6-O: Addendum Mean Annual Water Balance

REPORT

Whale Tail Pit - Expansion Project

Mean Annual Water Balance

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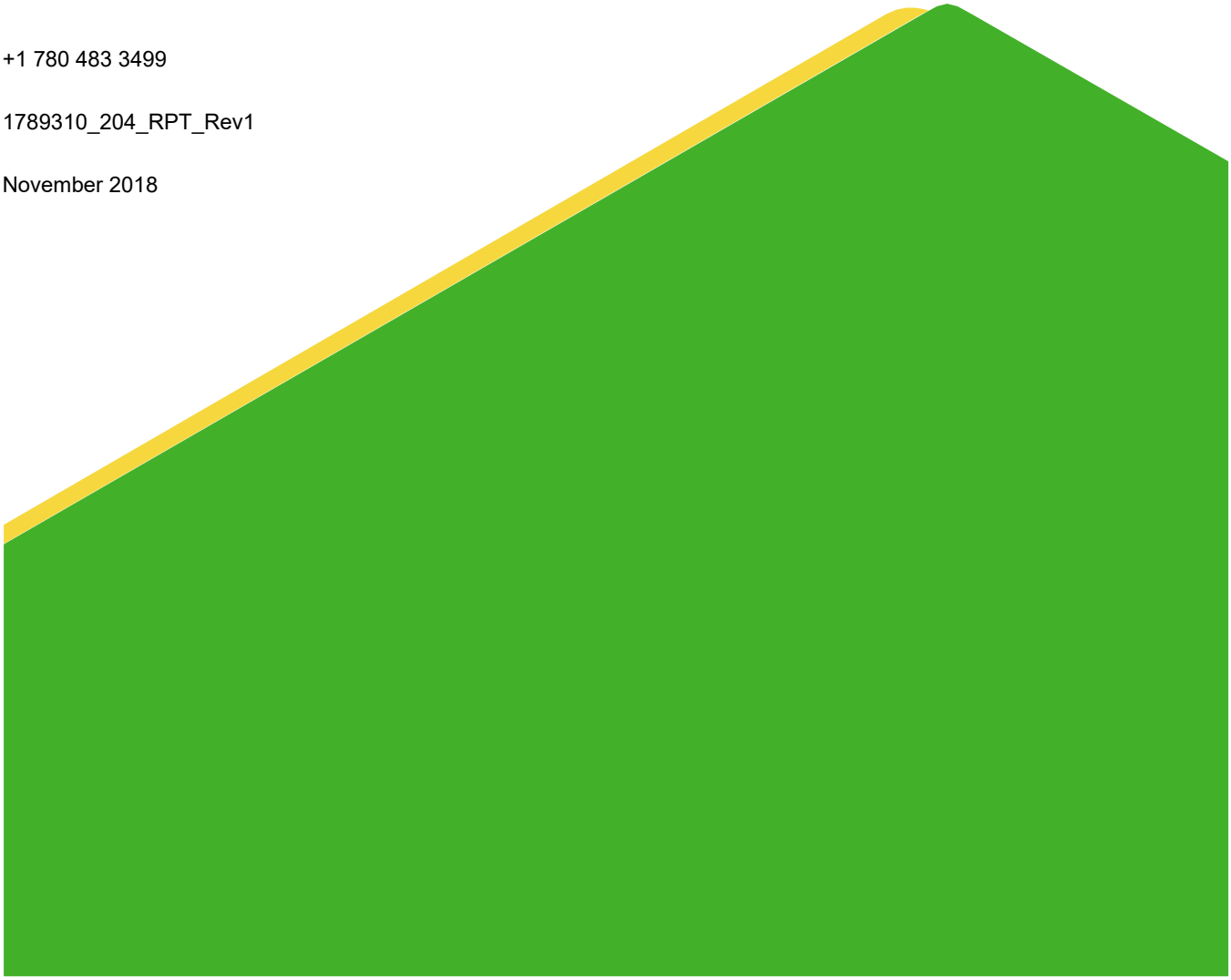

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1.0 INTRODUCTION

Agnico Eagle Mines Limited: Meadowbank Division (Agnico Eagle) is proposing to develop the Whale Tail Pit and the IVR Pit and underground operations on the Amaruq property (Project), in continuation of mine operations and milling of the Meadowbank Mine. The Amaruq Exploration 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 north of the Meadowbank Mine in the Kivalliq region of Nunavut.

The Approved Project supports mining an initial amount of approximately 8.3 million tonnes of ore from one open pit, the Whale Tail Pit, processed over a three to four-year mine life. The Expansion Project proposes mining an additional 15.2 million tonnes of ore from the expanded Whale Tail Pit, the IVR open pit and underground operations. A detailed Project Description, and water management plan describing water management facilities examined herein can be found in the Expansion Project's final environmental impact statement (FEIS) Addendum.

This report presents a description of water management activities and modelled flows from the mean annual water balance for the Expansion Project. This water balance was developed through an iterative process of infrastructure design, pond sizing, flow management and forecast of corresponding water quality in to achieve the goal of having workable and robust water flow and quality management at the mine which will minimize environmental impacts.

This report primarily focuses on the construction, operation, and closure phases of the Expansion Project. It is limited to catchments of the Project footprint, and does not address the receiving environment within and downstream of the effluent discharge point. When applicable, a comparison of water management milestones (e.g., drawdown and refilling durations) are provided between the Approved Project (Agnico Eagle 2016a) and the Expansion Project.

Water quality predictions corresponding to the Expansion Project's mean annual water balance are presented under separate cover (Golder 2018a).

This report is organized as follows:

- Section 2.0 provides the basis of the water balance;
- Section 3.0 provides a description of water management activities, and results of the water balance by catchment; and,
- Section 4.0 provides a list of risks and opportunities to be considered as the mine develops and is operated.

2.0 WATER BALANCE BASIS

2.1 General

The mean annual water balance was derived in GoldSim on a monthly timestep, in consideration of the following information:

- Site climate (Section 2.2);
- Mine plan (Section 2.3);
- Evolving catchments corresponding to the mine plan, derived based on Project topographic data (PhotoSat 2015), discretized by land and water areas;
- Evolving pit and underground mine elevation-area-storage characteristics (Appendix C), derived from Project raster data provided by Agnico Eagle;
- Evolving conservative (i.e., “EA” case) groundwater inflows and infiltration derived by Golder for the Whale Tail open pit and the underground mine (Golder 2018b). The IVR pit is situated entirely within permafrost during operation and closure, and no groundwater inflows are anticipated; and,
- Mine operation consumptive flows provided by Agnico Eagle (Section 2.4).

2.2 Climate Input

Water balance results presented herein were based on mean annual climate input summarized in Table 1, consistent with previous studies (Agnico Eagle 2016b). Thus, results presented herein are expected to vary from predicted under wet or dry conditions.

Precipitation presented in Table 1 was applied in water balance calculations as follows:

- Precipitation was adjusted for undercatch using a factor of 1.15 for rainfall, and 1.55 for snowfall following previous studies (Agnico Eagle 2016c);
- Frozen conditions were assumed from October to May;
- Rainfall during frozen conditions, as defined above, was applied as rainfall during the month of June of the same year if fallen between the months of January and May inclusively, or during the month of June of the following year if fallen between the months of October and December inclusively;
- Snowfall outside of frozen conditions, as defined above, was applied as rainfall during the same month; and,
- Infiltration losses were assumed to be negligible in natural areas based on permafrost conditions.

Table 1: Climate Input for Mean Year

Month	Mean Air Temperature (ºC)	Precipitation (mm)		Losses (mm)		
		Rainfall	Snow-Water Equivalent	Lake Evaporation	Evapo-transpiration	Sublimation
January	-31.3	0.0	6.9	0	0	9
February	-31.1	0.0	6.2	0	0	9
March	-26.3	0.0	9.1	0	0	9
April	-17.0	0.4	13.3	0	0	9
May	-6.4	5.2	8.1	0	0	9
June	4.9	18.1	3.0	9	3	0
July	11.6	38.5	0.0	99	32	0
August	9.8	42.1	0.6	100	32	0
September	3.1	34.7	6.8	40	13	0
October	-6.5	6.4	22.4	0	0	9
November	-19.3	0.2	16.6	0	0	9
December	-26.8	0.0	10.0	0	0	9
Annual	-11.3	145.7	103.0	248	80	72

2.3 Mine Plan

Water management facilities are presented on Figure 1, representative of end of mine life largest footprint conditions (2025). The water management plan is presented conceptually in flow diagrams representative of surface water management in Figure 2 and Figure 3, and of underground water management in Figure 4 and Figure 5. Conceptual flow diagrams are presented in Appendix A and the mine plan drawings are presented in Appendix B for the entire life of mine. Milestones relevant to the mean annual water balance are summarized in chronological order below:

- Quarry 1 is initiated in 2017 (i.e., prior to the start of the water balance in January 2018).
- Underground Mine is initiated in 2017 (i.e., prior to the start of the water balance).
- The Groundwater Storage Pond System (GSP) consists of three ponds. One pond will be used to store high salinity water. A second pond will be used to store low salinity water. A third pond will be used for contingency. The first GSP is initiated in 2017 (i.e., prior to the start of the water balance).
- The Whale Tail Dike is initiated in June 2018 and was assumed to retain upstream flows starting in July 2018.
- The Starter Pit is initiated in July 2018.
- The Whale Tail WRSF Dike is initiated in October 2018 and retains upstream flows starting in freshet 2019.
- The Mammoth Dike is initiated in November 2018 and retains upstream flows starting in freshet 2019.
- Dewatering of Whale Tail Lake (North Basin) is initiated in March 2019 and completed by June 2019.
- The Northeast Dike is initiated in January 2019 and retains upstream flows starting in freshet 2019. It is decommissioned prior to the initiation of the IVR Pit.

- The total suspended solids (TSS) removal unit of the Construction Water treatment plant (C-WTP) becomes available in May 2019.
- An arsenic (As) treatment unit is added to the C-WTP which becomes the Operational Water Treatment Plant (O-WTP), available in June 2019.
- The East channel is initiated in May 2019 and diverts upstream flows starting in freshet 2019.
- The Whale Tail Dike Well is operational by January 2020.
- The North Sector collection area is operational starting in June 2019 until closure.
- The IVR Pit is initiated by July 2020.
- The IVR Diversion is operational from July 2020 until closure.
- The IVR WRSF is operational from July 2020 until closure.
- The water treatment unit for low total dissolved solids (TDS) water or S-WTP (brackish) becomes available by October 2020.
- The water treatment unit for high TDS water, or S-WTP (brine) becomes available by April 2022; its capacity is increased in January 2023.
- Another GSP becomes operational by April 2022.
- Drawdown of Lake A53 occurs prior to freshet 2022.
- The IVR Attenuation Pond (i.e., ex-Lake A53) is operational by freshet 2022.
- Construction of Mammoth sill and spillway is completed after January 2026 to maintain the flooded pit lake water elevation at 153.5 metres above sea level (masl) at closure and post-closure.
- Closure is initiated in January 2026 and active and passive flooding occurs until Whale Tail Lake (North Basin) is refilled to overtop the Mammoth Lake sill and spillway to 153.5 masl, currently predicted to occur in 2041.
- Post-closure reconnection of Whale Tail Lake (North Basin) with Whale Tail Lake (South Basin) by decommissioning of Whale Tail Dike, Mammoth Dike and Whale Tail WRSF dike. This occurs once the flooding has reached 153.5 masl and the quality of the flooded pit lake is acceptable to fish and fish habitat; currently predicted to occur in 2051.

The schedule for construction of the third GSP will be adaptive, depending on need.

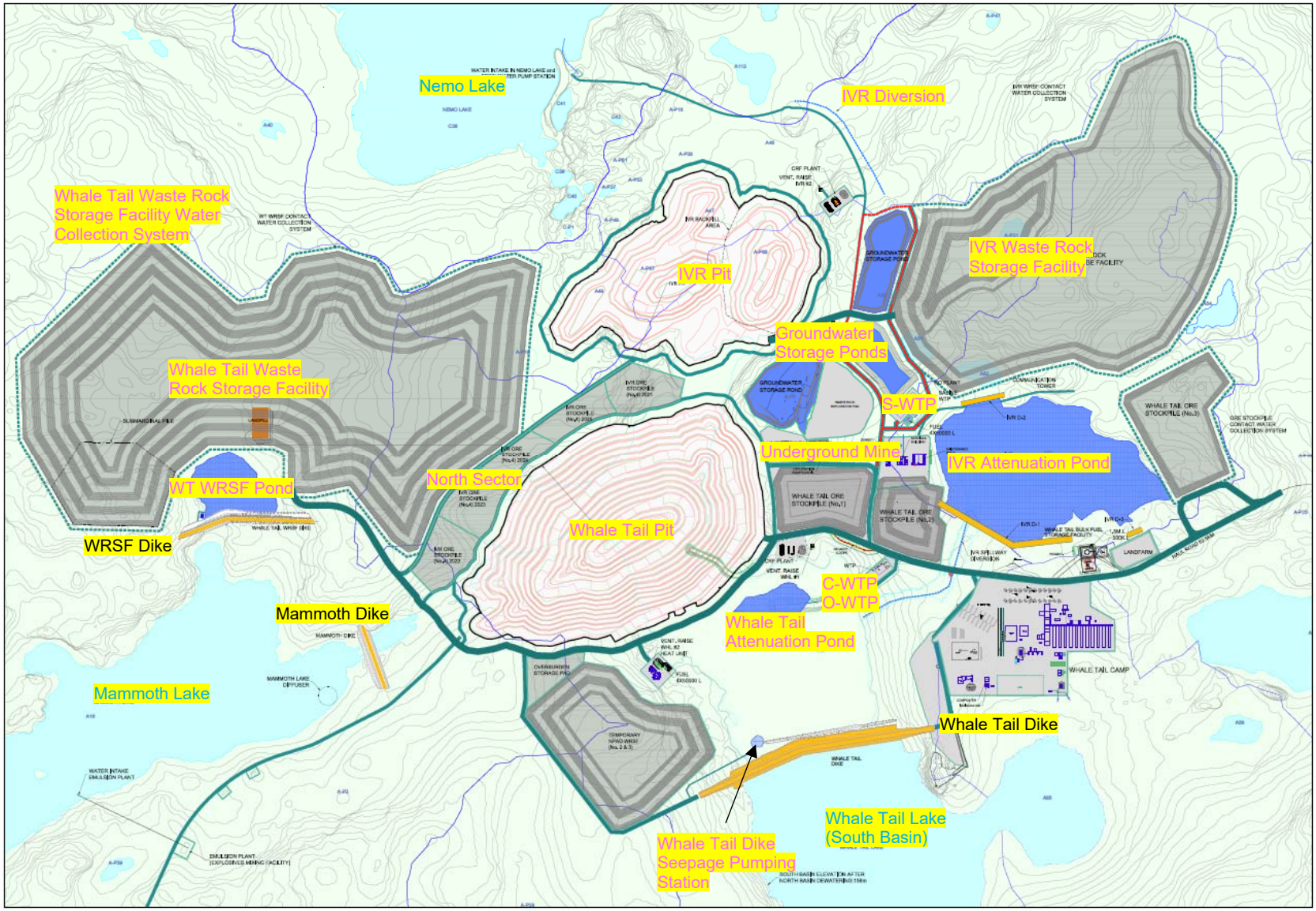

Figure 1: Water Management Facilities (2025)

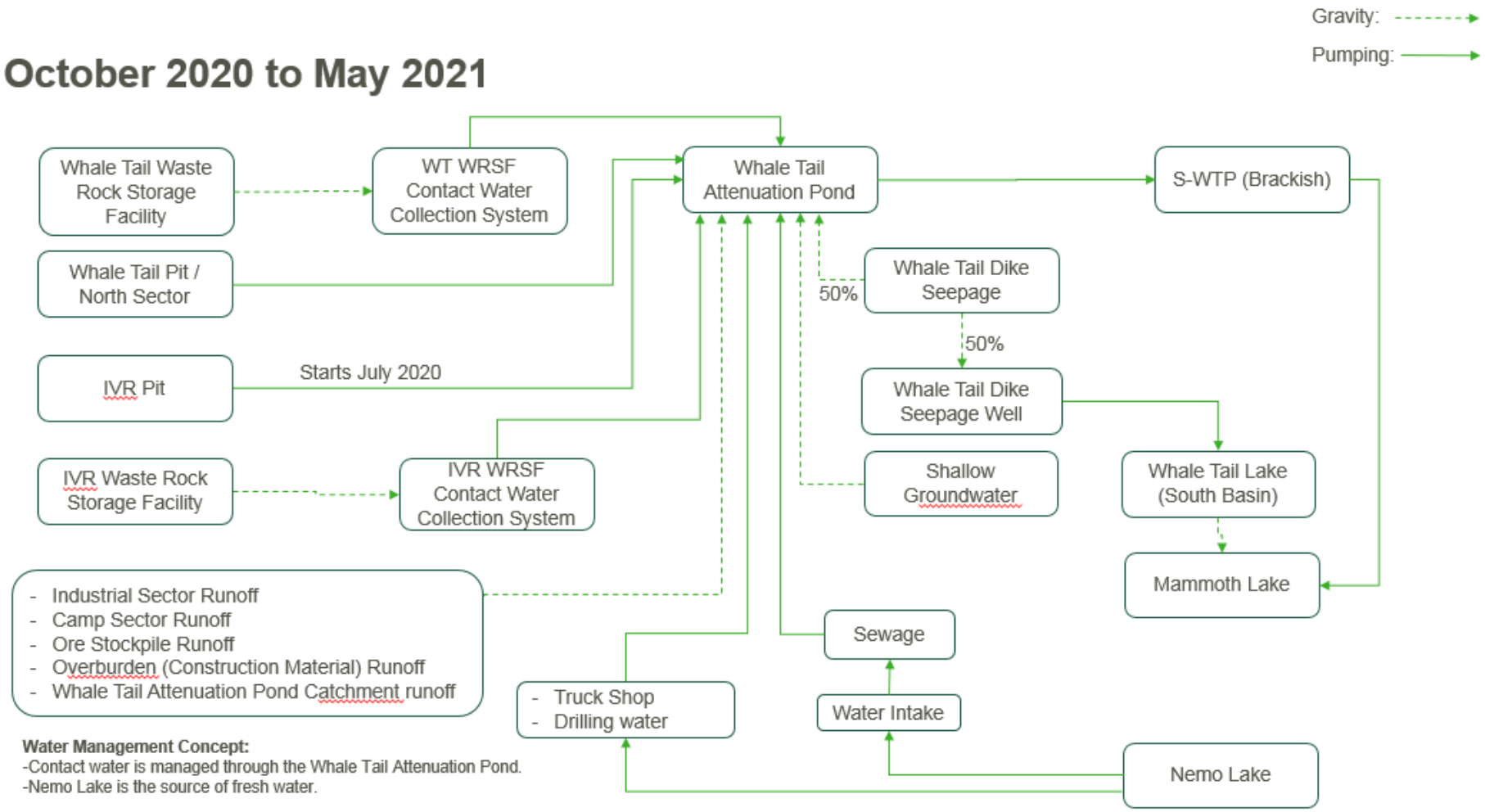

Figure 2: Conceptual Flow Diagram for Surface Waters – October 2021 to April 2022

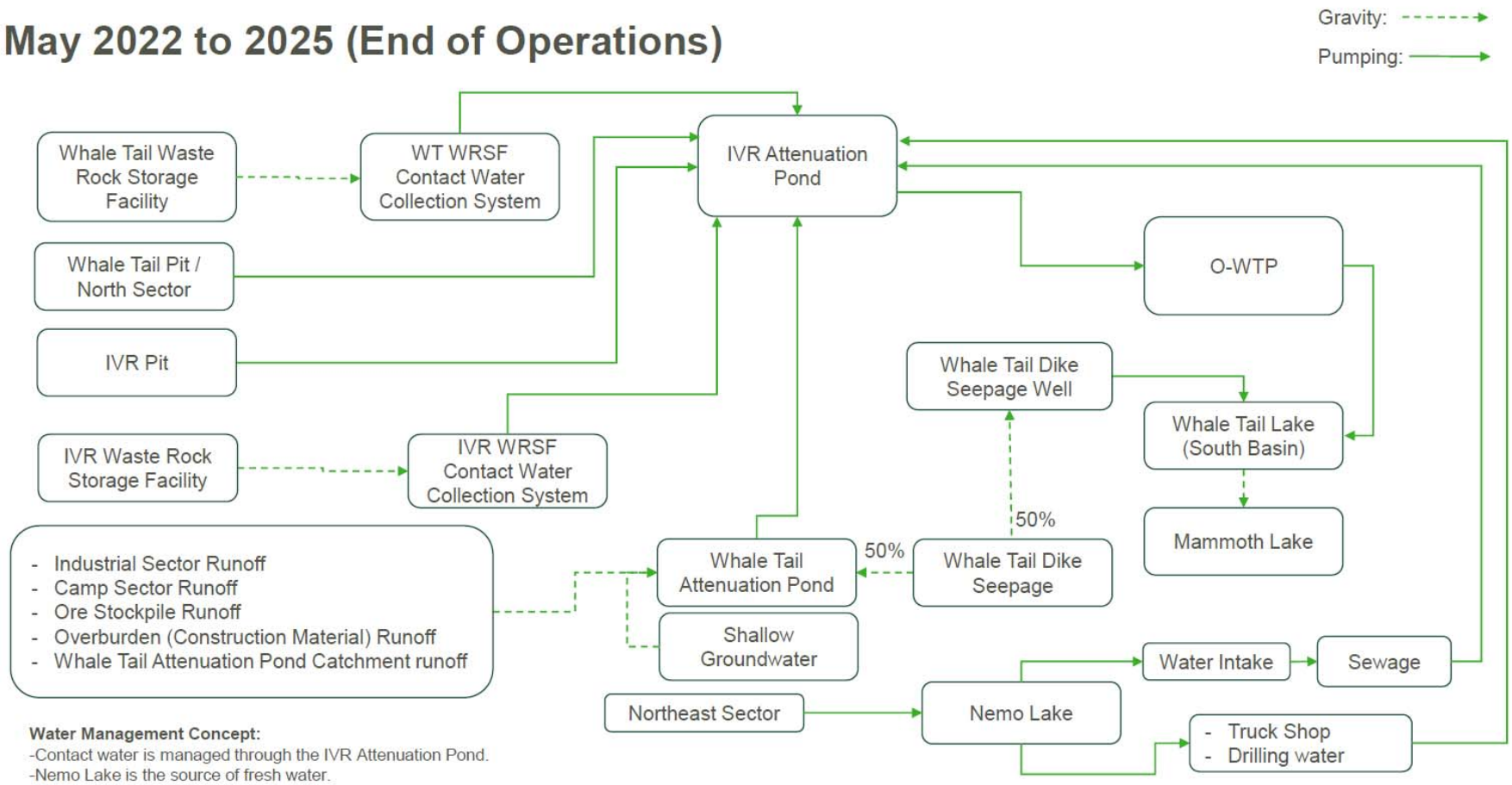

Figure 3: Conceptual Flow Diagram for Surface Waters – May 2022 to 2025

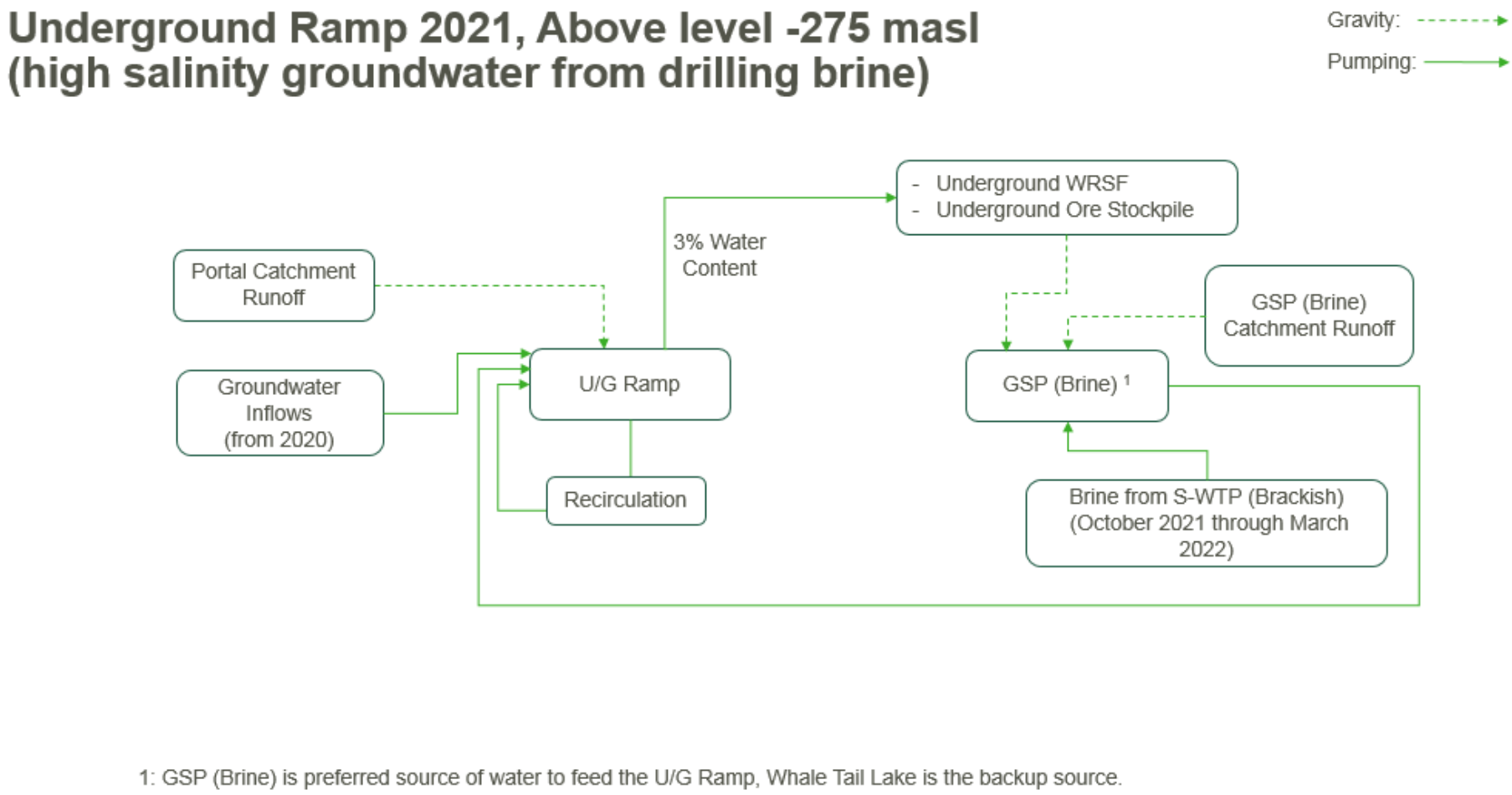

Figure 4: Conceptual Flow Diagram for Surface Waters – Underground Ramp 2021, shallower than Level -275 masl (High Salinity Groundwater from Drilling Brine)

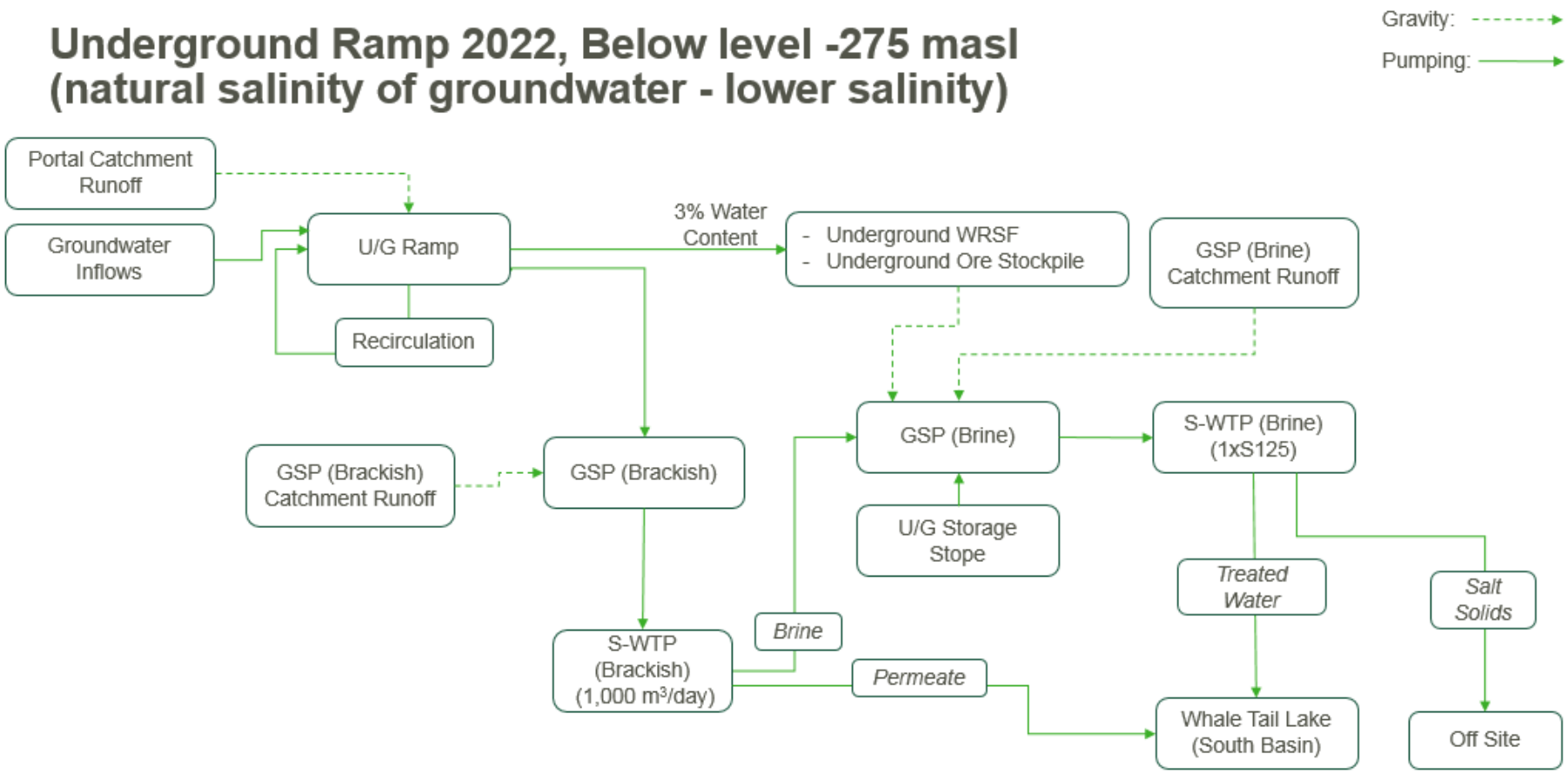

Figure 5: Conceptual Flow Diagram for Surface Waters – Underground Ramp 2022 - Deeper than Level -275 masl (Natural Salinity of Groundwater – Lower Salinity)

2.4 Consumptive Flows

Consumptive flows were provided by Agnico Eagle as follows:

- Camp use:
  - 77.8 m^3/day from January 2018 to the end of operations;
    - Sourced from Whale Tail Lake (South Basin) until the end of August 2018; and
    - Sourced from Lake C38 (Nemo Lake) from September 2018 to the end of operations.
  - 12.0 m^3/day during closure, sourced from Whale Tail Lake (South Basin).
- Truck shop:
  - 103.1 m^3/day from January 2018 to the end of operations.
- Drilling water for open pits:
  - 48.0 m^3/day from the initiation of the Whale Tail Pit to December 2018;
  - 24.0 m^3/day from January 2019 to June 2019; and
  - 48.0 m^3/day from July 2019 to the end of operations.
- Dust control was not considered in the Project's water balance given that its volume is expected to be fully lost to evaporation without runoff generation to Project storages. This approach is consistent with guidance from Agnico Eagle.
- 1% of the ore's weight trucked from the open pits to the Meadowbank mine was assumed to be saturated, as advised by Agnico Eagle.
- 3% of the waste rock's weight from the Underground Mine was assumed to be water, as advised by Agnico Eagle.

3.0 MEAN ANNUAL WATER BALANCE

3.1 Quarry 1

3.1.1 Catchment Characteristics and Water Management

Prior to mining activities, the natural area of Quarry 1 drains to Whale Tail Lake (North Basin). The Quarry 1 catchment is primarily used to manage contact water until Whale Tail Lake (North Basin) is dewatered and the Whale Tail Attenuation Pond becomes available. Contact water accumulated in Quarry 1 is discharged entirely to Lake A16 (Mammoth Lake) through the O-WTP once available in June 2019. Quarry 1 becomes part of the Whale Tail Pit thereafter.

An overview of the catchment, along with its natural drainage pattern, is provided in Figure 6.

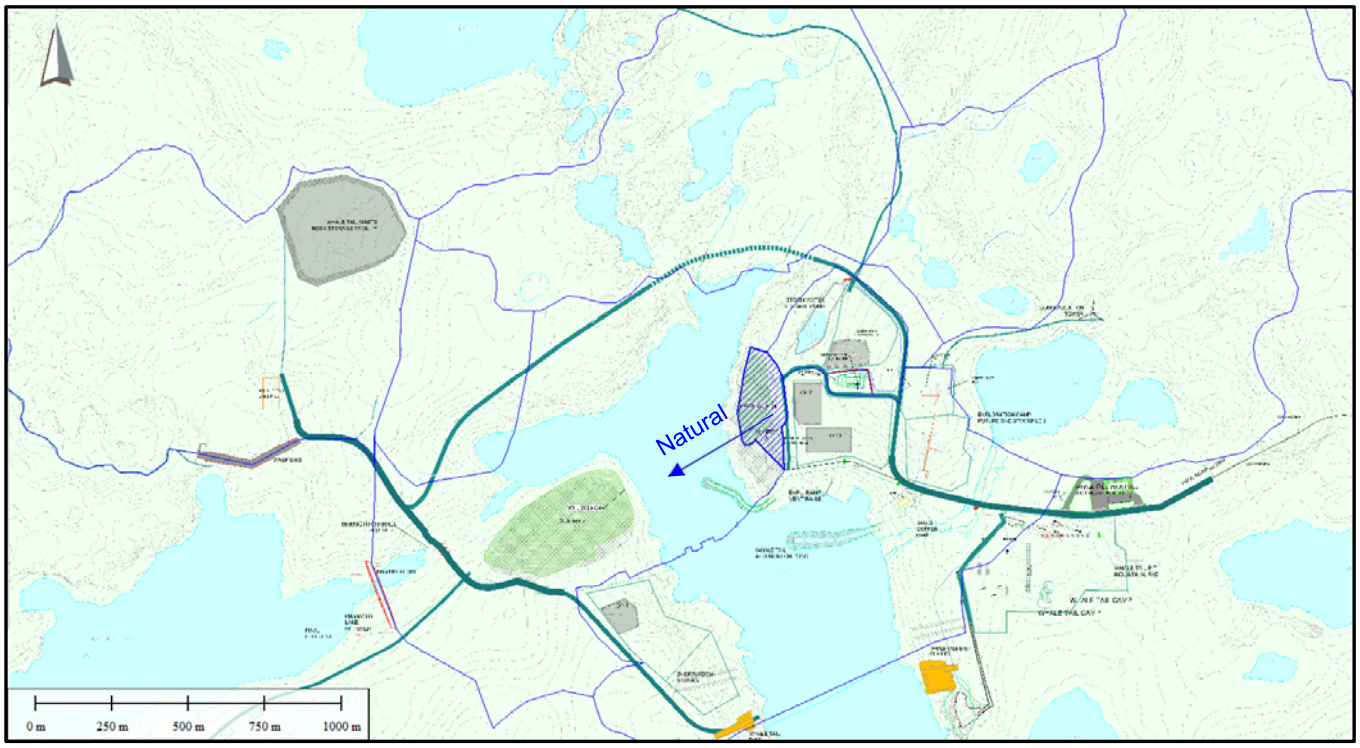

Figure 6: Quarry 1 Catchment Overview

Storage characteristics are summarized in Table 2, and elevation-storage-area relationships are provided in Appendix C. Drainage areas of Quarry 1 are summarized in Figure 7 through the Project.

Quarry 1 has a baseline drainage area of 0.040 km^2 which increases in 2018 to 1.48 km^2 from contact water catchments from the Starter Pit, Whale Tail WRSF, the Camp Sector (i.e., disturbed area surrounding the camp), the Industrial Sector (i.e., disturbed area east of Quarry 1 consisting of developed pad areas and ore stockpiles), and the Overburden Sector (i.e., disturbed area south of the Starter Pit consisting of construction material and ore stockpiles) while the Whale Tail Attenuation Pond is unavailable.

Table 2: Storage Characteristics (Quarry 1)

Snapshot	Drainage Area (km^2)	Operating Level		Capacity	
		Water Surface Elevation (masl)	Storage (m^3)	Water Surface Elevation (masl)	Storage (m^3)
Baseline	0.040	155.00	0	155.00	0
2018 to June 2019	0.040 to 1.48	139.00	0	155.00	203,450

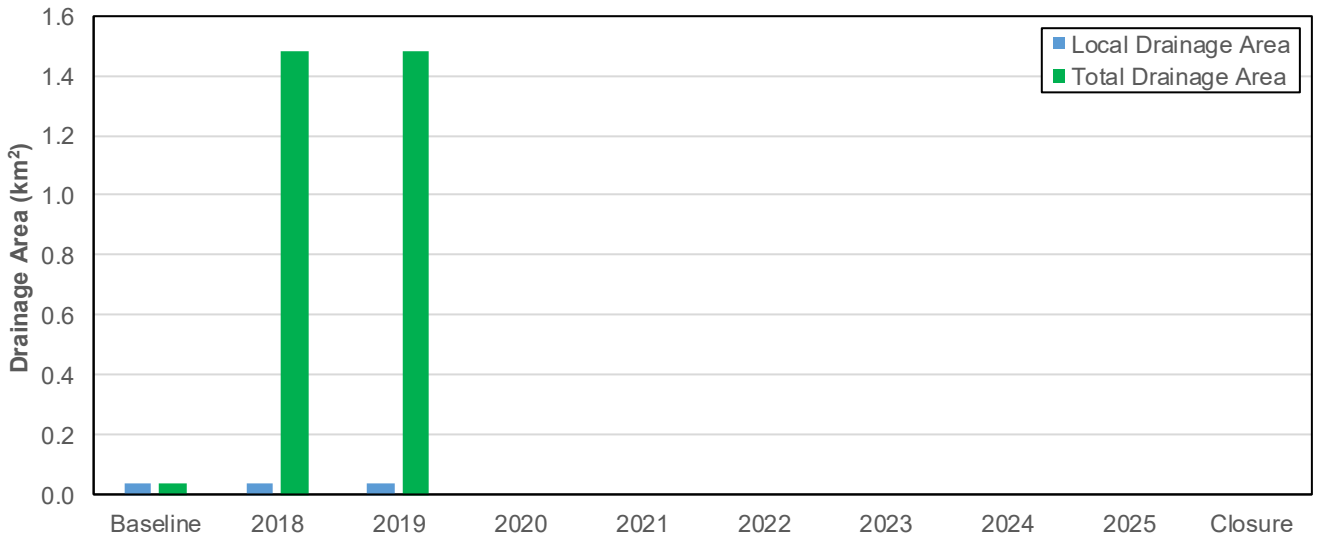

Figure 7: Drainage Area Progression through the Project (Quarry 1)

3.1.2 Water Balance

Inflows and outflows are summarized in Table 3, and presented in tabular form in Appendix D.

Table 3: Water Balance Flow Components (Quarry 1)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 8 (Construction / Operations) ■ Figure 9 (Closure)	■ Rainfall and Snow-Water-Equivalent (SWE) runoff	■ Natural drainage	■ 2018	■ June 2019	■ Catchment runoff until decommissioning of Quarry 1 by June 2019 once Whale Tail Lake (North Basin) is dewatered.
	■ Runoff diversion from the Starter Pit	■ Pump / Pipeline	■ July 2018	■ June 2019	■ Runoff diversion from the Starter Pit until decommissioning of Quarry 1 by June 2019 once Whale Tail Lake (North Basin) is dewatered.
	■ Runoff diversion from the Whale Tail WRSF Contact Water Collection System	■ Pump / Pipeline	■ 2018	■ June 2019	■ Runoff diversion from the Whale Tail WRSF until decommissioning of Quarry 1 by June 2019 once Whale Tail Lake (North Basin is dewatered and Whale Tail Attenuation Pond becomes operational.
	■ Runoff diversion from the Industrial Sector, Overburden Sector, Camp Sector and Ore Stockpile	■ Pump / Pipeline	■ 2018	■ June 2019	■ Runoff diversion until decommissioning of Quarry 1 by June 2019 once Whale Tail Lake (North Basin) is dewatered and Whale Tail Attenuation Pond becomes operational. ■ Runoff diversion from the Camp Sector is initiated following completion of mining in Quarry 1 by end of July 2018.
	■ Pumped flows from the Truck Shop	■ Pump / Pipeline	■ 2018	■ June 2019	■ Flow from the Truck Shop until decommissioning of Quarry 1 by June 2019 once Whale Tail Lake (North Basin) is dewatered and Whale Tail Attenuation Pond becomes operational.
	■ Drilling Water	■ Pump / Pipeline	■ 2018	■ August 2018	■ Drilling water from Whale Tail Lake (South Basin) until mining of Quarry 1 is completed by August 2018.
OUTFLOWS					
■ Figure 10 (Construction / Operations) ■ Figure 11 (Closure)	■ Evaporation	■ n/a	■ 2018	■ June 2019	■ Evaporative losses proportional to the water surface area in Quarry 1.
	■ Drawdown through O-WTP	■ Pump / Pipeline	■ June 2019	■ June 2019	■ Drawdown of Quarry 1 to Lake A16 (Mammoth Lake) via the O-WTP once available in June 2019. ■ Drawdown volume is expected to be approximately 185,399 m^3.

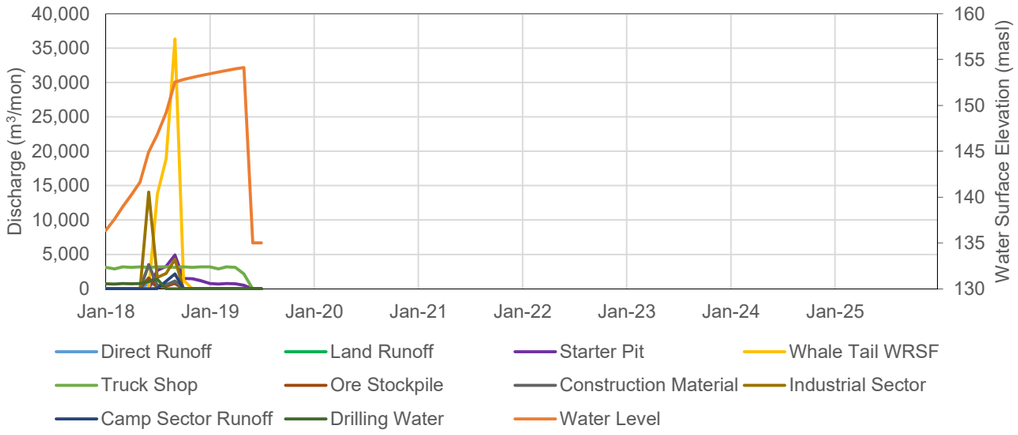

Figure 8: Inflows to Quarry 1 (Construction and Operations)

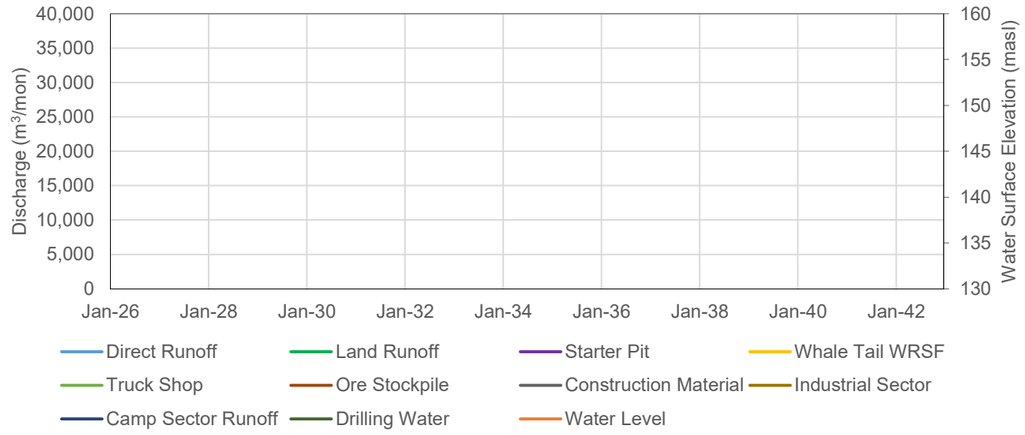

Figure 9: Inflows to Quarry 1 (Closure) – Quarry 1 integrated into the pit, waters report to the pit

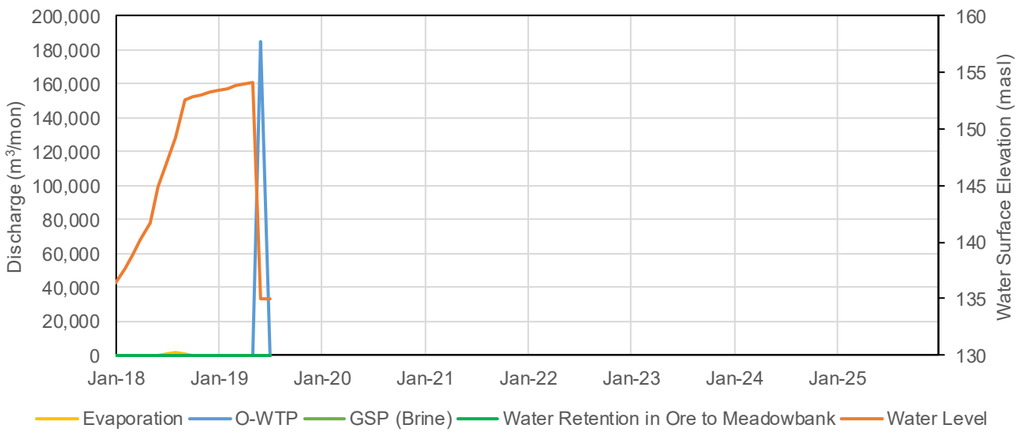

Figure 10: Outflows from Quarry 1 (Construction and Operations)

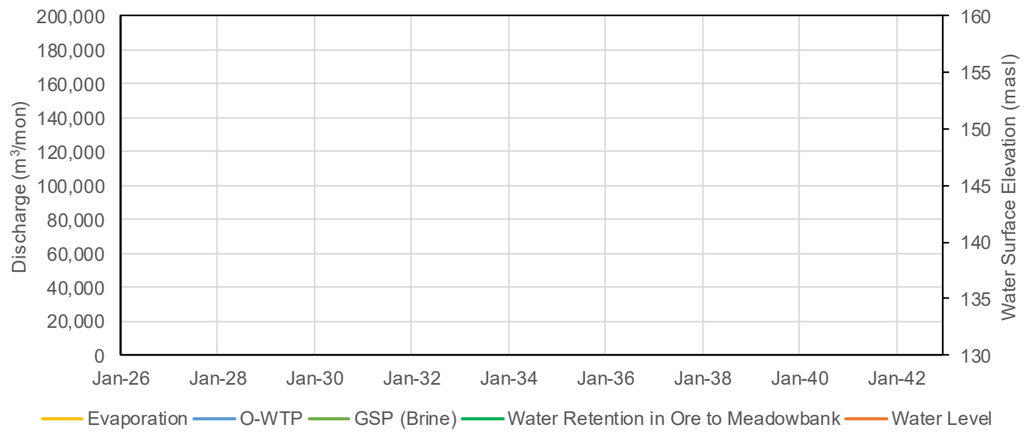

Figure 11: Outflows from Quarry 1 (Closure) – Quarry 1 integrated into the pit, waters report to the pit

3.2 Groundwater Storage Pond System

A Groundwater Storage Pond system (GSP) is designed to capture TDS (salt) affected waters. Three GSPs are planned to provide operational flexibility and adaptive management opportunity. The first pond will be used to store high salinity water from early mining operations through the permafrost, a second pond will be used to store low salinity water and a third pond for contingency. The location of this three-pond system is shown on Figure 1 and described hereafter.

3.2.1 Pond AP-5 / Groundwater Storage Pond (brine)

3.2.1.1 Catchment Characteristics and Water Management

Pond AP-5 / Groundwater Storage Pond for brine is located just northeast of, and drains naturally to, Whale Tail Lake. The pond is excavated and pumped dry prior to 2018 to increase its capacity permanently and manage runoff, consumptive flows, groundwater inflows from the Underground Mine and the S-WTP (brackish) treatment unit brine concentrate reject throughout construction and operations. It is referred to as a Groundwater Storage Pond for brine or GSP (Brine) once operational, and represented by GSP-1 in drawings provided in Appendix B. The purpose of this pond is to manage the high salinity flows from underground at the start of underground mining when a 20% brine is added to drilling water; and to receive the brine concentrate from S-WTP (brackish). This pond will receive excess water from the Whale Tail Attenuation Pond over the winter of 2019-2020 increasing its water level. The pond is subsequently flushed prior to freshet 2020 through the O-WTP to increase its storage capacity for the remainder of operations. An underground storage stope of approximately 10,000 m^3 capacity will also assist in retaining brine until January 2022 when it will be pumped out to this pond.

The salt content of inflows from the Underground Mine is expected to decrease once underground development is advanced below the permafrost, after which drill water brining will stop and groundwater inflows will have a substantially lower natural TDS content (generally less than 1%; Golder 2016). This lower TDS water is managed separately in another Groundwater Storage Pond to manage brackish water, or GSP (brackish water) described in Section 3.2.2.

At closure, the content of the GSP (brine) is drawn down by pumping to flood the Underground Mine, and the empty pond is backfilled with clean (low leachable and non-acid generating (NML/NPAG)) waste rock reducing its storage permanently to zero. Natural drainage patterns are then re-established towards Whale Tail Lake (North Basin) via the Whale Tail Pit.

An overview of the catchment, along with its natural drainage pattern, is provided in Figure 12.

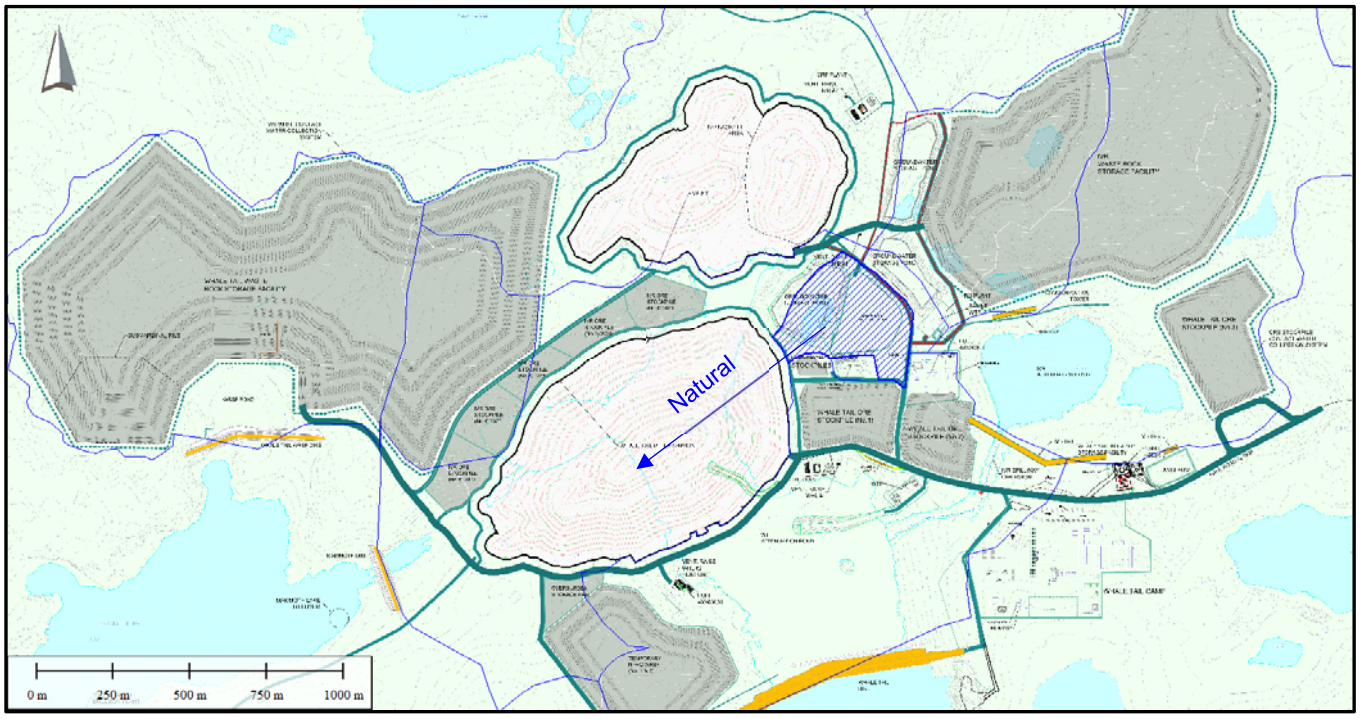

Figure 12: Pond AP-5 / Groundwater Storage Pond (brine) Catchment Overview

Storage characteristics are summarized in Table 4, and elevation-storage-area relationships are provided in Appendix C. Drainage areas of Pond AP-5 / GSP (brine) are summarized in Figure 13 through the Project.

The drainage area of AP-5 / GSP (brine) increases from baseline conditions (0.117 km^2) to 0.128 km^2 from management of the Underground Mine starting in 2018 until the GSP (brackish water) becomes operational in 2022, augmenting the drainage area of the GSP (brine) to 0.162 km^2 until closure, when natural drainage patterns are re-established.

Table 4: Storage Characteristics (Pond AP-5 / Groundwater Storage Pond [brine])

Snapshot	Drainage Area (km^2)	Operating Level		Capacity	
		Water Surface Elevation (masl)	Storage (m^3)	Water Surface Elevation (masl)	Storage (m^3)
Baseline	0.117	160.9	n/a	160.9	n/a
2018 to Closure	0.128 to 0.162	144.0	0	160.9	309,126
Closure to Post-Closure	0.117	160.9	0	160.9	0

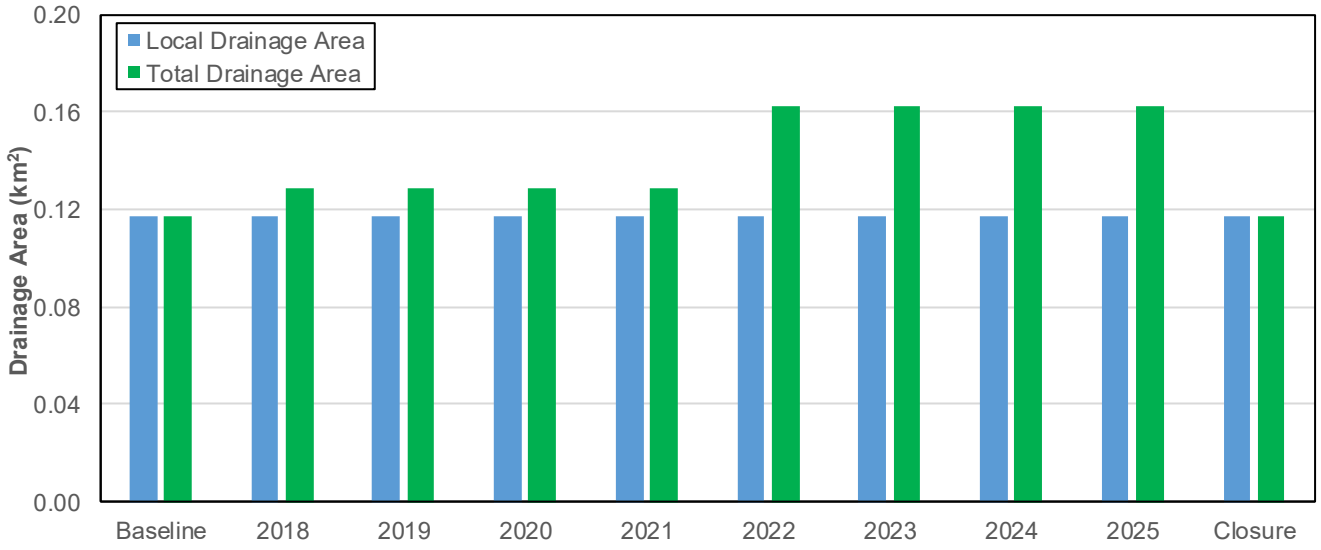

Figure 13: Drainage Area Progression through the Project (Pond AP-5 / Groundwater Storage Pond [brine])

3.2.1.2 Water Balance

Inflows and outflows are summarized in Table 5, and presented in tabular form in Appendix D.

Table 5: Water Balance Flow Components (AP-5 / Groundwater Storage Pond [brine])

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 14 (Construction / Operations) ■ Figure 15 (Closure)	■ Rainfall and SWE 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 waste rock pad	■ Natural drainage	■ 2018	■ Closure	■ Runoff volumes are expected to be proportional to the area of the waste rock pad.
	■ Overflow from the Underground Mine	■ Pump / Pipeline	■ 2018	■ Closure	■ Overflow from the Underground Mine is expected by April 2020 to June 2022. ■ Overflow results primarily from groundwater inflows once the Underground Stope (intended to supplement the capacity of the GSP [brine]) is full (assumed to be 10,000 m^3).
	■ Drawdown from the Underground Stope	■ Pump / Pipeline	■ 2018	■ Closure	■ Drawdown of the Underground Stope in January 2022.
	■ Overflow from the Whale Tail Attenuation Pond	■ Pump / Pipeline	■ Oct 2019	■ May 2020	■ Diverted overflow from the Whale Tail Attenuation Pond during frozen conditions from October 2019 to May 2020.
	■ Brine from the S-WTP (brackish) Unit	■ Pump / Pipeline	■ Oct 2020	■ Closure	■ S-WTP (brackish) brine concentrate reject from treatment of the Whale Tail Attenuation Pond during frozen conditions from October 2020 to May 2021. ■ S-WTP (brackish) brine concentrate reject from treatment of the GSP (brackish water) which collects excess groundwater inflows from the Underground Mine from May 2022 to Closure.
OUTFLOWS					
■ Figure 16 (Construction / Operations) ■ Figure 17 (Closure)	■ Evaporation	■ n/a	■ 2018	■ Closure	■ Evaporative losses expected to be proportional to the water surface area of the GSP (brine). ■ At closure, GSP (brine) is backfilled. It has negligible storage or evaporation potential.
	■ Diversion to the Underground Mine	■ Pump / Pipeline	■ 2018	■ 2021 Level > -275 masl	■ Supplemental consumptive flows to the Underground Mine when elevation of the development of the Underground Mine is shallower than -275 masl (i.e., below the base of the permafrost).
	■ Drawdown to the O-WTP	■ Pump / Pipeline	■ Jun 2020	■ Jun 2020	■ Drawdown of the GSP (brine) to Lake A16 (Mammoth Lake) via the O-WTP in June 2020. ■ Intended to prevent untreated overflow of the GSP (brine) to the receiving environment and dilution of high salinity waters.
	■ Diversion to the S-WTP (brine) Unit	■ Pump / Pipeline	■ 2022 Level < -275	■ Closure	■ Treatment at a rate of 60 m^3/day in 2022. ■ Treatment at a rate of 90 m^3/day from 2023 to closure. ■ Treated water (permeate) is discharged to Whale Tail Lake (South Basin).
	■ Drawdown to the Underground Mine	■ Pump / Pipeline	■ Closure	■ Closure	■ Drawdown of the GSP (brine) to the Underground Mine to expedite refilling of the Underground Mine. ■ Drawdown is expected to be completed in January 2026.
	■ Runoff to Whale Tail Pit	■ Natural drainage	■ Closure	■ Post-Closure	■ Following drawdown, the GSP (brine) is backfilled with clean waste rock and its natural drainage patterns are re-established. ■ The GSP (brine) drains towards Whale Tail Lake via Whale Tail Pit.

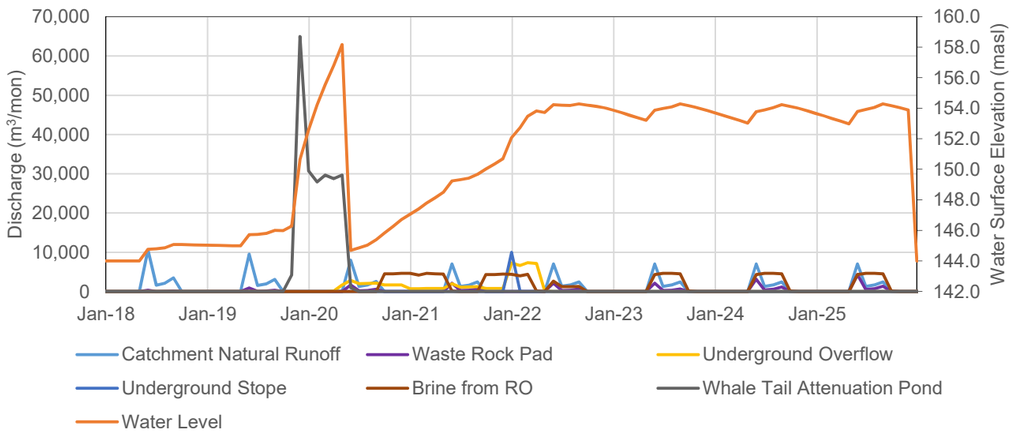

Figure 14: Inflows to AP-5 / Groundwater Storage Pond (brine) (Construction and Operations)

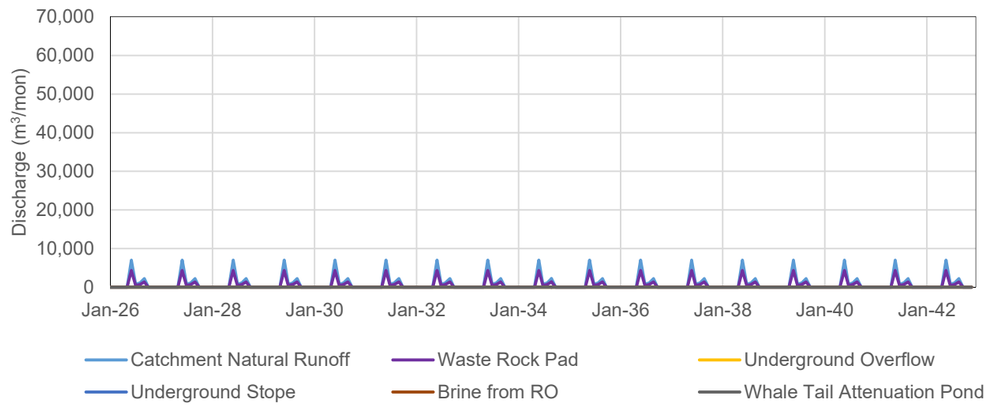

Figure 15: Inflows to the Groundwater Storage Pond (brine) Area (Closure)

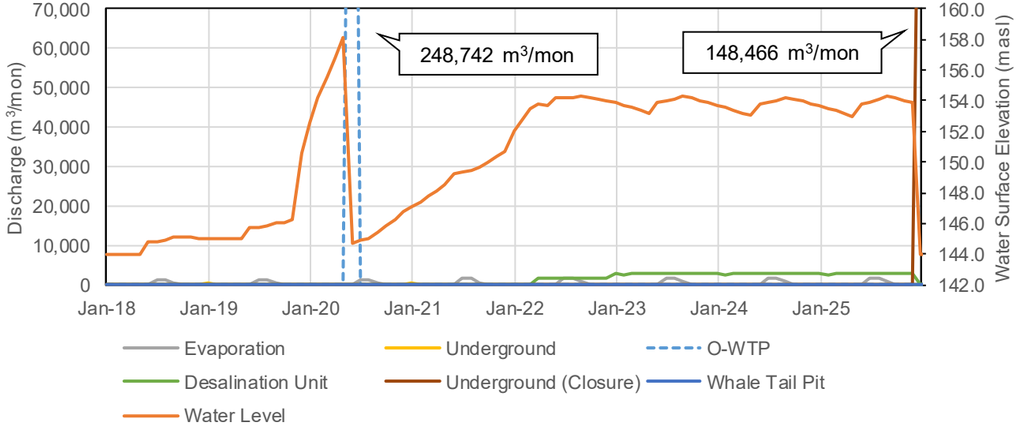

Figure 16: Outflows from AP-5 / Groundwater Storage Pond (brine) (Construction and Operations)

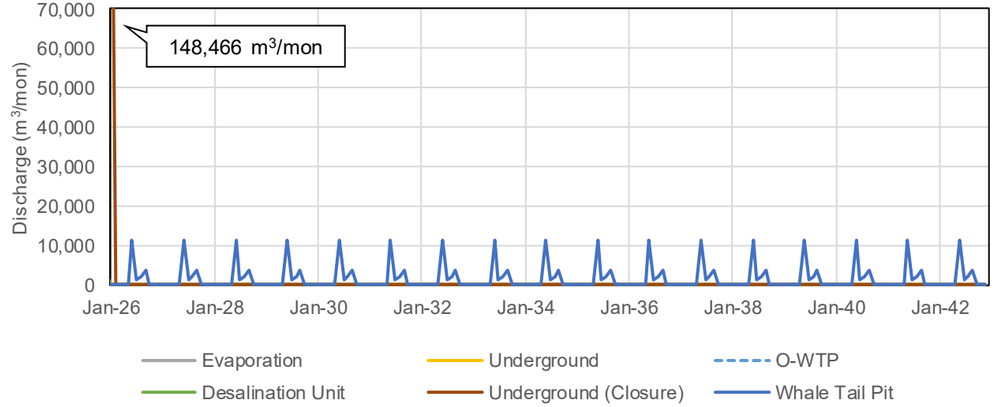

Figure 17: Outflows from the Groundwater Storage Pond (brine) Area (Closure)

3.2.2 Groundwater Storage Pond (brackish water)

3.2.2.1 Catchment Characteristics and Water Management

The catchment of the Groundwater Storage Pond for brackish water (GSP [brackish water]) is located just east of the catchment of the GSP (brine) and naturally drains to Lake A50 or to the IVR WRSF Contact Water Collection System once operational (see Section 3.10). In 2018, the catchment of the GSP (brackish water) is part of the Northeast Sector (see Section 3.3) until Q3 2020 when the IVR Pit is initiated. It then becomes part of the IVR WRSF catchment until the GSP (brackish water) becomes operational in 2022 to manage excess low salinity water from the Underground Mine. Water from this pond is treated through the S-WTP (brackish), producing a brine concentrate sent to the GSP (brine) and a clean water permeate sent to Whale Tail Lake (South Basin) until closure when the GSP (brackish water) is drawn down by pumping to the Underground Mine, backfilled with NML/NPAG waste rock eliminating its water storage capacity, and the natural drainage patterns of the area are re-established.

