0.63	0.0081	0.014	0.00016	0.0017	0.015	0.0000083	7.1	0.00021	0.0011	0.079	0.00011	2.0	0.059	0.0000082	0.00027	0.0047	0.00012	0.000023	0.000019	0.00015	0.000075	0.0053
		June		26	5.5	0.038	0.2	0.45	0.0059	0.011	0.00012	0.0012	0.011	0.0000062	5.2	0.00016	0.00078	0.057	0.000082	1.5	0.042	0.0000061	0.0002	0.0034	0.000091	0.000017	0.000014	0.00011	0.000055	0.004
		July		19	4.2	0.029	0.14	0.32	0.0044	0.0082	0.000092	0.00088	0.0087	0.0000048	3.9	0.00012	0.00059	0.042	0.000063	1.1	0.03	0.0000047	0.00014	0.0025	0.000068	0.000012	0.000011	0.000085	0.000041	0.003
		August		19	4.3	0.029	0.14	0.32	0.0044	0.0083	0.000094	0.00088	0.0088	0.0000048	4.0	0.00012	0.0006	0.042	0.000064	1.1	0.03	0.0000048	0.00014	0.0025	0.000069	0.000013	0.000011	0.000086	0.000041	0.0031
		September		19	4.3	0.029	0.14	0.31	0.0044	0.0083	0.000094	0.00087	0.0089	0.0000049	4.0	0.00012	0.0006	0.042	0.000065	1.1	0.029	0.0000048	0.00014	0.0025	0.000069	0.000013	0.000011	0.000087	0.000041	0.0031
		October		33	7.2	0.049	0.23	0.52	0.0074	0.014	0.00016	0.0015	0.015	0.0000082	6.7	0.00021	0.001	0.07	0.00011	1.9	0.049	0.0000081	0.00024	0.0041	0.00012	0.000021	0.000018	0.00015	0.000069	0.0052
		November		33	7.2	0.049	0.23	0.52	0.0074	0.014	0.00016	0.0015	0.015	0.0000082	6.7	0.00021	0.001	0.07	0.00011	1.9	0.049	0.0000081	0.00024	0.0041	0.00012	0.000021	0.000018	0.00015	0.000069	0.0052
		December		33	7.2	0.049	0.23	0.52	0.0074	0.014	0.00016	0.0015	0.015	0.0000082	6.7	0.00021	0.001	0.07	0.00011	1.9	0.049	0.0000081	0.00024	0.0041	0.00012	0.000021	0.000018	0.00015	0.000069	0.0052
		January	2036	33	7.2	0.049	0.23	0.52	0.0074	0.014	0.00016	0.0015	0.015	0.0000082	6.7	0.00021	0.001	0.07	0.00011	1.9	0.049	0.0000081	0.00024	0.0041	0.00012	0.000021	0.000018	0.00015	0.000069	0.0052
		February		33	7.2	0.049	0.23	0.52	0.0074	0.014	0.00016	0.0015	0.015	0.0000082	6.7	0.00021	0.001	0.07	0.00011	1.9	0.049	0.0000081	0.00024	0.0041	0.00012	0.000021	0.000018	0.00015	0.000069	0.0052
		March		33	7.2	0.049	0.23	0.52	0.0074	0.014	0.00016	0.0015	0.015	0.0000082	6.7	0.00021	0.001	0.07	0.00011	1.9	0.049	0.0000081	0.00024	0.0041	0.00012	0.000021	0.000018	0.00015	0.000069	0.0052
		April		33	7.2	0.049	0.23	0.52	0.0074	0.014	0.00016	0.0015	0.015	0.0000082	6.7	0.00021	0.001	0.07	0.00011	1.9	0.049	0.0000081	0.00024	0.0041	0.00012	0.000021	0.000018	0.00015	0.000069	0.0052
		May		33	7.2	0.049	0.23	0.52	0.0074	0.014	0.00016	0.0015	0.015	0.0000082	6.7	0.00021	0.001	0.07	0.00011	1.9	0.049	0.0000081	0.00024	0.0041	0.00012	0.000021	0.000018	0.00015	0.000069	0.0052
		June		24	5.4	0.037	0.17	0.37	0.0054	0.01	0.00012	0.0011	0.011	0.0000062	4.9	0.00016	0.00075	0.051	0.000082	1.4	0.035	0.0000061	0.00017	0.003	0.000086	0.000016	0.000014	0.00011	0.00005	0.0039
		July		18	4.1	0.028	0.12	0.26	0.004	0.008	0.000092	0.00079	0.0087	0.0000047	3.7	0.00012	0.00057	0.037	0.000064	1.1	0.025	0.0000047	0.00013	0.0022	0.000064	0.000012	0.00001	0.000085	0.000037	0.003
		August		18	4.2	0.028	0.12	0.26	0.004	0.0081	0.000093	0.00079	0.0089	0.0000048	3.8	0.00012	0.00057	0.037	0.000065	1.1	0.025	0.0000047	0.00013	0.0022	0.000065	0.000012	0.00001	0.000087	0.000038	0.003
		September		18	4.2	0.028	0.12	0.26	0.004	0.0081	0.000094	0.00079	0.0089	0.0000048	3.8	0.00012	0.00058	0.037	0.000065	1.1	0.025	0.0000048	0.00013	0.0022	0.000065	0.000012	0.00001	0.000088	0.000037	0.003
		October		31	7.1	0.048	0.19	0.43	0.0068	0.014	0.00016	0.0013	0.015	0.0000082	6.4	0.00021	0.00098	0.062	0.00011	1.8	0.041	0.0000081	0.00021	0.0036	0.00011	0.00002	0.000018	0.00015	0.000063	0.0051
		November		31	7.1	0.048	0.19	0.43	0.0068	0.014	0.00016	0.0013	0.015	0.0000082	6.4	0.00021	0.00098	0.062	0.00011	1.8	0.041	0.0000081	0.00021	0.0036	0.00011	0.00002	0.000018	0.00015	0.000063	0.0051
		December		31	7.1	0.048	0.19	0.43	0.0068	0.014	0.00016	0.0013	0.015	0.0000082	6.4	0.00021	0.00098	0.062	0.00011	1.8	0.041	0.0000081	0.00021	0.0036	0.00011	0.00002	0.000018	0.00015	0.000063	0.0051
		January	2037	31	7.1	0.048	0.19	0.43	0.0068	0.014	0.00016	0.0013	0.015	0.0000082	6.4	0.00021	0.00098	0.062	0.00011	1.8	0.041	0.0000081	0.00021	0.0036	0.00011	0.00002	0.000018	0.00015	0.000063	0.0051
		February		31	7.1	0.048	0.19	0.43	0.0068	0.014	0.00016	0.0013	0.015	0.0000082	6.4	0.00021	0.00098	0.062	0.00011	1.8	0.041	0.0000081	0.00021	0.0036	0.00011	0.00002	0.000018	0.00015	0.000063	0.0051
		March		31	7.1	0.048	0.19	0.43	0.0068	0.014	0.00016	0.0013	0.015	0.0000082	6.4	0.00021	0.00098	0.062	0.00011	1.8	0.041	0.0000081	0.00021	0.0036	0.00011	0.00002	0.000018	0.00015	0.000063	0.0051
		April		31	7.1	0.048	0.19	0.43	0.0068	0.014	0.00016	0.0013	0.015	0.0000082	6.4	0.00021	0.00098	0.062	0.00011	1.8	0.041	0.0000081	0.00021	0.0036	0.00011	0.00002	0.000018	0.00015	0.000063	0.0051
		May		31	7.1	0.048	0.19	0.43	0.0068	0.014	0.00016	0.0013	0.015	0.0000082	6.4	0.00021	0.00098	0.062	0.00011	1.8	0.041	0.0000081	0.00021	0.0036	0.00011	0.00002	0.000018	0.00015	0.000063	0.0051
		June		23	5.3	0.036	0.14	0.31	0.005	0.01	0.00012	0.00096	0.011	0.0000061	4.7	0.00015	0.00073	0.045	0.000083	1.3	0.029	0.000006	0.00015	0.0026	0.000081	0.000015	0.000013	0.00011	0.000046	0.0038
		July		17	4.1	0.027	0.099	0.22	0.0037	0.0078	0.000092	0.00071	0.0088	0.0000047	3.6	0.00012	0.00055	0.033	0.000064	1.0	0.021	0.0000046	0.00011	0.0019	0.000061	0.000011	0.00001	0.000086	0.000035	0.0029
		August		18	4.1	0.027	0.099	0.22	0.0037	0.0079	0.000093	0.00072	0.0089	0.0000048	3.6	0.00012	0.00056	0.033	0.000065	1.0	0.021	0.0000047	0.00011	0.0019	0.000062	0.000012	0.00001	0.000088	0.000035	0.003
		September		18	4.1	0.027	0.097	0.22	0.0037	0.0079	0.000094	0.00071	0.009	0.0000048	3.6	0.00012	0.00056	0.033	0.000066	1.0	0.021	0.0000047	0.00011	0.0019	0.000062	0.000012	0.00001	0.000088	0.000035	0.003
		October		30	7.0	0.047	0.16	0.36	0.0063	0.013	0.00016	0.0012	0.015	0.0000081	6.1	0.0002	0.00095	0.056	0.00011	1.7	0.035	0.000008	0.00019	0.0032	0.0001	0.00002	0.000017	0.00015	0.000059	0.0051
		November		30	7.0	0.047	0.16	0.36	0.0063	0.013	0.00016	0.0012	0.015	0.0000081	6.1	0.0002	0.00095	0.056	0.00011	1.7	0.035	0.000008	0.00019	0.0032	0.0001	0.00002	0.000017	0.00015	0.000059	0.0051
		December		30	7.0	0.047	0.16	0.36	0.0063	0.013	0.00016	0.0012	0.015	0.0000081	6.1	0.0002	0.00095	0.056	0.00011	1.7	0.035	0.000008	0.00019	0.0032	0.0001	0.00002	0.000017	0.00015	0.000059	0.0051

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5		0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
		CEQG aquatic life (long-term)[1] (mg/L)			120	0.12	12.6	2.93	0.01	0.1		0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008		0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	Sb	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Mammoth Lake	*Closure*	January	2038	30	7.0	0.047	0.16	0.36	0.0063	0.013	0.00016	0.0012	0.015	0.0000081	6.1	0.0002	0.00095	0.056	0.00011	1.7	0.035	0.000008	0.00019	0.0032	0.0001	0.00002	0.000017	0.00015	0.000059	0.0051
		February		30	7.0	0.047	0.16	0.36	0.0063	0.013	0.00016	0.0012	0.015	0.0000081	6.1	0.0002	0.00095	0.056	0.00011	1.7	0.035	0.000008	0.00019	0.0032	0.0001	0.00002	0.000017	0.00015	0.000059	0.0051
		March		30	7.0	0.047	0.16	0.36	0.0063	0.013	0.00016	0.0012	0.015	0.0000081	6.1	0.0002	0.00095	0.056	0.00011	1.7	0.035	0.000008	0.00019	0.0032	0.0001	0.00002	0.000017	0.00015	0.000059	0.0051
		April		30	7.0	0.047	0.16	0.36	0.0063	0.013	0.00016	0.0012	0.015	0.0000081	6.1	0.0002	0.00095	0.056	0.00011	1.7	0.035	0.000008	0.00019	0.0032	0.0001	0.00002	0.000017	0.00015	0.000059	0.0051
		May		30	7.0	0.047	0.16	0.36	0.0063	0.013	0.00016	0.0012	0.015	0.0000081	6.1	0.0002	0.00095	0.056	0.00011	1.7	0.035	0.000008	0.00019	0.0032	0.0001	0.00002	0.000017	0.00015	0.000059	0.0051
		June		22	5.2	0.035	0.12	0.26	0.0046	0.01	0.00012	0.00088	0.011	0.0000061	4.5	0.00015	0.00071	0.041	0.000084	1.3	0.025	0.000006	0.00014	0.0023	0.000077	0.000014	0.000013	0.00011	0.000043	0.0038
		July		17	4.0	0.026	0.083	0.18	0.0034	0.0077	0.000091	0.00065	0.0088	0.0000047	3.4	0.00012	0.00054	0.03	0.000065	0.99	0.018	0.0000046	0.0001	0.0017	0.000058	0.000011	0.0000099	0.000087	0.000032	0.0029
		August		17	4.1	0.027	0.083	0.18	0.0035	0.0078	0.000093	0.00065	0.0089	0.0000047	3.5	0.00012	0.00054	0.03	0.000065	1.0	0.018	0.0000047	0.0001	0.0017	0.000059	0.000011	0.00001	0.000088	0.000033	0.0029
		September		17	4.1	0.027	0.082	0.18	0.0035	0.0078	0.000093	0.00065	0.009	0.0000048	3.5	0.00012	0.00055	0.03	0.000066	1.0	0.018	0.0000047	0.0001	0.0017	0.000059	0.000011	0.00001	0.000089	0.000033	0.0029
		October		29	6.9	0.045	0.14	0.3	0.0058	0.013	0.00016	0.0011	0.015	0.0000081	5.9	0.0002	0.00092	0.051	0.00011	1.7	0.029	0.000008	0.00017	0.0029	0.00010	0.000019	0.000017	0.00015	0.000055	0.005
		November		29	6.9	0.045	0.14	0.3	0.0058	0.013	0.00016	0.0011	0.015	0.0000081	5.9	0.0002	0.00092	0.051	0.00011	1.7	0.029	0.000008	0.00017	0.0029	0.00010	0.000019	0.000017	0.00015	0.000055	0.005
		December		29	6.9	0.045	0.14	0.3	0.0058	0.013	0.00016	0.0011	0.015	0.0000081	5.9	0.0002	0.00092	0.051	0.00011	1.7	0.029	0.000008	0.00017	0.0029	0.00010	0.000019	0.000017	0.00015	0.000055	0.005
		January	2039	29	6.9	0.045	0.14	0.3	0.0058	0.013	0.00016	0.0011	0.015	0.0000081	5.9	0.0002	0.00092	0.051	0.00011	1.7	0.029	0.000008	0.00017	0.0029	0.00010	0.000019	0.000017	0.00015	0.000055	0.005
		February		29	6.9	0.045	0.14	0.3	0.0058	0.013	0.00016	0.0011	0.015	0.0000081	5.9	0.0002	0.00092	0.051	0.00011	1.7	0.029	0.000008	0.00017	0.0029	0.00010	0.000019	0.000017	0.00015	0.000055	0.005
		March		29	6.9	0.045	0.14	0.3	0.0058	0.013	0.00016	0.0011	0.015	0.0000081	5.9	0.0002	0.00092	0.051	0.00011	1.7	0.029	0.000008	0.00017	0.0029	0.00010	0.000019	0.000017	0.00015	0.000055	0.005
		April		29	6.9	0.045	0.14	0.3	0.0058	0.013	0.00016	0.0011	0.015	0.0000081	5.9	0.0002	0.00092	0.051	0.00011	1.7	0.029	0.000008	0.00017	0.0029	0.00010	0.000019	0.000017	0.00015	0.000055	0.005
		May		29	6.9	0.045	0.14	0.3	0.0058	0.013	0.00016	0.0011	0.015	0.0000081	5.9	0.0002	0.00092	0.051	0.00011	1.7	0.029	0.000008	0.00017	0.0029	0.00010	0.000019	0.000017	0.00015	0.000055	0.005
		June		21	5.2	0.034	0.097	0.21	0.0043	0.0099	0.00012	0.0008	0.012	0.0000061	4.4	0.00015	0.00069	0.037	0.000084	1.3	0.021	0.000006	0.00013	0.0021	0.000074	0.000014	0.000013	0.00011	0.000041	0.0037
		July		16	4.0	0.026	0.07	0.15	0.0032	0.0075	0.000091	0.0006	0.0088	0.0000046	3.3	0.00012	0.00052	0.027	0.000065	0.96	0.015	0.0000046	0.000093	0.0016	0.000056	0.000011	0.0000097	0.000087	0.000031	0.0029
		August		16	4.0	0.026	0.07	0.15	0.0033	0.0076	0.000092	0.0006	0.009	0.0000047	3.4	0.00012	0.00053	0.028	0.000066	0.97	0.015	0.0000047	0.000094	0.0016	0.000057	0.000011	0.0000099	0.000089	0.000031	0.0029
		September		16	4.0	0.026	0.068	0.15	0.0033	0.0077	0.000093	0.0006	0.009	0.0000047	3.4	0.00012	0.00053	0.027	0.000066	0.98	0.015	0.0000047	0.000094	0.0016	0.000057	0.000011	0.0000099	0.000089	0.000031	0.0029
		October		28	6.8	0.045	0.11	0.25	0.0055	0.013	0.00016	0.001	0.015	0.000008	5.7	0.0002	0.0009	0.046	0.00011	1.7	0.025	0.000008	0.00016	0.0026	0.000096	0.000018	0.000017	0.00015	0.000052	0.0049
		November		28	6.8	0.045	0.11	0.25	0.0055	0.013	0.00016	0.001	0.015	0.000008	5.7	0.0002	0.0009	0.046	0.00011	1.7	0.025	0.000008	0.00016	0.0026	0.000096	0.000018	0.000017	0.00015	0.000052	0.0049
		December		28	6.8	0.045	0.11	0.25	0.0055	0.013	0.00016	0.001	0.015	0.000008	5.7	0.0002	0.0009	0.046	0.00011	1.7	0.025	0.000008	0.00016	0.0026	0.000096	0.000018	0.000017	0.00015	0.000052	0.0049
		January	2040	28	6.8	0.045	0.11	0.25	0.0055	0.013	0.00016	0.001	0.015	0.000008	5.7	0.0002	0.0009	0.046	0.00011	1.7	0.025	0.000008	0.00016	0.0026	0.000096	0.000018	0.000017	0.00015	0.000052	0.0049
		February		28	6.8	0.045	0.11	0.25	0.0055	0.013	0.00016	0.001	0.015	0.000008	5.7	0.0002	0.0009	0.046	0.00011	1.7	0.025	0.000008	0.00016	0.0026	0.000096	0.000018	0.000017	0.00015	0.000052	0.0049
		March		28	6.8	0.045	0.11	0.25	0.0055	0.013	0.00016	0.001	0.015	0.000008	5.7	0.0002	0.0009	0.046	0.00011	1.7	0.025	0.000008	0.00016	0.0026	0.000096	0.000018	0.000017	0.00015	0.000052	0.0049
		April		28	6.8	0.045	0.11	0.25	0.0055	0.013	0.00016	0.001	0.015	0.000008	5.7	0.0002	0.0009	0.046	0.00011	1.7	0.025	0.000008	0.00016	0.0026	0.000096	0.000018	0.000017	0.00015	0.000052	0.0049
		May		28	6.8	0.045	0.11	0.25	0.0055	0.013	0.00016	0.001	0.015	0.000008	5.7	0.0002	0.0009	0.046	0.00011	1.7	0.025	0.000008	0.00016	0.0026	0.000096	0.000018	0.000017	0.00015	0.000052	0.0049
		June		20	5.1	0.033	0.081	0.18	0.004	0.0097	0.00012	0.00074	0.011	0.000006	4.2	0.00015	0.00067	0.034	0.000084	1.2	0.018	0.0000059	0.00011	0.0019	0.000071	0.000014	0.000012	0.00011	0.000038	0.0037
		July		16	3.9	0.025	0.058	0.13	0.003	0.0074	0.000091	0.00055	0.0089	0.0000046	3.2	0.00011	0.00051	0.025	0.000065	0.94	0.013	0.0000046	0.000086	0.0014	0.000054	0.00001	0.0000096	0.000088	0.000029	0.0028
		August		16	4.0	0.026	0.058	0.13	0.0031	0.0075	0.000092	0.00056	0.009	0.0000047	3.3	0.00012	0.00052	0.025	0.000066	0.95	0.013	0.0000046	0.000086	0.0014	0.000055	0.00001	0.0000097	0.000089	0.000029	0.0029
		September		16	4.0	0.026	0.057	0.12	0.0031	0.0076	0.000093	0.00056	0.0091	0.0000047	3.3	0.00012	0.00052	0.025	0.000067	0.96	0.013	0.0000047	0.000086	0.0014	0.000055	0.00001	0.0000098	0.00009	0.000029	0.0029
		October		27	6.8	0.044	0.096	0.21	0.0052	0.013	0.00016	0.00094	0.015	0.000008	5.6	0.0002	0.00089	0.042	0.00011	1.6	0.021	0.0000079	0.00015	0.0024	0.000093	0.000018	0.000017	0.00015	0.00005	0.0049
		November		27	6.8	0.044	0.096	0.21	0.0052	0.013	0.00016	0.00094	0.015	0.000008	5.6	0.0002	0.00089	0.042	0.00011	1.6	0.021	0.0000079	0.00015	0.0024	0.000093	0.000018	0.000017	0.00015	0.00005	0.0049
		December		27	6.8	0.044	0.096	0.21	0.0052	0.013	0.00016	0.00094	0.015	0.000008	5.6	0.0002	0.00089	0.042	0.00011	1.6	0.021	0.0000079	0.00015	0.0024	0.000093	0.000018	0.000017	0.00015	0.00005	0.0049
		January	2041	27	6.8	0.044	0.096	0.21	0.0052	0.013	0.00016	0.00094	0.015	0.000008	5.6	0.0002	0.00089	0.042	0.00011	1.6	0.021	0.0000079	0.00015	0.0024	0.000093	0.000018	0.000017	0.00015	0.00005	0.0049
		February		27	6.8	0.044	0.096	0.21	0.0052	0.013	0.00016	0.00094	0.015	0.000008	5.6	0.0002	0.00089	0.042	0.00011	1.6	0.021	0.0000079	0.00015	0.0024	0.000093	0.000018	0.000017	0.00015	0.00005	0.0049
		March		27	6.8	0.044	0.096	0.21	0.0052	0.013	0.00016	0.00094	0.015	0.000008	5.6	0.0002	0.00089	0.042	0.00011	1.6	0.021	0.0000079	0.00015	0.0024	0.000093	0.000018	0.000017	0.00015	0.00005	0.0049
		April		27	6.8	0.044	0.096	0.21	0.0052	0.013	0.00016	0.00094	0.015	0.000008	5.6	0.0002	0.00089	0.042	0.00011	1.6	0.021	0.0000079	0.00015	0.0024	0.000093	0.000018	0.000017	0.00015	0.00005	0.0049
		May		27	6.8	0.044	0.096	0.21	0.0052	0.013	0.00016	0.00094	0.015	0.000008	5.6	0.0002	0.00089	0.042	0.00011	1.6	0.021	0.0000079	0.00015	0.0024	0.000093	0.000018	0.000017	0.00015	0.00005	0.0049
		June		20	4.9	0.034	0.064	0.14	0.0048	0.011	0.00013	0.0019	0.012	0.0000061	4.1	0.00022	0.00067	0.038	0.000088	1.2	0.018	0.0000059	0.00013	0.0018	0.000075	0.000013	0.000012	0.00011	0.000052	0.0034
		July		16	3.6	0.029	0.038	0.084	0.0055	0.012	0.00013	0.0039	0.01	0.0000049	3.3	0.00031	0.00055	0.042	0.000075	0.95	0.018	0.0000047	0.00015	0.0016	0.000073	0.00001	0.0000094	0.000089	0.00007	0.0023
		August		17	3.7	0.03	0.037	0.083	0.0059	0.013	0.00013	0.0043	0.01	0.0000051	3.4	0.00034	0.00057	0.045	0.000078	0.98	0.019	0.0000048	0.00016	0.0016	0.000078	0.00001	0.0000096	0.000091	0.000077	0.0023
			MINIMUM	16	3.6	0.025	0.011	0.0087	0.002	0.0074	0.000059	0.00032	0.0062	0.0000025	3.2	0.000066	0.0004	0.0084	0.000032	0.94	0.0017	0.0000032	0.000086	0.0014	0.000039	0.0000054	0.0000067	0.000056	0.000029	0.0011
			MAXIMUM	130	48	0.12	1.5	3.5	0.028	0.23	0.00019	0.0064	0.025	0.000016	27	0.0041	0.0023	0.42	0.00015	8.3	0.32	0.0000099	0.0034	0.02	0.00035	0.000054	0.000033	0.00017	0.00057	0.0099
			AVERAGE	40	7.4	0.053	0.46	1.0	0.01	0.016	0.00014	0.0023	0.013	0.0000076	8.0	0.00022	0.0011	0.11	0.00009	2.2	0.095	0.0000074	0.0004	0.0068	0.00015	0.000025	0.000019	0.00012	0.000098	0.0052