An overview of the catchment, along with its natural drainage pattern and operational pathways, is provided in Figure 18.

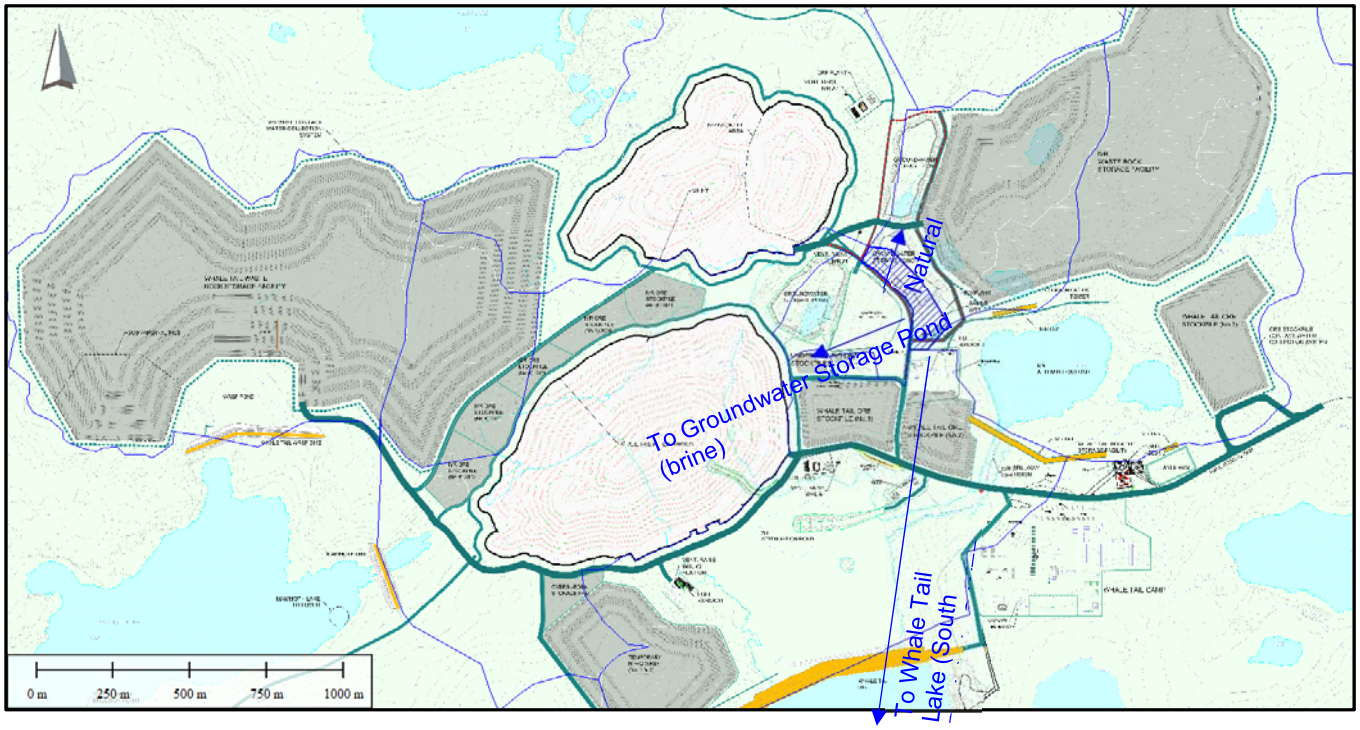

Figure 18: Groundwater Storage Pond (brackish water) Catchment Overview (Approximated)

Storage characteristics, as determined based on this mean annual water balance, are summarized in Table 6. Drainage areas of the GSP (brackish water) are summarized in Figure 19.

The catchment of the GSP (brackish water) is constant at 0.034 km^2.

Table 6: Storage Characteristics (Groundwater Storage Pond for brackish water)

Snapshot	Drainage Area (km^2)	Operating Level		Capacity	
		Water Surface Elevation (masl)	Storage (m^3)	Water Surface Elevation (masl)	Storage (m^3)
Baseline to 2022	0.034	n/a	0	n/a	0
Baseline to Closure	0.034	n/a	200,000*	n/a	200,000*
Closure to Post-closure	0.034	n/a	0	n/a	0

Note: * as determined from storage demands based on the mean annual water balance. The GSP (brackish water) remains to be designed.

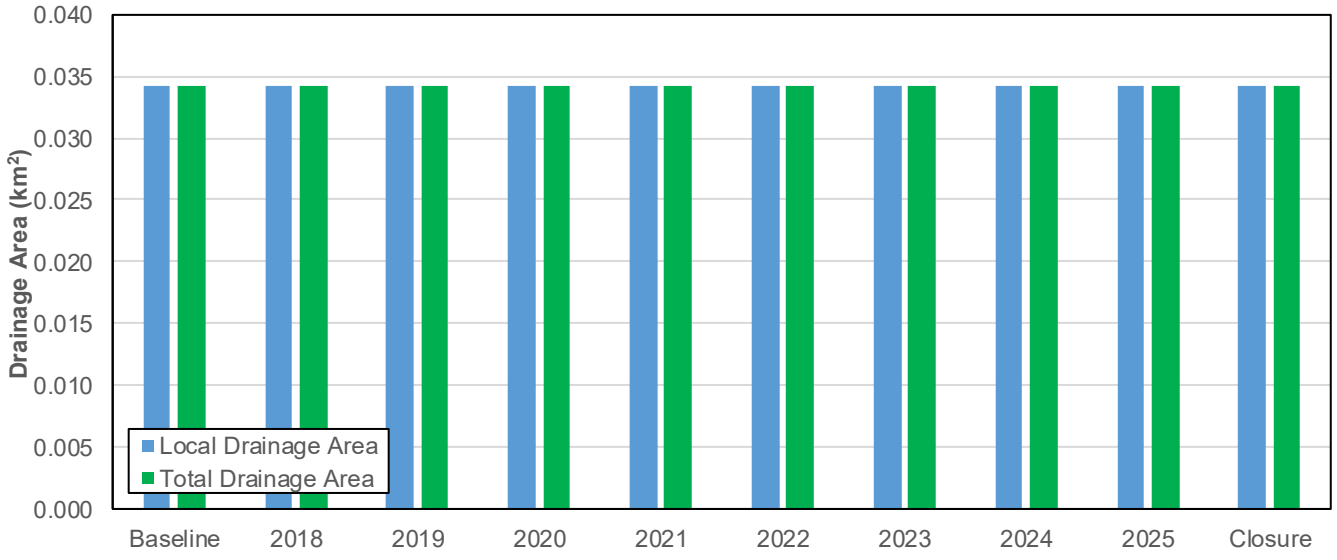

Figure 19: Drainage Area Progression through the Approved and Expansion Project (Groundwater Storage Pond for brackish water)

3.2.2.2 Water Balance

Inflows and outflows are summarized and discussed in Table 7, and presented in tabular form in Appendix D. Based on this mean annual water balance, the GSP (brackish water) requires a minimum capacity of 200,000 m^3.

Table 7: Water Balance Flow Components (Groundwater Storage Pond for brackish water)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 20 (Construction / Operations) ■ Figure 21 (Closure)	■ Watershed runoff	■ Natural drainage	■ 2022	■ Post-Closure	■ Runoff to the GSP (brackish water) catchment. ■ Runoff volumes were estimated assuming a catchment composed of land area only in the absence of a pond design at the time of this report. ■ Annual runoff volumes are expected to be constant. ■ Prior to the initiation of the GSP (brackish water), runoff volumes are accounted for in the Northeast Sector until Q3 2020, and in the IVR WRSF catchment from Q3 2020 to 2022.
	■ Overflow from the Underground Mine Sump	■ Pump / Pipeline	■ 2022	■ Closure	■ Overflow from the Underground Mine Sump when salinity is appropriate to be managed through the GSP (brackish water). ■ Runoff volumes are expected to be consistent with groundwater inflows to the Underground Mine.
OUTFLOWS					
■ Figure 22 (Construction / Operations) ■ Figure 23 (Closure)	■ Diversion to the S-WTP (brackish)	■ Pump / Pipeline	■ 2022	■ Closure	■ Runoff treatment at a maximum rate of 1,000 m^3 per day. ■ Resulting brine concentrate (assumed to be 15% of the treated volume) is conveyed to the GSP (brine). ■ Resulting treated water permeate (assumed to be 85% of the treated volume) is conveyed to Whale Tail Lake (South Basin).
	■ Drawdown to the Underground Mine	■ Pump / Pipeline	■ Closure	■ Closure	■ Drawdown of the GSP (brackish water) to the Underground Mine in January 2026 prior to backfilling.

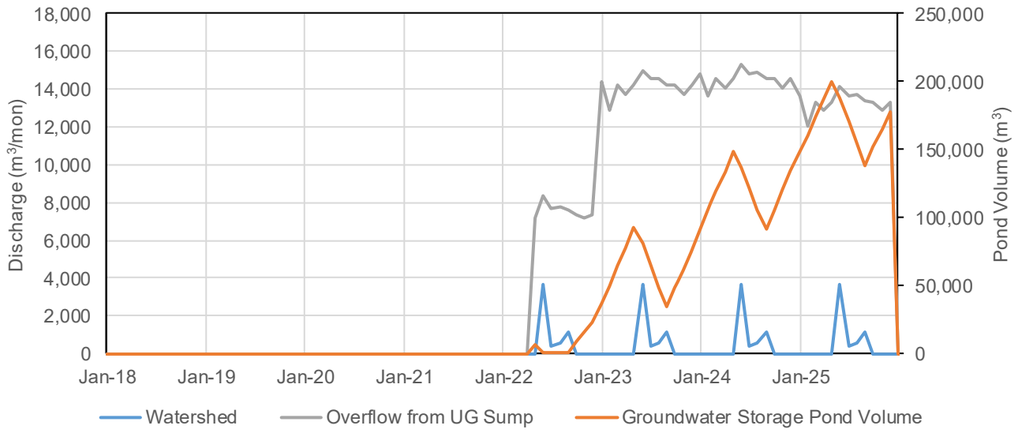

Figure 20: Inflows to the Groundwater Storage Pond for brackish water (Construction and Operations)

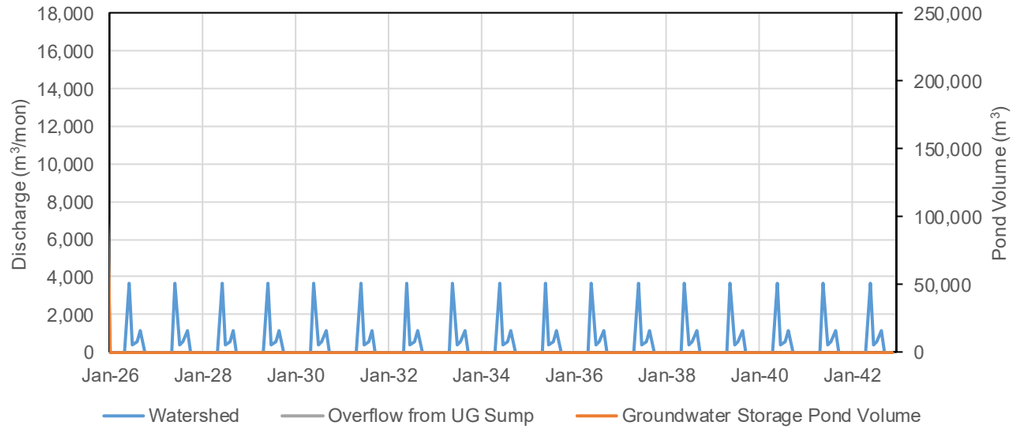

Figure 21: Inflows to the Groundwater Storage Pond (brackish water) (Closure)

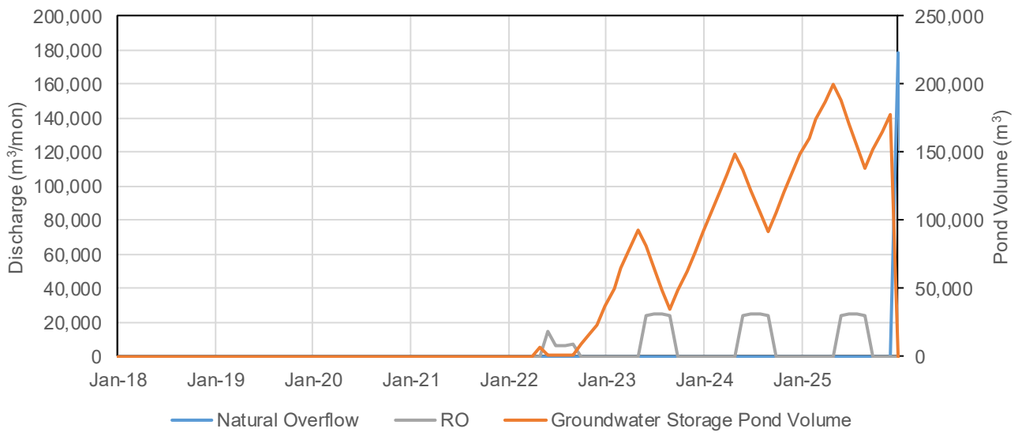

Figure 22: Outflows from the Groundwater Storage Pond for brackish water (Construction and Operations)

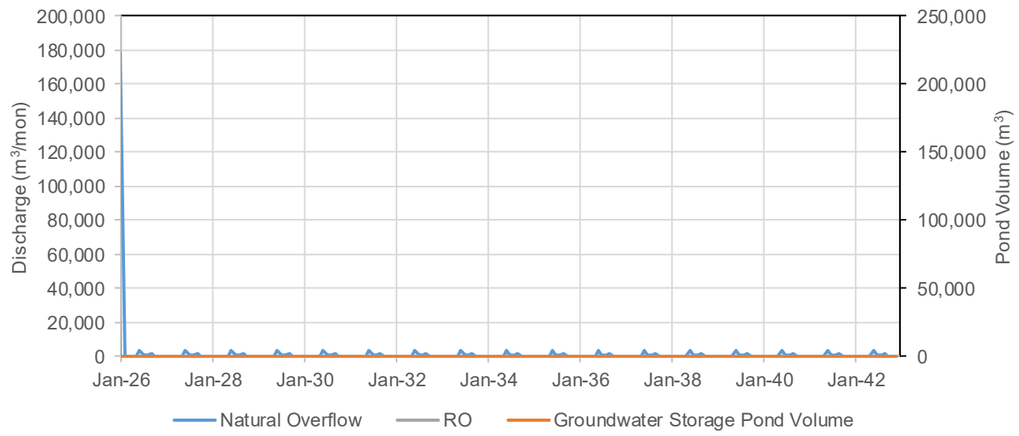

Figure 23: Outflows from the Groundwater Storage Pond (brackish water) (Closure)

3.3 Underground Mine

3.3.1 Catchment Characteristics and Water Management

The catchment of the Underground Mine is located just northeast of, and drains naturally to, Whale Tail Lake. It includes the area south of Pond AP-5 / GSP (brine). Make-up water of the mine is provided by the GSP (brine) (i.e., primary source), or by Lake C38 (Nemo Lake) (i.e., secondary source). Excess water volumes in the mine are managed through the Underground Mine Stope and the GSP (brine) (Section 3.2) for high salinity water, and through the GSP (brackish water) (Section 3.2.2) for low salinity water. Excess water volumes may also be managed with GSP-3 (i.e., one of the three GSPs discussed in Section 3.2, and shown on drawings in Appendix B), planned for contingency, operational flexibility, and adaptive management opportunity.

At closure, the mine is partially backfilled by cemented rock fill and the remaining volume is flooded by water drawn down of the GSP (brine and brackish water), the IVR Attenuation Pond, and Whale Tail Lake (South Basin). Once refilled, its water surface elevation is expected to remain below ground elevation at a maximum elevation of 152.5 masl (i.e., the baseline elevation of Whale Tail Lake) or less, depending on the groundwater regimes.

An overview of the catchment, along with its natural drainage pattern, is provided in Figure 24.

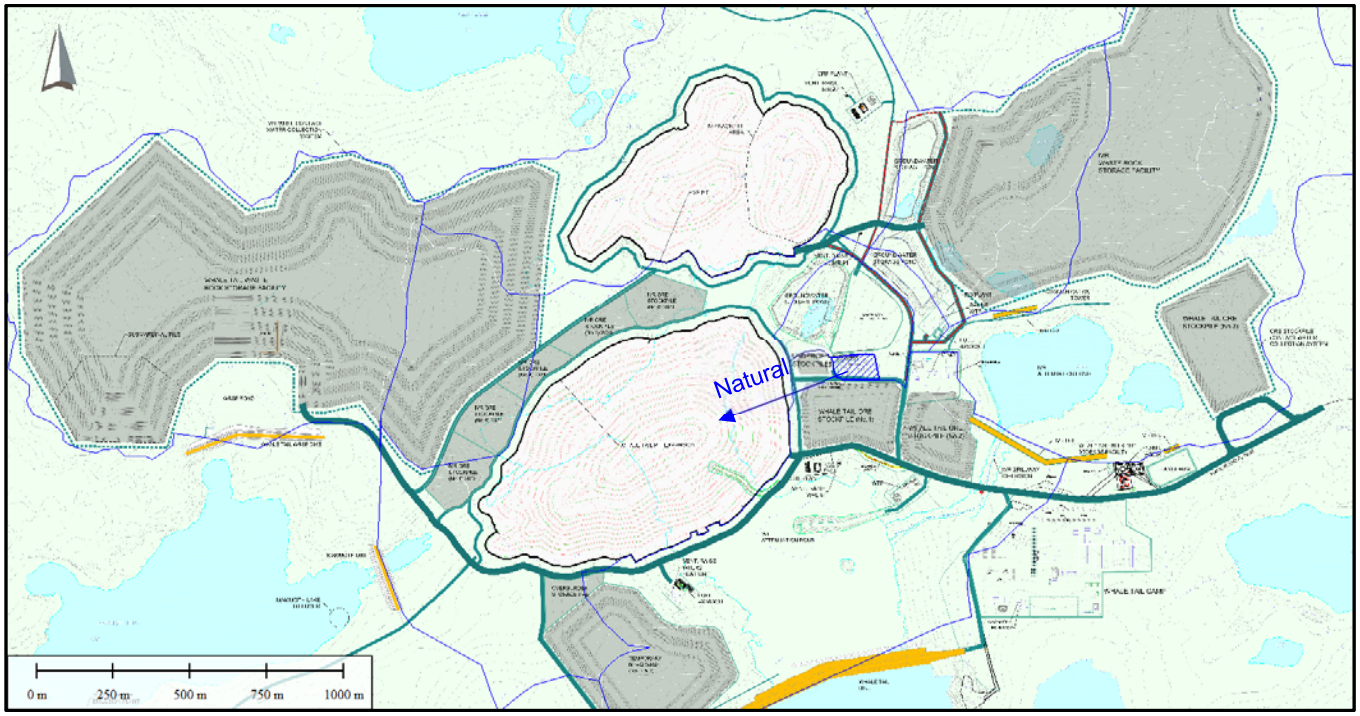

Figure 24: Underground Mine Catchment Overview

Storage characteristics are summarized in Table 8, and elevation-storage-area relationships are provided in Appendix C. Drainage areas of Pond AP-5 / GSP (brine) are summarized in Figure 25.

The drainage area of Underground Mine remains constant at 0.011 km^2.

Table 8: Storage Characteristics (Underground Mine)

Snapshot	Drainage Area (km^2)	Operating Level		Capacity	
		Water Surface Elevation (masl)	Storage (m^3)	Water Surface Elevation (masl)	Storage (m^3)
Baseline to Post-Closure	0.011	-501.10 to 149.00	10,000	149.00	1,268,546*

Note: * Accounts for backfilled volume and is representative of free water volume.

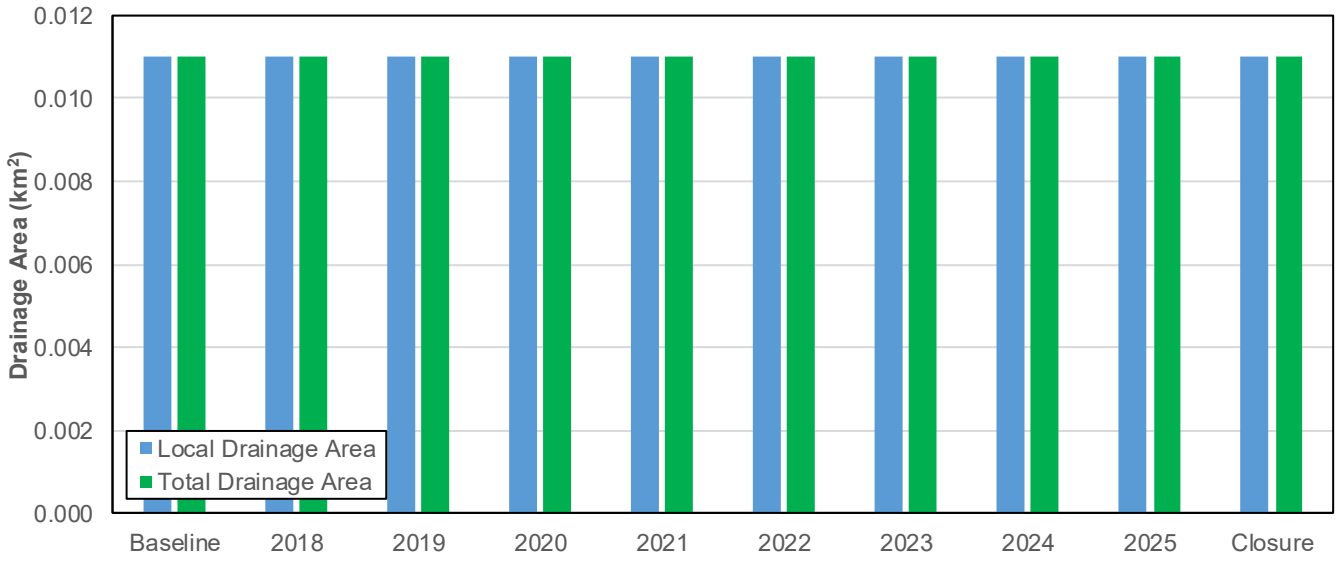

Figure 25: Drainage Area Progression through the Approved and Expansion Project (Underground Mine)

3.3.2 Water Balance

Inflows and outflows are summarized in Table 9, and presented in tabular form in Appendix D.

Table 9: Water Balance Flow Components (Underground Mine)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 26 (Construction / Operations) ■ Figure 27 (Closure)	■ Watershed runoff	■ Natural drainage	■ 2018	■ Post-Closure	■ Annual runoff volumes are expected to be constant.
	■ Groundwater	■ Natural drainage	■ 2020	■ Post-Closure	■ Groundwater inflows are expected by January 2020. ■ Groundwater volumes are expected to increase in 2022, and in 2023, as the mine progresses below the permafrost. ■ Groundwater volumes are expected to decrease slightly in 2025, and further decrease as the mine is refilled.
	■ Diversion from the GSP (brine)	■ Pump / pipeline	■ 2018	■ 2021 Level > -275 masl	■ Make-up water when the elevation of the Underground Mine is shallower than -275 masl. ■ Above this elevation, drilling fluid will be brined to facilitate operations within the permafrost.
	■ Recirculation of consumptive flows	■ Pump / pipeline	■ 2018	■ Closure	■ Recirculation is assumed to be 100%. ■ Consumption is expected to be consistent with the extraction rate of waste rock.
	■ Drawdown of Whale Tail Lake (South Basin)	■ Pump / pipeline	■ Closure	■ Closure	■ Drawdown of Whale Tail Lake (South Basin) from 156.0 masl to 152.5 masl to expedite refilling of the Underground Mine, initiated in May 2026. ■ The Underground Mine is expected to be refilled by May 2026.
	■ Drawdown of the IVR Attenuation Pond	■ Pump / pipeline	■ Closure	■ Closure	■ Drawdown of the IVR Attenuation Pond to expedite refilling of the Underground Mine, initiated in January 2026. ■ The Underground Mine is expected to be refilled by May 2026.
	■ Drawdown of the GSP (brine)	■ Pump / pipeline	■ Closure	■ Closure	■ Drawdown of the GSP (brine) to expedite refilling of the Underground Mine, initiated in January 2026. ■ The Underground Mine is expected to be refilled by May 2026.
	■ Drawdown of the GSP (brackish water)	■ Pump / pipeline	■ Closure	■ Closure	■ Drawdown of the GSP (brackish water) to expedite refilling of the Underground Mine, initiated in January 2026. ■ The Underground Mine is expected to be refilled by May 2026.
OUTFLOWS					
■ Figure 28 (Construction / Operations) ■ Figure 29 (Closure)	■ Recirculation of consumptive flows	■ Pump / pipeline	■ 2018	■ Post-Closure	■ Recirculation is assumed to be 100%. ■ Consumption is expected to be consistent with the extraction rate of waste rock.
	■ Groundwater	■ Natural drainage	■ Closure	■ Post-Closure	■ Annual losses to groundwater are expected to be constant once the Underground Mine is refilled.
	■ Diversion to the Underground Mine Stope	■ Pump / pipeline	■ 2018	■ 2020	■ Volumes exceeding the capacity of the Underground Mine sump are managed through the Underground Mine Stope. ■ The Underground Mine Stope is expected to be full by April 2020.
	■ Water content in waste rock	■ n/a	■ 2018	■ 2025	■ Volumes are expected to be consistent with the extraction rate of waste rock. ■ Water content of waste rock to surface was assumed to be 3% by weight.
	■ Diversion to the GSP (brackish water)	■ Pump / pipeline	■ 2022	■ Closure	■ Overflow of low salinity water from the Underground Mine Sump when the elevation of development is deeper than -275 masl. ■ Water volumes are expected to be consistent with groundwater inflows to the Underground Mine.
	■ Diversion to the GSP (brine)	■ Pump / pipeline	■ 2018	■ Closure	■ Overflow from the Underground Mine sump diverted to the GSP (brine) is expected by April 2020 once the Stope is full, on-going until May 2022 when salinity is appropriate to be managed through the GSP (brackish water) thereafter.

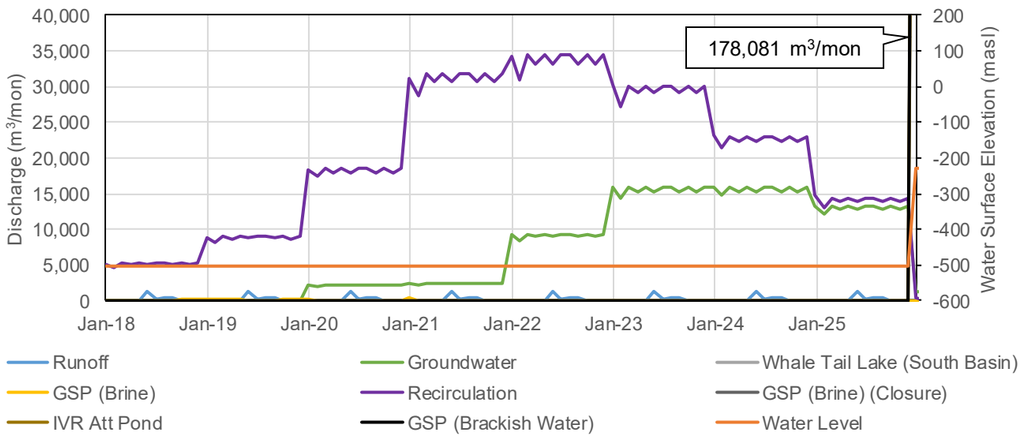

Figure 26: Inflows to Underground Mine (Construction and Operations)

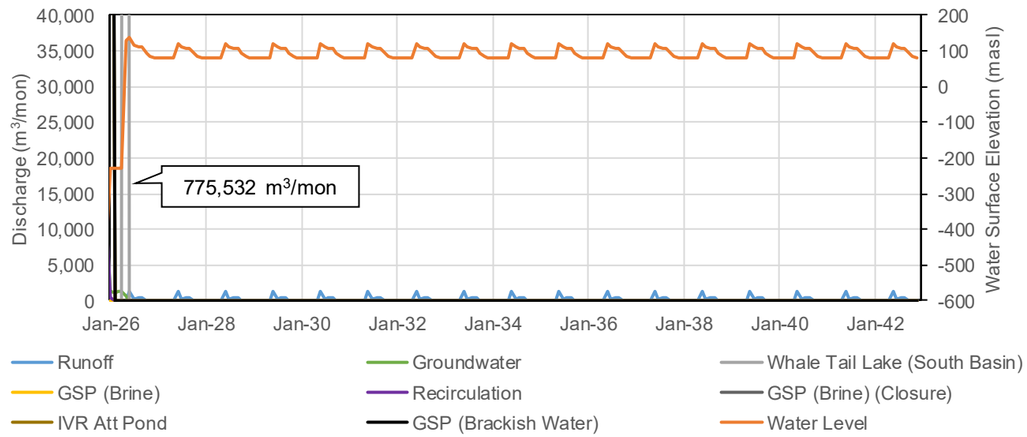

Figure 27: Inflows to Underground Mine (Closure)

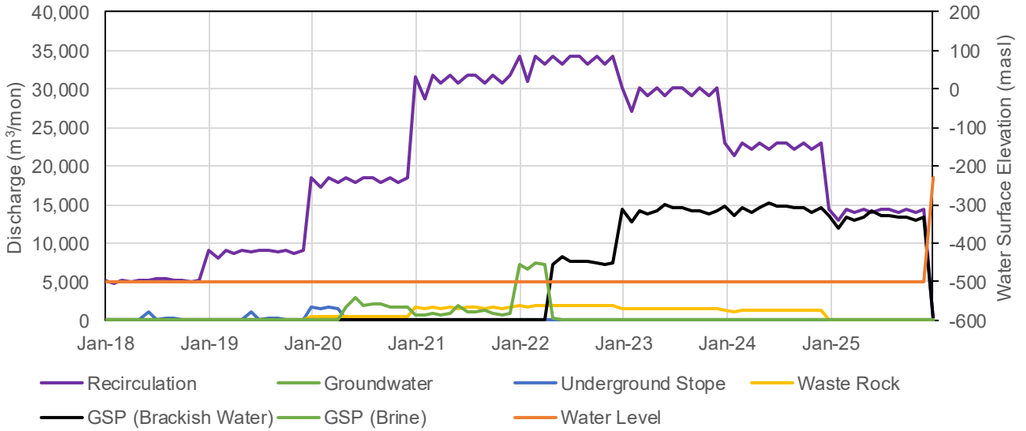

Figure 28: Outflows from Underground Mine (Construction and Operations)

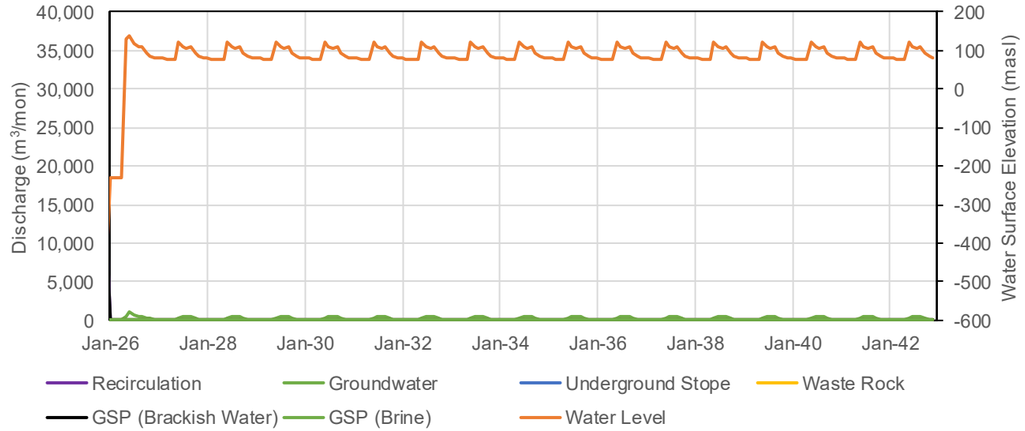

Figure 29: Outflows from Underground Mine (Closure)

3.4 Northeast Sector

3.4.1 Catchment Characteristics and Water Management

The Northeast Sector consists of the catchment upstream of the Northeast Dike, initiated in January 2019, just north of Whale Tail Lake. Prior to January 2019, runoff from the Northeast Sector drains naturally into Whale Tail Lake (North Basin). Runoff from the Northeast Sector is diverted to Lake A16 (Mammoth Lake) via the C- WTP and O-WTP (as available) from January 2019 to July 2020, prior to the initiation of the IVR Pit. Once the IVR Pit is initiated, the Northeast Sector is reduced to the catchment upstream of the IVR Diversion, and diverted to Lake C38 (Nemo Lake) until closure. At closure, the IVR Diversion is decommissioned thereby re-establishing drainage patterns towards Whale Tail Lake (North Basin) via the IVR Pit during refilling.

An overview of the catchment, along with its natural drainage pattern and its operational pathways, is provided in Figure 30.

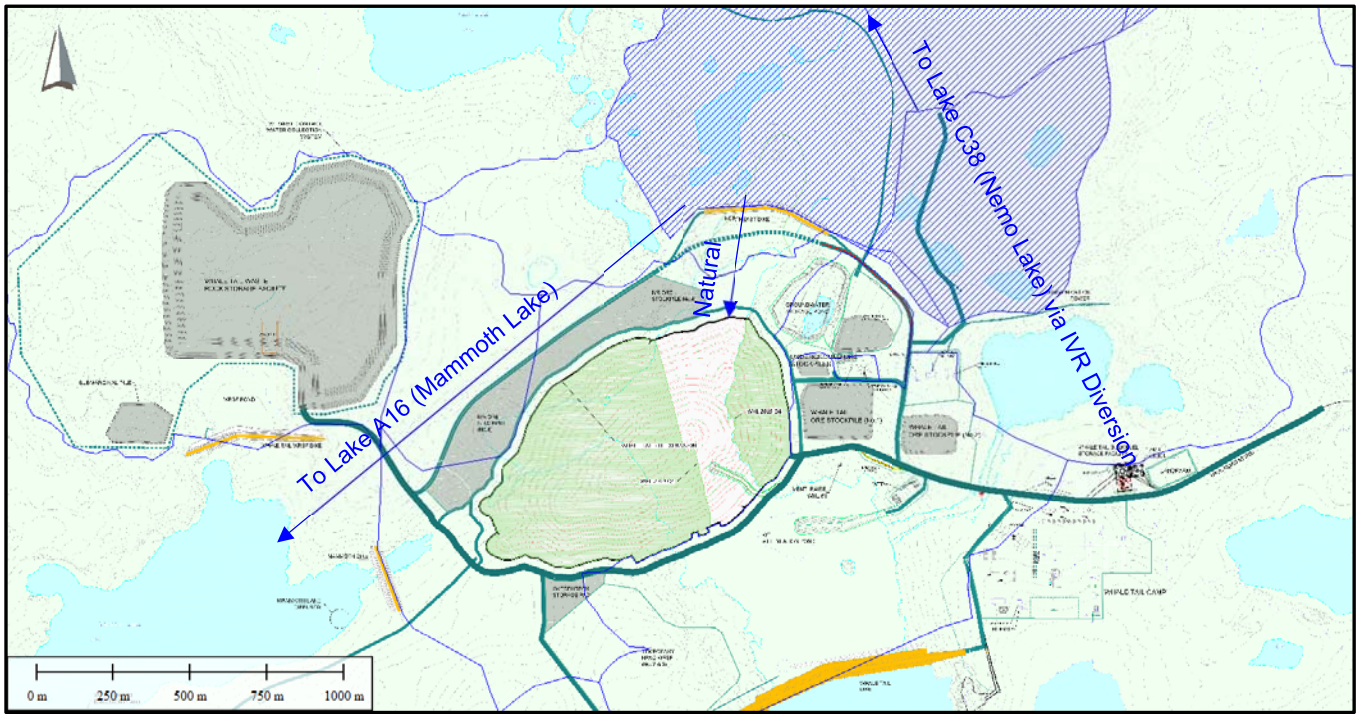

Figure 30: Northeast Sector Catchment Overview

Storage characteristics are summarized in Table 10. Drainage areas of the Northeast Sector are summarized in Figure 31.

The Northeast Sector has a drainage area of 2.13 km^2 until the IVR Pit is initiated in July 2020. It is then reduced to the drainage area of the IVR Diversion, to 0.643 km^2.

Table 10: Storage Characteristics (Northeast Sector)

Snapshot	Drainage Area (km^2)	Operating Level		Capacity	
		Water Surface Elevation (masl)	Storage (m^3)	Water Surface Elevation (masl)	Storage (m^3)
Baseline to July 2020	2.13	n/a	0	n/a	0
July 2020 to Post-Closure	0.643	n/a	0	n/a	0

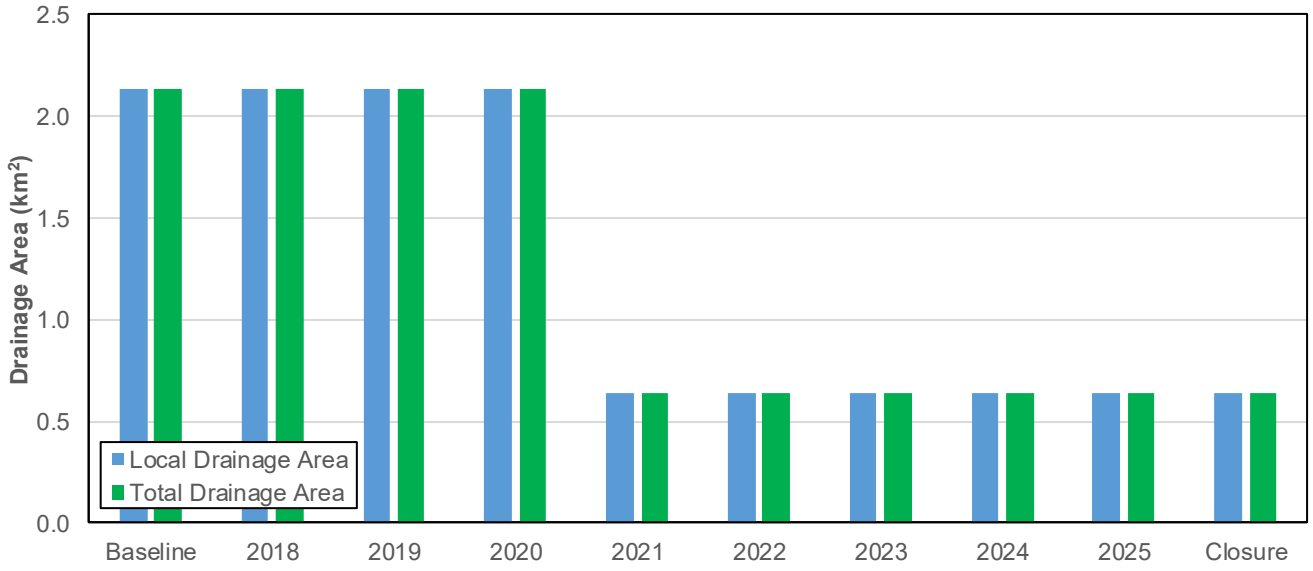

Figure 31: Drainage Area Progression through the Approved and Expansion Project (Northeast Sector)

3.4.2 Water Balance

Inflows and outflows are summarized in Table 11, and presented in tabular form in Appendix D.

Table 11: Water Balance Flow Components (Northeast Sector)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 32 (Construction / Operations) ■ Figure 33 (Closure)	■ Runoff from Lake A49	■ Natural drainage	■ 2018	■ July 2020	■ The Lake A49 sub-watershed becomes part of the IVR Pit watershed once the IVR Pit is initiated in July 2020, and is no longer part of the Northeast Sector.
	■ Rainfall and SWE runoff	■ Natural drainage	■ 2018	■ Post-Closure	■ Runoff volumes are expected to be proportional to the catchment area of the Northeast Sector. The catchment area of the Northeast Sector decreases once the IVR Pit is initiated in July 2020.
OUTFLOWS					
■ Figure 34 (Construction / Operations) ■ Figure 35 (Closure)	■ Evaporation	■ n/a	■ 2018	■ July 2020	■ Evaporative losses are expected to be proportional to the collective waterbody areas of the Northeast Sector. There are no waterbodies in the Northeast Sector once the IVR Pit is initiated in July 2020.
	■ Runoff to Whale Tail Lake (North Basin)	■ Natural drainage	■ 2018	■ 2019	■ Natural runoff to Whale Tail Lake (North Basin) until the Whale Tail Dike is operational.
	■ Runoff diversion to Lake A16 (Mammoth Lake)	■ Pump / Pipeline	■ 2019	■ July 2020	■ Runoff diversion to Lake A16 (Mammoth Lake) via the C-WTP and O-WTP once the Whale Tail Dike is operational until the IVR Pit is initiated.
	■ Runoff diversion to Lake C38 (Nemo Lake)	■ Channel	■ July 2020	■ Closure	■ Runoff diversion to Lake C38 (Nemo Lake) following the initiation of the IVR Pit once the IVR Diversion is operational and prior to Closure.
	■ Runoff to Whale Tail Lake (North Basin) via the IVR Pit	■ Natural drainage	■ Closure	■ Post-Closure	■ The IVR Diversion is decommissioned at Closure, and natural drainage patterns towards Whale Tail Lake (North Basin) are re-established.

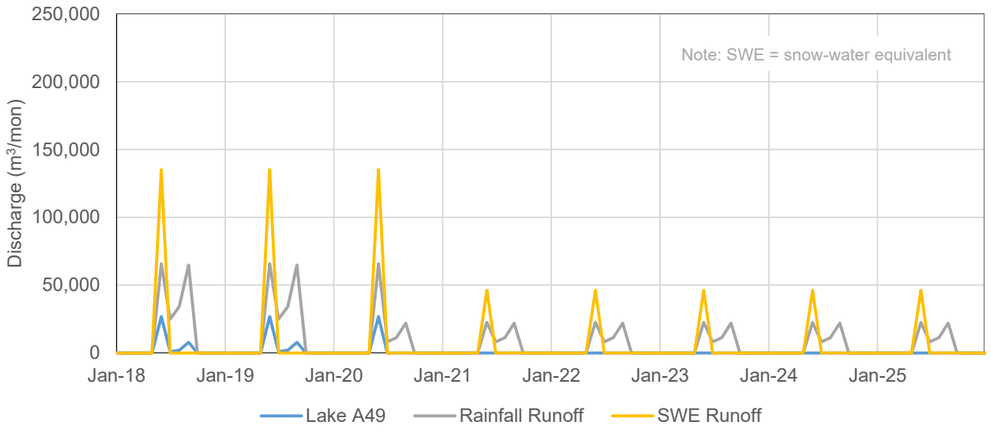

Figure 32: Inflows to the Northeast Sector (Construction and Operations)

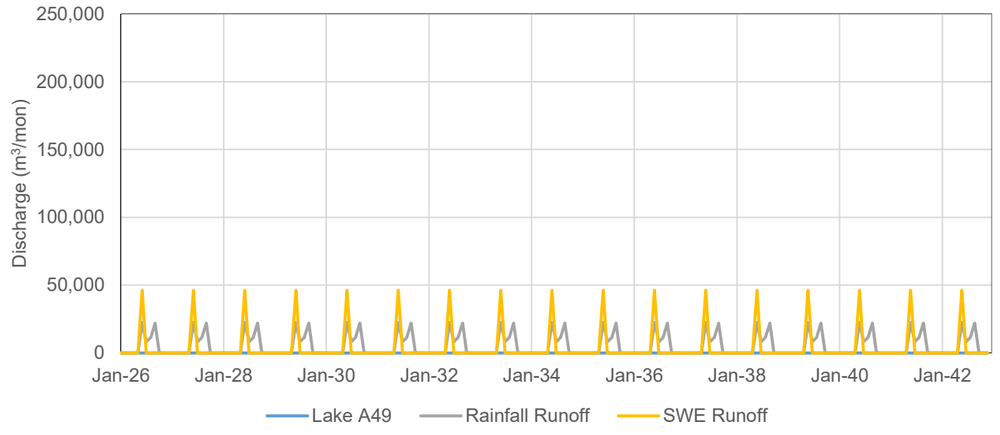

Figure 33: Inflows to the Northeast Sector (Closure)

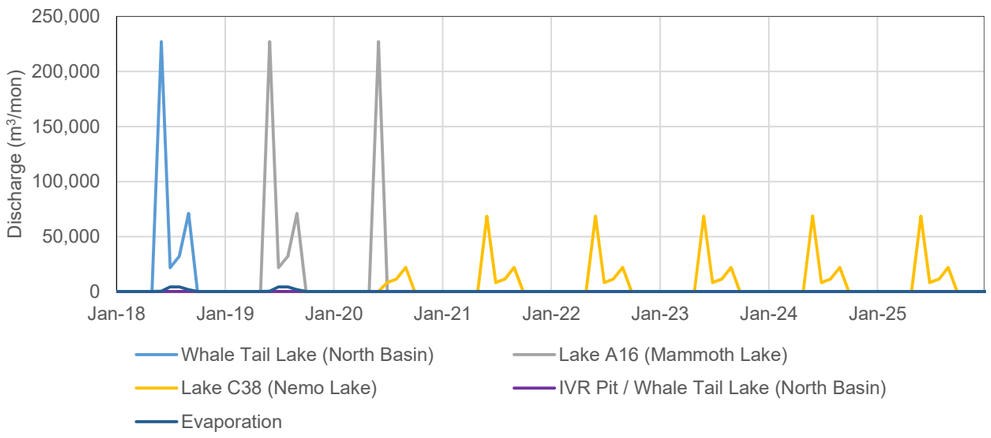

Figure 34: Outflows from the Northeast Sector (Construction and Operations)

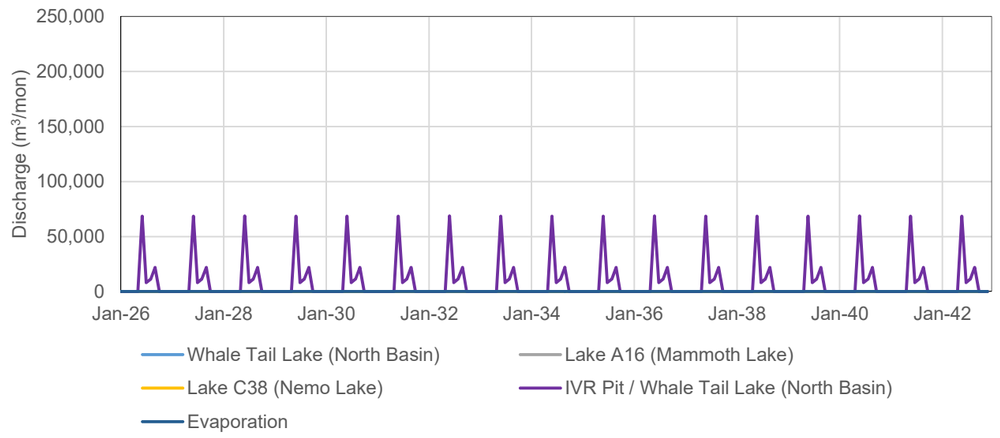

Figure 35: Outflows from the Northeast Sector (Closure)

3.5 Whale Tail Waste Rock Storage Facility Contact Water Collection System

3.5.1 Catchment Characteristics and Water Management

The catchment of the Whale Tail Waste Rock Storage Facility (WRSF) Contact Water Collection System is located in the northern headwaters of the Lake A16 (Mammoth Lake) catchment. Its runoff drains naturally to Lake A16 (Mammoth Lake) until Licence A is received (assumed to be in Q3 2018) when runoff is collected in a temporary sump and diverted to Quarry 1 until the Whale Tail Attenuation Pond becomes operational in 2019 (following construction of the Whale Tail WRSF Dike at the end of 2018). Runoff from the Whale Tail WRSF and catchment area is then collected in the Whale Tail WRSF Contact Water Collection System, diverted to the Whale Tail Attenuation Pond from 2019 to 2022 (i.e., when the IVR Attenuation Pond becomes operational), and to the IVR Attenuation Pond from 2022 to closure. At closure, runoff is diverted to the IVR Pit to expedite refilling of the pit and of Whale Tail Lake (North Basin). Natural drainage patterns are re-established at Post-Closure if water quality criteria are met (i.e., the assumed scenario in this water balance). Alternatively, collected runoff could be conveyed to Whale Tail Lake (North Basin).

An overview of the Whale Tail WRSF catchment, along with its natural drainage pattern and operational and closure pathways, is provided in Figure 36.

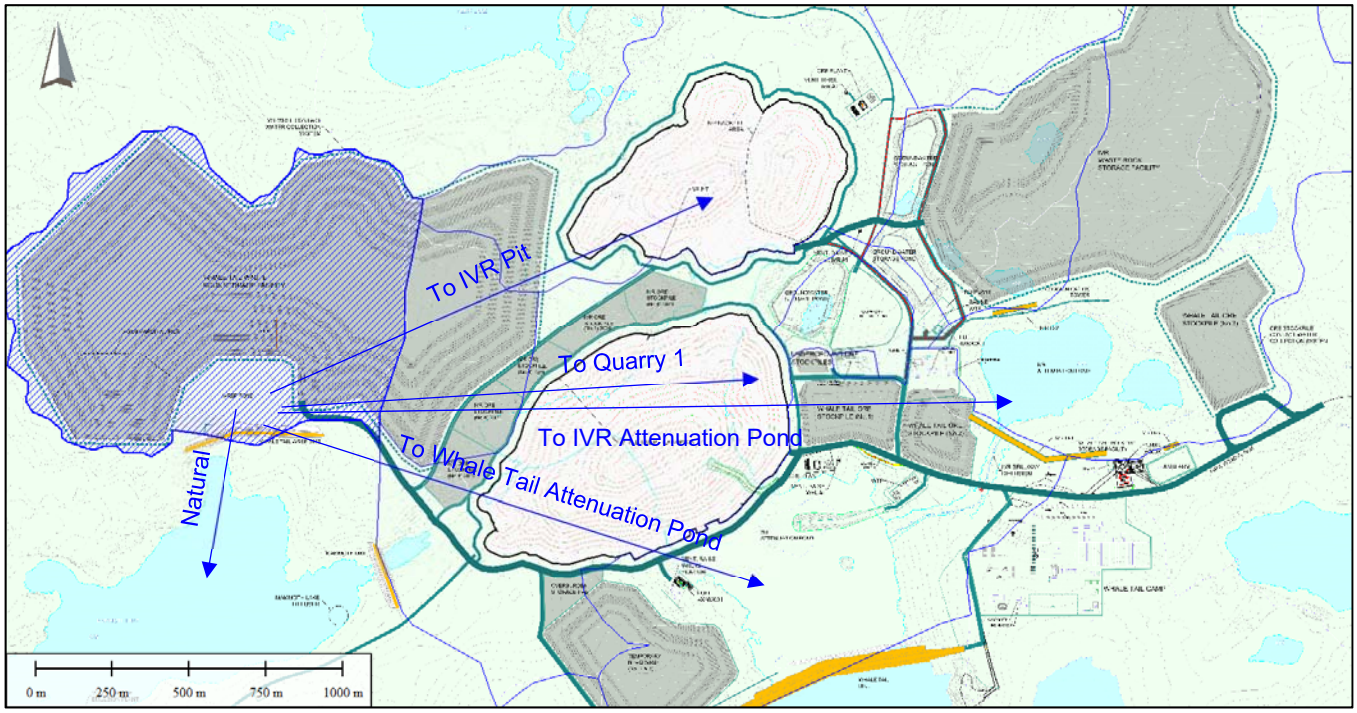

Figure 36: Whale Tail Waste Rock Storage Facility Contact Water Collection System Catchment Overview

Storage characteristics are summarized in Table 12 and elevation-storage-area relationships are presented in Appendix C. Drainage areas of the Northeast Sector are summarized in Figure 37.

The Whale Tail WRSF has a drainage area of 1.10 km^2. Its storage capacity increases in the form of the Whale Tail WRSF Contact Water Collection System once the WRSF Dike is constructed.

Table 12: Storage Characteristics (Whale Tail WRSF Contact Water Collection System)

Snapshot	Drainage Area (km^2)	Operating Level		Capacity	
		Water Surface Elevation (masl)	Storage (m^3)	Water Surface Elevation (masl)	Storage (m^3)
Baseline to October 2018	1.10	n/a	n/a	n/a	n/a
October 2018 to Post-Closure	1.10	153.2 to 154.0	0 to 11,631	154.0	11,631

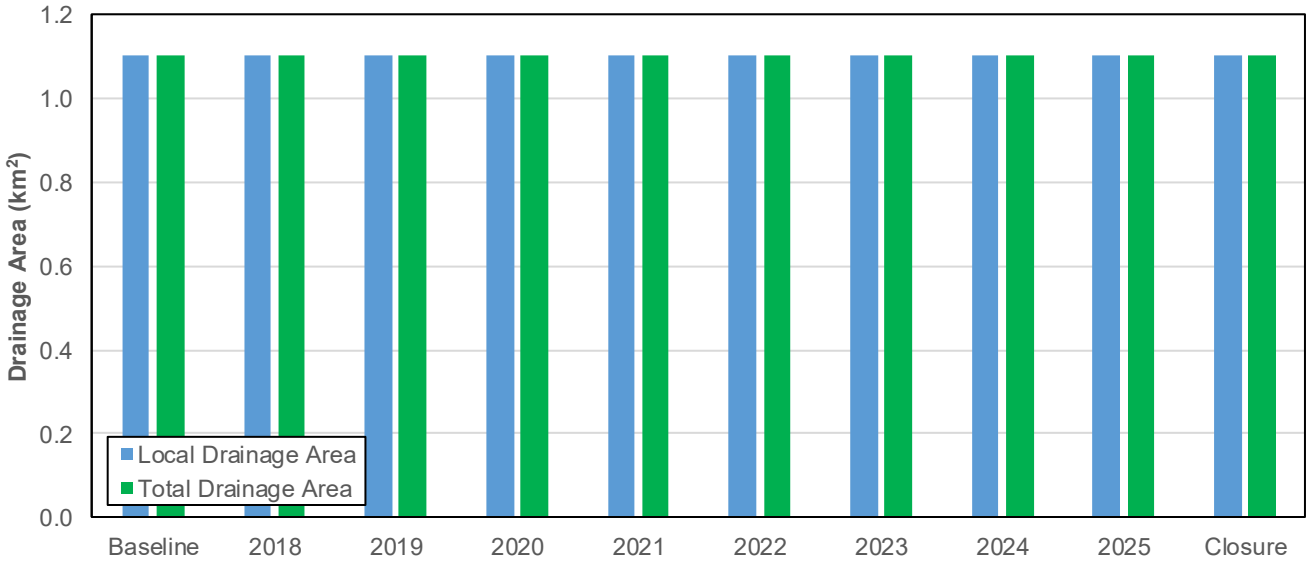

Figure 37: Drainage Area Progression through the Approved and Expansion Project (Whale Tail WRSF Contact Water Collection System)

3.5.2 Water Balance

Inflows and outflows are summarized in Table 13, and presented in tabular form in Appendix D.

Table 13: Water Balance Flow Components (Whale Tail WRSF Contact Water Collection System)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 38 (Construction / Operations) ■ Figure 39 (Closure)	■ Rainfall and SWE 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. ■ The freezing frequency of the outer layer of the Whale Tail WRSF is expected increase during closure, increasing runoff volumes.
	■ Seepage from the Whale Tail WRSF	■ Natural drainage	■ 2034	■ Post-Closure	■ The field capacity of the active layer of the Whale Tail WRSF is expected to be exceeded by 2034, resulting in seepage.
OUTFLOWS					
■ Figure 40 (Construction / Operations) ■ Figure 41 (Closure)	■ Runoff to Lake A16 (Mammoth Lake)	■ Natural drainage	■ 2018 ■ Post-Closure	■ Q3 2018 ■ Post-Closure	■ Natural drainage to Lake A16 (Mammoth Lake) until Licence A is received. ■ Natural drainage to Lake A16 (Mammoth Lake) at Post-Closure.
	■ Runoff diversion to Quarry 1	■ Pump / Pipeline	■ Q3 2018	■ 2019	■ Runoff diversion to Quarry 1 once Licence A is received until the Whale Tail Attenuation Pond becomes operational.
	■ Runoff diversion to Whale Tail Attenuation Pond	■ Pump / Pipeline	■ 2019	■ 2022	■ Runoff diversion to the Whale Tail Attenuation Pond once operational until the IVR Attenuation Pond becomes operational. ■ Runoff volumes are expected to be inversely proportional to the footprint of the Whale Tail WRSF which reaches its maximum footprint in 2021.
	■ Runoff diversion to IVR Attenuation Pond	■ Pump / Pipeline	■ 2022	■ Closure	■ Runoff diversion to the IVR Attenuation Pond once operational, until closure. ■ Annual runoff volumes are expected to be constant.
	■ Runoff diversion to Whale Tail Lake (North Basin) via IVR Pit	■ Pump / Pipeline	■ Closure	■ Post-Closure	■ Runoff diversion to Whale Tail Lake (North Basin) via IVR Pit to expedite refilling of the pit. ■ Runoff volumes are expected to increase from operations once freezing of the outer layer of the Whale Tail WRSF become more frequent at closure. ■ Runoff volumes are further expected to increase from seepage inflows from the Whale Tail WRSF starting in 2034.
	■ 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.

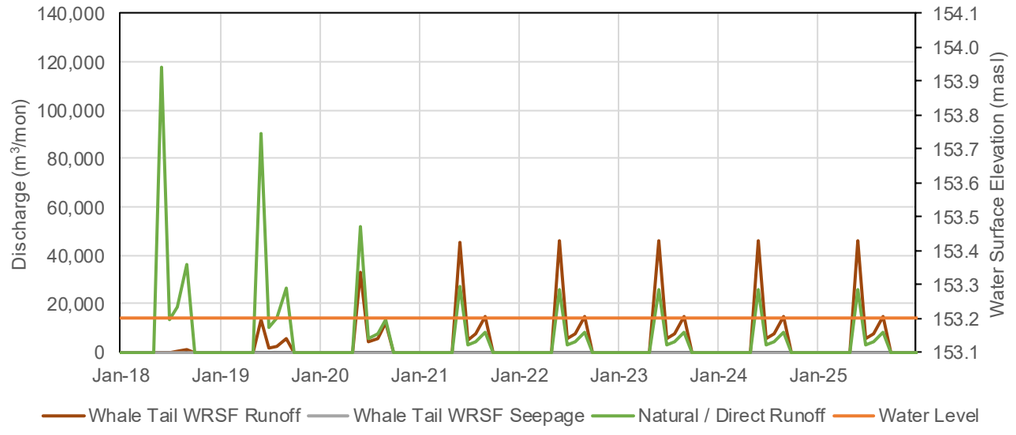

Figure 38: Inflows to the Whale Tail WRSF Contact Water Collection System (Construction and Operations)

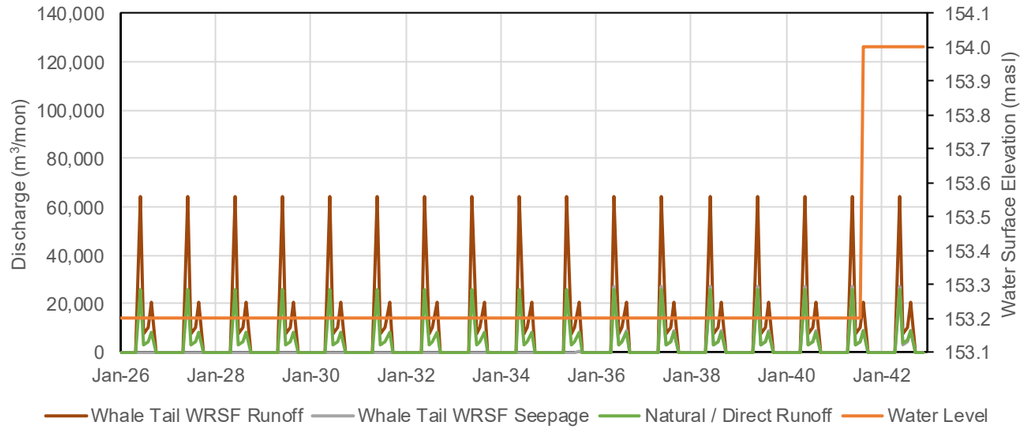

Figure 39: Inflows to the Whale Tail WRSF Contact Water Collection System (Closure)

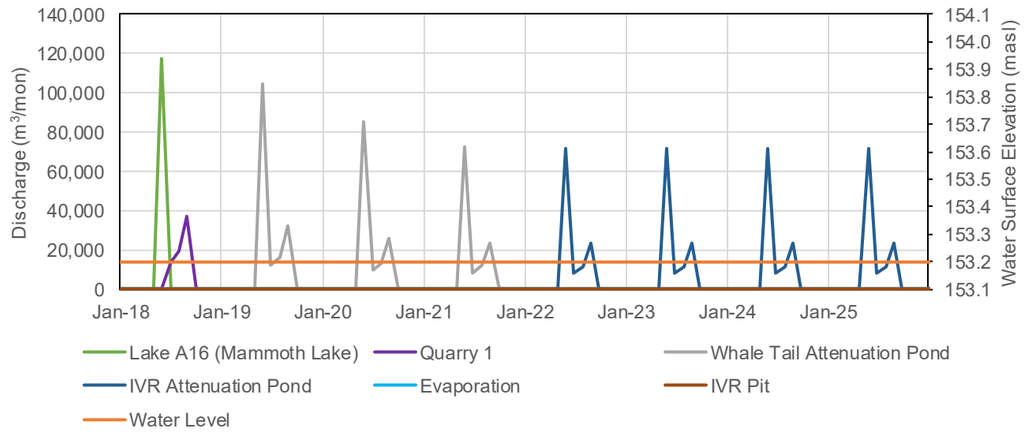

Figure 40: Outflows from the Whale Tail WRSF Contact Water Collection System (Construction and Operations)

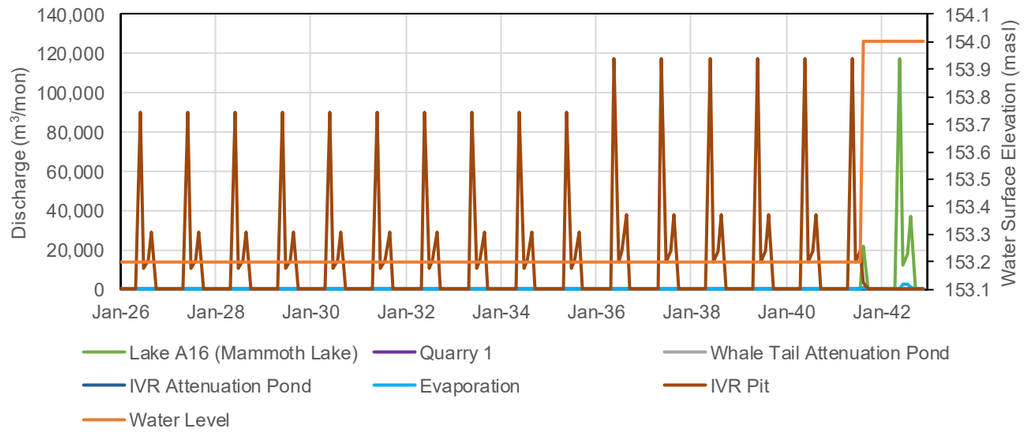

Figure 41: Outflows from the Whale Tail WRSF Contact Water Collection System (Closure)

3.6 North Sector

3.6.1 Catchment Characteristics and Water Management

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 becomes operational once Whale Tail Lake (North Basin) is dewatered in 2019, and is intended to collect and convey contact water draining from the portion of the Whale Tail WRSF encroaching on the Whale Tail Lake (North Basin) watershed starting in 2021, to the active attenuation pond (i.e., either the Whale Tail Attenuation Pond or the IVR Attenuation Pond). 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.

An overview of the sector, along with its natural drainage pattern and operational pathways, is provided in Figure 42.

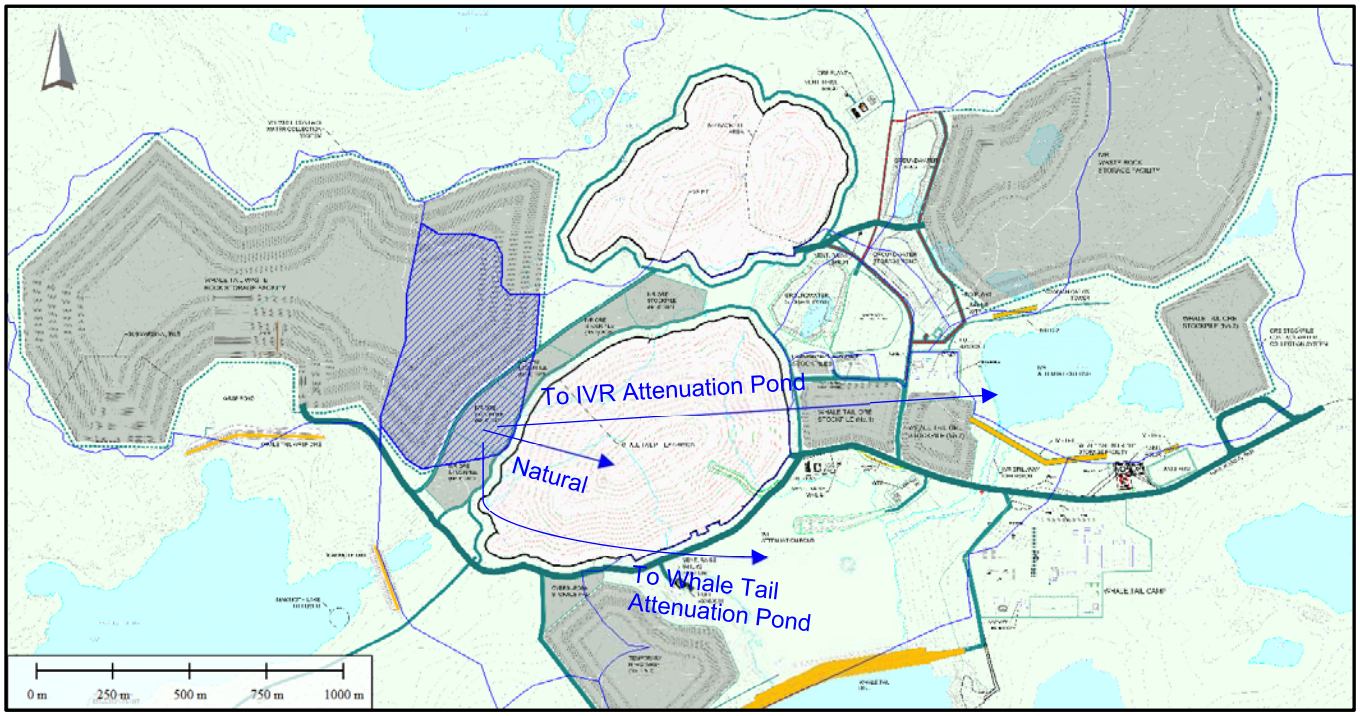

Figure 42: North Sector Catchment Overview

Storage characteristics are summarized in Table 14. Drainage areas of the North Sector are summarized in Figure 43.

The North Sector collection area has a drainage area of 0.289 km^2 and was assumed to have no storage in the water balance.

Table 14: Storage Characteristics (North Sector)

Snapshot	Drainage Area (km^2)	Operating Level		Capacity	
		Water Surface Elevation (masl)	Storage (m^3)	Water Surface Elevation (masl)	Storage (m^3)
Baseline to Closure	0.289	n/a	0	n/a	0

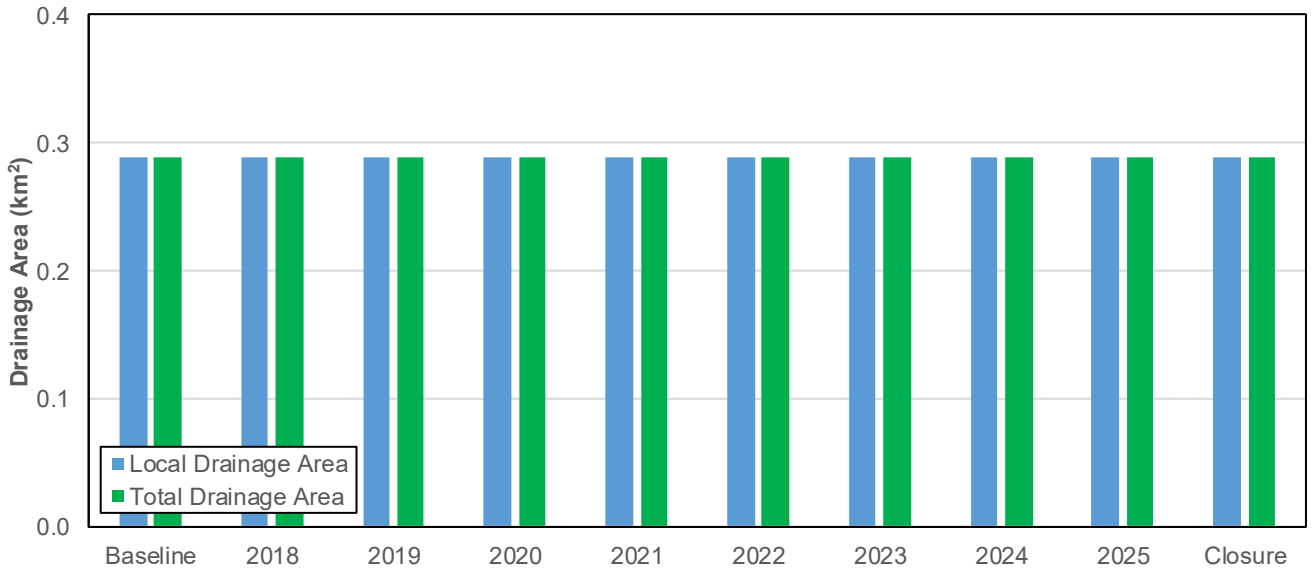

Figure 43: Drainage Area Progression through the Approved and Expansion Project (North Sector)

3.6.2 Water Balance

Inflows and outflows are summarized in Table 15, and presented in tabular form in Appendix D.

Table 15: Water Balance Flow Components (North Sector)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 44 (Construction / Operations) ■ Figure 45 (Closure)	■ Rainfall and SWE 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 encroaching on the North Sector / Sump watershed from 2021 until the end of operations. ■ Runoff volumes in closure are expected to increase from runoff volumes at the end of operations, due to the use of the NML/NPAG waste rock as cover material, thereby restoring some of the natural land.
	■ Runoff from the Whale Tail WRSF	■ Natural drainage	■ 2021	■ Post-Closure	■ Runoff volumes are expected to be proportional to the footprint of the Whale Tail WRSF encroaching on the North Sector / Sump watershed from 2021 until the end of operations. ■ A net decrease in runoff volumes is expected in closure from runoff volumes at the end of operations, due to: i) the use of the NML/NPAG waste rock as cover material, thereby restoring some of the natural land; and, ii) the freezing frequency of the outer layer of the Whale Tail WRSF, expected to increase thereby increasing runoff volumes.
	■ Seepage from the Whale Tail WRSF	■ Natural drainage	■ 2034	■ Post-Closure	■ The field capacity of the active layer of the Whale Tail WRSF is expected to be exceeded by 2034, resulting in seepage.
OUTFLOWS					
■ Figure 46 (Construction / Operations) ■ Figure 47 (Closure)	■ Runoff to Whale Tail Lake (North Basin)	■ Natural drainage	■ 2018	■ 2019	■ Natural drainage to Whale Tail Lake (North Basin) until the Whale Tail Attenuation Pond becomes available.
	■ Runoff diversion to the Whale Tail Attenuation Pond	■ Pump / Pipeline	■ 2019	■ 2022	■ Diverted runoff to the Whale Tail Attenuation Pond until the IVR Attenuation Pond becomes available. ■ Runoff volumes are expected to decrease as the footprint of the Whale Tail WRSF in the North Sector catchment increases, resulting from temporary storage in the Whale Tail WRSF.
	■ Runoff diversion to the IVR Attenuation Pond	■ Pump / Pipeline	■ 2022	■ Closure	■ Runoff volumes are expected to be constant until Closure due to the constant footprint of the Whale Tail WRSF.
	■ Runoff to Whale Tail Pit / Lake (North Basin)	■ Natural drainage	■ Closure	■ Post-Closure	■ Runoff volumes increase from operations due to i) the use of the NML/NPAG waste rock as cover material, thereby restoring some of the natural land, and ii) the increased frequency of freezing of the outer layer of the Whale Tail WRSF. ■ Runoff volume quantities are similar to baseline conditions once the Whale Tail WRSF seeps out starting in 2034.

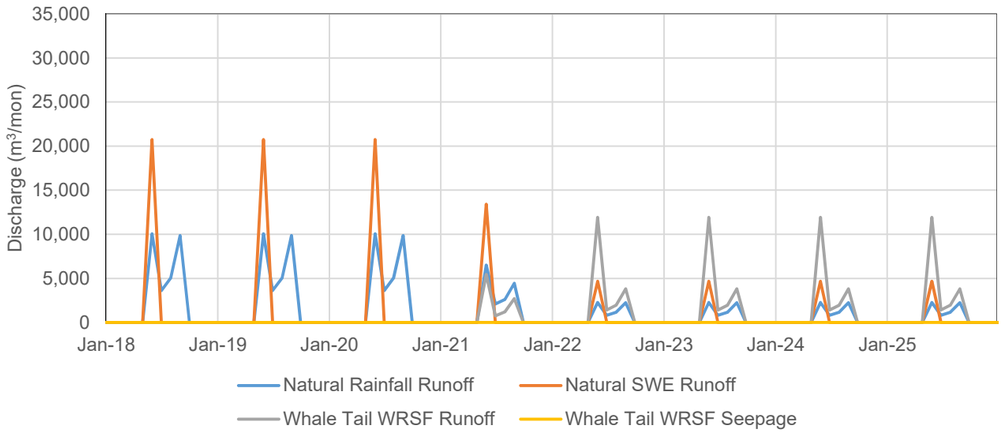

Figure 44: Inflows to the North Sector (Construction and Operations)

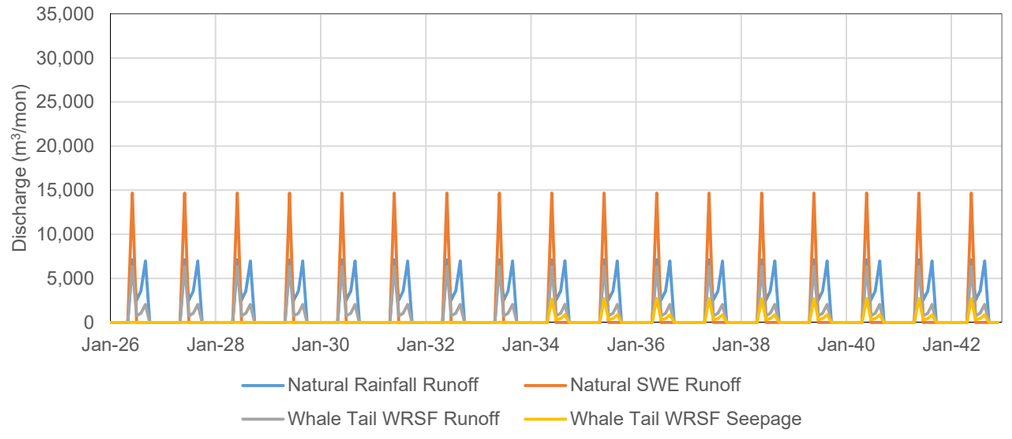

Figure 45: Inflows to the North Sector (Closure)

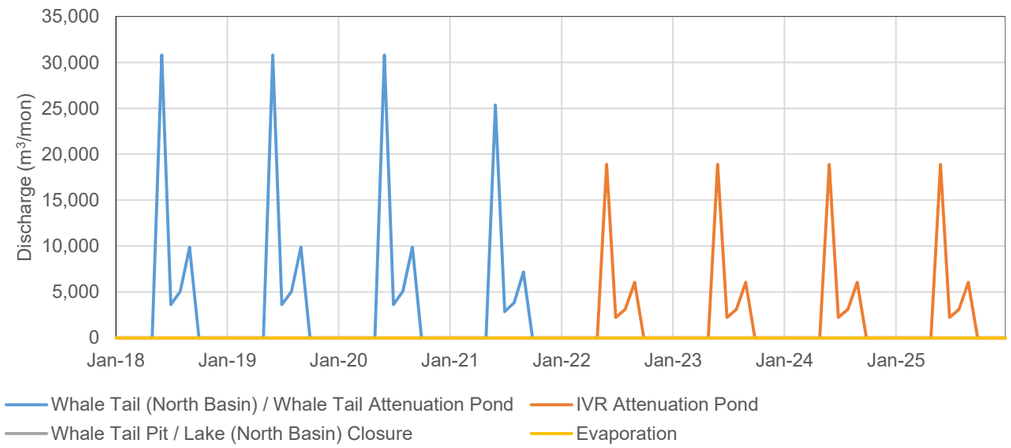

Figure 46: Outflows from the North Sector (Construction and Operations)

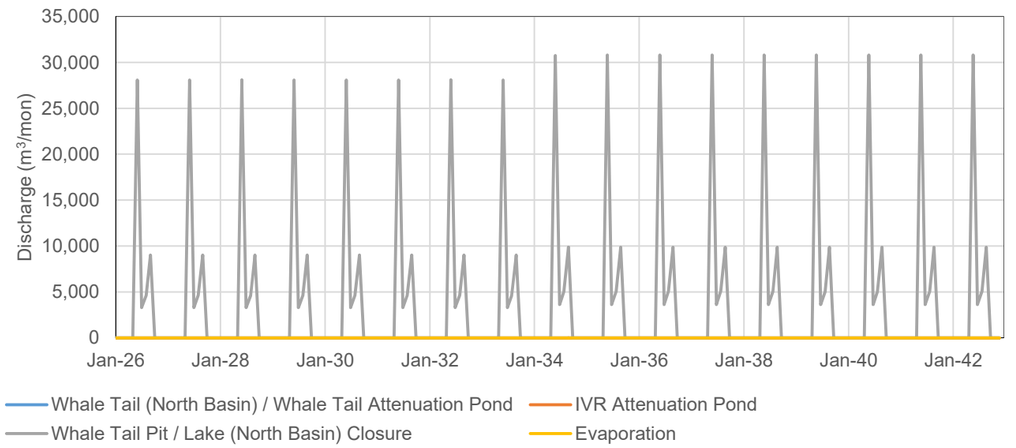

Figure 47: Outflows from the North Sector (Closure)

3.7 Whale Tail Pit

3.7.1 Catchment Characteristics and Water Management

The proposed Whale Tail Pit is located within the northern portion of Whale Tail Lake, just north of the Whale Tail Attenuation Pond. The Whale Tail Pit is initiated following the dewatering of Whale Tail Lake (North Basin) in 2019. Its operational runoff is conveyed to the active attenuation pond (i.e., either the Whale Tail Attenuation Pond or the IVR Attenuation Pond).

An overview of the catchment, along with its operational pathways, is provided in Figure 48.

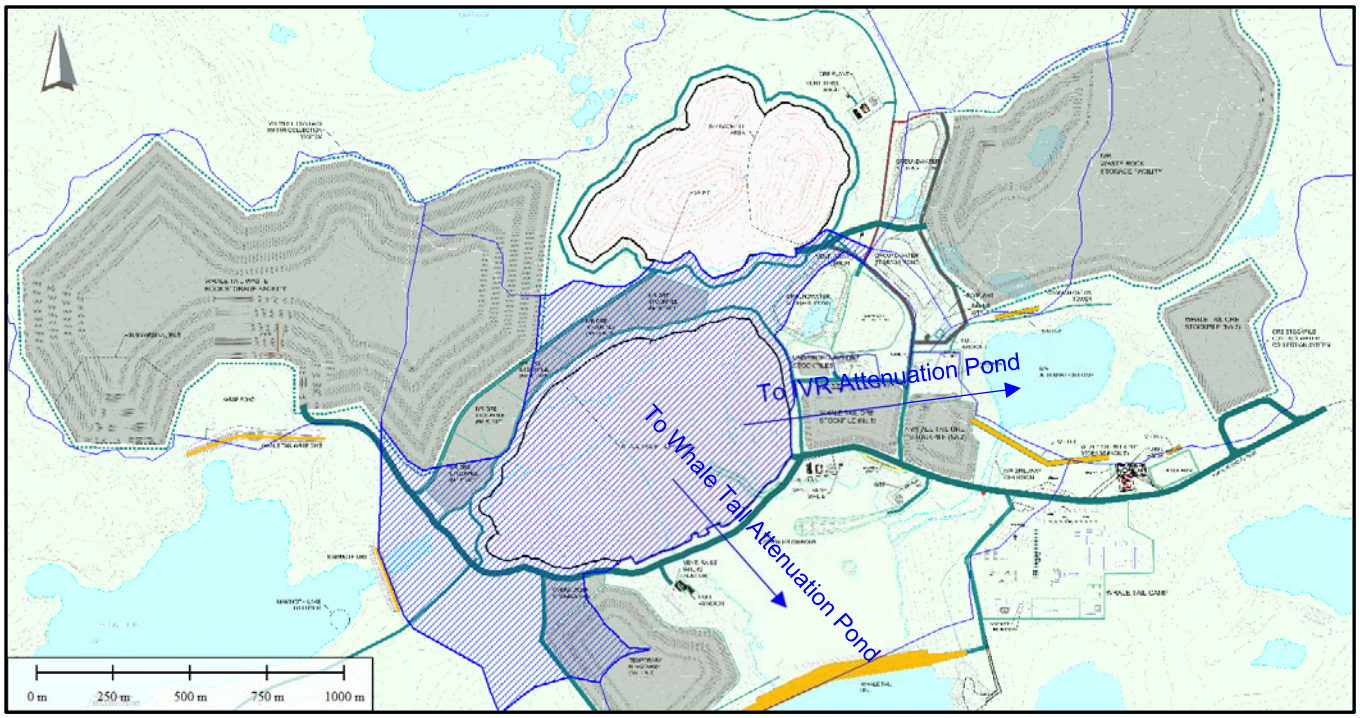

Figure 48: Whale Tail Pit Catchment Overview

Storage characteristics are summarized in Table 16. Drainage areas of the Whale Tail Pit are summarized in Figure 49.

The Whale Tail Pit catchment remains local with a drainage area of 1.16 km^2 until closure. At closure and following the refilling of IVR Pit (see Section 3.9), natural drainage patterns surrounding the Whale Tail Pit are re-established to expedite its refilling.

Table 16: Storage Characteristics (Whale Tail Pit)

Snapshot	Drainage Area (km^2)	Operating Level		Capacity	
		Water Surface Elevation (masl)	Storage (m^3)	Water Surface Elevation (masl)	Storage (m^3)
Baseline to Closure	1.16	-129 (2025) to 79 (2019)	0	146.3	54,907,880
Closure (> IVR Pit full) to Post-Closure	29.5	n/a	n/a	146.3	54,907,880

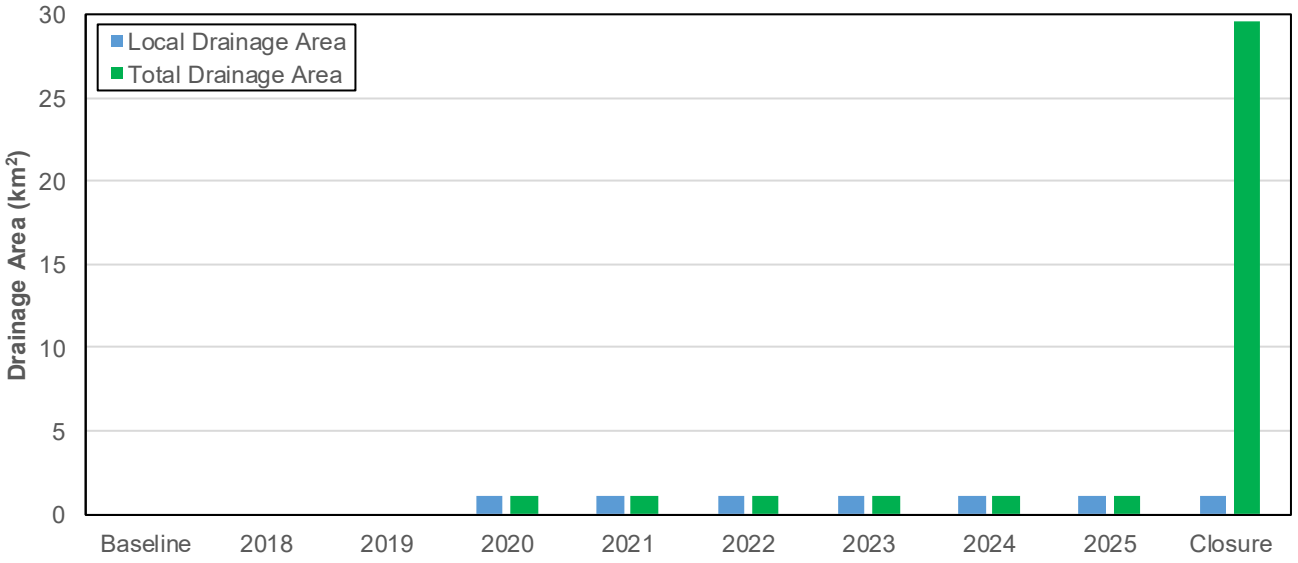

Figure 49: Drainage Area Progression through the Approved and Expansion Project (Whale Tail Pit)

3.7.2 Water Balance

Inflows and outflows are summarized in Table 17, and presented in tabular form in Appendix D. Whale Tail Pit is expected to be refilled to 146.3 masl by May 2039. In comparison, refilling for the Approved Project was expected from January 2022 to June 2024.

Table 17: Water Balance Flow Components (Whale Tail Pit)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 50 (Construction / Operations) ■ Figure 51 (Closure)	■ Rainfall and SWE runoff from the catchment	■ Natural drainage	■ 2019	■ Post-Closure	■ Annual runoff volumes are expected to be constant.
	■ Groundwater	■ Natural drainage	■ 2019	■ Post-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	■ 2019	■ Closure	■ Drilling water from Lake C38 (Nemo Lake) during operations of the pit.
	■ Runoff from the GSP (brine)	■ Natural drainage	■ Closure	■ Post-Closure	■ Runoff from the GSP (brine) following its backfill at closure, re-establishing its natural drainage patterns. ■ Annual runoff volumes are expected to be constant.
	■ 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. ■ Annual runoff volumes are expected to be constant until 2034 when seepages occur.
	■ Overflow from the Whale Tail Attenuation Pond	■ 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. ■ Annual runoff volumes are expected to be constant until these are influenced by net groundwater losses in 2034.
	■ Overflow from IVR Pit	■ Natural drainage	■ IVR Pit full	■ Post-Closure	■ Overflow from the IVR Pit (water surface elevation of 149.3 masl) into Whale Tail Pit during closure. ■ Annual runoff volumes are expected to be constant.
OUTFLOWS					
■ Figure 52 (Construction / Operations) ■ Figure 53 (Closure)	■ Runoff diversion to Whale Tail Attenuation Pond	■ Pump / Pipeline	■ 2019	■ 2022	■ Runoff is managed through the Whale Tail Attenuation Pond until the IVR Attenuation pond becomes operational. ■ Annual runoff volumes are expected to be approximately constant, with minor fluctuations from groundwater inflows.
	■ Runoff diversion to IVR Attenuation Pond	■ Pump / Pipeline	■ 2022	■ Closure	■ Runoff is managed through the IVR Attenuation Pond once operational, until closure. ■ Annual runoff volumes are expected to be constant.
	■ Water retention in ore to Meadowbank	■ n/a	■ 2022	■ Closure	■ Water retained in the ore extracted from Whale Tail Pit and trucked to Meadowbank. ■ Retained volumes are proportional to the quantity of ore extracted from Whale Tail Pit.
	■ Evaporation	■ n/a	■ 2022	■ Post-Closure	■ Evaporative losses proportional to the water surface area of Whale Tail Pit.

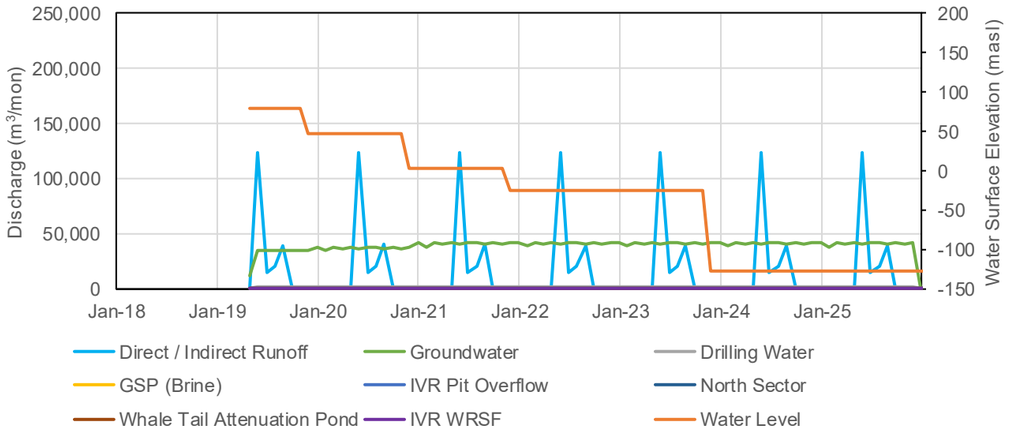

Figure 50: Inflows to the Whale Tail Pit (Construction and Operations)

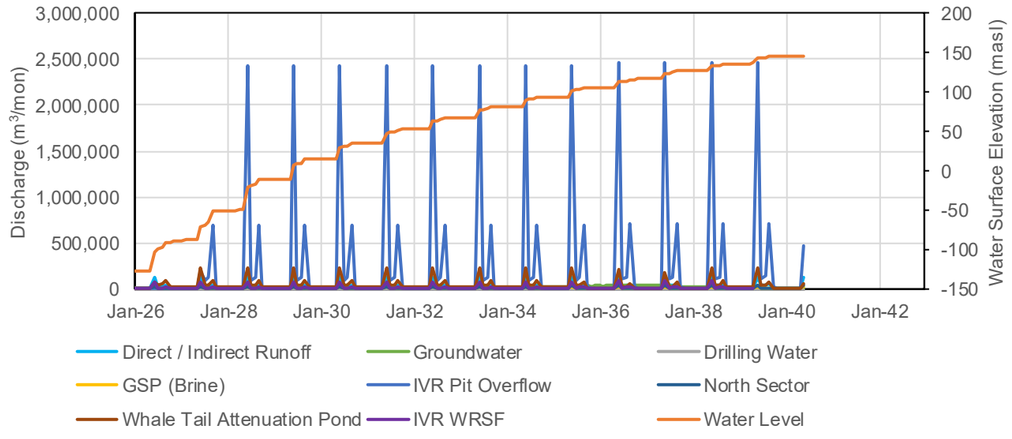

Figure 51: Inflows to the Whale Tail Pit (Closure)

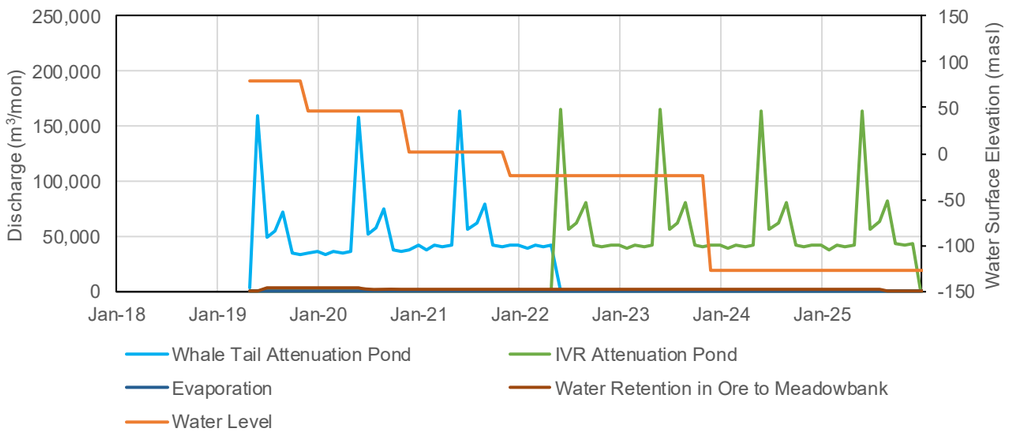

Figure 52: Outflows from the Whale Tail Pit (Construction and Operations)

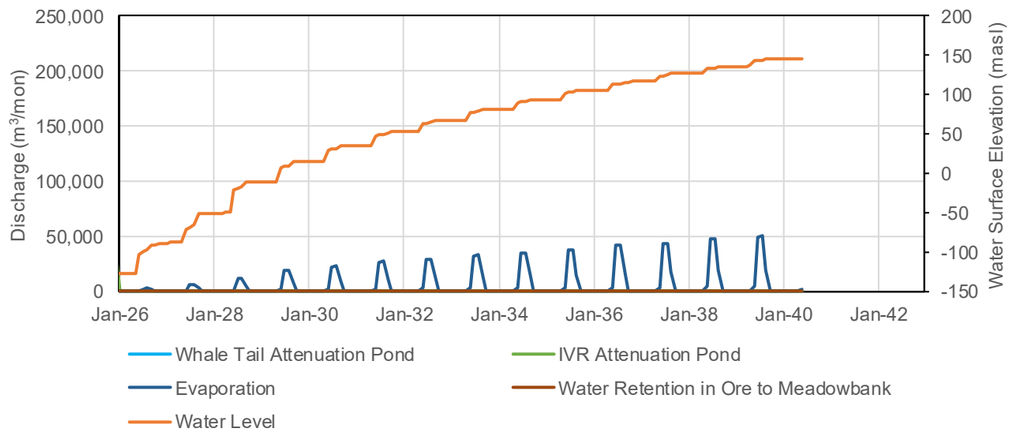

Figure 53: Outflows from the Whale Tail Pit (Closure)

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

3.8.1 Catchment Characteristics and Water Management

The Whale Tail Attenuation Pond is located just south of the Whale Tail Pit, and becomes operational once Whale Tail Lake (North Basin) is dewatered. Dewatering of Whale Tail Lake (North Basin) is planned from March to May 2019 through Whale Tail Lake (South Basin) for 66% of the total volume of Whale Tail Lake (North Basin), and to Whale Tail Lake (South Basin) through the TSS WTP for the remaining volume. In comparison, dewatering for the Approved Project was planned from March to July 2019.

The Whale Tail Attenuation Pond is intended to manage all contact water until the IVR Attenuation Pond becomes operational in 2022, aside from contact water managed within Quarry 1 and the GSP (brine). During this period, contributing catchments include those from the Whale Tail WRSF Contact Water Collection System, the North Sump, Whale Tail Pit, the IVR Pit, and the IVR WRSF. Collected water is discharged to Lake A16 (Mammoth Lake) through the O-WTP during open water conditions, and through the S-WTP (brackish) during winter conditions (i.e., October 2020 to April 2022). Contact water is stored in the GSP (brine) prior to the availability of the S-WTP (brackish) (i.e., October 2019 to May 2020) to prevent overflow of the Whale Tail Attenuation Pond.

Once the IVR Attenuation Pond becomes operational, the Whale Tail Attenuation Pond manages contact water from its local contributing area only until closure. Winter diversion to the IVR Attenuation Pond are not required during this period due to a net groundwater loss from the Whale Tail Attenuation Pond.

At closure, the Whale Tail Attenuation Pond becomes part of Whale Tail Lake (North Basin) once more upon filling of the Whale Tail and IVR Pits. This final elevation of the pit lake is 153.5 masl. This level is maintained by the Mammoth Lake sill constructed at closure. The Mammoth dike and Whale Tail dike remain in place until pit lake water meets quality objectives, predicted to occur at the end of 2050 (Golder 2018a).

Post-closure is initiated in 2051. It is defined as when the pit lake is fully flooded and water quality is acceptable. At that time, drainage patterns are then re-established towards Lake A16 (Mammoth Lake) (i.e., water overflows the Mammoth Lake sill) and Mammoth dike and Whale Tail Dike are decommissioned reconnecting the North and South basins of Whale Tail Lake.

An overview of the catchment, along with its natural drainage pattern and operational pathways, is provided in Figure 54.

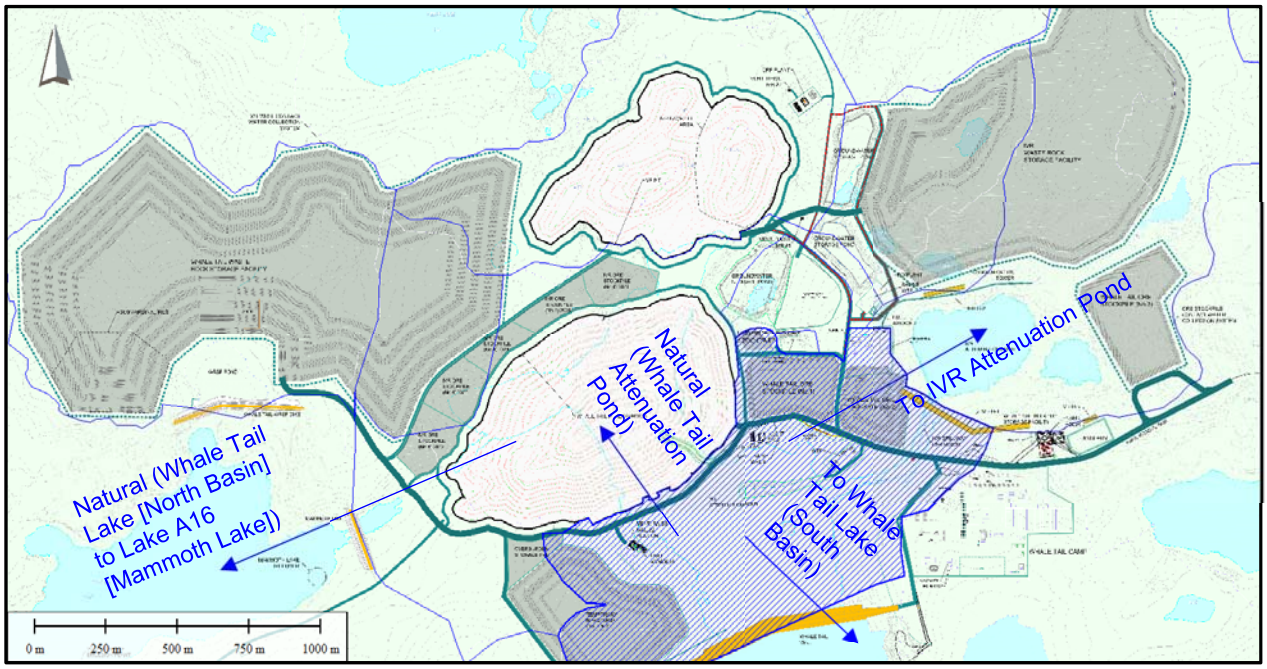

Figure 54: Whale Tail Attenuation Pond Catchment Overview

Storage characteristics are summarized in Table 18. Drainage areas of the Whale Tail Pit are summarized in Figure 55.

Whale Tail Lake (North Basin) has a catchment of 28.4 km^2. This catchment area is reduced to 28.3 km^2 in 2018 from the isolation of the Underground Mine and related water management systems. This catchment area is further reduced to 3.86 km^2 during dewatering of Whale Tail Lake (North Basin). The Whale Tail Lake Attenuation Pond, once operational, has a catchment area ranging from 1.03 km^2 (i.e., local catchment, when most of the Site's contact water is managed through the IVR Attenuation Pond once operational in 2022) to 5.07 km^2 (i.e., prior to the operations of the IVR Attenuation Pond).

Table 18: Storage Characteristics (Whale Tail Lake [North Basin] / Whale Tail Attenuation Pond)

Snapshot	Drainage Area (km^2)	Operating Level		Capacity	
		Water Surface Elevation (masl)	Storage (m^3)	Water Surface Elevation (masl)	Storage (m^3)
Baseline to 2019	28.3 to 28.4	152.50	3,029,705	152.50	3,029,705
2019	3.86	134.6 to 152.50	0 to 3,029,705	152.50	3,029,705
Whale Tail Lake (North Basin) Dewatered to Closure	1.03 to 5.07	134.6 to 143.5	0 to 133,232	143.5	133,232

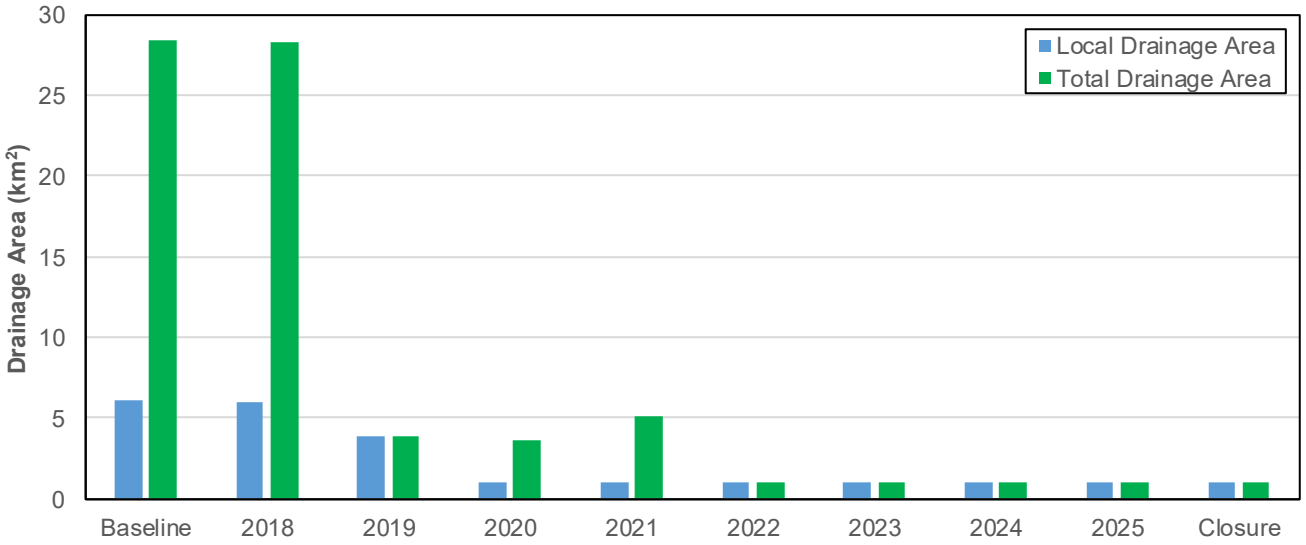

Figure 55: Drainage Area Progression through the Approved and Expansion Project (Whale Tail Lake [North Basin] / Whale Tail Attenuation Pond)

3.8.2 Water Balance

Inflows and outflows are summarized in Table 19, and presented in tabular form in Appendix D. Whale Tail Lake (North Basin) is expected to reach the baseline elevation of 152.5 masl by 2041. In comparison, refilling for the Approved Project was expected from January 2022 to June 2026.

Table 19: Water Balance Flow Components (Whale Tail Lake [North Basin] / Whale Tail Attenuation Pond)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 56 (Construction / Operations) ■ Figure 57 (Closure)	■ Groundwater	■ Natural drainage	■ 2019	■ Post-Closure	■ Groundwater inflows during dewatering from March to May 2019. ■ Groundwater inflows following the dewatering of Whale Tail Lake (North Basin) from June 2019 to Post-Closure.
	■ Runoff diversion from the Whale Tail WRSF Contact Water Collection System	■ Pump / pipeline	■ 2019	■ 2022	■ Runoff diversion once the Whale Tail Attenuation Pond becomes operational in June 2019 until the IVR Attenuation Pond becomes operational in 2022.
	■ Seepage through the Whale Tail Dike	■ Natural drainage	■ 2019	■ Post-Closure	■ Seepage from Whale Tail Lake (South Basin) thru the Whale Tail Dike once the Whale Tail Attenuation Pond becomes operational in June 2019, until Whale Tail Lake (North Basin) is refilled before post-closure. ■ 50% of the seepage is collected by the Whale Tail Dike Seepage Pumping Station when operational by January 2020, and recirculated to Whale Tail Lake (South Basin).
	■ Flows from the Truck Shop	■ Pump / pipeline	■ 2019	■ 2022	■ Flows from the truck shop once the Whale Tail Attenuation Pond becomes operational in June 2019 until the IVR Attenuation Pond becomes operational in 2022.
	■ Flows from the Camp Biodisk	■ Pump / pipeline	■ 2018 ■ 2026	■ 2022 ■ Post-Closure	■ Flows from the camp biodisk prior to the initiation of the Whale Tail Attenuation Pond until the IVR Attenuation Pond becomes operational in 2022. ■ Flows from the camp biodisk during closure.
	■ Runoff diversion from the Industrial Sector, Overburden Sector, Camp Sector and Ore Stockpile	■ Pump / Pipeline	■ 2019	■ Post-Closure	■ Runoff diversion once the Whale Tail Attenuation Pond becomes operational in June 2019 until post-closure. ■ Runoff diversion from the Camp Sector in June and July 2018 prior to the completion of mining in Quarry 1 by end of July 2018.
	■ Catchment runoff and direct precipitation	■ Natural drainage	■ 2018	■ Post-Closure	■ Runoff from the local catchment. ■ Annual runoff volumes are expected to be constant following the installation of the Whale Tail Dike and Mammoth Dike.
	■ Runoff from the Pit Sector, IVR Pit, Northeast Sector, and Lake A53	■ Natural drainage	■ 2018	■ 2018	■ Runoff from the catchments of Whale Tail Pit, IVR Pit, the Northeast Sector, and Lake A53 naturally draining to Whale Tail Lake (North Basin) prior to dewatering activities.
	■ Runoff from the North Sector	■ Natural drainage	■ 2018	■ 2021	■ Runoff from the North Sector / Sump prior to the operations of the IVR Attenuation Pond in 2022. ■ Annual runoff volumes are expected to be constant.
	■ Diversion from the Whale Tail Pit, IVR Pit, and IVR WRSF	■ Pump / pipeline	■ 2019	■ 2022	■ Diversions until the IVR Attenuation Pond becomes operational in 2022.
	■ Whale Tail Lake (South Basin)	■ Natural drainage	■ 2018	■ 2019	■ Natural runoff from Whale Tail Lake (South Basin) to Whale Tail Lake (North Basin) until the installation of the Whale Tail Dike.

Figure	Flow Component	Flow Type	Start	End	Note / Comment
OUTFLOWS					
■ Figure 58 (Construction / Operations) ■ Figure 59 (Closure)	■ Runoff to Lake A16 (Mammoth Lake)	■ Natural drainage	■ 2018 ■ Post-Closure	■ 2019 ■ Post-Closure	■ Natural runoff to Lake A16 (Mammoth Lake) until the Mammoth Dike is operational, and following the refilling of Whale Tail Lake (North Basin).
	■ Drawdown to Whale Tail Lake (South Basin)	■ Pump / pipeline	■ 2019	■ 2019	■ Dewatering of 66% of the Whale Tail Lake (North Basin) to Whale Tail Lake (South Basin) from March to May 2019, without treatment (assumed not be required).
	■ Drawdown to C-WTP	■ Pump / pipeline	■ 2019	■ 2019	■ Dewatering of the remaining 34% of the Whale Tail Lake (North Basin) to Whale Tail Lake (South Basin) via the C-WTP.
	■ Diversion to the O-WTP	■ Pump / pipeline	■ 2019	■ 2022	■ Diversion of collected water to Lake A16 (Mammoth Lake) until May 2021 and to Whale Tail Lake (South Basin) from June 2021 until May 2022 via the O-WTP during open water conditions.
	■ Diversion to the GSP (brine)	■ Pump / pipeline	■ 2019	■ 2020	■ Diversion of collected water to the GSP (brine) during winter conditions from October 2019 to May 2020 before the S-WTP (brackish) becomes available to treat winter discharges.
	■ Diversion to the S-WTP (brackish)	■ Pump / pipeline	■ 2020	■ 2022	■ Diversion of collected water to Lake A16 (Mammoth Lake) via the S-WTP (brackish) during winter conditions from October (i.e., when the treatment unit becomes operational) to April in 2020-2021 and 2021-2022 (i.e., when the S-WTP (brackish) is required to treat low TDS salinity water from the Underground Mine).
	■ Diversion to the IVR Attenuation Pond	■ Pump / pipeline	■ 2022	■ Closure	■ Diversion of collected water during open water conditions to the IVR Attenuation Pond when it becomes available in 2022 to the end of operations.
	■ Groundwater	■ Natural drainage	■ 2019	■ Post-Closure	■ Infiltration once the Whale Tail Attenuation Pond becomes operational until post-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.
	■ 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.

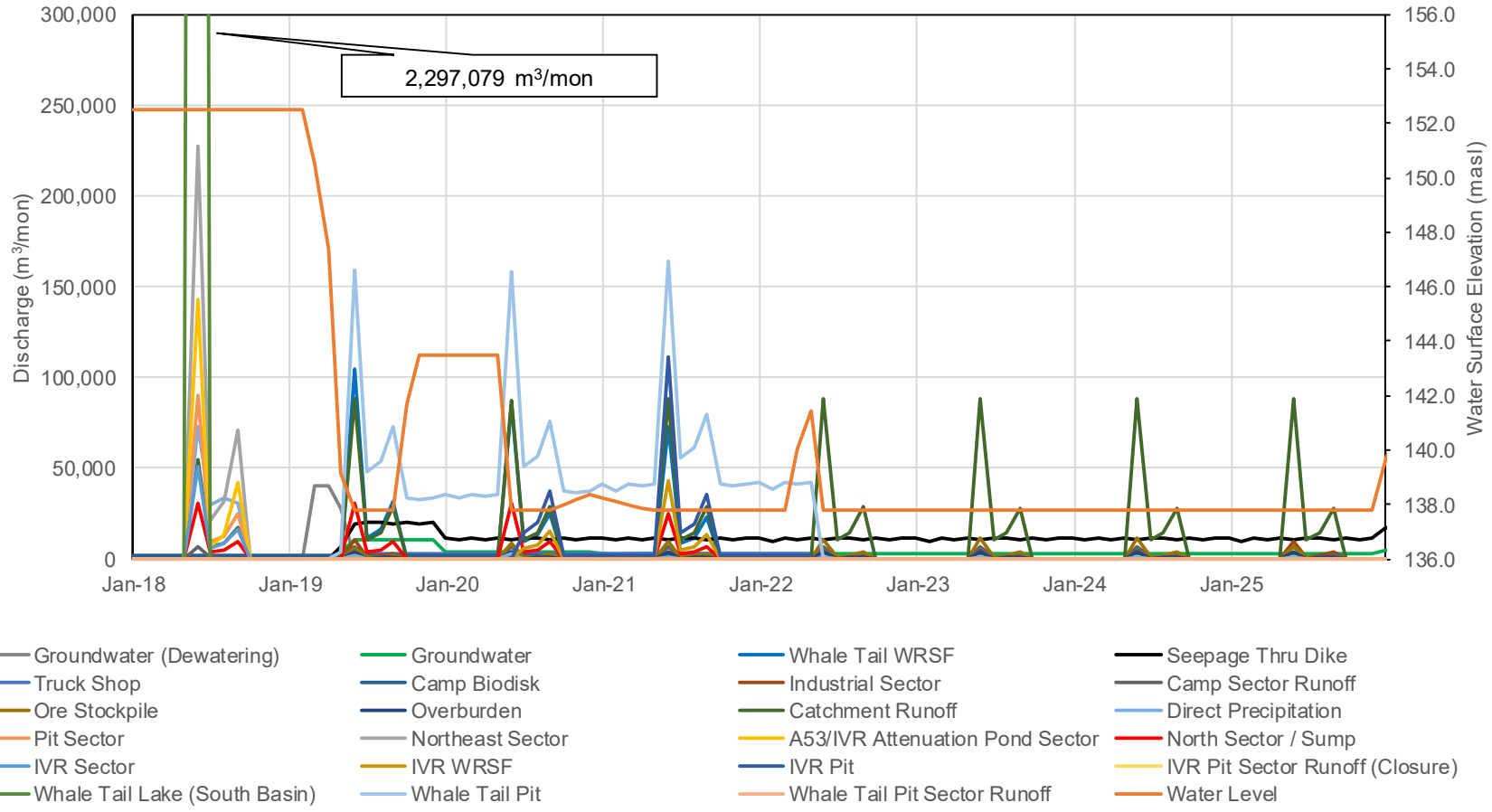

Figure 56: Inflows to the Whale Tail Lake [North Basin] / Whale Tail Attenuation Pond (Construction and Operations)

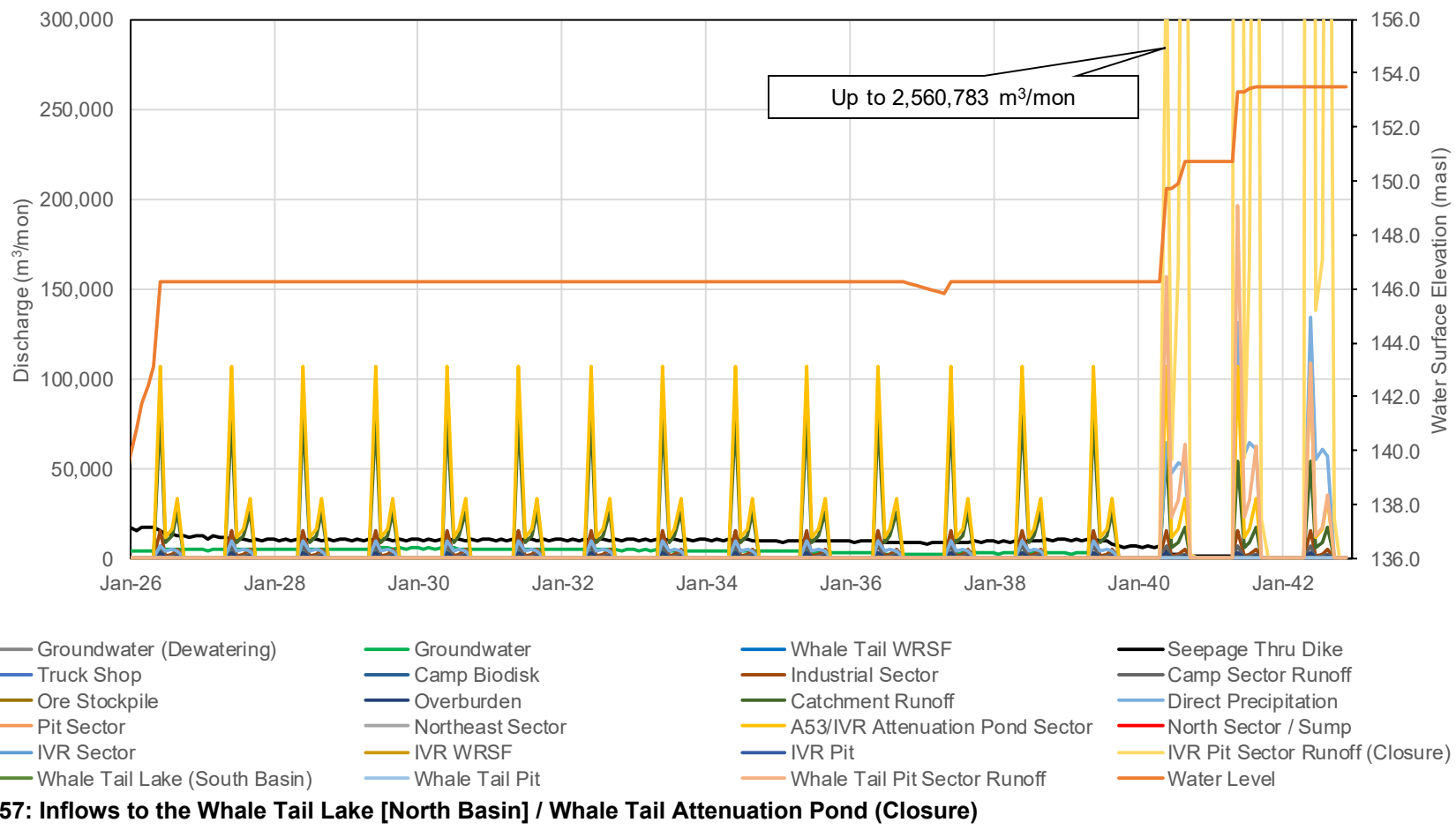

Figure 57: Inflows to the Whale Tail Lake [North Basin] / Whale Tail Attenuation Pond (Closure)

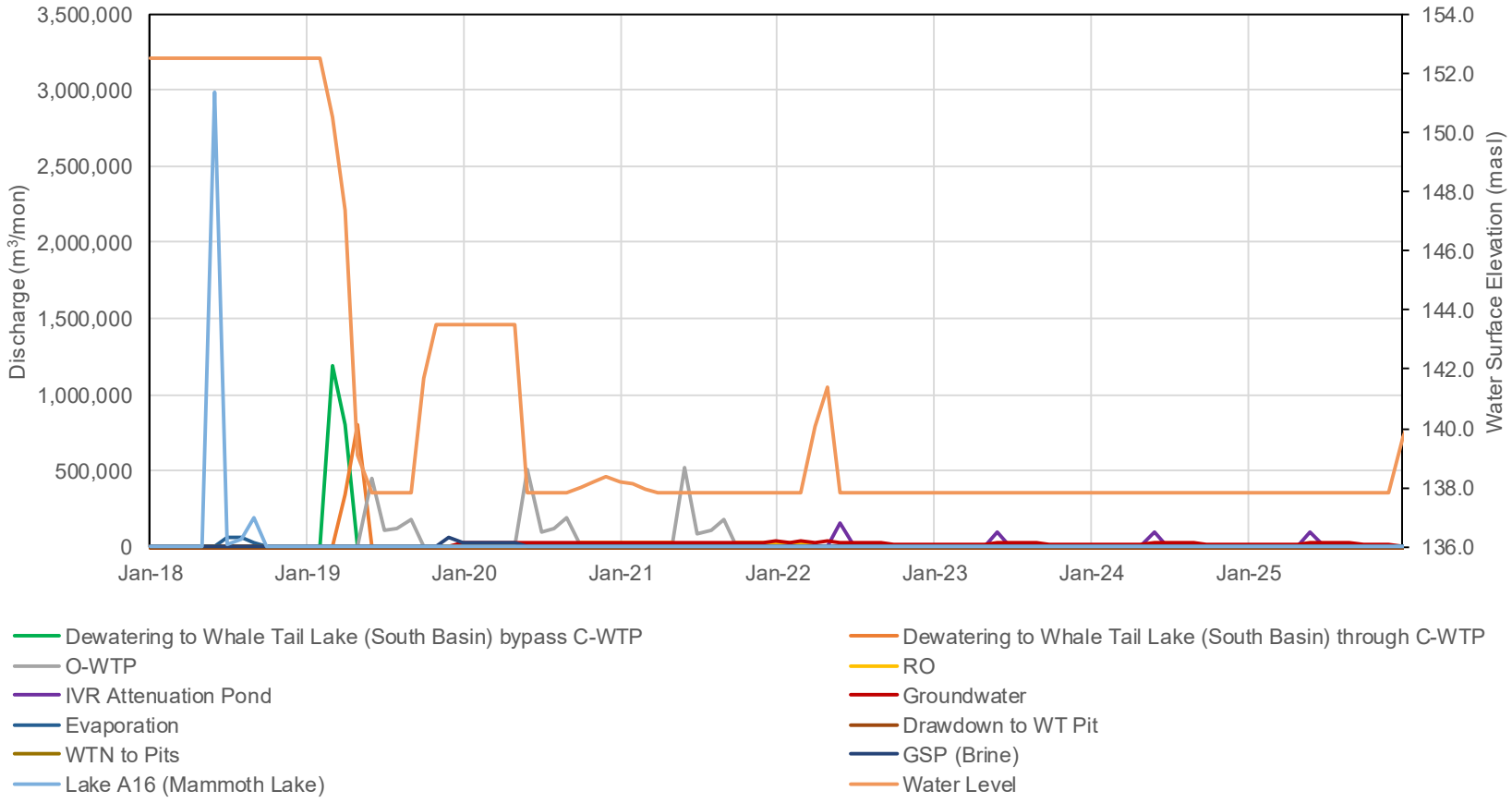

Figure 58: Outflows from the Whale Tail Lake [North Basin] / Whale Tail Attenuation Pond (Construction and Operations)

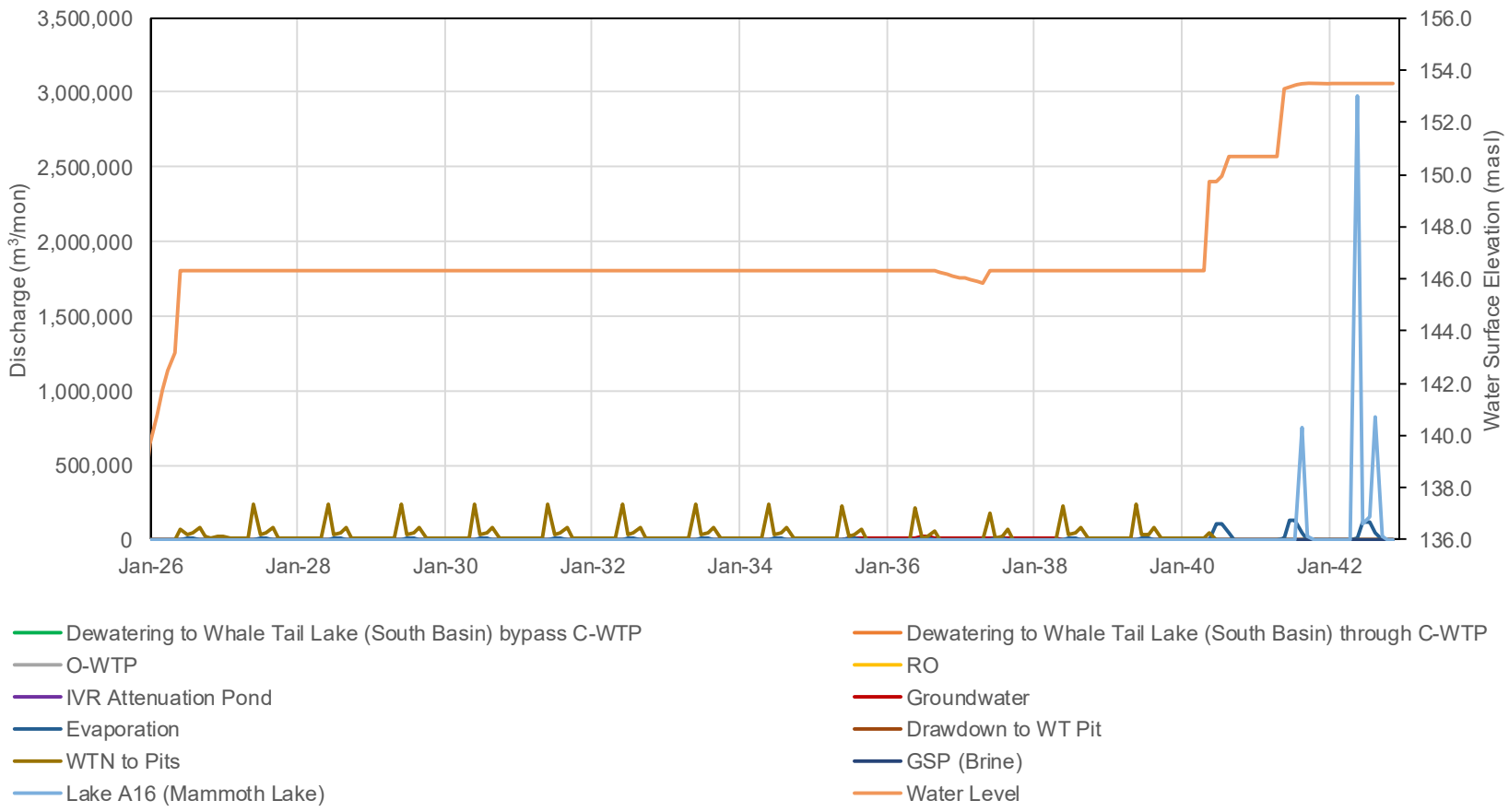

Figure 59: Outflows from the Whale Tail Lake [North Basin] / Whale Tail Attenuation Pond (Closure)

3.9 IVR Pit

3.9.1 Catchment Characteristics and Water Management

The proposed IVR Pit is located just north of Whale Tail Lake, within the Northeast Sector (see Section 3.2.2). The IVR Pit is initiated in Q3 2020. Its operational runoff is conveyed to the active attenuation pond (i.e., either the Whale Tail Attenuation Pond or the IVR Attenuation Pond).

An overview of the catchment, along with its operational pathways, is provided in Figure 60.

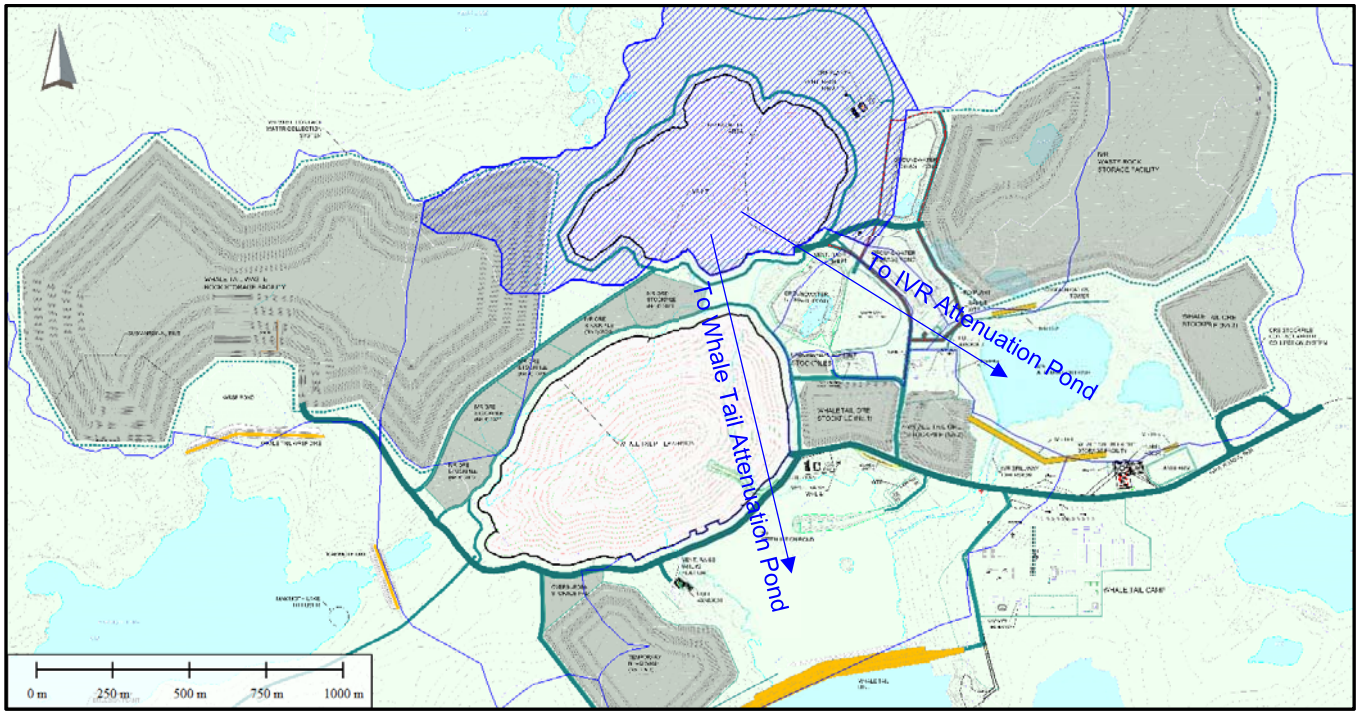

Figure 60: IVR Pit Catchment Overview

Storage characteristics are summarized in Table 20. Drainage areas of the Whale Tail Pit are summarized in Figure 61.