APPENDIX C-7
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5		0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1		0.025	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008		0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	Sb	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Mammoth Lake	*Post-Closure*	September	2041	17	3.7	0.031	0.035	0.079	0.0065	0.014	0.00014	0.005	0.011	0.0000053	3.5	0.00039	0.00059	0.05	0.000081	1.0	0.021	0.0000049	0.00018	0.0017	0.000084	0.000011	0.0000097	0.000093	0.000087	0.0022
		October		30	6.2	0.053	0.056	0.13	0.012	0.025	0.00025	0.0093	0.019	0.0000091	6.0	0.0007	0.001	0.089	0.00014	1.7	0.037	0.0000085	0.00032	0.003	0.00015	0.000018	0.000017	0.00016	0.00016	0.0037
		November		30	6.2	0.053	0.056	0.13	0.012	0.025	0.00025	0.0093	0.019	0.0000091	6.0	0.0007	0.001	0.089	0.00014	1.7	0.037	0.0000085	0.00032	0.003	0.00015	0.000018	0.000017	0.00016	0.00016	0.0037
		December		30	6.2	0.053	0.056	0.13	0.012	0.025	0.00025	0.0093	0.019	0.0000091	6.0	0.0007	0.001	0.089	0.00014	1.7	0.037	0.0000085	0.00032	0.003	0.00015	0.000018	0.000017	0.00016	0.00016	0.0037
		January	2042	30	6.2	0.053	0.056	0.13	0.012	0.025	0.00025	0.0093	0.019	0.0000091	6.0	0.0007	0.001	0.089	0.00014	1.7	0.037	0.0000085	0.00032	0.003	0.00015	0.000018	0.000017	0.00016	0.00016	0.0037
		February		30	6.2	0.053	0.056	0.13	0.012	0.025	0.00025	0.0093	0.019	0.0000091	6.0	0.0007	0.001	0.089	0.00014	1.7	0.037	0.0000085	0.00032	0.003	0.00015	0.000018	0.000017	0.00016	0.00016	0.0037
		March		30	6.2	0.053	0.056	0.13	0.012	0.025	0.00025	0.0093	0.019	0.0000091	6.0	0.0007	0.001	0.089	0.00014	1.7	0.037	0.0000085	0.00032	0.003	0.00015	0.000018	0.000017	0.00016	0.00016	0.0037
		April		30	6.2	0.053	0.056	0.13	0.012	0.025	0.00025	0.0093	0.019	0.0000091	6.0	0.0007	0.001	0.089	0.00014	1.7	0.037	0.0000085	0.00032	0.003	0.00015	0.000018	0.000017	0.00016	0.00016	0.0037
		May		30	6.2	0.053	0.056	0.13	0.012	0.025	0.00025	0.0093	0.019	0.0000091	6.0	0.0007	0.001	0.089	0.00014	1.7	0.037	0.0000085	0.00032	0.003	0.00015	0.000018	0.000017	0.00016	0.00016	0.0037
		June		21	4.3	0.039	0.035	0.081	0.0092	0.02	0.00019	0.0077	0.014	0.0000065	4.2	0.00056	0.00073	0.069	0.0001	1.2	0.028	0.0000061	0.00025	0.0022	0.00011	0.000013	0.000012	0.00011	0.00013	0.0024
		July		17	3.2	0.031	0.022	0.053	0.0078	0.017	0.00016	0.0068	0.011	0.0000051	3.3	0.0005	0.00058	0.059	0.000082	0.94	0.023	0.0000047	0.00021	0.0017	0.000091	0.0000098	0.0000091	0.000088	0.00011	0.0017
		August		17	3.3	0.032	0.022	0.053	0.0081	0.017	0.00016	0.0071	0.011	0.0000053	3.4	0.00051	0.0006	0.061	0.000084	0.98	0.024	0.0000048	0.00022	0.0018	0.000095	0.00001	0.0000093	0.00009	0.00011	0.0017
		September		18	3.4	0.033	0.022	0.052	0.0084	0.018	0.00017	0.0074	0.012	0.0000054	3.5	0.00054	0.00061	0.063	0.000086	1.0	0.025	0.000005	0.00023	0.0018	0.000099	0.00001	0.0000095	0.000092	0.00012	0.0017
		October		30	5.7	0.056	0.036	0.087	0.015	0.031	0.00029	0.013	0.02	0.0000093	5.9	0.00093	0.001	0.11	0.00015	1.7	0.043	0.0000085	0.00039	0.0031	0.00017	0.000018	0.000016	0.00016	0.00021	0.0029
		November		30	5.7	0.056	0.036	0.087	0.015	0.031	0.00029	0.013	0.02	0.0000093	5.9	0.00093	0.001	0.11	0.00015	1.7	0.043	0.0000085	0.00039	0.0031	0.00017	0.000018	0.000016	0.00016	0.00021	0.0029
		December		30	5.7	0.056	0.036	0.087	0.015	0.031	0.00029	0.013	0.02	0.0000093	5.9	0.00093	0.001	0.11	0.00015	1.7	0.043	0.0000085	0.00039	0.0031	0.00017	0.000018	0.000016	0.00016	0.00021	0.0029
		January	2043	30	5.7	0.056	0.036	0.087	0.015	0.031	0.00029	0.013	0.02	0.0000093	5.9	0.00093	0.001	0.11	0.00015	1.7	0.043	0.0000085	0.00039	0.0031	0.00017	0.000018	0.000016	0.00016	0.00021	0.0029
		February		30	5.7	0.056	0.036	0.087	0.015	0.031	0.00029	0.013	0.02	0.0000093	5.9	0.00093	0.001	0.11	0.00015	1.7	0.043	0.0000085	0.00039	0.0031	0.00017	0.000018	0.000016	0.00016	0.00021	0.0029
		March		30	5.7	0.056	0.036	0.087	0.015	0.031	0.00029	0.013	0.02	0.0000093	5.9	0.00093	0.001	0.11	0.00015	1.7	0.043	0.0000085	0.00039	0.0031	0.00017	0.000018	0.000016	0.00016	0.00021	0.0029
		April		30	5.7	0.056	0.036	0.087	0.015	0.031	0.00029	0.013	0.02	0.0000093	5.9	0.00093	0.001	0.11	0.00015	1.7	0.043	0.0000085	0.00039	0.0031	0.00017	0.000018	0.000016	0.00016	0.00021	0.0029
		May		30	5.7	0.056	0.036	0.087	0.015	0.031	0.00029	0.013	0.02	0.0000093	5.9	0.00093	0.001	0.11	0.00015	1.7	0.043	0.0000085	0.00039	0.0031	0.00017	0.000018	0.000016	0.00016	0.00021	0.0029
		June		21	4.0	0.04	0.024	0.058	0.011	0.023	0.00021	0.0094	0.014	0.0000066	4.2	0.00069	0.00075	0.08	0.00011	1.2	0.031	0.0000061	0.00028	0.0022	0.00012	0.000013	0.000012	0.00011	0.00015	0.002
		July		17	3.1	0.032	0.017	0.041	0.0083	0.018	0.00017	0.0075	0.011	0.0000052	3.2	0.00055	0.00058	0.064	0.000084	0.94	0.024	0.0000047	0.00022	0.0017	0.000095	0.0000097	0.0000089	0.000087	0.00012	0.0015
		August		17	3.2	0.032	0.017	0.042	0.0085	0.019	0.00017	0.0077	0.011	0.0000053	3.3	0.00057	0.0006	0.065	0.000086	0.97	0.025	0.0000048	0.00023	0.0018	0.000099	0.000010	0.0000092	0.000089	0.00012	0.0016
		September		18	3.2	0.033	0.017	0.042	0.0087	0.019	0.00017	0.0079	0.012	0.0000054	3.4	0.00059	0.00061	0.067	0.000087	1.0	0.025	0.0000049	0.00024	0.0018	0.0001	0.00001	0.0000094	0.000091	0.00013	0.0016
		October		30	5.5	0.057	0.028	0.071	0.015	0.033	0.0003	0.013	0.02	0.0000093	5.9	0.001	0.001	0.12	0.00015	1.7	0.043	0.0000085	0.00041	0.0032	0.00017	0.000017	0.000016	0.00016	0.00022	0.0027
		November		30	5.5	0.057	0.028	0.071	0.015	0.033	0.0003	0.013	0.02	0.0000093	5.9	0.001	0.001	0.12	0.00015	1.7	0.043	0.0000085	0.00041	0.0032	0.00017	0.000017	0.000016	0.00016	0.00022	0.0027
		December		30	5.5	0.057	0.028	0.071	0.015	0.033	0.0003	0.013	0.02	0.0000093	5.9	0.001	0.001	0.12	0.00015	1.7	0.043	0.0000085	0.00041	0.0032	0.00017	0.000017	0.000016	0.00016	0.00022	0.0027
		January	2044	30	5.5	0.057	0.028	0.071	0.015	0.033	0.0003	0.013	0.02	0.0000093	5.9	0.001	0.001	0.12	0.00015	1.7	0.043	0.0000085	0.00041	0.0032	0.00017	0.000017	0.000016	0.00016	0.00022	0.0027
		February		30	5.5	0.057	0.028	0.071	0.015	0.033	0.0003	0.013	0.02	0.0000093	5.9	0.001	0.001	0.12	0.00015	1.7	0.043	0.0000085	0.00041	0.0032	0.00017	0.000017	0.000016	0.00016	0.00022	0.0027
		March		30	5.5	0.057	0.028	0.071	0.015	0.033	0.0003	0.013	0.02	0.0000093	5.9	0.001	0.001	0.12	0.00015	1.7	0.043	0.0000085	0.00041	0.0032	0.00017	0.000017	0.000016	0.00016	0.00022	0.0027
		April		30	5.5	0.057	0.028	0.071	0.015	0.033	0.0003	0.013	0.02	0.0000093	5.9	0.001	0.001	0.12	0.00015	1.7	0.043	0.0000085	0.00041	0.0032	0.00017	0.000017	0.000016	0.00016	0.00022	0.0027
		May		30	5.5	0.057	0.028	0.071	0.015	0.033	0.0003	0.013	0.02	0.0000093	5.9	0.001	0.001	0.12	0.00015	1.7	0.043	0.0000085	0.00041	0.0032	0.00017	0.000017	0.000016	0.00016	0.00022	0.0027
		June		21	3.9	0.04	0.02	0.049	0.011	0.024	0.00021	0.0096	0.014	0.0000066	4.1	0.00073	0.00075	0.083	0.00011	1.2	0.031	0.000006	0.00029	0.0022	0.00012	0.000012	0.000011	0.00011	0.00015	0.0019
		July		16	3.0	0.031	0.015	0.036	0.0082	0.019	0.00017	0.0074	0.011	0.0000051	3.2	0.00057	0.00058	0.065	0.000083	0.93	0.024	0.0000047	0.00022	0.0017	0.000095	0.0000097	0.0000089	0.000087	0.00012	0.0015
		August		17	3.1	0.032	0.015	0.037	0.0084	0.019	0.00017	0.0076	0.011	0.0000053	3.3	0.00059	0.0006	0.066	0.000085	0.96	0.024	0.0000048	0.00023	0.0018	0.000099	0.0000099	0.0000091	0.000089	0.00012	0.0015
		September		17	3.2	0.033	0.015	0.037	0.0085	0.02	0.00017	0.0077	0.012	0.0000054	3.4	0.0006	0.00061	0.068	0.000086	0.99	0.025	0.0000049	0.00024	0.0018	0.0001	0.00001	0.0000093	0.000091	0.00013	0.0015
		October		30	5.4	0.056	0.025	0.063	0.015	0.033	0.0003	0.013	0.02	0.0000092	5.8	0.001	0.001	0.12	0.00015	1.7	0.042	0.0000084	0.0004	0.0031	0.00017	0.000017	0.000016	0.00016	0.00021	0.0026
		November		30	5.4	0.056	0.025	0.063	0.015	0.033	0.0003	0.013	0.02	0.0000092	5.8	0.001	0.001	0.12	0.00015	1.7	0.042	0.0000084	0.0004	0.0031	0.00017	0.000017	0.000016	0.00016	0.00021	0.0026
		December		30	5.4	0.056	0.025	0.063	0.015	0.033	0.0003	0.013	0.02	0.0000092	5.8	0.001	0.001	0.12	0.00015	1.7	0.042	0.0000084	0.0004	0.0031	0.00017	0.000017	0.000016	0.00016	0.00021	0.0026
		January	2045	30	5.4	0.056	0.025	0.063	0.015	0.033	0.0003	0.013	0.02	0.0000092	5.8	0.001	0.001	0.12	0.00015	1.7	0.042	0.0000084	0.0004	0.0031	0.00017	0.000017	0.000016	0.00016	0.00021	0.0026
		February		30	5.4	0.056	0.025	0.063	0.015	0.033	0.0003	0.013	0.02	0.0000092	5.8	0.001	0.001	0.12	0.00015	1.7	0.042	0.0000084	0.0004	0.0031	0.00017	0.000017	0.000016	0.00016	0.00021	0.0026
		March		30	5.4	0.056	0.025	0.063	0.015	0.033	0.0003	0.013	0.02	0.0000092	5.8	0.001	0.001	0.12	0.00015	1.7	0.042	0.0000084	0.0004	0.0031	0.00017	0.000017	0.000016	0.00016	0.00021	0.0026
		April		30	5.4	0.056	0.025	0.063	0.015	0.033	0.0003	0.013	0.02	0.0000092	5.8	0.001	0.001	0.12	0.00015	1.7	0.042	0.0000084	0.0004	0.0031	0.00017	0.000017	0.000016	0.00016	0.00021	0.0026
		May		30	5.4	0.056	0.025	0.063	0.015	0.033	0.0003	0.013	0.02	0.0000092	5.8	0.001	0.001	0.12	0.00015	1.7	0.042	0.0000084	0.0004	0.0031	0.00017	0.000017	0.000016	0.00016	0.00021	0.0026
		June		21	3.9	0.04	0.018	0.044	0.01	0.024	0.00021	0.0093	0.014	0.0000066	4.1	0.00073	0.00074	0.083	0.00011	1.2	0.029	0.000006	0.00028	0.0022	0.00012	0.000012	0.000011	0.00011	0.00015	0.0018
		July		16	3.0	0.031	0.014	0.033	0.0079	0.019	0.00016	0.0071	0.011	0.0000051	3.2	0.00057	0.00058	0.064	0.000082	0.92	0.023	0.0000047	0.00021	0.0017	0.000094	0.0000097	0.0000089	0.000087	0.00012	0.0014
		August		17	3.1	0.032	0.014	0.033	0.0081	0.019	0.00017	0.0072	0.011	0.0000052	3.3	0.00059	0.00059	0.066	0.000084	0.95	0.023	0.0000048	0.00022	0.0017	0.000098	0.0000099	0.0000091	0.000089	0.00012	0.0015
		September		17	3.1	0.032	0.014	0.034	0.0082	0.02	0.00017	0.0074	0.011	0.0000053	3.3	0.0006	0.0006	0.067	0.000085	0.98	0.023	0.0000049	0.00023	0.0018	0.0001	0.00001	0.0000093	0.000091	0.00012	0.0015
		October		29	5.4	0.055	0.024	0.058	0.014	0.034	0.00029	0.013	0.019	0.0000092	5.7	0.001	0.001	0.12	0.00015	1.7	0.04	0.0000084	0.00039	0.003	0.00017	0.000017	0.000016	0.00016	0.00021	0.0025
		November		29	5.4	0.055	0.024	0.058	0.014	0.034	0.00029	0.013	0.019	0.0000092	5.7	0.001	0.001	0.12	0.00015	1.7	0.04	0.0000084	0.00039	0.003	0.00017	0.000017	0.000016	0.00016	0.00021	0.0025
		December		29	5.4	0.055	0.024	0.058	0.014	0.034	0.00029	0.013	0.019	0.0000092	5.7	0.001	0.001	0.12	0.00015	1.7	0.04	0.0000084	0.00039	0.003	0.00017	0.000017	0.000016	0.00016	0.00021	0.0025
		January	2046	29	5.4	0.055	0.024	0.058	0.014	0.034	0.00029	0.013	0.019	0.0000092	5.7	0.001	0.001	0.12	0.00015	1.7	0.04	0.0000084	0.00039	0.003	0.00017	0.000017	0.000016	0.00016	0.00021	0.0025
		February		29	5.4	0.055	0.024	0.058	0.014	0.034	0.00029	0.013	0.019	0.0000092	5.7	0.001	0.001	0.12	0.00015	1.7	0.04	0.0000084	0.00039	0.003	0.00017	0.000017	0.000016	0.00016	0.00021	0.0025
		March		29	5.4	0.055	0.024	0.058	0.014	0.034	0.00029	0.013	0.019	0.0000092	5.7	0.001	0.001	0.12	0.00015	1.7	0.04	0.0000084	0.00039	0.003	0.00017	0.000017	0.000016	0.00016	0.00021	0.0025
		April		29	5.4	0.055	0.024	0.058	0.014	0.034	0.00029	0.013	0.019	0.0000092	5.7	0.001	0.001	0.12	0.00015	1.7	0.04	0.0000084	0.00039	0.003	0.00017	0.000017	0.000016	0.00016	0.00021	0.0025
		May		29	5.4	0.055	0.024	0.058	0.014	0.034	0.00029	0.013	0.019	0.0000092	5.7	0.001	0.001	0.12	0.00015	1.7	0.04	0.0000084	0.00039	0.003	0.00017	0.000017	0.000016	0.00016	0.00021	0.0025
		June		21	3.8	0.04	0.017	0.04	0.0099	0.024	0.00021	0.0089	0.014	0.0000065	4.0	0.00074	0.00073	0.082	0.0001	1.2	0.028	0.000006	0.00027	0.0021	0.00012	0.000012	0.000011	0.00011	0.00015	0.0018
		July		16	3.0	0.031	0.013	0.031	0.0076	0.019	0.00016	0.0068	0.011	0.0000051	3.1	0.00057	0.00057	0.064	0.000081	0.91	0.021	0.0000047	0.00021	0.0016	0.000092	0.0000097	0.0000089	0.000087	0.00011	0.0014
		August		16	3.0	0.031	0.013	0.031	0.0077	0.019	0.00016	0.0069	0.011	0.0000052	3.2	0.00059	0.00058	0.065	0.000082	0.94	0.022	0.0000048	0.00022	0.0017	0.000096	0.0000099	0.0000091	0.000089	0.00012	0.0015
		September		17	3.1	0.032	0.013	0.032	0.0078	0.02	0.00017	0.007	0.011	0.0000053	3.3	0.0006	0.0006	0.067	0.000084	0.97	0.022	0.0000049	0.00022	0.0017	0.000098	0.00001	0.0000093	0.000091	0.00012	0.0015
		October		29	5.3	0.055	0.023	0.054	0.013	0.034	0.00028	0.012	0.019	0.0000091	5.6	0.001	0.001	0.11	0.00014	1.7	0.038	0.0000084	0.00038	0.003	0.00017	0.000017	0.000016	0.00016	0.0002	0.0025
		November		29	5.3	0.055	0.023	0.054	0.013	0.034	0.00028	0.012	0.019	0.0000091	5.6	0.001	0.001	0.11	0.00014	1.7	0.038	0.0000084	0.00038	0.003	0.00017	0.000017	0.000016	0.00016	0.0002	0.0025
		December		29	5.3	0.055	0.023	0.054	0.013	0.034	0.00028	0.012	0.019	0.0000091	5.6	0.001	0.001	0.11	0.00014	1.7	0.038	0.0000084	0.00038	0.003	0.00017	0.000017	0.000016	0.00016	0.0002	0.0025

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5		0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1		*0.025*	1.5	0.00011			0.002	0.3	0.0017		0.49	0.000026	0.073	0.06565	0.001	0.00025	0.0008		0.015	0.028
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	Sb	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Mammoth Lake	*Post-Closure*	January	2047	29	5.3	0.055	0.023	0.054	**0.013**	0.034	0.00028	0.012	0.019	0.0000091	5.6	0.001	0.001	0.11	0.00014	1.7	0.038	0.0000084	0.00038	0.003	0.00017	0.000017	0.000016	0.00016	0.0002	0.0025
		February		29	5.3	0.055	0.023	0.054	**0.013**	0.034	0.00028	0.012	0.019	0.0000091	5.6	0.001	0.001	0.11	0.00014	1.7	0.038	0.0000084	0.00038	0.003	0.00017	0.000017	0.000016	0.00016	0.0002	0.0025
		March		29	5.3	0.055	0.023	0.054	**0.013**	0.034	0.00028	0.012	0.019	0.0000091	5.6	0.001	0.001	0.11	0.00014	1.7	0.038	0.0000084	0.00038	0.003	0.00017	0.000017	0.000016	0.00016	0.0002	0.0025
		April		29	5.3	0.055	0.023	0.054	**0.013**	0.034	0.00028	0.012	0.019	0.0000091	5.6	0.001	0.001	0.11	0.00014	1.7	0.038	0.0000084	0.00038	0.003	0.00017	0.000017	0.000016	0.00016	0.0002	0.0025
		May		29	5.3	0.055	0.023	0.054	**0.013**	0.034	0.00028	0.012	0.019	0.0000091	5.6	0.001	0.001	0.11	0.00014	1.7	0.038	0.0000084	0.00038	0.003	0.00017	0.000017	0.000016	0.00016	0.0002	0.0025
		June		20	3.8	0.039	0.016	0.038	0.0094	0.024	0.0002	0.0084	0.014	0.0000065	4.0	0.00073	0.00073	0.081	0.0001	1.2	0.027	0.000006	0.00026	0.0021	0.00012	0.000012	0.000011	0.00011	0.00014	0.0018
		July		16	2.9	0.03	0.013	0.029	0.0072	0.019	0.00015	0.0064	0.011	0.000005	3.1	0.00057	0.00056	0.063	0.000079	0.9	0.02	0.0000046	0.0002	0.0016	0.000091	0.0000097	0.0000089	0.000087	0.00011	0.0014
		August		16	3.0	0.031	0.013	0.029	0.0073	0.019	0.00016	0.0065	0.011	0.0000051	3.2	0.00059	0.00058	0.065	0.000081	0.94	0.021	0.0000048	0.00021	0.0017	0.000094	0.0000099	0.0000091	0.000089	0.00011	0.0014
		September		17	3.1	0.031	0.013	0.03	0.0075	0.02	0.00016	0.0066	0.011	0.0000053	3.3	0.0006	0.00059	0.066	0.000082	0.96	0.021	0.0000049	0.00021	0.0017	0.000097	0.00001	0.0000093	0.000091	0.00011	0.0015
		October		28	5.3	0.054	0.022	0.051	**0.013**	0.034	0.00028	0.011	0.019	0.000009	5.6	0.001	0.001	0.11	0.00014	1.7	0.036	0.0000083	0.00037	0.0029	0.00016	0.000017	0.000016	0.00016	0.00019	0.0025
		November		28	5.3	0.054	0.022	0.051	**0.013**	0.034	0.00028	0.011	0.019	0.000009	5.6	0.001	0.001	0.11	0.00014	1.7	0.036	0.0000083	0.00037	0.0029	0.00016	0.000017	0.000016	0.00016	0.00019	0.0025
		December		28	5.3	0.054	0.022	0.051	**0.013**	0.034	0.00028	0.011	0.019	0.000009	5.6	0.001	0.001	0.11	0.00014	1.7	0.036	0.0000083	0.00037	0.0029	0.00016	0.000017	0.000016	0.00016	0.00019	0.0025
		January	2048	28	5.3	0.054	0.022	0.051	**0.013**	0.034	0.00028	0.011	0.019	0.000009	5.6	0.001	0.001	0.11	0.00014	1.7	0.036	0.0000083	0.00037	0.0029	0.00016	0.000017	0.000016	0.00016	0.00019	0.0025
		February		28	5.3	0.054	0.022	0.051	**0.013**	0.034	0.00028	0.011	0.019	0.000009	5.6	0.001	0.001	0.11	0.00014	1.7	0.036	0.0000083	0.00037	0.0029	0.00016	0.000017	0.000016	0.00016	0.00019	0.0025
		March		28	5.3	0.054	0.022	0.051	**0.013**	0.034	0.00028	0.011	0.019	0.000009	5.6	0.001	0.001	0.11	0.00014	1.7	0.036	0.0000083	0.00037	0.0029	0.00016	0.000017	0.000016	0.00016	0.00019	0.0025
		April		28	5.3	0.054	0.022	0.051	**0.013**	0.034	0.00028	0.011	0.019	0.000009	5.6	0.001	0.001	0.11	0.00014	1.7	0.036	0.0000083	0.00037	0.0029	0.00016	0.000017	0.000016	0.00016	0.00019	0.0025
		May		28	5.3	0.054	0.022	0.051	**0.013**	0.034	0.00028	0.011	0.019	0.000009	5.6	0.001	0.001	0.11	0.00014	1.7	0.036	0.0000083	0.00037	0.0029	0.00016	0.000017	0.000016	0.00016	0.00019	0.0025
		June		20	3.8	0.038	0.016	0.035	0.009	0.024	0.0002	0.0079	0.013	0.0000064	3.9	0.00073	0.00072	0.081	0.0001	1.2	0.025	0.0000059	0.00025	0.002	0.00012	0.000012	0.000011	0.00011	0.00014	0.0018
		July		15	2.9	0.03	0.012	0.027	0.0069	0.019	0.00015	0.006	0.01	0.000005	3.0	0.00057	0.00056	0.062	0.000078	0.9	0.019	0.0000046	0.00019	0.0016	0.000089	0.0000097	0.0000089	0.000087	0.0001	0.0014
		August		16	3.0	0.03	0.013	0.027	0.007	0.019	0.00015	0.0061	0.011	0.0000051	3.2	0.00058	0.00057	0.064	0.00008	0.93	0.02	0.0000047	0.0002	0.0016	0.000093	0.0000099	0.0000091	0.000089	0.00011	0.0014
		September		16	3.1	0.031	0.013	0.028	0.0071	0.02	0.00016	0.0062	0.011	0.0000052	3.2	0.0006	0.00058	0.065	0.000081	0.96	0.02	0.0000048	0.00021	0.0017	0.000095	0.00001	0.0000093	0.000091	0.00011	0.0015
		October		28	5.2	0.053	0.022	0.048	**0.012**	0.034	0.00027	0.011	0.019	0.0000089	5.5	0.001	0.0010	0.11	0.00014	1.6	0.034	0.0000083	0.00035	0.0028	0.00016	0.000017	0.000016	0.00016	0.00019	0.0025
		November		28	5.2	0.053	0.022	0.048	**0.012**	0.034	0.00027	0.011	0.019	0.0000089	5.5	0.001	0.0010	0.11	0.00014	1.6	0.034	0.0000083	0.00035	0.0028	0.00016	0.000017	0.000016	0.00016	0.00019	0.0025
		December		28	5.2	0.053	0.022	0.048	**0.012**	0.034	0.00027	0.011	0.019	0.0000089	5.5	0.001	0.0010	0.11	0.00014	1.6	0.034	0.0000083	0.00035	0.0028	0.00016	0.000017	0.000016	0.00016	0.00019	0.0025
		January	2049	28	5.2	0.053	0.022	0.048	**0.012**	0.034	0.00027	0.011	0.019	0.0000089	5.5	0.001	0.0010	0.11	0.00014	1.6	0.034	0.0000083	0.00035	0.0028	0.00016	0.000017	0.000016	0.00016	0.00019	0.0025
		February		28	5.2	0.053	0.022	0.048	**0.012**	0.034	0.00027	0.011	0.019	0.0000089	5.5	0.001	0.0010	0.11	0.00014	1.6	0.034	0.0000083	0.00035	0.0028	0.00016	0.000017	0.000016	0.00016	0.00019	0.0025
		March		28	5.2	0.053	0.022	0.048	**0.012**	0.034	0.00027	0.011	0.019	0.0000089	5.5	0.001	0.0010	0.11	0.00014	1.6	0.034	0.0000083	0.00035	0.0028	0.00016	0.000017	0.000016	0.00016	0.00019	0.0025
		April		28	5.2	0.053	0.022	0.048	**0.012**	0.034	0.00027	0.011	0.019	0.0000089	5.5	0.001	0.0010	0.11	0.00014	1.6	0.034	0.0000083	0.00035	0.0028	0.00016	0.000017	0.000016	0.00016	0.00019	0.0025
		May		28	5.2	0.053	0.022	0.048	**0.012**	0.034	0.00027	0.011	0.019	0.0000089	5.5	0.001	0.0010	0.11	0.00014	1.6	0.034	0.0000083	0.00035	0.0028	0.00016	0.000017	0.000016	0.00016	0.00019	0.0025
		June		20	3.7	0.038	0.015	0.033	0.0086	0.024	0.00019	0.0075	0.013	0.0000064	3.9	0.00073	0.00071	0.08	0.000099	1.2	0.024	0.0000059	0.00025	0.002	0.00011	0.000012	0.000011	0.00011	0.00013	0.0018
		July		15	2.9	0.029	0.012	0.025	0.0066	0.019	0.00015	0.0057	0.01	0.0000049	3.0	0.00057	0.00055	0.062	0.000077	0.89	0.018	0.0000046	0.00019	0.0015	0.000088	0.0000097	0.0000089	0.000087	0.0001	0.0014
		August		16	3.0	0.03	0.012	0.026	0.0067	0.019	0.00015	0.0058	0.011	0.0000051	3.1	0.00058	0.00057	0.063	0.000079	0.92	0.019	0.0000047	0.0002	0.0016	0.000091	0.0000099	0.0000091	0.000089	0.0001	0.0014
		September		16	3.0	0.031	0.012	0.026	0.0068	0.02	0.00015	0.0059	0.011	0.0000052	3.2	0.00059	0.00058	0.065	0.00008	0.95	0.019	0.0000048	0.0002	0.0016	0.000094	0.00001	0.0000093	0.000091	0.00011	0.0015
		October		28	5.2	0.052	0.021	0.045	**0.012**	0.034	0.00026	0.01	0.018	0.0000089	5.5	0.001	0.00099	0.11	0.00014	1.6	0.033	0.0000083	0.00034	0.0028	0.00016	0.000017	0.000016	0.00016	0.00018	0.0025
		November		28	5.2	0.052	0.021	0.045	**0.012**	0.034	0.00026	0.01	0.018	0.0000089	5.5	0.001	0.00099	0.11	0.00014	1.6	0.033	0.0000083	0.00034	0.0028	0.00016	0.000017	0.000016	0.00016	0.00018	0.0025
		December		28	5.2	0.052	0.021	0.045	**0.012**	0.034	0.00026	0.01	0.018	0.0000089	5.5	0.001	0.00099	0.11	0.00014	1.6	0.033	0.0000083	0.00034	0.0028	0.00016	0.000017	0.000016	0.00016	0.00018	0.0025
		January	≥2050	28	5.2	0.052	0.021	0.045	**0.012**	0.034	0.00026	0.01	0.018	0.0000089	5.5	0.001	0.00099	0.11	0.00014	1.6	0.033	0.0000083	0.00034	0.0028	0.00016	0.000017	0.000016	0.00016	0.00018	0.0025
		February		28	5.2	0.052	0.021	0.045	**0.012**	0.034	0.00026	0.01	0.018	0.0000089	5.5	0.001	0.00099	0.11	0.00014	1.6	0.033	0.0000083	0.00034	0.0028	0.00016	0.000017	0.000016	0.00016	0.00018	0.0025
		March		28	5.2	0.052	0.021	0.045	**0.012**	0.034	0.00026	0.01	0.018	0.0000089	5.5	0.001	0.00099	0.11	0.00014	1.6	0.033	0.0000083	0.00034	0.0028	0.00016	0.000017	0.000016	0.00016	0.00018	0.0025
		April		28	5.2	0.052	0.021	0.045	**0.012**	0.034	0.00026	0.01	0.018	0.0000089	5.5	0.001	0.00099	0.11	0.00014	1.6	0.033	0.0000083	0.00034	0.0028	0.00016	0.000017	0.000016	0.00016	0.00018	0.0025
		May		28	5.2	0.052	0.021	0.045	**0.012**	0.034	0.00026	0.01	0.018	0.0000089	5.5	0.001	0.00099	0.11	0.00014	1.6	0.033	0.0000083	0.00034	0.0028	0.00016	0.000017	0.000016	0.00016	0.00018	0.0025
		June		20	3.7	0.037	0.015	0.031	0.0082	0.024	0.00019	0.0071	0.013	0.0000063	3.9	0.00072	0.00071	0.079	0.000098	1.1	0.023	0.0000059	0.00024	0.002	0.00011	0.000012	0.000011	0.00011	0.00013	0.0018
		July		15	2.9	0.029	0.012	0.024	0.0063	0.019	0.00014	0.0054	0.012	0.0000049	3.0	0.00056	0.00055	0.061	0.000076	0.88	0.018	0.0000046	0.00018	0.0015	0.000086	0.0000096	0.0000089	0.000087	0.000097	0.0014
		August		16	3.0	0.03	0.012	0.024	0.0064	0.019	0.00015	0.0055	0.01	0.000005	3.1	0.00058	0.00056	0.063	0.000078	0.92	0.018	0.0000047	0.00019	0.0016	0.00009	0.0000099	0.0000091	0.000089	0.00010	0.0014
		September		16	3.0	0.03	0.012	0.025	0.0065	0.02	0.00015	0.0056	0.011	0.0000051	3.2	0.00059	0.00057	0.064	0.000079	0.94	0.018	0.0000048	0.0002	0.0016	0.000092	0.00001	0.0000093	0.000091	0.0001	0.0015
		October		27	5.2	0.052	0.02	0.042	**0.011**	0.034	0.00026	0.0096	0.018	0.0000088	5.4	0.001	0.00098	0.11	0.00013	1.6	0.031	0.0000082	0.00033	0.0027	0.00016	0.000017	0.000016	0.00016	0.00017	0.0025
		November		27	5.2	0.052	0.02	0.042	**0.011**	0.034	0.00026	0.0096	0.018	0.0000088	5.4	0.001	0.00098	0.11	0.00013	1.6	0.031	0.0000082	0.00033	0.0027	0.00016	0.000017	0.000016	0.00016	0.00017	0.0025
		December		27	5.2	0.052	0.02	0.042	**0.011**	0.034	0.00026	0.0096	0.018	0.0000088	5.4	0.001	0.00098	0.11	0.00013	1.6	0.031	0.0000082	0.00033	0.0027	0.00016	0.000017	0.000016	0.00016	0.00017	0.0025
			MINIMUM	15	2.9	0.029	0.012	0.024	0.0063	0.017	0.00014	0.0054	0.01	0.0000049	3.0	0.0005	0.00055	0.059	0.000076	0.88	0.018	0.0000046	0.00018	0.0015	0.000086	0.0000096	0.0000089	0.000087	0.000097	0.0014
			MAXIMUM	30	6.2	0.057	0.056	0.13	**0.015**	0.034	0.0003	0.013	0.02	0.0000093	6.0	0.001	0.001	0.12	0.00015	1.7	0.043	0.0000085	0.00041	0.0032	0.00017	0.000018	0.000017	0.00016	0.00022	0.0037
			AVERAGE	25	4.7	0.047	0.023	0.054	**0.012**	0.029	0.00024	0.01	0.017	0.0000079	4.9	0.00086	0.00089	0.097	0.00012	1.5	0.033	0.0000073	0.00032	0.0026	0.00014	0.000015	0.000014	0.00014	0.00017	0.0023

Notes:

[1] Canadian Council of Ministers of the Environment CEQG (2002) freshwater guidelines. Values above the freshwater CEQG's shown in bold-underlined type

[2] CEQG Freshwater Aquatic Life criterion for total ammonia is pH and temperature dependent (5C used based on hydrodynamic modelling).

[3] CEQG Freshwater Aquatic Life Trigger Ranges are dependent on trophic status; oligotrophic status assumed

[4] CEQG Freshwater Aquatic Life Criterion for aluminum is pH dependant.

[5] The CEQG aquatic life criterion for Arsenic is replaced by the Site Specific Water Quality Objective of 0.025 mg/L developed for the Whale Tail Pit Project (Volume 6, Appendix 6-N)

[6] CEQG Freshwater Aquatic Life Criteria are hardness dependant.

[7] CEQG Freshwater Aquatic Life criterion for manganese is pH and hardness dependent.

[8] CEQG Freshwater Aquatic Life criterion is for dissolved zinc and is hardness, pH and DOC dependent.

* Variable guidelines based on average values in Mammoth 2020 CREMP monitoring data (pH=6.85, hardness=61 mg/L, DOC=2.7 mg/L)