The IVR Pit catchment remains local with a drainage area of 1.05 km^2 until closure. At closure, natural drainage patterns surrounding the IVR Pit are re-established, including the IVR Diversion, and the IVR WRSF sub-watersheds. Runoff from the Whale Tail Lake (South Basin), the GSP (brine) watershed area, the Underground Mine watershed area and the Whale Tail WRSF Contact Water Collection System are diverted to the IVR Pit to expedite its refilling.

Table 20: Storage Characteristics (IVR Pit)

Snapshot	Drainage Area (km^2)	Operating Level		Capacity	
		Water Surface Elevation (masl)	Storage (m^3)	Water Surface Elevation (masl)	Storage (m^3)
Q3 2020 to Closure	1.05	46 (2025) to 130 (2020)	0	149.3	10,107,510
Closure to Post-Closure	27.3	n/a	0	149.3	10,107,510

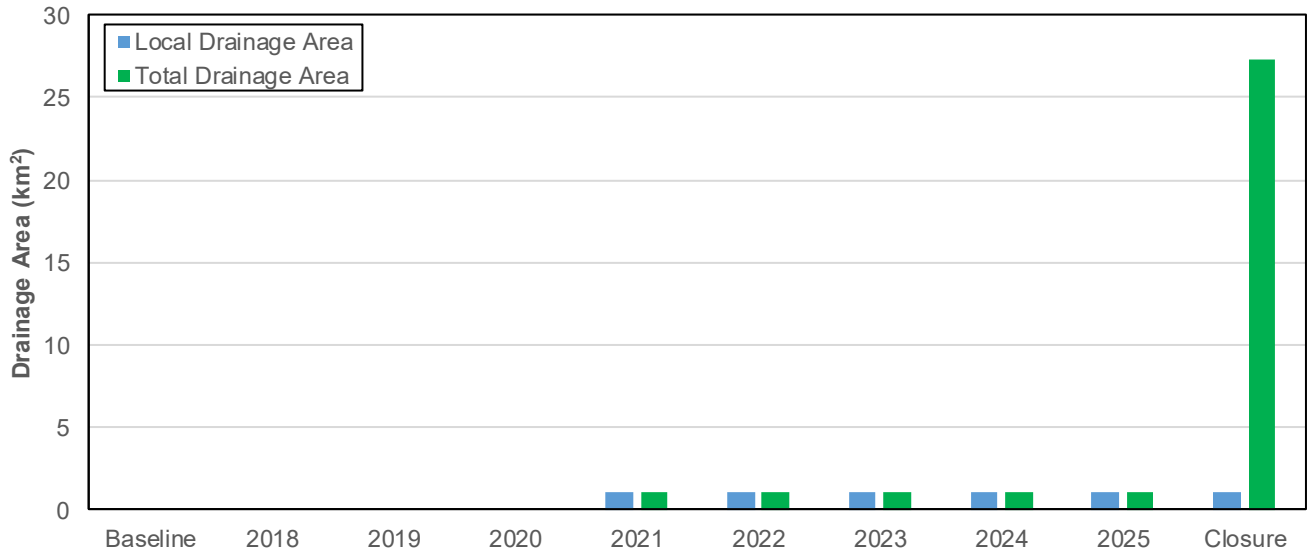

Figure 61: Drainage Area Progression through the Approved and Expansion Project (IVR Pit)

3.9.2 Water Balance

Inflows and outflows are summarized in Table 21, and presented in tabular form in Appendix D. IVR Pit is expected to be refilled to 149.3 masl by June 2027.

Table 21: Water Balance Flow Components (IVR Pit)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 62 (Construction / Operations) ■ Figure 63 (Closure)	■ Rainfall and SWE runoff from natural areas	■ Natural drainage	■ Q3 2020	■ Post-Closure	■ Runoff volumes are expected to be constant on an annual basis, with minor fluctuations from direct runoff at various pit surface areas.
	■ Drilling Water	■ Pump / Pipeline	■ 2019	■ Closure	■ Drilling water from Lake C38 (Nemo Lake) during operations of the pit.
	■ Runoff from the IVR Diversion sub-watershed	■ Natural drainage	■ Closure	■ Post-Closure	■ Runoff from the IVR Diversion sub-watershed following its decommissioning at closure, re-establishing its natural drainage patterns. ■ Runoff volumes are expected to be constant on an annual basis.
	■ Runoff diversion from the drawdown of Whale Tail Lake (South Basin)	■ Pump / Pipeline	■ Closure	■ WTS drawn down	■ Runoff from Whale Tail Lake (South Basin) during its drawdown from 156.0 masl to 153.5 masl in 2026.
	■ Diversion of overflow from the Whale Tail Lake (South Basin)	■ Pump / Pipeline	■ WTS drawn down	■ Post-Closure	■ Diversion of runoff from Whale Tail Lake (South Basin) following its drawdown in 2026 to maintain its water surface elevation at 153.5 masl during closure. ■ Annual runoff volumes are expected to be constant.
	■ Runoff from the IVR WRSF	■ Natural drainage	■ Closure	■ Post-Closure	■ Runoff from the IVR WRSF at closure, following natural drainage patterns to the IVR Pit. ■ Annual runoff volumes are expected to be constant.
	■ Runoff from the northeast portion of the Whale Tail WRSF	■ Pump / Pipeline	■ Closure	■ Post-Closure	■ Annual runoff volumes are expected to be constant.
OUTFLOWS					
■ Figure 64 (Construction / Operations) ■ Figure 65 (Closure)	■ Runoff diversion to Whale Tail Attenuation Pond	■ Pump / Pipeline	■ Q3 2020	■ 2022	■ Runoff is managed through the Whale Tail Attenuation Pond until the IVR Attenuation pond becomes operational. ■ Runoff volumes are expected to be approximately constant on an annual basis, with minor fluctuations from direct runoff at various pit surface areas.
	■ Runoff diversion to IVR Attenuation Pond	■ Pump / Pipeline	■ 2022	■ Closure	■ Runoff is managed through the IVR Attenuation Pond once operational, until closure. ■ Annual runoff volumes are expected to be constant.
	■ Water retention in ore to Meadowbank	■ n/a	■ 2022	■ Closure	■ Water retained in the ore extracted from Whale Tail Pit and trucked to Meadowbank. ■ Retained volumes are proportional to the quantity of ore extracted from Whale Tail Pit.
	■ Overflow to Whale Tail Pit	■ Natural drainage	■ IVR Pit full	■ WT Pit full	■ Runoff overflows from IVR Pit when full (water surface elevation of 149.3 masl) to Whale Tail Pit by natural drainage patterns until Whale Tail Pit is full (water surface elevation of 146.3 masl). ■ Annual runoff volumes are expected to be constant.
	■ Overflow to Whale Tail Lake (North Basin)	■ Natural drainage	■ WT Pit full	■ Post-Closure	■ Runoff overflows from IVR Pit when full (elevation of 149.3 masl) to Whale Tail Lake (North Basin) by natural drainage patterns once Whale Tail Pit is full. ■ Annual runoff volumes are expected to be constant.
	■ Evaporation	■ n/a	■ 2022	■ Post-Closure	■ Evaporative losses proportional to the water surface area of IVR Pit.

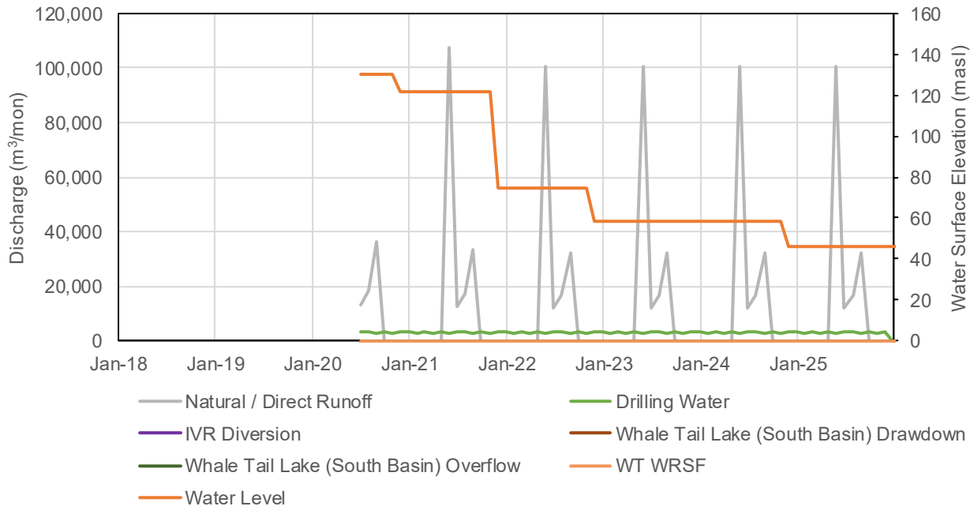

Figure 62: Inflows to the IVR Pit (Construction and Operations)

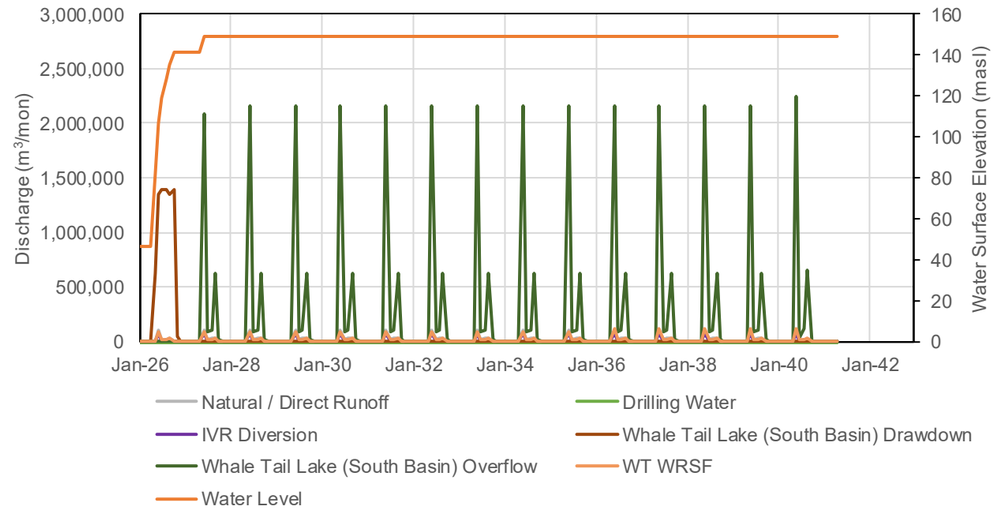

Figure 63: Inflows to the IVR Pit (Closure)

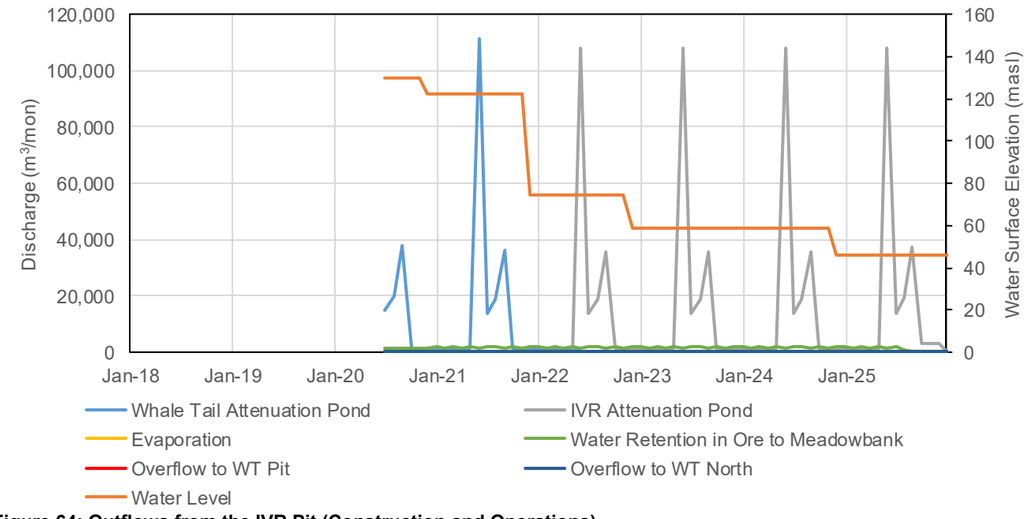

Figure 64: Outflows from the IVR Pit (Construction and Operations)

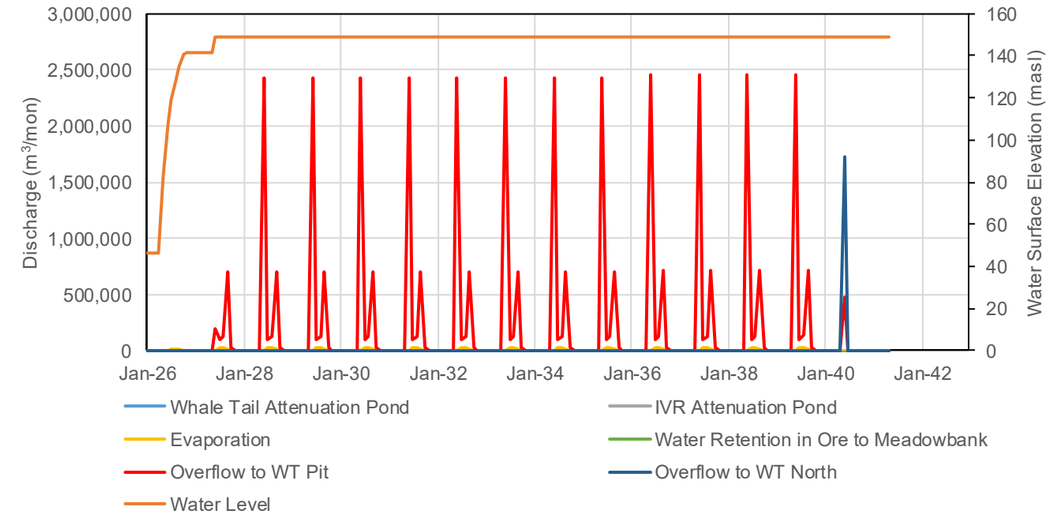

Figure 65: Outflows from the IVR Pit (Closure)

3.10 IVR Waste Rock Storage Facility

3.10.1 Catchment Characteristics and Water Management

The IVR WSRF becomes operational once the IVR Pit is initiated. Prior to its operation, the natural catchment forms a portion of the Northeast Sector (see Section 3.2.2). 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). This conveyance system is decommissioned at closure thereby re-establishing natural drainage pattern towards Whale Tail Lake (North Basin) via Whale Tail Pit.

An overview of the catchment, along with its natural drainage pattern and operational pathways, is provided in Figure 66.

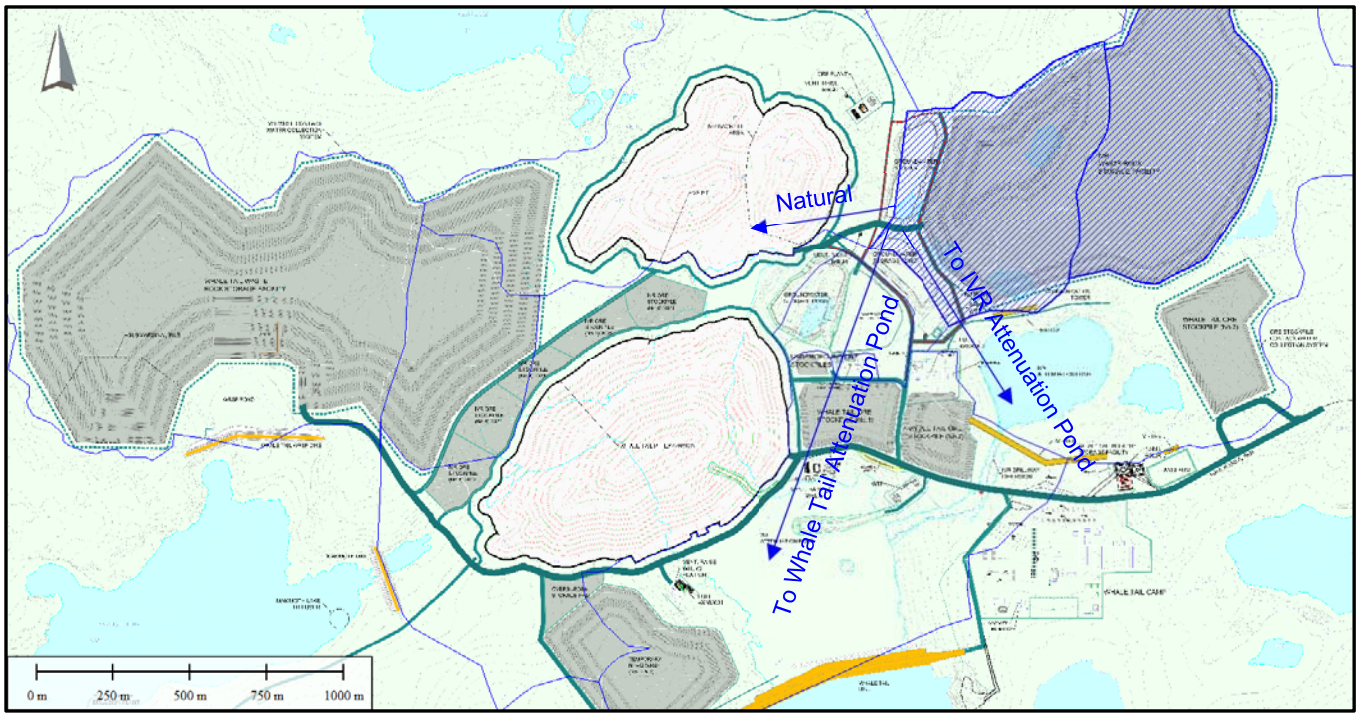

Figure 66: IVR Waste Rock Storage Facility Catchment Overview

Storage characteristics are summarized in Table 22. Drainage areas of the IVR Waste Rock Storage Facility are summarized in Figure 67.

The total catchment of the IVR WRSF increases proportionally with the increase in waste rock footprint which encroaches on the natural catchment of the IVR Attenuation Pond over time. At closure, the GSP (brackish water) drains to the IVR WRSF thereby increasing its total catchment area. Thus, its total catchment area ranges from 0.441 km^2 during baseline conditions, to 0.822 km^2 at closure. The water balance assumes that the IVR WRSF Contact Water Collection System has no capacity.

Table 22: Storage Characteristics (IVR WRSF Contact Water Collection System)

Snapshot	Drainage Area (km^2)	Operating Level		Capacity	
		Water Surface Elevation (masl)	Storage (m^3)	Water Surface Elevation (masl)	Storage (m^3)
Baseline to Closure	0.441 to 0.788	n/a	0	n/a	0
Closure to Post-Closure	0.822	n/a	0	n/a	0

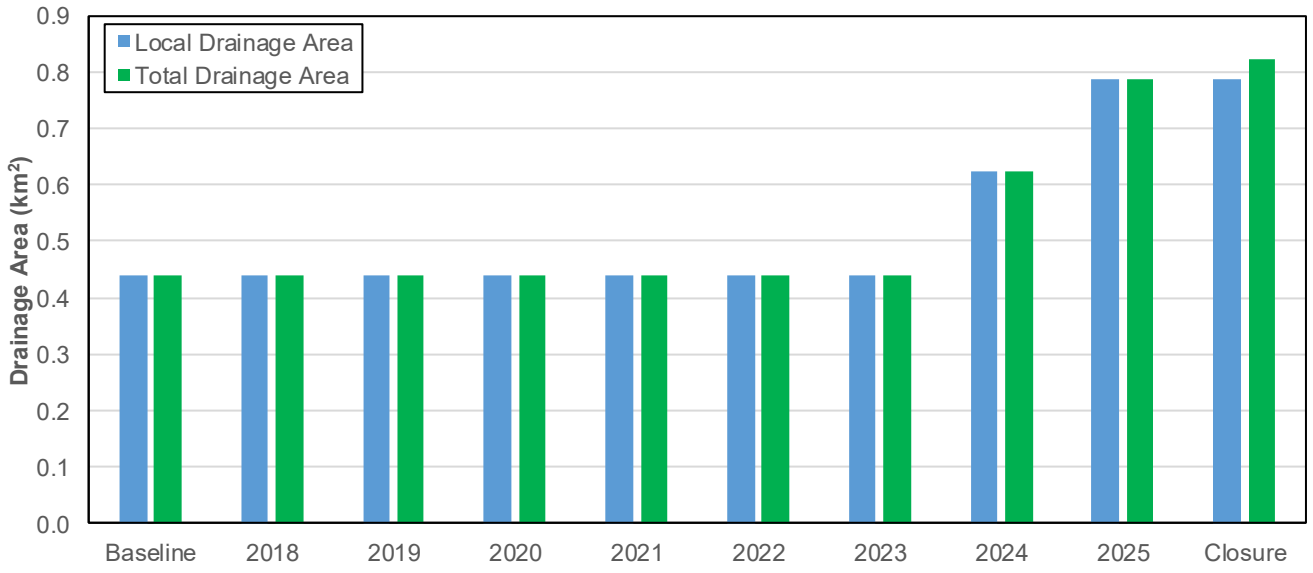

Figure 67: Drainage Area Progression through the Approved and Expansion Project (IVR WRSF Contact Water Collection System)

3.10.2 Water Balance

Inflows and outflows are summarized in Table 23, and presented in tabular form in Appendix D.

Table 23: Water Balance Flow Components (IVR WRSF Contact Water Collection System)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 68 (Construction / Operations) ■ Figure 69 (Closure)	■ Rainfall and Snow-Water-Equivalent (SWE) Runoff from natural areas	■ Natural drainage	■ 2018	■ Post-Closure	■ Runoff volumes are expected to be inversely proportional to the footprint of the IVR WRSF which increases until 2025.
	■ Runoff from the IVR WRSF	■ Natural drainage	■ Q3 2020	■ Post-Closure	■ Runoff volumes are expected to be proportional to the footprint of the IVR WRSF which increases until 2025.
	■ Seepage from the IVR WRSF	■ Natural drainage	■ 2034	■ Post-Closure	■ The field capacity of the active layer of the IVR WRSF is expected to be exceeded by 2034, resulting in seepage.
	■ Runoff from the GSP (brackish water)	■ Natural drainage	■ Closure	■ Post-Closure	■ The GSP (brackish water) will be backfilled at the start of closure and its runoff will follow natural drainage patterns towards the IVR WRSF
OUTFLOWS					
■ Figure 70 (Construction / Operations) ■ Figure 71 (Closure)	■ Runoff to Whale Tail Lake (North Basin)	■ Natural drainage	■ 2018	■ 2019	■ Runoff to Whale Tail Lake (North Basin) until the Northeast Dike is constructed in October 2018
	■ Runoff diversion to the Northeast Sector	■ Pump / Pipeline	■ 2019	■ Q3 2020	■ Runoff diversion to Lake A16 (Mammoth Lake) via the Northeast Sector diversion (see Section 3.2.2) once the Northeast Dike is constructed in October 2018, until the IVR Pit is initiated in Q3 2020.
	■ Runoff diversion to the Whale Tail Attenuation Pond	■ Pump / Pipeline	■ Q3 2020	■ 2022	■ Runoff diversion to Whale Tail Attenuation Pond once the IVR Pit is initiated in Q3 2020, until the IVR Attenuation Pond is operational in 2022. ■ Runoff volumes decrease slightly from baseline conditions resulting from temporary storage in the IVR WRSF (i.e., released as seepage in 2034).
	■ Runoff diversion to the IVR Attenuation Pond	■ Pump / Pipeline	■ 2022	■ Closure	■ Runoff diversion to IVR Attenuation Pond once operational 2022 until closure. ■ Runoff volumes decrease slightly from baseline conditions resulting from temporary storage in the IVR WRSF (i.e., released as seepage in 2034).
	■ Runoff to Whale Tail Lake (North Basin) via the Whale Tail Pit	■ Natural drainage	■ Closure	■ Post-Closure	■ Runoff to Whale Tail Lake (North Basin) via the IVR Pit at closure, following natural drainage pattern. ■ Runoff volumes are expected to increase from baseline conditions from freezing of the Whale Tail WRSF and runoff from the GSP (brackish water). ■ Runoff volumes are further expected to increase from seepage inflows from the IVR WRSF in 2034.

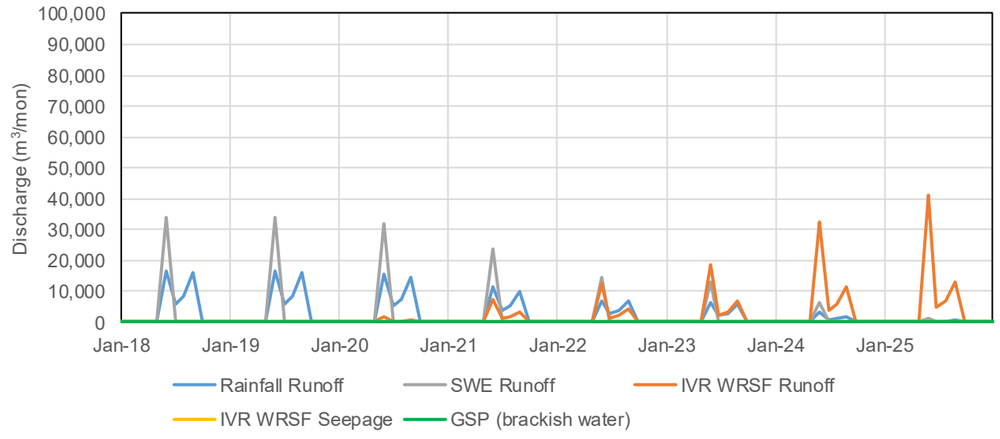

Figure 68: Inflows to the IVR WRSF Contact Water Collection System (Construction and Operations)

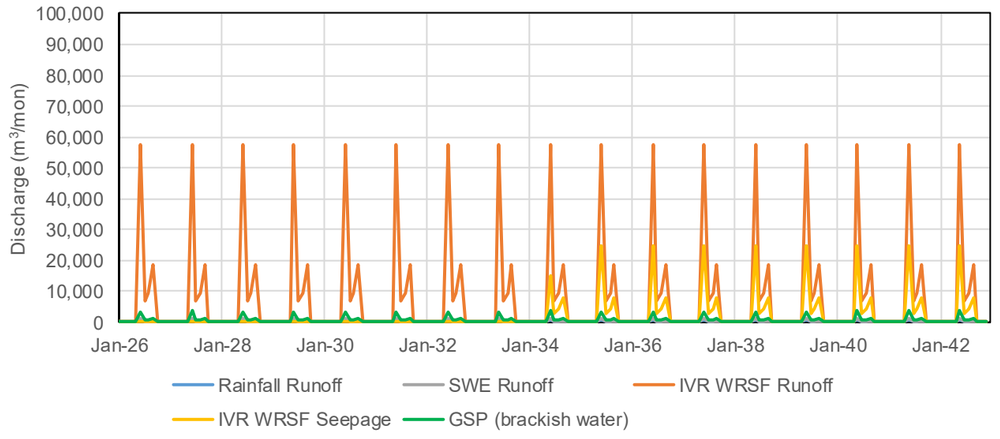

Figure 69: Inflows to the IVR WRSF Contact Water Collection System (Closure)

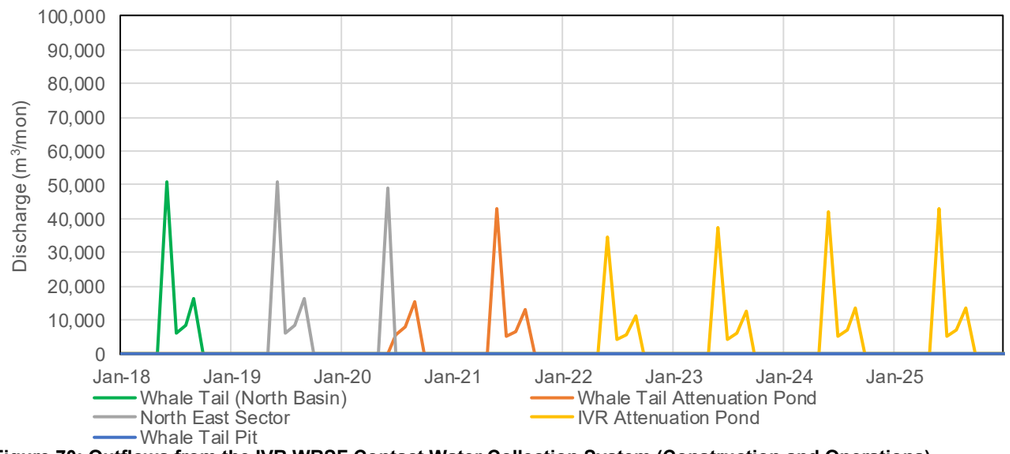

Figure 70: Outflows from the IVR WRSF Contact Water Collection System (Construction and Operations)

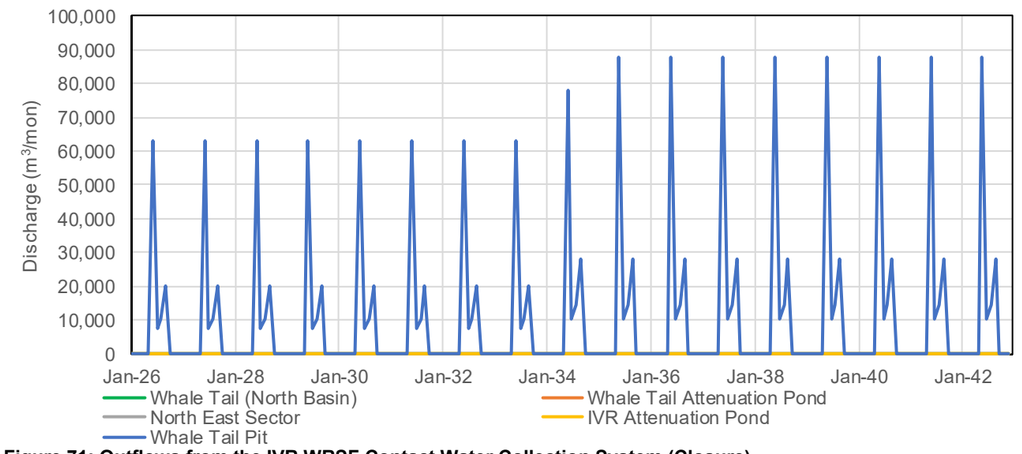

Figure 71: Outflows from the IVR WRSF Contact Water Collection System (Closure)

3.11 East Sector / IVR Attenuation Pond

3.11.1 Catchment Characteristics and Water Management

The East Sector, inclusive of the Lake A53 catchment, is located east of Whale Tail Lake. The catchment remains at baseline conditions until 2022, when it becomes the IVR Attenuation Pond following fishout, construction of the IVR Attenuation Pond dike, and dewatering of Lake A53; however, its outlet only drains naturally to Whale Tail Lake (North Basin) in 2018, prior to its diversion to Whale Tail Lake (South Basin) from 2019 to 2022. The IVR Attenuation Pond is operational by freshet 2022. The IVR Attenuation Pond is intended to manage all contact water from 2022 to closure while discharging through the C-WTP and O-WTP during open water conditions. At closure, it is drawn down by pumping to the Underground Mine, is backfilled with NML/NPAG waste rock to decrease its storage capacity to zero and its natural drainage patterns are re-established towards Whale Tail Lake (North Basin) via the Whale Tail Attenuation Pond.

An overview of the catchment, along with its natural drainage pattern and operational pathways, is provided in Figure 72.

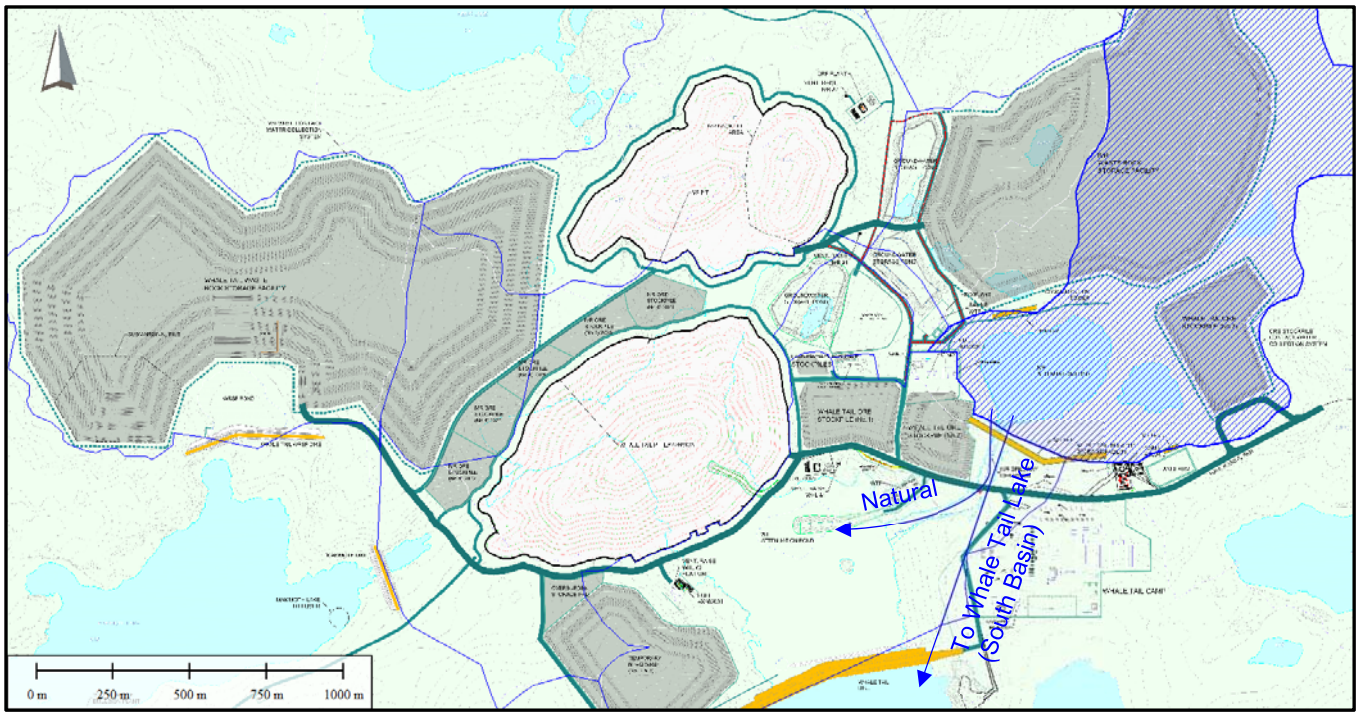

Figure 72: East Sector / IVR Attenuation Pond Catchment Overview

Storage characteristics are summarized in Table 24. Drainage areas of the IVR Attenuation Pond are summarized in Figure 73.

The East Sector / IVR Attenuation Pond has a drainage area of 1.35 km^2 at baseline. Its local drainage area diminishes progressively from the progressive increase in footprint of the IVR WRSF. 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 6.42 km^2 during operations. At closure, its drainage area consists of its local drainage area of 1.00 km^2.

Table 24: Storage Characteristics (East Sector / IVR Attenuation Pond)

Snapshot	Drainage Area (km^2)	Operating Level		Capacity	
		Water Surface Elevation (masl)	Storage (m^3)	Water Surface Elevation (masl)	Storage (m^3)
Baseline to 2022	1.35	161.73	154,735	161.73	154,735
2022 to Closure	6.42	157.75 to 163.73	534,819	163.73	534,819
Closure to Post-Closure	1.00	161.73	0	161.73	0

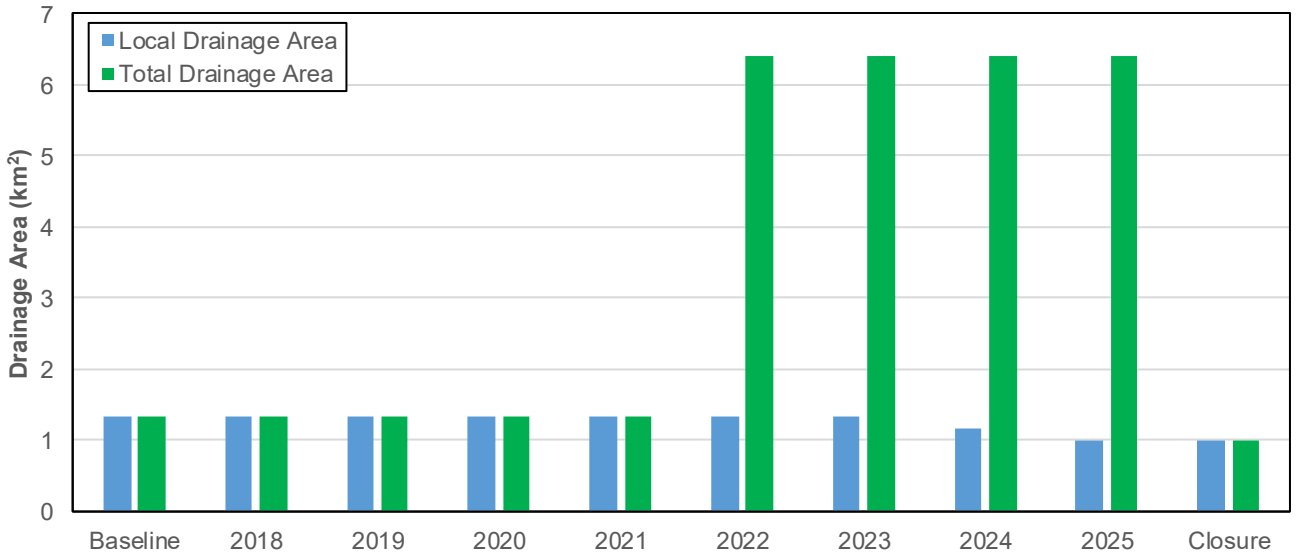

Figure 73: Drainage Area Progression through the Approved and Expansion Project (East Sector / IVR Attenuation Pond)

3.11.2 Water Balance

Inflows and outflows are summarized in Table 25, and presented in tabular form in Appendix D.

Table 25: Water Balance Flow Components (East Sector / IVR Attenuation Pond)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 74 (Construction / Operations) ■ Figure 75 (Closure)	■ Rainfall and SWE runoff from natural areas	■ Natural drainage	■ 2018	■ Post-Closure	■ Runoff volumes are expected to be inversely proportional to the footprint of the IVR WRSF increasingly encroaching on the East Sector / IVR Attenuation catchment until 2025.
	■ Camp biodisk and truck shop inflows	■ Pump / Pipeline	■ 2022	■ Closure	■ Runoff volumes are expected to be constant.
	■ Runoff diversion from the Whale Tail Attenuation Pond	■ Pump / Pipeline	■ 2022	■ Closure	■ Runoff volumes are expected to be greater in 2022 to reduce the water level in the Whale Tail Attenuation and constant on annual basis thereafter.
	■ Runoff diversion from the IVR Pit	■ Pump / Pipeline	■ 2022	■ Closure	■ Annual runoff volumes expected to be constant.
	■ Runoff diversion from the IVR WRSF	■ Pump / Pipeline	■ 2022	■ Closure	■ Runoff volumes are expected to be proportional to the footprint of the IVR WRSF increasingly encroaching on the East Sector / IVR Attenuation catchment until 2025.
	■ Runoff diversion from the North Sump	■ Pump / Pipeline	■ 2022	■ Closure	■ Annual runoff volumes expected to be constant.
	■ Runoff diversion from the Whale Tail Pit	■ Pump / Pipeline	■ 2022	■ Closure	■ Annual runoff volumes expected to be constant.
	■ Runoff diversion from Whale Tail WRSF	■ Pump / Pipeline	■ 2022	■ Closure	■ Annual runoff volumes expected to be constant.
OUTFLOWS					
■ Figure 76 (Construction / Operations) ■ Figure 77 (Closure)	■ Evaporation	■ n/a	■ 2018	■ Post-Closure	■ Evaporative losses are expected to be proportional to the water surface elevation in Lake A53 / IVR Attenuation Pond
	■ Runoff to Whale Tail Lake (North Basin)	■ Natural drainage	■ 2018 ■ Closure	■ 2019 ■ Post-Closure	■ Runoff following natural drainage patterns prior to the diversion to Whale Tail Lake (South Basin), and during closure.
	■ Runoff to Whale Tail Lake (South Basin)	■ Channel	■ 2019	■ 2022	■ Runoff diversion to Whale Tail Lake (South Basin) starting during the dewatering of Whale Tail Lake (North Basin) and ending once the IVR Attenuation Pond becomes operational.
	■ Drawdown and runoff diversion bypassing the O-WTP	■ Pump / Pipeline	■ 2022	■ 2022	■ Drawdown of 66% of Lake A53 to Whale Tail Lake (South Basin) assumed not to require treatment, following fishout and prior to operations of the IVR Attenuation Pond in April 2022.
	■ Runoff diversion to the O-WTP	■ Pump / Pipeline	■ 2022	■ Closure	■ Drawdown of 34% of the Lake A53 to Whale Tail (South Basin) prior to operations of the IVR Attenuation Pond in May 2022. ■ Diversion to the TSS / As WTP during open water conditions.
	■ Drawdown to the Underground Mine	■ Pump / Pipeline	■ Start of closure	■ Start of closure	■ Pumping of the IVR Attenuation Pond to the underground mine prior to backfilling with NML/NPAG waste rock at the start of closure.

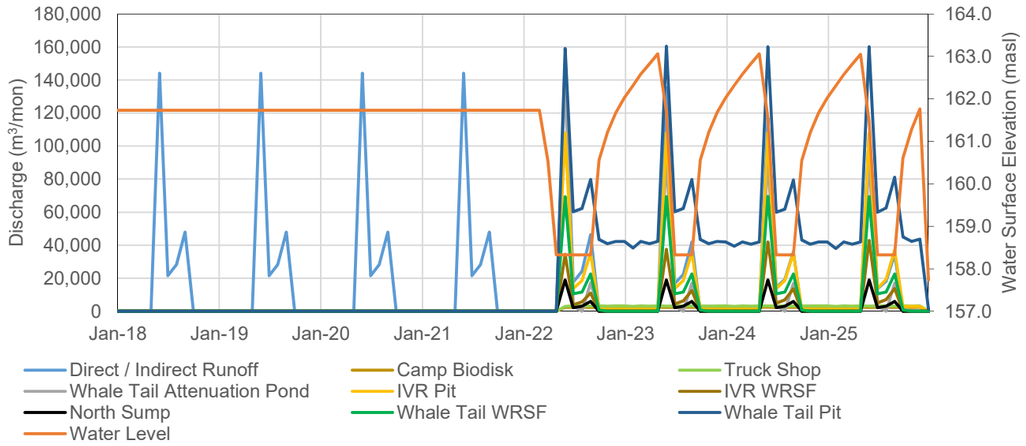

Figure 74: Inflows to the East Sector / IVR Attenuation Pond (Construction and Operations)

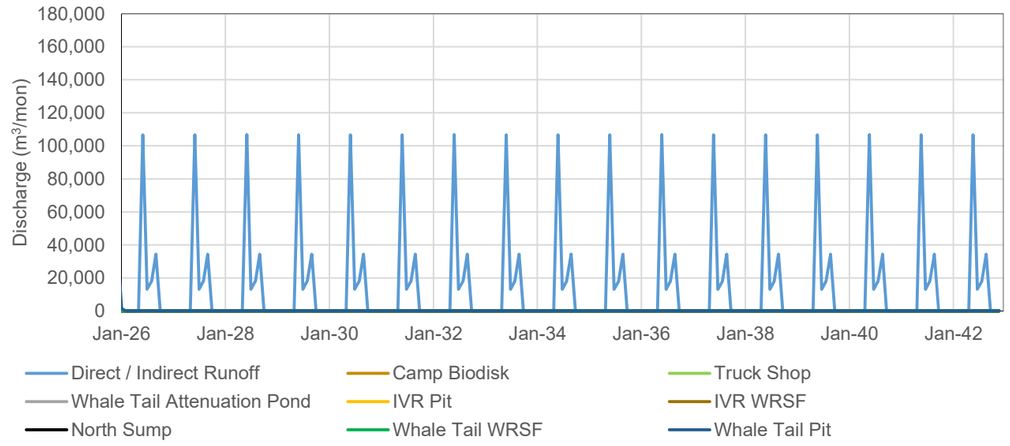

Figure 75: Inflows to the East Sector / IVR Attenuation Pond Area (Closure)

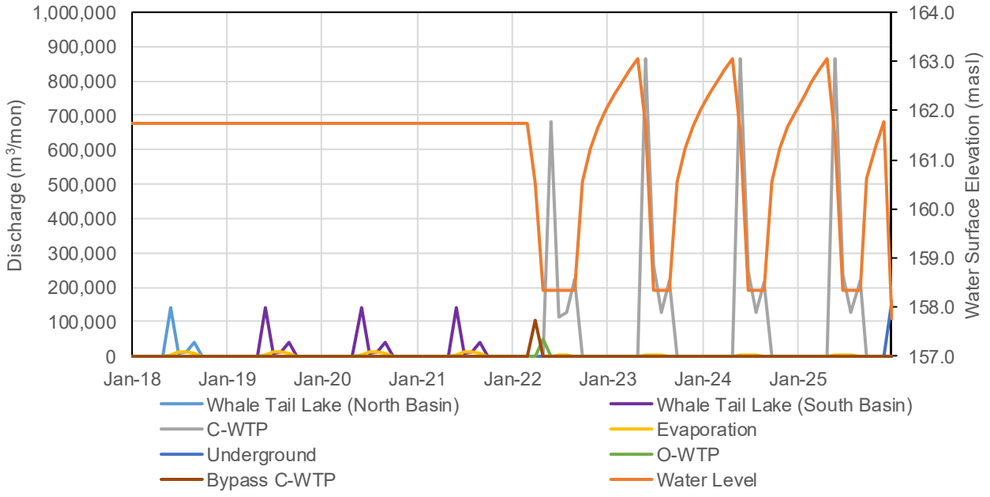

Figure 76: Outflows from the East Sector / IVR Attenuation Pond (Construction and Operations)

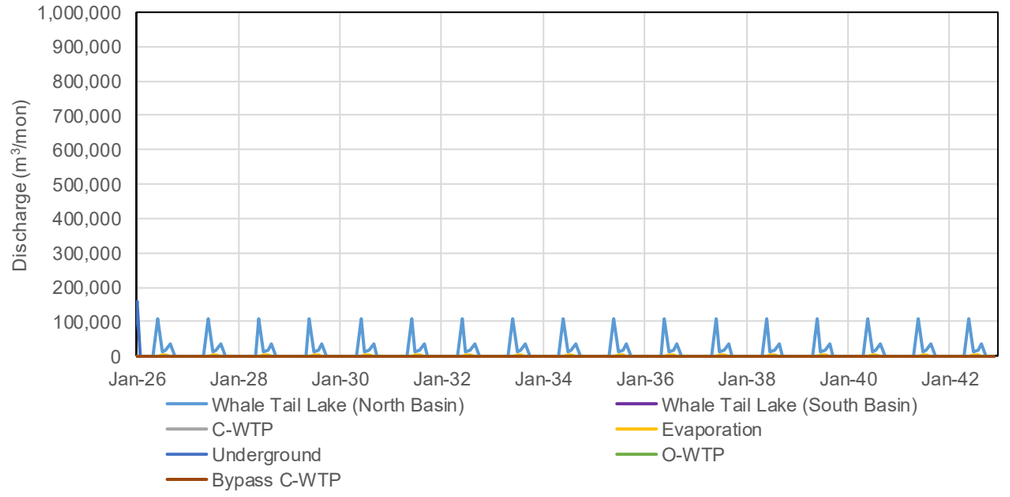

Figure 77: Outflows from the East Sector / IVR Attenuation Pond Area (Closure)

3.12 Whale Tail Lake (South Basin)

3.12.1 Catchment Characteristics and Water Management

Whale Tail Lake (South Basin) is located south of and adjacent to the proposed Whale Tail Dike. Whale Tail Lake (South Basin) is at baseline conditions connected to Whale Tail Lake (North Basin) until the construction of the Whale Tail Dike prior to dewatering of Whale Tail Lake (North Basin) through Whale Tail Lake (South Basin) from March to May 2019. Dewatering of Whale Tail Lake (North Basin) results in the flooding of Whale Tail Lake (South Basin) and spilling into the Lake A16 (Mammoth Lake) watershed via an engineered channel during operations. From June 2021 to the operations, Whale Tail Lake (South Basin) receives effluent.

At the end of operations and into closure, the water level in the South Basin is lowered permanently to 153.5 masl (i.e., one metre above baseline level) by pumping the flooded volume into the Underground Mine and the IVR Pit. This water level is maintained throughout the rest of the closure phase and the post-closure phase thereafter. During the rest of the closure phase, water level is maintained by pumping Whale Tail Lake (South Basin) water into Whale Tail Lake (North Basin). At post-closure, the Mammoth Dike and the Whale Tail Dike are decommissioned to re-establish natural drainage patterns in Whale Tail Lake. Whale Tail Lake then flows to Lake A16 (Mammoth Lake) via the Mammoth sill.

An overview of the sector, along with its natural drainage pattern and operational pathways, is provided in Figure 78.

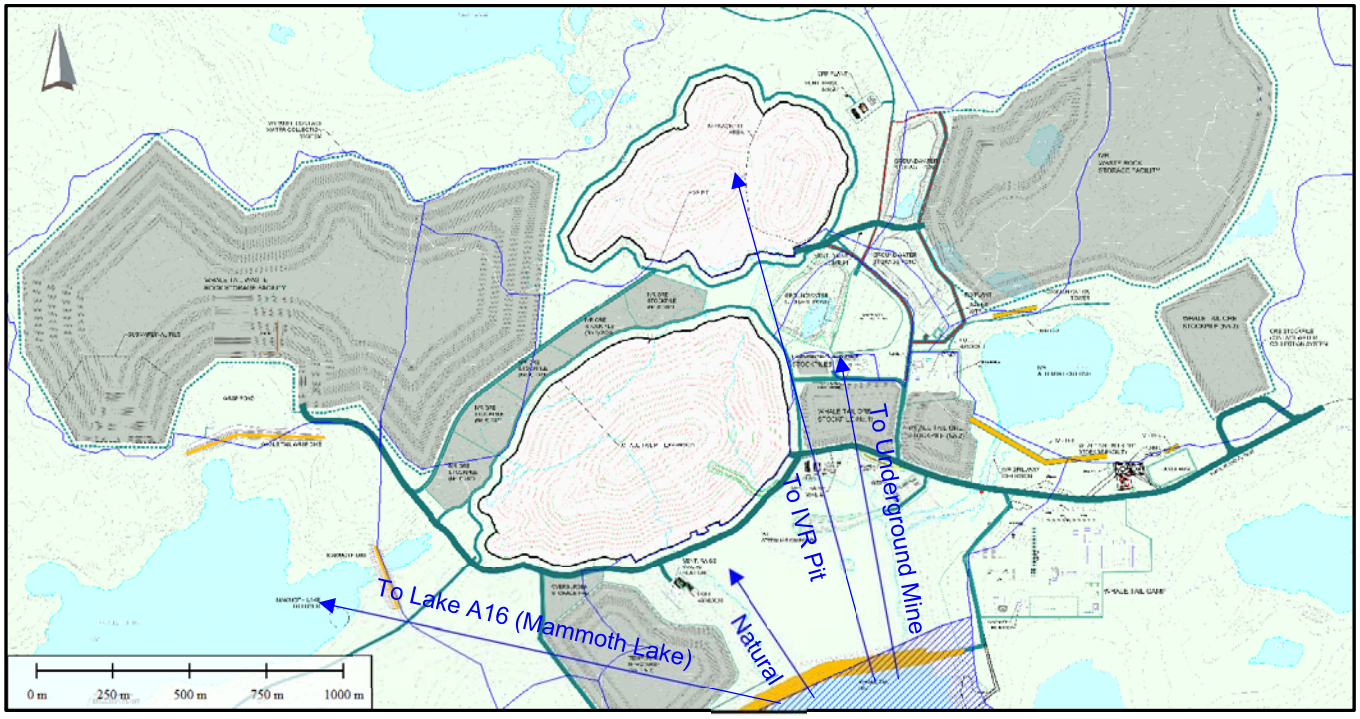

Figure 78: Whale Tail Lake (South Basin) Catchment Overview

Storage characteristics are summarized in Table 26. Drainage areas of Whale Tail Lake (South Basin) are summarized in Figure 79. The baseline drainage area of Whale Tail Lake (South Basin), 22.3 km^2, is augmented during the diversion of Lake A53 to 23.7 km^2 prior to the initiation of the IVR Attenuation Pond, and during the dewatering of Whale Tail Lake (North Basin) to 25.0 km^2 (inclusive of the diversion of Lake A53) in 2019.

Table 26: Storage Characteristics (Whale Tail Lake [South Basin])

Snapshot	Drainage Area (km^2)	Operating Level		Capacity	
		Water Surface Elevation (masl)	Storage (m^3)	Water Surface Elevation (masl)	Storage (m^3)
Baseline	22.3	152.50	4,597,768	152.50	4,597,768
Construction to Closure	22.3 to 28.7	156.00	11,832,960	156.00	11,832,960
Closure to Post-Closure	22.3	153.50	5,547,803	153.50	5,547,803

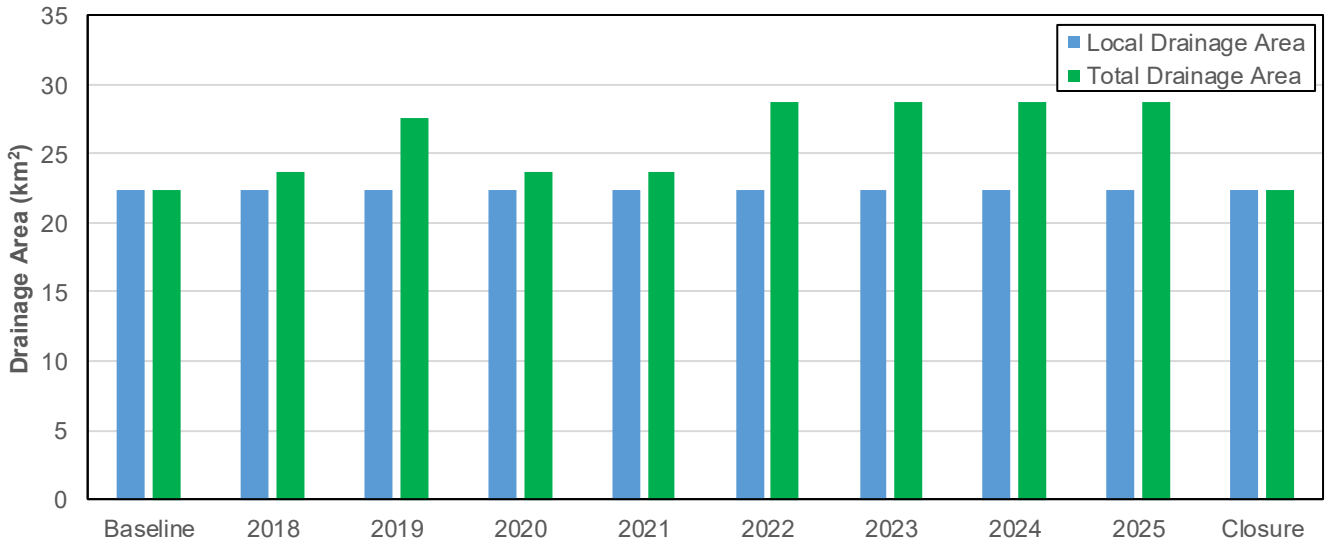

Figure 79: Drainage Area Progression through the Approved and Expansion Project (Whale Tail Lake [South Basin])

3.12.2 Water Balance

Inflows and outflows are summarized in Table 27, and presented in tabular form in Appendix D.

Table 27: Water Balance Flow Components (Whale Tail Lake [South Basin])

Figure	Flow Component	Flow Type	Start	End	Note / Comment
INFLOWS					
■ Figure 80 (Construction / Operations) ■ Figure 81 (Closure)	■ Rainfall SWE runoff on natural areas	■ Natural drainage	■ 2018	■ Post-Closure	■ Runoff volumes are proportional to the lake surface area of Whale Tail Lake (South Basin). ■ Runoff volumes include those from tributary lakes when they become part of the flooded area of Whale Tail Lake (South Basin).
	■ Runoff from tributary Lakes A18, A55, A60, A62, and A65	■ Natural drainage	■ 2018	■ Post-Closure	■ Runoff volumes of tributary lakes are included in runoff volumes of Whale Tail Lake (South Basin) when they become part of the flooded area of Whale Tail Lake (South Basin), as noted above.
	■ Runoff diversion from Lake A53	■ Channel	■ 2019	■ 2022	■ Runoff diversion from the Lake A53 watershed until the IVR Attenuation Pond becomes operational. ■ Runoff volumes are expected to be constant on an annual basis.
	■ Drawdown of Whale Tail Lake (North Basin)	■ Pump / Pipeline	■ 2019	■ 2019	■ Drawdown of Whale Tail Lake (North Basin) through Whale Tail Lake (South Basin) from March to May 2019.
	■ Runoff diversion from Whale Tail Attenuation Seepage Well	■ Pump / Pipeline	■ 2020	■ Closure	■ Runoff diversion from the Whale Tail Attenuation Pond Seepage Pumping Station operational by 2020 and decommissioned by closure.
	■ Effluent discharge from the O-WTP	■ Pump / Pipeline	■ June 2021	■ Closure	■ The O-WTP discharges to Whale Tail Lake (South Basin) from June 2021 to closure.
OUTFLOWS					
■ Figure 82 (Construction / Operations) ■ Figure 83 (Closure)	■ Natural connection to Whale Tail Lake (North Basin)	■ Natural drainage	■ 2018	■ July 2018	■ Runoff to Whale Tail Lake (North Basin) following natural drainage patterns until construction of the Whale Tail Dike assumed to prevent runoff by July 2018.
	■ Runoff diversion to Lake A16 (Mammoth Lake)	■ Channel	■ 2020	■ Closure	■ Whale Tail Lake (South Basin) is expected to reach an elevation of 156.0 masl and overflow during open water conditions to Lake A16 (Mammoth Lake) by June 2020 until closure.
	■ 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.
	■ Drawdown to the Underground Mine and IVR Pit	■ Pump / Pipeline	■ 2026	■ WTS drawn down	■ Drawdown of Whale Tail Lake (South Basin) from 156.0 masl at the start of closure to 153.5 masl by October 2026. ■ Drawdown through the Underground Mine until it is refilled and through IVR Pit thereafter.
	■ Runoff diversion to IVR Pit	■ Pump / Pipeline	■ 2027	■ Post-Closure	■ Runoff diversion from Whale Tail Lake (South Basin) to maintain water surface elevations at 153.5 masl, to the IVR Pit. ■ Annual runoff volumes are expected to be constant.
	■ Camp Use	■ Pump / Pipeline	■ 2018 ■ 2026	■ Sep 2018 ■ Post-Closure	■ Camp use until the water intake at Lake C38 (Nemo Lake) becomes operational. ■ Camp use during closure.
	■ Drilling Water	■ Pump / Pipeline	■ 2018	■ Sep 2018	■ Drilling water until the water intake at Lake C38 (Nemo Lake) becomes operational.
	■ Evaporation	■ n/a	■ 2018	■ Post-Closure	■ Evaporative losses proportional to the lake surface area of Whale Tail Lake (South Basin).

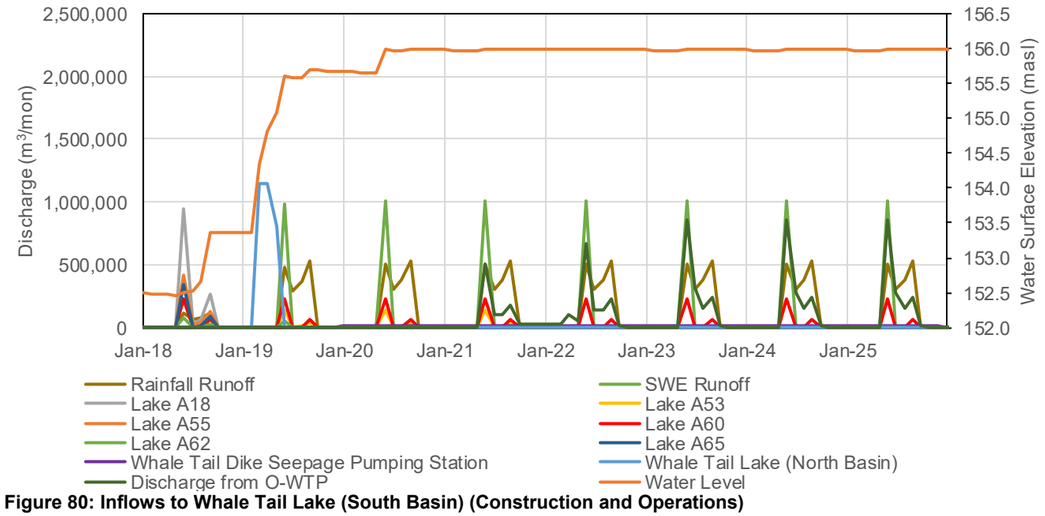

Figure 80: Inflows to Whale Tail Lake (South Basin) (Construction and Operations)

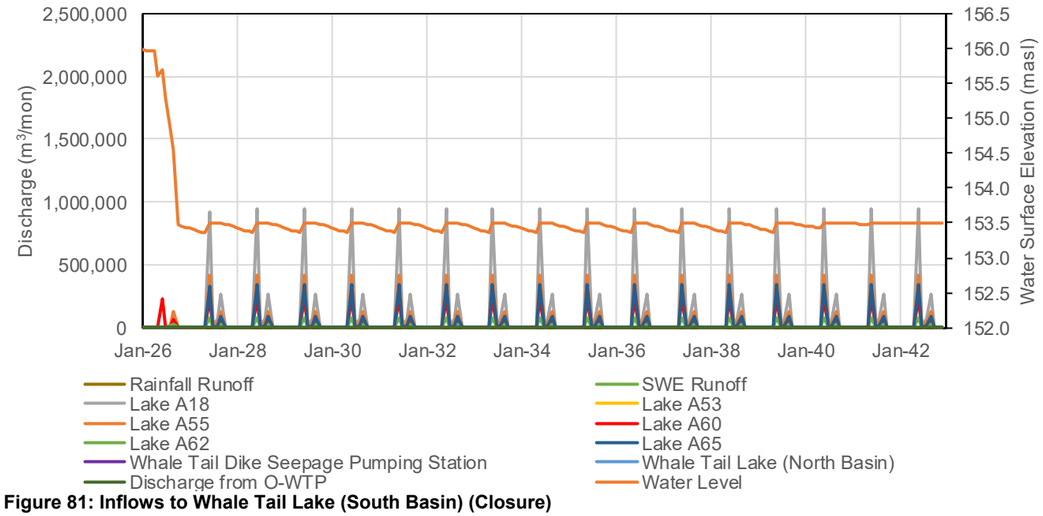

Figure 81: Inflows to Whale Tail Lake (South Basin) (Closure)

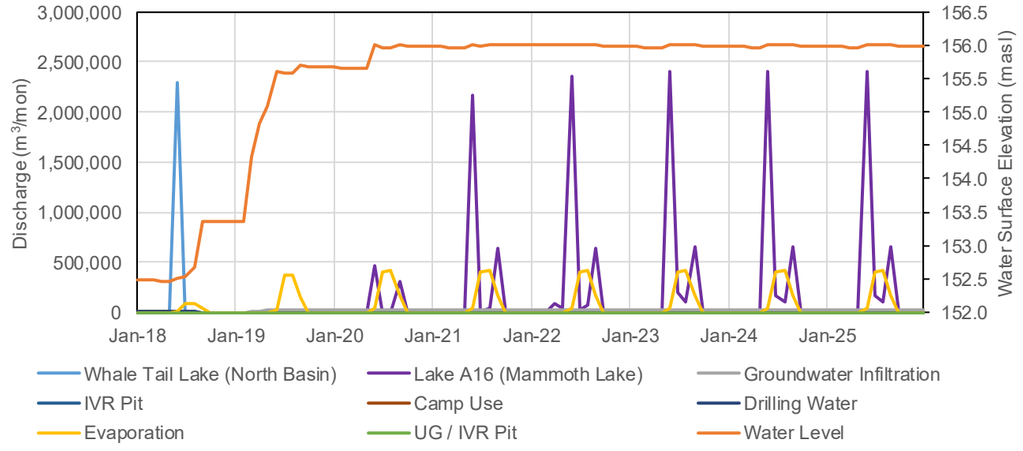

Figure 82: Outflows from Whale Tail Lake (South Basin) (Construction and Operations)

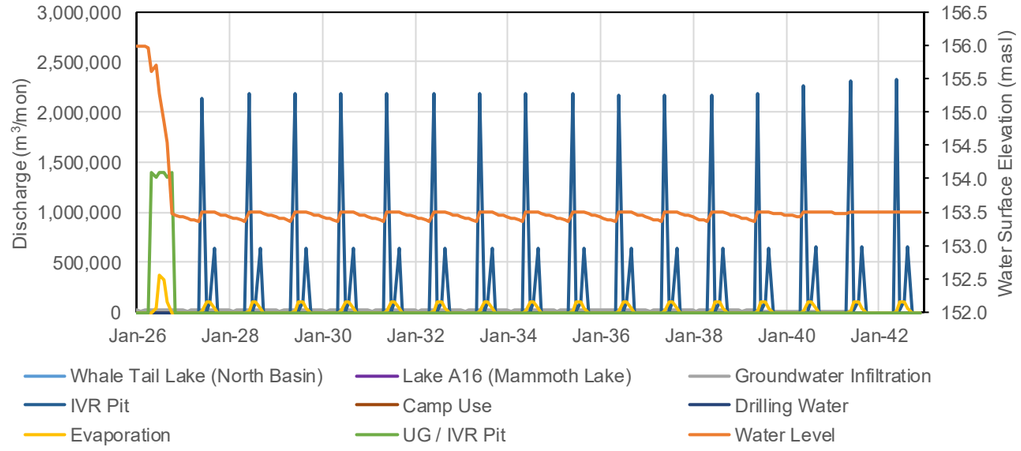

Figure 83: Outflows from Whale Tail Lake (South Basin) (Closure)

3.13 Water Treatment Plants: Treatment Requirement Summary

This section summarizes water treatment requirements identified in previous sections. All water treatment plant designs (type of treatment units, water treatment capacity and flow rate, treated water quality and sludge/brine characteristics) are provided by Agnico Eagle (2018).

Inflows and outflows are summarized in Table 28, and presented in tabular form in Appendix D.

Table 28: Water Balance Flow Components (Water Treatment Plants)

Figure	Flow Component	Flow Type	Start	End	Note / Comment
C-WTP for TSS removal only					
■ Figure 84 (Inflows) ■ Figure 88 (Outflows)	■ Drawdown from Whale Tail Lake (North Basin)	■ Pump / pipeline	■ April 2019	■ May 2019	■ Drawdown of last third of the volume (34% or approximately 1,150,320 m^3) of Whale Tail Lake (North Basin) via the C-WTP. It is not expected to require attenuation of arsenic. The first two-thirds of the volume is presumed free of suspended solids and will be discharged directly to Whale Tail Lake South Basin).
O-WTP for TSS and arsenic removal					
■ Figure 85 (Inflows) ■ Figure 88 (Outflows)	■ Diversion from Quarry 1	■ Pump / pipeline	■ June 2019	■ June 2019	■ Drawdown of Quarry 1 to Lake A16 (Mammoth Lake) via the O- WTP once available in June 2019. ■ Drawdown volume is expected to be approximately 185,399 m^3.
	■ Diversion from the Whale Tail Attenuation Pond	■ Pump / pipeline	■ 2019	■ 2022	■ Diversion of collected water to Lake A16 (Mammoth Lake) until May 2021 and to Whale Tail Lake (South Basin) from June 2021 until May 2022 via the O- WTP during open water conditions. ■ Total treated volume is expected to be approximately 2,674,577 m^3.
	■ Diversion from the GSP (brine)	■ Pump / pipeline	■ Jun 2020	■ Jun 2020	■ Drawdown of the GSP (brine) to Lake A16 (Mammoth Lake) via the O- WTP in June 2020. ■ Drawdown volume is expected to be approximately 236,206 m^3 ■ Intended to prevent untreated overflow of the GSP (brine) to the receiving environment and dilution of high salinity waters.
	■ Drawdown from the Lake A53	■ Pump / pipeline	■ May 2022	■ May 2022	■ Drawdown of last third of the volume (34% or approximately 50,578 m^3) of Lake A53 to Whale Tail Lake (South Basin) prior to operations of the IVR Attenuation Pond in May 2022. This water is expected to require TSS control only but will be run through the As treatment circuit as well. The first two-thirds of the volume is presumed free of suspended solids and will be discharged directly to Lake A16 (Mammoth Lake).
	■ Runoff diversion from the Northeast Sector	■ Pump / pipeline	■ 2019	■ July 2020	■ Runoff diversion to Lake A16 (Mammoth Lake) once the Whale Tail Dike is operational and until the IVR Pit is initiated. This water is expected to require TSS control only but will be run through the As treatment circuit as well.
	■ Diversion from the IVR Attenuation Pond	■ Pump / pipeline	■ 2022	■ Closure	■ Diversion to Whale Tail Lake (South Basin) during open water seasons via the O-WTP.
S-WTP (brine) Unit					
■ Figure 86 (Inflows) ■ Figure 88 (Outflows)	■ Diversion from the GSP (brine)	■ Pump / pipeline	■ 2022	■ Closure	■ Treatment at a rate of 60 m^3/day in 2022. ■ Treatment at a rate of 90 m^3/day from 2023 to closure. ■ Treated water (permeate) is discharged to Whale Tail Lake (South Basin).
S-WTP (brackish) Unit					
■ Figure 87 ■ (Inflows) ■ Figure 88 (Outflows)	■ Diversion from the Whale Tail Attenuation Pond	■ Pump / pipeline	■ Winter 2020 - 2021	■ Winter 2021 - 2022	■ Diversion of collected water to Lake A16 (Mammoth Lake) via the S-WTP (brackish) during winter only from October 2020 (i.e., when the treatment unit becomes operational) to April 2022 (i.e., when treatment is required for low salinity water from the Underground Mine). ■ Treatment at a maximum rate of 1,000 m^3 per day. ■ Resulting brine concentrate reject (assumed to be 15% of the treated volume) is conveyed to the GSP (brine). ■ Resulting permeate (assumed to be 85% of the treated volume) is conveyed to Lake A16 (Mammoth Lake) from October 2020 to May 2021 and to Whale Tail Lake (South Basin) from October 2021 to April 2022.
	■ Diversion from the GSP (brackish water)	■ Pump / pipeline	■ 2022	■ Closure	■ Treatment at a maximum rate of 1,000 m^3 per day. ■ Resulting brine (assumed to be 15% of the treated volume) is conveyed to the GSP (brine). ■ Resulting permeate (assumed to be 85% of the treated volume) is discharged to Whale Tail Lake (South Basin).

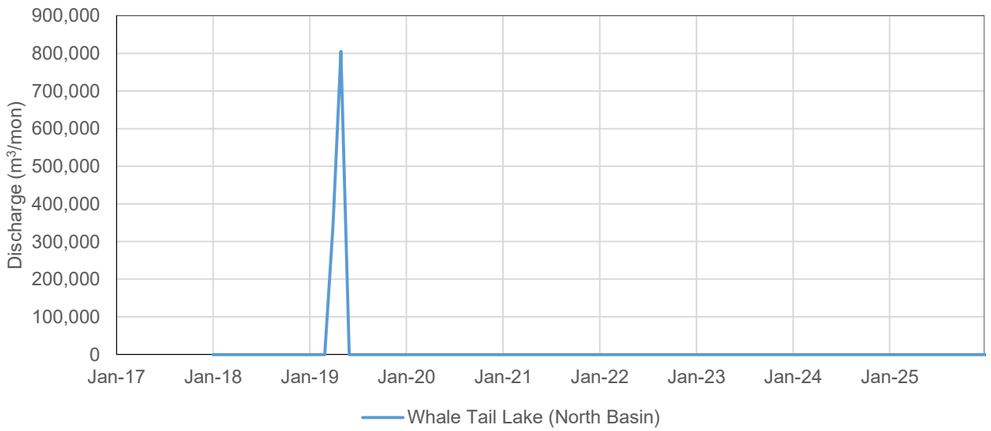

Figure 84: Inflows to the C-WTP (Construction and Operations)

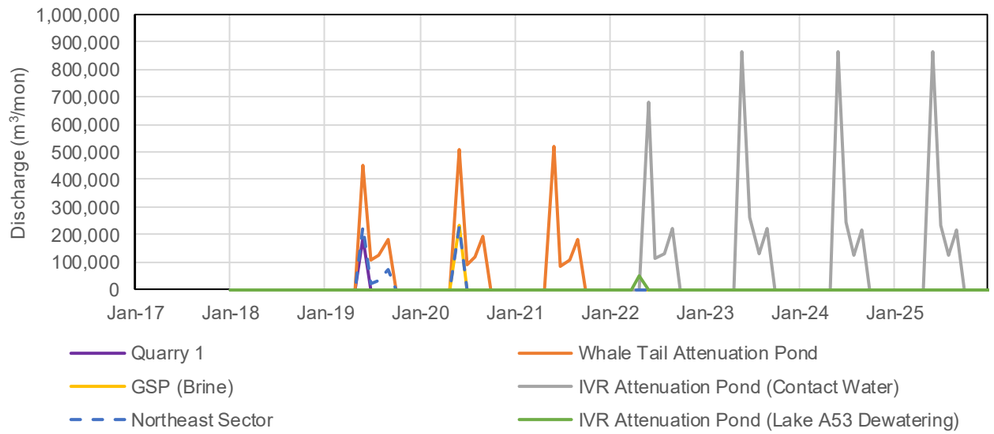

Figure 85: Inflows to the O-WTP (Construction and Operations)

Figure 86: Inflows to the S-WTP (brine) Unit (Construction and Operations)

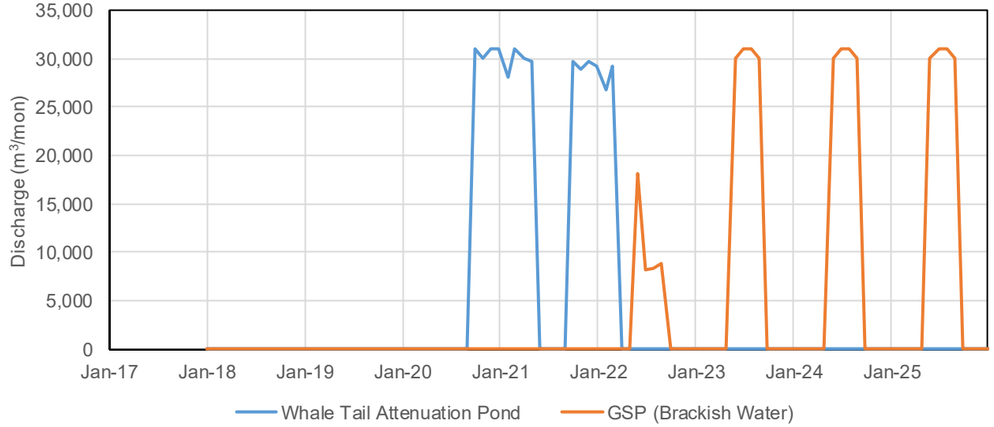

Figure 87: Inflows to the S-WTP (brackish) Unit (Construction and Operations)

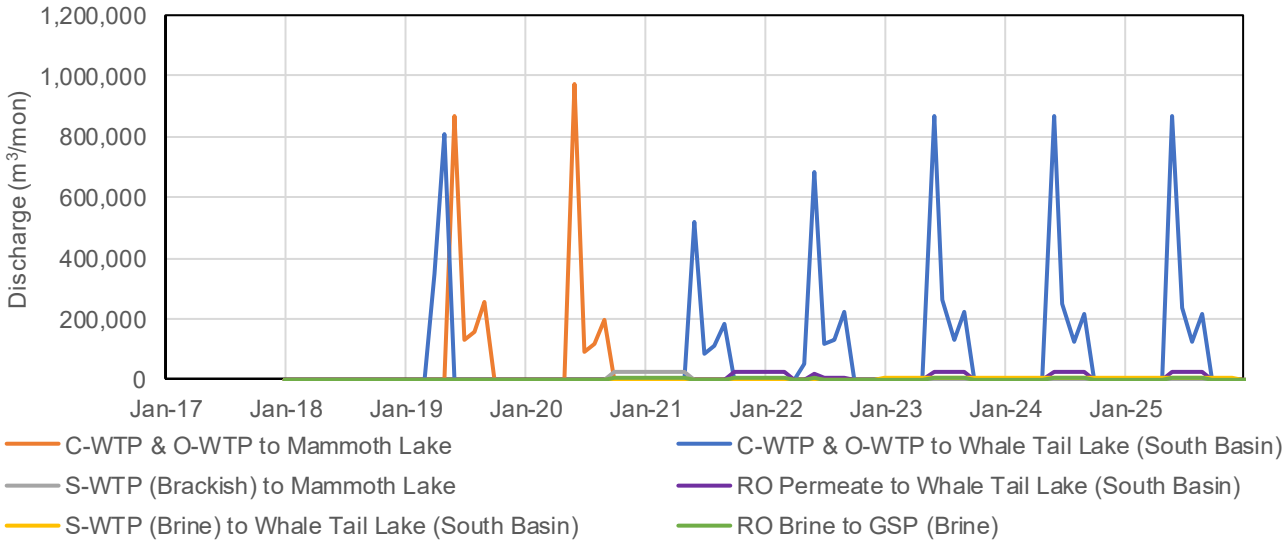

Figure 88: Outflows from the Water Treatment Plants

3.14 Closure: Flooding of Open Pits, Underground Mine and Refilling of Whale Tail Lake (North Basin)

Mine closure will be initiated after cessation of mining activities, in January 2026 until Whale Tail Lake (North Basin) reaches a water surface elevation of 153.5 masl (i.e., 1 metre over the baseline elevation). The water management plan for the closure period is presented conceptually in Figure 89.

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 the Groundwater Storage Ponds (brine and brackish water), 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 diversion from 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 was estimated to occur from 2026 to 2041 (Figure 90) as follows:

- refilling of the Underground Mine expected to be completed in early 2026;
- 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;
- 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]) expected in 2039; and,
- refilling of the Whale Tail Attenuation Pond and pit areas to the water surface elevation of 153.5 masl expected in 2041.
- Reconnection of the South Basin and North Basin will occur once water quality objectives are met within the flooded pit lake, currently predicted to occur in 2051 (Golder 2018a). 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 goals.

During this period, the total catchment area of Lake A16 (Mammoth Lake) will be reduced by 77% from 38.7 km^2 to 9.0 km^2, resulting in a proportional decrease in flows. In comparison, the refilling period for the Approved Project was expected from January 2022 to June 2026.

Elevation-storage-area relationships used for this estimate are provided in Appendix C.

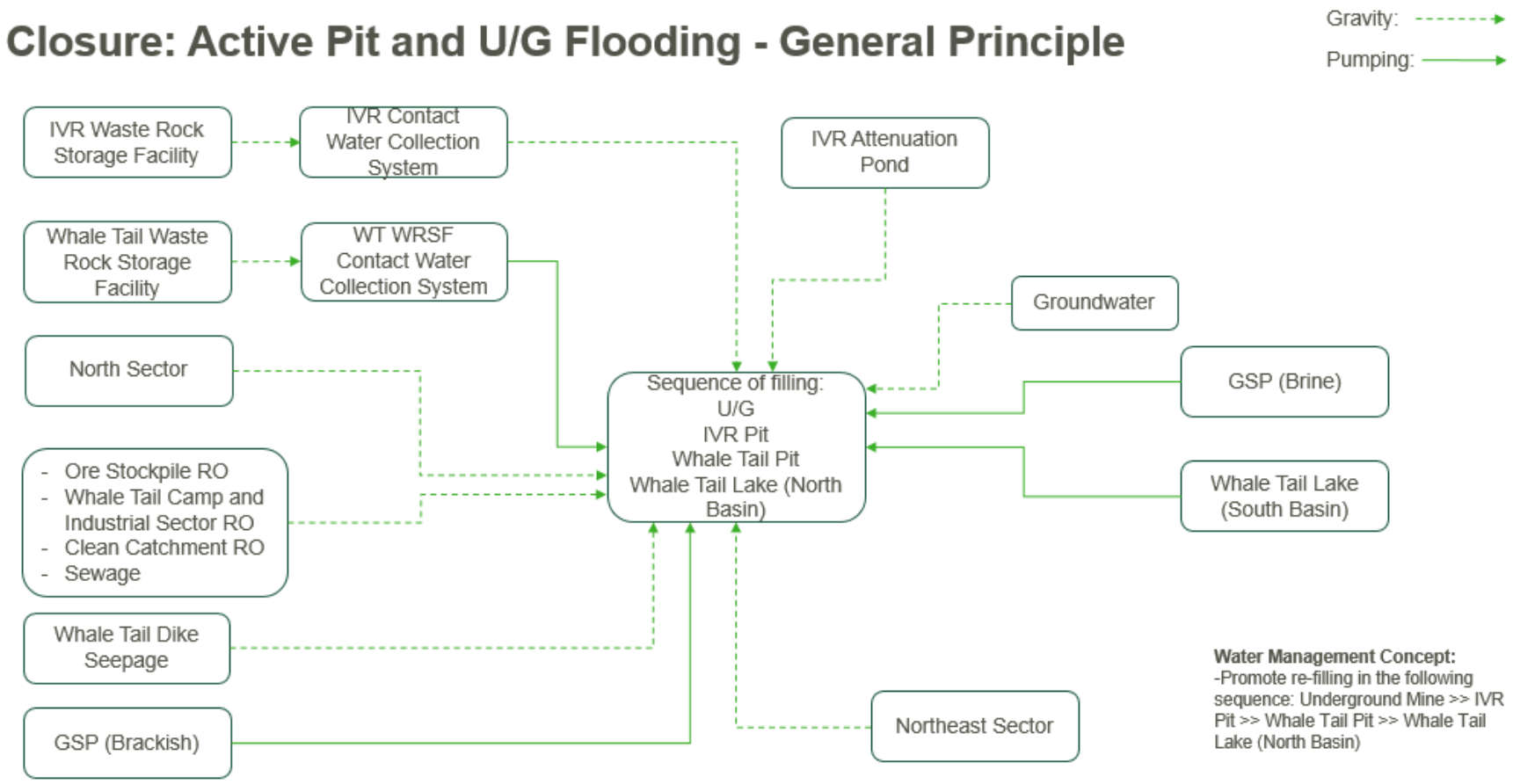

Figure 89: Mine Closure Period Flow Diagram

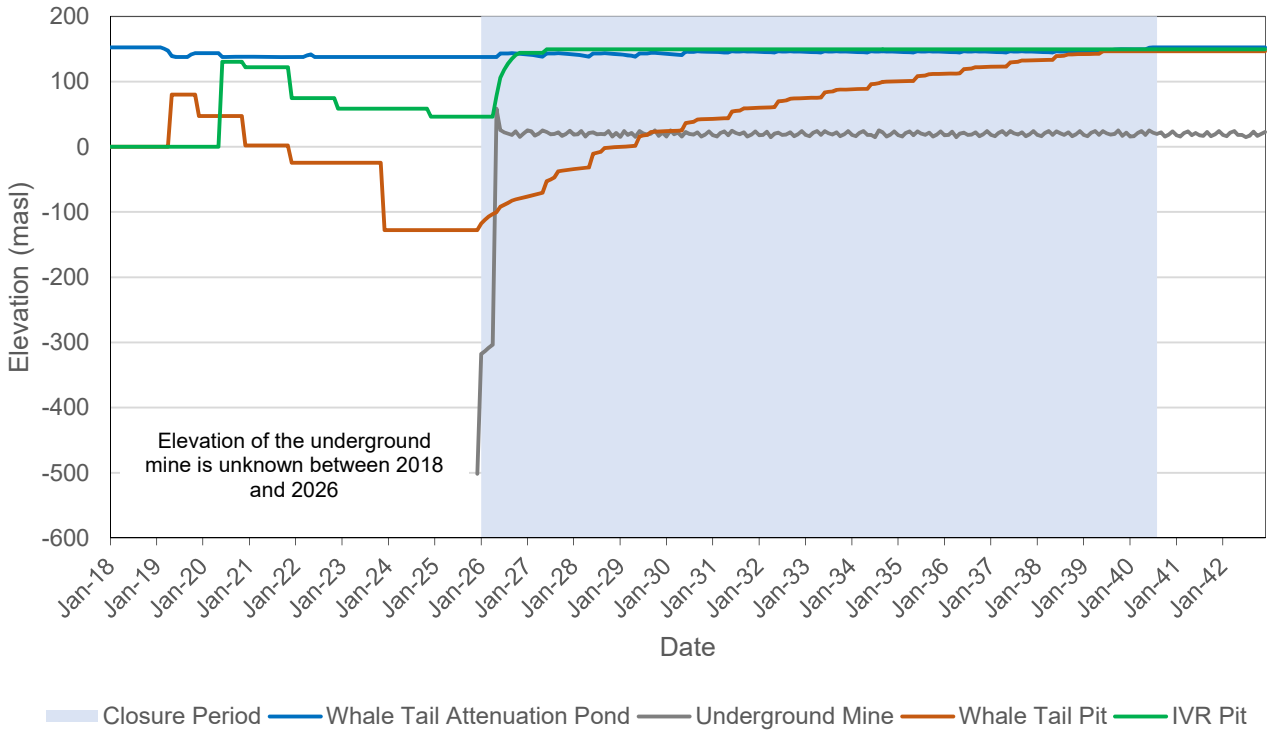

Figure 90: Refilling of Whale Tail Lake (North Basin) and Underground Mine

3.15 Post-Closure: Re-Establishment of Natural Drainage Patterns

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 2041; adequate water quality in 2051; Golder 2018a), the Whale Tail Dike, Mammoth Dike, and 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 sill 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.

The configuration of Whale Tail Lake at Post-Closure, along with permanent drainage pathways, is shown in Figure 91. Water balance components are presented in Section 3.8 (Whale Tail Lake) and in Section 3.5 (Whale Tail WRSF Contact Water Collection System area).

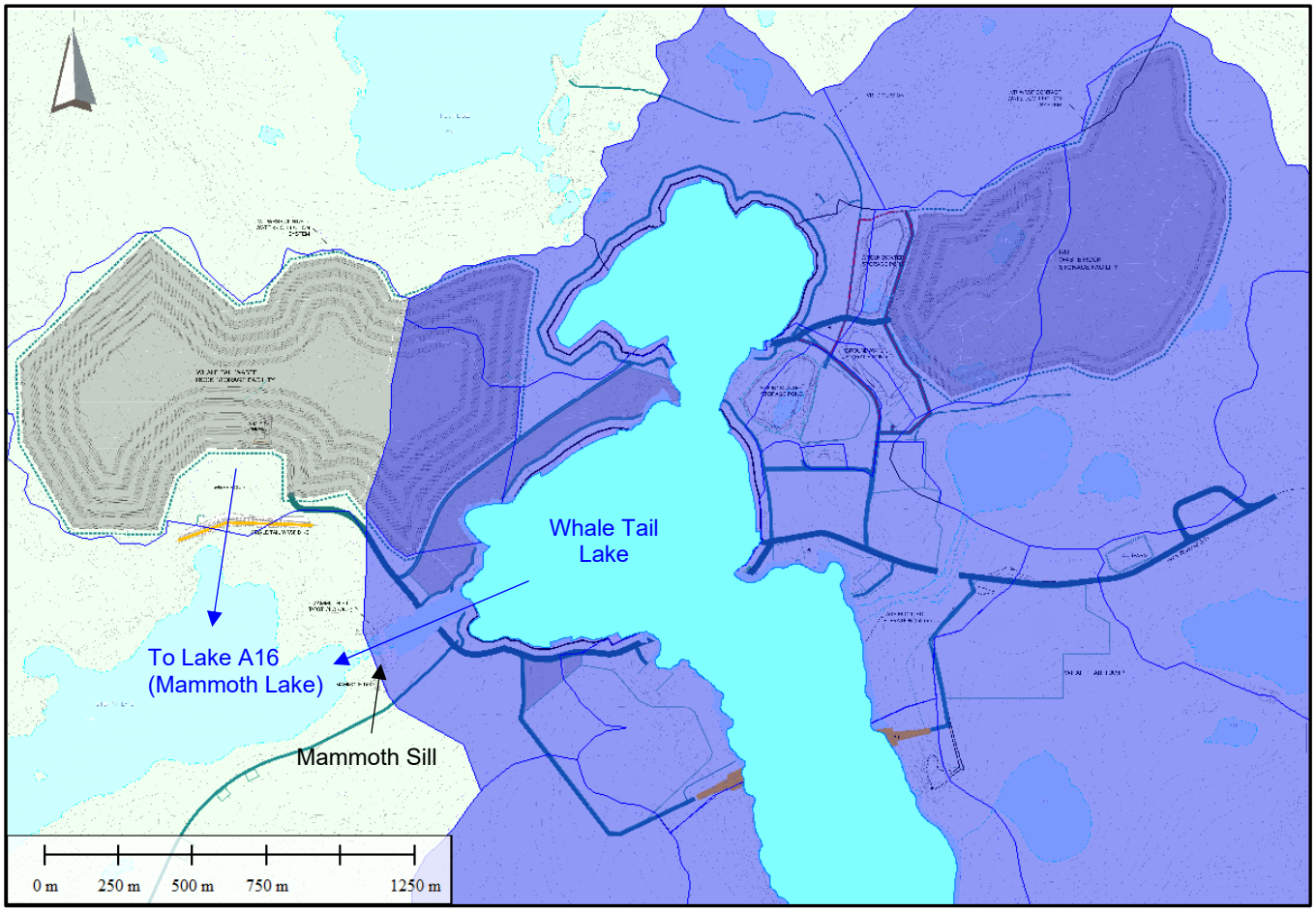

Figure 91: Post-Closure

4.0 RISKS AND OPPORTUNITIES

Based on the results of the water balance presented herein, risks and opportunities are listed as follows:

- Dry/Wet Precipitation Years: This water balance was based on mean annual precipitation. Runoff is therefore expected to vary from mean annual conditions under dry or wet annual conditions. These variations can affect filling and drawdown durations, as well as monthly runoff volumes managed on site.
- As described in Section 2.4, dust control was not considered in the water balance but will be considered for water licencing purposes.
- Contingency Storage Capacity: GSP-3 will provide flexibility in water management and treatment, and adaptive management opportunity. This, along with any other adjustment to the mining plan should be updated in the water balance for the water licensing stage of the Expansion Project.
- Management of Saline Water: The S-WTP (brine) is not expected to be required until 2022 based on the storage capacity of the GSP (brine) and Underground Mine Stope as assumed herein, and on the expectation that brine will be successfully isolated from brackish water, as presented under separate cover (Golder 2018a). Management of saline water may therefore require to be revisited or adapted to conditions other than those assumed herein, in consideration of additional capacity provided by GSP-3, planned for contingency and operational flexibility.
- Conservative Groundwater Inflows: Groundwater inflows considered herein comprise a substantial proportion of total inflows. These inflows were based on the “EA Case”, and are conservative by design (Golder 2018b). Thus, actual groundwater inflows may be less than those considered herein.
- Conservative underground storage stope capacity: as described in Section 3.2, a capacity of 10,000 m^3 was considered in the water balance. Additional capacity may be available in the final design of the storage stope.
- Isolation of Underground Mine Contact Water: Water treatment capacities of the various treatment units were based on the isolation of saline water from the Underground Mine from other site contact water. These capacities may be insufficient should contact water from the Underground Mine be managed with other site contact water.
- WRSF contact water volume: Two aspects can affect in opposite ways the actual volume of WRSF contact water:
  - Thermal conditions in the WRSFs: This water balance assumed that annual freezing of material placed in the WRSFs results in no seepage or drainage originating from the piles as the field capacity is reached post closure (only runoff occurs during operations). Should seepage or drainage from the piles occur during operations, this could increase the volume of contact water that would require management on site during operations.
  - Precipitation on WRSFs: This water balance assumes that any precipitation that falls on the WRSF and runoff to the pile immediately reports to the Contact Water Collection System surrounding the waste rock storage facility. Observation at the Meadowbank mine WRSFs suggests very little water has reported to the WRSF ponds in the 8 years of mine life. This would decrease volumes requiring management.
- Water Content in Waste Rock from the Pits: Losses from the pits due to the water content in waste rock were not considered. This results in a conservative water balance.
- It is noted that the water balance was based on the Project’s mine plan as available in August 2018 which differs slightly from that provided in Appendix B.

5.0 STUDY LIMITATIONS

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6.0 CLOSURE

This report presents methods and results of the Project's mean annual water balance with a focus on the construction, operation, and closure phases of the Expansion Project to provide input to the Project's design, water management plan, and environmental impact assessments. It is limited to catchments of the Project footprint, and does not address the receiving environment within and downstream of the effluent discharge point. When applicable, a comparison of water management milestones was provided between the Approved Project (Agnico Eagle 2016a) and the Expansion Project.

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

Golder Associates Ltd.

REGISTERED PROFESSIONAL ENGINEER
N.P. SCHMIDT
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7.0 REFERENCES

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APPENDIX A

Conceptual Flow Diagrams

Whale Tail Pit – Expansion Project
Water Management Flow Charts – July 31, 2018

GOLDER

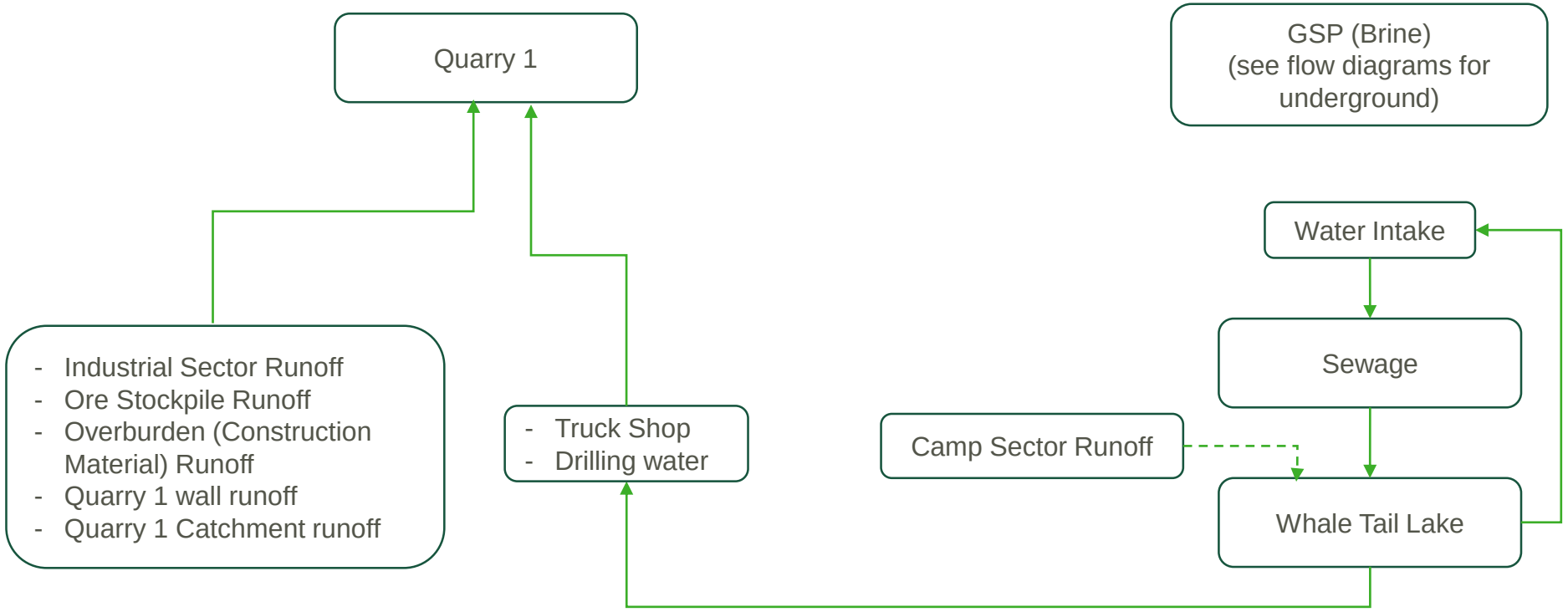
Surface Water Flow Charts

Q1-Q2 2018 (Until Quarry 1 is mined out and Licence A is received)

Gravity: ----->

Pumping: ——>

Water Management Concept:
-Contact water is managed through Quarry 1.
-Whale Tail Lake is the source of fresh water.

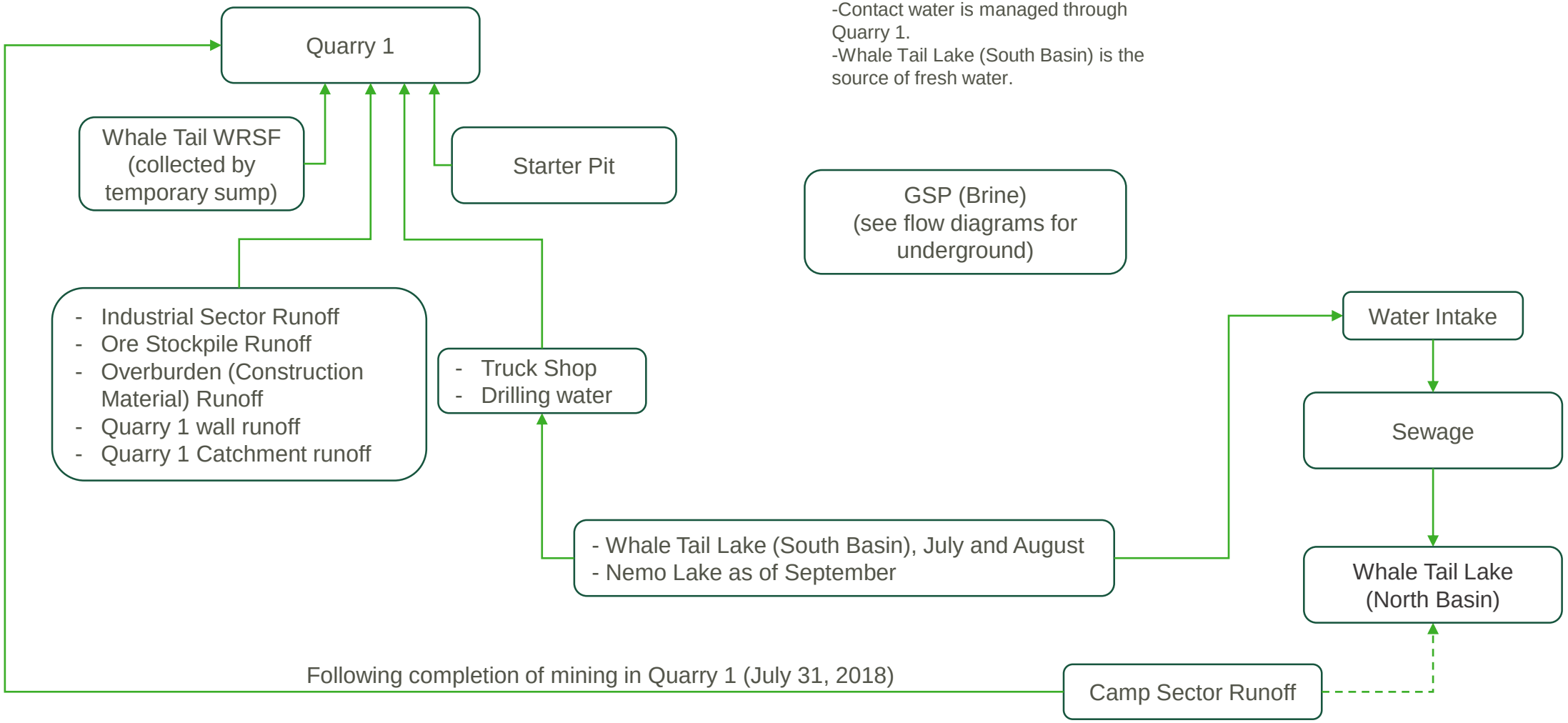


Q3 2018 (From Reception of Licence A to Whale Tail WRSF Contact Water Collection System ready)

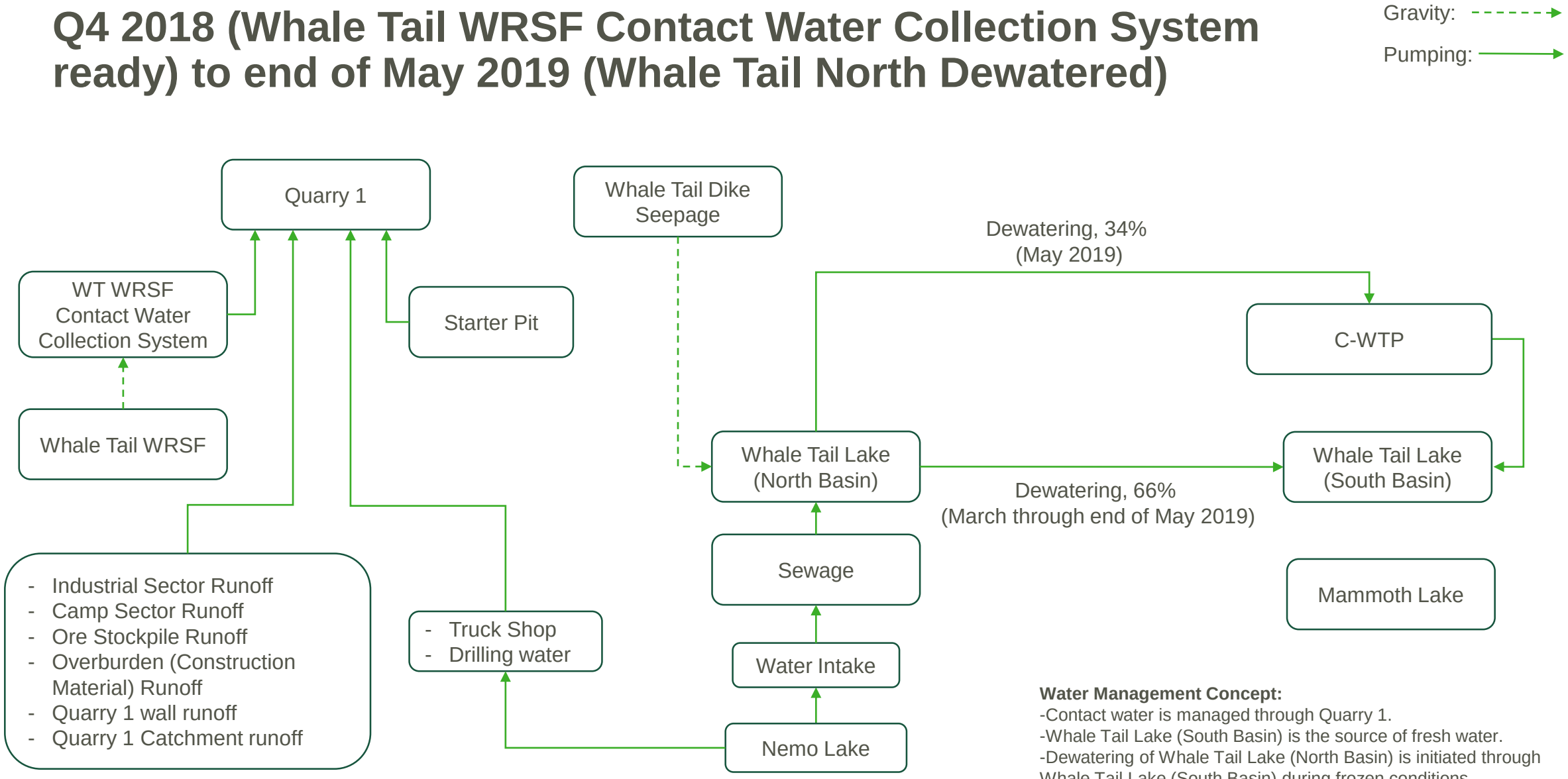
Gravity: ----->

Pumping: ——>

Water Management Concept:
-Contact water is managed through Quarry 1.
-Whale Tail Lake (South Basin) is the source of fresh water.

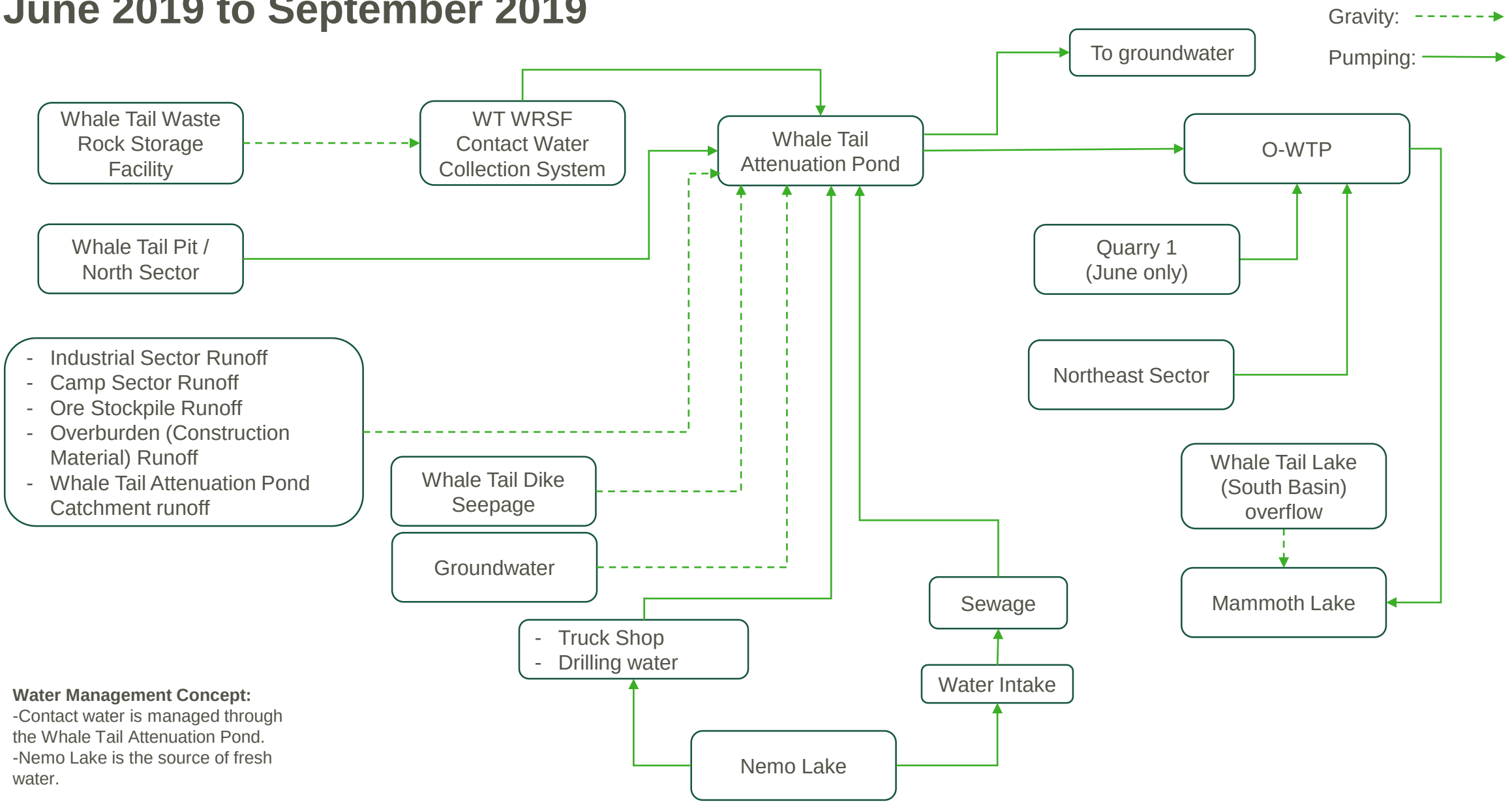


Q4 2018 (Whale Tail WRSF Contact Water Collection System ready) to end of May 2019 (Whale Tail North Dewatered)



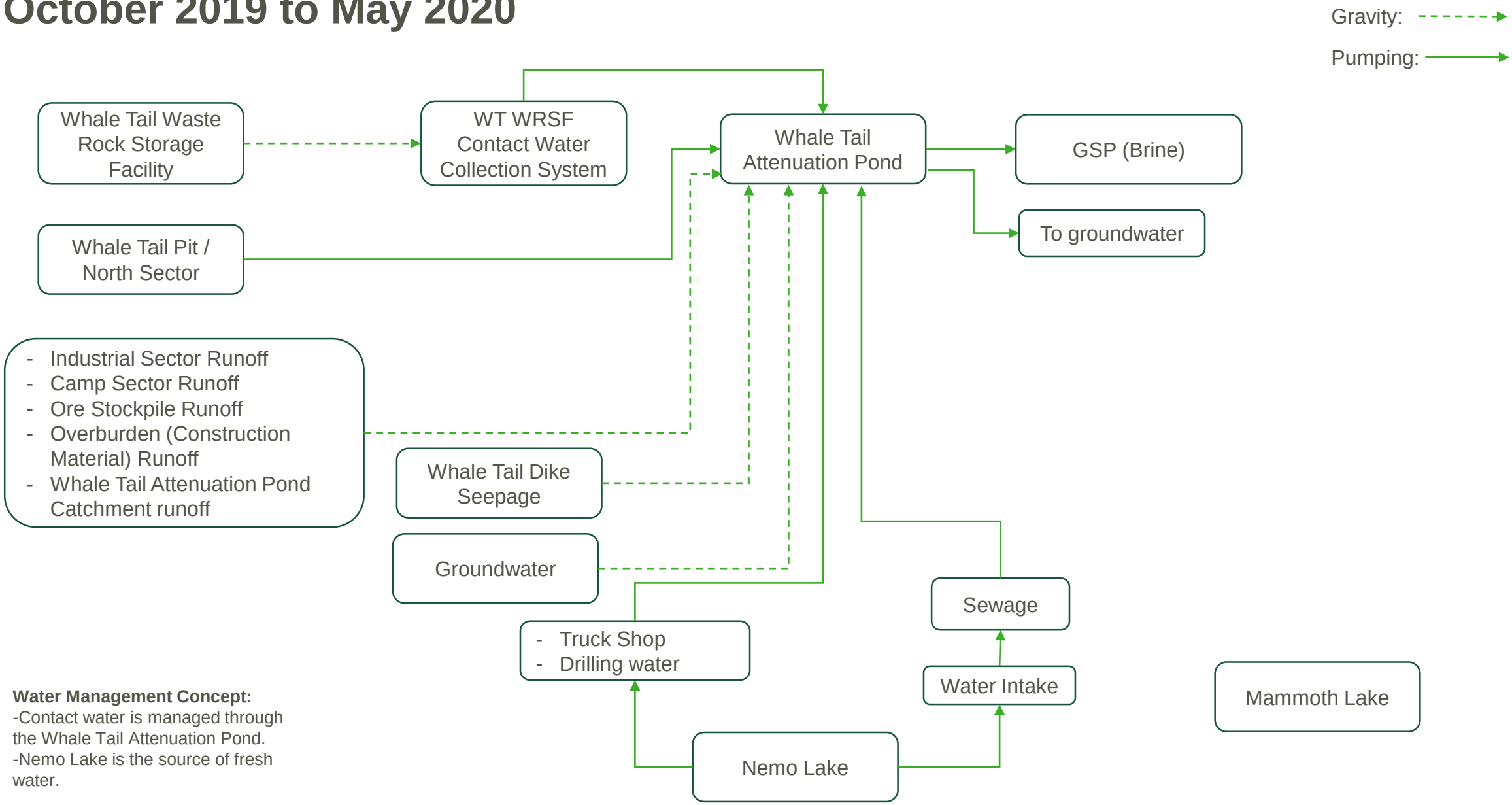
Water Management Concept:
-Contact water is managed through Quarry 1.
-Whale Tail Lake (South Basin) is the source of fresh water.
-Dewatering of Whale Tail Lake (North Basin) is initiated through Whale Tail Lake (South Basin) during frozen conditions.

June 2019 to September 2019



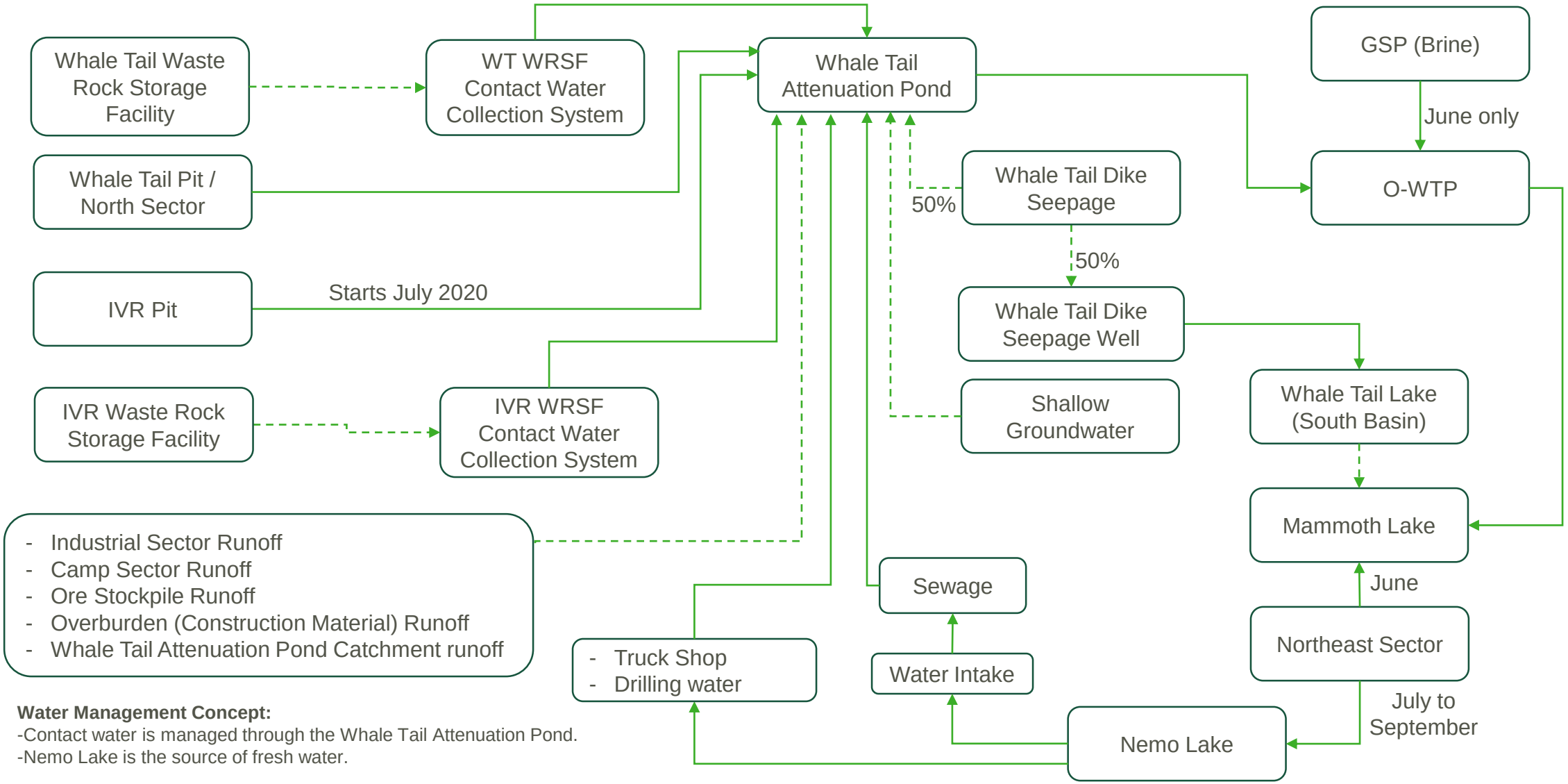
Water Management Concept:
-Contact water is managed through the Whale Tail Attenuation Pond.
-Nemo Lake is the source of fresh water.

October 2019 to May 2020



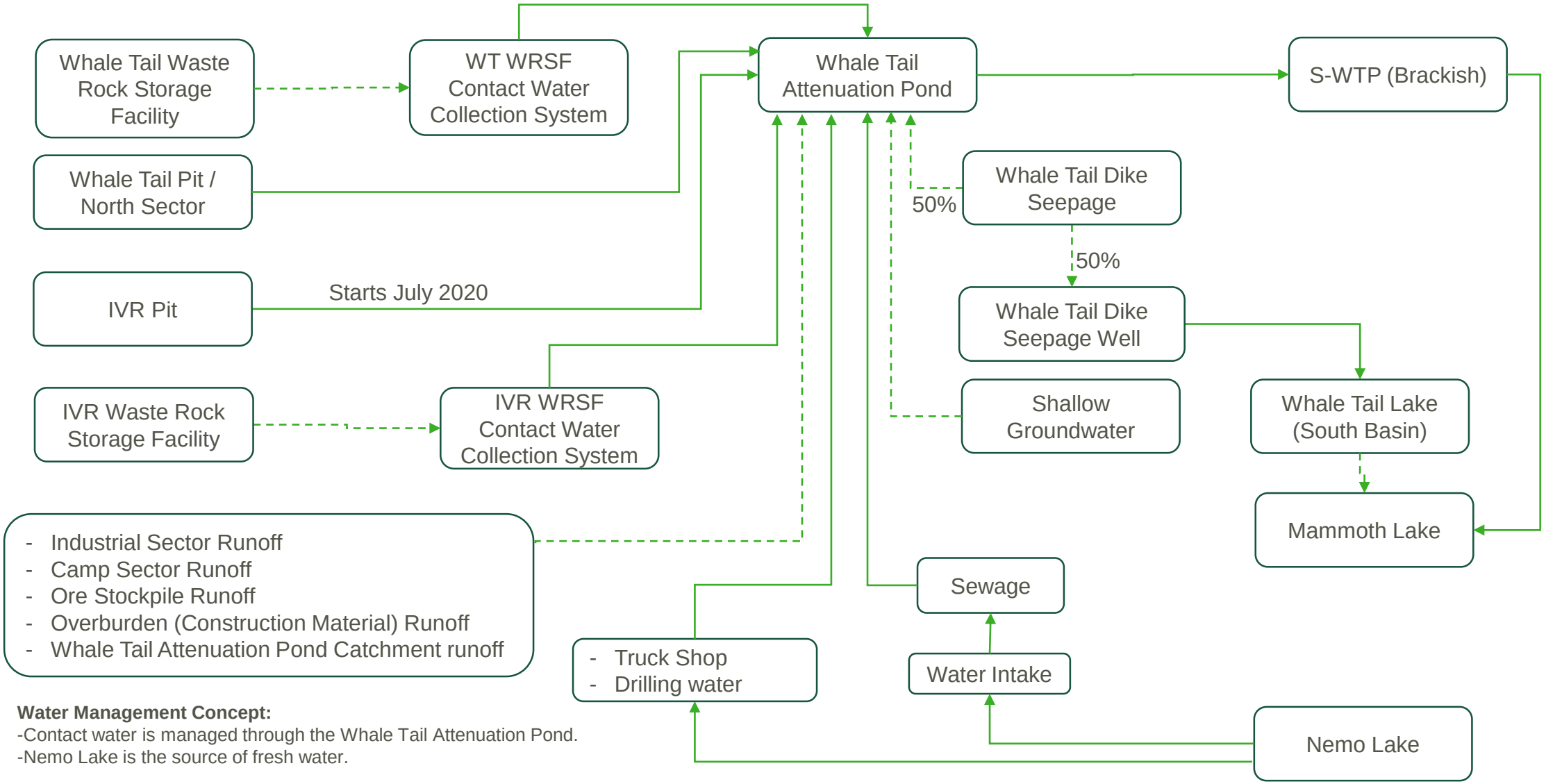
Water Management Concept:
-Contact water is managed through the Whale Tail Attenuation Pond.
-Nemo Lake is the source of fresh water.

June 2020 to September 2020



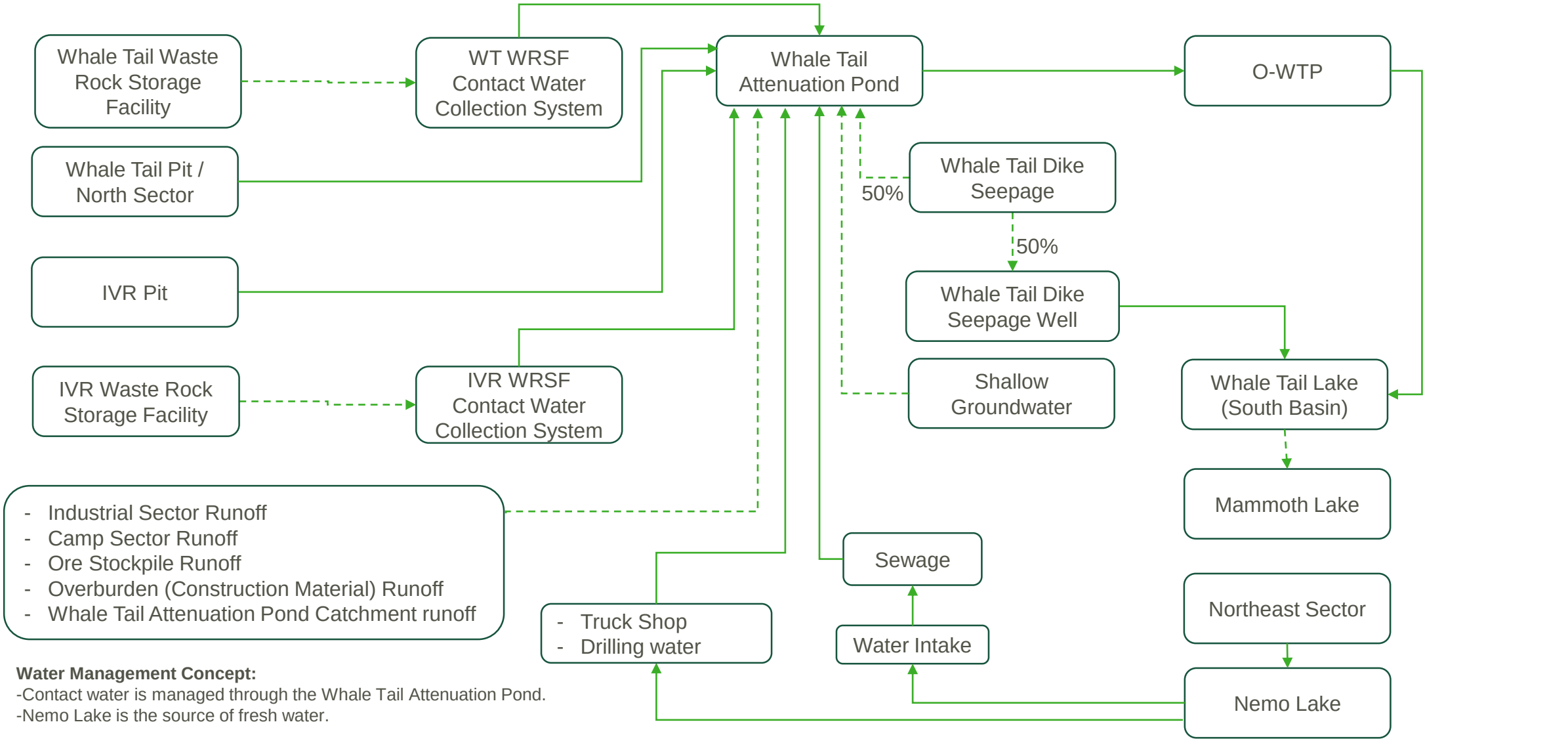
Water Management Concept:
-Contact water is managed through the Whale Tail Attenuation Pond.
-Nemo Lake is the source of fresh water.

October 2020 to May 2021



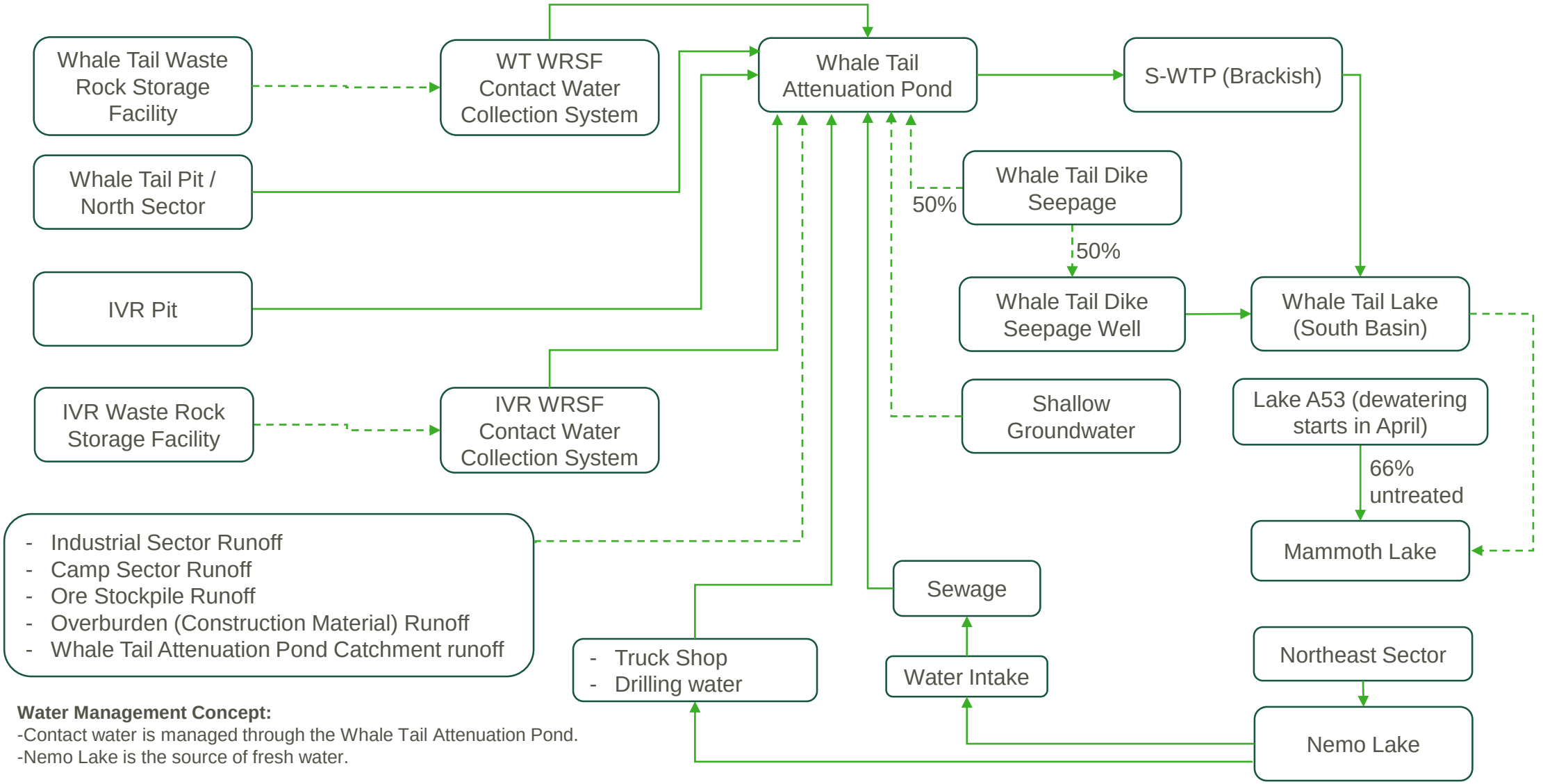
Water Management Concept:
-Contact water is managed through the Whale Tail Attenuation Pond.
-Nemo Lake is the source of fresh water.