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
		CEQG aquatic life (long-term)[1] (mg/L)			120	0.12	12.6	2.93	0.01	0.1	0.025	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008		0.015	0.019
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Lake (South Basin)	Construction and Operations	January	2018	16	4.0	0.04	0.0093	0.0078	0.0036	0.017	0.00026	0.015	0.0000076	3.2	0.00017	0.00077	0.035	0.00011	1.1	0.0044	0.0000076	0.000089	0.001	0.000076	0.000015	0.000015	0.00015	0.000056	0.0046
		February		16	4.0	0.04	0.0093	0.0078	0.0036	0.017	0.00026	0.015	0.0000076	3.2	0.00017	0.00077	0.035	0.00011	1.1	0.0044	0.0000076	0.000089	0.001	0.000076	0.000015	0.000015	0.00015	0.000056	0.0046
		March		16	4.0	0.04	0.0093	0.0078	0.0036	0.017	0.00026	0.015	0.0000076	3.2	0.00017	0.00077	0.035	0.00011	1.1	0.0044	0.0000076	0.000089	0.001	0.000076	0.000015	0.000015	0.00015	0.000056	0.0046
		April		16	4.0	0.04	0.0093	0.0078	0.0036	0.017	0.00026	0.015	0.0000076	3.2	0.00017	0.00077	0.035	0.00011	1.1	0.0044	0.0000076	0.000089	0.001	0.000076	0.000015	0.000015	0.00015	0.000056	0.0046
		May		16	4.0	0.04	0.0093	0.0078	0.0036	0.017	0.00026	0.015	0.0000076	3.2	0.00017	0.00077	0.035	0.00011	1.1	0.0044	0.0000076	0.000089	0.001	0.000076	0.000015	0.000015	0.00015	0.000056	0.0046
		June		11	2.7	0.027	0.0063	0.0053	0.0025	0.011	0.00018	0.01	0.0000052	2.2	0.00011	0.00052	0.024	0.000073	0.74	0.003	0.0000052	0.000061	0.0007	0.000052	0.00001	0.00001	0.0001	0.000038	0.0031
		July		9.2	2.3	0.023	0.0053	0.0045	0.0021	0.0097	0.00015	0.0087	0.0000044	1.8	0.000096	0.00044	0.02	0.000061	0.63	0.0025	0.0000044	0.000051	0.00059	0.000044	0.0000087	0.0000087	0.000087	0.000032	0.0026
		August		9.4	2.3	0.023	0.0055	0.0046	0.0021	0.0099	0.00015	0.0089	0.0000045	1.9	0.000098	0.00045	0.02	0.000063	0.64	0.0026	0.0000045	0.000052	0.0006	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
		September		9.6	2.4	0.024	0.0056	0.0047	0.0022	0.01	0.00016	0.0091	0.0000046	1.9	0.00010	0.00046	0.021	0.000064	0.65	0.0027	0.0000046	0.000054	0.00062	0.000046	0.0000091	0.0000091	0.000091	0.000034	0.0027
		October		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0039	0.0000067	0.000079	0.00091	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0039	0.0000067	0.000079	0.00091	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0039	0.0000067	0.000079	0.00091	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		January	2019	14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0039	0.0000067	0.000079	0.00091	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		February		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0039	0.0000067	0.000079	0.00091	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		March		14	3.4	0.035	0.0086	0.0081	0.0044	0.021	0.00074	0.013	0.0000064	2.8	0.00021	0.00066	0.054	0.000093	0.94	0.0053	0.0000066	0.000075	0.00094	0.000073	0.000014	0.000013	0.00013	0.00005	0.0037
		April		14	3.0	0.036	0.0093	0.011	0.007	0.036	0.0018	0.013	0.0000057	2.7	0.00036	0.00063	0.11	0.00009	0.89	0.0082	0.0000063	0.000069	0.001	0.000085	0.000015	0.000013	0.00013	0.000052	0.0032
		May		14	2.9	0.037	0.0096	0.012	0.0081	0.043	0.0024	0.012	0.0000055	2.7	0.00043	0.00062	0.13	0.000091	0.88	0.0094	0.0000062	0.000067	0.0011	0.000089	0.000015	0.000013	0.00012	0.000053	0.003
		June		12	2.5	0.031	0.0083	0.011	0.0075	0.04	0.0023	0.011	0.0000047	2.3	0.0004	0.00053	0.12	0.000078	0.75	0.0086	0.0000053	0.000056	0.00092	0.000077	0.000013	0.000011	0.00011	0.000046	0.0025
		July		11	2.6	0.028	0.013	0.011	0.0063	0.032	0.0018	0.0092	0.0000042	2.2	0.00032	0.00048	0.098	0.000067	0.74	0.0086	0.0000046	0.000087	0.00085	0.000067	0.000011	0.000010	0.000092	0.000044	0.0023
		August		12	3.0	0.028	0.018	0.013	0.0061	0.03	0.0016	0.0094	0.0000044	2.4	0.0003	0.00049	0.093	0.000067	0.81	0.0095	0.0000047	0.00012	0.0009	0.000068	0.000011	0.00001	0.000093	0.000047	0.0024
		September		12	3.0	0.028	0.017	0.012	0.0058	0.028	0.0015	0.0094	0.0000044	2.4	0.00029	0.00049	0.086	0.000067	0.8	0.0089	0.0000047	0.00011	0.00088	0.000066	0.000011	0.00001	0.000093	0.000046	0.0025
		October		24	7.0	0.049	0.031	0.025	**0.011**	0.045	0.0023	0.019	0.0000083	4.5	0.00046	0.00084	0.13	0.00012	1.6	0.017	0.0000078	0.0004	0.0015	0.00011	0.000019	0.000017	0.00015	0.00014	0.0042
		November		36	12	0.059	0.045	0.035	**0.014**	0.044	0.0023	0.027	0.00001	6.2	0.00046	0.00091	0.13	0.00013	2.1	0.032	0.0000078	0.00088	0.0016	0.00014	0.000019	0.000017	0.00015	0.0003	0.0044
		December		47	15	0.074	0.062	0.037	**0.015**	0.044	0.0025	0.029	0.000012	8.4	0.00045	0.00096	0.15	0.00013	2.7	0.06	0.0000078	0.0012	0.0017	0.00017	0.000021	0.000017	0.00015	0.00042	0.0043
		January	2020	56	18	0.085	0.074	0.037	**0.015**	0.042	0.0025	0.029	0.000012	10	0.00043	0.00099	0.15	0.00013	3.1	0.079	0.0000077	0.0013	0.0018	0.00018	0.000022	0.000017	0.00014	0.0005	0.0042
		February		58	18	0.089	0.078	0.037	**0.015**	0.041	0.0025	0.029	0.000012	11	0.00042	0.00099	0.16	0.00012	3.3	0.088	0.0000077	0.0014	0.0019	0.00019	0.000023	0.000018	0.00014	0.00052	0.0041
		March		60	19	0.091	0.081	0.038	**0.015**	0.04	0.0025	0.028	0.000012	11	0.00041	0.00099	0.16	0.00012	3.3	0.093	0.0000077	0.0014	0.0019	0.00019	0.000024	0.000018	0.00013	0.00053	0.004
		April		62	19	0.094	0.084	0.085	**0.015**	0.04	0.0025	0.028	0.000013	11	0.00041	0.001	0.16	0.00012	3.4	0.099	0.0000077	0.0014	0.002	0.0002	0.000024	0.000018	0.00013	0.00054	0.0041
		May		64	20	0.096	0.087	0.14	**0.015**	0.04	0.0025	0.028	0.000013	12	0.00042	0.001	0.18	0.00012	3.5	0.1	0.0000077	0.0015	0.0022	0.0002	0.000026	0.000018	0.00013	0.00055	0.0042
		June		48	15	0.07	0.09	0.12	**0.012**	0.029	0.0019	0.02	0.0000094	8.8	0.0003	0.0008	0.13	0.000085	2.6	0.078	0.0000056	0.0011	0.0018	0.00015	0.000019	0.000014	0.000092	0.0004	0.0032
		July		37	12	0.053	0.096	0.13	0.009	0.021	0.0015	0.014	0.000007	6.9	0.00023	0.00064	0.1	0.000065	2.0	0.059	0.0000043	0.00086	0.0015	0.00011	0.000015	0.000011	0.00007	0.00028	0.0025
		August		36	12	0.053	0.094	0.12	0.009	0.021	0.0015	0.015	0.0000071	6.8	0.00023	0.00066	0.1	0.000068	2.0	0.057	0.0000045	0.00084	0.0016	0.00011	0.000015	0.000011	0.000074	0.00028	0.0027
		September		36	11	0.054	0.093	0.13	0.0089	0.021	0.0014	0.015	0.0000072	6.7	0.00024	0.00069	0.1	0.000072	2.0	0.056	0.0000047	0.00082	0.0016	0.00011	0.000015	0.000012	0.000078	0.00027	0.0028
		October		37	11	0.055	0.11	0.16	0.009	0.021	0.0015	0.015	0.0000073	6.9	0.00026	0.00073	0.11	0.000074	2.1	0.061	0.0000048	0.00084	0.0018	0.00011	0.000016	0.000012	0.000078	0.00028	0.0029
		November		40	12	0.058	0.13	0.2	0.0093	0.021	0.0015	0.015	0.0000075	7.5	0.00026	0.00076	0.12	0.000075	2.2	0.072	0.0000048	0.00091	0.0021	0.00012	0.000017	0.000012	0.000077	0.00029	0.0031
		December		73	21	0.1	0.22	0.36	**0.017**	0.038	0.0029	0.026	0.000013	14	0.00046	0.0014	0.23	0.00013	4.0	0.14	0.0000083	0.0016	0.0038	0.00021	0.000032	0.000022	0.00013	0.00053	0.0054
		January	2021	75	22	0.11	0.23	0.37	**0.017**	0.038	0.0029	0.026	0.000013	14	0.00046	0.0014	0.24	0.00013	4.1	0.15	0.0000083	0.0017	0.0038	0.00022	0.000032	0.000022	0.00013	0.00054	0.0053
		February		75	22	0.11	0.23	0.38	**0.017**	0.038	0.0029	0.025	0.000013	14	0.00045	0.0014	0.24	0.00012	4.1	0.15	0.0000082	0.0017	0.0038	0.00022	0.000033	0.000022	0.00013	0.00054	0.0052
		March		76	22	0.11	0.23	0.38	**0.017**	0.037	0.0029	0.025	0.000013	14	0.00044	0.0013	0.23	0.00012	4.1	0.16	0.0000082	0.0016	0.0038	0.00022	0.000033	0.000022	0.00013	0.00055	0.0051
		April		76	22	0.11	0.23	0.39	**0.017**	0.037	0.0029	0.025	0.000013	14	0.00044	0.0013	0.23	0.00012	4.1	0.16	0.0000082	0.0016	0.0037	0.00023	0.000032	0.000022	0.00012	0.00055	0.0051
		May		77	22	0.11	0.24	0.39	**0.017**	0.036	0.0029	0.025	0.000013	14	0.00043	0.0013	0.23	0.00012	4.1	0.16	0.0000082	0.0016	0.0037	0.00023	0.000032	0.000022	0.00012	0.00055	0.005
		June		52	14	0.077	0.16	0.26	**0.012**	0.025	0.0019	0.017	0.000009	9.6	0.00029	0.00091	0.15	0.000084	2.8	0.11	0.0000058	0.0011	0.0025	0.00016	0.000022	0.000015	0.000088	0.00036	0.0035
		July		35	9.8	0.053	0.1	0.17	0.008	0.017	0.0013	0.012	0.0000064	6.6	0.0002	0.00065	0.1	0.000062	1.9	0.073	0.0000043	0.00072	0.0017	0.00011	0.000015	0.000011	0.000067	0.00025	0.0026
		August		36	9.9	0.054	0.1	0.17	0.008	0.017	0.0013	0.012	0.0000065	6.6	0.0002	0.00066	0.1	0.000063	1.9	0.073	0.0000044	0.00072	0.0017	0.00011	0.000016	0.000011	0.00007	0.00025	0.0027
		September		35	9.7	0.053	0.1	0.17	0.0079	0.017	0.0013	0.012	0.0000065	6.5	0.0002	0.00066	0.1	0.000064	1.9	0.071	0.0000045	0.0007	0.0017	0.00011	0.000016	0.000011	0.000072	0.00024	0.0027
		October		59	16	0.09	0.17	0.29	**0.013**	0.029	0.0022	0.021	0.000011	11	0.00034	0.0011	0.17	0.00011	3.2	0.12	0.0000077	0.0012	0.0029	0.00018	0.000027	0.000019	0.00012	0.0004	0.0046
		November		59	16	0.091	0.17	0.3	**0.014**	0.029	0.0023	0.021	0.000011	11	0.00034	0.0011	0.18	0.00011	3.2	0.13	0.0000077	0.0012	0.0029	0.00018	0.000027	0.000019	0.00012	0.0004	0.0045
		December		60	16	0.092	0.18	0.31	**0.014**	0.03	0.0024	0.021	0.000011	11	0.00034	0.0011	0.19	0.00011	3.2	0.13	0.0000077	0.0012	0.003	0.00019	0.000028	0.00002	0.00012	0.00041	0.0045
		January	2022	60	16	0.093	0.18	0.32	**0.015**	0.03	0.0025	0.02	0.000011	11	0.00034	0.0011	0.19	0.00011	3.2	0.13	0.0000077	0.0012	0.003	0.00019	0.000029	0.00002	0.00012	0.00041	0.0044
		February		61	16	0.094	0.18	0.33	**0.015**	0.029	0.0025	0.02	0.000011	11	0.00033	0.0011	0.19	0.0001	3.2	0.14	0.0000077	0.0012	0.003	0.00019	0.000029	0.00002	0.00012	0.00041	0.0044
		March		61	16	0.095	0.18	0.34	**0.015**	0.029	0.0025	0.02	0.000011	11	0.00033	0.0011	0.19	0.0001	3.2	0.14	0.0000077	0.0012	0.003	0.00019	0.000029	0.00002	0.00011	0.00041	0.0043
		April		61	16	0.096	0.19	0.34	**0.016**	0.029	0.0024	0.02	0.000011	11	0.00032	0.0011	0.19	0.0001	3.2	0.14	0.0000077	0.0012	0.003	0.00019	0.000029	0.00002	0.00011	0.00041	0.0043
		May		62	16	0.096	0.19	0.35	**0.016**	0.028	0.0024	0.019	0.000011	11	0.00032	0.0011	0.19	0.000099	3.2	0.14	0.0000077	0.0011	0.0029	0.00019	0.000029	0.00002	0.00011	0.00041	0.0042
		June		43	11	0.067	0.13	0.24	**0.011**	0.02	0.0016	0.014	0.0000076	7.9	0.00022	0.00078	0.13	0.000072	2.2	0.098	0.0000056	0.00078	0.002	0.00013	0.00002	0.000014	0.000082	0.00028	0.0031
		July		30	7.7	0.048	0.087	0.16	0.0076	0.014	0.0011	0.01	0.0000056	5.5	0.00016	0.00057	0.089	0.000055	1.6	0.066	0.0000042	0.00053	0.0014	0.000094	0.000015	0.000011	0.000064	0.00019	0.0023
		August		30	7.7	0.048	0.086	0.16	0.0076	0.015	0.0011	0.01	0.0000057	5.5	0.00016	0.00058	0.09	0.000056	1.6	0.066	0.0000043	0.00053	0.0014	0.000095	0.000015	0.000011	0.000067	0.00019	0.0024
		September		29	7.6	0.048	0.084	0.16	0.0075	0.015	0.0011	0.011	0.0000057	5.4	0.00016	0.00059	0.088	0.000058	1.6	0.064	0.0000044	0.00051	0.0014	0.000094	0.000015	0.000011	0.000069	0.00019	0.0024
		October		49	13	0.081	0.14	0.27	**0.013**	0.025	0.002	0.018	0.0000098	9.2	0.00027	0.0010	0.15	0.000098	2.6	0.11	0.0000076	0.00086	0.0024	0.00016	0.000025	0.000019	0.00012	0.00031	0.0042
		November		50	13	0.082	0.14	0.28	**0.013**	0.025	0.0021	0.018	0.0000097	9.2	0.00027	0.001	0.16	0.000097	2.6	0.11	0.0000076	0.00086	0.0025	0.00016	0.000026	0.000019	0.00012	0.00031	0.0041
		December		50	13	0.083	0.15	0.29	**0.014**	0.025	0.0022	0.017	0.0000097	9.3	0.00027	0.001	0.16	0.000096	2.6	0.12	0.0000076	0.00086	0.0026	0.00016	0.000027	0.000019	0.00011	0.00031	0.0041
		January	2023	51	13	0.084	0.15	0.3	**0.014**	0.025	0.0023	0.017	0.0000097	9.4	0.00027	0.001	0.17	0.000095	2.7	0.12	0.0000076	0.00085	0.0026	0.00016	0.000028	0.000019	0.00011	0.00031	0.004
		February		51	13	0.085	0.15	0.31	**0.014**	0.025	0.0023	0.017	0.0000096	9.4	0.00027	0.001	0.17	0.000093	2.7	0.12	0.0000075	0.00085	0.0026	0.00016	0.000028	0.000019	0.00011	0.00031	0.004
		March		51	13	0.085	0.15	0.32	**0.015**	0.025	0.0023	0.017	0.0000095	9.4	0.00026	0.001	0.17	0.000092	2.7	0.13	0.0000075	0.00085	0.0026	0.00016	0.000028	0.000019	0.00011	0.00031	0.0039
		April		51	13	0.086	0.16	0.33	**0.015**	0.025	0.0023	0.017	0.0000095	9.5	0.00026	0.00099	0.17	0.00009	2.6	0.13	0.0000075	0.00084	0.0026	0.00017	0.000028	0.000019	0.00011	0.00031	0.0039
		May		52	13	0.086	0.16	0.34	**0.015**	0.024	0.0023	0.016	0.0000094	9.5	0.00025	0.00099	0.17	0.000089	2.6	0.13	0.0000075	0.00084	0.0025	0.00017	0.000028	0.000019	0.00011	0.00031	0.0038
		June		36	8.6	0.06	0.11	0.23	**0.011**	0.017	0.0015	0.012	0.0000067	6.6	0.00018	0.0007	0.12	0.000065	1.8	0.089	0.0000055	0.00057	0.0018	0.00012	0.00002	0.000014	0.000079	0.00021	0.0028
		July		25	6.1	0.043	0.074	0.16	0.0073	0.013	0.001	0.0088	0.000005	4.6	0.00013	0.00052	0.08	0.00005	1.3	0.06	0.0000041	0.00039	0.0012	0.000083	0.000014	0.00001	0.000062	0.00015	0.0022
		August		25	6.1	0.044	0.073	0.16	0.0073	0.013	0.001	0.0091	0.0000051	4.6	0.00013	0.00053	0.081	0.000052	1.3	0.06	0.0000043	0.00039	0.0013	0.000084	0.000014	0.000011	0.000065	0.00015	0.0022
		September		25	6.0	0.043	0.071	0.15	0.0072	0.013	0.001	0.0092	0.0000051	4.6	0.00013	0.00054	0.079	0.000053	1.3	0.058	0.0000043	0.00038	0.0013	0.000083	0.000014	0.000011	0.000067	0.00014	0.0023
		October		42	10	0.074	0.12	0.26	**0.012**	0.022	0.0019	0.016	0.0000088	7.8	0.00023	0.00092	0.14	0.000091	2.2	0.10	0.0000075	0.00063	0.0022	0.00014	0.000025	0.000018	0.00012	0.00024	0.0039
		November		42	10	0.074	0.12	0.27	**0.013**	0.022	0.002	0.015	0.0000087	7.8	0.00023	0.00092	0.14	0.00009	2.2	0.1	0.0000074	0.00063	0.0022	0.00014	0.000025	0.000018	0.00011	0.00024	0.0038
		December		43	10	0.075	0.13	0.29	**0.013**	0.022	0.0021	0.015	0.0000087	7.8	0.00023	0.00093	0.15	0.000089	2.2	0.11	0.0000074	0.00063	0.0023	0.00014	0.000026	0.000019	0.00011	0.00024	0.0038

APPENDIX C-8
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
		CEQG aquatic life (long-term)[1] (mg/L)			120	0.12	12.6	2.93	0.01	0.1	*0.025*	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008		0.015	0.019
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Lake (South Basin)	*Construction and Operations*	January	2024	43	10	0.076	0.13	0.3	**0.014**	0.023	0.0021	0.015	0.0000087	7.9	0.00023	0.00093	0.16	0.000088	2.2	0.11	0.0000074	0.00062	0.0023	0.00014	0.000027	0.000019	0.00011	0.00024	0.0038
		February		43	10.0	0.076	0.13	0.31	**0.014**	0.023	0.0021	0.015	0.0000086	7.9	0.00022	0.00093	0.16	0.000086	2.2	0.11	0.0000074	0.00062	0.0023	0.00015	0.000027	0.000019	0.00011	0.00024	0.0037
		March		43	9.9	0.077	0.13	0.32	**0.014**	0.022	0.0021	0.015	0.0000085	7.9	0.00022	0.00092	0.16	0.000085	2.2	0.12	0.0000074	0.00062	0.0023	0.00015	0.000027	0.000019	0.00011	0.00024	0.0036
		April		44	9.9	0.077	0.14	0.33	**0.014**	0.022	0.0021	0.014	0.0000085	8.0	0.00022	0.00091	0.16	0.000084	2.2	0.12	0.0000074	0.00061	0.0023	0.00015	0.000027	0.000019	0.0001	0.00024	0.0036
		May		44	9.8	0.078	0.14	0.34	**0.015**	0.022	0.0021	0.014	0.0000084	8.0	0.00022	0.00091	0.16	0.000082	2.2	0.12	0.0000074	0.00061	0.0023	0.00015	0.000027	0.000019	0.0001	0.00024	0.0035
		June		30	6.8	0.055	0.095	0.24	**0.01**	0.015	0.0014	0.01	0.000006	5.6	0.00015	0.00065	0.11	0.000061	1.5	0.081	0.0000054	0.00041	0.0016	0.0001	0.000019	0.000014	0.000077	0.00016	0.0026
		July		21	4.8	0.039	0.065	0.16	0.0071	0.011	0.00098	0.0079	0.0000045	3.9	0.00011	0.00048	0.075	0.000047	1.1	0.055	0.0000041	0.00028	0.0011	0.000074	0.000014	0.00001	0.000061	0.00011	0.002
		August		22	4.9	0.04	0.065	0.16	0.0071	0.012	0.00098	0.0081	0.0000046	4.0	0.00012	0.0005	0.075	0.000049	1.1	0.055	0.0000042	0.00028	0.0011	0.000075	0.000014	0.00001	0.000064	0.00011	0.0021
		September		21	4.8	0.04	0.063	0.15	0.007	0.012	0.00095	0.0083	0.0000047	3.9	0.00012	0.0005	0.074	0.00005	1.1	0.053	0.0000043	0.00028	0.0011	0.000075	0.000014	0.00001	0.000066	0.00011	0.0022
		October		36	8.2	0.068	0.11	0.26	**0.012**	0.02	0.0018	0.014	0.000008	6.7	0.0002	0.00086	0.13	0.000086	1.9	0.091	0.0000074	0.00047	0.002	0.00013	0.000024	0.000018	0.00011	0.00019	0.0037
		November		37	8.1	0.068	0.11	0.28	**0.012**	0.02	0.0019	0.014	0.000008	6.7	0.0002	0.00086	0.13	0.000085	1.9	0.096	0.0000074	0.00046	0.002	0.00013	0.000025	0.000018	0.00011	0.00019	0.0037
		December		37	8.1	0.069	0.11	0.29	**0.013**	0.021	0.002	0.014	0.000008	6.7	0.0002	0.00087	0.14	0.000084	1.9	0.099	0.0000074	0.00046	0.0021	0.00013	0.000026	0.000018	0.00011	0.00019	0.0036
		January	2025	37	8.0	0.07	0.12	0.3	**0.013**	0.021	0.0021	0.013	0.0000079	6.8	0.0002	0.00088	0.15	0.000083	1.9	0.1	0.0000074	0.00046	0.0022	0.00013	0.000027	0.000019	0.00011	0.00019	0.0036
		February		37	8.0	0.07	0.12	0.32	**0.013**	0.021	0.0021	0.013	0.0000079	6.8	0.0002	0.00087	0.15	0.000082	1.9	0.1	0.0000074	0.00046	0.0022	0.00013	0.000027	0.000019	0.00011	0.00019	0.0035
		March		38	8.0	0.071	0.12	0.33	**0.014**	0.021	0.0021	0.013	0.0000078	6.8	0.0002	0.00087	0.15	0.00008	1.9	0.11	0.0000074	0.00045	0.0022	0.00013	0.000027	0.000019	0.0001	0.00019	0.0035
		April		38	7.9	0.071	0.12	0.34	**0.014**	0.02	0.0021	0.013	0.0000077	6.8	0.00019	0.00086	0.15	0.000079	1.9	0.11	0.0000074	0.00045	0.0021	0.00013	0.000027	0.000019	0.0001	0.00019	0.0034
		May		38	7.9	0.071	0.13	0.36	**0.014**	0.02	0.002	0.013	0.0000077	6.8	0.00019	0.00085	0.15	0.000078	1.9	0.11	0.0000074	0.00045	0.0021	0.00013	0.000027	0.000019	0.0001	0.00019	0.0033
		June		26	5.5	0.05	0.087	0.25	0.0099	0.014	0.0014	0.0093	0.0000055	4.8	0.00014	0.00061	0.1	0.000058	1.3	0.075	0.0000054	0.00031	0.0015	0.000093	0.000019	0.000014	0.000076	0.00013	0.0025
		July		19	3.9	0.036	0.059	0.17	0.0069	0.011	0.00095	0.0072	0.0000042	3.4	0.0001	0.00046	0.072	0.000045	0.96	0.051	0.0000041	0.00021	0.0011	0.000067	0.000014	0.000010	0.00006	0.00009	0.0019
		August		19	4.0	0.037	0.059	0.16	0.0069	0.011	0.00095	0.0074	0.0000043	3.4	0.0001	0.00047	0.072	0.000047	0.98	0.051	0.0000042	0.00021	0.0011	0.000068	0.000014	0.00001	0.000063	0.00009	0.002
		September		19	4.0	0.037	0.058	0.16	0.0068	0.011	0.00093	0.0076	0.0000044	3.4	0.00011	0.00048	0.071	0.000048	0.98	0.049	0.0000043	0.00021	0.0011	0.000068	0.000014	0.00001	0.000065	0.000089	0.0021
		October		32	6.7	0.063	0.098	0.27	**0.012**	0.019	0.0017	0.013	0.0000075	5.8	0.00018	0.00082	0.12	0.000083	1.7	0.085	0.0000073	0.00035	0.0019	0.00012	0.000024	0.000018	0.00011	0.00015	0.0036
		November		32	6.7	0.063	0.1	0.29	**0.012**	0.019	0.0019	0.013	0.0000075	5.8	0.00018	0.00082	0.13	0.000082	1.7	0.089	0.0000073	0.00035	0.0019	0.00012	0.000024	0.000018	0.00011	0.00015	0.0035
		December		32	6.6	0.064	0.1	0.31	**0.012**	0.02	0.002	0.013	0.0000074	5.9	0.00018	0.00083	0.14	0.000081	1.7	0.092	0.0000073	0.00035	0.002	0.00012	0.000026	0.000018	0.00011	0.00015	0.0035
			MINIMUM	9.2	2.3	0.023	0.0053	0.0045	0.0021	0.0097	0.00015	0.0072	0.0000042	1.8	0.000096	0.00044	0.02	0.000045	0.63	0.0025	0.0000041	0.000051	0.00059	0.000044	0.0000087	0.0000087	0.00006	0.000032	0.0019
			MAXIMUM	77	22	0.11	0.24	0.39	**0.017**	0.045	0.0029	0.029	0.000013	14	0.00046	0.0014	0.24	0.00013	4.1	0.16	0.0000083	0.0017	0.0038	0.00023	0.000033	0.000022	0.00015	0.00055	0.0054
			AVERAGE	37	9.8	0.063	0.097	0.19	**0.01**	0.023	0.0017	0.015	0.0000081	6.9	0.00025	0.00082	0.12	0.000087	2.0	0.077	0.0000065	0.00064	0.0019	0.00013	0.000021	0.000016	0.00011	0.00024	0.0035

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
		CEQG aquatic life (long-term)[1] (mg/L)			120	0.12	12.6	2.93	0.01	0.1	0.025	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008		0.015	0.019
		Constituent		TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Lake (South Basin)	Closure	January	2026	33	6.6	0.064	0.11	0.31	0.013	0.02	0.002	0.012	0.0000074	5.9	0.00018	0.00084	0.15	0.00008	1.7	0.095	0.0000073	0.00034	0.0021	0.00012	0.000026	0.000019	0.00011	0.00015	0.0034
		February		33	6.6	0.064	0.11	0.31	0.013	0.02	0.002	0.012	0.0000074	5.9	0.00018	0.00084	0.15	0.00008	1.7	0.095	0.0000073	0.00034	0.0021	0.00012	0.000026	0.000019	0.00011	0.00015	0.0034
		March		33	6.6	0.064	0.11	0.31	0.013	0.02	0.002	0.012	0.0000074	5.9	0.00018	0.00084	0.15	0.00008	1.7	0.095	0.0000073	0.00034	0.0021	0.00012	0.000026	0.000019	0.00011	0.00015	0.0034
		April		33	6.6	0.064	0.11	0.31	0.013	0.02	0.002	0.012	0.0000074	5.9	0.00018	0.00084	0.15	0.00008	1.7	0.095	0.0000073	0.00034	0.0021	0.00012	0.000026	0.000019	0.00011	0.00015	0.0034
		May		33	6.6	0.064	0.11	0.31	0.013	0.02	0.002	0.012	0.0000074	5.9	0.00018	0.00084	0.15	0.00008	1.7	0.095	0.0000073	0.00034	0.0021	0.00012	0.000026	0.000019	0.00011	0.00015	0.0034
		June		23	4.7	0.045	0.072	0.21	0.0087	0.014	0.0014	0.0092	0.0000054	4.1	0.00013	0.00061	0.1	0.00006	1.2	0.064	0.0000053	0.00024	0.0014	0.000084	0.000019	0.000013	0.00008	0.0001	0.0026
		July		16	3.4	0.033	0.049	0.14	0.006	0.011	0.00094	0.0071	0.0000041	3.0	0.000099	0.00045	0.07	0.000047	0.87	0.043	0.000004	0.00016	0.001	0.000061	0.000013	0.0000099	0.000063	0.000074	0.002
		August		16	3.4	0.033	0.048	0.14	0.006	0.011	0.00093	0.0074	0.0000042	3.0	0.0001	0.00046	0.069	0.000048	0.88	0.042	0.0000042	0.00016	0.001	0.000062	0.000013	0.00001	0.000065	0.000074	0.0021
		September		16	3.4	0.033	0.046	0.13	0.0058	0.011	0.00089	0.0076	0.0000043	3.0	0.0001	0.00047	0.067	0.00005	0.88	0.04	0.0000042	0.00016	0.001	0.000062	0.000013	0.00001	0.000068	0.000072	0.0021
		October		23	4.9	0.048	0.064	0.18	0.0083	0.016	0.0012	0.011	0.0000063	4.2	0.00015	0.00069	0.094	0.000074	1.3	0.056	0.0000062	0.00022	0.0015	0.000089	0.000019	0.000015	0.0001	0.0001	0.0032
		November		23	4.9	0.048	0.064	0.18	0.0083	0.016	0.0012	0.011	0.0000063	4.2	0.00015	0.00069	0.094	0.000074	1.3	0.056	0.0000062	0.00022	0.0015	0.000089	0.000019	0.000015	0.0001	0.0001	0.0032
		December		23	4.9	0.048	0.064	0.18	0.0083	0.016	0.0012	0.011	0.0000063	4.2	0.00015	0.00069	0.094	0.000074	1.3	0.056	0.0000062	0.00022	0.0015	0.000089	0.000019	0.000015	0.0001	0.0001	0.0032
		January	2027	23	4.9	0.048	0.064	0.18	0.0083	0.016	0.0012	0.011	0.0000063	4.2	0.00015	0.00069	0.094	0.000074	1.3	0.056	0.0000062	0.00022	0.0015	0.000089	0.000019	0.000015	0.0001	0.0001	0.0032
		February		23	4.9	0.048	0.064	0.18	0.0083	0.016	0.0012	0.011	0.0000063	4.2	0.00015	0.00069	0.094	0.000074	1.3	0.056	0.0000062	0.00022	0.0015	0.000089	0.000019	0.000015	0.0001	0.0001	0.0032
		March		23	4.9	0.048	0.064	0.18	0.0083	0.016	0.0012	0.011	0.0000063	4.2	0.00015	0.00069	0.094	0.000074	1.3	0.056	0.0000062	0.00022	0.0015	0.000089	0.000019	0.000015	0.0001	0.0001	0.0032
		April		23	4.9	0.048	0.064	0.18	0.0083	0.016	0.0012	0.011	0.0000063	4.2	0.00015	0.00069	0.094	0.000074	1.3	0.056	0.0000062	0.00022	0.0015	0.000089	0.000019	0.000015	0.0001	0.0001	0.0032
		May		23	4.9	0.048	0.064	0.18	0.0083	0.016	0.0012	0.011	0.0000063	4.2	0.00015	0.00069	0.094	0.000074	1.3	0.056	0.0000062	0.00022	0.0015	0.000089	0.000019	0.000015	0.0001	0.0001	0.0032
		June		17	3.7	0.036	0.044	0.12	0.006	0.013	0.00086	0.0092	0.0000051	3.2	0.00012	0.00055	0.067	0.000062	0.97	0.038	0.000005	0.00016	0.0011	0.000068	0.000015	0.000012	0.000085	0.000075	0.0027
		July		13	2.9	0.029	0.031	0.084	0.0044	0.01	0.00061	0.0079	0.0000043	2.5	0.000099	0.00046	0.049	0.000054	0.78	0.026	0.0000042	0.00012	0.00085	0.000054	0.000012	0.0000095	0.000074	0.000057	0.0023
		August		13	3.0	0.029	0.03	0.081	0.0043	0.011	0.00059	0.0081	0.0000044	2.5	0.0001	0.00046	0.048	0.000055	0.78	0.025	0.0000043	0.00012	0.00085	0.000055	0.000012	0.0000096	0.000077	0.000056	0.0024
		September		13	2.9	0.029	0.028	0.074	0.0042	0.011	0.00055	0.0083	0.0000044	2.5	0.0001	0.00047	0.046	0.000057	0.78	0.023	0.0000044	0.00011	0.00084	0.000055	0.000011	0.0000097	0.000079	0.000055	0.0024
		October		19	4.3	0.042	0.038	0.1	0.006	0.016	0.00078	0.012	0.0000065	3.6	0.00015	0.00069	0.065	0.000084	1.1	0.032	0.0000065	0.00016	0.0012	0.00008	0.000017	0.000014	0.00012	0.000078	0.0036
		November		19	4.3	0.042	0.038	0.1	0.006	0.016	0.00078	0.012	0.0000065	3.6	0.00015	0.00069	0.065	0.000084	1.1	0.032	0.0000065	0.00016	0.0012	0.00008	0.000017	0.000014	0.00012	0.000078	0.0036
		December		19	4.3	0.042	0.038	0.1	0.006	0.016	0.00078	0.012	0.0000065	3.6	0.00015	0.00069	0.065	0.000084	1.1	0.032	0.0000065	0.00016	0.0012	0.00008	0.000017	0.000014	0.00012	0.000078	0.0036
		January	2028	19	4.3	0.042	0.038	0.1	0.006	0.016	0.00078	0.012	0.0000065	3.6	0.00015	0.00069	0.065	0.000084	1.1	0.032	0.0000065	0.00016	0.0012	0.00008	0.000017	0.000014	0.00012	0.000078	0.0036
		February		19	4.3	0.042	0.038	0.1	0.006	0.016	0.00078	0.012	0.0000065	3.6	0.00015	0.00069	0.065	0.000084	1.1	0.032	0.0000065	0.00016	0.0012	0.00008	0.000017	0.000014	0.00012	0.000078	0.0036
		March		19	4.3	0.042	0.038	0.1	0.006	0.016	0.00078	0.012	0.0000065	3.6	0.00015	0.00069	0.065	0.000084	1.1	0.032	0.0000065	0.00016	0.0012	0.00008	0.000017	0.000014	0.00012	0.000078	0.0036
		April		19	4.3	0.042	0.038	0.1	0.006	0.016	0.00078	0.012	0.0000065	3.6	0.00015	0.00069	0.065	0.000084	1.1	0.032	0.0000065	0.00016	0.0012	0.00008	0.000017	0.000014	0.00012	0.000078	0.0036
		May		19	4.3	0.042	0.038	0.1	0.006	0.016	0.00078	0.012	0.0000065	3.6	0.00015	0.00069	0.065	0.000084	1.1	0.032	0.0000065	0.00016	0.0012	0.00008	0.000017	0.000014	0.00012	0.000078	0.0036
		June		14	3.3	0.032	0.026	0.067	0.0043	0.012	0.00054	0.010	0.0000052	2.8	0.00012	0.00055	0.047	0.000068	0.88	0.021	0.0000052	0.00011	0.00092	0.000061	0.000013	0.000011	0.000096	0.000058	0.0029
		July		11	2.6	0.026	0.017	0.043	0.0032	0.01	0.00037	0.0084	0.0000043	2.2	0.000097	0.00045	0.034	0.000058	0.7	0.014	0.0000043	0.000083	0.00072	0.000049	0.00001	0.0000091	0.000081	0.000044	0.0025
		August		11	2.6	0.026	0.017	0.041	0.0032	0.01	0.00036	0.0085	0.0000044	2.2	0.000099	0.00046	0.034	0.000059	0.71	0.013	0.0000044	0.000082	0.00072	0.000049	0.00001	0.0000093	0.000083	0.000044	0.0025
		September		11	2.6	0.026	0.016	0.038	0.0031	0.01	0.00035	0.0087	0.0000045	2.2	0.0001	0.00046	0.033	0.00006	0.71	0.012	0.0000045	0.000081	0.00072	0.00005	0.00001	0.0000094	0.000085	0.000043	0.0026
		October		16	3.9	0.038	0.023	0.052	0.0045	0.015	0.00049	0.013	0.0000066	3.2	0.00015	0.00068	0.047	0.000089	1.0	0.017	0.0000066	0.00012	0.0011	0.000073	0.000015	0.000014	0.00013	0.000063	0.0038
		November		16	3.9	0.038	0.023	0.052	0.0045	0.015	0.00049	0.013	0.0000066	3.2	0.00015	0.00068	0.047	0.000089	1.0	0.017	0.0000066	0.00012	0.0011	0.000073	0.000015	0.000014	0.00013	0.000063	0.0038
		December		16	3.9	0.038	0.023	0.052	0.0045	0.015	0.00049	0.013	0.0000066	3.2	0.00015	0.00068	0.047	0.000089	1.0	0.017	0.0000066	0.00012	0.0011	0.000073	0.000015	0.000014	0.00013	0.000063	0.0038
		January	2029	16	3.9	0.038	0.023	0.052	0.0045	0.015	0.00049	0.013	0.0000066	3.2	0.00015	0.00068	0.047	0.000089	1.0	0.017	0.0000066	0.00012	0.0011	0.000073	0.000015	0.000014	0.00013	0.000063	0.0038
		February		16	3.9	0.038	0.023	0.052	0.0045	0.015	0.00049	0.013	0.0000066	3.2	0.00015	0.00068	0.047	0.000089	1.0	0.017	0.0000066	0.00012	0.0011	0.000073	0.000015	0.000014	0.00013	0.000063	0.0038
		March		16	3.9	0.038	0.023	0.052	0.0045	0.015	0.00049	0.013	0.0000066	3.2	0.00015	0.00068	0.047	0.000089	1.0	0.017	0.0000066	0.00012	0.0011	0.000073	0.000015	0.000014	0.00013	0.000063	0.0038
		April		16	3.9	0.038	0.023	0.052	0.0045	0.015	0.00049	0.013	0.0000066	3.2	0.00015	0.00068	0.047	0.000089	1.0	0.017	0.0000066	0.00012	0.0011	0.000073	0.000015	0.000014	0.00013	0.000063	0.0038
		May		16	3.9	0.038	0.023	0.052	0.0045	0.015	0.00049	0.013	0.0000066	3.2	0.00015	0.00068	0.047	0.000089	1.0	0.017	0.0000066	0.00012	0.0011	0.000073	0.000015	0.000014	0.00013	0.000063	0.0038
		June		13	3.0	0.03	0.016	0.035	0.0034	0.012	0.00035	0.01	0.0000053	2.5	0.00012	0.00054	0.035	0.000072	0.82	0.012	0.0000053	0.000087	0.00081	0.000057	0.000012	0.000011	0.0001	0.000048	0.0031
		July		10	2.4	0.024	0.011	0.023	0.0026	0.0099	0.00025	0.0086	0.0000044	2.0	0.000097	0.00045	0.027	0.00006	0.66	0.0079	0.0000043	0.000066	0.00065	0.000046	0.0000094	0.0000089	0.000085	0.000038	0.0026
		August		10	2.5	0.025	0.011	0.022	0.0026	0.01	0.00025	0.0087	0.0000044	2.0	0.000098	0.00045	0.027	0.000061	0.67	0.0077	0.0000044	0.000067	0.00066	0.000047	0.0000095	0.0000091	0.000086	0.000038	0.0026
		September		10	2.5	0.025	0.011	0.021	0.0026	0.01	0.00025	0.0089	0.0000045	2.0	0.00010	0.00046	0.026	0.000062	0.68	0.0073	0.0000045	0.000066	0.00066	0.000047	0.0000096	0.0000092	0.000088	0.000038	0.0026
		October		15	3.7	0.037	0.015	0.029	0.0038	0.015	0.00035	0.013	0.0000066	3.0	0.00015	0.00068	0.038	0.000092	1.0	0.01	0.0000066	0.000096	0.00097	0.00007	0.000014	0.000014	0.00013	0.000056	0.0039
		November		15	3.7	0.037	0.015	0.029	0.0038	0.015	0.00035	0.013	0.0000066	3.0	0.00015	0.00068	0.038	0.000092	1.0	0.01	0.0000066	0.000096	0.00097	0.00007	0.000014	0.000014	0.00013	0.000056	0.0039
		December		15	3.7	0.037	0.015	0.029	0.0038	0.015	0.00035	0.013	0.0000066	3.0	0.00015	0.00068	0.038	0.000092	1.0	0.01	0.0000066	0.000096	0.00097	0.00007	0.000014	0.000014	0.00013	0.000056	0.0039
		January	2030	15	3.7	0.037	0.015	0.029	0.0038	0.015	0.00035	0.013	0.0000066	3.0	0.00015	0.00068	0.038	0.000092	1.0	0.01	0.0000066	0.000096	0.00097	0.00007	0.000014	0.000014	0.00013	0.000056	0.0039
		February		15	3.7	0.037	0.015	0.029	0.0038	0.015	0.00035	0.013	0.0000066	3.0	0.00015	0.00068	0.038	0.000092	1.0	0.01	0.0000066	0.000096	0.00097	0.00007	0.000014	0.000014	0.00013	0.000056	0.0039
		March		15	3.7	0.037	0.015	0.029	0.0038	0.015	0.00035	0.013	0.0000066	3.0	0.00015	0.00068	0.038	0.000092	1.0	0.01	0.0000066	0.000096	0.00097	0.00007	0.000014	0.000014	0.00013	0.000056	0.0039
		April		15	3.7	0.037	0.015	0.029	0.0038	0.015	0.00035	0.013	0.0000066	3.0	0.00015	0.00068	0.038	0.000092	1.0	0.01	0.0000066	0.000096	0.00097	0.00007	0.000014	0.000014	0.00013	0.000056	0.0039
		May		15	3.7	0.037	0.015	0.029	0.0038	0.015	0.00035	0.013	0.0000066	3.0	0.00015	0.00068	0.038	0.000092	1.0	0.01	0.0000066	0.000096	0.00097	0.00007	0.000014	0.000014	0.00013	0.000056	0.0039
		June		12	2.9	0.029	0.011	0.02	0.0029	0.012	0.00026	0.01	0.0000053	2.3	0.00012	0.00054	0.029	0.000073	0.79	0.0073	0.0000053	0.000074	0.00076	0.000055	0.000011	0.000011	0.0001	0.000043	0.0031
		July		9.7	2.4	0.024	0.0081	0.013	0.0023	0.0098	0.0002	0.0087	0.0000044	1.9	0.000096	0.00045	0.023	0.000061	0.64	0.0051	0.0000044	0.000059	0.00062	0.000045	0.0000091	0.0000088	0.000086	0.000035	0.0026
		August		9.8	2.4	0.024	0.0081	0.013	0.0024	0.010	0.0002	0.0088	0.0000044	1.9	0.000098	0.00045	0.023	0.000062	0.65	0.005	0.0000044	0.000059	0.00063	0.000046	0.0000092	0.000009	0.000088	0.000035	0.0026
		September		9.9	2.4	0.024	0.0079	0.012	0.0024	0.01	0.0002	0.009	0.0000045	2.0	0.000099	0.00046	0.023	0.000063	0.66	0.0049	0.0000045	0.000059	0.00064	0.000046	0.0000093	0.0000091	0.000089	0.000036	0.0027
		October		15	3.6	0.036	0.011	0.017	0.0035	0.015	0.00029	0.013	0.0000067	2.9	0.00015	0.00068	0.034	0.000093	0.98	0.0069	0.0000067	0.000087	0.00094	0.000068	0.000014	0.000013	0.00013	0.000052	0.004
		November		15	3.6	0.036	0.011	0.017	0.0035	0.015	0.00029	0.013	0.0000067	2.9	0.00015	0.00068	0.034	0.000093	0.98	0.0069	0.0000067	0.000087	0.00094	0.000068	0.000014	0.000013	0.00013	0.000052	0.004
		December		15	3.6	0.036	0.011	0.017	0.0035	0.015	0.00029	0.013	0.0000067	2.9	0.00015	0.00068	0.034	0.000093	0.98	0.0069	0.0000067	0.000087	0.00094	0.000068	0.000014	0.000013	0.00013	0.000052	0.004
		January	2031	15	3.6	0.036	0.011	0.017	0.0035	0.015	0.00029	0.013	0.0000067	2.9	0.00015	0.00068	0.034	0.000093	0.98	0.0069	0.0000067	0.000087	0.00094	0.000068	0.000014	0.000013	0.00013	0.000052	0.004
		February		15	3.6	0.036	0.011	0.017	0.0035	0.015	0.00029	0.013	0.0000067	2.9	0.00015	0.00068	0.034	0.000093	0.98	0.0069	0.0000067	0.000087	0.00094	0.000068	0.000014	0.000013	0.00013	0.000052	0.004
		March		15	3.6	0.036	0.011	0.017	0.0035	0.015	0.00029	0.013	0.0000067	2.9	0.00015	0.00068	0.034	0.000093	0.98	0.0069	0.0000067	0.000087	0.00094	0.000068	0.000014	0.000013	0.00013	0.000052	0.004
		April		15	3.6	0.036	0.011	0.017	0.0035	0.015	0.00029	0.013	0.0000067	2.9	0.00015	0.00068	0.034	0.000093	0.98	0.0069	0.0000067	0.000087	0.00094	0.000068	0.000014	0.000013	0.00013	0.000052	0.004
		May		15	3.6	0.036	0.011	0.017	0.0035	0.015	0.00029	0.013	0.0000067	2.9	0.00015	0.00068	0.034	0.000093	0.98	0.0069	0.0000067	0.000087	0.00094	0.000068	0.000014	0.000013	0.00013	0.000052	0.004
		June		12	2.8	0.028	0.0086	0.012	0.0027	0.012	0.00022	0.011	0.0000053	2.3	0.00012	0.00054	0.027	0.000074	0.77	0.0051	0.0000053	0.000068	0.00074	0.000054	0.000011	0.000011	0.0001	0.000041	0.0032
		July		9.4	2.3	0.023	0.0067	0.0087	0.0022	0.0098	0.00017	0.0087	0.0000044	1.9	0.000096	0.00044	0.021	0.000061	0.64	0.0038	0.0000044	0.000055	0.00061	0.000044	0.0000089	0.0000088	0.000087	0.000033	0.0026
		August		9.6	2.4	0.024	0.0067	0.0086	0.0022	0.0099	0.00017	0.0089	0.0000044	1.9	0.000098	0.00045	0.022	0.000062	0.65	0.0038	0.0000044	0.000056	0.00062	0.000045	0.000009	0.0000089	0.000088	0.000034	0.0027
		September		9.7	2.4	0.024	0.0067	0.0083	0.0023	0.01	0.00018	0.009	0.0000045	1.9	0.000099	0.00046	0.022	0.000063	0.66	0.0037	0.0000045	0.000056	0.00062	0.000046	0.0000092	0.0000091	0.00009	0.000034	0.0027
		October		14	3.5	0.035	0.0097	0.012	0.0033	0.015	0.00026	0.013	0.0000067	2.8	0.00015	0.00068	0.032	0.000093	0.97	0.0053	0.0000067	0.000082	0.00092	0.000067	0.000014	0.000013	0.00013	0.000051	0.004
		November		14	3.5	0.035	0.0097	0.012	0.0033	0.015	0.00026	0.013	0.0000067	2.8	0.00015	0.00068	0.032	0.000093	0.97	0.0053	0.0000067	0.000082	0.00092	0.000067	0.000014	0.000013	0.00013	0.000051	0.004
		December		14	3.5	0.035	0.0097	0.012	0.0033	0.015	0.00026	0.013	0.0000067	2.8	0.00015	0.00068	0.032	0.000093	0.97	0.0053	0.0000067	0.000082	0.00092	0.000067	0.000014	0.000013	0.00013	0.000051	0.004