June 2021 to September 2021



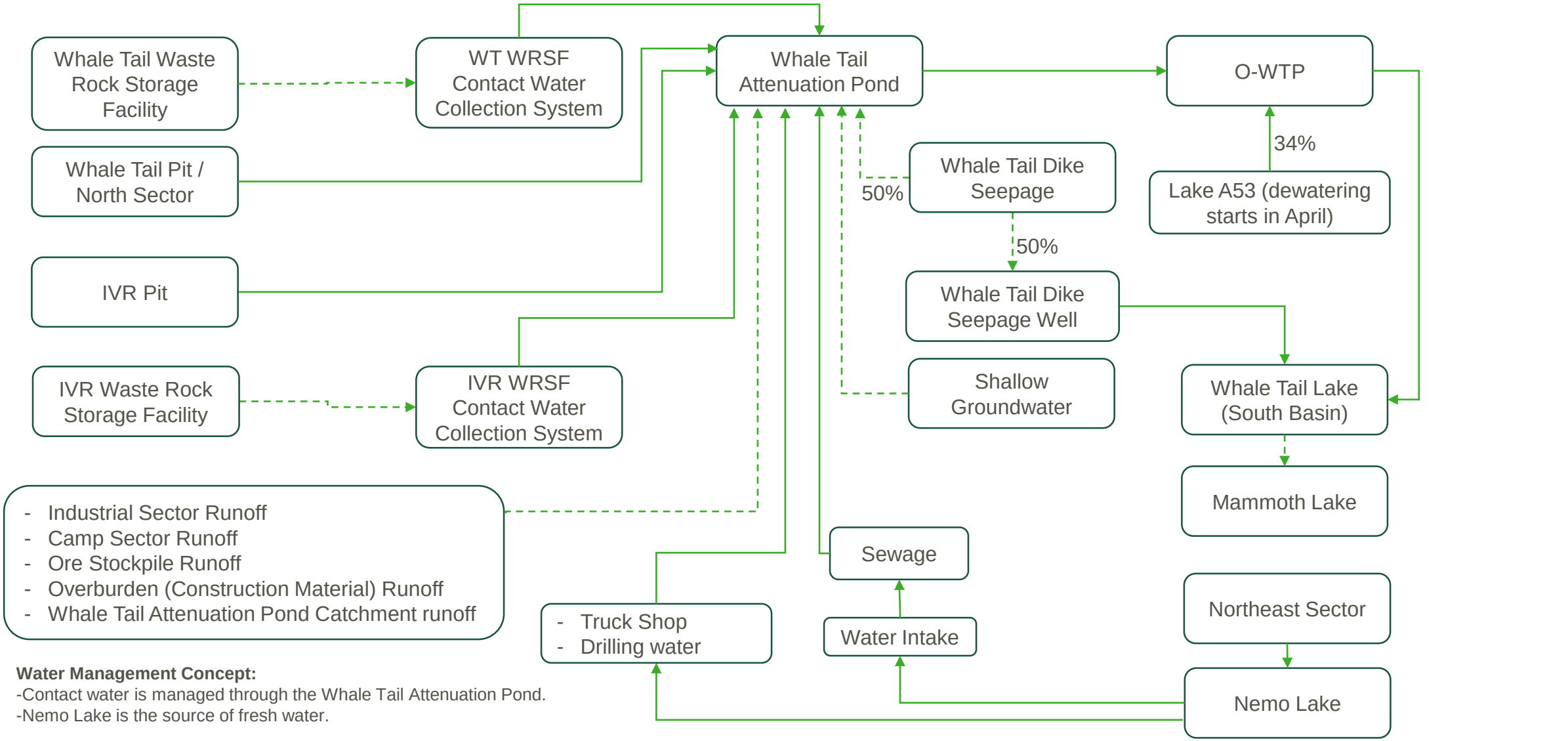
Water Management Concept:
-Contact water is managed through the Whale Tail Attenuation Pond.
-Nemo Lake is the source of fresh water.

October 2021 to April 2022 (Lake A53 Amendment Granted)



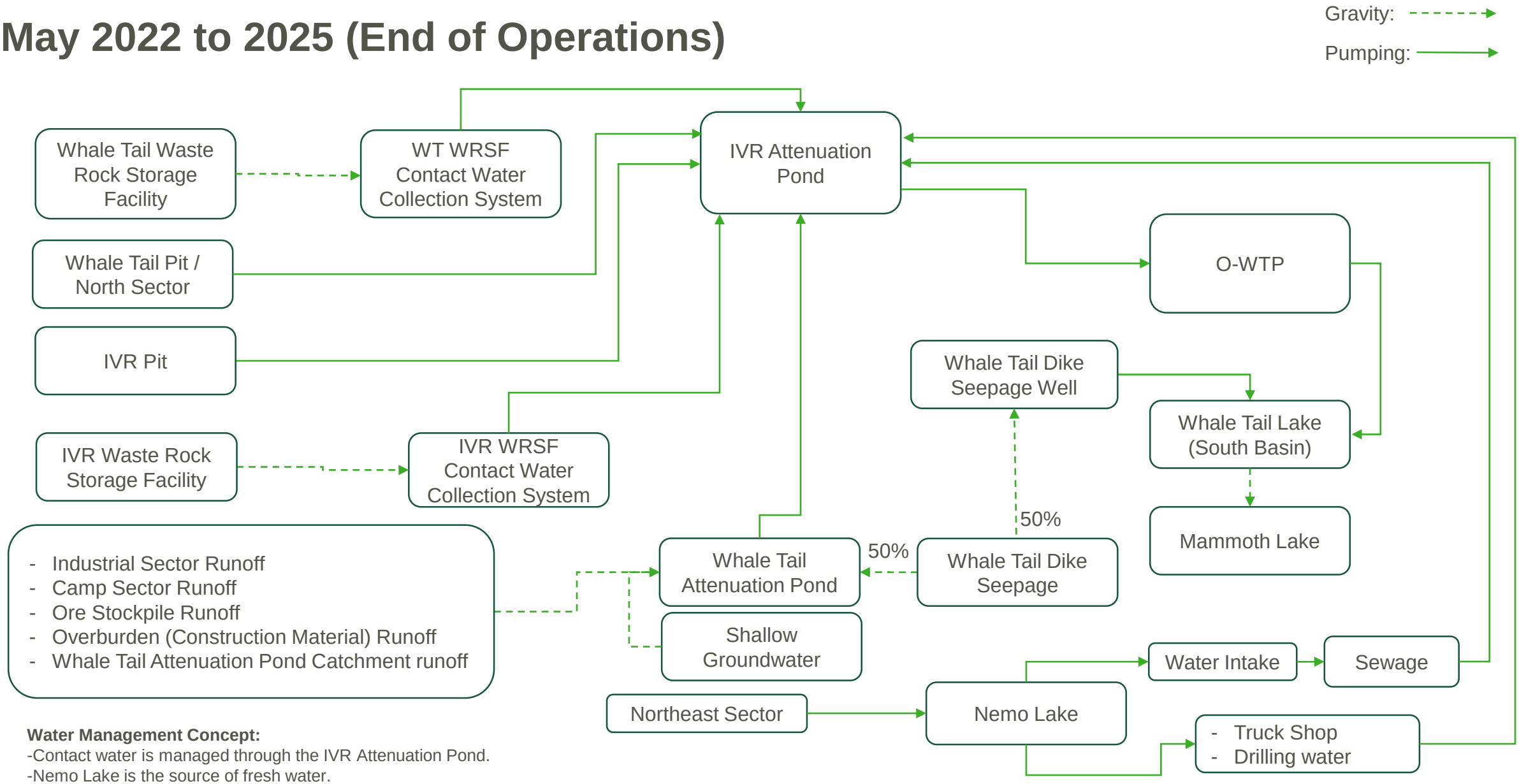
Water Management Concept:
-Contact water is managed through the Whale Tail Attenuation Pond.
-Nemo Lake is the source of fresh water.

May 2022



Water Management Concept:
-Contact water is managed through the Whale Tail Attenuation Pond.
-Nemo Lake is the source of fresh water.

May 2022 to 2025 (End of Operations)

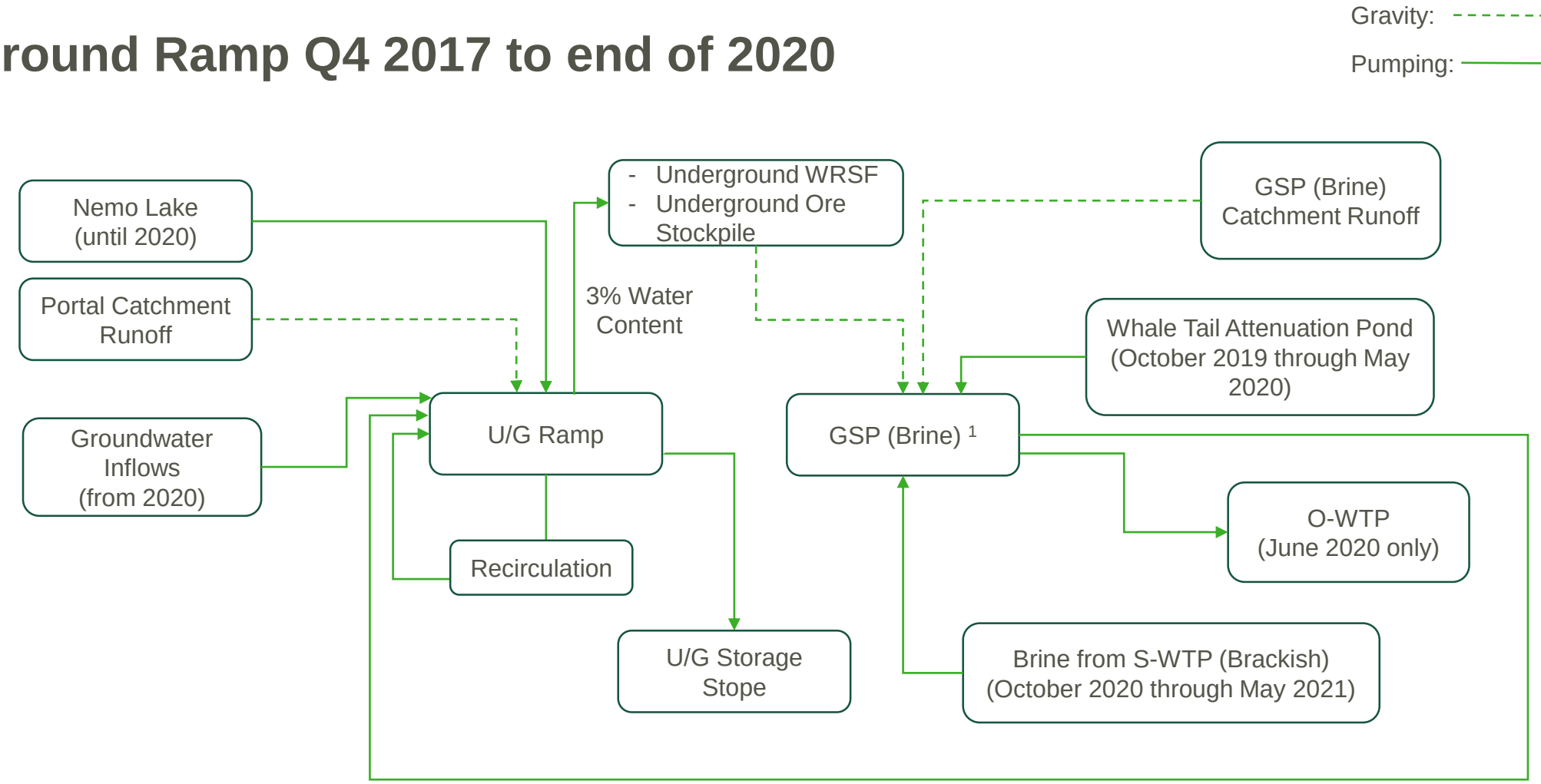


Water Management Concept:
-Contact water is managed through the IVR Attenuation Pond.
-Nemo Lake is the source of fresh water.

GOLDER

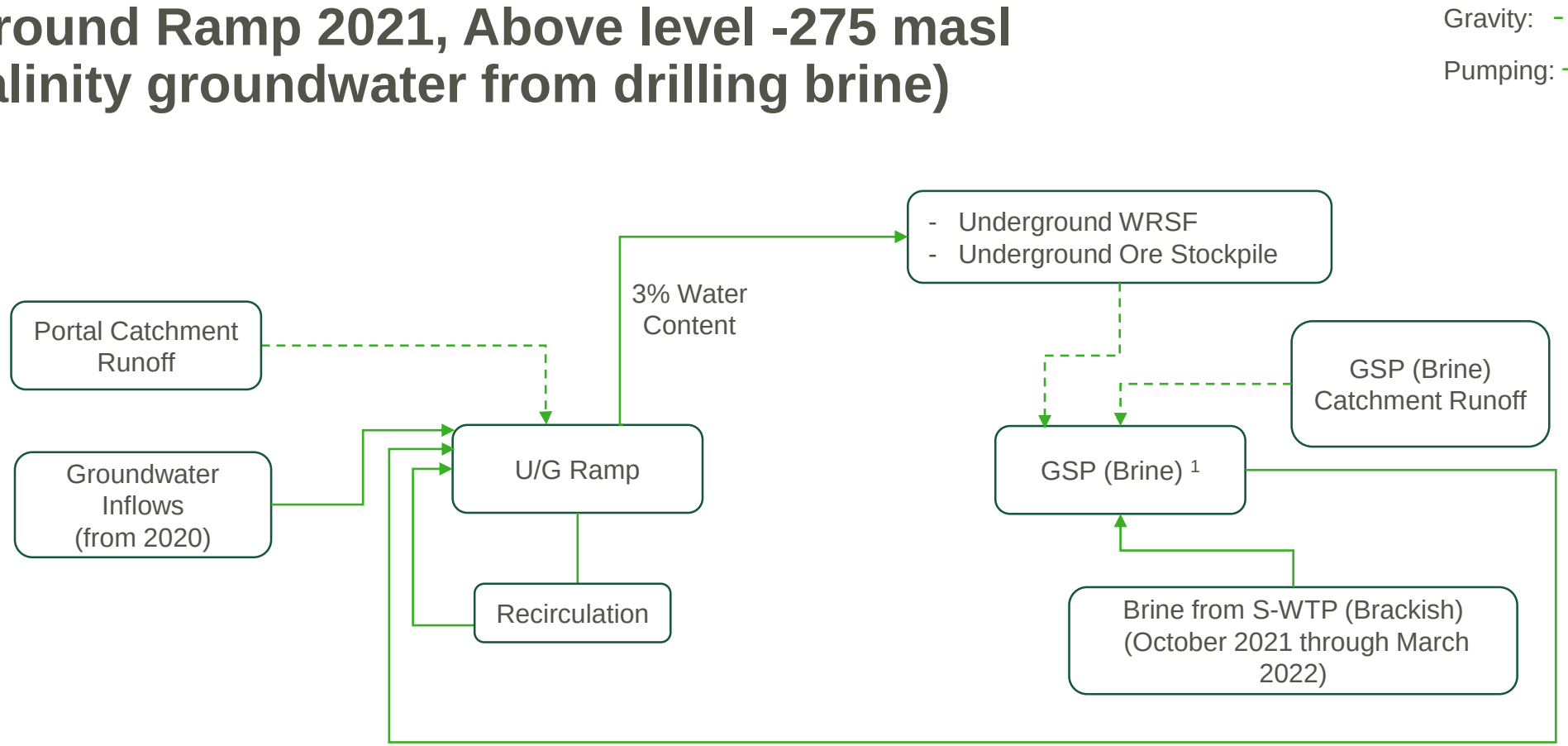
Underground Mine Water Flow Charts

Underground Ramp Q4 2017 to end of 2020



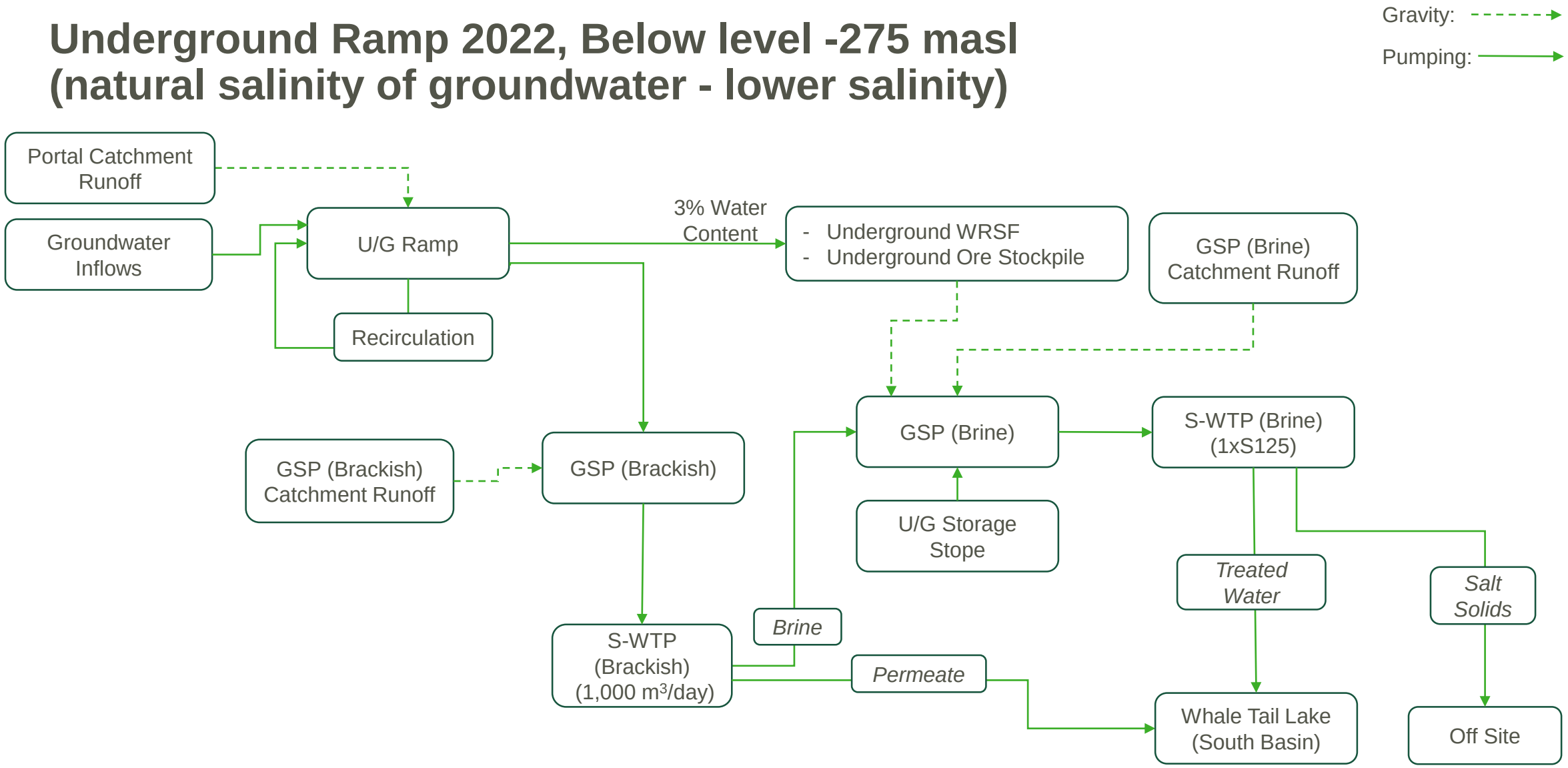
1: GSP (Brine) is preferred source of water to feed the U/G Ramp, Whale Tail Lake is the backup source.

Underground Ramp 2021, Above level -275 masl (high salinity groundwater from drilling brine)

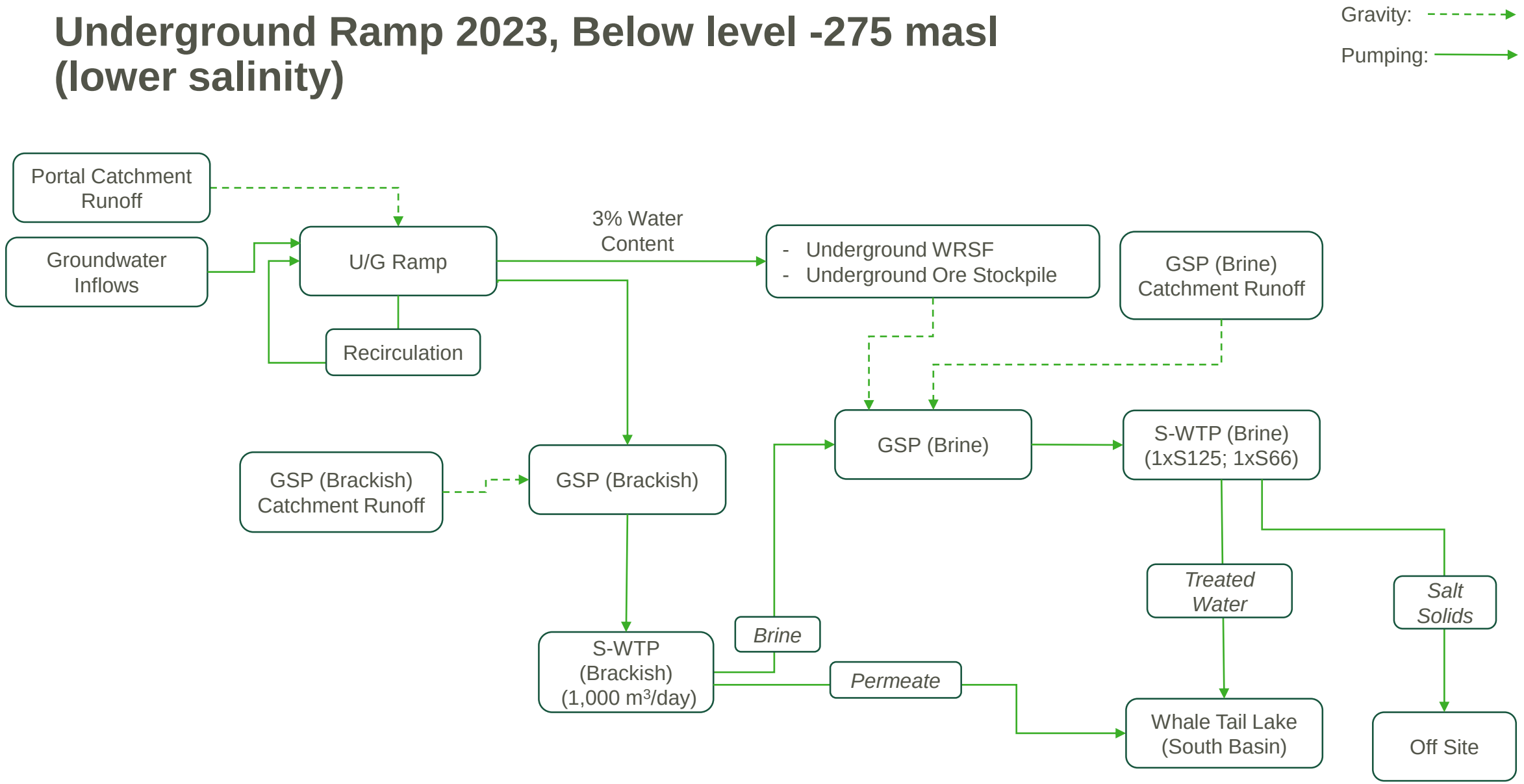


1: GSP (Brine) is preferred source of water to feed the U/G Ramp, Whale Tail Lake is the backup source.

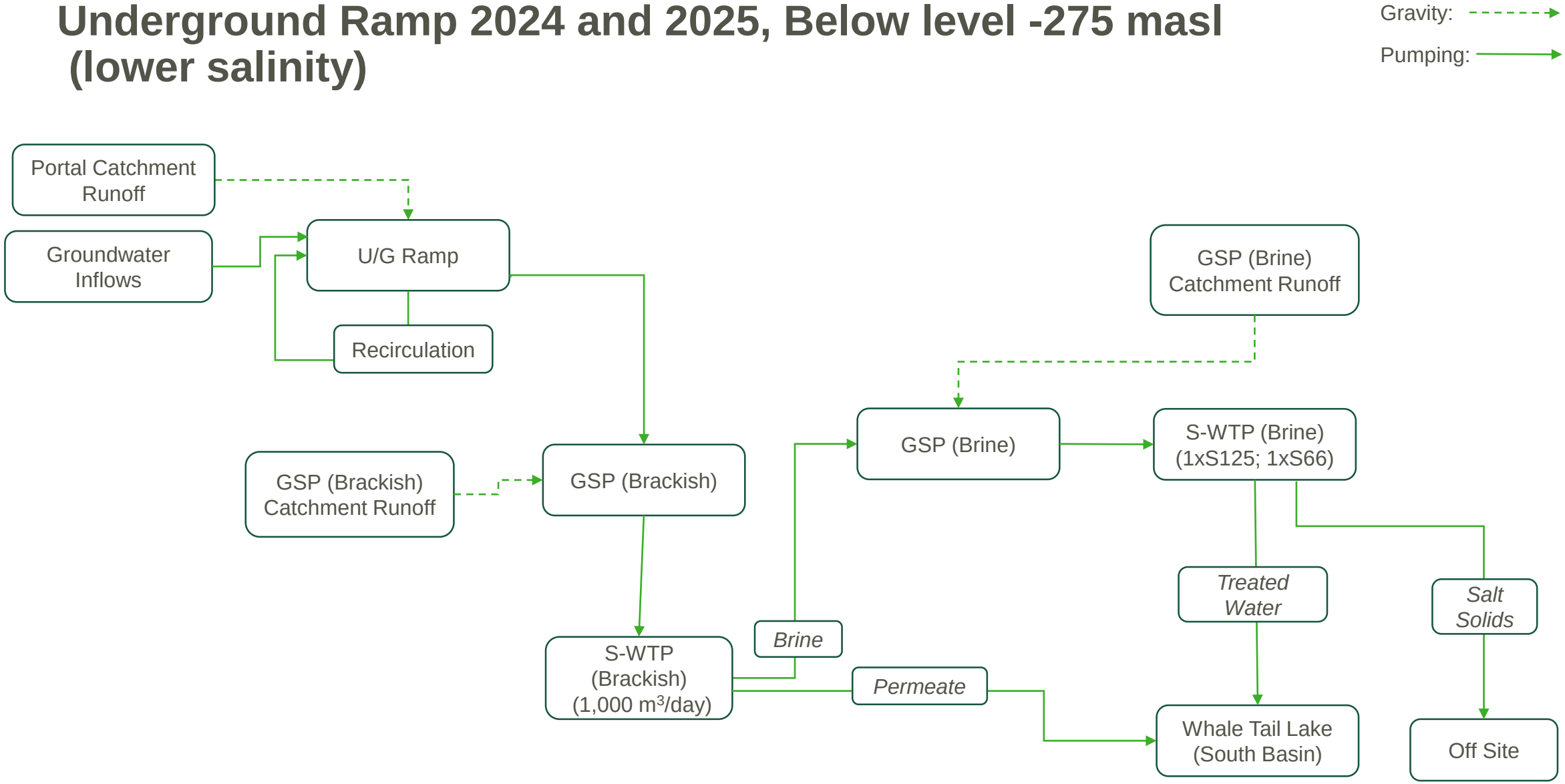
Underground Ramp 2022, Below level -275 masl (natural salinity of groundwater - lower salinity)



Underground Ramp 2023, Below level -275 masl (lower salinity)

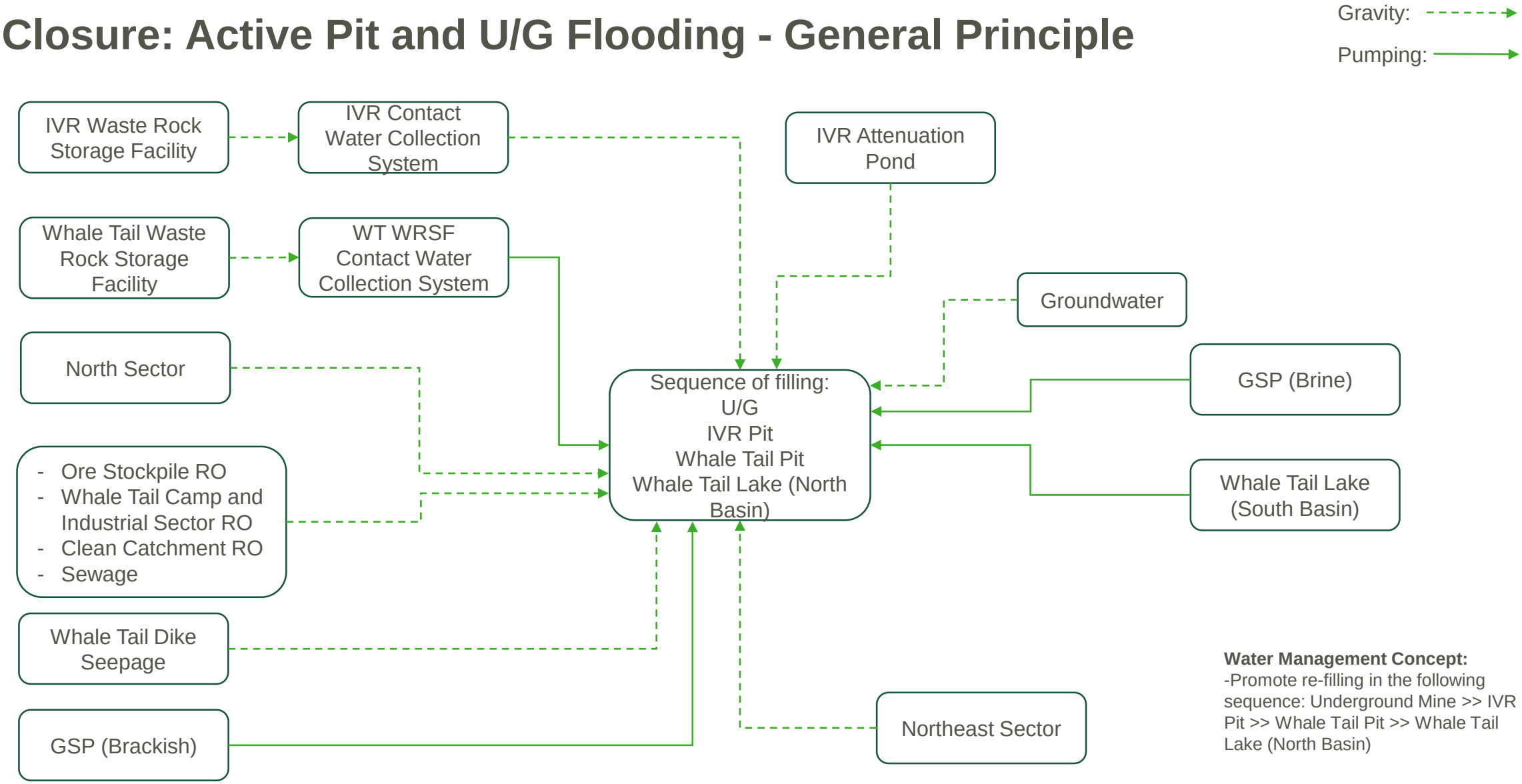


Underground Ramp 2024 and 2025, Below level -275 masl (lower salinity)



Closure and Post-Closure Flow Charts

Closure: Active Pit and U/G Flooding - General Principle



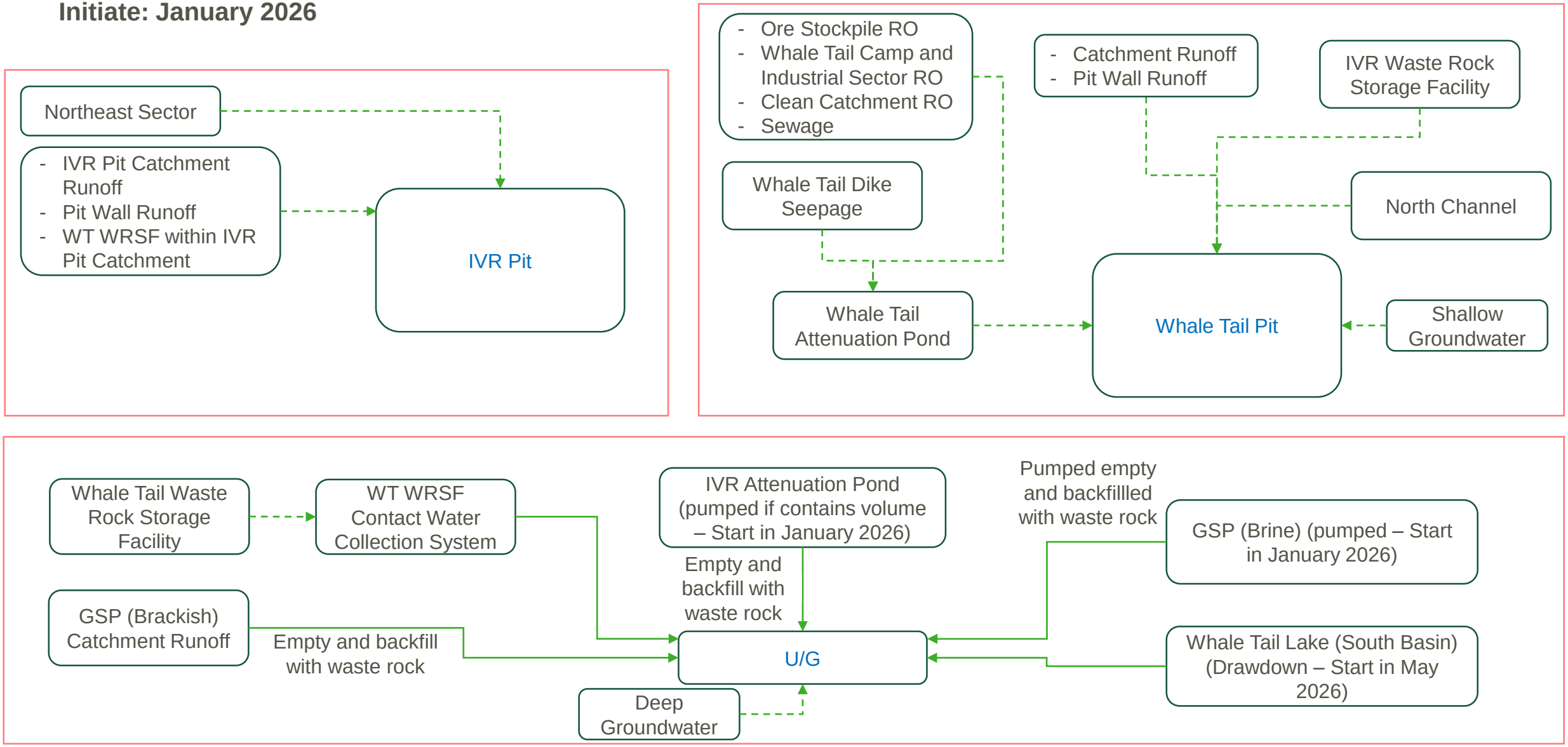
Water Management Concept:
-Promote re-filling in the following sequence: Underground Mine >> IVR Pit >> Whale Tail Pit >> Whale Tail Lake (North Basin)

Closure (Active Flooding) Sequence: Underground Mine

Gravity: ⇢

Pumping: →

Initiate: January 2026

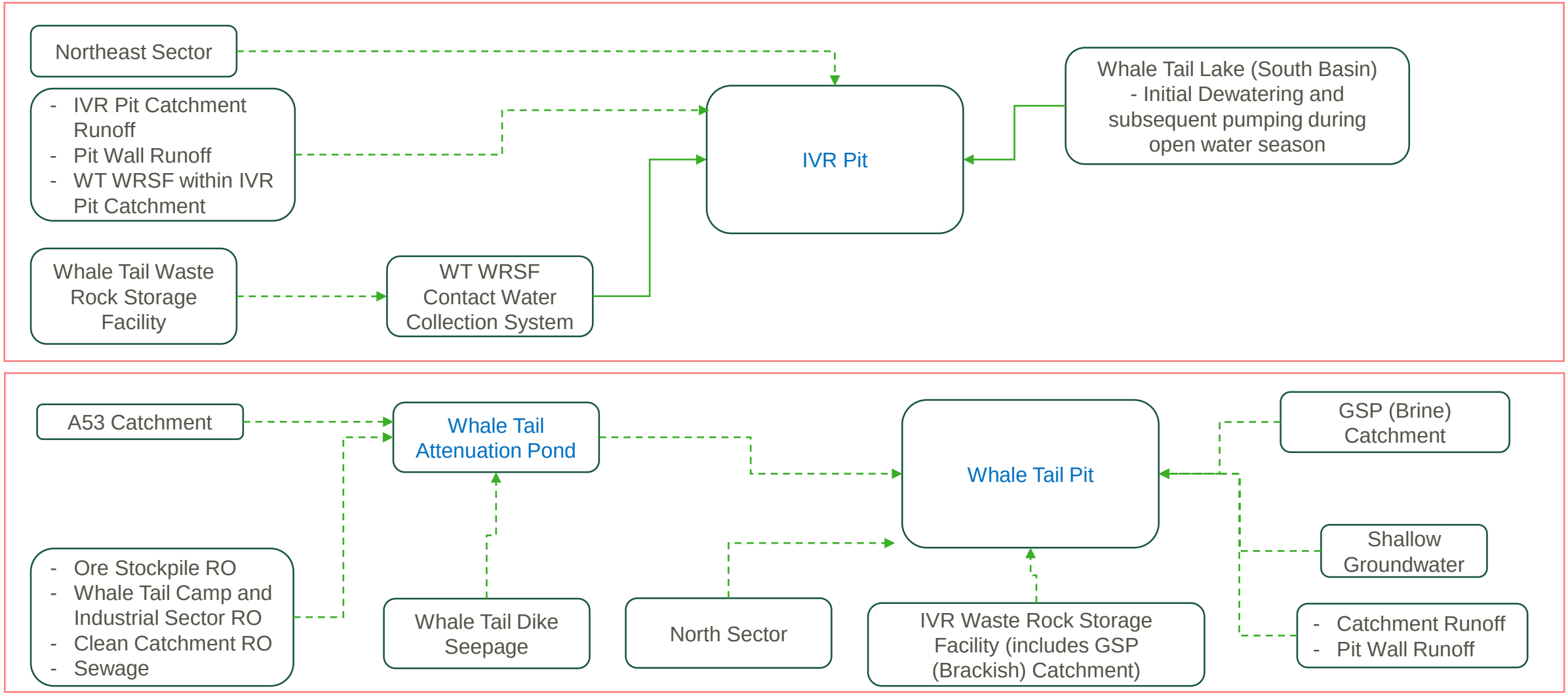


Closure (Active Flooding) Sequence: IVR Pit

Initiate: Following Refilling of Underground Mine

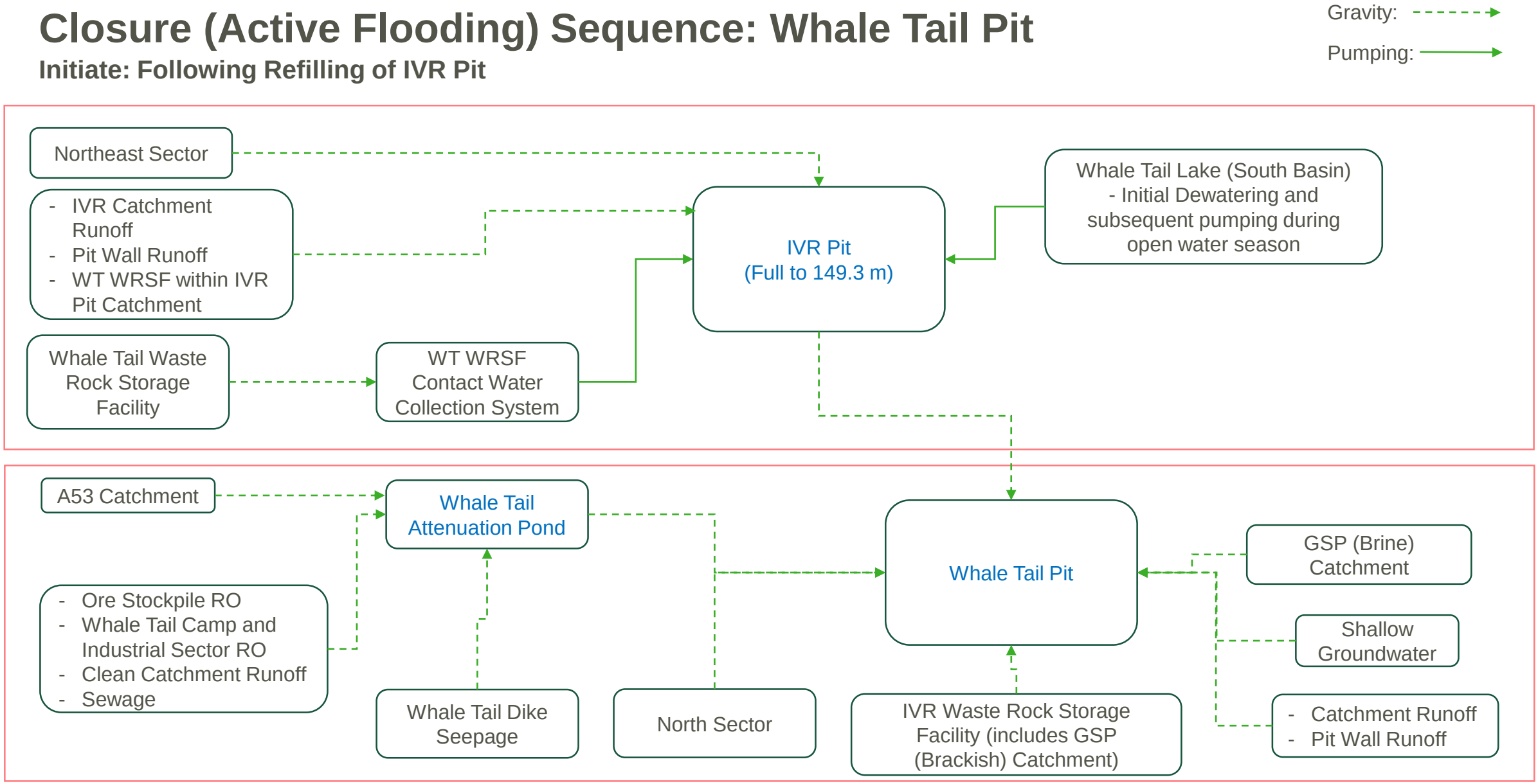
Gravity: ----->

Pumping: ——>



Closure (Active Flooding) Sequence: Whale Tail Pit

Initiate: Following Refilling of IVR Pit

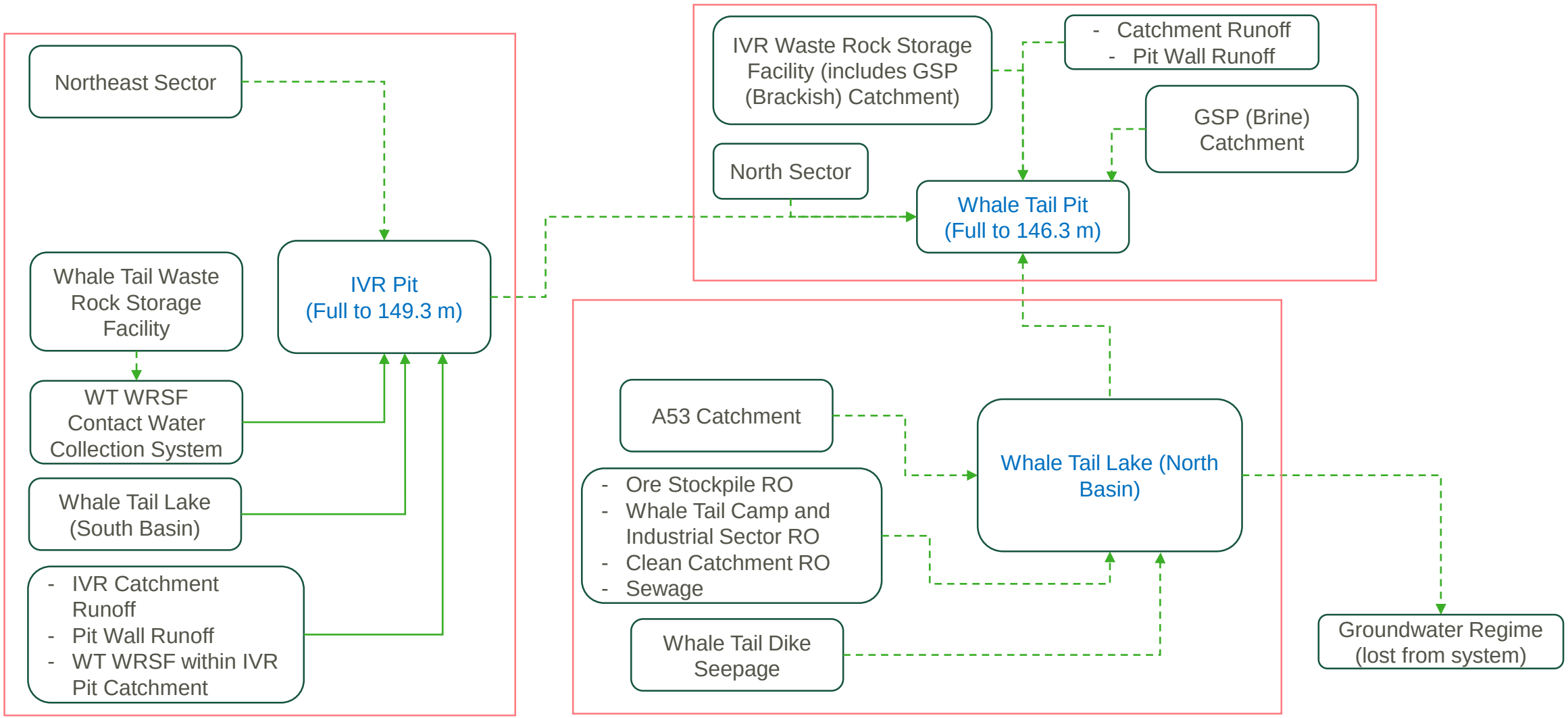


Closure (Active Flooding) Sequence: Whale Tail Lake (North Basin)

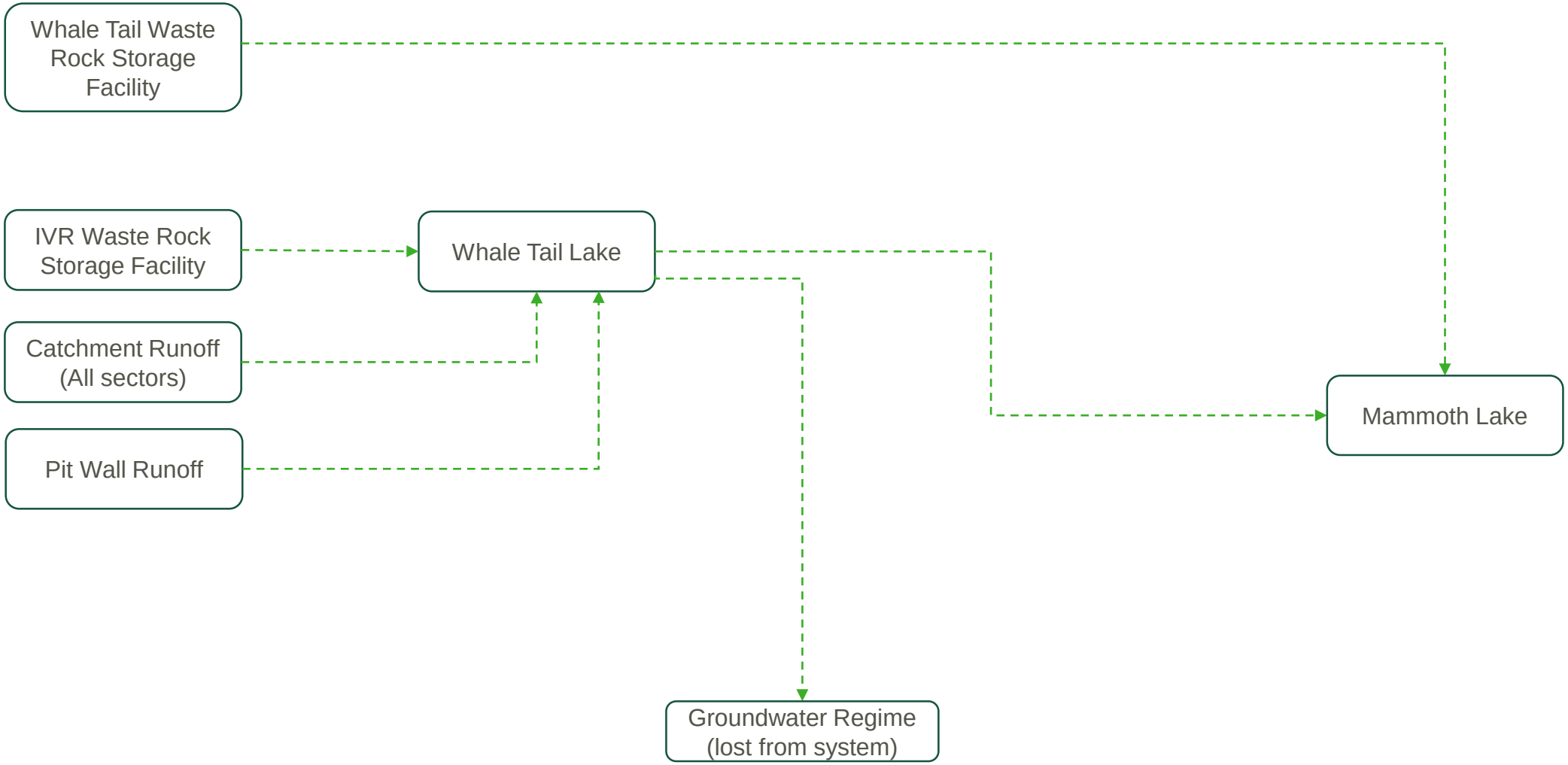
Gravity: ⇢

Pumping: →

Initiate: Following Refilling of Whale Tail Pit



Post-closure General, Whale Tail Lake

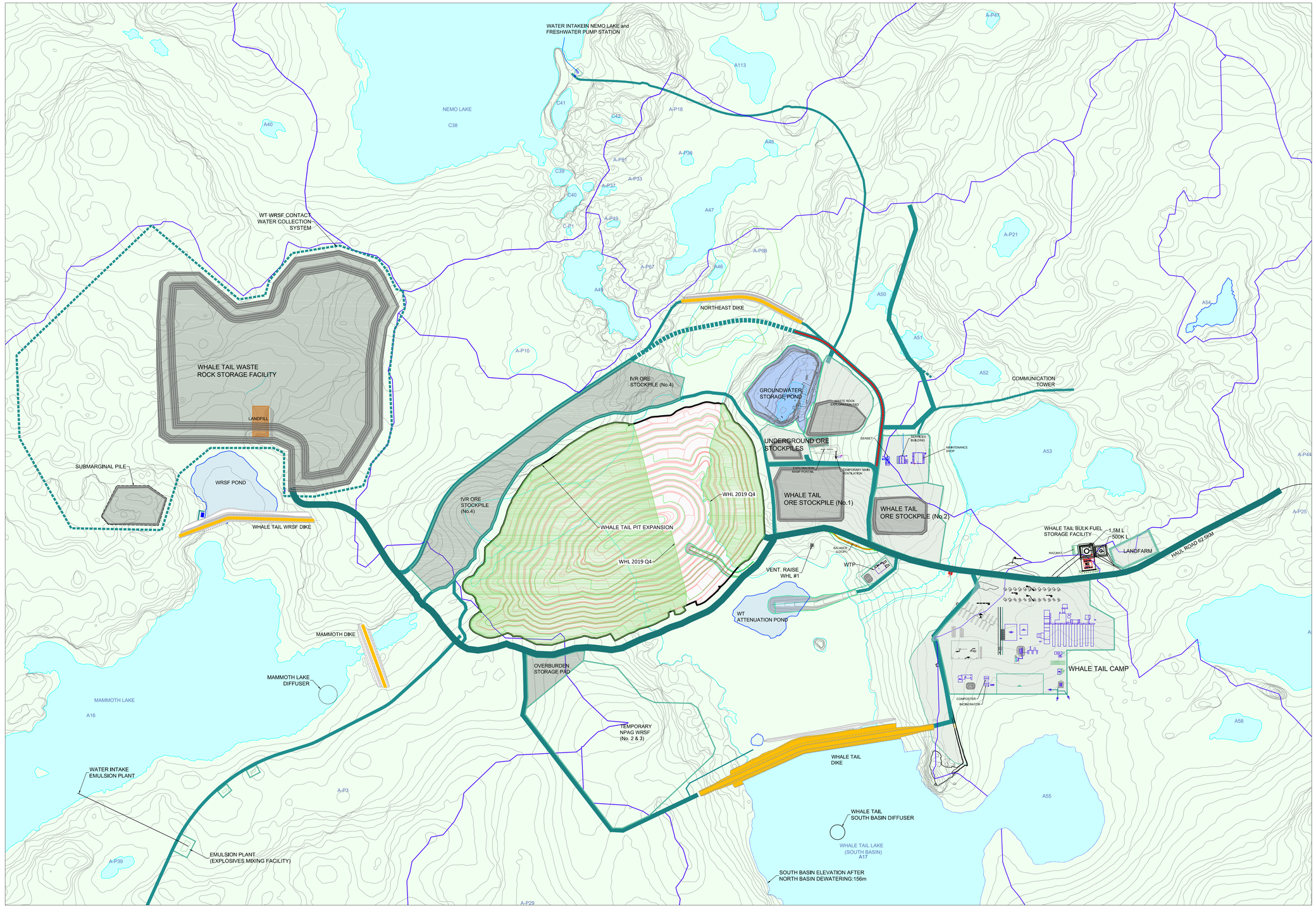


APPENDIX B

Mine Plan Drawings

NO. DESSIN DRAWING NO. AMQ_2019Q4V7

FORMAT ARCHD



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005 – SITE PREPARATION
210 GENERAL ARRANGEMENT
AMARUQ MINE SITE ARRANGEMENT
PERMITTING

DESSINÉ PAR DRAWN BY	JOCELYN CRETE	DATE 2018-10-18
VÉRIFIÉ PAR CHECKED BY	FRANCOIS PETRUCCI	2016-10-18
APPROUVÉ PAR APPROVED BY		
ÉCHELLE SCALE	1:6000	DATE 2018-10-18
NO. DESSIN DRAWING NO.	2019Q4	
NO. PROJET PROJECT NO.	6117	REVISION v7 / FEUILLE / SHT 3 / 6

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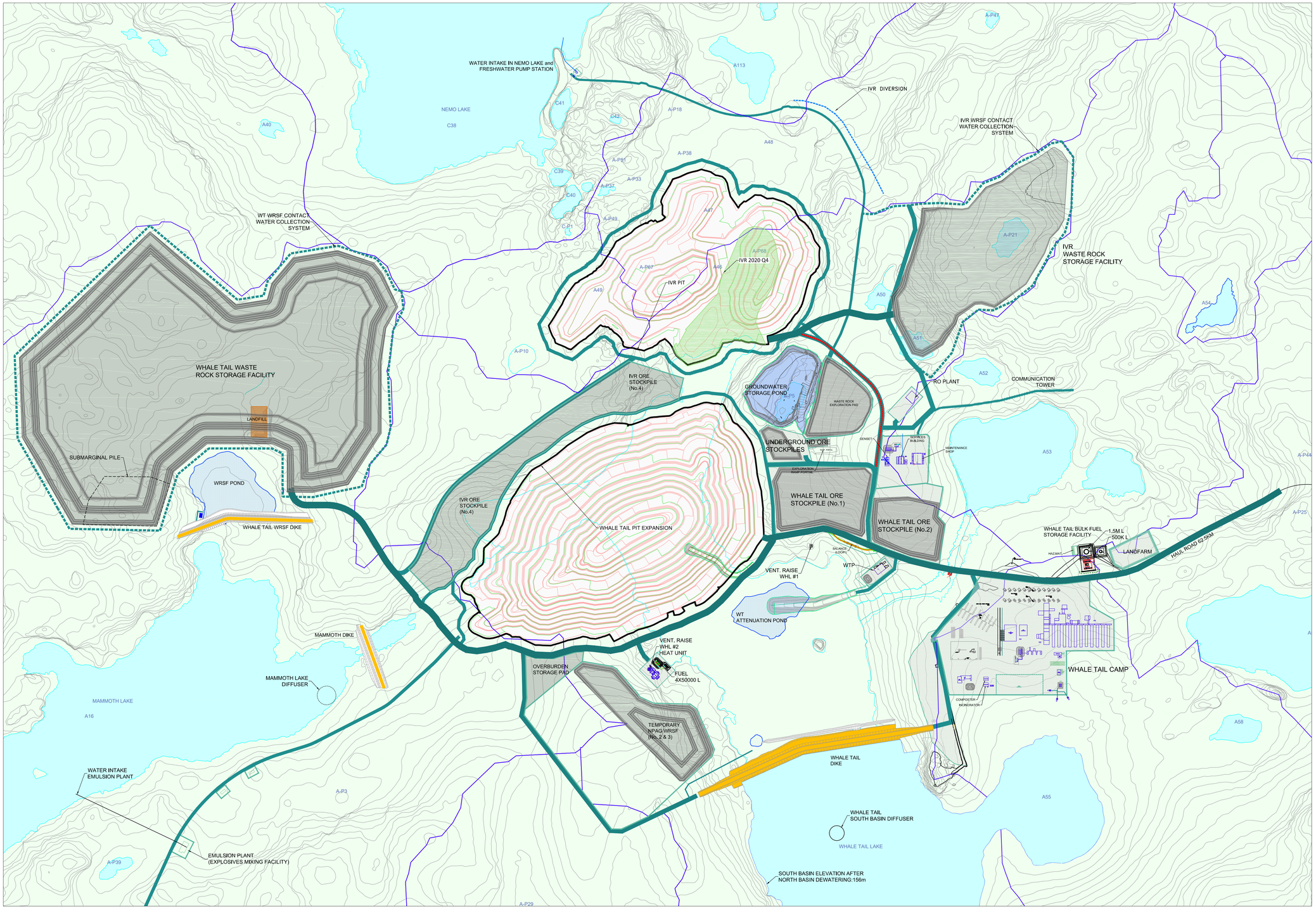

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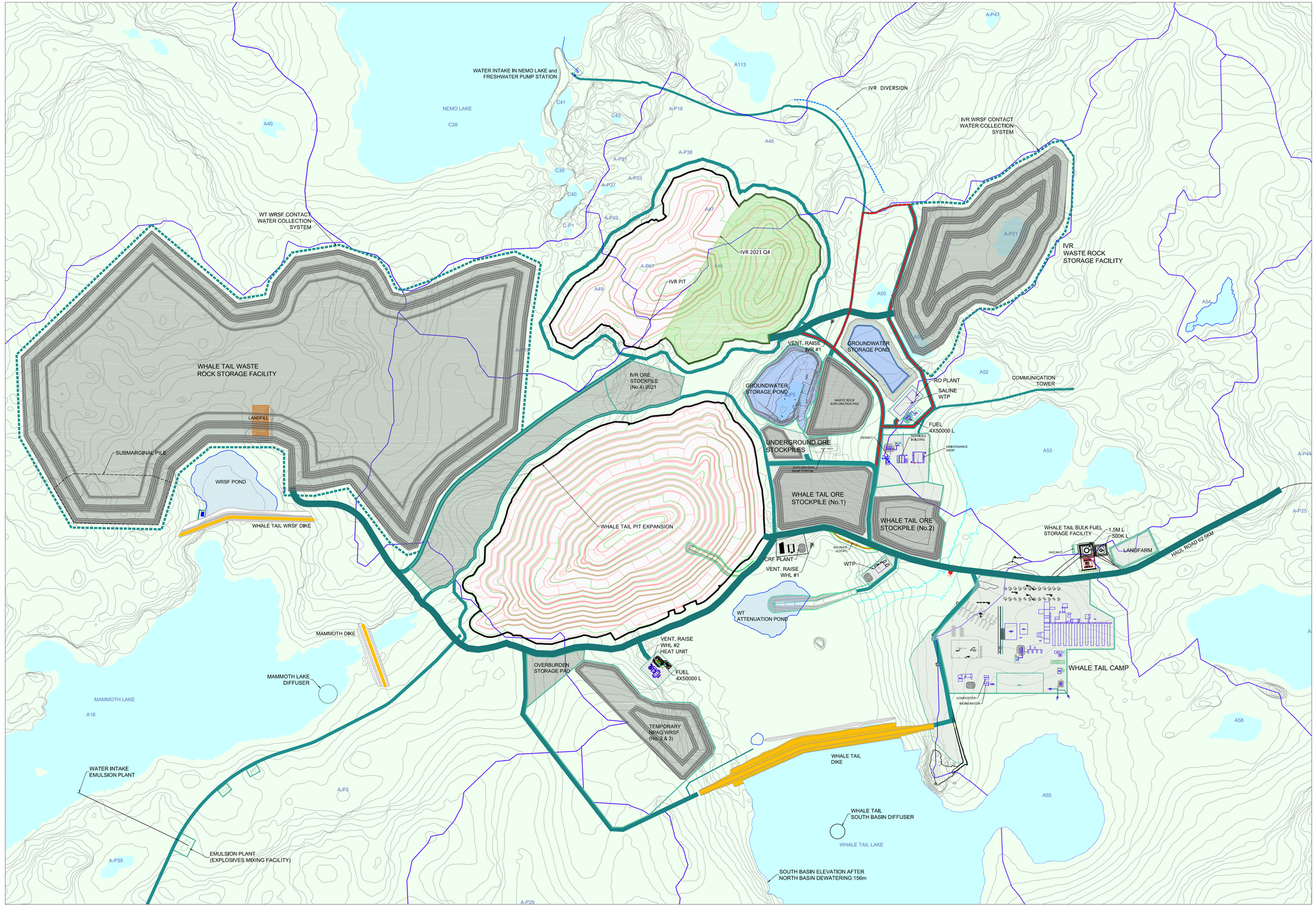

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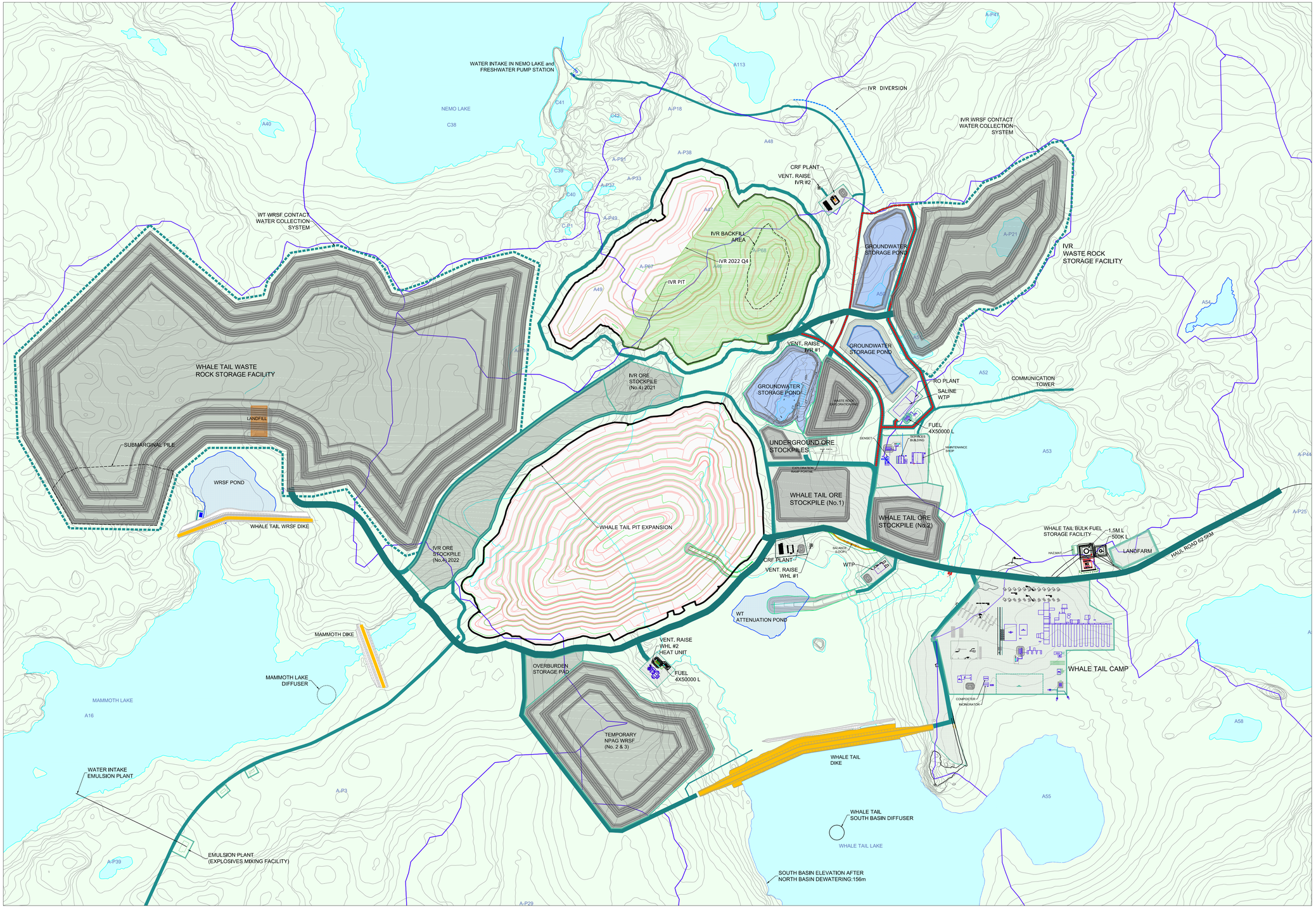