APPENDIX C-8
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
		CEQG aquatic life (long-term)[1] (mg/L)			120	0.12	12.6	2.93	0.01	0.1	0.025	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008		0.015	0.019
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Lake (South Basin)	Closure	January	2032	14	3.5	0.035	0.0097	0.012	0.0033	0.015	0.00026	0.013	0.0000067	2.8	0.00015	0.00068	0.032	0.000093	0.97	0.0053	0.0000067	0.000082	0.00092	0.000067	0.000014	0.000013	0.00013	0.000051	0.004
		February		14	3.5	0.035	0.0097	0.012	0.0033	0.015	0.00026	0.013	0.0000067	2.8	0.00015	0.00068	0.032	0.000093	0.97	0.0053	0.0000067	0.000082	0.00092	0.000067	0.000014	0.000013	0.00013	0.000051	0.004
		March		14	3.5	0.035	0.0097	0.012	0.0033	0.015	0.00026	0.013	0.0000067	2.8	0.00015	0.00068	0.032	0.000093	0.97	0.0053	0.0000067	0.000082	0.00092	0.000067	0.000014	0.000013	0.00013	0.000051	0.004
		April		14	3.5	0.035	0.0097	0.012	0.0033	0.015	0.00026	0.013	0.0000067	2.8	0.00015	0.00068	0.032	0.000093	0.97	0.0053	0.0000067	0.000082	0.00092	0.000067	0.000014	0.000013	0.00013	0.000051	0.004
		May		14	3.5	0.035	0.0097	0.012	0.0033	0.015	0.00026	0.013	0.0000067	2.8	0.00015	0.00068	0.032	0.000093	0.97	0.0053	0.0000067	0.000082	0.00092	0.000067	0.000014	0.000013	0.00013	0.000051	0.004
		June		11	2.8	0.028	0.0075	0.0087	0.0026	0.012	0.0002	0.011	0.0000053	2.3	0.00012	0.00054	0.025	0.000074	0.77	0.004	0.0000053	0.000065	0.00073	0.000053	0.000011	0.000011	0.00011	0.00004	0.0032
		July		9.3	2.3	0.023	0.006	0.0065	0.0021	0.0098	0.00016	0.0087	0.0000044	1.9	0.000096	0.00044	0.021	0.000061	0.63	0.0031	0.0000044	0.000053	0.0006	0.000044	0.0000088	0.0000088	0.000087	0.000033	0.0026
		August		9.5	2.4	0.023	0.006	0.0065	0.0022	0.0099	0.00016	0.0089	0.0000044	1.9	0.000098	0.00045	0.021	0.000062	0.64	0.0031	0.0000044	0.000054	0.00061	0.000045	0.000009	0.0000089	0.000089	0.000033	0.0027
		September		9.6	2.4	0.024	0.0061	0.0064	0.0022	0.01	0.00016	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000063	0.65	0.0031	0.0000045	0.000054	0.00062	0.000045	0.0000091	0.0000091	0.00009	0.000034	0.0027
		October		14	3.5	0.035	0.0089	0.0092	0.0032	0.015	0.00024	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0046	0.0000067	0.00008	0.00091	0.000067	0.000013	0.000013	0.00013	0.00005	0.004
		November		14	3.5	0.035	0.0089	0.0092	0.0032	0.015	0.00024	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0046	0.0000067	0.00008	0.00091	0.000067	0.000013	0.000013	0.00013	0.00005	0.004
		December		14	3.5	0.035	0.0089	0.0092	0.0032	0.015	0.00024	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0046	0.0000067	0.00008	0.00091	0.000067	0.000013	0.000013	0.00013	0.00005	0.004
		January	2033	14	3.5	0.035	0.0089	0.0092	0.0032	0.015	0.00024	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0046	0.0000067	0.00008	0.00091	0.000067	0.000013	0.000013	0.00013	0.00005	0.004
		February		14	3.5	0.035	0.0089	0.0092	0.0032	0.015	0.00024	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0046	0.0000067	0.00008	0.00091	0.000067	0.000013	0.000013	0.00013	0.00005	0.004
		March		14	3.5	0.035	0.0089	0.0092	0.0032	0.015	0.00024	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0046	0.0000067	0.00008	0.00091	0.000067	0.000013	0.000013	0.00013	0.00005	0.004
		April		14	3.5	0.035	0.0089	0.0092	0.0032	0.015	0.00024	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0046	0.0000067	0.00008	0.00091	0.000067	0.000013	0.000013	0.00013	0.00005	0.004
		May		14	3.5	0.035	0.0089	0.0092	0.0032	0.015	0.00024	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0046	0.0000067	0.00008	0.00091	0.000067	0.000013	0.000013	0.00013	0.00005	0.004
		June		11	2.8	0.028	0.007	0.007	0.0026	0.012	0.00019	0.011	0.0000053	2.2	0.00012	0.00054	0.025	0.000074	0.76	0.0035	0.0000053	0.000063	0.00072	0.000053	0.000011	0.000011	0.00011	0.000039	0.0032
		July		9.3	2.3	0.023	0.0057	0.0055	0.0021	0.0097	0.00015	0.0087	0.0000044	1.8	0.000096	0.00044	0.02	0.000061	0.63	0.0028	0.0000044	0.000052	0.0006	0.000044	0.0000088	0.0000088	0.000087	0.000032	0.0026
		August		9.4	2.3	0.023	0.0057	0.0055	0.0021	0.0099	0.00016	0.0089	0.0000045	1.9	0.000098	0.00045	0.021	0.000062	0.64	0.0029	0.0000045	0.000053	0.00061	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
		September		9.6	2.4	0.024	0.0058	0.0055	0.0022	0.01	0.00016	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000063	0.65	0.0029	0.0000045	0.000054	0.00061	0.000045	0.0000091	0.000009	0.00009	0.000033	0.0027
		October		14	3.5	0.035	0.0085	0.008	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0042	0.0000067	0.000079	0.00091	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0085	0.008	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0042	0.0000067	0.000079	0.00091	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0085	0.008	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0042	0.0000067	0.000079	0.00091	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		January	2034	14	3.5	0.035	0.0085	0.008	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0042	0.0000067	0.000079	0.00091	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		February		14	3.5	0.035	0.0085	0.008	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0042	0.0000067	0.000079	0.00091	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		March		14	3.5	0.035	0.0085	0.008	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0042	0.0000067	0.000079	0.00091	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		April		14	3.5	0.035	0.0085	0.008	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0042	0.0000067	0.000079	0.00091	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		May		14	3.5	0.035	0.0085	0.008	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.0042	0.0000067	0.000079	0.00091	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		June		11	2.8	0.028	0.0067	0.0062	0.0025	0.012	0.00019	0.011	0.0000053	2.2	0.00012	0.00054	0.024	0.000074	0.76	0.0033	0.0000053	0.000063	0.00072	0.000053	0.000011	0.000011	0.00011	0.000039	0.0032
		July		9.2	2.3	0.023	0.0055	0.005	0.0021	0.0097	0.00015	0.0088	0.0000044	1.8	0.000096	0.00044	0.02	0.000061	0.63	0.0027	0.0000044	0.000052	0.00059	0.000044	0.0000088	0.0000088	0.000087	0.000032	0.0026
		August		9.4	2.3	0.023	0.0056	0.005	0.0021	0.0099	0.00015	0.0089	0.0000045	1.9	0.000098	0.00045	0.02	0.000063	0.64	0.0027	0.0000045	0.000053	0.0006	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
		September		9.5	2.4	0.024	0.0057	0.005	0.0022	0.01	0.00016	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000063	0.65	0.0027	0.0000045	0.000053	0.00061	0.000045	0.0000091	0.000009	0.00009	0.000033	0.0027
		October		14	3.5	0.035	0.0083	0.0074	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.004	0.0000067	0.000079	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0083	0.0074	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.004	0.0000067	0.000079	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0083	0.0074	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.004	0.0000067	0.000079	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		January	2035	14	3.5	0.035	0.0083	0.0074	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.004	0.0000067	0.000079	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		February		14	3.5	0.035	0.0083	0.0074	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.004	0.0000067	0.000079	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		March		14	3.5	0.035	0.0083	0.0074	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.004	0.0000067	0.000079	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		April		14	3.5	0.035	0.0083	0.0074	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.004	0.0000067	0.000079	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		May		14	3.5	0.035	0.0083	0.0074	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.031	0.000094	0.96	0.004	0.0000067	0.000079	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		June		11	2.8	0.028	0.0066	0.0058	0.0025	0.012	0.00018	0.011	0.0000053	2.2	0.00012	0.00054	0.024	0.000074	0.76	0.0032	0.0000053	0.000063	0.00072	0.000053	0.000011	0.000011	0.00011	0.000039	0.0032
		July		9.2	2.3	0.023	0.0054	0.0047	0.0021	0.0097	0.00015	0.0088	0.0000044	1.8	0.000096	0.00044	0.02	0.000061	0.63	0.0026	0.0000044	0.000052	0.00059	0.000044	0.0000088	0.0000088	0.000088	0.000032	0.0026
		August		9.4	2.3	0.023	0.0055	0.0048	0.0021	0.0099	0.00015	0.0089	0.0000045	1.9	0.000098	0.00045	0.02	0.000063	0.64	0.0026	0.0000045	0.000052	0.0006	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
		September		9.5	2.4	0.024	0.0056	0.0048	0.0022	0.01	0.00016	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000063	0.65	0.0027	0.0000045	0.000053	0.00061	0.000045	0.000009	0.000009	0.00009	0.000033	0.0027
		October		14	3.5	0.035	0.0082	0.0071	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.004	0.0000067	0.000079	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0082	0.0071	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.004	0.0000067	0.000079	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0082	0.0071	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.004	0.0000067	0.000079	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		January	2036	14	3.5	0.035	0.0082	0.0071	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.004	0.0000067	0.000079	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		February		14	3.5	0.035	0.0082	0.0071	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.004	0.0000067	0.000079	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		March		14	3.5	0.035	0.0082	0.0071	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.004	0.0000067	0.000079	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		April		14	3.5	0.035	0.0082	0.0071	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.004	0.0000067	0.000079	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		May		14	3.5	0.035	0.0082	0.0071	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.004	0.0000067	0.000079	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		June		11	2.8	0.028	0.0065	0.0056	0.0025	0.012	0.00018	0.011	0.0000053	2.2	0.00012	0.00054	0.024	0.000074	0.76	0.0031	0.0000053	0.000062	0.00072	0.000053	0.000011	0.000011	0.00011	0.000039	0.0032
		July		9.2	2.3	0.023	0.0054	0.0046	0.0021	0.0097	0.00015	0.0088	0.0000044	1.8	0.000096	0.00044	0.02	0.000062	0.63	0.0026	0.0000044	0.000051	0.00059	0.000044	0.0000088	0.0000088	0.000088	0.000032	0.0026
		August		9.4	2.3	0.023	0.0055	0.0047	0.0021	0.0099	0.00015	0.0089	0.0000045	1.9	0.000098	0.00045	0.02	0.000063	0.64	0.0026	0.0000045	0.000052	0.0006	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
		September		9.5	2.4	0.024	0.0056	0.0047	0.0022	0.01	0.00015	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000063	0.65	0.0027	0.0000045	0.000053	0.00061	0.000045	0.000009	0.000009	0.00009	0.000033	0.0027
		October		14	3.5	0.035	0.0082	0.007	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0082	0.007	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0082	0.007	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		January	2037	14	3.5	0.035	0.0082	0.007	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		February		14	3.5	0.035	0.0082	0.007	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		March		14	3.5	0.035	0.0082	0.007	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		April		14	3.5	0.035	0.0082	0.007	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		May		14	3.5	0.035	0.0082	0.007	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		June		11	2.8	0.028	0.0065	0.0055	0.0025	0.012	0.00018	0.011	0.0000053	2.2	0.00012	0.00054	0.024	0.000074	0.76	0.0031	0.0000053	0.000062	0.00072	0.000053	0.000011	0.000011	0.00011	0.000039	0.0032
		July		9.2	2.3	0.023	0.0054	0.0045	0.0021	0.0097	0.00015	0.0088	0.0000044	1.8	0.000096	0.00044	0.02	0.000062	0.63	0.0026	0.0000044	0.000051	0.00059	0.000044	0.0000088	0.0000088	0.000088	0.000032	0.0026
		August		9.4	2.3	0.023	0.0055	0.0046	0.0021	0.0099	0.00015	0.0089	0.0000045	1.9	0.000098	0.00045	0.02	0.000063	0.64	0.0026	0.0000045	0.000052	0.0006	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
		September		9.5	2.4	0.024	0.0055	0.0047	0.0022	0.01	0.00015	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000063	0.65	0.0026	0.0000045	0.000053	0.00061	0.000045	0.000009	0.000009	0.00009	0.000033	0.0027
		October		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1	0.025	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008		0.015	0.019
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Lake (South Basin)	Closure	January	2038	14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		February		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		March		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		April		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		May		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		June		11	2.8	0.028	0.0065	0.0055	0.0025	0.012	0.00018	0.011	0.0000053	2.2	0.00012	0.00054	0.024	0.000074	0.76	0.0031	0.0000053	0.000062	0.00072	0.000053	0.000011	0.000011	0.00011	0.000039	0.0032
		July		9.2	2.3	0.023	0.0054	0.0045	0.0021	0.0097	0.00015	0.0088	0.0000044	1.8	0.000096	0.00044	0.02	0.000062	0.63	0.0026	0.0000044	0.000051	0.00059	0.000044	0.0000088	0.0000088	0.000088	0.000032	0.0026
		August		9.4	2.3	0.023	0.0055	0.0046	0.0021	0.0099	0.00015	0.0089	0.0000045	1.9	0.000098	0.00045	0.02	0.000063	0.64	0.0026	0.0000045	0.000052	0.0006	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
		September		9.5	2.4	0.024	0.0055	0.0047	0.0022	0.01	0.00015	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000064	0.65	0.0026	0.0000045	0.000053	0.00061	0.000045	0.000009	0.000009	0.00009	0.000033	0.0027
		October		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		January	2039	14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		February		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		March		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		April		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		May		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		June		11	2.8	0.028	0.0065	0.0055	0.0025	0.012	0.00018	0.011	0.0000053	2.2	0.00012	0.00054	0.024	0.000074	0.76	0.0031	0.0000053	0.000062	0.00072	0.000053	0.000011	0.000011	0.00011	0.000039	0.0032
		July		9.2	2.3	0.023	0.0054	0.0045	0.0021	0.0097	0.00015	0.0088	0.0000044	1.8	0.000096	0.00044	0.02	0.000062	0.63	0.0025	0.0000044	0.000051	0.00059	0.000044	0.0000088	0.0000088	0.000088	0.000032	0.0026
		August		9.4	2.3	0.023	0.0054	0.0046	0.0021	0.0099	0.00015	0.0089	0.0000045	1.9	0.000098	0.00045	0.02	0.000063	0.64	0.0026	0.0000045	0.000052	0.0006	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
		September		9.5	2.4	0.024	0.0055	0.0047	0.0022	0.01	0.00015	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000064	0.65	0.0026	0.0000045	0.000053	0.00061	0.000045	0.000009	0.000009	0.00009	0.000033	0.0027
		October		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		January	2040	14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		February		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		March		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		April		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		May		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		June		11	2.8	0.028	0.0065	0.0054	0.0025	0.012	0.00018	0.011	0.0000053	2.2	0.00012	0.00054	0.024	0.000074	0.76	0.0031	0.0000053	0.000062	0.00071	0.000053	0.000011	0.000011	0.00011	0.000039	0.0032
		July		9.2	2.3	0.023	0.0054	0.0045	0.0021	0.0097	0.00015	0.0088	0.0000044	1.8	0.000096	0.00044	0.02	0.000062	0.63	0.0025	0.0000044	0.000051	0.00059	0.000044	0.0000088	0.0000088	0.000088	0.000032	0.0026
		August		9.4	2.3	0.023	0.0054	0.0046	0.0021	0.0099	0.00015	0.0089	0.0000045	1.9	0.000098	0.00045	0.02	0.000063	0.64	0.0026	0.0000045	0.000052	0.0006	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
		September		9.5	2.4	0.024	0.0055	0.0046	0.0022	0.01	0.00015	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000064	0.65	0.0026	0.0000045	0.000053	0.00061	0.000045	0.000009	0.000009	0.00009	0.000033	0.0027
		October		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		January	2041	14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		February		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		March		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		April		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		May		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		June		11	2.8	0.028	0.0065	0.0054	0.0025	0.012	0.00018	0.011	0.0000053	2.2	0.00012	0.00054	0.024	0.000074	0.76	0.0031	0.0000053	0.000062	0.00072	0.000053	0.000011	0.000011	0.00011	0.000039	0.0032
		July		9.2	2.3	0.023	0.0054	0.0045	0.0021	0.0097	0.00015	0.0088	0.0000044	1.8	0.000096	0.00044	0.02	0.000062	0.63	0.0025	0.0000044	0.000051	0.00059	0.000044	0.0000088	0.0000088	0.000088	0.000032	0.0026
		August		9.4	2.3	0.023	0.0055	0.0046	0.0021	0.0099	0.00015	0.0089	0.0000045	1.9	0.000098	0.00045	0.02	0.000063	0.64	0.0026	0.0000045	0.000052	0.0006	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
			MINIMUM	9.2	2.3	0.023	0.0054	0.0045	0.0021	0.0097	0.00015	0.0071	0.0000041	1.8	0.000096	0.00044	0.02	0.000047	0.63	0.0025	0.000004	0.000051	0.00059	0.000044	0.0000088	0.0000088	0.000063	0.000032	0.002
			MAXIMUM	33	6.6	0.064	0.11	0.31	0.013	0.02	0.002	0.013	0.0000074	5.9	0.00018	0.00084	0.15	0.000094	1.7	0.095	0.0000073	0.00034	0.0021	0.00012	0.000026	0.000019	0.00013	0.00015	0.004
			AVERAGE	14	3.4	0.034	0.017	0.036	0.0038	0.014	0.00038	0.012	0.000006	2.8	0.00013	0.00062	0.038	0.000082	0.92	0.012	0.000006	0.000096	0.00091	0.000064	0.000013	0.000012	0.00012	0.000054	0.0035

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
		CEQG aquatic life (long-term)[1] (mg/L)			120	0.12	12.6	2.93	0.01	0.1	0.025	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008		0.015	0.019
		Constituent		TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Lake (South Basin)	Post-Closure	September	2041	9.5	2.4	0.024	0.0055	0.0046	0.0022	0.01	0.00015	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000064	0.65	0.0026	0.0000045	0.000053	0.00061	0.000045	0.000009	0.000009	0.00009	0.000033	0.0027
		October		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		January	2042	14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		February		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		March		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		April		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		May		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		June		11	2.8	0.028	0.0065	0.0055	0.0025	0.012	0.00018	0.011	0.0000053	2.2	0.00012	0.00054	0.024	0.000075	0.76	0.0031	0.0000053	0.000062	0.00072	0.000053	0.000011	0.000011	0.00011	0.000039	0.0032
		July		9.2	2.3	0.023	0.0054	0.0045	0.0021	0.0097	0.00015	0.0088	0.0000044	1.8	0.000096	0.00044	0.02	0.000062	0.63	0.0025	0.0000044	0.000051	0.00059	0.000044	0.0000088	0.0000088	0.000088	0.000032	0.0026
		August		9.4	2.3	0.023	0.0054	0.0046	0.0021	0.0099	0.00015	0.0089	0.0000045	1.9	0.000098	0.00045	0.02	0.000063	0.64	0.0026	0.0000045	0.000052	0.0006	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
		September		9.5	2.4	0.024	0.0055	0.0046	0.0022	0.01	0.00015	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000064	0.65	0.0026	0.0000045	0.000053	0.00061	0.000045	0.000009	0.000009	0.00009	0.000033	0.0027
		October		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		January	2043	14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		February		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		March		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		April		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		May		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		June		11	2.8	0.028	0.0065	0.0054	0.0025	0.012	0.00018	0.011	0.0000053	2.2	0.00012	0.00054	0.024	0.000075	0.76	0.0031	0.0000053	0.000062	0.00072	0.000053	0.000011	0.000011	0.00011	0.000039	0.0032
		July		9.2	2.3	0.023	0.0054	0.0045	0.0021	0.0097	0.00015	0.0088	0.0000044	1.8	0.000096	0.00044	0.02	0.000062	0.63	0.0025	0.0000044	0.000051	0.00059	0.000044	0.0000088	0.0000088	0.000088	0.000032	0.0026
		August		9.4	2.3	0.023	0.0054	0.0046	0.0021	0.0099	0.00015	0.0089	0.0000045	1.9	0.000098	0.00045	0.02	0.000063	0.64	0.0026	0.0000045	0.000052	0.0006	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
		September		9.5	2.4	0.024	0.0055	0.0046	0.0022	0.01	0.00015	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000064	0.65	0.0026	0.0000045	0.000053	0.00061	0.000045	0.000009	0.000009	0.00009	0.000033	0.0027
		October		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		January	2044	14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		February		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		March		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		April		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		May		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		June		11	2.8	0.028	0.0065	0.0054	0.0025	0.012	0.00018	0.011	0.0000053	2.2	0.00012	0.00054	0.024	0.000075	0.76	0.0031	0.0000053	0.000062	0.00072	0.000053	0.000011	0.000011	0.00011	0.000039	0.0032
		July		9.2	2.3	0.023	0.0054	0.0045	0.0021	0.0097	0.00015	0.0088	0.0000044	1.8	0.000096	0.00044	0.02	0.000062	0.63	0.0025	0.0000044	0.000051	0.00059	0.000044	0.0000088	0.0000088	0.000088	0.000032	0.0026
		August		9.4	2.3	0.023	0.0054	0.0046	0.0021	0.0099	0.00015	0.0089	0.0000045	1.9	0.000098	0.00045	0.02	0.000063	0.64	0.0026	0.0000045	0.000052	0.0006	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
		September		9.5	2.4	0.024	0.0055	0.0046	0.0022	0.01	0.00015	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000064	0.65	0.0026	0.0000045	0.000053	0.00061	0.000045	0.000009	0.000009	0.00009	0.000033	0.0027
		October		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		January	2045	14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		February		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		March		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		April		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		May		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		June		11	2.8	0.028	0.0065	0.0054	0.0025	0.012	0.00018	0.011	0.0000053	2.2	0.00012	0.00054	0.024	0.000075	0.76	0.0031	0.0000053	0.000062	0.00072	0.000053	0.000011	0.000011	0.00011	0.000039	0.0032
		July		9.2	2.3	0.023	0.0054	0.0045	0.0021	0.0097	0.00015	0.0088	0.0000044	1.8	0.000096	0.00044	0.02	0.000062	0.63	0.0025	0.0000044	0.000051	0.00059	0.000044	0.0000088	0.0000088	0.000088	0.000032	0.0026
		August		9.4	2.3	0.023	0.0054	0.0046	0.0021	0.0099	0.00015	0.0089	0.0000045	1.9	0.000098	0.00045	0.02	0.000063	0.64	0.0026	0.0000045	0.000052	0.0006	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
		September		9.5	2.4	0.024	0.0055	0.0046	0.0022	0.01	0.00015	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000064	0.65	0.0026	0.0000045	0.000053	0.00061	0.000045	0.000009	0.000009	0.00009	0.000033	0.0027
		October		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		January	2046	14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		February		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		March		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		April		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		May		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		June		11	2.8	0.028	0.0065	0.0054	0.0025	0.012	0.00018	0.011	0.0000053	2.2	0.00012	0.00054	0.024	0.000075	0.76	0.0031	0.0000053	0.000062	0.00072	0.000053	0.000011	0.000011	0.00011	0.000039	0.0032
		July		9.2	2.3	0.023	0.0054	0.0045	0.0021	0.0097	0.00015	0.0088	0.0000044	1.8	0.000096	0.00044	0.02	0.000062	0.63	0.0025	0.0000044	0.000051	0.00059	0.000044	0.0000088	0.0000088	0.000088	0.000032	0.0026
		August		9.4	2.3	0.023	0.0054	0.0046	0.0021	0.0099	0.00015	0.0089	0.0000045	1.9	0.000098	0.00045	0.02	0.000063	0.64	0.0026	0.0000045	0.000052	0.0006	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
		September		9.5	2.4	0.024	0.0055	0.0046	0.0022	0.01	0.00015	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000064	0.65	0.0026	0.0000045	0.000053	0.00061	0.000045	0.000009	0.000009	0.00009	0.000033	0.0027
		October		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004

APPENDIX C-8
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25						0.1
		CEQG aquatic life (long-term)[1] (mg/L)			120	0.12	12.6	2.93	0.01	0.1	0.025	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008		0.015	0.019
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	Sn	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Whale Tail Lake (South Basin)	*Post-Closure*	January	2047	14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		February		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		March		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		April		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		May		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		June		11	2.8	0.028	0.0065	0.0055	0.0025	0.012	0.00018	0.011	0.0000053	2.2	0.00012	0.00054	0.024	0.000075	0.76	0.0031	0.0000053	0.000062	0.00072	0.000053	0.000011	0.000011	0.00011	0.000039	0.0032
		July		9.2	2.3	0.023	0.0054	0.0045	0.0021	0.0097	0.00015	0.0088	0.0000044	1.8	0.000096	0.00044	0.02	0.000062	0.63	0.0025	0.0000044	0.000051	0.00059	0.000044	0.0000088	0.0000088	0.000088	0.000032	0.0026
		August		9.4	2.3	0.023	0.0054	0.0046	0.0021	0.0099	0.00015	0.0089	0.0000045	1.9	0.000098	0.00045	0.02	0.000063	0.64	0.0026	0.0000045	0.000052	0.0006	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
		September		9.5	2.4	0.024	0.0055	0.0046	0.0022	0.01	0.00015	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000064	0.65	0.0026	0.0000045	0.000053	0.00061	0.000045	0.000009	0.000009	0.00009	0.000033	0.0027
		October		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		January	2048	14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		February		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		March		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		April		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		May		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		June		11	2.8	0.028	0.0065	0.0054	0.0025	0.012	0.00018	0.011	0.0000053	2.2	0.00012	0.00054	0.024	0.000075	0.76	0.0031	0.0000053	0.000062	0.00072	0.000053	0.000011	0.000011	0.00011	0.000039	0.0032
		July		9.2	2.3	0.023	0.0054	0.0045	0.0021	0.0097	0.00015	0.0088	0.0000044	1.8	0.000096	0.00044	0.02	0.000062	0.63	0.0025	0.0000044	0.000051	0.00059	0.000044	0.0000088	0.0000088	0.000088	0.000032	0.0026
		August		9.4	2.3	0.023	0.0054	0.0046	0.0021	0.0099	0.00015	0.0089	0.0000045	1.9	0.000098	0.00045	0.02	0.000063	0.64	0.0026	0.0000045	0.000052	0.0006	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
		September		9.5	2.4	0.024	0.0055	0.0046	0.0022	0.01	0.00015	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000064	0.65	0.0026	0.0000045	0.000053	0.00061	0.000045	0.000009	0.000009	0.00009	0.000033	0.0027
		October		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		January	2049	14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		February		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		March		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		April		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		May		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		June		11	2.8	0.028	0.0065	0.0054	0.0025	0.012	0.00018	0.011	0.0000053	2.2	0.00012	0.00054	0.024	0.000075	0.76	0.0031	0.0000053	0.000062	0.00072	0.000053	0.000011	0.000011	0.00011	0.000039	0.0032
		July		9.2	2.3	0.023	0.0054	0.0045	0.0021	0.0097	0.00015	0.0088	0.0000044	1.8	0.000096	0.00044	0.02	0.000062	0.63	0.0025	0.0000044	0.000051	0.00059	0.000044	0.0000088	0.0000088	0.000088	0.000032	0.0026
		August		9.4	2.3	0.023	0.0054	0.0046	0.0021	0.0099	0.00015	0.0089	0.0000045	1.9	0.000098	0.00045	0.02	0.000063	0.64	0.0026	0.0000045	0.000052	0.0006	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
		September		9.5	2.4	0.024	0.0055	0.0046	0.0022	0.01	0.00015	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000064	0.65	0.0026	0.0000045	0.000053	0.00061	0.000045	0.000009	0.000009	0.00009	0.000033	0.0027
		October		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		January	≥2050	14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		February		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		March		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		April		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.012	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		May		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		June		11	2.8	0.028	0.0065	0.0055	0.0025	0.012	0.00018	0.011	0.0000053	2.2	0.00012	0.00054	0.024	0.000075	0.76	0.0031	0.0000053	0.000062	0.00072	0.000053	0.000011	0.000011	0.00011	0.000039	0.0032
		July		9.2	2.3	0.023	0.0054	0.0045	0.0021	0.0097	0.00015	0.0088	0.0000044	1.8	0.000096	0.00044	0.02	0.000062	0.63	0.0025	0.0000044	0.000051	0.00059	0.000044	0.0000088	0.0000088	0.000088	0.000032	0.0026
		August		9.4	2.3	0.023	0.0054	0.0046	0.0021	0.0099	0.00015	0.0089	0.0000045	1.9	0.000098	0.00045	0.02	0.000063	0.64	0.0026	0.0000045	0.000052	0.0006	0.000045	0.0000089	0.0000089	0.000089	0.000033	0.0027
		September		9.5	2.4	0.024	0.0055	0.0046	0.0022	0.01	0.00015	0.009	0.0000045	1.9	0.000099	0.00046	0.021	0.000064	0.65	0.0026	0.0000045	0.000053	0.00061	0.000045	0.000009	0.000009	0.00009	0.000033	0.0027
		October		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		November		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
		December		14	3.5	0.035	0.0082	0.0069	0.0032	0.015	0.00023	0.013	0.0000067	2.8	0.00015	0.00068	0.03	0.000094	0.96	0.0039	0.0000067	0.000078	0.0009	0.000067	0.000013	0.000013	0.00013	0.000049	0.004
			MINIMUM	9.2	2.3	0.023	0.0054	0.0045	0.0021	0.0097	0.00015	0.0071	0.0000041	1.8	0.000096	0.00044	0.02	0.000047	0.63	0.0025	0.000004	0.000051	0.00059	0.000044	0.0000088	0.0000088	0.000063	0.000032	0.002
			MAXIMUM	33	6.6	0.064	0.11	0.31	**0.013**	0.02	0.002	0.013	0.0000074	5.9	0.00018	0.00084	0.15	0.000094	1.7	0.095	0.0000073	0.00034	0.0021	0.00012	0.000026	0.000019	0.00013	0.00015	0.004
			AVERAGE	13	3.2	0.032	0.0083	0.0091	0.0029	0.013	0.00022	0.012	0.000006	2.5	0.00013	0.00061	0.028	0.000084	0.87	0.0044	0.000006	0.000073	0.00082	0.000061	0.000012	0.000012	0.00012	0.000045	0.0036

Notes:

[1] Canadian Council of Ministers of the Environment CEQG (2002) freshwater guidelines. Values above the freshwater CEQG's shown in bold-underlined type
[2] CEQG Freshwater Aquatic Life criterion for total ammonia is pH and temperature dependent (5C used based on hydrodynamic modelling).
[3] CEQG Freshwater Aquatic Life Trigger Ranges are dependent on trophic status; oligotrophic status assumed
[4] CEQG Freshwater Aquatic Life Criterion for aluminum is pH dependant.
[5] The CEQG aquatic life criterion for Arsenic is replaced by the Site Specific Water Quality Objective of 0.025 mg/L developed for the Whale Tail Pit Project (Volume 6, Appendix 6-N)
[6] CEQG Freshwater Aquatic Life Criteria are hardness dependant.
[7] CEQG Freshwater Aquatic Life criterion for manganese is pH and hardness dependent.
[8] CEQG Freshwater Aquatic Life criterion is for dissolved zinc and is hardness, pH and DOC dependent.
* Variable guidelines based on average values in WTS 2020 CREMP monitoring data (pH=6.8, hardness=33 mg/L, DOC=3.8 mg/L)

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1	0.025	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008	0.015	0.0054
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Downstream Node 1	Construction and Operations	January	2018	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		11	1.5	0.027	0.0083	0.0083	0.0028	0.017	0.00027	0.01	0.0000058	2.2	0.00021	0.00053	0.042	0.000082	0.67	0.0049	0.0000051	0.000055	0.0008	0.000054	0.00001	0.00001	0.000031	0.003
		July		12	2.0	0.028	0.014	0.0097	0.0037	0.027	0.00039	0.01	0.0000056	2.6	0.0004	0.00054	0.057	0.000084	0.73	0.012	0.0000051	0.000061	0.0013	0.000061	0.0000098	0.00001	0.000031	0.0029
		August		13	2.0	0.028	0.014	0.0097	0.0037	0.027	0.00039	0.01	0.0000057	2.6	0.00039	0.00055	0.057	0.000085	0.73	0.012	0.0000052	0.000062	0.0013	0.000061	0.000010	0.00001	0.000032	0.0029
		September		12	1.9	0.028	0.014	0.0093	0.0035	0.026	0.00038	0.01	0.0000057	2.5	0.00038	0.00054	0.056	0.000084	0.72	0.011	0.0000052	0.000061	0.0012	0.000061	0.0000099	0.00001	0.000032	0.0029
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		11	1.6	0.027	0.011	0.0084	0.0029	0.021	0.00031	0.01	0.0000057	2.3	0.00028	0.00053	0.048	0.000082	0.68	0.0077	0.0000051	0.000057	0.00098	0.000056	0.0000099	0.00001	0.000031	0.0029
		July		12	1.6	0.027	0.011	0.0084	0.0029	0.021	0.00031	0.01	0.0000057	2.3	0.00029	0.00053	0.049	0.000083	0.68	0.0078	0.0000051	0.000057	0.00099	0.000057	0.0000099	0.00001	0.000031	0.0029
		August		13	2.0	0.028	0.015	0.0095	0.0034	0.028	0.0004	0.01	0.0000057	2.6	0.00041	0.00055	0.059	0.000085	0.73	0.013	0.0000052	0.000063	0.0013	0.000062	0.0000099	0.00001	0.000032	0.0029
		September		16	3.3	0.029	0.022	0.02	0.0039	0.036	0.00051	0.01	0.0000055	3.5	0.00057	0.00056	0.072	0.000084	0.87	0.019	0.0000051	0.000095	0.0018	0.000069	0.0000098	0.00001	0.000035	0.0028
		October		19	5.0	0.03	0.031	0.041	0.0042	0.038	0.00056	0.01	0.0000054	4.4	0.0006	0.00057	0.075	0.000082	1.1	0.022	0.0000051	0.00016	0.002	0.000074	0.0000099	0.00001	0.000042	0.0028
		November		20	5.6	0.03	0.034	0.049	0.0043	0.038	0.00059	0.0099	0.0000053	4.7	0.00062	0.00056	0.076	0.000079	1.1	0.023	0.0000049	0.00019	0.0021	0.000075	0.0000097	0.00001	0.000044	0.0027
		December		13	3.7	0.018	0.023	0.035	0.0026	0.024	0.00037	0.0059	0.0000032	3.0	0.00039	0.00034	0.047	0.000047	0.73	0.015	0.0000029	0.00013	0.0013	0.000046	0.0000058	0.000006	0.000028	0.0016
		January	2020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		22	6.5	0.031	0.04	0.062	0.0046	0.04	0.00064	0.01	0.0000054	5.2	0.00067	0.00058	0.081	0.00008	1.3	0.026	0.000005	0.00023	0.0023	0.000079	0.0000099	0.00001	0.000049	0.0028
		May		23	6.6	0.032	0.041	0.064	0.0046	0.041	0.00065	0.01	0.0000055	5.3	0.00068	0.00059	0.082	0.000081	1.3	0.027	0.000005	0.00023	0.0024	0.00008	0.00001	0.00001	0.00005	0.0028
		June		17	4.2	0.03	0.026	0.048	0.0034	0.024	0.00044	0.01	0.0000058	3.7	0.00035	0.00056	0.057	0.00008	1.0	0.013	0.000005	0.00018	0.0014	0.000065	0.00001	0.00001	0.000047	0.003
		July		17	3.8	0.03	0.025	0.054	0.0033	0.019	0.00042	0.01	0.0000061	3.4	0.00027	0.00057	0.052	0.000081	1.0	0.01	0.0000051	0.0002	0.0012	0.000063	0.000011	0.00001	0.000052	0.0031
		August		19	4.7	0.032	0.031	0.071	0.0036	0.021	0.0005	0.011	0.0000063	3.8	0.00031	0.0006	0.059	0.000083	1.2	0.013	0.0000052	0.00025	0.0013	0.000068	0.000012	0.000011	0.000061	0.0032
		September		20	5.1	0.033	0.035	0.083	0.0039	0.022	0.00056	0.011	0.0000064	4.1	0.00033	0.00061	0.062	0.000084	1.2	0.015	0.0000052	0.00029	0.0014	0.000071	0.000012	0.000011	0.000069	0.0033
		October		22	5.8	0.034	0.041	0.098	0.0042	0.023	0.00063	0.011	0.0000065	4.4	0.00035	0.00063	0.067	0.000084	1.3	0.017	0.0000052	0.00034	0.0015	0.000074	0.000012	0.000011	0.000078	0.0033
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		19	4.4	0.032	0.034	0.079	0.0037	0.019	0.00052	0.011	0.0000064	3.7	0.00027	0.0006	0.058	0.000083	1.1	0.014	0.0000052	0.00026	0.0013	0.000068	0.000012	0.000011	0.000067	0.0033
		July		17	3.7	0.031	0.034	0.076	0.0035	0.017	0.00047	0.011	0.0000063	3.3	0.00023	0.0006	0.055	0.000083	1.0	0.013	0.0000052	0.00023	0.0012	0.000065	0.000012	0.000011	0.000062	0.0033
		August		18	3.9	0.032	0.037	0.083	0.0036	0.017	0.00049	0.011	0.0000064	3.5	0.00023	0.00061	0.057	0.000084	1.1	0.015	0.0000052	0.00024	0.0013	0.000067	0.000012	0.000011	0.000065	0.0033
		September		19	4.2	0.033	0.046	0.1	0.0038	0.018	0.00054	0.011	0.0000065	3.7	0.00024	0.00062	0.06	0.000084	1.1	0.017	0.0000053	0.00027	0.0014	0.000069	0.000012	0.000011	0.00007	0.0034
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		18	3.7	0.032	0.055	0.11	0.0037	0.016	0.00052	0.011	0.0000064	3.5	0.00021	0.00062	0.059	0.000082	1.1	0.018	0.0000052	0.00024	0.0014	0.000068	0.000012	0.000011	0.000067	0.0033
		July		17	3.3	0.032	0.058	0.11	0.0036	0.015	0.00049	0.011	0.0000063	3.3	0.00018	0.00061	0.056	0.000082	1.0	0.017	0.0000052	0.00021	0.0013	0.000066	0.000012	0.000011	0.000062	0.0033
		August		18	3.4	0.033	0.063	0.12	0.0037	0.015	0.00051	0.011	0.0000064	3.4	0.00018	0.00063	0.057	0.000083	1.0	0.019	0.0000053	0.00022	0.0014	0.000068	0.000013	0.000011	0.000064	0.0034
		September		18	3.6	0.033	0.077	0.15	0.004	0.015	0.00056	0.011	0.0000065	3.5	0.00019	0.00064	0.06	0.000083	1.1	0.021	0.0000053	0.00024	0.0015	0.00007	0.000013	0.000011	0.000068	0.0034
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2023	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		18	3.2	0.033	0.083	0.16	0.0039	0.014	0.00055	0.011	0.0000063	3.4	0.00017	0.00063	0.058	0.000081	1.0	0.021	0.0000052	0.00021	0.0015	0.000068	0.000013	0.000011	0.000063	0.0034
		July		16	2.8	0.032	0.08	0.15	0.0037	0.014	0.00052	0.011	0.0000062	3.1	0.00015	0.00062	0.054	0.000081	0.97	0.019	0.0000052	0.00018	0.0014	0.000066	0.000012	0.000011	0.000057	0.0033
		August		17	2.9	0.033	0.086	0.16	0.0039	0.014	0.00054	0.011	0.0000064	3.2	0.00015	0.00063	0.056	0.000082	1.0	0.02	0.0000053	0.00019	0.0015	0.000068	0.000013	0.000011	0.000059	0.0034
		September		18	3.0	0.033	0.10	0.19	0.0041	0.014	0.00059	0.011	0.0000064	3.4	0.00015	0.00064	0.059	0.000082	1.0	0.023	0.0000053	0.0002	0.0016	0.00007	0.000013	0.000012	0.000062	0.0034
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1	0.025	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008	0.015	0.0054
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Downstream Node 1	*Construction and Operations*	January	2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		17	2.8	0.032	0.10	0.19	0.004	0.013	0.00058	0.01	0.0000062	3.2	0.00014	0.00063	0.056	0.000081	0.98	0.022	0.0000052	0.00018	0.0015	0.000069	0.000013	0.000011	0.000058	0.0033
		July		16	2.4	0.032	0.091	0.17	0.0038	0.013	0.00054	0.01	0.0000062	3.0	0.00014	0.00062	0.053	0.000081	0.92	0.019	0.0000052	0.00016	0.0015	0.000066	0.000012	0.000011	0.000053	0.0033
		August		16	2.5	0.032	0.097	0.18	0.0039	0.013	0.00057	0.011	0.0000063	3.1	0.00014	0.00063	0.055	0.000082	0.95	0.02	0.0000053	0.00016	0.0015	0.000068	0.000013	0.000011	0.000054	0.0034
		September		17	2.6	0.033	0.11	0.21	0.0042	0.013	0.00062	0.011	0.0000063	3.2	0.00014	0.00064	0.057	0.000081	0.98	0.023	0.0000053	0.00017	0.0017	0.00007	0.000013	0.000012	0.000057	0.0034
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		16	2.4	0.032	0.11	0.2	0.004	0.013	0.0006	0.01	0.0000062	3.1	0.00013	0.00063	0.055	0.00008	0.94	0.022	0.0000052	0.00016	0.0016	0.000068	0.000013	0.000011	0.000053	0.0033
		July		15	2.2	0.031	0.096	0.18	0.0038	0.013	0.00056	0.01	0.0000061	2.9	0.00013	0.00061	0.053	0.00008	0.89	0.019	0.0000052	0.00014	0.0015	0.000066	0.000012	0.000011	0.000049	0.0033
		August		16	2.3	0.032	0.1	0.2	0.004	0.013	0.00059	0.01	0.0000062	3.0	0.00013	0.00063	0.054	0.000081	0.92	0.02	0.0000053	0.00014	0.0016	0.000068	0.000013	0.000012	0.00005	0.0034
		September		17	2.3	0.033	0.11	0.22	0.0042	0.013	0.00064	0.01	0.0000062	3.2	0.00013	0.00064	0.057	0.000081	0.94	0.023	0.0000054	0.00015	0.0017	0.00007	0.000013	0.000012	0.000052	0.0034
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			MINIMUM	11	1.5	0.018	0.0083	0.0083	0.0026	0.013	0.00027	0.0059	0.0000032	2.2	0.00013	0.00034	0.042	0.000047	0.67	0.0049	0.0000029	0.000055	0.0008	0.000046	0.0000058	0.000006	0.000028	0.0016
			MAXIMUM	23	6.6	0.034	0.11	0.22	0.0046	0.041	0.00065	0.011	0.0000065	5.3	0.00068	0.00064	0.082	0.000085	1.3	0.027	0.0000054	0.00034	0.0024	0.00008	0.000013	0.000012	0.000078	0.0034
			AVERAGE	17	3.4	0.031	0.053	0.098	0.0038	0.021	0.00051	0.01	0.000006	3.4	0.00029	0.00059	0.059	0.000081	0.98	0.017	0.0000051	0.00018	0.0015	0.000067	0.000011	0.000011	0.000052	0.0031

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1	0.025	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008	0.015	0.0054
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Downstream Node 1	*Closure*	January	2026	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		14	1.9	0.03	0.077	0.15	0.0035	0.012	0.00049	0.01	0.000006	2.7	0.00012	0.00059	0.049	0.00008	0.82	0.015	0.0000052	0.00011	0.0013	0.000063	0.000012	0.000011	0.000043	0.0032
		July		13	1.6	0.029	0.054	0.1	0.0031	0.012	0.0004	0.01	0.000006	2.4	0.00012	0.00057	0.044	0.00008	0.76	0.011	0.0000052	0.000092	0.0011	0.000059	0.000011	0.000011	0.000039	0.0032
		August		13	1.6	0.029	0.05	0.095	0.0031	0.012	0.00038	0.01	0.0000061	2.4	0.00012	0.00057	0.044	0.000082	0.76	0.01	0.0000052	0.000089	0.001	0.000059	0.000011	0.000011	0.000039	0.0032
		September		13	1.7	0.029	0.055	0.1	0.0031	0.012	0.0004	0.01	0.000006	2.5	0.00012	0.00058	0.045	0.000081	0.77	0.011	0.0000052	0.000092	0.0011	0.000059	0.000011	0.000011	0.000039	0.0032
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2027	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		13	1.6	0.029	0.05	0.095	0.003	0.012	0.00038	0.01	0.000006	2.4	0.00012	0.00057	0.043	0.00008	0.75	0.010	0.0000051	0.000087	0.001	0.000058	0.000011	0.000011	0.000038	0.0031
		July		12	1.5	0.029	0.043	0.081	0.0029	0.012	0.00035	0.01	0.000006	2.3	0.00012	0.00056	0.042	0.000081	0.73	0.0085	0.0000051	0.000081	0.00097	0.000057	0.000011	0.000011	0.000037	0.0031
		August		12	1.5	0.029	0.04	0.075	0.0029	0.012	0.00034	0.01	0.000006	2.3	0.00012	0.00056	0.042	0.000082	0.73	0.008	0.0000052	0.000079	0.00094	0.000057	0.000011	0.000011	0.000036	0.0032
		September		13	1.5	0.029	0.044	0.084	0.0029	0.012	0.00036	0.01	0.000006	2.4	0.00012	0.00057	0.043	0.000082	0.74	0.0088	0.0000052	0.000082	0.00099	0.000058	0.000011	0.000011	0.000037	0.0032
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2028	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		12	1.5	0.028	0.041	0.079	0.0029	0.012	0.00035	0.01	0.0000059	2.3	0.00012	0.00056	0.042	0.000081	0.73	0.0083	0.0000051	0.000079	0.00096	0.000056	0.000011	0.000011	0.000036	0.0031
		July		12	1.4	0.028	0.035	0.068	0.0028	0.012	0.00032	0.01	0.000006	2.3	0.00012	0.00055	0.041	0.000081	0.71	0.0072	0.0000051	0.000074	0.0009	0.000056	0.000011	0.000011	0.000035	0.0031
		August		12	1.4	0.029	0.033	0.064	0.0028	0.012	0.00032	0.01	0.000006	2.3	0.00012	0.00056	0.041	0.000082	0.72	0.0068	0.0000052	0.000073	0.00089	0.000056	0.000011	0.000011	0.000035	0.0032
		September		12	1.5	0.029	0.037	0.071	0.0028	0.012	0.00033	0.01	0.000006	2.3	0.00012	0.00056	0.041	0.000082	0.72	0.0075	0.0000052	0.000076	0.00093	0.000057	0.000011	0.000011	0.000036	0.0032
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		12	1.4	0.028	0.034	0.067	0.0027	0.012	0.00032	0.01	0.0000059	2.2	0.00012	0.00055	0.04	0.000081	0.71	0.0071	0.0000051	0.000073	0.0009	0.000056	0.000011	0.000011	0.000035	0.0031
		July		12	1.4	0.028	0.03	0.058	0.0027	0.012	0.0003	0.01	0.000006	2.2	0.00012	0.00055	0.04	0.000081	0.7	0.0062	0.0000051	0.00007	0.00085	0.000055	0.000011	0.00001	0.000034	0.0031
		August		12	1.4	0.028	0.028	0.054	0.0027	0.012	0.0003	0.01	0.000006	2.2	0.00012	0.00056	0.04	0.000082	0.71	0.0059	0.0000052	0.000069	0.00084	0.000055	0.000011	0.000011	0.000034	0.0032
		September		12	1.4	0.028	0.031	0.06	0.0027	0.012	0.00031	0.01	0.000006	2.2	0.00012	0.00056	0.04	0.000082	0.71	0.0064	0.0000052	0.000071	0.00087	0.000056	0.000011	0.000011	0.000035	0.0032
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		12	1.4	0.028	0.029	0.057	0.0027	0.012	0.0003	0.01	0.0000059	2.2	0.00012	0.00055	0.039	0.000081	0.7	0.006	0.0000051	0.000069	0.00085	0.000055	0.000011	0.00001	0.000034	0.0031
		July		12	1.4	0.028	0.025	0.049	0.0026	0.012	0.00028	0.01	0.0000059	2.2	0.00012	0.00055	0.039	0.000081	0.69	0.0053	0.0000051	0.000066	0.00081	0.000054	0.000011	0.00001	0.000033	0.0031
		August		12	1.4	0.028	0.023	0.046	0.0026	0.012	0.00028	0.01	0.000006	2.2	0.00012	0.00055	0.039	0.000083	0.7	0.0051	0.0000052	0.000066	0.0008	0.000055	0.000011	0.000011	0.000034	0.0031
		September		12	1.4	0.028	0.026	0.051	0.0026	0.012	0.00029	0.01	0.000006	2.2	0.00012	0.00055	0.039	0.000083	0.7	0.0055	0.0000052	0.000067	0.00082	0.000055	0.000011	0.000011	0.000034	0.0032
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		12	1.4	0.028	0.024	0.048	0.0026	0.012	0.00028	0.01	0.0000059	2.2	0.00012	0.00055	0.038	0.000081	0.69	0.0052	0.0000051	0.000066	0.0008	0.000054	0.000011	0.00001	0.000033	0.0031
		July		11	1.4	0.028	0.021	0.042	0.0025	0.012	0.00027	0.01	0.0000059	2.1	0.00012	0.00054	0.038	0.000082	0.69	0.0046	0.0000051	0.000064	0.00077	0.000054	0.000011	0.00001	0.000033	0.0031
		August		12	1.4	0.028	0.02	0.039	0.0026	0.012	0.00027	0.01	0.000006	2.1	0.00012	0.00055	0.038	0.000083	0.69	0.0044	0.0000052	0.000063	0.00076	0.000054	0.000011	0.000011	0.000033	0.0031
		September		12	1.4	0.028	0.022	0.044	0.0026	0.012	0.00027	0.01	0.000006	2.2	0.00012	0.00055	0.039	0.000083	0.7	0.0048	0.0000052	0.000065	0.00078	0.000054	0.000011	0.000011	0.000033	0.0031
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1	0.025	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008	0.015	0.0054
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Downstream Node 1	Closure	January	2032	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		11	1.4	0.028	0.021	0.041	0.0025	0.012	0.00027	0.01	0.0000059	2.1	0.00012	0.00054	0.038	0.000082	0.68	0.0046	0.0000051	0.000063	0.00076	0.000054	0.000011	0.00001	0.000033	0.0031
		July		11	1.3	0.028	0.018	0.036	0.0025	0.012	0.00026	0.01	0.0000059	2.1	0.00012	0.00054	0.037	0.000082	0.68	0.0041	0.0000051	0.000062	0.00074	0.000053	0.000011	0.00001	0.000032	0.0031
		August		11	1.3	0.028	0.017	0.034	0.0025	0.012	0.00026	0.01	0.000006	2.1	0.00012	0.00055	0.038	0.000083	0.69	0.0039	0.0000052	0.000062	0.00073	0.000054	0.000011	0.00001	0.000033	0.0031
		September		11	1.4	0.028	0.019	0.037	0.0025	0.012	0.00026	0.01	0.000006	2.1	0.00012	0.00055	0.038	0.000083	0.69	0.0042	0.0000052	0.000063	0.00075	0.000054	0.000011	0.000011	0.000033	0.0031
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		11	1.3	0.028	0.018	0.035	0.0025	0.012	0.00026	0.01	0.0000059	2.1	0.00012	0.00054	0.037	0.000082	0.68	0.004	0.0000051	0.000061	0.00073	0.000053	0.000011	0.00001	0.000032	0.0031
		July		11	1.3	0.028	0.016	0.031	0.0025	0.012	0.00025	0.01	0.0000059	2.1	0.00012	0.00054	0.037	0.000082	0.68	0.0036	0.0000051	0.00006	0.00071	0.000053	0.00001	0.00001	0.000032	0.0031
		August		11	1.3	0.028	0.015	0.029	0.0025	0.012	0.00025	0.01	0.000006	2.1	0.00012	0.00055	0.037	0.000083	0.68	0.0035	0.0000052	0.00006	0.00071	0.000053	0.000011	0.00001	0.000032	0.0031
		September		11	1.4	0.028	0.016	0.032	0.0025	0.012	0.00025	0.01	0.000006	2.1	0.00012	0.00055	0.038	0.000083	0.69	0.0037	0.0000052	0.000061	0.00072	0.000054	0.000011	0.00001	0.000033	0.0031
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		11	1.3	0.028	0.016	0.03	0.0025	0.012	0.00025	0.01	0.0000059	2.1	0.00012	0.00054	0.037	0.000082	0.67	0.0036	0.0000051	0.00006	0.00071	0.000053	0.00001	0.00001	0.000032	0.0031
		July		11	1.3	0.028	0.014	0.027	0.0024	0.012	0.00024	0.01	0.0000059	2.1	0.00012	0.00054	0.037	0.000082	0.67	0.0033	0.0000051	0.000059	0.00069	0.000053	0.00001	0.00001	0.000032	0.0031
		August		11	1.3	0.028	0.013	0.026	0.0025	0.012	0.00024	0.01	0.000006	2.1	0.00012	0.00054	0.037	0.000083	0.68	0.0032	0.0000052	0.000059	0.00069	0.000053	0.000011	0.00001	0.000032	0.0031
		September		11	1.3	0.028	0.014	0.028	0.0025	0.012	0.00025	0.01	0.000006	2.1	0.00012	0.00055	0.037	0.000083	0.68	0.0034	0.0000052	0.00006	0.0007	0.000053	0.000011	0.00001	0.000032	0.0031
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		11	1.3	0.027	0.014	0.026	0.0024	0.012	0.00024	0.01	0.0000059	2.1	0.00012	0.00054	0.036	0.000082	0.67	0.0032	0.0000051	0.000058	0.00068	0.000052	0.00001	0.00001	0.000032	0.0031
		July		11	1.3	0.027	0.013	0.024	0.0024	0.012	0.00024	0.01	0.0000059	2.1	0.00012	0.00054	0.036	0.000082	0.67	0.003	0.0000051	0.000058	0.00067	0.000052	0.00001	0.00001	0.000032	0.0031
		August		11	1.3	0.028	0.012	0.022	0.0024	0.012	0.00024	0.01	0.000006	2.1	0.00012	0.00054	0.037	0.000083	0.68	0.0029	0.0000052	0.000058	0.00067	0.000053	0.000011	0.00001	0.000032	0.0031
		September		11	1.3	0.028	0.013	0.024	0.0024	0.012	0.00024	0.01	0.000006	2.1	0.00012	0.00054	0.037	0.000083	0.68	0.003	0.0000052	0.000058	0.00068	0.000053	0.000011	0.00001	0.000032	0.0031
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		11	1.3	0.027	0.012	0.023	0.0024	0.012	0.00024	0.01	0.0000059	2.1	0.00012	0.00054	0.036	0.000082	0.67	0.0029	0.0000051	0.000057	0.00067	0.000052	0.00001	0.00001	0.000032	0.0031
		July		11	1.3	0.027	0.011	0.021	0.0024	0.012	0.00023	0.01	0.0000059	2.1	0.00012	0.00054	0.036	0.000082	0.67	0.0027	0.0000051	0.000057	0.00065	0.000052	0.00001	0.00001	0.000031	0.0031
		August		11	1.3	0.028	0.011	0.02	0.0024	0.012	0.00023	0.01	0.000006	2.1	0.00012	0.00054	0.037	0.000083	0.67	0.0026	0.0000052	0.000057	0.00065	0.000053	0.000011	0.00001	0.000032	0.0031
		September		11	1.3	0.028	0.012	0.021	0.0024	0.012	0.00024	0.01	0.000006	2.1	0.00012	0.00054	0.037	0.000083	0.68	0.0028	0.0000052	0.000058	0.00066	0.000053	0.000011	0.00001	0.000032	0.0031
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		11	1.3	0.027	0.011	0.02	0.0024	0.012	0.00023	0.01	0.0000059	2.1	0.00012	0.00053	0.036	0.000082	0.67	0.0027	0.0000051	0.000057	0.00065	0.000052	0.00001	0.00001	0.000031	0.0031
		July		11	1.3	0.027	0.01	0.018	0.0024	0.012	0.00023	0.01	0.0000059	2.0	0.00012	0.00053	0.036	0.000082	0.66	0.0025	0.0000051	0.000056	0.00064	0.000052	0.00001	0.00001	0.000031	0.0031
		August		11	1.3	0.028	0.010	0.018	0.0024	0.012	0.00023	0.01	0.000006	2.1	0.00012	0.00054	0.036	0.000083	0.67	0.0025	0.0000052	0.000056	0.00064	0.000053	0.00001	0.00001	0.000032	0.0031
		September		11	1.3	0.028	0.011	0.019	0.0024	0.012	0.00023	0.01	0.000006	2.1	0.00012	0.00054	0.036	0.000083	0.67	0.0026	0.0000052	0.000057	0.00065	0.000053	0.00001	0.00001	0.000032	0.0031
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1	0.025	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008	0.015	0.0054
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Downstream Node 1	*Closure*	January	2038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		11	1.3	0.027	0.01	0.018	0.0024	0.012	0.00023	0.01	0.0000059	2.0	0.00012	0.00053	0.036	0.000082	0.66	0.0025	0.0000051	0.000056	0.00064	0.000052	0.00001	0.00001	0.000031	0.0031
		July		11	1.3	0.027	0.0094	0.017	0.0024	0.012	0.00022	0.01	0.0000059	2.0	0.00012	0.00053	0.036	0.000082	0.66	0.0023	0.0000051	0.000055	0.00063	0.000052	0.00001	0.00001	0.000031	0.0031
		August		11	1.3	0.028	0.0092	0.016	0.0024	0.012	0.00023	0.01	0.000006	2.1	0.00012	0.00054	0.036	0.000083	0.67	0.0023	0.0000052	0.000056	0.00063	0.000052	0.00001	0.00001	0.000032	0.0031
		September		11	1.3	0.028	0.0097	0.017	0.0024	0.012	0.00023	0.01	0.000006	2.1	0.00012	0.00054	0.036	0.000083	0.67	0.0024	0.0000052	0.000056	0.00064	0.000053	0.00001	0.00001	0.000032	0.0031
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		11	1.3	0.027	0.0093	0.016	0.0024	0.012	0.00022	0.01	0.0000059	2.0	0.00012	0.00053	0.036	0.000082	0.66	0.0023	0.0000051	0.000055	0.00063	0.000052	0.00001	0.00001	0.000031	0.0031
		July		11	1.3	0.027	0.0087	0.015	0.0024	0.012	0.00022	0.01	0.0000059	2.0	0.00012	0.00053	0.036	0.000082	0.66	0.0022	0.0000051	0.000055	0.00062	0.000052	0.00001	0.00001	0.000031	0.0031
		August		11	1.3	0.028	0.0086	0.014	0.0024	0.012	0.00022	0.01	0.000006	2.1	0.00012	0.00054	0.036	0.000083	0.67	0.0022	0.0000052	0.000055	0.00063	0.000052	0.00001	0.00001	0.000031	0.0031
		September		11	1.3	0.028	0.009	0.015	0.0024	0.012	0.00023	0.01	0.000006	2.1	0.00012	0.00054	0.036	0.000083	0.67	0.0023	0.0000052	0.000056	0.00063	0.000052	0.00001	0.00001	0.000031	0.0031
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		11	1.3	0.027	0.0087	0.015	0.0023	0.012	0.00022	0.01	0.0000059	2.0	0.00012	0.00053	0.035	0.000082	0.66	0.0022	0.0000051	0.000055	0.00062	0.000052	0.00001	0.00001	0.000031	0.0031
		July		11	1.3	0.027	0.0082	0.014	0.0023	0.012	0.00022	0.01	0.0000059	2.0	0.00012	0.00053	0.035	0.000082	0.66	0.0021	0.0000051	0.000055	0.00062	0.000052	0.00001	0.00001	0.000031	0.0031
		August		11	1.3	0.028	0.0081	0.013	0.0024	0.012	0.00022	0.01	0.000006	2.0	0.00012	0.00054	0.036	0.000083	0.67	0.0021	0.0000052	0.000055	0.00062	0.000052	0.00001	0.00001	0.000031	0.0031
		September		11	1.3	0.028	0.0083	0.014	0.0024	0.012	0.00022	0.01	0.000006	2.1	0.00012	0.00054	0.036	0.000083	0.67	0.0021	0.0000052	0.000055	0.00062	0.000052	0.00001	0.00001	0.000031	0.0031
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2041	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		11	1.4	0.027	0.0089	0.015	0.0024	0.012	0.00023	0.01	0.0000059	2.1	0.00012	0.00054	0.035	0.000082	0.67	0.0022	0.0000051	0.000055	0.00063	0.000052	0.00001	0.00001	0.000031	0.0031
		July		11	1.4	0.028	0.0098	0.017	0.0024	0.012	0.00024	0.01	0.000006	2.1	0.00012	0.00054	0.036	0.000083	0.68	0.0024	0.0000052	0.000056	0.00065	0.000053	0.00001	0.00001	0.000031	0.0031
		August		11	1.5	0.028	0.01	0.018	0.0025	0.012	0.00025	0.011	0.0000061	2.2	0.00012	0.00055	0.036	0.000084	0.7	0.0026	0.0000053	0.000058	0.00067	0.000053	0.000011	0.000011	0.000032	0.0032
			MINIMUM	11	1.3	0.027	0.0081	0.013	0.0023	0.012	0.00022	0.01	0.0000059	2.0	0.00012	0.00053	0.035	0.00008	0.66	0.0021	0.0000051	0.000055	0.00062	0.000052	0.00001	0.00001	0.000031	0.0031
			MAXIMUM	14	1.9	0.03	0.077	0.15	0.0035	0.012	0.00049	0.011	0.0000061	2.7	0.00012	0.00059	0.049	0.000084	0.82	0.015	0.0000053	0.00011	0.0013	0.000063	0.000012	0.000011	0.000043	0.0032
			AVERAGE	12	1.4	0.028	0.021	0.041	0.0026	0.012	0.00027	0.01	0.000006	2.2	0.00012	0.00055	0.038	0.000082	0.69	0.0046	0.0000052	0.000065	0.00076	0.000054	0.000011	0.00001	0.000033	0.0031