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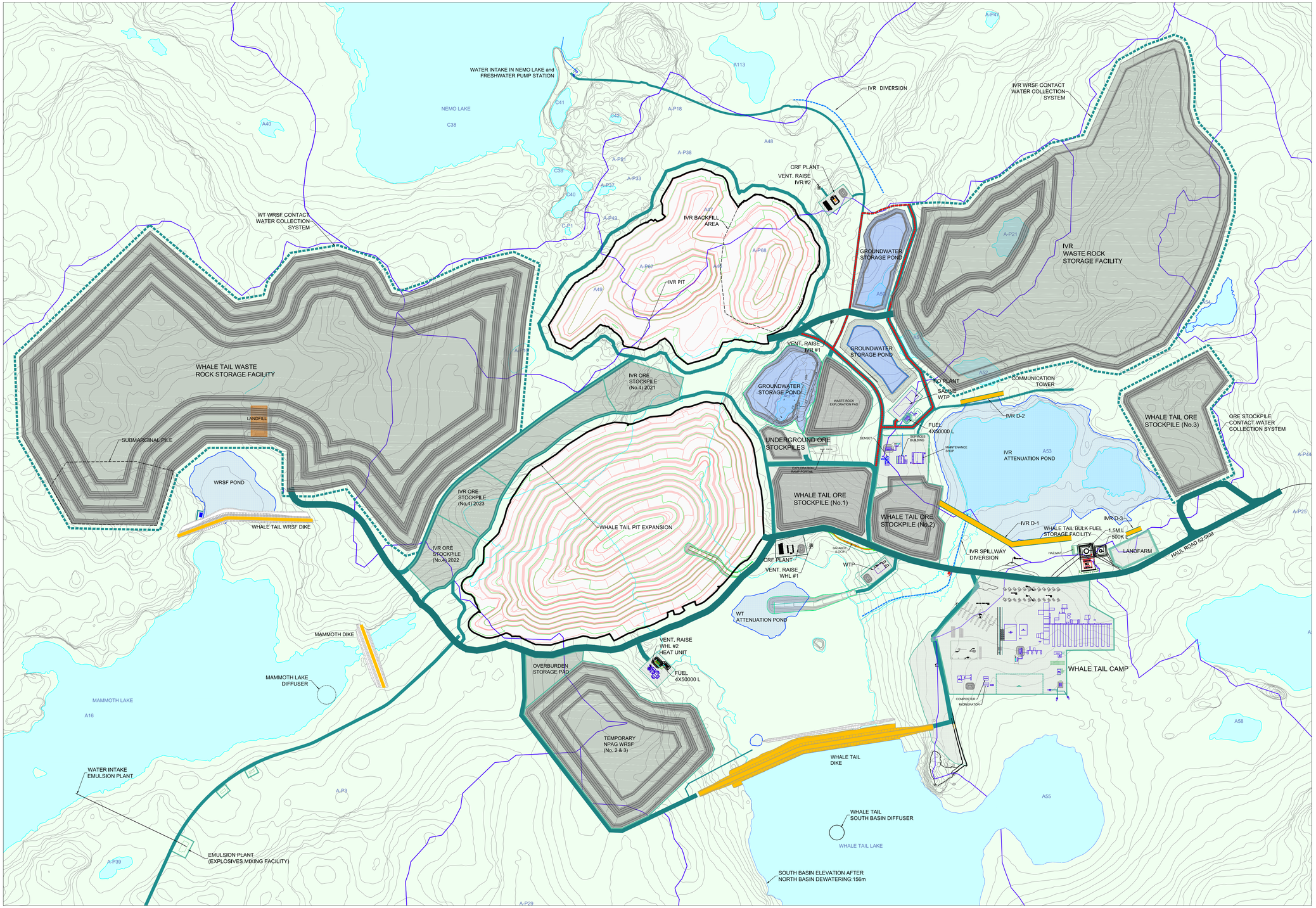

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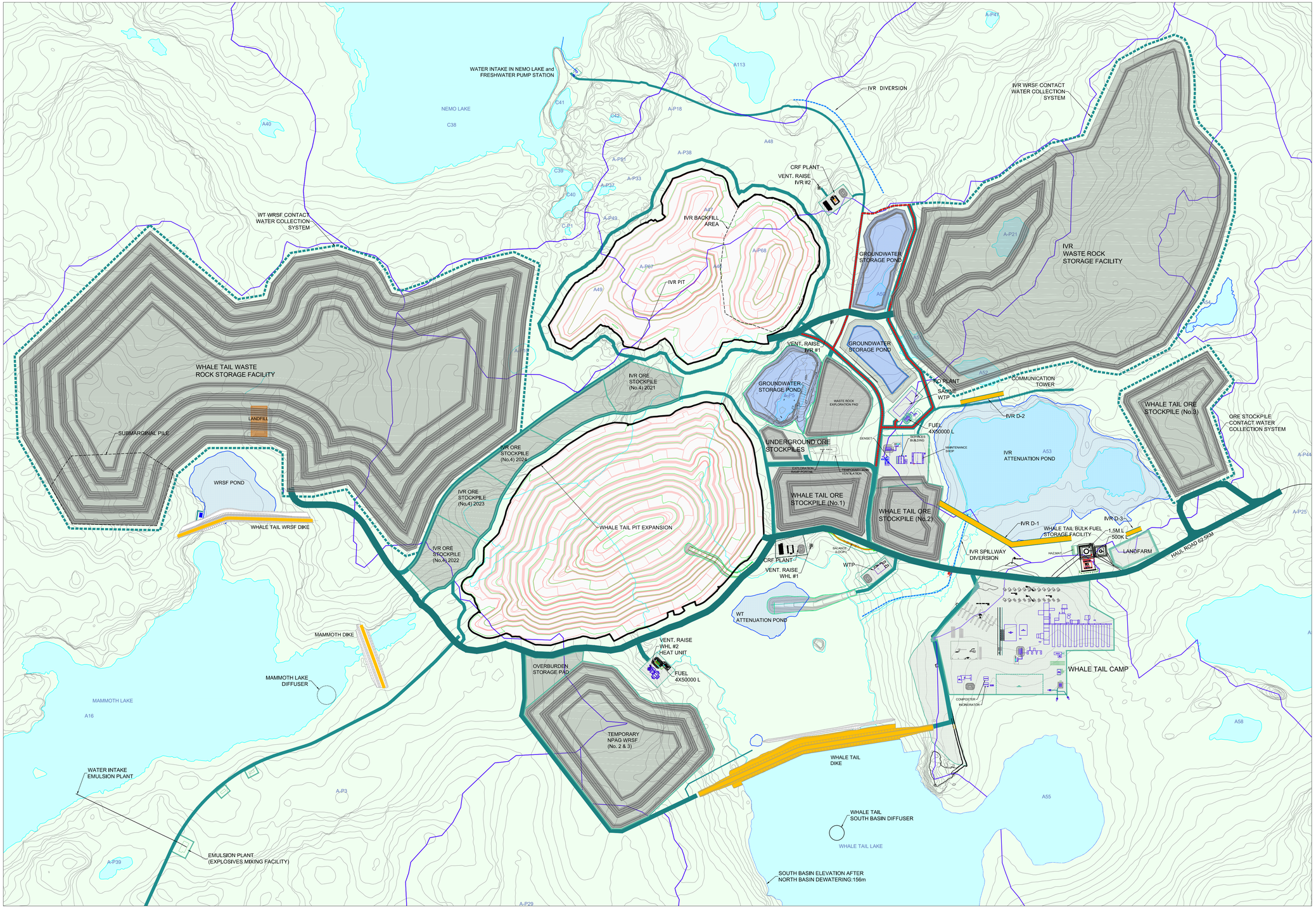

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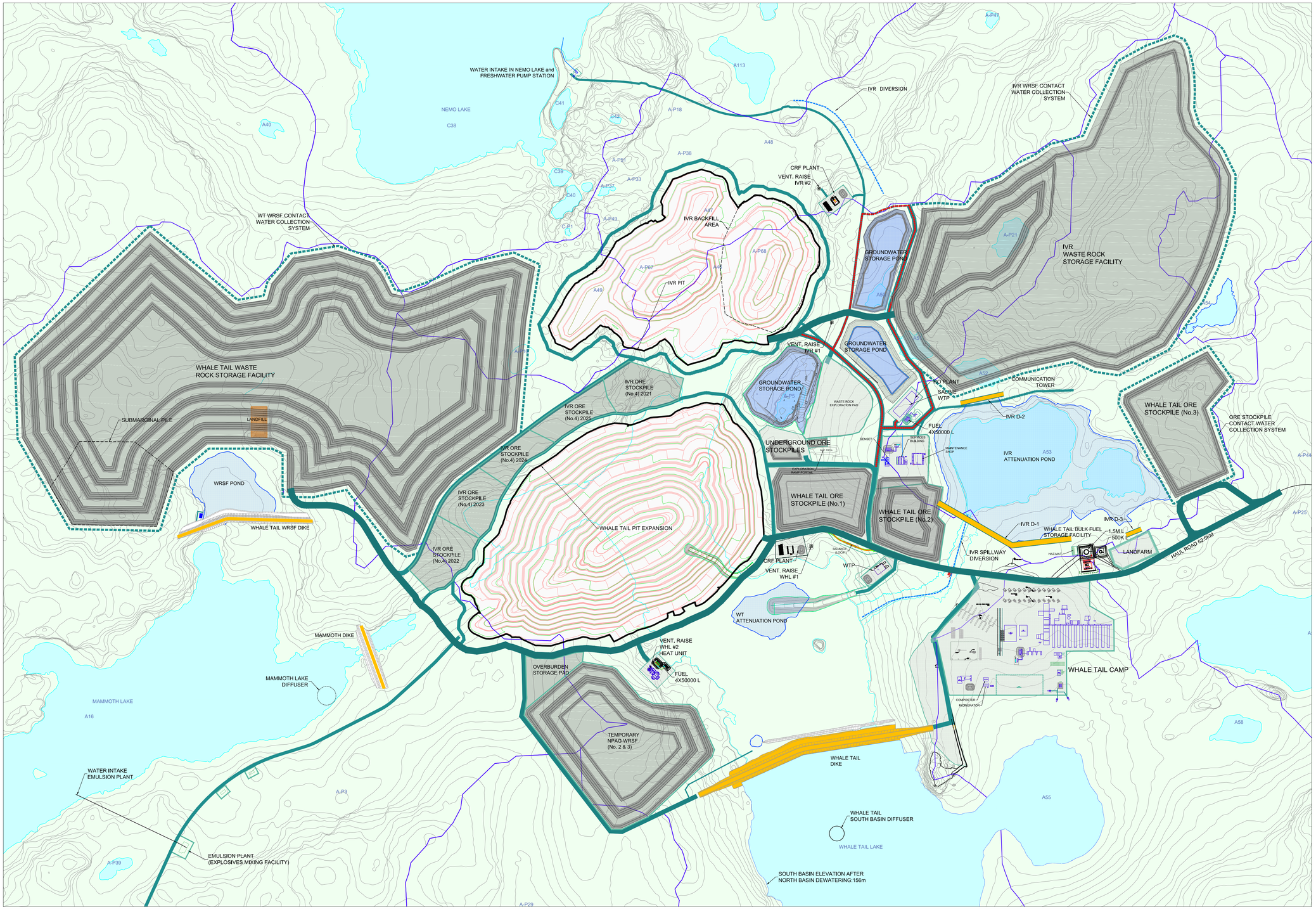

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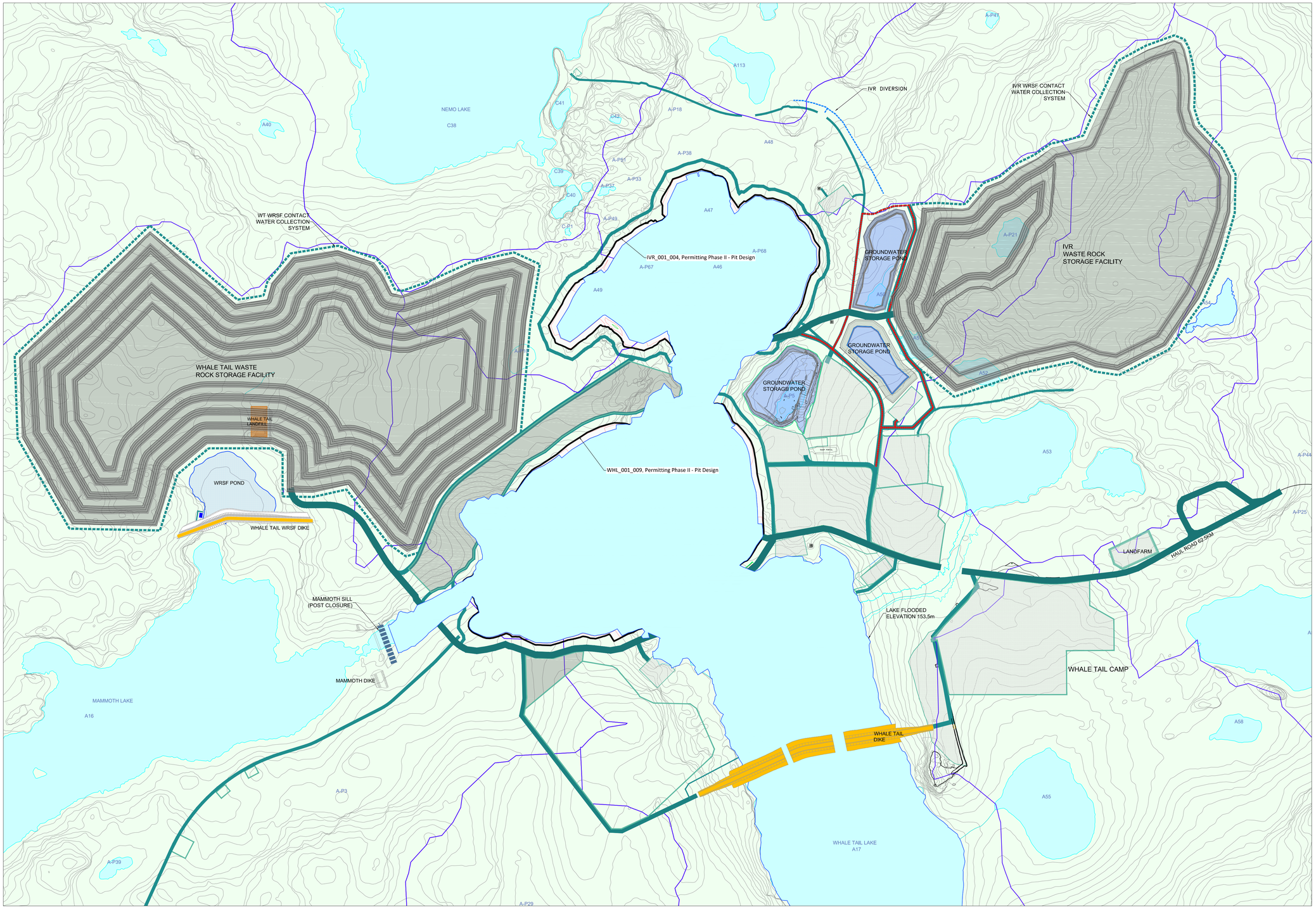

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ÉCHELLE SCALE	1:6000	DATE 2018-10-18

NO. DESSIN DRAWING NO. AFTER MINE

NO. PROJET PROJECT NO.	REVISION	FEUILLE / SHT
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APPENDIX C

Elevation-Storage-Area Relationships

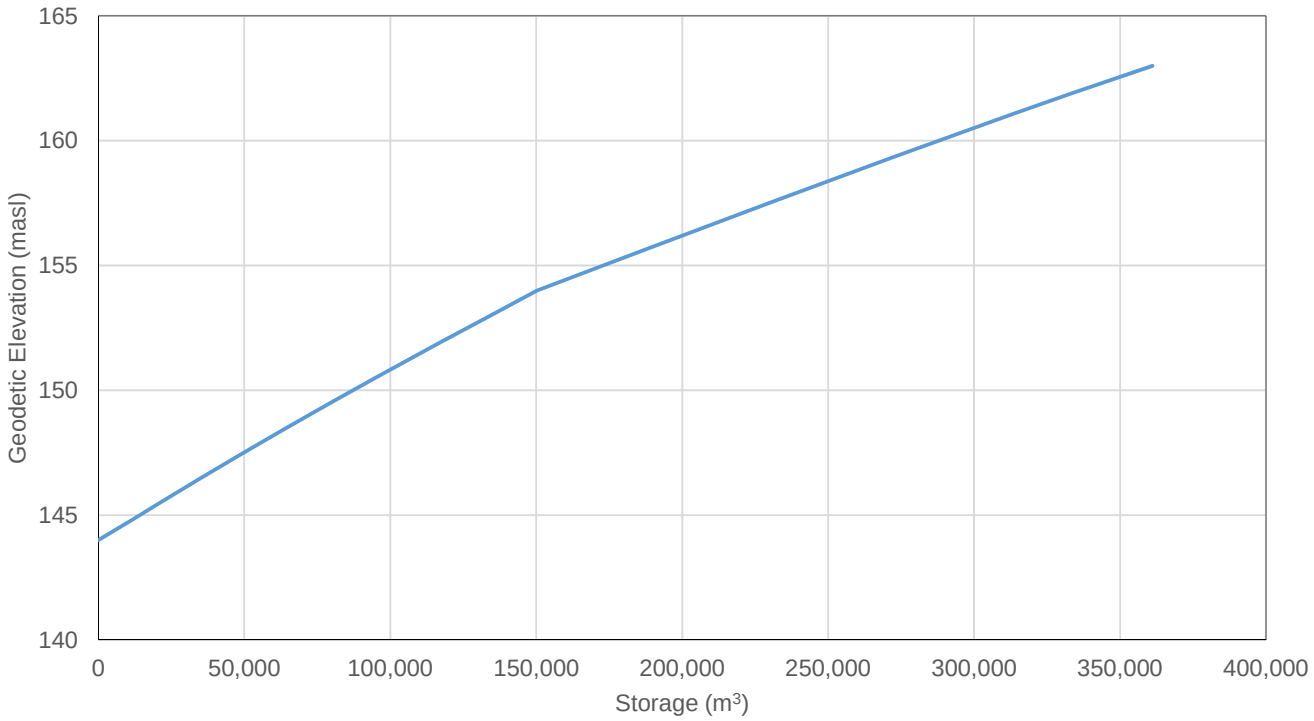

Figure C-1: Derived Elevation-Storage Relationship (Stormwater Storage Pond)

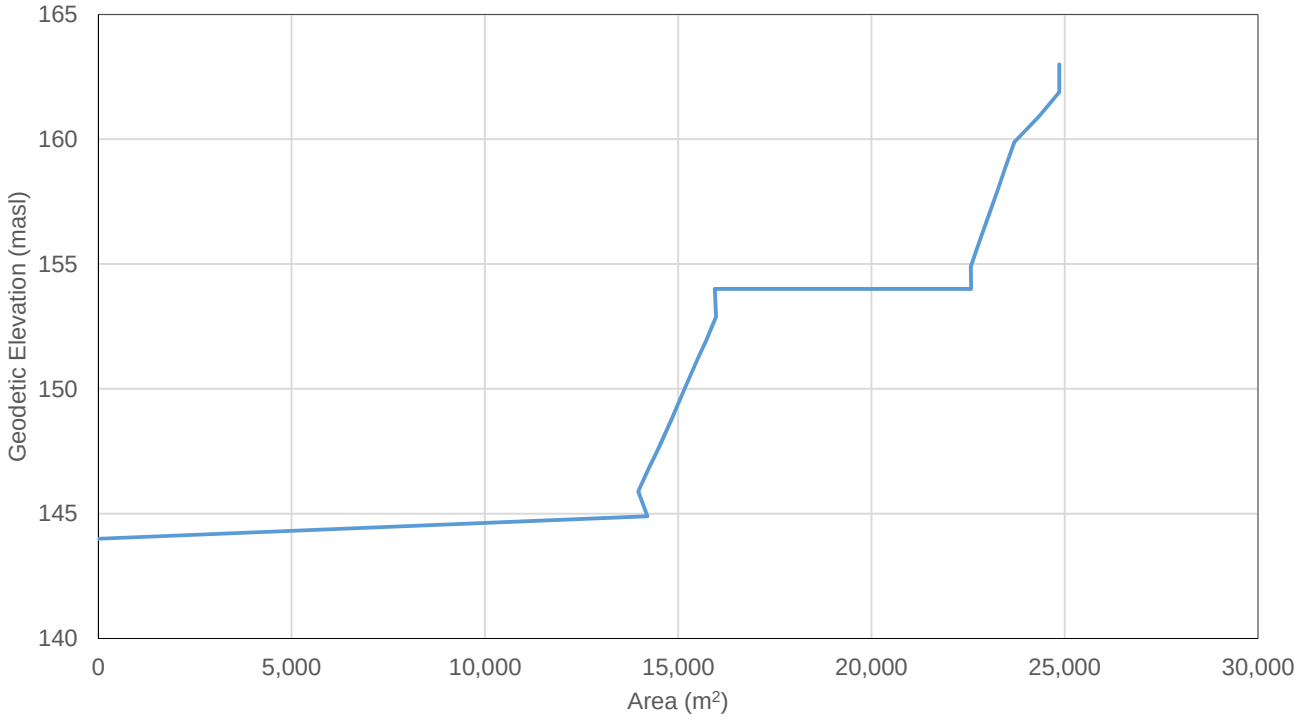

Figure C-2: Derived Elevation-Area Relationship (Stormwater Storage Pond)

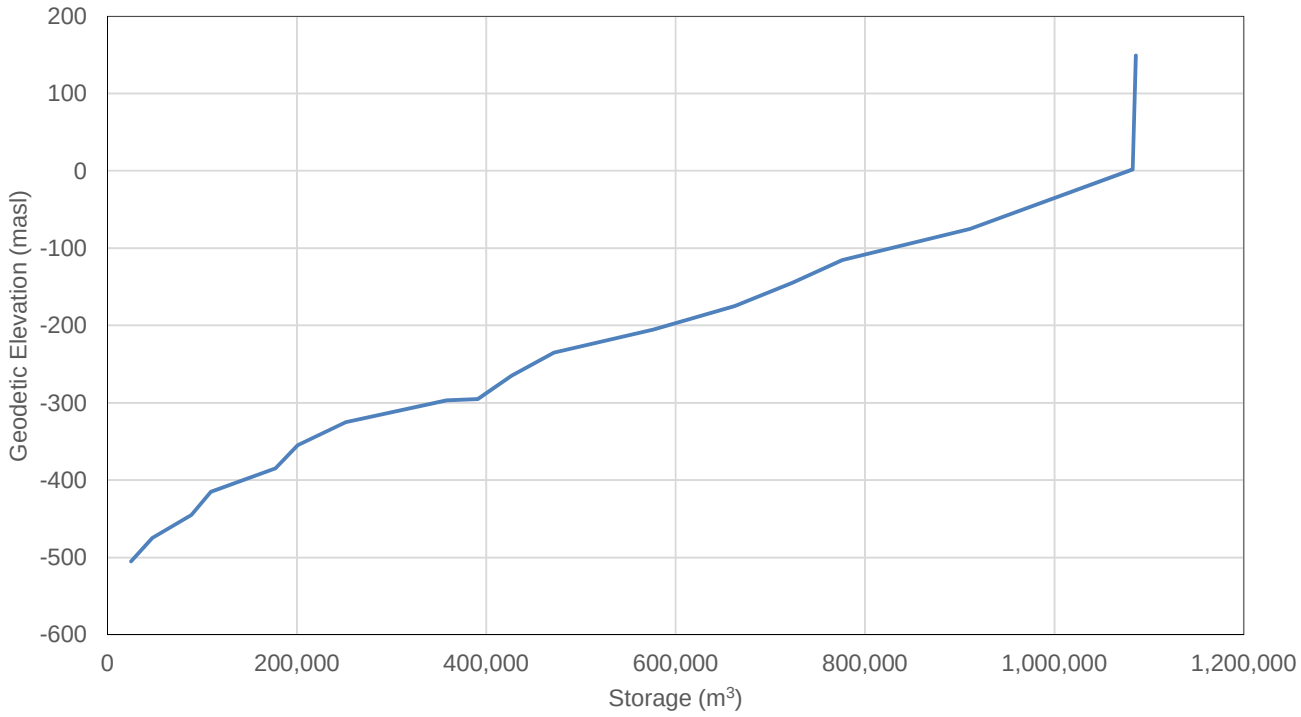

Figure C-3: Derived Elevation-Storage Relationship (Underground Mine [Whale Tail])

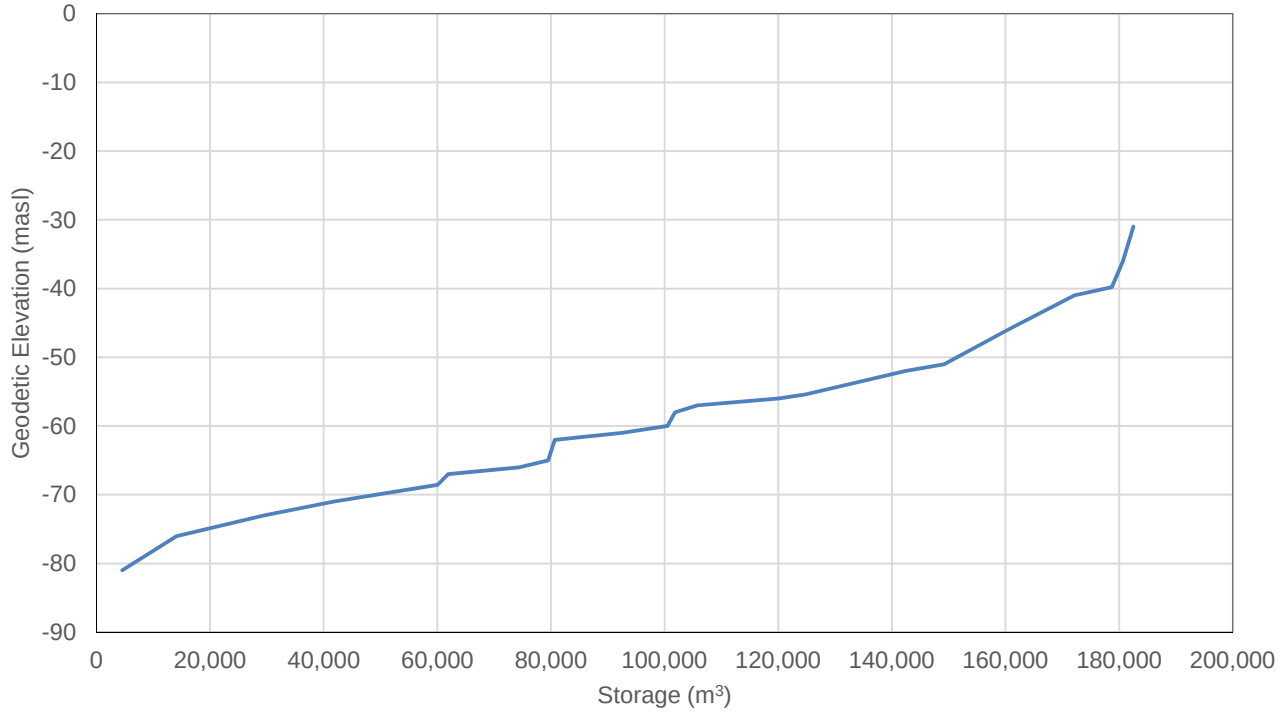

Figure C-4: Derived Elevation-Storage Relationship (Underground Mine [IVR])

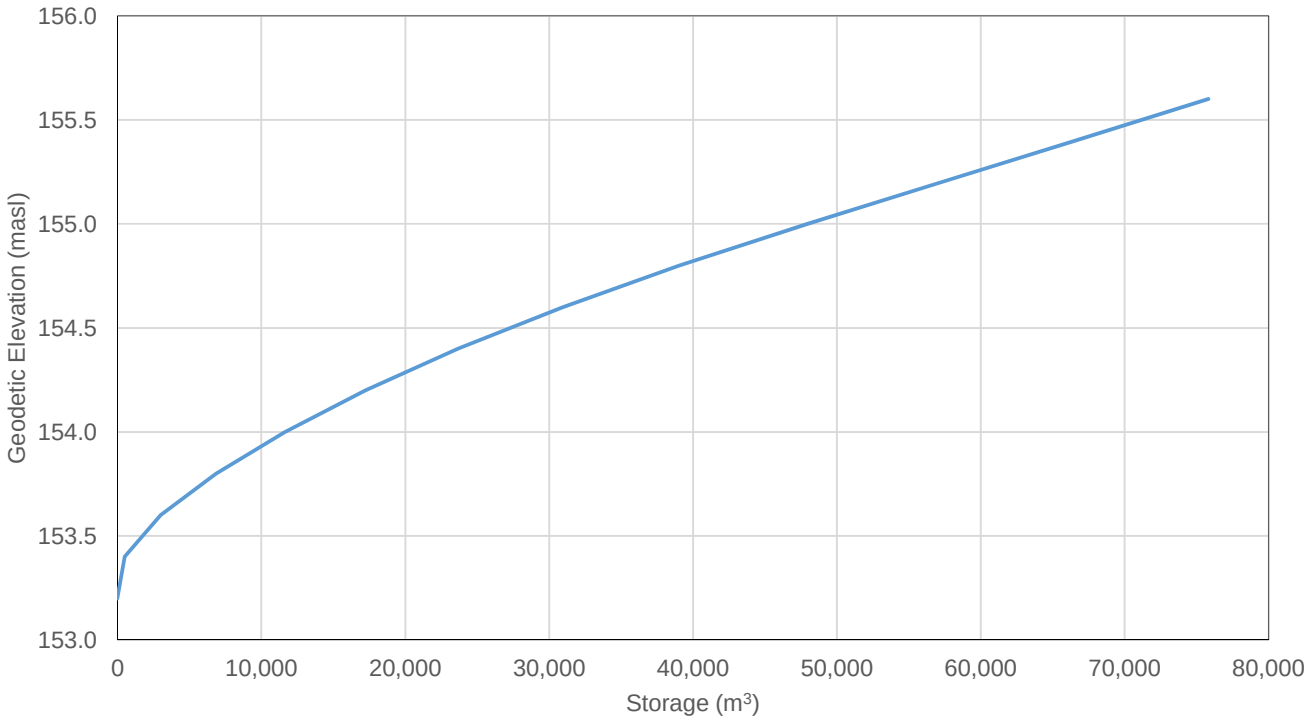

Figure C-5: Derived Elevation-Storage Relationship (Whale Tail WRSF Pond)

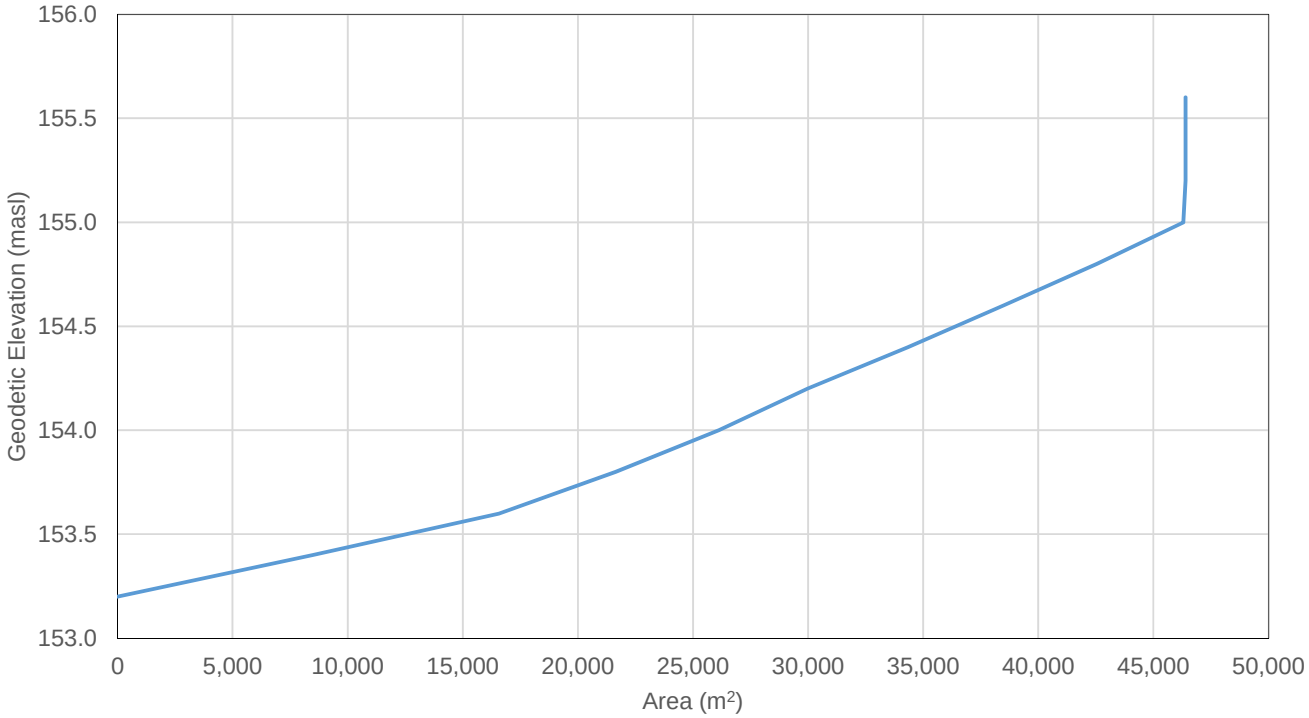

Figure C-6: Derived Elevation-Area Relationship (Whale Tail WRSF Pond)

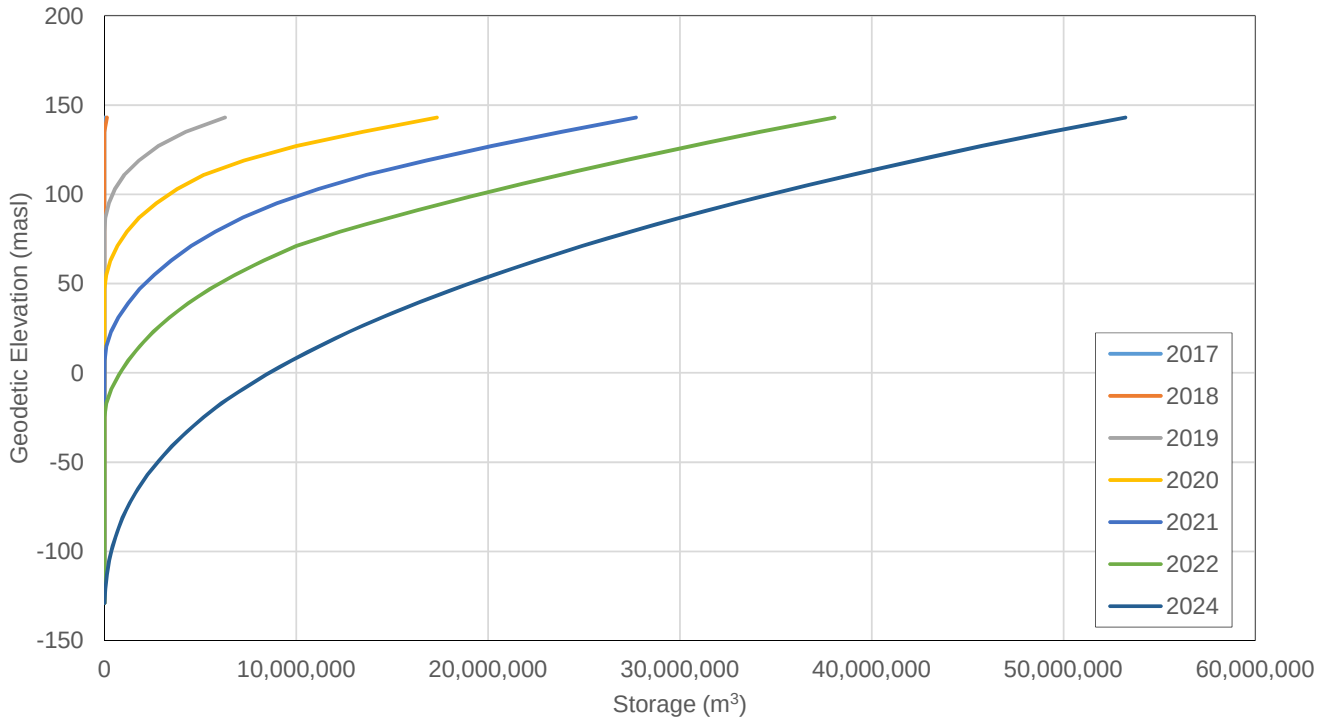

Figure C-7: Derived Elevation-Storage Relationship (Whale Tail Pit)

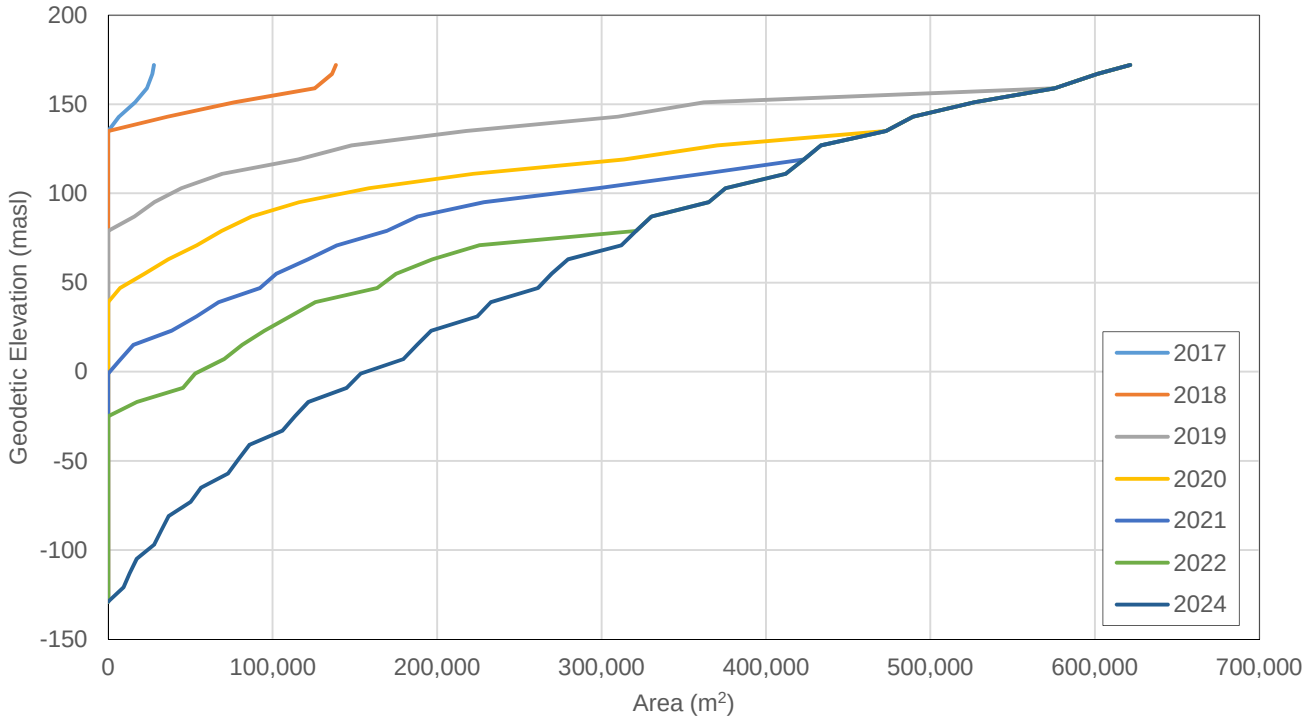

Figure C-8: Derived Elevation-Area Relationship (Whale Tail Pit)

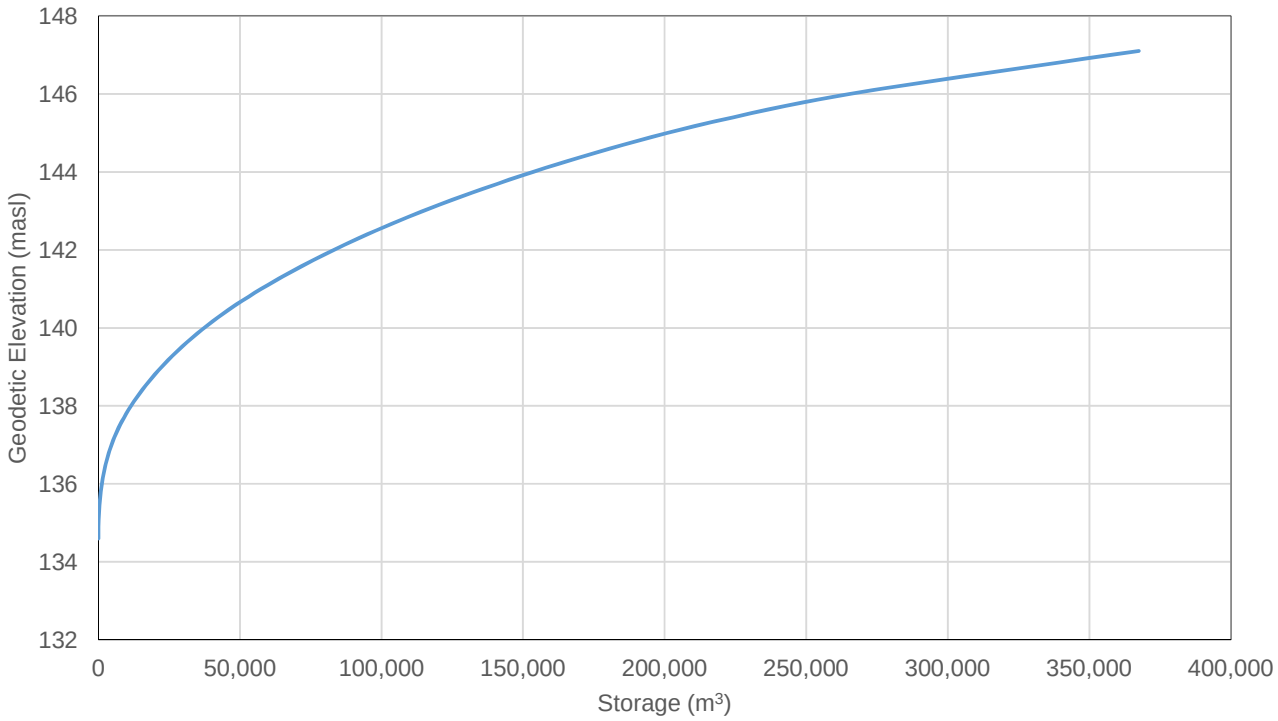

Figure C-9: Derived Elevation-Storage Relationship (Whale Tail Attenuation Pond)

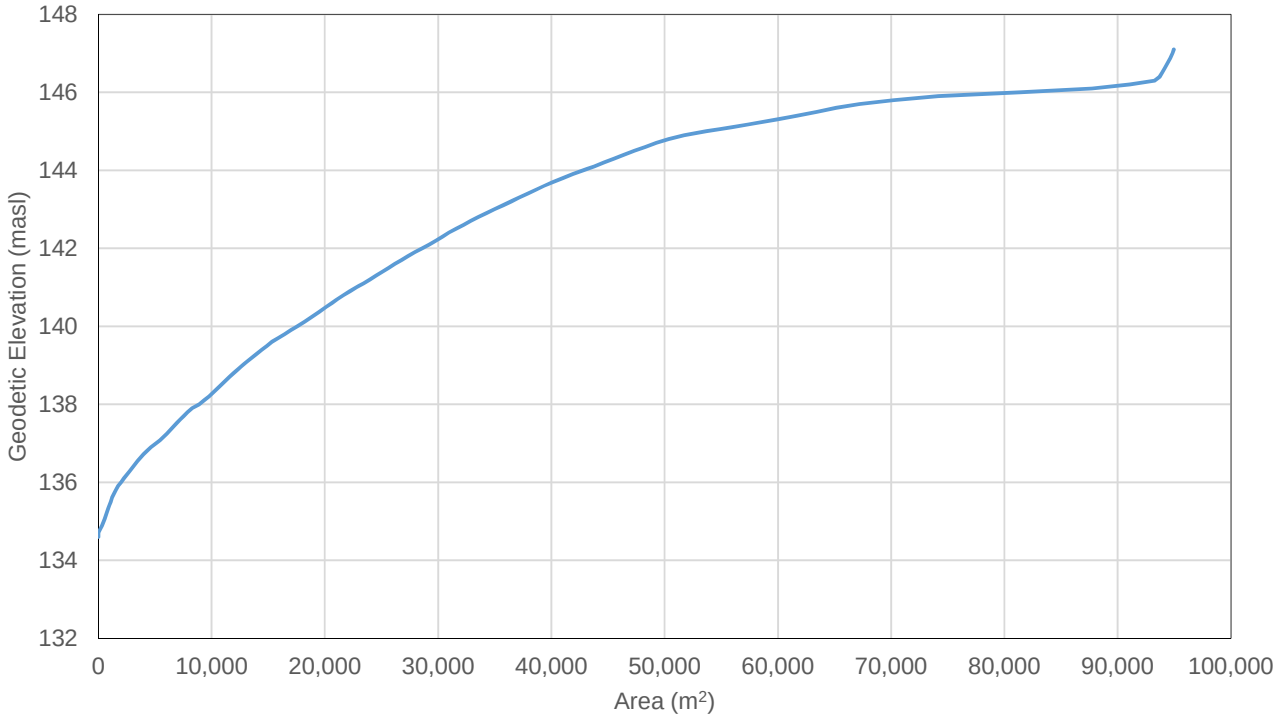

Figure C-10: Derived Elevation-Area Relationship (Whale Tail Attenuation Pond)

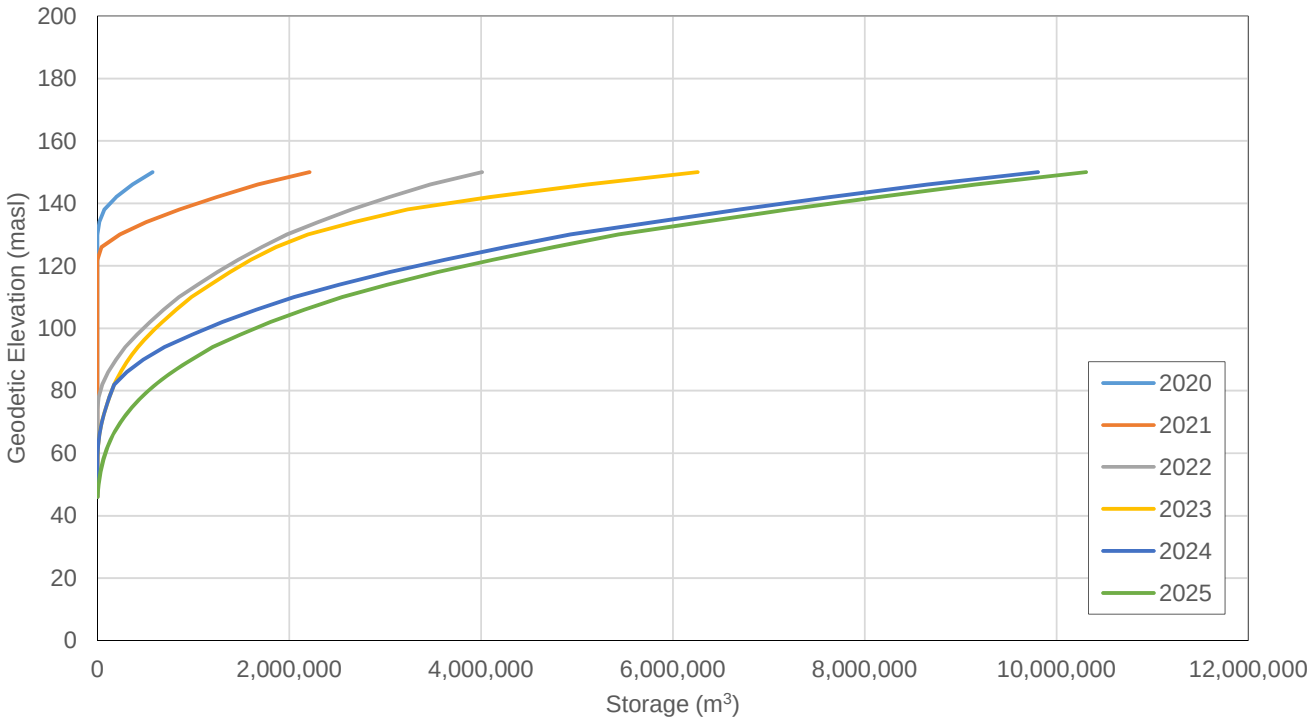

Figure C-11: Derived Elevation-Storage Relationship (IVR Pit)

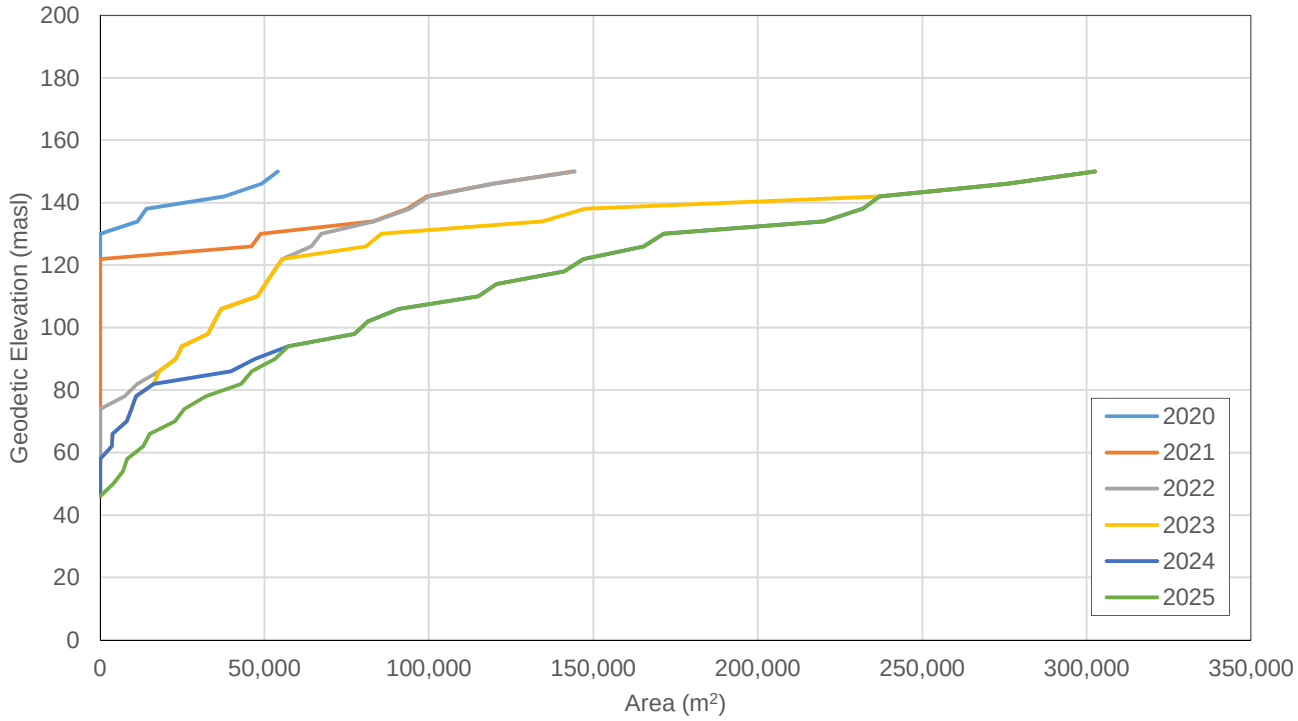

Figure C-12: Derived Elevation-Area Relationship (IVR Pit)

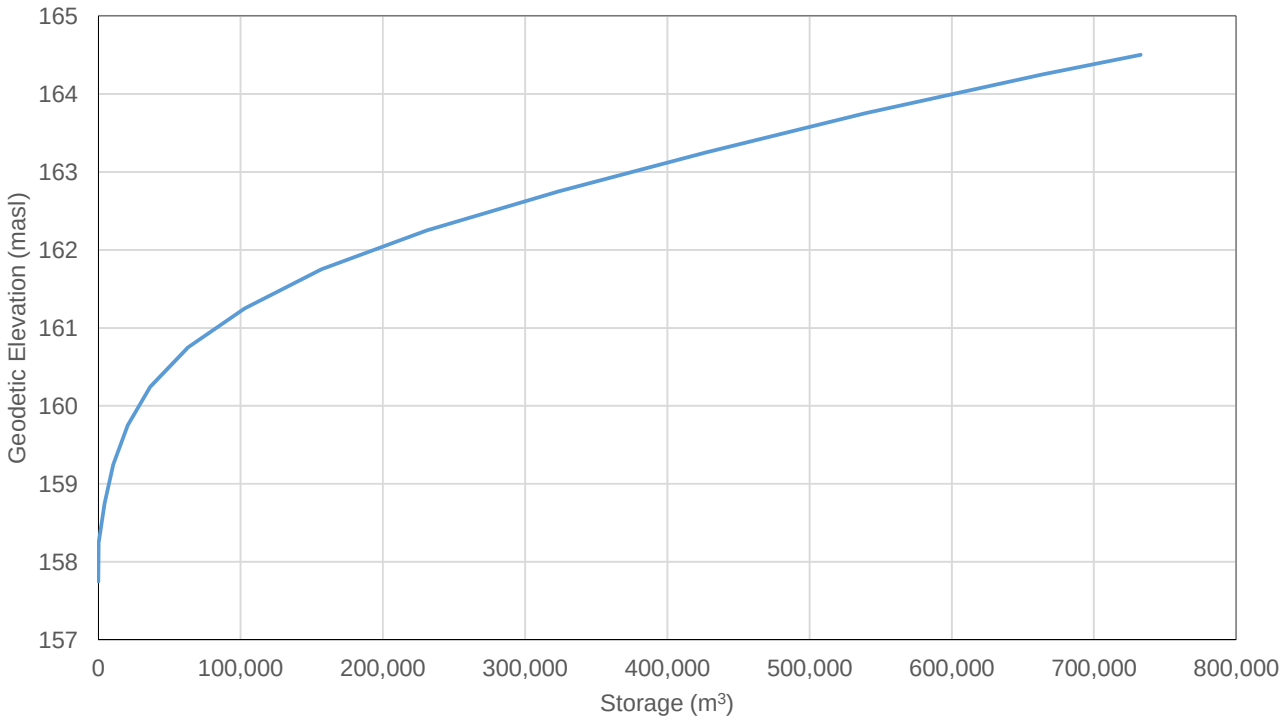

Figure C-13: Derived Elevation-Storage Relationship (IVR Attenuation Pond)

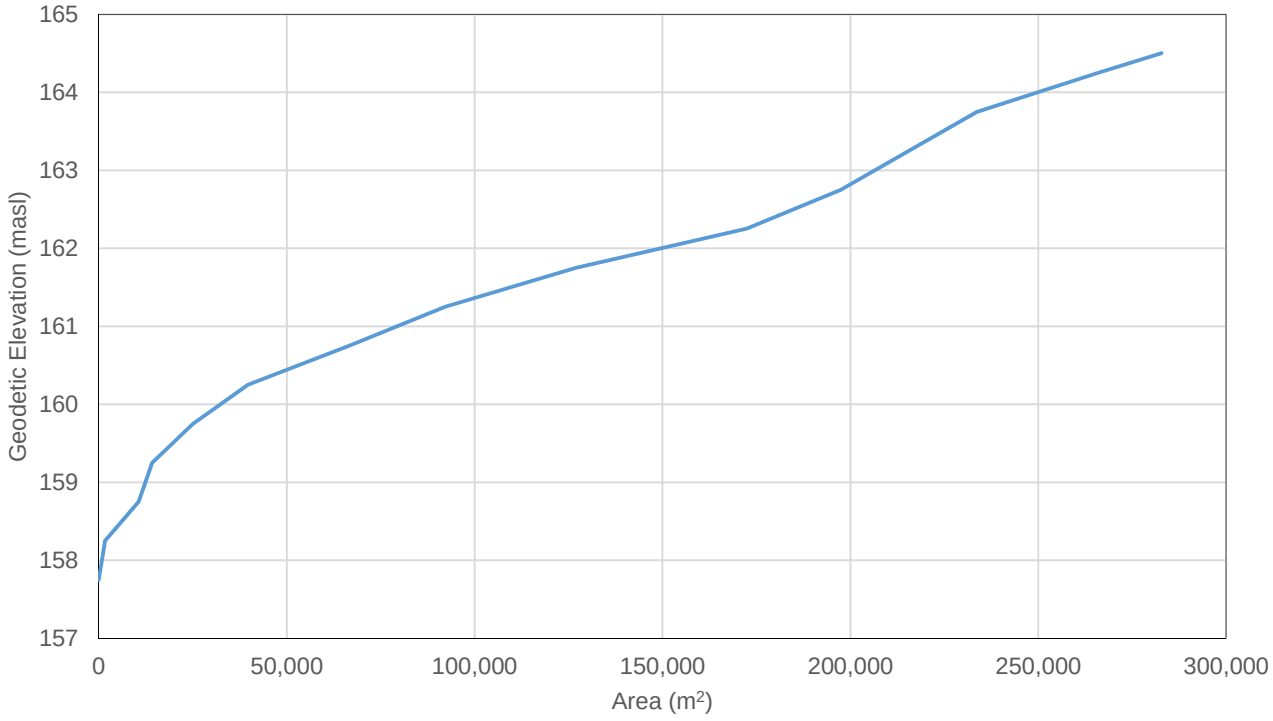

Figure C-14: Derived Elevation-Area Relationship (IVR Attenuation Pond)

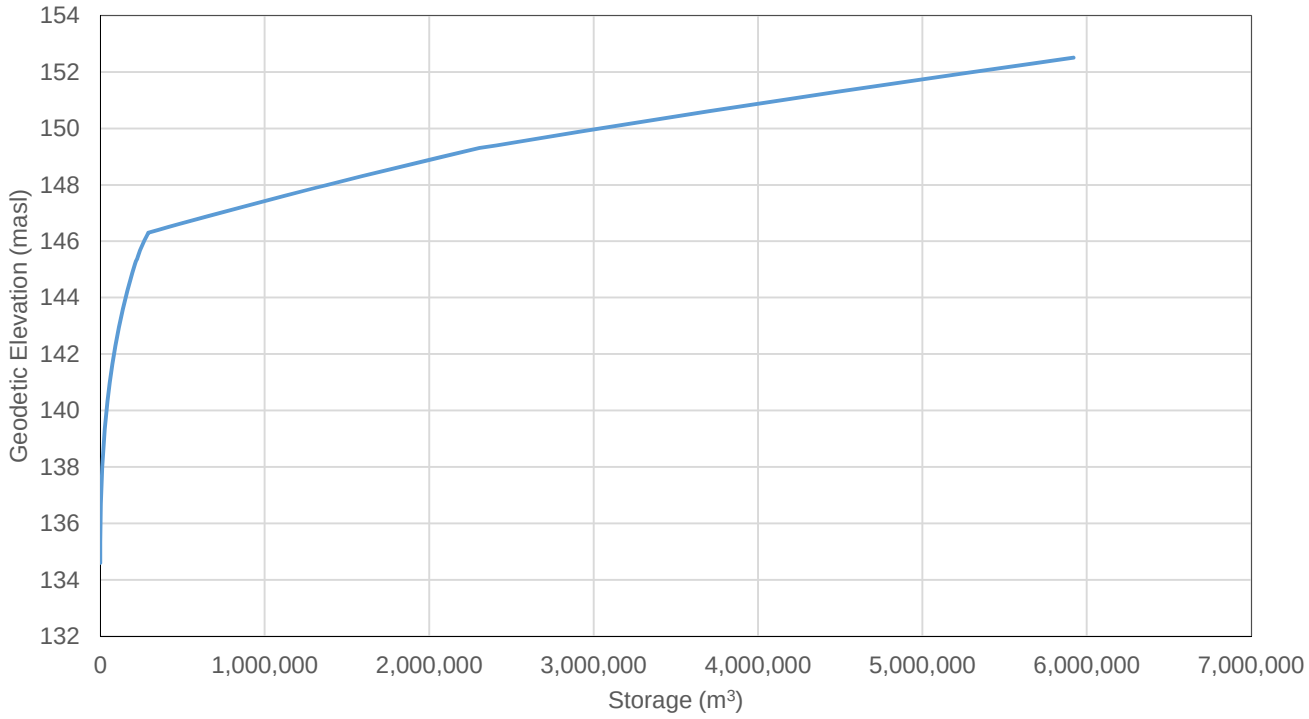

Figure C-15: Derived Elevation-Storage Relationship (Whale Tail Lake [North Basin] above the Whale Tail Attenuation Pond)

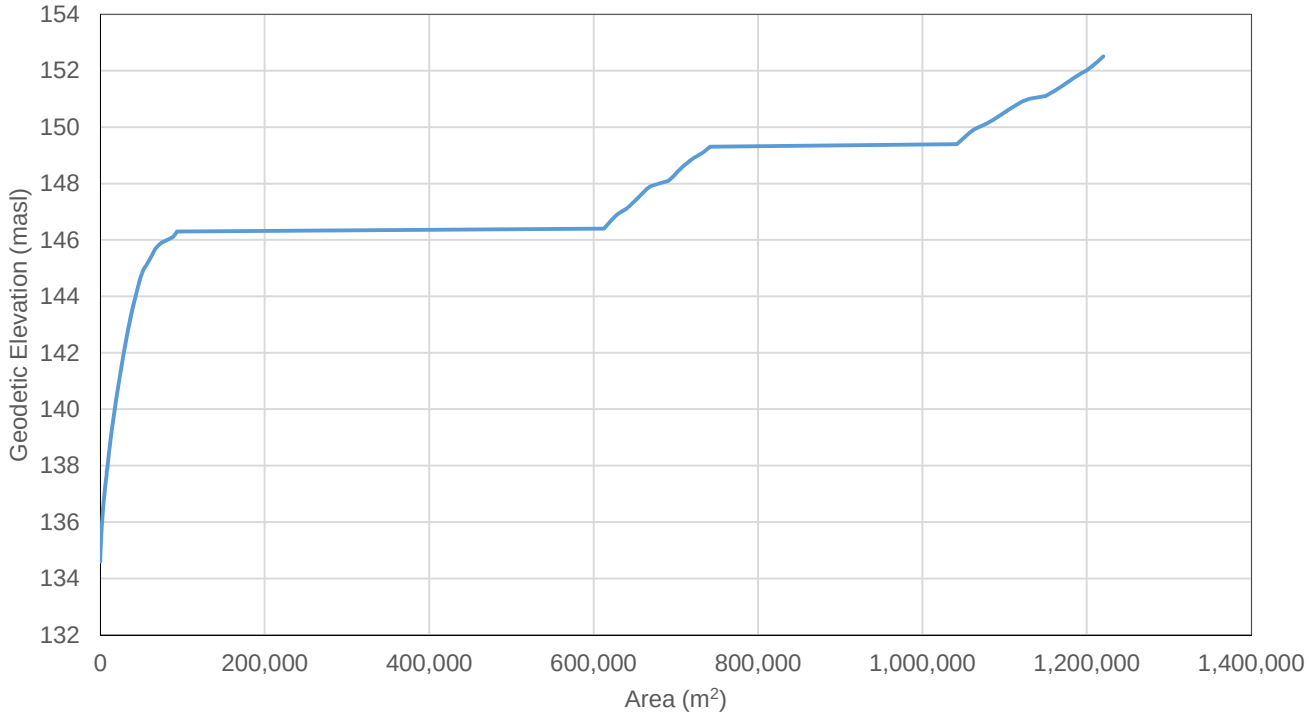

Figure C-16: Derived Elevation-Area Relationship (Whale Tail Lake [North Basin] above the Whale Tail Attenuation Pond)

APPENDIX D

Mean Annual Water Balance

Table D-1: Mean Annual Water Balance (Quarry 1)

Date	Inflow (m^3/mon)									Outflow (m^3/mon)			Water Surface Elevation (masl)	Storage (m^3)
	Direct Runoff	Land Runoff	Starter Pit	Whale Tail WRSF	Truck Shop	Ore Stockpile	Industrial Sector	Camp Sector	Drilling Water	Evaporation	O-WTP	GSP (Brine)		
Jan-18	0	0	0	0	3,093	0	0	0	0	0	0	0	136.4	3,913
Feb-18	0	0	0	0	2,887	0	0	0	0	0	0	0	137.6	7,472
Mar-18	0	0	0	0	3,196	0	0	0	0	0	0	0	139.0	11,412
Apr-18	0	0	0	0	3,093	0	0	0	0	0	0	0	140.3	15,225
May-18	0	0	0	0	3,196	0	0	0	0	0	0	0	141.6	19,165
Jun-18	810	3,493	0	0	3,093	1,567	3,511	14,052	0	66	0	0	144.9	46,671
Jul-18	451	377	2,664	13,696	3,196	218	412	1,623	25	1,009	0	0	146.8	69,716
Aug-18	632	480	3,269	18,852	3,196	352	575	2,231	1,092	1,286	0	0	149.2	99,109
Sep-18	763	817	4,926	36,309	3,093	781	1,125	4,299	2,137	640	0	0	152.5	152,718
Oct-18	0	0	1,488	1,226	3,196	0	0	0	0	0	0	0	152.8	158,628
Nov-18	0	0	1,440	0	3,093	0	0	0	0	0	0	0	153.0	163,161
Dec-18	0	0	1,151	0	3,196	0	0	0	0	0	0	0	153.3	167,509
Jan-19	0	0	745	0	3,196	0	0	0	0	0	0	0	153.5	171,450
Feb-19	0	0	672	0	2,887	0	0	0	0	0	0	0	153.6	175,008
Mar-19	0	0	744	0	3,196	0	0	0	0	0	0	0	153.8	178,948
Apr-19	0	0	720	0	3,093	0	0	0	0	0	0	0	154.0	182,761
May-19	0	0	503	0	2,161	0	0	0	0	0	0	0	154.1	185,425
Jun-19	0	0	0	0	0	0	0	0	0	26	185,399	0	135.0	0
Jul-19	0	0	0	0	0	0	0	0	0	0	0	0	135.0	0