APPENDIX C-9
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

		Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)		1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
		CEQG aquatic life (long-term)[1] (mg/L)			120	0.12	12.6	2.93	0.01	0.1	0.025	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008	0.015	0.0054
		Constituent		TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Downstream Node 1	*Post-Closure*	September	2041	12	1.5	0.028	0.011	0.02	0.0025	0.012	0.00027	0.011	0.0000061	2.2	0.00012	0.00055	0.036	0.000084	0.71	0.0028	0.0000053	0.000059	0.00069	0.000054	0.000011	0.000011	0.000032	0.0032
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		11	1.5	0.028	0.01	0.018	0.0025	0.012	0.00034	0.01	0.0000059	2.1	0.00012	0.00054	0.036	0.000082	0.69	0.0028	0.0000052	0.000059	0.00067	0.000053	0.00001	0.00001	0.000032	0.0031
		July		11	1.5	0.028	0.0097	0.017	0.0026	0.012	0.00043	0.01	0.0000059	2.1	0.00013	0.00054	0.036	0.000083	0.69	0.003	0.0000052	0.00006	0.00068	0.000053	0.00001	0.00001	0.000034	0.0031
		August		12	1.5	0.028	0.01	0.018	0.0026	0.012	0.00048	0.011	0.000006	2.2	0.00013	0.00055	0.037	0.000084	0.71	0.0032	0.0000052	0.000063	0.0007	0.000055	0.000011	0.000011	0.000035	0.0031
		September		12	1.6	0.028	0.011	0.019	0.0027	0.012	0.00061	0.011	0.000006	2.2	0.00014	0.00055	0.037	0.000084	0.71	0.0036	0.0000053	0.000066	0.00073	0.000056	0.000011	0.000011	0.000036	0.0031
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2043	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		12	1.5	0.028	0.0092	0.016	0.0028	0.012	0.0007	0.01	0.0000059	2.2	0.00014	0.00054	0.037	0.000083	0.7	0.0036	0.0000052	0.000066	0.00071	0.000055	0.00001	0.00001	0.000037	0.003
		July		12	1.5	0.028	0.0085	0.015	0.0028	0.012	0.00077	0.01	0.0000059	2.2	0.00015	0.00054	0.038	0.000083	0.69	0.0037	0.0000052	0.000068	0.00071	0.000055	0.00001	0.00001	0.000038	0.003
		August		12	1.5	0.028	0.0087	0.015	0.0029	0.013	0.00085	0.011	0.000006	2.2	0.00016	0.00055	0.038	0.000085	0.71	0.004	0.0000052	0.00007	0.00073	0.000057	0.000011	0.00001	0.000039	0.003
		September		12	1.6	0.029	0.0089	0.016	0.0031	0.013	0.001	0.011	0.000006	2.2	0.00017	0.00056	0.039	0.000085	0.72	0.0044	0.0000053	0.000074	0.00076	0.000058	0.000011	0.00001	0.000041	0.003
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		12	1.5	0.028	0.0079	0.014	0.003	0.013	0.00098	0.01	0.0000059	2.2	0.00016	0.00055	0.039	0.000083	0.7	0.0042	0.0000052	0.000072	0.00073	0.000057	0.00001	0.00001	0.00004	0.003
		July		12	1.5	0.028	0.0074	0.013	0.003	0.013	0.00097	0.01	0.0000059	2.2	0.00016	0.00055	0.039	0.000084	0.7	0.0041	0.0000052	0.000072	0.00072	0.000057	0.00001	0.00001	0.00004	0.003
		August		12	1.5	0.029	0.0077	0.013	0.0031	0.013	0.0011	0.011	0.000006	2.2	0.00017	0.00056	0.04	0.000085	0.71	0.0043	0.0000052	0.000075	0.00074	0.000058	0.000011	0.00001	0.000042	0.003
		September		12	1.6	0.029	0.0078	0.014	0.0032	0.013	0.0012	0.011	0.0000061	2.2	0.00018	0.00056	0.04	0.000085	0.72	0.0048	0.0000053	0.000078	0.00077	0.000059	0.000011	0.00001	0.000044	0.003
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		12	1.5	0.028	0.0072	0.012	0.0031	0.013	0.0011	0.011	0.0000059	2.2	0.00017	0.00055	0.039	0.000084	0.7	0.0043	0.0000052	0.000074	0.00073	0.000057	0.00001	0.00001	0.000042	0.0029
		July		12	1.5	0.028	0.0069	0.012	0.003	0.013	0.001	0.011	0.000006	2.2	0.00017	0.00055	0.039	0.000084	0.7	0.0041	0.0000052	0.000073	0.00072	0.000057	0.00001	0.00001	0.000041	0.0029
		August		12	1.5	0.029	0.0071	0.012	0.0031	0.013	0.0011	0.011	0.000006	2.2	0.00018	0.00056	0.04	0.000085	0.71	0.0044	0.0000052	0.000076	0.00074	0.000059	0.000011	0.00001	0.000043	0.003
		September		12	1.6	0.029	0.0072	0.012	0.0032	0.013	0.0013	0.011	0.0000061	2.2	0.00018	0.00056	0.041	0.000085	0.72	0.0048	0.0000053	0.000079	0.00077	0.00006	0.000011	0.00001	0.000045	0.003
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		12	1.5	0.028	0.0068	0.011	0.0031	0.013	0.0011	0.011	0.0000059	2.2	0.00017	0.00055	0.04	0.000084	0.7	0.0043	0.0000052	0.000075	0.00073	0.000058	0.00001	0.00001	0.000042	0.0029
		July		12	1.5	0.028	0.0066	0.011	0.003	0.013	0.001	0.01	0.0000059	2.2	0.00017	0.00055	0.039	0.000084	0.69	0.0041	0.0000052	0.000073	0.00072	0.000057	0.00001	0.00001	0.000041	0.0029
		August		12	1.5	0.029	0.0068	0.011	0.0031	0.013	0.0011	0.011	0.000006	2.2	0.00018	0.00056	0.04	0.000085	0.71	0.0043	0.0000052	0.000076	0.00074	0.000059	0.000011	0.00001	0.000043	0.003
		September		12	1.6	0.029	0.007	0.012	0.0032	0.013	0.0012	0.011	0.000006	2.2	0.00019	0.00056	0.041	0.000085	0.72	0.0047	0.0000053	0.000079	0.00077	0.00006	0.000011	0.00001	0.000045	0.0029
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1	*0.025*	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008	0.015	0.0054
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Downstream Node 1	*Post-Closure*	January	2047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		12	1.5	0.028	0.0066	0.011	0.003	0.013	0.0011	0.01	0.0000059	2.2	0.00018	0.00055	0.04	0.000084	0.7	0.0042	0.0000051	0.000074	0.00073	0.000058	0.00001	0.00001	0.000042	0.0029
		July		12	1.5	0.028	0.0065	0.011	0.003	0.013	0.001	0.01	0.0000059	2.2	0.00017	0.00054	0.039	0.000083	0.69	0.004	0.0000052	0.000072	0.00072	0.000057	0.00001	0.00001	0.000041	0.0029
		August		12	1.5	0.029	0.0067	0.011	0.0031	0.013	0.0011	0.011	0.000006	2.2	0.00018	0.00055	0.04	0.000085	0.71	0.0042	0.0000052	0.000075	0.00074	0.000058	0.000011	0.00001	0.000043	0.003
		September		12	1.5	0.029	0.0068	0.011	0.0032	0.013	0.0012	0.011	0.000006	2.2	0.00019	0.00056	0.041	0.000085	0.72	0.0046	0.0000052	0.000078	0.00076	0.000059	0.000011	0.00001	0.000044	0.0029
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		12	1.5	0.028	0.0065	0.011	0.003	0.013	0.001	0.01	0.0000059	2.2	0.00018	0.00054	0.04	0.000083	0.7	0.0041	0.0000051	0.000073	0.00072	0.000057	0.00001	0.00001	0.000042	0.0029
		July		11	1.5	0.028	0.0064	0.01	0.0029	0.013	0.00096	0.01	0.0000059	2.1	0.00017	0.00054	0.039	0.000083	0.69	0.0038	0.0000051	0.000072	0.00071	0.000057	0.00001	0.00001	0.000041	0.0029
		August		12	1.5	0.029	0.0066	0.011	0.003	0.013	0.001	0.011	0.000006	2.2	0.00018	0.00055	0.04	0.000085	0.71	0.0041	0.0000052	0.000074	0.00073	0.000058	0.000011	0.00001	0.000042	0.003
		September		12	1.5	0.029	0.0068	0.011	0.0031	0.013	0.0011	0.011	0.000006	2.2	0.00019	0.00056	0.041	0.000085	0.71	0.0044	0.0000052	0.000077	0.00075	0.000059	0.000011	0.00001	0.000044	0.0029
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		12	1.5	0.028	0.0065	0.01	0.003	0.013	0.00099	0.01	0.0000059	2.2	0.00018	0.00054	0.039	0.000083	0.69	0.0039	0.0000051	0.000073	0.00072	0.000057	0.00001	0.00001	0.000041	0.0029
		July		11	1.5	0.028	0.0064	0.01	0.0029	0.013	0.00092	0.01	0.0000059	2.1	0.00017	0.00054	0.039	0.000083	0.69	0.0037	0.0000051	0.000071	0.00071	0.000057	0.00001	0.00001	0.00004	0.0029
		August		12	1.5	0.028	0.0066	0.01	0.003	0.013	0.00099	0.011	0.000006	2.2	0.00018	0.00055	0.04	0.000085	0.71	0.0039	0.0000052	0.000073	0.00073	0.000058	0.000011	0.00001	0.000042	0.003
		September		12	1.5	0.029	0.0067	0.011	0.0031	0.013	0.0011	0.011	0.000006	2.2	0.00019	0.00056	0.041	0.000085	0.71	0.0043	0.0000052	0.000076	0.00075	0.000059	0.000011	0.00001	0.000043	0.0029
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	≥ 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		11	1.5	0.028	0.0064	0.01	0.0029	0.013	0.00095	0.01	0.0000059	2.2	0.00018	0.00054	0.039	0.000083	0.69	0.0038	0.0000051	0.000072	0.00071	0.000057	0.00001	0.00001	0.000041	0.0029
		July		11	1.5	0.028	0.0063	0.0099	0.0029	0.013	0.00088	0.01	0.0000059	2.1	0.00017	0.00054	0.039	0.000083	0.69	0.0036	0.0000051	0.00007	0.0007	0.000057	0.00001	0.00001	0.00004	0.0029
		August		12	1.5	0.028	0.0065	0.01	0.0029	0.013	0.00095	0.011	0.000006	2.2	0.00018	0.00055	0.04	0.000084	0.71	0.0038	0.0000052	0.000073	0.00072	0.000058	0.000011	0.00001	0.000041	0.003
		September		12	1.5	0.029	0.0066	0.011	0.003	0.013	0.001	0.011	0.000006	2.2	0.00019	0.00055	0.041	0.000085	0.71	0.0041	0.0000052	0.000075	0.00074	0.000059	0.000011	0.00001	0.000043	0.0029
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			MINIMUM	11	1.3	0.027	0.0063	0.0099	0.0023	0.012	0.00022	0.01	0.0000059	2.0	0.00012	0.00053	0.035	0.00008	0.66	0.0021	0.0000051	0.000055	0.00062	0.000052	0.00001	0.00001	0.000031	0.0029
			MAXIMUM	14	1.9	0.03	0.077	0.15	0.0035	0.013	0.0013	0.012	0.0000061	2.7	0.00019	0.00059	0.049	0.000085	0.82	0.015	0.0000053	0.00011	0.0013	0.000063	0.000012	0.000011	0.000045	0.0032
			AVERAGE	12	1.5	0.028	0.0096	0.017	0.003	0.013	0.0009	0.011	0.000006	2.2	0.00016	0.00055	0.039	0.000084	0.7	0.0043	0.0000052	0.000072	0.00074	0.000057	0.00001	0.00001	0.00004	0.003

Notes:

[1] Canadian Council of Ministers of the Environment CEQG (2002) freshwater guidelines. Values above the freshwater CEQG's shown in bold-underlined type

[2] CEQG Freshwater Aquatic Life criterion for total ammonia is pH and temperature dependent (5C used based on hydrodynamic modelling).

[3] CEQG Freshwater Aquatic Life Trigger Ranges are dependent on trophic status; oligotrophic status assumed

[4] CEQG Freshwater Aquatic Life Criterion for aluminum is pH dependant.

[5] The CEQG aquatic life criterion for Arsenic is replaced by the Site Specific Water Quality Objective of 0.025 mg/L developed for the Whale Tail Pit Project (Volume 6, Appendix 6-N)

[6] CEQG Freshwater Aquatic Life Criteria are hardness dependant.

[7] CEQG Freshwater Aquatic Life criterion for manganese is pH and hardness dependent.

[8] CEQG Freshwater Aquatic Life criterion is for dissolved zinc and is hardness, pH and DOC dependent.

* Variable guidelines based on average values in DS1 2020 CREMP monitoring data (pH=6.9, hardness=10.8 mg/L, DOC=3 mg/L)

APPENDIX C-10
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1	*0.025*	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008	0.015	0.0054
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Downstream Node 2	*Construction and Operations*	January	2018	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		15	3.1	0.03	0.024	0.013	0.0058	0.043	0.00062	0.011	0.0000054	3.5	0.0007	0.00058	0.08	0.000088	0.86	0.023	0.0000054	0.000073	0.0021	0.000073	0.0000099	0.000011	0.000032	0.0028
		July		16	3.1	0.031	0.029	0.013	0.0057	0.053	0.0007	0.011	0.0000054	3.7	0.00088	0.00059	0.097	0.000091	0.86	0.03	0.0000055	0.000078	0.0025	0.000081	0.0000097	0.000011	0.000034	0.0027
		August		18	4.1	0.032	0.044	0.015	0.0075	0.078	0.001	0.011	0.0000048	4.6	0.0014	0.0006	0.13	0.000092	0.96	0.047	0.0000054	0.00009	0.0036	0.000096	0.0000088	0.000011	0.000035	0.0024
		September		18	4.2	0.032	0.045	0.015	0.0074	0.081	0.001	0.011	0.0000047	4.6	0.0014	0.00059	0.14	0.000092	0.96	0.049	0.0000053	0.000091	0.0037	0.000097	0.0000087	0.000011	0.000035	0.0023
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		17	3.6	0.031	0.039	0.013	0.0062	0.072	0.00091	0.01	0.0000047	4.2	0.0012	0.00057	0.12	0.00009	0.9	0.043	0.0000052	0.000084	0.0033	0.00009	0.0000087	0.000011	0.000034	0.0023
		July		17	3.5	0.031	0.038	0.013	0.0057	0.069	0.00088	0.011	0.000005	4.1	0.0012	0.00059	0.12	0.000092	0.9	0.041	0.0000053	0.000084	0.0032	0.00009	0.0000091	0.000011	0.000035	0.0025
		August		18	4.0	0.032	0.042	0.015	0.0061	0.078	0.00098	0.011	0.0000048	4.5	0.0013	0.0006	0.13	0.000093	0.96	0.047	0.0000053	0.000091	0.0036	0.000096	0.0000089	0.000011	0.000036	0.0024
		September		24	7.0	0.032	0.044	0.042	0.0054	0.064	0.00087	0.01	0.0000049	5.9	0.0011	0.00059	0.11	0.000085	1.2	0.04	0.0000051	0.00017	0.0033	0.00009	0.0000092	0.000011	0.000042	0.0025
		October		36	13	0.035	0.066	0.12	0.0056	0.05	0.00085	0.0097	0.0000052	8.6	0.00087	0.00062	0.097	0.000073	1.9	0.038	0.0000048	0.00041	0.0033	0.000097	0.00001	0.000010	0.000068	0.0027
		November		40	15	0.036	0.08	0.17	0.0058	0.045	0.00088	0.0094	0.0000053	9.4	0.00079	0.00064	0.093	0.000068	2.2	0.039	0.0000046	0.00054	0.0034	0.0001	0.000011	0.0000097	0.000083	0.0028
		December		26	9.7	0.022	0.056	0.12	0.0037	0.026	0.00058	0.0057	0.0000033	6.1	0.00046	0.0004	0.057	0.000039	1.5	0.025	0.0000027	0.0004	0.0021	0.000064	0.0000067	0.0000058	0.00006	0.0018
		January	2020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		46	17	0.038	0.1	0.22	0.0065	0.044	0.001	0.0097	0.0000058	11	0.00079	0.00069	0.098	0.000067	2.7	0.043	0.0000046	0.00073	0.0037	0.00011	0.000012	0.0000099	0.00011	0.0031
		May		48	18	0.039	0.1	0.23	0.0066	0.044	0.001	0.0098	0.0000059	11	0.0008	0.00071	0.10	0.000068	2.7	0.044	0.0000047	0.00076	0.0037	0.00011	0.000012	0.00001	0.00011	0.0032
		June		47	17	0.043	0.12	0.29	0.0073	0.042	0.0013	0.012	0.0000071	10	0.00078	0.00079	0.12	0.000078	2.9	0.045	0.0000051	0.00093	0.0035	0.00012	0.000015	0.000011	0.00015	0.0037
		July		54	19	0.052	0.14	0.37	0.009	0.05	0.0018	0.014	0.0000086	11	0.00096	0.00093	0.15	0.000091	3.3	0.056	0.0000057	0.0012	0.004	0.00014	0.000019	0.000013	0.00021	0.0043
		August		55	19	0.054	0.15	0.38	0.0095	0.052	0.0019	0.015	0.0000089	11	0.001	0.00096	0.16	0.000095	3.4	0.059	0.0000059	0.0012	0.0041	0.00014	0.00002	0.000014	0.00022	0.0045
		September		52	18	0.054	0.14	0.36	0.0093	0.05	0.0018	0.015	0.000009	11	0.00095	0.00095	0.15	0.000096	3.3	0.056	0.000006	0.0012	0.0038	0.00014	0.00002	0.000014	0.00022	0.0044
		October		61	21	0.06	0.16	0.43	0.011	0.057	0.0022	0.016	0.0000097	12	0.0011	0.001	0.18	0.0001	3.8	0.069	0.0000062	0.0014	0.0044	0.00016	0.000022	0.000015	0.00027	0.0047
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		47	15	0.052	0.15	0.37	0.009	0.041	0.0017	0.014	0.0000085	9.5	0.00073	0.00092	0.15	0.000091	2.9	0.064	0.0000057	0.0011	0.0038	0.00013	0.00002	0.000014	0.00022	0.0043
		July		43	12	0.051	0.17	0.39	0.0082	0.032	0.0015	0.014	0.0000083	8.5	0.00053	0.00092	0.13	0.00009	2.6	0.069	0.0000058	0.00089	0.0039	0.00012	0.00002	0.000014	0.00019	0.0044
		August		44	13	0.052	0.18	0.42	0.0085	0.032	0.0016	0.014	0.0000085	8.7	0.00054	0.00095	0.14	0.000091	2.6	0.073	0.0000059	0.00092	0.0041	0.00013	0.00002	0.000014	0.0002	0.0045
		September		47	13	0.055	0.21	0.47	0.009	0.033	0.0017	0.014	0.0000087	9.2	0.00054	0.0010	0.15	0.000092	2.8	0.082	0.000006	0.00098	0.0045	0.00014	0.000021	0.000015	0.00021	0.0047
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		46	12	0.055	0.3	0.6	0.0096	0.028	0.0018	0.013	0.0000083	9.1	0.00043	0.001	0.15	0.000087	2.7	0.092	0.0000058	0.00092	0.0048	0.00014	0.000022	0.000015	0.0002	0.0047
		July		41	9.8	0.052	0.31	0.61	0.009	0.023	0.0016	0.013	0.000008	8.0	0.00033	0.00099	0.13	0.000086	2.3	0.084	0.0000059	0.00074	0.0044	0.00013	0.000021	0.000015	0.00017	0.0046
		August		42	10	0.053	0.33	0.65	0.0094	0.024	0.0017	0.013	0.0000082	8.2	0.00034	0.001	0.14	0.000087	2.4	0.087	0.000006	0.00077	0.0046	0.00013	0.000021	0.000015	0.00018	0.0047
		September		44	10	0.055	0.37	0.72	0.010	0.024	0.0018	0.013	0.0000083	8.6	0.00034	0.001	0.14	0.000087	2.5	0.094	0.0000061	0.0008	0.0049	0.00014	0.000022	0.000016	0.00018	0.0048
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2023	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		42	9.6	0.054	0.43	0.81	0.01	0.021	0.0019	0.012	0.0000079	8.3	0.00028	0.001	0.14	0.000081	2.4	0.097	0.0000059	0.00073	0.0051	0.00014	0.000022	0.000016	0.00017	0.0046
		July		37	7.8	0.051	0.4	0.76	0.0095	0.019	0.0017	0.012	0.0000076	7.3	0.00024	0.00098	0.12	0.000082	2.1	0.085	0.000006	0.00059	0.0046	0.00013	0.000021	0.000016	0.00015	0.0045
		August		39	8.0	0.052	0.41	0.79	0.0098	0.019	0.0018	0.012	0.0000077	7.5	0.00024	0.001	0.13	0.000083	2.1	0.089	0.0000061	0.00061	0.0048	0.00013	0.000022	0.000016	0.00015	0.0046
		September		40	8.3	0.054	0.45	0.86	0.01	0.019	0.002	0.012	0.0000078	7.9	0.00024	0.001	0.13	0.000082	2.2	0.096	0.0000062	0.00064	0.0052	0.00014	0.000022	0.000016	0.00016	0.0047
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

APPENDIX C-10
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

			Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)	1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
			CEQG aquatic life (long-term)[1] (mg/L)		120	0.12	12.6	2.93	0.01	0.1	0.025	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008	0.015	0.0054
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Downstream Node 2	*Construction and Operations*	January	2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		39	7.6	0.053	0.48	0.9	0.011	0.018	0.0021	0.011	0.0000074	7.6	0.00021	0.001	0.13	0.000077	2.1	0.096	0.000006	0.00059	0.0053	0.00014	0.000022	0.000016	0.00015	0.0045
		July		35	6.3	0.049	0.42	0.81	0.0096	0.017	0.0018	0.011	0.0000073	6.8	0.00019	0.00097	0.12	0.000079	1.9	0.085	0.0000061	0.00049	0.0049	0.00013	0.000021	0.000016	0.00013	0.0044
		August		36	6.5	0.051	0.44	0.85	0.0099	0.017	0.0019	0.011	0.0000074	7.0	0.0002	0.00099	0.12	0.00008	1.9	0.088	0.0000061	0.0005	0.0051	0.00013	0.000022	0.000016	0.00013	0.0045
		September		37	6.8	0.052	0.47	0.92	0.01	0.017	0.002	0.011	0.0000075	7.3	0.0002	0.001	0.13	0.000079	2.0	0.095	0.0000062	0.00052	0.0054	0.00014	0.000023	0.000017	0.00013	0.0046
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		36	6.3	0.051	0.49	0.94	0.011	0.016	0.0021	0.011	0.0000071	7.1	0.00018	0.001	0.13	0.000075	2.0	0.096	0.0000061	0.00049	0.0056	0.00013	0.000022	0.000017	0.00013	0.0044
		July		33	5.3	0.048	0.43	0.85	0.0097	0.016	0.0019	0.011	0.000007	6.5	0.00017	0.00096	0.12	0.000077	1.8	0.085	0.0000061	0.00041	0.0052	0.00013	0.000021	0.000016	0.00011	0.0043
		August		34	5.5	0.049	0.45	0.89	0.0099	0.016	0.002	0.011	0.0000071	6.7	0.00018	0.00098	0.12	0.000078	1.8	0.088	0.0000062	0.00042	0.0054	0.00013	0.000022	0.000016	0.00011	0.0044
		September		36	5.7	0.051	0.48	0.95	0.01	0.016	0.0021	0.011	0.0000072	6.9	0.00018	0.001	0.13	0.000077	1.9	0.094	0.0000063	0.00044	0.0058	0.00013	0.000023	0.000017	0.00012	0.0045
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			MINIMUM	15	3.1	0.022	0.024	0.013	0.0037	0.016	0.00058	0.0057	0.0000033	3.5	0.00017	0.0004	0.057	0.000039	0.86	0.023	0.0000027	0.000073	0.0021	0.000064	0.0000067	0.0000058	0.000032	0.0018
			MAXIMUM	61	21	0.06	0.49	0.95	0.011	0.081	0.0022	0.016	0.0000097	12	0.0014	0.001	0.18	0.0001	3.8	0.097	0.0000063	0.0014	0.0058	0.00016	0.000023	0.000017	0.00027	0.0048
			AVERAGE	37	9.9	0.045	0.23	0.46	0.0084	0.038	0.0015	0.012	0.000007	7.7	0.00063	0.00085	0.13	0.000083	2.1	0.067	0.0000056	0.00061	0.0042	0.00012	0.000017	0.000013	0.00013	0.0038

APPENDIX C-10
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

			Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)	1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
			CEQG aquatic life (long-term)[1] (mg/L)		120	0.12	12.6	2.93	0.01	0.1	*0.025*	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008	0.015	0.0054
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Downstream Node 2	*Closure*	January	2026	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		31	4.7	0.046	0.4	0.78	0.009	0.015	0.0018	0.01	0.0000068	6.0	0.00016	0.00092	0.11	0.000077	1.6	0.077	0.000006	0.00036	0.0048	0.00012	0.00002	0.000016	0.000097	0.0042
		July		20	2.8	0.037	0.19	0.36	0.0055	0.014	0.00095	0.011	0.0000067	3.9	0.00014	0.00074	0.071	0.000085	1.1	0.036	0.0000058	0.00019	0.0025	0.000084	0.000016	0.000013	0.000062	0.0038
		August		24	3.4	0.04	0.26	0.5	0.0067	0.014	0.0012	0.011	0.0000067	4.6	0.00015	0.0008	0.084	0.000082	1.3	0.049	0.0000059	0.00024	0.0033	0.000095	0.000017	0.000014	0.000073	0.0039
		September		27	4.0	0.043	0.33	0.64	0.0078	0.015	0.0015	0.011	0.0000068	5.2	0.00016	0.00085	0.096	0.00008	1.4	0.062	0.000006	0.00029	0.004	0.00011	0.000019	0.000015	0.000083	0.004
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2027	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		25	3.7	0.041	0.3	0.59	0.0073	0.014	0.0014	0.01	0.0000066	4.9	0.00015	0.00082	0.089	0.000079	1.4	0.057	0.0000058	0.00027	0.0038	0.00010	0.000018	0.000014	0.000077	0.0039
		July		18	2.4	0.035	0.14	0.28	0.0047	0.014	0.00078	0.011	0.0000066	3.4	0.00014	0.0007	0.063	0.000086	1.0	0.027	0.0000058	0.00015	0.0021	0.000077	0.000014	0.000013	0.000053	0.0037
		August		21	2.8	0.037	0.2	0.39	0.0056	0.014	0.0010	0.011	0.0000066	3.9	0.00014	0.00074	0.072	0.000084	1.1	0.038	0.0000058	0.00019	0.0027	0.000085	0.000016	0.000013	0.000061	0.0038
		September		23	3.2	0.039	0.25	0.5	0.0064	0.014	0.0012	0.011	0.0000067	4.5	0.00015	0.00079	0.081	0.000082	1.3	0.048	0.0000059	0.00023	0.0033	0.000094	0.000017	0.000014	0.000068	0.0039
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2028	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		22	3.1	0.038	0.23	0.47	0.0061	0.014	0.0011	0.011	0.0000066	4.3	0.00014	0.00077	0.077	0.000081	1.2	0.044	0.0000058	0.00021	0.0032	0.000091	0.000016	0.000014	0.000064	0.0038
		July		17	2.2	0.034	0.11	0.23	0.0042	0.014	0.00065	0.011	0.0000066	3.2	0.00014	0.00068	0.057	0.000087	0.95	0.022	0.0000058	0.00013	0.0018	0.000073	0.000014	0.000013	0.000048	0.0036
		August		19	2.5	0.036	0.15	0.31	0.0049	0.014	0.00082	0.011	0.0000066	3.6	0.00014	0.00071	0.064	0.000086	1.0	0.03	0.0000058	0.00016	0.0023	0.00008	0.000015	0.000013	0.000054	0.0037
		September		21	2.8	0.037	0.19	0.4	0.0055	0.014	0.00099	0.011	0.0000067	4.0	0.00014	0.00075	0.071	0.000085	1.1	0.038	0.0000059	0.00019	0.0028	0.000086	0.000016	0.000013	0.000059	0.0038
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		20	2.8	0.036	0.18	0.38	0.0053	0.014	0.00093	0.011	0.0000066	3.9	0.00014	0.00073	0.068	0.000084	1.1	0.036	0.0000058	0.00018	0.0027	0.000084	0.000015	0.000013	0.000057	0.0037
		July		16	2.0	0.033	0.087	0.18	0.0038	0.013	0.00056	0.011	0.0000066	3.0	0.00014	0.00066	0.053	0.000088	0.91	0.018	0.0000058	0.00011	0.0016	0.00007	0.000013	0.000012	0.000045	0.0036
		August		17	2.3	0.034	0.12	0.26	0.0044	0.013	0.0007	0.011	0.0000066	3.3	0.00014	0.00069	0.058	0.000087	0.99	0.024	0.0000058	0.00014	0.002	0.000075	0.000014	0.000013	0.000049	0.0037
		September		19	2.6	0.036	0.15	0.33	0.0049	0.014	0.00083	0.011	0.0000067	3.7	0.00014	0.00072	0.063	0.000086	1.1	0.03	0.0000059	0.00016	0.0024	0.000081	0.000015	0.000013	0.000053	0.0038
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		19	2.6	0.035	0.14	0.31	0.0047	0.013	0.0008	0.011	0.0000065	3.6	0.00014	0.0007	0.061	0.000085	1.0	0.029	0.0000058	0.00015	0.0023	0.000079	0.000015	0.000013	0.000051	0.0037
		July		15	2.0	0.033	0.07	0.15	0.0036	0.013	0.0005	0.011	0.0000066	2.9	0.00013	0.00065	0.05	0.000089	0.88	0.015	0.0000058	0.0001	0.0015	0.000068	0.000013	0.000012	0.000043	0.0036
		August		16	2.2	0.034	0.096	0.21	0.004	0.013	0.00061	0.011	0.0000066	3.1	0.00014	0.00067	0.054	0.000088	0.94	0.02	0.0000058	0.00012	0.0018	0.000072	0.000014	0.000012	0.000046	0.0036
		September		18	2.5	0.035	0.12	0.27	0.0044	0.013	0.00072	0.011	0.0000066	3.4	0.00014	0.00069	0.058	0.000087	1.0	0.025	0.0000059	0.00014	0.0021	0.000076	0.000014	0.000013	0.000049	0.0037
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		18	2.5	0.034	0.12	0.26	0.0043	0.013	0.00069	0.011	0.0000065	3.4	0.00014	0.00068	0.056	0.000086	1.0	0.024	0.0000058	0.00013	0.002	0.000075	0.000014	0.000012	0.000048	0.0036
		July		15	1.9	0.032	0.058	0.13	0.0034	0.013	0.00045	0.011	0.0000066	2.8	0.00013	0.00064	0.047	0.000089	0.86	0.012	0.0000058	0.000095	0.0013	0.000066	0.000013	0.000012	0.000041	0.0035
		August		16	2.1	0.033	0.08	0.17	0.0037	0.013	0.00054	0.011	0.0000066	3.0	0.00014	0.00065	0.051	0.000088	0.91	0.017	0.0000058	0.00011	0.0016	0.000069	0.000013	0.000012	0.000043	0.0036
		September		17	2.4	0.034	0.1	0.22	0.0041	0.013	0.00064	0.011	0.0000066	3.3	0.00014	0.00068	0.054	0.000088	0.98	0.021	0.0000058	0.00012	0.0019	0.000073	0.000014	0.000013	0.000046	0.0037
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

			Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)	1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
			CEQG aquatic life (long-term)[1] (mg/L)		120	0.12	12.6	2.93	0.01	0.1	0.025	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008	0.015	0.0054
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Downstream Node 2	Closure	January	2032	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		17	2.4	0.033	0.096	0.21	0.004	0.013	0.00062	0.011	0.0000065	3.2	0.00014	0.00066	0.052	0.000086	0.96	0.02	0.0000057	0.00012	0.0018	0.000071	0.000014	0.000012	0.000045	0.0036
		July		14	1.9	0.032	0.049	0.11	0.0032	0.013	0.00042	0.011	0.0000066	2.7	0.00013	0.00063	0.046	0.00009	0.84	0.01	0.0000058	0.000088	0.0012	0.000064	0.000012	0.000012	0.000039	0.0035
		August		15	2.1	0.032	0.066	0.14	0.0035	0.013	0.00049	0.011	0.0000066	2.9	0.00013	0.00064	0.048	0.000089	0.89	0.014	0.0000058	0.0001	0.0014	0.000067	0.000013	0.000012	0.000041	0.0036
		September		16	2.3	0.033	0.084	0.18	0.0038	0.013	0.00057	0.011	0.0000066	3.1	0.00014	0.00066	0.051	0.000088	0.94	0.018	0.0000058	0.00011	0.0017	0.00007	0.000013	0.000012	0.000044	0.0036
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		16	2.3	0.033	0.08	0.18	0.0037	0.013	0.00056	0.011	0.0000065	3.1	0.00013	0.00065	0.049	0.000087	0.93	0.017	0.0000057	0.00011	0.0016	0.000069	0.000013	0.000012	0.000043	0.0036
		July		14	1.8	0.032	0.041	0.088	0.0031	0.013	0.00039	0.011	0.0000066	2.6	0.00013	0.00062	0.044	0.00009	0.83	0.0089	0.0000057	0.000083	0.0011	0.000063	0.000012	0.000012	0.000038	0.0035
		August		15	2.1	0.032	0.056	0.12	0.0034	0.013	0.00045	0.011	0.0000065	2.8	0.00013	0.00063	0.046	0.000089	0.87	0.012	0.0000057	0.000093	0.0013	0.000065	0.000013	0.000012	0.00004	0.0035
		September		16	2.3	0.033	0.07	0.15	0.0036	0.013	0.00052	0.011	0.0000066	3.0	0.00014	0.00065	0.048	0.000089	0.92	0.015	0.0000058	0.0001	0.0015	0.000068	0.000013	0.000012	0.000042	0.0036
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		15	2.3	0.032	0.067	0.15	0.0035	0.013	0.00051	0.011	0.0000064	3.0	0.00013	0.00064	0.046	0.000087	0.9	0.014	0.0000057	0.0001	0.0015	0.000067	0.000013	0.000012	0.000041	0.0035
		July		14	1.8	0.031	0.035	0.074	0.003	0.013	0.00036	0.011	0.0000066	2.6	0.00013	0.00062	0.043	0.00009	0.81	0.0077	0.0000057	0.000079	0.001	0.000062	0.000012	0.000012	0.000038	0.0035
		August		14	2.0	0.032	0.047	0.1	0.0032	0.013	0.00042	0.011	0.0000065	2.7	0.00013	0.00063	0.044	0.000089	0.85	0.01	0.0000057	0.000087	0.0012	0.000064	0.000012	0.000012	0.000039	0.0035
		September		15	2.2	0.032	0.059	0.13	0.0034	0.013	0.00048	0.011	0.0000065	2.9	0.00014	0.00064	0.046	0.000089	0.9	0.013	0.0000058	0.000096	0.0014	0.000066	0.000013	0.000012	0.00004	0.0036
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		15	2.3	0.032	0.056	0.12	0.0034	0.013	0.00046	0.011	0.0000064	2.9	0.00013	0.00063	0.044	0.000088	0.88	0.012	0.0000057	0.000093	0.0013	0.000065	0.000013	0.000012	0.000039	0.0035
		July		13	1.8	0.031	0.03	0.063	0.003	0.013	0.00034	0.011	0.0000066	2.5	0.00013	0.00061	0.042	0.00009	0.8	0.0066	0.0000057	0.000075	0.00097	0.000061	0.000012	0.000012	0.000037	0.0035
		August		14	2.0	0.031	0.04	0.085	0.0031	0.013	0.00039	0.011	0.0000065	2.7	0.00013	0.00062	0.043	0.000089	0.84	0.0087	0.0000057	0.000082	0.0011	0.000063	0.000012	0.000012	0.000038	0.0035
		September		15	2.2	0.032	0.05	0.11	0.0033	0.013	0.00044	0.011	0.0000065	2.8	0.00013	0.00063	0.044	0.000089	0.88	0.011	0.0000058	0.000089	0.0012	0.000065	0.000013	0.000012	0.000039	0.0035
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		15	2.2	0.031	0.048	0.1	0.0032	0.013	0.00043	0.011	0.0000064	2.8	0.00013	0.00062	0.043	0.000088	0.87	0.01	0.0000057	0.000087	0.0012	0.000063	0.000012	0.000012	0.000038	0.0035
		July		13	1.8	0.031	0.026	0.053	0.0029	0.013	0.00033	0.011	0.0000066	2.5	0.00013	0.00061	0.041	0.00009	0.8	0.0058	0.0000057	0.000073	0.00092	0.00006	0.000012	0.000012	0.000036	0.0035
		August		14	2.0	0.031	0.034	0.072	0.003	0.013	0.00037	0.011	0.0000065	2.6	0.00013	0.00061	0.042	0.000089	0.83	0.0075	0.0000057	0.000078	0.001	0.000062	0.000012	0.000012	0.000037	0.0035
		September		15	2.2	0.032	0.042	0.09	0.0032	0.013	0.00041	0.011	0.0000065	2.8	0.00013	0.00063	0.042	0.00009	0.86	0.0091	0.0000058	0.000084	0.0012	0.000063	0.000012	0.000012	0.000038	0.0035
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		14	2.2	0.031	0.04	0.086	0.0031	0.012	0.0004	0.011	0.0000064	2.7	0.00013	0.00061	0.041	0.000088	0.85	0.0088	0.0000057	0.000082	0.0011	0.000062	0.000012	0.000012	0.000037	0.0035
		July		13	1.8	0.031	0.022	0.045	0.0028	0.013	0.00031	0.011	0.0000065	2.5	0.00013	0.00061	0.04	0.00009	0.79	0.0051	0.0000057	0.00007	0.00088	0.00006	0.000012	0.000012	0.000036	0.0035
		August		14	2.0	0.031	0.029	0.061	0.0029	0.013	0.00035	0.011	0.0000065	2.6	0.00013	0.00061	0.041	0.00009	0.82	0.0065	0.0000057	0.000075	0.00097	0.000061	0.000012	0.000012	0.000036	0.0035
		September		14	2.2	0.031	0.036	0.076	0.0031	0.013	0.00039	0.011	0.0000065	2.7	0.00013	0.00062	0.041	0.00009	0.85	0.0079	0.0000058	0.00008	0.0011	0.000062	0.000012	0.000012	0.000037	0.0035
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

APPENDIX C-10
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)				1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
CEQG aquatic life (long-term)[1] (mg/L)					120	0.12	12.6	2.93	0.01	0.1	*0.025*	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008	0.015	0.0054
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Downstream Node 2	*Closure*	January	2038	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		14	2.2	0.031	0.034	0.072	0.003	0.012	0.00038	0.011	0.0000064	2.7	0.00013	0.00061	0.04	0.000088	0.84	0.0076	0.0000057	0.000078	0.0011	0.000061	0.000012	0.000012	0.000036	0.0034
		July		13	1.8	0.031	0.02	0.039	0.0028	0.013	0.0003	0.011	0.0000065	2.5	0.00013	0.0006	0.04	0.00009	0.78	0.0045	0.0000057	0.000068	0.00084	0.000059	0.000012	0.000012	0.000035	0.0034
		August		13	1.9	0.031	0.025	0.051	0.0029	0.013	0.00033	0.011	0.0000065	2.6	0.00013	0.00061	0.04	0.00009	0.81	0.0057	0.0000057	0.000072	0.00092	0.00006	0.000012	0.000012	0.000036	0.0035
		September		14	2.2	0.031	0.031	0.064	0.003	0.013	0.00037	0.011	0.0000065	2.7	0.00013	0.00062	0.04	0.00009	0.84	0.0068	0.0000058	0.000076	0.001	0.000061	0.000012	0.000012	0.000036	0.0035
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		14	2.2	0.031	0.03	0.061	0.0029	0.012	0.00036	0.011	0.0000064	2.7	0.00013	0.0006	0.039	0.000088	0.83	0.0066	0.0000057	0.000075	0.00099	0.00006	0.000012	0.000012	0.000036	0.0034
		July		13	1.8	0.031	0.017	0.034	0.0028	0.013	0.00029	0.011	0.0000065	2.4	0.00013	0.0006	0.039	0.00009	0.78	0.0041	0.0000057	0.000067	0.00081	0.000059	0.000012	0.000012	0.000035	0.0034
		August		13	1.9	0.031	0.022	0.044	0.0028	0.013	0.00032	0.011	0.0000065	2.5	0.00013	0.0006	0.039	0.00009	0.8	0.005	0.0000057	0.00007	0.00088	0.000059	0.000012	0.000012	0.000035	0.0034
		September		14	2.1	0.031	0.026	0.054	0.0029	0.013	0.00035	0.011	0.0000065	2.7	0.00013	0.00061	0.039	0.00009	0.83	0.006	0.0000057	0.000074	0.00096	0.000061	0.000012	0.000012	0.000036	0.0035
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		14	2.1	0.03	0.025	0.051	0.0029	0.012	0.00034	0.011	0.0000064	2.6	0.00013	0.0006	0.038	0.000088	0.82	0.0057	0.0000056	0.000072	0.00093	0.000059	0.000012	0.000011	0.000035	0.0034
		July		13	1.8	0.031	0.015	0.029	0.0027	0.013	0.00029	0.011	0.0000065	2.4	0.00013	0.0006	0.039	0.000091	0.78	0.0037	0.0000057	0.000065	0.00079	0.000059	0.000012	0.000012	0.000035	0.0034
		August		13	1.9	0.031	0.019	0.037	0.0028	0.013	0.00031	0.011	0.0000065	2.5	0.00013	0.0006	0.039	0.00009	0.8	0.0044	0.0000057	0.000068	0.00085	0.000059	0.000012	0.000012	0.000035	0.0034
		September		14	2.1	0.031	0.023	0.046	0.0029	0.013	0.00034	0.011	0.0000065	2.6	0.00013	0.00061	0.038	0.00009	0.83	0.0052	0.0000057	0.000071	0.00091	0.00006	0.000012	0.000012	0.000035	0.0035
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2041	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		14	2.3	0.031	0.025	0.05	0.0029	0.012	0.00036	0.011	0.0000064	2.7	0.00013	0.0006	0.037	0.000089	0.84	0.0057	0.0000057	0.000072	0.00095	0.00006	0.000012	0.000012	0.000035	0.0034
		July		14	2.4	0.031	0.024	0.048	0.0029	0.012	0.00038	0.011	0.0000064	2.8	0.00013	0.00061	0.037	0.000089	0.86	0.0056	0.0000057	0.000073	0.00096	0.00006	0.000012	0.000012	0.000035	0.0035
		August		15	2.5	0.031	0.026	0.051	0.003	0.012	0.00041	0.012	0.0000065	2.8	0.00014	0.00062	0.037	0.00009	0.88	0.006	0.0000058	0.000075	0.00099	0.000061	0.000012	0.000012	0.000036	0.0035
			MINIMUM	13	1.8	0.03	0.015	0.029	0.0027	0.012	0.00029	0.01	0.0000064	2.4	0.00013	0.0006	0.037	0.000077	0.78	0.0037	0.0000056	0.000065	0.00079	0.000059	0.000012	0.000011	0.000035	0.0034
			MAXIMUM	31	4.7	0.046	0.4	0.78	0.009	0.015	0.0018	0.012	0.0000068	6.0	0.00016	0.00092	0.11	0.000091	1.6	0.077	0.000006	0.00036	0.0048	0.00012	0.00002	0.000016	0.000097	0.0042
			AVERAGE	16	2.3	0.033	0.09	0.18	0.0039	0.013	0.00059	0.011	0.0000066	3.1	0.00014	0.00066	0.052	0.000088	0.94	0.018	0.0000058	0.00012	0.0016	0.00007	0.000013	0.000012	0.000045	0.0036

APPENDIX C-10
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

			Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)	1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
			CEQG aquatic life (long-term)[1] (mg/L)		120	0.12	12.6	2.93	0.01	0.1	*0.025*	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008	0.015	0.0054
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Downstream Node 2	*Post-Closure*	September	2041	15	2.7	0.031	0.027	0.055	0.0031	0.012	0.00048	0.012	0.0000064	2.9	0.00014	0.00062	0.037	0.00009	0.9	0.0065	0.0000058	0.000077	0.001	0.000062	0.000012	0.000012	0.000036	0.0035
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		15	2.8	0.031	0.027	0.056	0.0036	0.012	0.0012	0.011	0.0000061	2.9	0.00018	0.0006	0.038	0.000087	0.9	0.0085	0.0000056	0.000091	0.0011	0.000064	0.000012	0.000011	0.000043	0.0032
		July		15	2.7	0.032	0.023	0.048	0.0041	0.013	0.0019	0.012	0.0000063	3.0	0.00022	0.00062	0.042	0.00009	0.9	0.0097	0.0000056	0.00011	0.0012	0.000069	0.000012	0.000011	0.000053	0.0031
		August		16	2.8	0.032	0.024	0.05	0.0043	0.014	0.0021	0.012	0.0000063	3.0	0.00024	0.00063	0.044	0.000091	0.93	0.011	0.0000057	0.00011	0.0012	0.000071	0.000012	0.000011	0.000056	0.0032
		September		16	2.9	0.033	0.024	0.05	0.0047	0.014	0.0025	0.012	0.0000064	3.1	0.00026	0.00064	0.046	0.000093	0.95	0.012	0.0000058	0.00012	0.0013	0.000074	0.000012	0.000012	0.000061	0.0031
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2043	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		16	2.8	0.033	0.02	0.043	0.0053	0.015	0.0033	0.012	0.0000062	3.1	0.00031	0.00063	0.049	0.000092	0.93	0.013	0.0000056	0.00014	0.0013	0.000077	0.000012	0.000011	0.000071	0.0029
		July		16	2.6	0.033	0.016	0.035	0.0053	0.016	0.0035	0.012	0.0000064	3.0	0.00032	0.00063	0.051	0.000093	0.92	0.013	0.0000057	0.00014	0.0013	0.000078	0.000012	0.000011	0.000073	0.0029
		August		16	2.7	0.034	0.017	0.037	0.0056	0.016	0.0037	0.012	0.0000064	3.1	0.00033	0.00064	0.052	0.000095	0.94	0.014	0.0000058	0.00014	0.0013	0.000081	0.000012	0.000011	0.000077	0.0029
		September		16	2.8	0.034	0.017	0.037	0.0059	0.016	0.004	0.012	0.0000065	3.2	0.00035	0.00065	0.054	0.000096	0.96	0.014	0.0000058	0.00015	0.0014	0.000083	0.000012	0.000011	0.000081	0.0028
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		16	2.7	0.033	0.015	0.033	0.006	0.017	0.0043	0.012	0.0000063	3.1	0.00037	0.00064	0.054	0.000094	0.93	0.015	0.0000056	0.00016	0.0014	0.000083	0.000011	0.000011	0.000084	0.0027
		July		16	2.5	0.033	0.013	0.028	0.0058	0.017	0.004	0.012	0.0000064	3.0	0.00036	0.00064	0.054	0.000095	0.91	0.014	0.0000057	0.00015	0.0013	0.000082	0.000012	0.000011	0.000081	0.0027
		August		16	2.6	0.034	0.013	0.029	0.006	0.017	0.0042	0.012	0.0000065	3.1	0.00038	0.00065	0.056	0.000096	0.94	0.014	0.0000057	0.00016	0.0013	0.000084	0.000012	0.000011	0.000084	0.0027
		September		16	2.7	0.035	0.014	0.029	0.0062	0.017	0.0045	0.013	0.0000065	3.1	0.00039	0.00066	0.057	0.000097	0.95	0.015	0.0000058	0.00016	0.0014	0.000086	0.000012	0.000011	0.000088	0.0027
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		16	2.6	0.034	0.013	0.027	0.0062	0.017	0.0045	0.012	0.0000063	3.1	0.0004	0.00064	0.056	0.000094	0.93	0.015	0.0000056	0.00016	0.0014	0.000085	0.000011	0.000011	0.000087	0.0026
		July		16	2.5	0.033	0.011	0.024	0.0058	0.017	0.004	0.012	0.0000064	3.0	0.00037	0.00064	0.055	0.000094	0.91	0.013	0.0000057	0.00015	0.0013	0.000082	0.000011	0.000011	0.000082	0.0027
		August		16	2.6	0.034	0.012	0.025	0.006	0.017	0.0043	0.012	0.0000065	3.1	0.00039	0.00065	0.057	0.000096	0.93	0.014	0.0000057	0.00016	0.0013	0.000085	0.000012	0.000011	0.000085	0.0027
		September		16	2.7	0.034	0.012	0.026	0.0062	0.018	0.0045	0.013	0.0000065	3.1	0.0004	0.00065	0.058	0.000097	0.95	0.015	0.0000058	0.00016	0.0014	0.000087	0.000012	0.000011	0.000088	0.0027
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		16	2.6	0.033	0.012	0.025	0.0061	0.017	0.0044	0.012	0.0000063	3.0	0.0004	0.00063	0.057	0.000094	0.93	0.015	0.0000056	0.00016	0.0013	0.000085	0.000011	0.000011	0.000087	0.0025
		July		15	2.5	0.033	0.011	0.022	0.0056	0.017	0.0039	0.012	0.0000064	3.0	0.00037	0.00063	0.055	0.000094	0.91	0.013	0.0000056	0.00015	0.0013	0.000082	0.000011	0.000011	0.000081	0.0027
		August		16	2.6	0.034	0.011	0.023	0.0059	0.018	0.0041	0.012	0.0000064	3.0	0.00039	0.00064	0.057	0.000095	0.93	0.014	0.0000057	0.00015	0.0013	0.000084	0.000012	0.000011	0.000084	0.0027
		September		16	2.6	0.034	0.011	0.024	0.006	0.018	0.0043	0.012	0.0000065	3.1	0.00041	0.00065	0.058	0.000096	0.94	0.014	0.0000058	0.00016	0.0014	0.000086	0.000012	0.000011	0.000087	0.0026
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

APPENDIX C-10
Site and Downstream Water Quality Model Predictions
Whale Tail Expansion Project, Meadowbank Division
Agnico-Eagle Mines Limited

			Whale Tail Effluent Quality Criteria maximum average[1] (mg/L)	1400			16		0.3	0.5	0.1		0.002		0.02	0.1	1.0	0.05			0.004		0.25					0.1
			CEQG aquatic life (long-term)[1] (mg/L)		120	0.12	12.6	2.93	0.01	0.1	*0.025*	1.5	0.00004			0.002	0.3	0.001		0.35	0.000026	0.073	0.025	0.001	0.00025	0.0008	0.015	0.0054
			Constituent	TDS	Cl	F	NH_3 (as N)[2]	NO_3 (as N)	P[3]	Al[4]	As[5]	B	Cd[6]	Ca	Cr	Cu[6]	Fe	Pb[6]	Mg	Mn[7]	Hg	Mo	Ni[6]	Se	Ag	Tl	U	Zn[8]
LOCATION	Time Period	Month	Year	mg/L	mg/L	mg/L	mg N/L	mg N/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Downstream Node 2	*Post-Closure*	January	2047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		16	2.6	0.033	0.011	0.023	0.0059	0.018	0.0043	0.012	0.0000062	3.0	0.00041	0.00063	0.057	0.000093	0.92	0.014	0.0000056	0.00016	0.0013	0.000084	0.000011	0.000011	0.000085	0.0025
		July		15	2.5	0.033	0.01	0.021	0.0055	0.017	0.0037	0.012	0.0000063	2.9	0.00037	0.00063	0.055	0.000093	0.9	0.012	0.0000056	0.00014	0.0012	0.000081	0.000011	0.000011	0.000079	0.0027
		August		16	2.5	0.034	0.011	0.022	0.0057	0.018	0.004	0.012	0.0000064	3.0	0.00039	0.00064	0.057	0.000095	0.92	0.013	0.0000057	0.00015	0.0013	0.000084	0.000012	0.000011	0.000082	0.0027
		September		16	2.6	0.034	0.011	0.022	0.0058	0.018	0.0041	0.012	0.0000064	3.1	0.00041	0.00065	0.058	0.000095	0.94	0.014	0.0000058	0.00016	0.0013	0.000085	0.000012	0.000011	0.000084	0.0026
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		16	2.6	0.033	0.011	0.022	0.0057	0.018	0.004	0.012	0.0000062	3.0	0.0004	0.00063	0.056	0.000092	0.91	0.013	0.0000056	0.00015	0.0013	0.000083	0.000011	0.000011	0.000082	0.0025
		July		15	2.4	0.033	0.01	0.02	0.0053	0.017	0.0035	0.012	0.0000063	2.9	0.00037	0.00063	0.055	0.000093	0.9	0.012	0.0000056	0.00014	0.0012	0.00008	0.000011	0.000011	0.000077	0.0026
		August		16	2.5	0.033	0.01	0.021	0.0055	0.018	0.0038	0.012	0.0000064	3.0	0.00039	0.00064	0.056	0.000094	0.92	0.013	0.0000057	0.00015	0.0013	0.000083	0.000012	0.000011	0.00008	0.0026
		September		16	2.6	0.034	0.011	0.021	0.0056	0.018	0.0039	0.012	0.0000064	3.1	0.00041	0.00064	0.057	0.000095	0.94	0.013	0.0000057	0.00015	0.0013	0.000084	0.000012	0.000011	0.000082	0.0026
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	2049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		15	2.6	0.033	0.01	0.021	0.0055	0.018	0.0038	0.012	0.0000062	3.0	0.0004	0.00062	0.056	0.000091	0.91	0.013	0.0000056	0.00015	0.0013	0.000082	0.000011	0.000011	0.00008	0.0025
		July		15	2.4	0.033	0.0099	0.019	0.0051	0.017	0.0034	0.012	0.0000063	2.9	0.00037	0.00062	0.054	0.000092	0.89	0.011	0.0000056	0.00014	0.0012	0.000079	0.000011	0.000011	0.000074	0.0026
		August		15	2.5	0.033	0.01	0.02	0.0053	0.018	0.0036	0.012	0.0000064	3.0	0.00039	0.00063	0.056	0.000093	0.92	0.012	0.0000057	0.00014	0.0013	0.000082	0.000012	0.000011	0.000078	0.0026
		September		16	2.6	0.033	0.01	0.02	0.0054	0.018	0.0037	0.012	0.0000064	3.0	0.0004	0.00064	0.057	0.000094	0.93	0.012	0.0000057	0.00015	0.0013	0.000083	0.000012	0.000011	0.00008	0.0026
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		January	≥ 2050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		February		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		March		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		April		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		June		15	2.5	0.032	0.01	0.02	0.0053	0.018	0.0036	0.012	0.0000062	3.0	0.0004	0.00062	0.056	0.000091	0.91	0.012	0.0000055	0.00014	0.0013	0.000081	0.000011	0.000011	0.000078	0.0025
		July		15	2.4	0.032	0.0097	0.018	0.0049	0.017	0.0032	0.012	0.0000063	2.9	0.00037	0.00062	0.054	0.000091	0.89	0.011	0.0000056	0.00013	0.0012	0.000079	0.000011	0.000011	0.000073	0.0026
		August		15	2.5	0.033	0.01	0.019	0.0051	0.018	0.0034	0.012	0.0000063	3.0	0.00039	0.00063	0.055	0.000093	0.91	0.011	0.0000057	0.00014	0.0012	0.000081	0.000012	0.000011	0.000076	0.0026
		September		16	2.6	0.033	0.01	0.019	0.0052	0.018	0.0035	0.012	0.0000064	3.0	0.0004	0.00064	0.057	0.000093	0.93	0.012	0.0000057	0.00014	0.0013	0.000082	0.000012	0.000011	0.000078	0.0026
		October		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		November		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		December		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			MINIMUM	13	1.8	0.03	0.0097	0.018	0.0027	0.012	0.00029	0.01	0.0000061	2.4	0.00013	0.0006	0.037	0.000077	0.78	0.0037	0.0000055	0.000065	0.00079	0.000059	0.000011	0.000011	0.000035	0.0025
			MAXIMUM	31	4.7	0.046	0.4	0.78	0.009	0.018	0.0045	0.013	0.0000068	6.0	0.00041	0.00092	0.11	0.000097	1.6	0.077	0.000006	0.00036	0.0048	0.00012	0.00002	0.000016	0.000097	0.0042
			AVERAGE	16	2.6	0.033	0.025	0.051	0.0054	0.016	0.0034	0.012	0.0000064	3.1	0.00034	0.00064	0.054	0.000093	0.94	0.014	0.0000057	0.00015	0.0014	0.000081	0.000012	0.000011	0.000075	0.0028

Notes:

[1] Canadian Council of Ministers of the Environment CEQG (2002) freshwater guidelines. Values above the freshwater CEQG's shown in bold-underlined type

[2] CEQG Freshwater Aquatic Life criterion for total ammonia is pH and temperature dependent (5C used based on hydrodynamic modelling).

[3] CEQG Freshwater Aquatic Life Trigger Ranges are dependent on trophic status; oligotrophic status assumed

[4] CEQG Freshwater Aquatic Life Criterion for aluminum is pH dependant.

[5] The CEQG aquatic life criterion for Arsenic is replaced by the Site Specific Water Quality Objective of 0.025 mg/L developed for the Whale Tail Pit Project (Volume 6, Appendix 6-N)

[6] CEQG Freshwater Aquatic Life Criteria are hardness dependant.

[7] CEQG Freshwater Aquatic Life criterion for manganese is pH and hardness dependent.

[8] CEQG Freshwater Aquatic Life criterion is for dissolved zinc and is hardness, pH and DOC dependent.

* Variable guidelines based on average values in DS1 2020 CREMP monitoring data (pH=6.9, hardness=10.8 mg/L, DOC=3 mg/L)

GOLDER
MEMBER OF WSP

golder.com

APPENDIX E • 2020 FRESHET ACTION PLAN

AGNICO EAGLE

MEADOWBANK COMPLEX

FRESHET ACTION AND INCIDENT RESPONSE PLAN

WHALE TAIL PIT EXPANSION PROJECT

MARCH 2021

VERSION 3

EXECUTIVE SUMMARY

The purpose of this Action and Response Plan is to identify areas of concern around the Whale Tail Pit Expansion Project and the associated Hauling road needing to be managed in an organized and timely manner during the annual freshet period to prevent adverse environmental and operational impacts. The Incident Response section of the Plan outlines any future incidents that have the potential to affect off site water or land will be added and would include any specific mitigation and monitoring actions.

The freshet period typically occurs during the annual snow and ice melt sometime around mid-May and extends until the end of July. During this period excess water is created and must be managed through additional pumping and management practices at vulnerable areas around the site. Mitigation techniques, timeframes and specified roles and responsibilities are outlined in this document for each area of concern.

The main areas of concern are the mining pit, the WT WRSF surrounding and pond, the IVR WRSF, the Whale Tail Attenuation Pond, the IVR attenuation Pond, the Whale Tail South Channel, and the IVR Diversion Ditch.

It is important that all water management and associated infrastructure be in good working order and adequate to manage the expected water flows associated with the freshet period; this includes but is not limited to pumps, ditch, culvert and sump maintenance, critical piping system installation and inspection, adequate resource allocation for preparative work and establishing a viable monitoring program for the areas of concern and incident response locations. A summary of the 2021 preparation works and roles and responsibilities is presented in the attached Appendix 1 (2021 Freshet Action Plan Procedures). Appendix 1 will be updated yearly to reflect changes in conditions at the Whale Tail site.

DOCUMENT CONTROL

Revision				Pages Revised	Remarks
#	Prep.	Rev.	Date		
01	Agnico	Internal	March 2019	All	Initial Version
02	Agnico	Internal	March 2020	All	Comprehensive update from 2019 plan
03	Agnico	Internal	March 2021	All	Comprehensive update from 2020 plan to include IVR infrastructures

Prepared By: Meadowbank Environment

Approved by:

Alexandre Lavallee
Environment Superintendent Interim

TABLE OF CONTENTS

LIST OF FIGURES

List of Appendix

1 INTRODUCTION

The purpose of the Whale Tail (WT) Freshet Action and Incident Response Plan is to ensure that Agnico can address and manage excess water associated with the freshet season at the Whale Tail site, and to ensure Agnico has implemented specific management and mitigation measures in response to environmental incidents with potential for off site impacts to water or land.

The freshet season is loosely defined as being a period from approximately May 15 – July 30; in some cases, this period of time can extend up to early fall when freezing re-occurs (October 15). There are many areas around the site that are vulnerable to this excess water; the goal is to identify these areas and develop a clear plan with defined roles and responsibilities (among Agnico departments), and to manage the freshet flows.

In addition, several guiding principles are applicable to the formation of this plan. The highest priority principles are:

1) to ensure that the health and safety of Agnico employees is protected, especially with respect to mining operations when excess water is present;
2) to ensure that mine contact water from runoff or seepage is managed to prevent adverse environmental impacts; and
3) to make sure the site is in compliance with the Nunavut Water Board (NWB) License, Part D, Item 21 and Part E, Item 11.

The plan will identify the areas of concern and discuss the potential risks as well as mitigation measures necessary to address the identified issues. The overall site footprint has increased, and experience needs to be gained in identifying key location; lessons learned from the Meadowbank site will provide the necessary guidance. Appendix 1 contains the defined 2021 procedures, the roles and responsibilities and associated timelines. Agnico's intent is to update the Procedural Appendix on a yearly basis. There may be additional mitigation measures for a defined problem area or in some cases a previously defined issue may be permanently rectified.

The main areas of concern are:

- Mining pits and pit walls;
- WRSF pond;
- IVR WRSF;
- Whale Tail South channel;
- IVR Diversion Ditch;
- Whale Tail Attenuation pond;
- IVR Attenuation Pond;
- WT Tank farm;
- Haul road culverts and bridges;
- Pads and roads built since 2020;

- Underground WRSF.

Each area identified above will be discussed in detail below. All areas of concern are considered priorities based on the guiding principles.

2 AREAS OF CONCERN

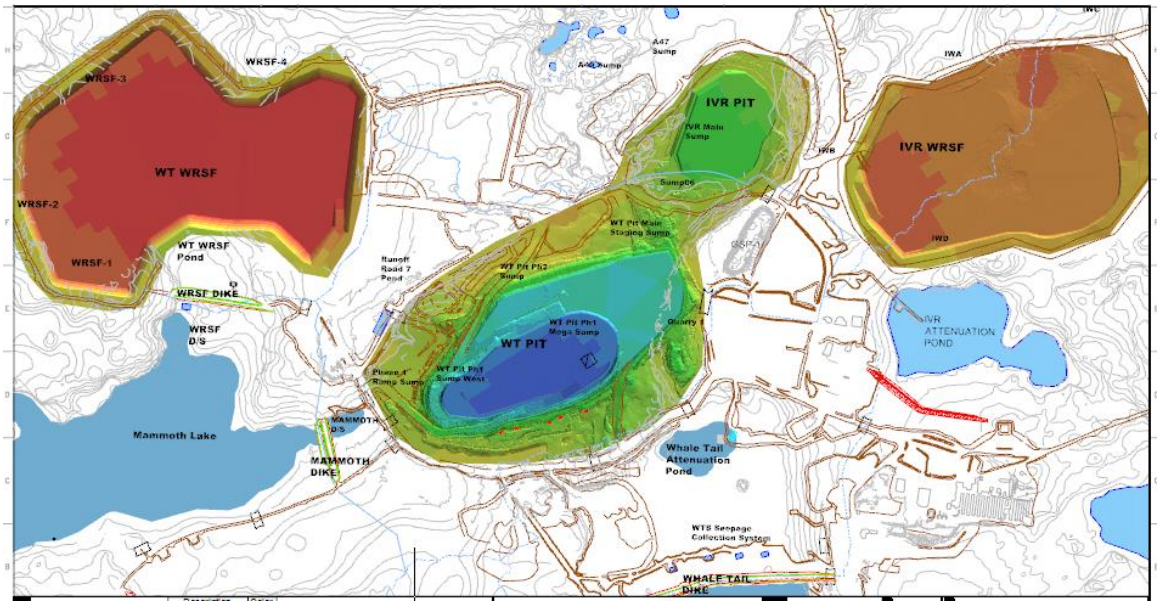


Figure 2-1: View of Whale Tail area

2.1 MINING PITS AND PIT WALLS

All permanent ramps, jump ramps, ditches and sumps must be cleaned of all ice and snow before May in order to contain any water resulting from the snow melt. All pumps must be checked and serviced before the month of May. In addition, a check must be completed confirming that all piping systems starting from the different pits leading to the Whale Tail attenuation pond are free of ice by validating pumping values (if pumping systems are active) and/or performing an air test in the pipe with a compressor.

The water management strategy for the pits will be to send water from the WT Pit and IVR Pit area to the IVR Attenuation Pond. Water can also be sent to Whale Tail Attenuation Pond as a secondary water management option.

- A sump and ditch system is used to manage runoff water within the pit footprints. The infrastructures location will be modified or added as required based on the mining sequence.
- Sumps outside of the pit footprint are planned to prevent runoff from reporting to the Pit and to prevent water from ponding against the pit crest;
    - At WT Pit this includes the sumps located at the downstream area of Mammoth Dike and at Road 7;
    - At IVR Pit this include the sump located in former Lake A49 and A47.

2.2 WHALE TAIL WASTE ROCK STORAGE FACILITY

Runoff from the Whale Tail Waste Rock Storage Facility (WT WRSF) is collected by 4 sumps (WT WRSF 1,2,3 & 4) as well as the WRSF pond delimited by WRSF Dike. Water from these sumps is pumped to the WRSF Pond and the WRSF Pond water is pumped to either the IVR Attenuation Pond or the WT Attenuation Pond.

The WT WRSF will require weekly inspections around the perimeter beginning as soon as the freshet starts (May) until freeze up to identify any seepage. In the event that seepage is observed from the WT WRSF, it must be reported to the Environment Departments and samples must be taken to determine the water quality and source. A mitigation plan will be prepared and implemented if necessary. Based on field observation, it may be deemed necessary to remove snow accumulation in the sumps around the WT WRSF to mitigate risk of snowmelt reporting to the surrounding environment. Runoff originating from the WT WRSF ultimately ends up in the WT WRSF pond. In August 2019, seepage from this pond was found to have reported through the WRSF Dike to the Mammoth lake. Remediation measures put in place in 2020 demonstrated to be successful, and will be maintained in 2021. See section 3.1 for further details. Daily inspections of the WRSF Downstream Pond will be required to confirm no seepage is occurring. A pump must be available in this location to pump any water potentially seeping through the structure back into the WRSF Pond.

2.3 IVR WASTE ROCK STORAGE FACILITY

Runoff from the IVR Waste Rock Storage Facility (WRSF) is collected by 4 sumps (IW A,B,C,D). Water from these sumps is sent to the IVR Pond either by pumping or by gravity

The IVR Rock Storage Facility (IVR WRSF) will require weekly inspections around the perimeter beginning as soon as the freshet starts (May) until freeze up to identify any seepage and ensure that the gravity flow to the IVR Attenuation Pond are occurring as planned. In the event that seepage is observed from the IVR WRSF, it must be reported to the Environment Departments and samples must be taken to determine the water quality and source. A mitigation plan will be prepared and implemented if necessary. Based on field observation, it may be deemed necessary to remove snow accumulation in key locations around the IVR WRSF to mitigate risk of snowmelt reporting to the surrounding environment.

2.4 WHALE TAIL SOUTH DIVERSION CHANNEL

The South Whale Tail Diversion Channel was constructed in 2020. This channel allows water from the Whale Tail South watershed (2,400 ha) to report to Mammoth Lake, and subsequent downstream lakes. In 2020, the first year of operation of the channel, no TSS exceedances occurred, and the channel performed as designed. In early May, partial snow removal will be required in this infrastructure to form a preferential water path and prevent snow blockage. Daily inspection at the start of freshet will be required until freshet is completed and following rain events, to ensure no contaminant is transported into Mammoth Lake. Turbidity barriers were designed by SNC-Lavalin and installed by Agnico Eagle in 2020. They were left in place at the end of 2020 to

secure subsequent freshets. **Error! Reference source not found.** demonstrate the location and design of turbidity barrier. Barrier inspection will be required to ensure they perform as intended.

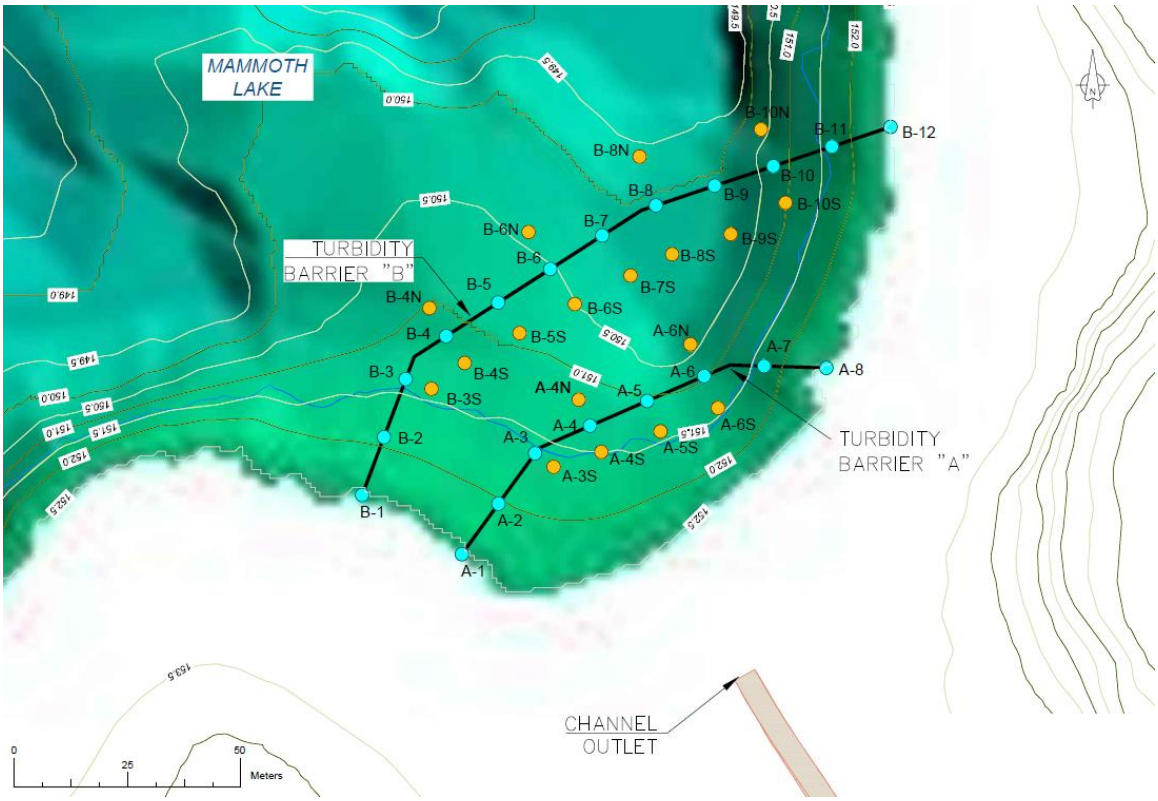


Figure 2-2: Turbidity Barrier Location

2.5 IVR DIVERSION DITCH

The IVR Diversion Ditch was constructed during the fall of 2020, and will be commissioned for freshet 2021. The IVR Diversion Ditch serves to divert the watershed reporting to the IVR Pit towards the C-Watershed. This will reduce the amount of contact water to manage on site. Significant attention and monitoring will be required for the commissioning of this infrastructure. In early May, partial snow removal will be required in this infrastructure to form a preferential water path and prevent snow blockage. Daily inspection at the start of freshet will be required until freshet is completed and following rain events, to ensure no contaminant is transported into the surrounding environment. Additional mitigation measures may be required, such as the use of straw logs, based on field observations.

2.6 WHALE TAIL ATTENUATION POND

The Whale Tail Attenuation Pond is the secondary contact water management basin on site. Contact water from surrounding infrastructure is pumped to the pond. From there, Whale Tail Attenuation Pond water can be pumped to either the IVR Attenuation Pond or the AsWTP, for

treatment, if required, and discharge to approved final effluent locations within Whale Tail South or Mammoth lake. The plant's treatment abilities were designed to remove TSS and arsenic. All piping and the discharge diffuser must be inspected prior to freshet, in order to have all installations in place to proceed with pumping and/or treatment activities during freshet. The pond water levels will be managed closely and inspected regularly.

2.7 WHALE TAIL DIKE SEEPAGE

Water from the Whale Tail Dike seepage is reporting to the WT Attenuation Pond through either a pumping system or by gravity. If water quality criteria are met, it is possible for the system to discharge directly to WTS. In 2021, the system is not expected to be put in operation due to the current water quality.

2.8 IVR ATTENUATION POND

The IVR Attenuation Pond is the main contact water management basin on site. Contact water from surrounding infrastructure is pumped to the pond. From there, water can be discharged to approved final effluent locations within Whale Tail South or Mammoth lake, or may be sent to the AsWTP, for treatment, if required, prior to discharge. The plant's treatment abilities were designed to remove TSS and arsenic. All piping and the discharge diffuser must be inspected prior to freshet, in order to have all installations in place to proceed with pumping and/or treatment activities during freshet. The pond water levels will be managed closely and inspected regularly.

2.9 WHALE TAIL FUEL TANK FARMS

The main fuel farm containments were built in 2019, and will be monitored throughout freshet. Snow and ice accumulation within the fuel tank farms must be adequately managed to prevent overflow to the environment and/or damage to the fuel handling systems. The Energy and Infrastructure Department will advise the Environmental Department of their intent to pump the containment area once ice/snow begins to melt. Water samples will be taken in accordance with the Water License to ensure compliance prior to its release. A notice must be provided to the Inspector 10 days prior to this pumping activity. Once sample results have been obtained, the Environmental Department will advise the Energy and Infrastructure Department. If sample results permit, the pumping may begin; to direct water to the tundra/ground in a way to prevent erosion. In the event that the water sample results do not meet discharge criteria the water could be trucked in a tanker and transported to the Meadowbank site to be disposed of in the TSF or placed in containers for shipment south as hazmat.

2.10 HAUL ROAD CULVERTS AND BRIDGES

Daily inspections will be undertaken starting in May at all culverts along the Haul road to ensure that water during freshet is flowing freely and no erosion is occurring. If elevated TSS/Turbidity levels are observed sampling will occur and the results assessed. Turbidity barrier will be installed if required. The Mine department will also be advised if severe erosion/scouring is observed. In addition, snow and ice removal may be required to allow the water to flow as per design

specifications. Daily inspections will be performed during the freshet period by the Environment department.

2.11 2020-2021 PAD AND ROAD CONSTRUCTION

In 2020, the expansion project was approved, meaning many pads and roads were built around site that will experience their first snowmelt. Weekly inspections at the start of snowmelt will be required to monitor for potential erosion and sediment transport. Mitigation measures may be required to minimize transport of sediments towards water bodies. See below for a list of such constructions:

- IVR Pit Ring Road;
- IVR WRSF ring road;
- Whale Tail main pad extension;
- IVR Dike;
- New road culverts – Road 23 and culverts drain towards IVR attenuation pond;
- Various pad extensions.

2.12 UNDERGROUND WRSF WATER COLLECTION SYSTEM

The Underground WRSF Water Collection System was built in 2019 to collect any water running off the underground infrastructure, and direct runoff water into GSP1. Steaming of culverts may be necessary if snow or ice blockage are identified prior to the start of freshet. Weekly inspection will be required during freshet to validate operationality and liner integrity of collection system.

3 INCIDENT RESPONSE

3.1 WRSF POND SEEPAGE

In August 2019, water originating from the WRSF Pond seeped through the dike and reported to the Mammoth Lake. Immediate actions taken were to build an access road to the downstream portion of the dike, in order to excavate a small sump and pump the seepage water into WRSF pond. Furthermore, WRSF Pond was emptied and maintained dry. Downstream pumping stopped on September 30th, when the reporting flow and surrounding had frozen. In October 2019, the KIA conducted a sample analysis of the lake bed sediments in Mammoth Lake. The report concluded the seepage did not have a measurable impact on metal quantities of the Mammoth Lake sediments. In 2020, follow-up lake bed sediments samples were analyzed and support the 2019 conclusions.

The following mitigation measure are implemented:

- Operational water level was reviewed to keep water as low as possible in the WRSF pond, as recommended by the MDRB;
- Aggradation of permafrost into the dike's foundation by:
    - Construction of a thermal berm in 2020 on the upstream portion of the dike;
- Access road to the downstream area was constructed to facilitate inspection;
- Various environmental monitoring program:
    - Monthly limnology profile of Mammoth Lake during winter and open water conditions;
    - Mammoth Lake included in a Core receiving environmental monitoring program; and
    - A sediment sampling campaign executed in Mammoth Lake.

3.2 ADAPTIVE WATER MANAGEMENT STRATEGY

An Adaptive Water Management Plan will be developed to document specific mitigation measures and associated management actions to be taken when specified thresholds are exceeded. Mitigation measures may include special studies, operational changes, revised or new water and waste management systems, structures and/or facilities, or implementing mitigation activities to prevent, stabilize or reverse a change in environmental conditions or to otherwise protect the receiving environment. The Adaptive Management Plan would be reviewed periodically to account for the dynamics of mine construction and operation, and to adjust the adaptive management strategy as needed.

Various level thresholds were identified for surface water management, based on the capacity of different water management infrastructure to retain water on site. The objective is to trigger management strategy actions based on the capacity of these structures. The main management response is based on increasing the discharge rate especially when water is meeting effluent discharge criteria.

4 SNOW MANAGEMENT

A snow management procedure has been developed internally in 2020 and will be updated annually. Refer to Appendix 2 for the snow management map. Temporary snow storage dumps and snow accumulation areas of concern were identified on a map. Removal will be managed accordingly.

APPENDIX 1

2021 Freshet Action Plan Procedure

Section	Area of Concern	Role/Action	Responsibilities	Dates
2.1	**MINING PITS AND PIT WALLS**			
2.1	Mining Pit and Pit walls - General	1) Clean all ice, mud and snow on all permanent ramps, jump ramps, etc.	Mine Operations	Before May
		2) Check and service all pumps.	E&I (Energy and Infrastructure) and Maintenance	Before May
		3) Check that all piping systems starting from the pit leading to the Attenuation ponds are free of ice by validating pumping values (if pumping systems active) and/or performing an air test in the pipe with a compressor.	E&I/Mine Operations	Before May
2.2	**WHALE TAIL WASTE ROCK STORAGE FACILITY**			
2.2.	WT WRSF Inspection	1) Weekly inspection around the RSF perimeter to identify any seepage.	Env. Department	May - as soon as freshet starts until freeze up
		2) Pump if required from the WRSF periphery to WRSF Pond	E&I	May - as soon as freshet starts until freeze up

		3) If seepage observed notify Env Department AND sample for Water License Parameters.	Env. Department	May - as soon as freshet starts until freeze up
2.3	**IVR WASTE ROCK STORAGE FACILITY**			
2.3.	IVR WRSF Inspection	1) Weekly inspection around the IVR WRSF perimeter to identify any seepage.	Env. Department	May - as soon as freshet starts until freeze up
		2) Pump if required from the IVR WRSF periphery to IVR attenuation pond	E&I	May - as soon as freshet starts until freeze up
		3) If seepage observed notify Env Department AND sample for Water License Parameters.	Env. Department	May - as soon as freshet starts until freeze up
2.4	**WHALE TAIL SOUTH DIVERSION CHANNEL**			
2.4	Whale Tail South Diversion Channel	1) Daily inspection - keep record	Env. Department	May - until freshet complete and after rain events
		2) Install mitigation measures, if needed (elevated TSS observed), and maintain	Env. Department	May - until freshet complete and after rain events

		3) Sample monitoring for TSS, if excess turbidity observed - use external lab.	Env. Department	May - until freshet complete and after rain events
		4) Report any discharge of TSS to Mammoth Lake to ECCC/NWB (if grab > 30 mg/L).	Env. Department	May - until freshet complete and after rain events
2.5	**IVR DIVERSION DITCH**			
2.5	IVR Diversion Ditch	1) Daily inspection - keep record	Env. Department	May - until freshet complete and after rain events
		2) Install mitigation measures, if needed (elevated TSS observed), and maintain	Env. Department	May - until freshet complete and after rain events
		3) Sample monitoring for TSS, if excess turbidity observed - use external lab.	Env. Department	May - until freshet complete and after rain events
		4) Report any discharge of TSS to Mammoth Lake to ECCC/NWB (if grab > 30 mg/L).	Env. Department	May - until freshet complete and after rain events
2.6	**WHALE TAIL ATTENUATION POND**			

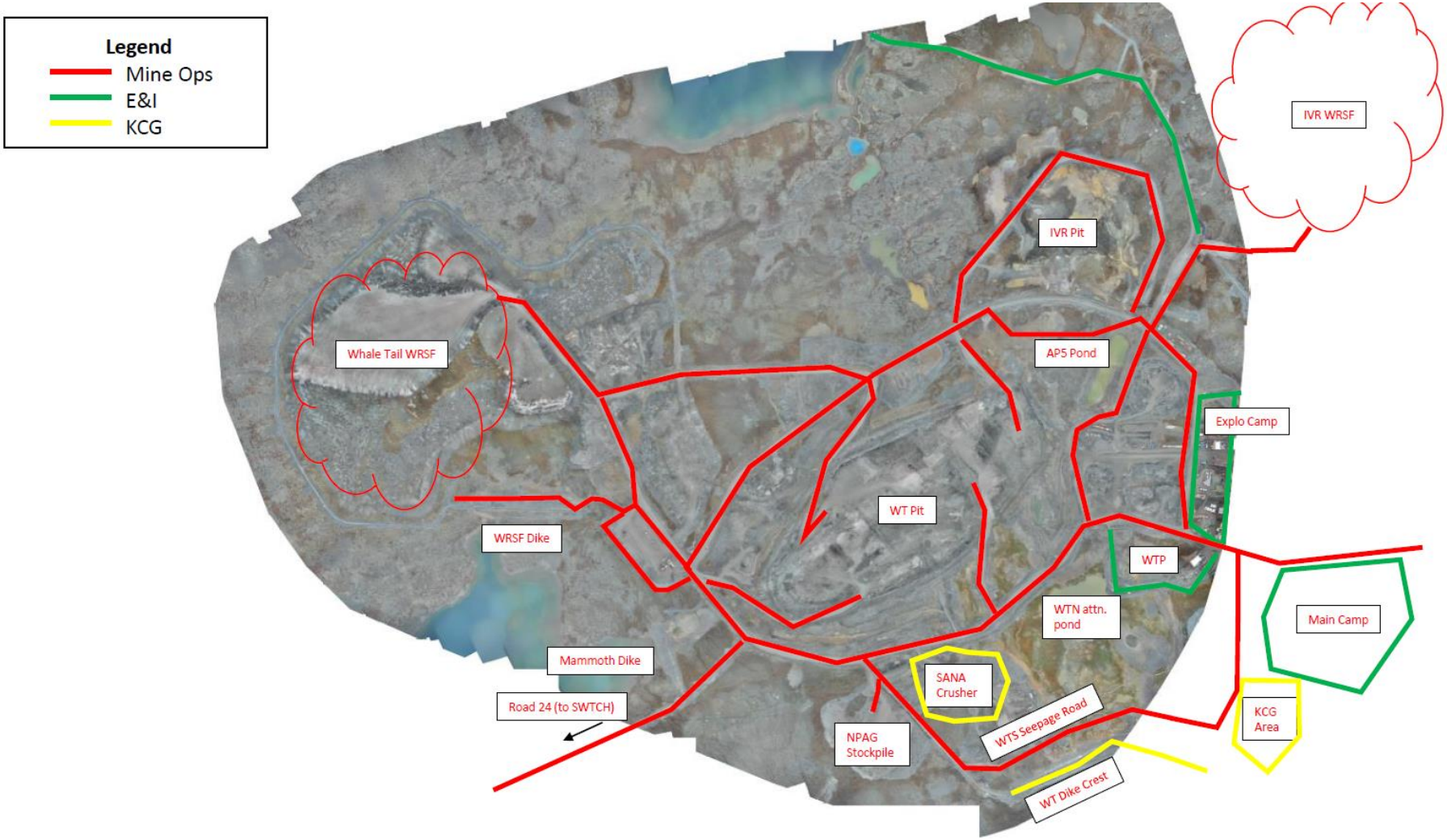
2.6	Whale Tail Attenuation Pond	1) Set-up pumping of the WT Attenuation Pond to prevent water from flowing into the pit area, keeping track of all daily volumes	E&I	At all time
		2) Notify Environmental Department before any environmental discharge.	E&I	At all time
		3) Inspect all piping and discharge diffuser	E&I	May
2.7	**IVR ATTENUATION POND**			
2.7	IVR Attenuation Pond	1) Set-up pumping of IVR Attenuation Pond through the AsWTP, keeping track of all daily volumes	E&I	At all time
		2) Notify Environmental Department before any environmental discharge.	E&I	At all time
		3) Inspect all piping and discharge diffuser	E&I	May
2.8	**FUEL TANK FARMS**			
2.8	WT Tank Farm	1) E&I Dept to advise Env Dept in advance of intent to pump once ice melts in containment area.	E&I and Env. Department	Probably mid-June and September
		2) Sample water in accordance with Water License to ensure compliance with limits prior to release.	Env. Department	Probably mid-June and September

		3) Provide notice to Inspector 10 days prior to pumping.	Env. Department	Probably mid-June and September
		4) Advise Energy and Infrastructure Dept if pumping can begin based on sample results.	Env. Department	Probably mid-June and September
		5) Pump to tundra/ground or Meadowbank TSF. **NOTE: The water cannot be pumped out to the tundra if it does not meet the Water License criteria.**	E&I	Probably mid-June and September
2.10	**RECENT PAD AND ROAD CONSTRUCTIONS**			
2.10	Recent pad and road constructions	1) Daily inspection of culverts around site (Road to emulsion plant, IVR access road)	Env. Department	May and after rain events
		2) Weekly inspection of toes of constructions built in the last year.	Env. Department	May and after rain events
		3) Sample for TSS and Turbidity if elevated TSS observed.	Env. Department	May - until freeze up
		4) Notify E&I Dept if severe erosion/scouring observed - for repair action.	Env. Department	May - until freeze up
		5) Install mitigation measures if required.	Env. Department	May - until freeze up

3.0	INCIDENT RESPONSE			
3.1	WRSF Pond Seepage	1) Daily inspection - keep record	Env. Department	May - until freshet complete and after rain events
		2) Maintain WRSF Pond as dry as possible	E&I	May - until freeze up
		3) Pump any water reporting to the WRSF downstream water collection system – Volumes required to be documented	E&I/Engineering	May - until freeze up
		4) Sample upstream and downstream	Env. Department	May - until freeze up
		5) Report any discharge of TSS to Mammoth Lake to ECCC/NWB (if grab > 30 mg/L).	Env. Department	May - until freshet complete and after rain events

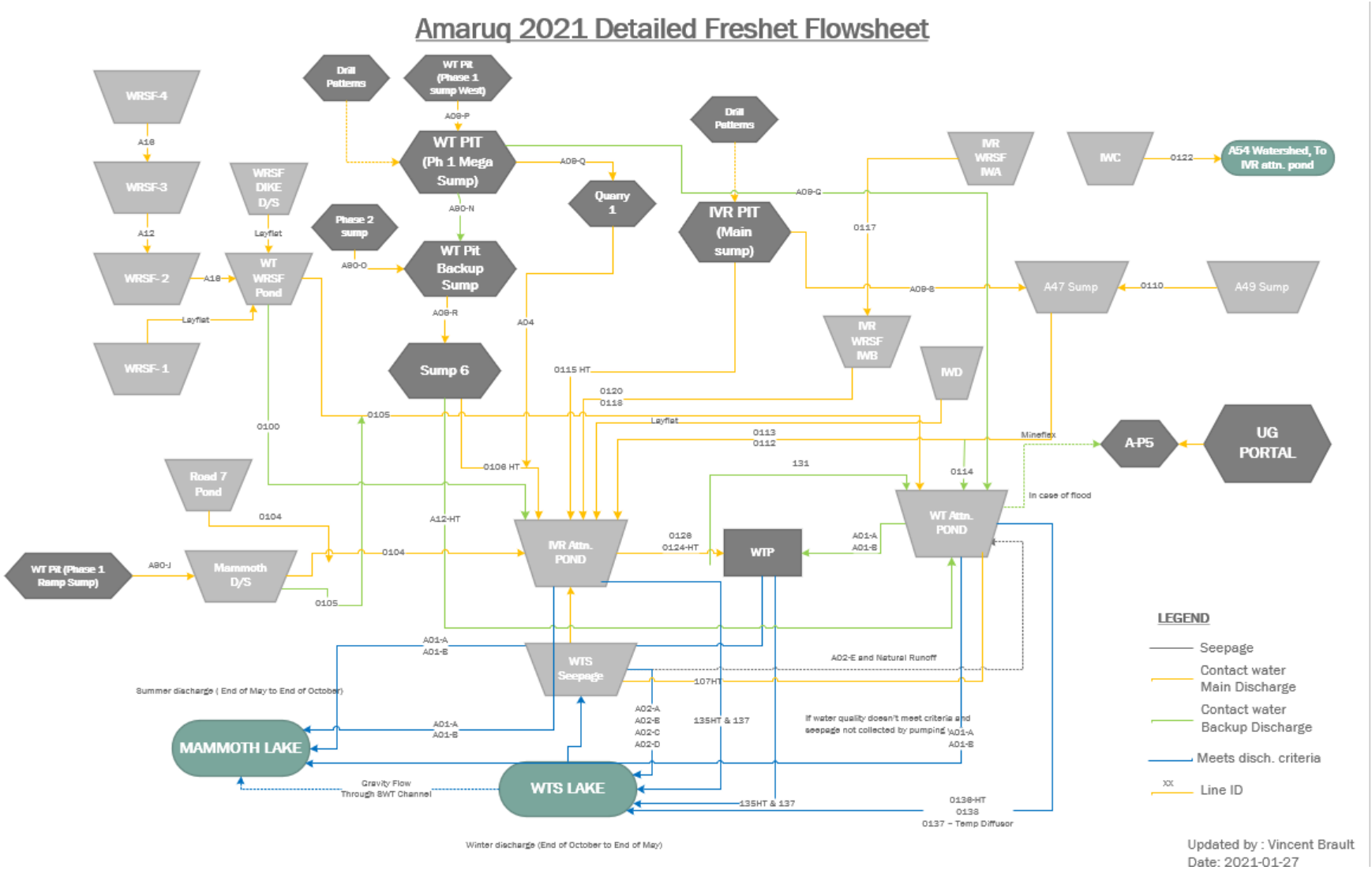
APPENDIX 2

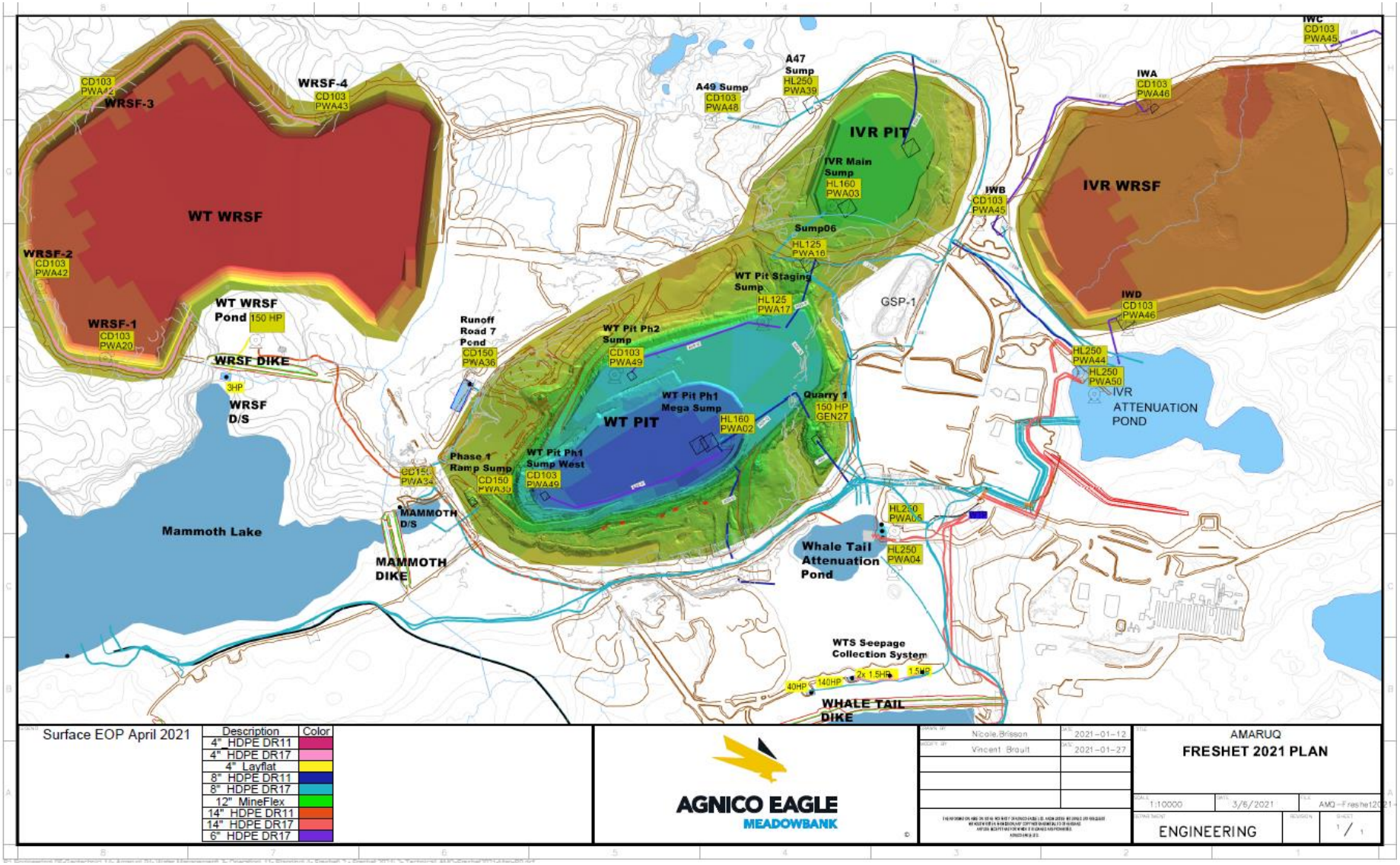
2020 Snow Management Map


Legend
Mine Ops
E&I
KCG
IVR WRSF
IVR Pit
Whale Tail WRSF
AP5 Pond
Explo Camp
WT Pit
WRSF Dike
WTP
WTN attn. pond
Main Camp
Mammoth Dike
SANA Crusher
Road 24 (to SWTCH)
KCG Area
NPAG Stockpile
WTS Seepage Road
WT Dike Crest

APPENDIX 3

2021 Freshet flowchart and plan view


Amaruq 2021 Detailed Freshet Flowsheet
WRSF-4
A18
WRSF-3
A12
WRSF-2
A18
WRSF-1
Layflat
WRSF DIKE D/S
Layflat
WT WRSF Pond
Drill Patterns
WT Pit (Phase 1 sump West)
A08-P
WT PIT (Ph 1 Mega Sump)
A08-Q
A80-N
Phase 2 sump
A80-O
WT Pit Backup Sump
A08-R
Quarry 1
Sump 6
A04
0115 HT
0120
0118
Drill Patterns
IVR PIT (Main sump)
A08-G
0117
IVR WRSF IWA
IWC
0122
A54 Watershed, To IVR attn. pond
A08-S
A47 Sump
0110
A49 Sump
IVR WRSF IWB
IWD
0105
0100
Layflat
0113
0112
Mineflex
A-P5
UG PORTAL
0108 HT
131
0114
In case of flood
Road 7 Pond
0104
A12-HT
WT Attn. POND
IVR Attn. POND
0128
0124-HT
WTP
A01-A
A01-B
WT Pit (Phase 1 Ramp Sump)
A80-J
Mammoth D/S
0104
0105
A01-A
A01-B
WTS Seepage
A02-E and Natural Runoff
107HT
Summer discharge (End of May to End of October)
A02-A
A02-B
A02-C
A02-D
135HT & 137
If water quality doesn't meet criteria and seepage not collected by pumping
A01-A
A01-B
MAMMOTH LAKE
A01-A
A01-B
Gravity Flow Through SWT Channel
WTS LAKE
135HT & 137
0138-HT
0138
0137 – Temp Diffusor
Winter discharge (End of October to End of May)
LEGEND
Seepage
Contact water Main Discharge
Contact water Backup Discharge
Meets disch. criteria
XX
Line ID
Updated by : Vincent Brault
Date: 2021-01-27


WRSF-3
CD103 PWA42
WRSF-4
CD103 PWA43
WT WRSF
WRSF-2
CD103 PWA42
WRSF-1
CD103 PWA20
WT WRSF Pond
150 HP
WRSF DIKE
3HP
WRSF D/S
Mammoth Lake
MAMMOTH D/S
MAMMOTH DIKE
Runoff Road 7 Pond
CD150 PWA36
Phase 1 Ramp Sump
CD150 PWA34
CD150 PWA33
WT Pit Ph1 Sump West
CD103 PWA49
WT PIT
WT Pit Ph1 Mega Sump
HL160 PWA02
WT Pit Ph2 Sump
CD103 PWA49
WT Pit Staging Sump
HL125 PWA17
Sump06
HL125 PWA16
IVR Main Sump
HL160 PWA03
IVR PIT
A49 Sump
CD103 PWA48
A47 Sump
HL250 PWA39
Quarry 1
150 HP
GEN27
GSP-1
Whale Tail Attenuation Pond
HL250 PWA04
HL250 PWA05
WTS Seepage Collection System
40HP
140HP
2x 1.5HP
1.5HP
WHALE TAIL DIKE
IWB
CD103 PWA45
IWC
CD103 PWA45
IWA
CD103 PWA46
IVR WRSF
IWD
CD103 PWA46
HL250 PWA44
HL250 PWA50
IVR ATTENUATION POND
Surface EOP April 2021
Description
Color
4" HDPE DR11
4" HDPE DR17
4" Layflat
8" HDPE DR11
8" HDPE DR17
12" MineFlex
14" HDPE DR11
14" HDPE DR17
6" HDPE DR17
AGNICO EAGLE
MEADOWBANK
Nicole.Brisson
2021-01-12
Vincent Brault
2021-01-27
AMARUQ
FRESHET 2021 PLAN
1:10000
3/6/2021
AMQ-Freshet2021
ENGINEERING
1 / 1