Table D-2: Mean Annual Water Balance (GSP (Brine))

Date	Inflow (m^3/mon)							Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Quarry 1	Catchment Natural Runoff	Waste Rock Pad	Underground Overflow	Underground Stope	Brine from S-WTP (Brackish)	Whale Tail Attenuation Pond	Evaporation	Underground	O-WTP	S-WTP (Brine)	Underground (Closure)	Whale Tail Pit		
Jan-18	0	0	0	0	0	0	0	0	0	0	0	0	0	144.00	0
Feb-18	0	0	0	0	0	0	0	0	0	0	0	0	0	144.00	0
Mar-18	0	0	0	0	0	0	0	0	0	0	0	0	0	144.00	0
Apr-18	0	0	0	0	0	0	0	0	0	0	0	0	0	144.00	0
May-18	0	0	0	0	0	0	0	0	0	0	0	0	0	144.00	0
Jun-18	0	10,644	345	0	0	0	0	53	0	0	0	0	0	144.77	10,936
Jul-18	0	1,645	45	0	0	0	0	1,263	0	0	0	0	0	144.80	11,364
Aug-18	0	2,144	70	0	0	0	0	1,349	0	0	0	0	0	144.86	12,229
Sep-18	0	3,507	150	0	0	0	0	558	0	0	0	0	0	145.08	15,328
Oct-18	0	0	0	0	0	0	0	0	131	0	0	0	0	145.07	15,197
Nov-18	0	0	0	0	0	0	0	0	131	0	0	0	0	145.06	15,067
Dec-18	0	0	0	0	0	0	0	0	135	0	0	0	0	145.05	14,931
Jan-19	0	0	0	0	0	0	0	0	275	0	0	0	0	145.03	14,657
Feb-19	0	0	0	0	0	0	0	0	138	0	0	0	0	145.02	14,519
Mar-19	0	0	0	0	0	0	0	0	152	0	0	0	0	145.01	14,367
Apr-19	0	0	0	0	0	0	0	0	147	0	0	0	0	145.00	14,220
May-19	0	0	0	0	0	0	0	0	152	0	0	0	0	144.99	14,067
Jun-19	0	9,540	909	0	0	0	0	125	5	0	0	0	0	145.73	24,387
Jul-19	0	1,557	113	0	0	0	0	1,412	0	0	0	0	0	145.75	24,645
Aug-19	0	1,975	167	0	0	0	0	1,426	0	0	0	0	0	145.80	25,361
Sep-19	0	3,117	344	0	0	0	0	551	0	0	0	0	0	146.01	28,271
Oct-19	0	0	0	0	0	0	0	0	147	0	0	0	0	146.00	28,124
Nov-19	0	0	0	0	0	0	4,198	0	147	0	0	0	0	146.28	32,175
Dec-19	0	0	0	0	0	0	64,981	0	152	0	0	0	0	150.64	97,003
Jan-20	0	0	0	0	0	0	30,778	0	239	0	0	0	0	152.58	127,542
Feb-20	0	0	0	0	0	0	27,893	0	0	0	0	0	0	154.23	155,435
Mar-20	0	0	0	0	0	0	29,644	0	0	0	0	0	0	155.54	185,079
Apr-20	0	0	0	147	0	0	28,768	0	0	0	0	0	0	156.82	213,994
May-20	0	0	0	1,722	0	0	29,641	0	0	0	0	0	0	158.18	245,357
Jun-20	0	8,016	1,674	2,883	0	0	956	134	0	248,752	0	0	0	144.70	10,000
Jul-20	0	1,324	205	2,019	0	0	0	1,260	0	0	0	0	0	144.87	12,289
Aug-20	0	1,717	299	2,075	0	0	0	1,442	0	0	0	0	0	145.05	14,938
Sep-20	0	2,591	608	2,113	0	0	0	557	0	0	0	0	0	145.39	19,693
Oct-20	0	0	0	1,722	0	4,500	0	0	0	0	0	0	0	145.84	25,915
Nov-20	0	0	0	1,667	0	4,500	0	0	0	0	0	0	0	146.27	32,082
Dec-20	0	0	0	1,722	0	4,650	0	0	0	0	0	0	0	146.72	38,455
Jan-21	0	0	0	741	0	4,650	0	0	345	0	0	0	0	147.07	43,501
Feb-21	0	0	0	742	0	4,200	0	0	0	0	0	0	0	147.41	48,443
Mar-21	0	0	0	821	0	4,650	0	0	0	0	0	0	0	147.78	53,914
Apr-21	0	0	0	795	0	4,500	0	0	0	0	0	0	0	148.14	59,209
May-21	0	0	0	821	0	4,468	0	0	0	0	0	0	0	148.50	64,498
Jun-21	0	7,044	2,159	2,011	0	144	0	132	0	0	0	0	0	149.25	75,723
Jul-21	0	1,309	253	1,118	0	0	0	1,509	0	0	0	0	0	149.33	76,894
Aug-21	0	1,634	353	1,174	0	0	0	1,527	0	0	0	0	0	149.43	78,529
Sep-21	0	2,436	692	1,241	0	0	0	593	0	0	0	0	0	149.68	82,305
Oct-21	0	0	0	821	0	4,305	0	0	0	0	0	0	0	150.02	87,431

Date	Inflow (m^3/mon)							Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Quarry 1	Catchment Natural Runoff	Waste Rock Pad	Underground Overflow	Underground Stope	Brine from S-WTP (Brackish)	Whale Tail Attenuation Pond	Evaporation	Underground	O-WTP	S-WTP (Brine)	Underground (Closure)	Whale Tail Pit		
Nov-21	0	0	0	795	0	4,321	0	0	0	0	0	0	0	150.35	92,547
Dec-21	0	0	0	821	0	4,449	0	0	0	0	0	0	0	150.69	97,818
Jan-22	0	0	0	7,299	10,000	4,381	0	0	0	0	0	0	0	152.07	119,498
Feb-22	0	0	0	6,668	0	4,000	0	0	0	0	0	0	0	152.74	130,166
Mar-22	0	0	0	7,383	0	4,381	0	0	0	0	0	0	0	153.48	141,929
Apr-22	0	0	0	7,145	0	141	0	0	0	0	1,740	0	0	153.83	147,475
May-22	0	0	0	238	0	0	0	0	0	0	1,860	0	0	153.72	145,853
Jun-22	0	7,048	2,159	0	0	2,640	0	146	0	0	1,800	0	0	154.24	155,755
Jul-22	0	1,396	253	0	0	1,237	0	1,779	0	0	1,860	0	0	154.21	155,002
Aug-22	0	1,715	353	0	0	1,249	0	1,779	0	0	1,860	0	0	154.20	154,680
Sep-22	0	2,470	692	0	0	1,310	0	699	0	0	1,800	0	0	154.28	156,654
Oct-22	0	0	0	0	0	44	0	0	0	0	1,860	0	0	154.20	154,837
Nov-22	0	0	0	0	0	0	0	0	0	0	1,800	0	0	154.12	153,037
Dec-22	0	0	0	0	0	0	0	0	0	0	1,860	0	0	154.04	151,177
Jan-23	0	0	0	0	0	0	0	0	0	0	2,790	0	0	153.88	148,387
Feb-23	0	0	0	0	0	0	0	0	0	0	2,520	0	0	153.73	145,867
Mar-23	0	0	0	0	0	0	0	0	0	0	2,790	0	0	153.55	143,077
Apr-23	0	0	0	0	0	0	0	0	0	0	2,700	0	0	153.38	140,377
May-23	0	0	0	0	0	0	0	0	0	0	2,790	0	0	153.21	137,587
Jun-23	0	7,047	2,159	0	0	4,350	0	142	0	0	2,700	0	0	153.88	148,302
Jul-23	0	1,341	253	0	0	4,650	0	1,608	0	0	2,790	0	0	153.99	150,147
Aug-23	0	1,676	353	0	0	4,650	0	1,657	0	0	2,790	0	0	154.09	152,379
Sep-23	0	2,465	692	0	0	4,500	0	683	0	0	2,700	0	0	154.28	156,653
Oct-23	0	0	0	0	0	150	0	0	0	0	2,790	0	0	154.17	154,013
Nov-23	0	0	0	0	0	0	0	0	0	0	2,700	0	0	154.05	151,313
Dec-23	0	0	0	0	0	0	0	0	0	0	2,790	0	0	153.89	148,523
Jan-24	0	0	0	0	0	0	0	0	0	0	2,790	0	0	153.72	145,733
Feb-24	0	0	0	0	0	0	0	0	0	0	2,610	0	0	153.55	143,123
Mar-24	0	0	0	0	0	0	0	0	0	0	2,790	0	0	153.38	140,333
Apr-24	0	0	0	0	0	0	0	0	0	0	2,700	0	0	153.21	137,633
May-24	0	0	0	0	0	0	0	0	0	0	2,790	0	0	153.03	134,843
Jun-24	0	7,048	3,147	0	0	4,350	0	142	0	0	2,700	0	0	153.77	146,547
Jul-24	0	1,341	390	0	0	4,650	0	1,609	0	0	2,790	0	0	153.89	148,529
Aug-24	0	1,667	574	0	0	4,650	0	1,628	0	0	2,790	0	0	154.03	151,002
Sep-24	0	2,460	1,182	0	0	4,500	0	669	0	0	2,700	0	0	154.24	155,776
Oct-24	0	0	0	0	0	150	0	0	0	0	2,790	0	0	154.13	153,136
Nov-24	0	0	0	0	0	0	0	0	0	0	2,700	0	0	154.01	150,436
Dec-24	0	0	0	0	0	0	0	0	0	0	2,790	0	0	153.84	147,646
Jan-25	0	0	0	0	0	0	0	0	0	0	2,790	0	0	153.66	144,856
Feb-25	0	0	0	0	0	0	0	0	0	0	2,520	0	0	153.50	142,336
Mar-25	0	0	0	0	0	0	0	0	0	0	2,790	0	0	153.33	139,546
Apr-25	0	0	0	0	0	0	0	0	0	0	2,700	0	0	153.16	136,846
May-25	0	0	0	0	0	0	0	0	0	0	2,790	0	0	152.98	134,056
Jun-25	0	7,047	4,317	0	0	4,350	0	142	0	0	2,700	0	0	153.79	146,928
Jul-25	0	1,341	506	0	0	4,650	0	1,609	0	0	2,790	0	0	153.92	149,027
Aug-25	0	1,669	707	0	0	4,650	0	1,636	0	0	2,790	0	0	154.06	151,627
Sep-25	0	2,463	1,383	0	0	4,500	0	678	0	0	2,700	0	0	154.28	156,596

Date	Inflow (m^3/mon)							Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Quarry 1	Catchment Natural Runoff	Waste Rock Pad	Underground Overflow	Underground Stope	Brine from S-WTP (Brackish)	Whale Tail Attenuation Pond	Evaporation	Underground	O-WTP	S-WTP (Brine)	Underground (Closure)	Whale Tail Pit		
Oct-25	0	0	0	0	0	150	0	0	0	0	2,790	0	0	154.16	153,956
Nov-25	0	0	0	0	0	0	0	0	0	0	2,700	0	0	154.04	151,256
Dec-25	0	0	0	0	0	0	0	0	0	0	2,790	0	0	153.89	148,466
Jan-26	0	0	0	0	0	0	0	0	0	0	0	148,466	0	144.00	0
Feb-26	0	0	0	0	0	0	0	0	0	0	0	0	0	144.00	0
Mar-26	0	0	0	0	0	0	0	0	0	0	0	0	0	144.00	0
Apr-26	0	0	0	0	0	0	0	0	0	0	0	0	0	144.00	0
May-26	0	0	0	0	0	0	0	0	0	0	0	0	0	144.00	0
Jun-26	0	7,000	4,317	0	0	0	0	0	0	0	0	0	11,317	144.00	0
Jul-26	0	821	506	0	0	0	0	0	0	0	0	0	1,327	144.00	0
Aug-26	0	1,146	707	0	0	0	0	0	0	0	0	0	1,853	144.00	0
Sep-26	0	2,243	1,383	0	0	0	0	0	0	0	0	0	3,626	144.00	0
Oct-26	0	0	0	0	0	0	0	0	0	0	0	0	0	144.00	0
Nov-26	0	0	0	0	0	0	0	0	0	0	0	0	0	144.00	0
Dec-26	0	0	0	0	0	0	0	0	0	0	0	0	0	144.00	0

Table D-3: Mean Annual Water Balance (Underground Mine)

Date	Inflow (m^3/mon)									Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Runoff	Ground-water	Whale Tail Lake (South Basin)	GSP (Brine)	Lake C38 (Nemo Lake)	Re-circulation	GSP (Brine) (Closure)	IVR Att. Pond	GSP (Brackish Water)	Re-circulation	Ground-water	Waste Rock	Under-ground Stope	GSP (Brine)	GSP (Brackish Water)		
Jan-18	0	0	0	0	303	5,029	0	0	0	5,197	0	135	0	0	0	-501.1	1
Feb-18	0	0	0	0	122	4,694	0	0	0	4,694	0	122	0	0	0	-501.1	1
Mar-18	0	0	0	0	135	5,197	0	0	0	5,197	0	135	0	0	0	-501.1	1
Apr-18	0	0	0	0	131	5,029	0	0	0	5,029	0	131	0	0	0	-501.1	1
May-18	0	0	0	0	135	5,197	0	0	0	5,197	0	135	0	0	0	-501.1	1
Jun-18	1,216	0	0	0	0	5,160	0	0	0	5,160	0	131	1,085	0	0	-501.1	1
Jul-18	297	0	0	0	0	5,332	0	0	0	5,332	0	135	162	0	0	-501.1	1
Aug-18	353	0	0	0	0	5,332	0	0	0	5,332	0	135	218	0	0	-501.1	1
Sep-18	446	0	0	0	0	5,160	0	0	0	5,160	0	131	316	0	0	-501.1	1
Oct-18	0	0	0	131	0	5,201	0	0	0	5,197	0	135	0	0	0	-501.1	1
Nov-18	0	0	0	131	0	5,029	0	0	0	5,029	0	131	0	0	0	-501.1	1
Dec-18	0	0	0	135	0	5,197	0	0	0	5,197	0	135	0	0	0	-501.1	1
Jan-19	0	0	0	275	0	8,870	0	0	0	8,993	0	152	0	0	0	-501.1	1
Feb-19	0	0	0	138	0	8,122	0	0	0	8,122	0	138	0	0	0	-501.1	1
Mar-19	0	0	0	152	0	8,993	0	0	0	8,993	0	152	0	0	0	-501.1	1
Apr-19	0	0	0	147	0	8,703	0	0	0	8,703	0	147	0	0	0	-501.1	1
May-19	0	0	0	152	0	8,993	0	0	0	8,993	0	152	0	0	0	-501.1	1
Jun-19	1,216	0	0	5	0	8,845	0	0	0	8,850	0	147	1,069	0	0	-501.1	1
Jul-19	297	0	0	0	0	9,145	0	0	0	9,145	0	152	145	0	0	-501.1	1
Aug-19	353	0	0	0	0	9,145	0	0	0	9,145	0	152	201	0	0	-501.1	1
Sep-19	446	0	0	0	0	8,850	0	0	0	8,850	0	147	299	0	0	-501.1	1
Oct-19	0	0	0	147	0	8,998	0	0	0	8,993	0	152	0	0	0	-501.1	1
Nov-19	0	0	0	147	0	8,703	0	0	0	8,703	0	147	0	0	0	-501.1	1
Dec-19	0	0	0	152	0	8,993	0	0	0	8,993	0	152	0	0	0	-501.1	1
Jan-20	0	2,170	0	239	0	18,246	0	0	0	18,555	0	448	1,652	0	0	-501.1	1
Feb-20	0	2,030	0	0	0	17,371	0	0	0	17,371	0	419	1,611	0	0	-501.1	1
Mar-20	0	2,170	0	0	0	18,569	0	0	0	18,569	0	448	1,722	0	0	-501.1	1
Apr-20	0	2,100	0	0	0	17,970	0	0	0	17,970	0	433	1,520	147	0	-501.1	1
May-20	0	2,170	0	0	0	18,569	0	0	0	18,569	0	448	0	1,722	0	-501.1	1
Jun-20	1,216	2,100	0	0	0	17,970	0	0	0	17,970	0	433	0	2,883	0	-501.1	1
Jul-20	297	2,170	0	0	0	18,569	0	0	0	18,569	0	448	0	2,019	0	-501.1	1
Aug-20	353	2,170	0	0	0	18,569	0	0	0	18,569	0	448	0	2,075	0	-501.1	1
Sep-20	446	2,100	0	0	0	17,970	0	0	0	17,970	0	433	0	2,113	0	-501.1	1
Oct-20	0	2,170	0	0	0	18,569	0	0	0	18,569	0	448	0	1,722	0	-501.1	1
Nov-20	0	2,100	0	0	0	17,970	0	0	0	17,970	0	433	0	1,667	0	-501.1	1
Dec-20	0	2,170	0	0	0	18,569	0	0	0	18,569	0	448	0	1,722	0	-501.1	1
Jan-21	0	2,480	0	345	0	31,238	0	0	0	31,663	0	1,659	0	741	0	-501.1	1
Feb-21	0	2,240	0	0	0	28,672	0	0	0	28,672	0	1,498	0	742	0	-501.1	1
Mar-21	0	2,480	0	0	0	31,744	0	0	0	31,744	0	1,659	0	821	0	-501.1	1
Apr-21	0	2,400	0	0	0	30,720	0	0	0	30,720	0	1,605	0	795	0	-501.1	1
May-21	0	2,480	0	0	0	31,744	0	0	0	31,744	0	1,659	0	821	0	-501.1	1
Jun-21	1,216	2,400	0	0	0	30,720	0	0	0	30,720	0	1,605	0	2,011	0	-501.1	1
Jul-21	297	2,480	0	0	0	31,744	0	0	0	31,744	0	1,659	0	1,118	0	-501.1	1
Aug-21	353	2,480	0	0	0	31,744	0	0	0	31,744	0	1,659	0	1,174	0	-501.1	1
Sep-21	446	2,400	0	0	0	30,720	0	0	0	30,720	0	1,605	0	1,241	0	-501.1	1
Oct-21	0	2,480	0	0	0	31,744	0	0	0	31,744	0	1,659	0	821	0	-501.1	1

Date	Inflow (m^3/mon)									Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Runoff	Ground-water	Whale Tail Lake (South Basin)	GSP (Brine)	Lake C38 (Nemo Lake)	Re-circulation	GSP (Brine) (Closure)	IVR Att. Pond	GSP (Brackish Water)	Re-circulation	Ground-water	Waste Rock	Under-ground Stope	GSP (Brine)	GSP (Brackish Water)		
Nov-21	0	2,400	0	0	0	30,720	0	0	0	30,720	0	1,605	0	795	0	-501.1	1
Dec-21	0	2,480	0	0	0	31,744	0	0	0	31,744	0	1,659	0	821	0	-501.1	1
Jan-22	0	9,300	0	0	0	34,264	0	0	0	34,348	0	1,917	0	7,299	0	-501.1	1
Feb-22	0	8,400	0	0	0	31,024	0	0	0	31,024	0	1,732	0	6,668	0	-501.1	1
Mar-22	0	9,300	0	0	0	34,348	0	0	0	34,348	0	1,917	0	7,383	0	-501.1	1
Apr-22	0	9,000	0	0	0	33,240	0	0	0	33,240	0	1,855	0	7,145	0	-501.1	1
May-22	0	9,300	0	0	0	34,348	0	0	0	34,348	0	1,917	0	238	7,145	-501.1	1
Jun-22	1,216	9,000	0	0	0	33,240	0	0	0	33,240	0	1,855	0	0	8,361	-501.1	1
Jul-22	297	9,300	0	0	0	34,348	0	0	0	34,348	0	1,917	0	0	7,680	-501.1	1
Aug-22	353	9,300	0	0	0	34,348	0	0	0	34,348	0	1,917	0	0	7,736	-501.1	1
Sep-22	446	9,000	0	0	0	33,240	0	0	0	33,240	0	1,855	0	0	7,591	-501.1	1
Oct-22	0	9,300	0	0	0	34,348	0	0	0	34,348	0	1,917	0	0	7,383	-501.1	1
Nov-22	0	9,000	0	0	0	33,240	0	0	0	33,240	0	1,855	0	0	7,145	-501.1	1
Dec-22	0	9,300	0	0	0	34,348	0	0	0	34,348	0	1,917	0	0	7,383	-501.1	1
Jan-23	0	15,810	0	0	0	30,208	0	0	0	30,070	0	1,591	0	0	14,357	-501.1	1
Feb-23	0	14,280	0	0	0	27,160	0	0	0	27,160	0	1,437	0	0	12,843	-501.1	1
Mar-23	0	15,810	0	0	0	30,070	0	0	0	30,070	0	1,591	0	0	14,219	-501.1	1
Apr-23	0	15,300	0	0	0	29,100	0	0	0	29,100	0	1,540	0	0	13,760	-501.1	1
May-23	0	15,810	0	0	0	30,070	0	0	0	30,070	0	1,591	0	0	14,219	-501.1	1
Jun-23	1,216	15,300	0	0	0	29,100	0	0	0	29,100	0	1,540	0	0	14,976	-501.1	1
Jul-23	297	15,810	0	0	0	30,070	0	0	0	30,070	0	1,591	0	0	14,516	-501.1	1
Aug-23	353	15,810	0	0	0	30,070	0	0	0	30,070	0	1,591	0	0	14,572	-501.1	1
Sep-23	446	15,300	0	0	0	29,100	0	0	0	29,100	0	1,540	0	0	14,207	-501.1	1
Oct-23	0	15,810	0	0	0	30,070	0	0	0	30,070	0	1,591	0	0	14,219	-501.1	1
Nov-23	0	15,300	0	0	0	29,100	0	0	0	29,100	0	1,540	0	0	13,760	-501.1	1
Dec-23	0	15,810	0	0	0	30,070	0	0	0	30,070	0	1,591	0	0	14,219	-501.1	1
Jan-24	0	15,810	0	0	0	23,170	0	0	0	22,940	0	1,265	0	0	14,775	-501.1	1
Feb-24	0	14,790	0	0	0	21,460	0	0	0	21,460	0	1,184	0	0	13,606	-501.1	1
Mar-24	0	15,810	0	0	0	22,940	0	0	0	22,940	0	1,265	0	0	14,545	-501.1	1
Apr-24	0	15,300	0	0	0	22,200	0	0	0	22,200	0	1,225	0	0	14,075	-501.1	1
May-24	0	15,810	0	0	0	22,940	0	0	0	22,940	0	1,265	0	0	14,545	-501.1	1
Jun-24	1,216	15,300	0	0	0	22,200	0	0	0	22,200	0	1,225	0	0	15,292	-501.1	1
Jul-24	297	15,810	0	0	0	22,940	0	0	0	22,940	0	1,265	0	0	14,842	-501.1	1
Aug-24	353	15,810	0	0	0	22,940	0	0	0	22,940	0	1,265	0	0	14,897	-501.1	1
Sep-24	446	15,300	0	0	0	22,200	0	0	0	22,200	0	1,225	0	0	14,522	-501.1	1
Oct-24	0	15,810	0	0	0	22,940	0	0	0	22,940	0	1,265	0	0	14,545	-501.1	1
Nov-24	0	15,300	0	0	0	22,200	0	0	0	22,200	0	1,225	0	0	14,075	-501.1	1
Dec-24	0	15,810	0	0	0	22,940	0	0	0	22,940	0	1,265	0	0	14,545	-501.1	1
Jan-25	0	13,330	0	0	0	14,690	0	0	0	14,415	0	0	0	0	13,605	-501.1	1
Feb-25	0	12,040	0	0	0	13,020	0	0	0	13,020	0	0	0	0	12,040	-501.1	1
Mar-25	0	13,330	0	0	0	14,415	0	0	0	14,415	0	0	0	0	13,330	-501.1	1
Apr-25	0	12,900	0	0	0	13,950	0	0	0	13,950	0	0	0	0	12,900	-501.1	1
May-25	0	13,330	0	0	0	14,415	0	0	0	14,415	0	0	0	0	13,330	-501.1	1
Jun-25	1,216	12,900	0	0	0	13,950	0	0	0	13,950	0	0	0	0	14,116	-501.1	1
Jul-25	297	13,330	0	0	0	14,415	0	0	0	14,415	0	0	0	0	13,627	-501.1	1
Aug-25	353	13,330	0	0	0	14,415	0	0	0	14,415	0	0	0	0	13,683	-501.1	1
Sep-25	446	12,900	0	0	0	13,950	0	0	0	13,950	0	0	0	0	13,346	-501.1	1

Date	Inflow (m^3/mon)									Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Runoff	Ground-water	Whale Tail Lake (South Basin)	GSP (Brine)	Lake C38 (Nemo Lake)	Re-circulation	GSP (Brine) (Closure)	IVR Att. Pond	GSP (Brackish Water)	Re-circulation	Ground-water	Waste Rock	Under-ground Stope	GSP (Brine)	GSP (Brackish Water)		
Oct-25	0	13,330	0	0	0	14,415	0	0	0	14,415	0	0	0	0	13,330	-501.1	1
Nov-25	0	12,900	0	0	0	13,950	0	0	0	13,950	0	0	0	0	12,900	-501.1	1
Dec-25	0	13,330	0	0	0	14,415	0	0	0	14,415	0	0	0	0	13,330	-501.1	1
Jan-26	0	1,275	0	0	0	465	148,464	160,306	178,081	0	0	0	0	0	0	-230.1	488,591
Feb-26	0	1,167	0	0	0	0	0	0	0	0	0	0	0	0	0	-229.8	489,759
Mar-26	0	1,293	0	0	0	0	0	0	0	0	0	0	0	0	0	-229.4	491,052
Apr-26	0	1,251	0	0	0	0	0	0	0	0	0	0	0	0	0	-229.1	492,303
May-26	0	711	775,532	0	0	0	0	0	0	0	404	0	0	0	0	130.4	1,268,142
Jun-26	1,216	0	0	0	0	0	0	0	0	0	1,077	0	0	0	0	136.8	1,268,281
Jul-26	297	0	0	0	0	0	0	0	0	0	732	0	0	0	0	116.8	1,267,846
Aug-26	353	0	0	0	0	0	0	0	0	0	493	0	0	0	0	110.4	1,267,706
Sep-26	446	0	0	0	0	0	0	0	0	0	442	0	0	0	0	110.6	1,267,710
Oct-26	0	0	0	0	0	0	0	0	0	0	336	0	0	0	0	95.1	1,267,375
Nov-26	0	0	0	0	0	0	0	0	0	0	188	0	0	0	0	86.5	1,267,186
Dec-26	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	81.9	1,267,086
Jan-27	0	0	0	0	0	0	0	0	0	0	44	0	0	0	0	79.8	1,267,042
Feb-27	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	79.0	1,267,024
Mar-27	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	78.6	1,267,015
Apr-27	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	78.4	1,267,011
May-27	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	78.3	1,267,009
Jun-27	1,216	0	0	0	0	0	0	0	0	0	308	0	0	0	0	120.1	1,267,917
Jul-27	297	0	0	0	0	0	0	0	0	0	511	0	0	0	0	110.2	1,267,703
Aug-27	353	0	0	0	0	0	0	0	0	0	425	0	0	0	0	106.9	1,267,631
Sep-27	446	0	0	0	0	0	0	0	0	0	404	0	0	0	0	108.8	1,267,673
Oct-27	0	0	0	0	0	0	0	0	0	0	318	0	0	0	0	94.2	1,267,354
Nov-27	0	0	0	0	0	0	0	0	0	0	180	0	0	0	0	85.9	1,267,174
Dec-27	0	0	0	0	0	0	0	0	0	0	94	0	0	0	0	81.6	1,267,081

Table D-4: Mean Annual Water Balance (GSP (Brackish Water))

Date	Inflow (m^3/mon)		Outflow (m^3/mon)		Storage (m^3)
	Watershed	Overflow from UG Sump	S-WTP (Brackish)	Natural Overflow	
Jan-18	0	0	0	0	0
Feb-18	0	0	0	0	0
Mar-18	0	0	0	0	0
Apr-18	0	0	0	0	0
May-18	0	0	0	0	0
Jun-18	0	0	0	0	0
Jul-18	0	0	0	0	0
Aug-18	0	0	0	0	0
Sep-18	0	0	0	0	0
Oct-18	0	0	0	0	0
Nov-18	0	0	0	0	0
Dec-18	0	0	0	0	0
Jan-19	0	0	0	0	0
Feb-19	0	0	0	0	0
Mar-19	0	0	0	0	0
Apr-19	0	0	0	0	0
May-19	0	0	0	0	0
Jun-19	0	0	0	0	0
Jul-19	0	0	0	0	0
Aug-19	0	0	0	0	0
Sep-19	0	0	0	0	0
Oct-19	0	0	0	0	0
Nov-19	0	0	0	0	0
Dec-19	0	0	0	0	0
Jan-20	0	0	0	0	0
Feb-20	0	0	0	0	0
Mar-20	0	0	0	0	0
Apr-20	0	0	0	0	0
May-20	0	0	0	0	0
Jun-20	0	0	0	0	0
Jul-20	0	0	0	0	0
Aug-20	0	0	0	0	0
Sep-20	0	0	0	0	0
Oct-20	0	0	0	0	0
Nov-20	0	0	0	0	0
Dec-20	0	0	0	0	0
Jan-21	0	0	0	0	0
Feb-21	0	0	0	0	0
Mar-21	0	0	0	0	0
Apr-21	0	0	0	0	0
May-21	0	0	0	0	0
Jun-21	0	0	0	0	0
Jul-21	0	0	0	0	0
Aug-21	0	0	0	0	0
Sep-21	0	0	0	0	0
Oct-21	0	0	0	0	0

Date	Inflow (m^3/mon)		Outflow (m^3/mon)		Storage (m^3)
	Watershed	Overflow from UG Sump	S-WTP (Brackish)	Natural Overflow	
Nov-21	0	0	0	0	0
Dec-21	0	0	0	0	0
Jan-22	0	0	0	0	0
Feb-22	0	0	0	0	0
Mar-22	0	0	0	0	0
Apr-22	0	0	0	0	0
May-22	0	7,145	0	0	7,145
Jun-22	3,643	8,361	18,149	0	1,000
Jul-22	427	7,680	8,107	0	1,000
Aug-22	596	7,736	8,332	0	1,000
Sep-22	1,167	7,591	8,758	0	1,000
Oct-22	0	7,383	0	0	8,383
Nov-22	0	7,145	0	0	15,527
Dec-22	0	7,383	0	0	22,910
Jan-23	0	14,357	0	0	37,267
Feb-23	0	12,843	0	0	50,110
Mar-23	0	14,219	0	0	64,329
Apr-23	0	13,760	0	0	78,089
May-23	0	14,219	0	0	92,308
Jun-23	3,643	14,976	30,000	0	80,928
Jul-23	427	14,516	31,000	0	64,871
Aug-23	596	14,572	31,000	0	49,039
Sep-23	1,167	14,207	30,000	0	34,413
Oct-23	0	14,219	0	0	48,632
Nov-23	0	13,760	0	0	62,392
Dec-23	0	14,219	0	0	76,611
Jan-24	0	14,775	0	0	91,386
Feb-24	0	13,606	0	0	104,992
Mar-24	0	14,545	0	0	119,537
Apr-24	0	14,075	0	0	133,612
May-24	0	14,545	0	0	148,157
Jun-24	3,644	15,292	30,000	0	137,093
Jul-24	427	14,842	31,000	0	121,362
Aug-24	596	14,897	31,000	0	105,855
Sep-24	1,167	14,522	30,000	0	91,545
Oct-24	0	14,545	0	0	106,089
Nov-24	0	14,075	0	0	120,165
Dec-24	0	14,545	0	0	134,709
Jan-25	0	13,605	0	0	148,314
Feb-25	0	12,040	0	0	160,354
Mar-25	0	13,330	0	0	173,684
Apr-25	0	12,900	0	0	186,584
May-25	0	13,330	0	0	199,914
Jun-25	3,643	14,116	30,000	0	187,674
Jul-25	427	13,627	31,000	0	170,728
Aug-25	596	13,683	31,000	0	154,007
Sep-25	1,167	13,346	30,000	0	138,521

Date	Inflow (m^3/mon)		Outflow (m^3/mon)		Storage (m^3)
	Watershed	Overflow from UG Sump	S-WTP (Brackish)	Natural Overflow	
Oct-25	0	13,330	0	0	151,851
Nov-25	0	12,900	0	0	164,751
Dec-25	0	13,330	0	0	178,081
Jan-26	0	0	0	178,081	0
Feb-26	0	0	0	0	0
Mar-26	0	0	0	0	0
Apr-26	0	0	0	0	0
May-26	0	0	0	0	0
Jun-26	3,643	0	0	3,643	0
Jul-26	427	0	0	427	0
Aug-26	596	0	0	596	0
Sep-26	1,167	0	0	1,167	0
Oct-26	0	0	0	0	0
Nov-26	0	0	0	0	0
Dec-26	0	0	0	0	0

Table D-5: Mean Annual Water Balance (Northeast Sector)

Date	Inflow (m^3/mon)			Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Lake A49	Rainfall Runoff	SWE Runoff	Whale Tail Lake (North Basin)	Lake A16 (Mammoth Lake)	Lake C38 (Nemo Lake)	IVR Pit / Whale Tail Lake (North Basin)	Evaporation	Dewatering		
Jan-18	0	0	0	0	0	0	0	0	0	154.40	33,786
Feb-18	0	0	0	0	0	0	0	0	0	154.40	33,786
Mar-18	0	0	0	0	0	0	0	0	0	154.40	33,786
Apr-18	0	0	0	0	0	0	0	0	0	154.40	33,786
May-18	0	0	0	0	0	0	0	0	0	154.40	33,786
Jun-18	26,721	65,638	135,066	227,063	0	0	0	362	26,721	154.40	33,786
Jul-18	823	24,852	0	21,559	0	0	0	4,115	823	154.40	33,786
Aug-18	2,038	34,164	0	32,045	0	0	0	4,157	2,038	154.40	33,786
Sep-18	7,716	64,793	0	70,900	0	0	0	1,609	7,716	154.40	33,786
Oct-18	0	0	0	0	0	0	0	0	0	154.40	33,786
Nov-18	0	0	0	0	0	0	0	0	0	154.40	33,786
Dec-18	0	0	0	0	0	0	0	0	0	154.40	33,786
Jan-19	0	0	0	0	0	0	0	0	0	154.40	33,786
Feb-19	0	0	0	0	0	0	0	0	0	154.40	33,786
Mar-19	0	0	0	0	0	0	0	0	0	154.40	33,786
Apr-19	0	0	0	0	0	0	0	0	0	154.40	33,786
May-19	0	0	0	0	0	0	0	0	0	154.40	33,786
Jun-19	26,721	65,638	135,065	0	227,062	0	0	362	26,721	154.40	33,786
Jul-19	823	24,852	0	0	21,559	0	0	4,115	823	154.40	33,786
Aug-19	2,038	34,164	0	0	32,045	0	0	4,157	2,038	154.40	33,786
Sep-19	7,716	64,793	0	0	70,900	0	0	1,609	7,716	154.40	33,786
Oct-19	0	0	0	0	0	0	0	0	0	154.40	33,786
Nov-19	0	0	0	0	0	0	0	0	0	154.40	33,786
Dec-19	0	0	0	0	0	0	0	0	0	154.40	33,786
Jan-20	0	0	0	0	0	0	0	0	0	154.40	33,786
Feb-20	0	0	0	0	0	0	0	0	0	154.40	33,786
Mar-20	0	0	0	0	0	0	0	0	0	154.40	33,786
Apr-20	0	0	0	0	0	0	0	0	0	154.40	33,786
May-20	0	0	0	0	0	0	0	0	0	154.40	33,786
Jun-20	26,726	65,638	135,107	0	227,110	0	0	362	26,726	154.40	33,786
Jul-20	0	8,043	0	0	0	8,043	0	0	0	154.40	33,786
Aug-20	0	11,228	0	0	0	11,228	0	0	0	154.40	33,786
Sep-20	0	21,977	0	0	0	21,977	0	0	0	154.40	33,786
Oct-20	0	0	0	0	0	0	0	0	0	154.40	33,786
Nov-20	0	0	0	0	0	0	0	0	0	154.40	33,786
Dec-20	0	0	0	0	0	0	0	0	0	154.40	33,786
Jan-21	0	0	0	0	0	0	0	0	0	154.40	33,786
Feb-21	0	0	0	0	0	0	0	0	0	154.40	33,786
Mar-21	0	0	0	0	0	0	0	0	0	154.40	33,786
Apr-21	0	0	0	0	0	0	0	0	0	154.40	33,786
May-21	0	0	0	0	0	0	0	0	0	154.40	33,786
Jun-21	0	22,404	46,185	0	0	68,589	0	0	0	154.40	33,786
Jul-21	0	8,043	0	0	0	8,043	0	0	0	154.40	33,786
Aug-21	0	11,228	0	0	0	11,228	0	0	0	154.40	33,786
Sep-21	0	21,977	0	0	0	21,977	0	0	0	154.40	33,786

Date	Inflow (m^3/mon)			Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Lake A49	Rainfall Runoff	SWE Runoff	Whale Tail Lake (North Basin)	Lake A16 (Mammoth Lake)	Lake C38 (Nemo Lake)	IVR Pit / Whale Tail Lake (North Basin)	Evaporation	Dewatering		
Oct-21	0	0	0	0	0	0	0	0	0	154.40	33,786
Nov-21	0	0	0	0	0	0	0	0	0	154.40	33,786
Dec-21	0	0	0	0	0	0	0	0	0	154.40	33,786
Jan-22	0	0	0	0	0	0	0	0	0	154.40	33,786
Feb-22	0	0	0	0	0	0	0	0	0	154.40	33,786
Mar-22	0	0	0	0	0	0	0	0	0	154.40	33,786
Apr-22	0	0	0	0	0	0	0	0	0	154.40	33,786
May-22	0	0	0	0	0	0	0	0	0	154.40	33,786
Jun-22	0	22,404	46,185	0	0	68,589	0	0	0	154.40	33,786
Jul-22	0	8,043	0	0	0	8,043	0	0	0	154.40	33,786
Aug-22	0	11,228	0	0	0	11,228	0	0	0	154.40	33,786
Sep-22	0	21,977	0	0	0	21,977	0	0	0	154.40	33,786
Oct-22	0	0	0	0	0	0	0	0	0	154.40	33,786
Nov-22	0	0	0	0	0	0	0	0	0	154.40	33,786
Dec-22	0	0	0	0	0	0	0	0	0	154.40	33,786
Jan-23	0	0	0	0	0	0	0	0	0	154.40	33,786
Feb-23	0	0	0	0	0	0	0	0	0	154.40	33,786
Mar-23	0	0	0	0	0	0	0	0	0	154.40	33,786
Apr-23	0	0	0	0	0	0	0	0	0	154.40	33,786
May-23	0	0	0	0	0	0	0	0	0	154.40	33,786
Jun-23	0	22,404	46,185	0	0	68,589	0	0	0	154.40	33,786
Jul-23	0	8,043	0	0	0	8,043	0	0	0	154.40	33,786
Aug-23	0	11,228	0	0	0	11,228	0	0	0	154.40	33,786
Sep-23	0	21,977	0	0	0	21,977	0	0	0	154.40	33,786
Oct-23	0	0	0	0	0	0	0	0	0	154.40	33,786
Nov-23	0	0	0	0	0	0	0	0	0	154.40	33,786
Dec-23	0	0	0	0	0	0	0	0	0	154.40	33,786
Jan-24	0	0	0	0	0	0	0	0	0	154.40	33,786
Feb-24	0	0	0	0	0	0	0	0	0	154.40	33,786
Mar-24	0	0	0	0	0	0	0	0	0	154.40	33,786
Apr-24	0	0	0	0	0	0	0	0	0	154.40	33,786
May-24	0	0	0	0	0	0	0	0	0	154.40	33,786
Jun-24	0	22,404	46,200	0	0	68,603	0	0	0	154.40	33,786
Jul-24	0	8,043	0	0	0	8,043	0	0	0	154.40	33,786
Aug-24	0	11,228	0	0	0	11,228	0	0	0	154.40	33,786
Sep-24	0	21,977	0	0	0	21,977	0	0	0	154.40	33,786
Oct-24	0	0	0	0	0	0	0	0	0	154.40	33,786
Nov-24	0	0	0	0	0	0	0	0	0	154.40	33,786
Dec-24	0	0	0	0	0	0	0	0	0	154.40	33,786
Jan-25	0	0	0	0	0	0	0	0	0	154.40	33,786
Feb-25	0	0	0	0	0	0	0	0	0	154.40	33,786
Mar-25	0	0	0	0	0	0	0	0	0	154.40	33,786
Apr-25	0	0	0	0	0	0	0	0	0	154.40	33,786
May-25	0	0	0	0	0	0	0	0	0	154.40	33,786
Jun-25	0	22,404	46,185	0	0	68,589	0	0	0	154.40	33,786
Jul-25	0	8,043	0	0	0	8,043	0	0	0	154.40	33,786

Date	Inflow (m^3/mon)			Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Lake A49	Rainfall Runoff	SWE Runoff	Whale Tail Lake (North Basin)	Lake A16 (Mammoth Lake)	Lake C38 (Nemo Lake)	IVR Pit / Whale Tail Lake (North Basin)	Evaporation	Dewatering		
Aug-25	0	11,228	0	0	0	11,228	0	0	0	154.40	33,786
Sep-25	0	21,977	0	0	0	21,977	0	0	0	154.40	33,786
Oct-25	0	0	0	0	0	0	0	0	0	154.40	33,786
Nov-25	0	0	0	0	0	0	0	0	0	154.40	33,786
Dec-25	0	0	0	0	0	0	0	0	0	154.40	33,786
Jan-26	0	0	0	0	0	0	0	0	0	154.40	33,786
Feb-26	0	0	0	0	0	0	0	0	0	154.40	33,786
Mar-26	0	0	0	0	0	0	0	0	0	154.40	33,786
Apr-26	0	0	0	0	0	0	0	0	0	154.40	33,786
May-26	0	0	0	0	0	0	0	0	0	154.40	33,786
Jun-26	0	22,404	46,185	0	0	0	68,589	0	0	154.40	33,786
Jul-26	0	8,043	0	0	0	0	8,043	0	0	154.40	33,786
Aug-26	0	11,228	0	0	0	0	11,228	0	0	154.40	33,786
Sep-26	0	21,977	0	0	0	0	21,977	0	0	154.40	33,786
Oct-26	0	0	0	0	0	0	0	0	0	154.40	33,786
Nov-26	0	0	0	0	0	0	0	0	0	154.40	33,786
Dec-26	0	0	0	0	0	0	0	0	0	154.40	33,786

Table D-6: Mean Annual Water Balance (Whale Tail WRSF Contact Water Collection System)

Date	Inflow (m^3/mon)			Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Whale Tail WRSF Seepage	Whale Tail Attenuation Pond	Natural / Direct Runoff	Lake A16 (Mammoth Lake)	Quarry 1	Whale Tail Attenuation Pond	IVR Attenuation Pond	Evaporation	IVR Pit		
Jan-18	0	0	0	0	0	0	0	0	0	153.2	1
Feb-18	0	0	0	0	0	0	0	0	0	153.2	1
Mar-18	0	0	0	0	0	0	0	0	0	153.2	1
Apr-18	0	0	0	0	0	0	0	0	0	153.2	1
May-18	0	0	0	0	0	0	0	0	0	153.2	1
Jun-18	0	0	0	117,661	117,661	0	0	0	0	153.2	1
Jul-18	56	0	0	13,686	0	13,742	0	0	0	153.2	1
Aug-18	238	0	0	18,784	0	19,022	0	0	0	153.2	1
Sep-18	775	0	0	36,150	0	36,925	0	0	0	153.2	1
Oct-18	0	0	0	0	0	0	0	0	0	153.2	1
Nov-18	0	0	0	0	0	0	0	0	0	153.2	1
Dec-18	0	0	0	0	0	0	0	0	0	153.2	1
Jan-19	0	0	0	0	0	0	0	0	0	153.2	1
Feb-19	0	0	0	0	0	0	0	0	0	153.2	1
Mar-19	0	0	0	0	0	0	0	0	0	153.2	1
Apr-19	0	0	0	0	0	0	0	0	0	153.2	1
May-19	0	0	0	0	0	0	0	0	0	153.2	1
Jun-19	13,485	0	0	90,691	0	0	104,176	0	0	153.2	1
Jul-19	1,747	0	0	10,305	0	0	12,050	0	2	153.2	1
Aug-19	2,673	0	0	13,915	0	0	16,586	0	2	153.2	1
Sep-19	5,685	0	0	26,331	0	0	32,015	0	1	153.2	1
Oct-19	0	0	0	0	0	0	0	0	0	153.2	1
Nov-19	0	0	0	0	0	0	0	0	0	153.2	1
Dec-19	0	0	0	0	0	0	0	0	0	153.2	1
Jan-20	0	0	0	0	0	0	0	0	0	153.2	1
Feb-20	0	0	0	0	0	0	0	0	0	153.2	1
Mar-20	0	0	0	0	0	0	0	0	0	153.2	1
Apr-20	0	0	0	0	0	0	0	0	0	153.2	1
May-20	0	0	0	0	0	0	0	0	0	153.2	1
Jun-20	32,744	0	0	52,198	0	0	84,941	0	0	153.2	1
Jul-20	4,054	0	0	5,691	0	0	9,743	0	2	153.2	1
Aug-20	5,964	0	0	7,333	0	0	13,295	0	2	153.2	1
Sep-20	12,262	0	0	13,176	0	0	25,438	0	1	153.2	1
Oct-20	0	0	0	0	0	0	0	0	0	153.2	1
Nov-20	0	0	0	0	0	0	0	0	0	153.2	1
Dec-20	0	0	0	0	0	0	0	0	0	153.2	1
Jan-21	0	0	0	0	0	0	0	0	0	153.2	1
Feb-21	0	0	0	0	0	0	0	0	0	153.2	1
Mar-21	0	0	0	0	0	0	0	0	0	153.2	1
Apr-21	0	0	0	0	0	0	0	0	0	153.2	1
May-21	0	0	0	0	0	0	0	0	0	153.2	1
Jun-21	45,187	0	0	27,287	0	0	72,474	0	0	153.2	1
Jul-21	5,310	0	0	3,178	0	0	8,486	0	2	153.2	1
Aug-21	7,428	0	0	4,405	0	0	11,831	0	2	153.2	1
Sep-21	14,570	0	0	8,560	0	0	23,130	0	1	153.2	1
Oct-21	0	0	0	0	0	0	0	0	0	153.2	1

Date	Inflow (m^3/mon)			Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Whale Tail WRSF Seepage	Whale Tail Attenuation Pond	Natural / Direct Runoff	Lake A16 (Mammoth Lake)	Quarry 1	Whale Tail Attenuation Pond	IVR Attenuation Pond	Evaporation	IVR Pit		
Nov-21	0	0	0	0	0	0	0	0	0	153.2	1
Dec-21	0	0	0	0	0	0	0	0	0	153.2	1
Jan-22	0	0	0	0	0	0	0	0	0	153.2	1
Feb-22	0	0	0	0	0	0	0	0	0	153.2	1
Mar-22	0	0	0	0	0	0	0	0	0	153.2	1
Apr-22	0	0	0	0	0	0	0	0	0	153.2	1
May-22	0	0	0	0	0	0	0	0	0	153.2	1
Jun-22	45,803	0	0	26,055	0	0	0	71,858	0	153.2	1
Jul-22	5,371	0	0	3,056	0	0	0	8,425	2	153.2	1
Aug-22	7,498	0	0	4,266	0	0	0	11,762	2	153.2	1
Sep-22	14,676	0	0	8,349	0	0	0	23,024	1	153.2	1
Oct-22	0	0	0	0	0	0	0	0	0	153.2	1
Nov-22	0	0	0	0	0	0	0	0	0	153.2	1
Dec-22	0	0	0	0	0	0	0	0	0	153.2	1
Jan-23	0	0	0	0	0	0	0	0	0	153.2	1
Feb-23	0	0	0	0	0	0	0	0	0	153.2	1
Mar-23	0	0	0	0	0	0	0	0	0	153.2	1
Apr-23	0	0	0	0	0	0	0	0	0	153.2	1
May-23	0	0	0	0	0	0	0	0	0	153.2	1
Jun-23	45,803	0	0	26,055	0	0	0	71,858	0	153.2	1
Jul-23	5,371	0	0	3,056	0	0	0	8,425	2	153.2	1
Aug-23	7,498	0	0	4,266	0	0	0	11,762	2	153.2	1
Sep-23	14,676	0	0	8,349	0	0	0	23,024	1	153.2	1
Oct-23	0	0	0	0	0	0	0	0	0	153.2	1
Nov-23	0	0	0	0	0	0	0	0	0	153.2	1
Dec-23	0	0	0	0	0	0	0	0	0	153.2	1
Jan-24	0	0	0	0	0	0	0	0	0	153.2	1
Feb-24	0	0	0	0	0	0	0	0	0	153.2	1
Mar-24	0	0	0	0	0	0	0	0	0	153.2	1
Apr-24	0	0	0	0	0	0	0	0	0	153.2	1
May-24	0	0	0	0	0	0	0	0	0	153.2	1
Jun-24	45,812	0	0	26,061	0	0	0	71,873	0	153.2	1
Jul-24	5,371	0	0	3,056	0	0	0	8,425	2	153.2	1
Aug-24	7,498	0	0	4,266	0	0	0	11,762	2	153.2	1
Sep-24	14,676	0	0	8,349	0	0	0	23,024	1	153.2	1
Oct-24	0	0	0	0	0	0	0	0	0	153.2	1
Nov-24	0	0	0	0	0	0	0	0	0	153.2	1
Dec-24	0	0	0	0	0	0	0	0	0	153.2	1
Jan-25	0	0	0	0	0	0	0	0	0	153.2	1
Feb-25	0	0	0	0	0	0	0	0	0	153.2	1
Mar-25	0	0	0	0	0	0	0	0	0	153.2	1
Apr-25	0	0	0	0	0	0	0	0	0	153.2	1
May-25	0	0	0	0	0	0	0	0	0	153.2	1
Jun-25	45,803	0	0	26,055	0	0	0	71,858	0	153.2	1
Jul-25	5,371	0	0	3,056	0	0	0	8,425	2	153.2	1
Aug-25	7,498	0	0	4,266	0	0	0	11,762	2	153.2	1
Sep-25	14,676	0	0	8,349	0	0	0	23,024	1	153.2	1

Date	Inflow (m^3/mon)			Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Whale Tail WRSF Seepage	Whale Tail Attenuation Pond	Natural / Direct Runoff	Lake A16 (Mammoth Lake)	Quarry 1	Whale Tail Attenuation Pond	IVR Attenuation Pond	Evaporation	IVR Pit		
Oct-25	0	0	0	0	0	0	0	0	0	153.2	1
Nov-25	0	0	0	0	0	0	0	0	0	153.2	1
Dec-25	0	0	0	0	0	0	0	0	0	153.2	1
Jan-26	0	0	0	0	0	0	0	0	0	153.2	1
Feb-26	0	0	0	0	0	0	0	0	0	153.2	1
Mar-26	0	0	0	0	0	0	0	0	0	153.2	1
Apr-26	0	0	0	0	0	0	0	0	0	153.2	1
May-26	0	0	0	0	0	0	0	0	0	153.2	1
Jun-26	64,124	0	0	26,055	0	0	0	0	0	153.2	1
Jul-26	7,520	0	0	3,056	0	0	0	0	2	153.2	1
Aug-26	10,497	0	0	4,266	0	0	0	0	2	153.2	1
Sep-26	20,546	0	0	8,349	0	0	0	0	1	153.2	1
Oct-26	0	0	0	0	0	0	0	0	0	153.2	1
Nov-26	0	0	0	0	0	0	0	0	0	153.2	1
Dec-26	0	0	0	0	0	0	0	0	0	153.2	1

Table D-7: Mean Annual Water Balance (North Sector)

Date	Inflow (m^3/mon)				Outflow (m^3/mon)				Storage (m^3)
	Natural Rainfall Runoff	Natural SWE Runoff	Whale Tail WRSF Runoff	Whale Tail WRSF Seepage	Whale Tail (North Basin) / Whale Tail Attenuation Pond	IVR Attenuation Pond	Whale Tail Pit / Lake (North Basin) Closure	Evaporation	
Jan-18	0	0	0	0	0	0	0	0	0
Feb-18	0	0	0	0	0	0	0	0	0
Mar-18	0	0	0	0	0	0	0	0	0
Apr-18	0	0	0	0	0	0	0	0	0
May-18	0	0	0	0	0	0	0	0	0
Jun-18	10,059	20,736	0	0	30,794	0	0	0	1
Jul-18	3,611	0	0	0	3,611	0	0	0	1
Aug-18	5,041	0	0	0	5,041	0	0	0	1
Sep-18	9,867	0	0	0	9,867	0	0	0	1
Oct-18	0	0	0	0	0	0	0	0	1
Nov-18	0	0	0	0	0	0	0	0	1
Dec-18	0	0	0	0	0	0	0	0	1
Jan-19	0	0	0	0	0	0	0	0	1
Feb-19	0	0	0	0	0	0	0	0	1
Mar-19	0	0	0	0	0	0	0	0	1
Apr-19	0	0	0	0	0	0	0	0	1
May-19	0	0	0	0	0	0	0	0	1
Jun-19	10,059	20,736	0	0	30,795	0	0	0	1
Jul-19	3,611	0	0	0	3,611	0	0	0	1
Aug-19	5,041	0	0	0	5,041	0	0	0	1
Sep-19	9,867	0	0	0	9,867	0	0	0	1
Oct-19	0	0	0	0	0	0	0	0	1
Nov-19	0	0	0	0	0	0	0	0	1
Dec-19	0	0	0	0	0	0	0	0	1
Jan-20	0	0	0	0	0	0	0	0	1
Feb-20	0	0	0	0	0	0	0	0	1
Mar-20	0	0	0	0	0	0	0	0	1
Apr-20	0	0	0	0	0	0	0	0	1
May-20	0	0	0	0	0	0	0	0	1
Jun-20	10,059	20,743	0	0	30,801	0	0	0	1
Jul-20	3,611	0	0	0	3,611	0	0	0	1
Aug-20	5,041	0	0	0	5,041	0	0	0	1
Sep-20	9,867	0	0	0	9,867	0	0	0	1
Oct-20	0	0	0	0	0	0	0	0	1
Nov-20	0	0	0	0	0	0	0	0	1
Dec-20	0	0	0	0	0	0	0	0	1
Jan-21	0	0	0	0	0	0	0	0	1
Feb-21	0	0	0	0	0	0	0	0	1
Mar-21	0	0	0	0	0	0	0	0	1
Apr-21	0	0	0	0	0	0	0	0	1
May-21	0	0	0	0	0	0	0	0	1
Jun-21	6,506	13,411	5,439	0	25,356	0	0	0	1
Jul-21	2,102	0	755	0	2,857	0	0	0	1
Aug-21	2,602	0	1,219	0	3,822	0	0	0	1

Date	Inflow (m^3/mon)				Outflow (m^3/mon)				Storage (m^3)
	Natural Rainfall Runoff	Natural SWE Runoff	Whale Tail WRSF Runoff	Whale Tail WRSF Seepage	Whale Tail (North Basin) / Whale Tail Attenuation Pond	IVR Attenuation Pond	Whale Tail Pit / Lake (North Basin) Closure	Evaporation	
Sep-21	4,456	0	2,706	0	7,161	0	0	0	1
Oct-21	0	0	0	0	0	0	0	0	1
Nov-21	0	0	0	0	0	0	0	0	1
Dec-21	0	0	0	0	0	0	0	0	1
Jan-22	0	0	0	0	0	0	0	0	1
Feb-22	0	0	0	0	0	0	0	0	1
Mar-22	0	0	0	0	0	0	0	0	1
Apr-22	0	0	0	0	0	0	0	0	1
May-22	0	0	0	0	0	0	0	0	1
Jun-22	2,270	4,680	11,922	0	0	18,873	0	0	1
Jul-22	815	0	1,398	0	0	2,213	0	0	1
Aug-22	1,138	0	1,952	0	0	3,089	0	0	1
Sep-22	2,227	0	3,820	0	0	6,047	0	0	1
Oct-22	0	0	0	0	0	0	0	0	1
Nov-22	0	0	0	0	0	0	0	0	1
Dec-22	0	0	0	0	0	0	0	0	1
Jan-23	0	0	0	0	0	0	0	0	1
Feb-23	0	0	0	0	0	0	0	0	1
Mar-23	0	0	0	0	0	0	0	0	1
Apr-23	0	0	0	0	0	0	0	0	1
May-23	0	0	0	0	0	0	0	0	1
Jun-23	2,270	4,680	11,922	0	0	18,873	0	0	1
Jul-23	815	0	1,398	0	0	2,213	0	0	1
Aug-23	1,138	0	1,952	0	0	3,089	0	0	1
Sep-23	2,227	0	3,820	0	0	6,047	0	0	1
Oct-23	0	0	0	0	0	0	0	0	1
Nov-23	0	0	0	0	0	0	0	0	1
Dec-23	0	0	0	0	0	0	0	0	1
Jan-24	0	0	0	0	0	0	0	0	1
Feb-24	0	0	0	0	0	0	0	0	1
Mar-24	0	0	0	0	0	0	0	0	1
Apr-24	0	0	0	0	0	0	0	0	1
May-24	0	0	0	0	0	0	0	0	1
Jun-24	2,270	4,681	11,925	0	0	18,876	0	0	1
Jul-24	815	0	1,398	0	0	2,213	0	0	1
Aug-24	1,138	0	1,952	0	0	3,089	0	0	1
Sep-24	2,227	0	3,820	0	0	6,047	0	0	1
Oct-24	0	0	0	0	0	0	0	0	1
Nov-24	0	0	0	0	0	0	0	0	1
Dec-24	0	0	0	0	0	0	0	0	1
Jan-25	0	0	0	0	0	0	0	0	1
Feb-25	0	0	0	0	0	0	0	0	1
Mar-25	0	0	0	0	0	0	0	0	1
Apr-25	0	0	0	0	0	0	0	0	1
May-25	0	0	0	0	0	0	0	0	1

Date	Inflow (m^3/mon)				Outflow (m^3/mon)				Storage (m^3)
	Natural Rainfall Runoff	Natural SWE Runoff	Whale Tail WRSF Runoff	Whale Tail WRSF Seepage	Whale Tail (North Basin) / Whale Tail Attenuation Pond	IVR Attenuation Pond	Whale Tail Pit / Lake (North Basin) Closure	Evaporation	
Jun-25	2,270	4,680	11,922	0	0	18,873	0	0	1
Jul-25	815	0	1,398	0	0	2,213	0	0	1
Aug-25	1,138	0	1,952	0	0	3,089	0	0	1
Sep-25	2,227	0	3,820	0	0	6,047	0	0	1
Oct-25	0	0	0	0	0	0	0	0	1
Nov-25	0	0	0	0	0	0	0	0	1
Dec-25	0	0	0	0	0	0	0	0	1
Jan-26	0	0	0	0	0	0	0	0	1
Feb-26	0	0	0	0	0	0	0	0	1
Mar-26	0	0	0	0	0	0	0	0	1
Apr-26	0	0	0	0	0	0	0	0	1
May-26	0	0	0	0	0	0	0	0	1
Jun-26	7,110	14,656	6,320	0	0	0	28,086	0	1
Jul-26	2,552	0	741	0	0	0	3,294	0	1
Aug-26	3,563	0	1,035	0	0	0	4,598	0	1
Sep-26	6,974	0	2,025	0	0	0	8,999	0	1
Oct-26	0	0	0	0	0	0	0	0	1
Nov-26	0	0	0	0	0	0	0	0	1
Dec-26	0	0	0	0	0	0	0	0	1

Table D-8: Mean Annual Water Balance (Whale Tail Pit)

Date	Inflow (m^3/mon)									Outflow (m^3/mon)					Water Surface Elevation (masl)	Storage (m^3)
	Ground-water	Drilling Water	GSP (Brine)	IVR Pit Overflow	North Sector	Whale Tail Attenuation Pond	Drawdown from WTN	IVR WRSF	Direct / Indirect Runoff	Whale Tail Attenuation Pond	IVR Attenuation Pond	Evaporation	Water Retention in Ore to Meadow-bank	Loss to Ground-water		
Jan-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Feb-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mar-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Apr-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jun-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jul-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aug-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sep-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oct-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nov-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dec-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jan-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Feb-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mar-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Apr-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May-19	11,450	241	0	0	0	0	0	0	0	3,691	0	0	0	0	80.1	8,000
Jun-19	34,200	1,068	0	0	0	0	0	0	123,705	158,954	0	19	0	0	80.1	8,000
Jul-19	35,340	1,488	0	0	0	0	0	0	14,575	48,311	0	214	2,878	0	80.1	8,000
Aug-19	35,340	1,488	0	0	0	0	0	0	20,318	54,052	0	216	2,878	0	80.1	8,000
Sep-19	34,200	1,440	0	0	0	0	0	0	39,662	72,523	0	84	2,696	0	80.1	8,000
Oct-19	35,340	1,488	0	0	0	0	0	0	0	33,950	0	0	2,878	0	80.1	8,000
Nov-19	34,200	1,440	0	0	0	0	0	0	0	32,944	0	0	2,696	0	80.1	8,000
Dec-19	35,340	1,488	0	0	0	0	0	0	0	33,950	0	0	2,878	0	47.1	8,000
Jan-20	37,200	1,488	0	0	0	0	0	0	0	35,810	0	0	2,878	0	47.1	8,000
Feb-20	34,800	1,392	0	0	0	0	0	0	0	33,673	0	0	2,519	0	47.1	8,000
Mar-20	37,200	1,488	0	0	0	0	0	0	0	35,810	0	0	2,878	0	47.1	8,000
Apr-20	36,000	1,440	0	0	0	0	0	0	0	34,744	0	0	2,696	0	47.1	8,000
May-20	37,200	1,488	0	0	0	0	0	0	0	35,810	0	0	2,878	0	47.1	8,000
Jun-20	36,000	1,440	0	0	0	0	0	0	123,746	158,426	0	64	2,696	0	47.1	8,000
Jul-20	37,200	1,488	0	0	0	0	0	0	14,742	51,259	0	733	1,439	0	47.1	8,000
Aug-20	37,200	1,488	0	0	0	0	0	0	20,486	56,994	0	740	1,439	0	47.1	8,000
Sep-20	36,000	1,440	0	0	0	0	0	0	39,728	75,534	0	287	1,348	0	47.1	8,000
Oct-20	37,200	1,488	0	0	0	0	0	0	0	37,249	0	0	1,439	0	47.1	8,000
Nov-20	36,000	1,440	0	0	0	0	0	0	0	36,092	0	0	1,348	0	47.1	8,000
Dec-20	37,200	1,488	0	0	0	0	0	0	0	37,249	0	0	1,439	0	2.0	8,000
Jan-21	41,540	1,488	0	0	0	0	0	0	0	41,274	0	0	1,754	0	2.0	8,000
Feb-21	37,520	1,344	0	0	0	0	0	0	0	37,433	0	0	1,431	0	2.0	8,000
Mar-21	41,540	1,488	0	0	0	0	0	0	0	41,274	0	0	1,754	0	2.0	8,000
Apr-21	40,200	1,440	0	0	0	0	0	0	0	39,997	0	0	1,643	0	2.0	8,000
May-21	41,540	1,488	0	0	0	0	0	0	0	41,274	0	0	1,754	0	2.0	8,000
Jun-21	40,200	1,440	0	0	0	0	0	0	123,707	163,679	0	25	1,643	0	2.0	8,000
Jul-21	41,540	1,488	0	0	0	0	0	0	14,598	55,586	0	285	1,754	0	2.0	8,000
Aug-21	41,540	1,488	0	0	0	0	0	0	20,341	61,327	0	288	1,754	0	2.0	8,000
Sep-21	40,200	1,440	0	0	0	0	0	0	39,671	79,557	0	112	1,643	0	2.0	8,000

Date	Inflow (m^3/mon)									Outflow (m^3/mon)					Water Surface Elevation (masl)	Storage (m^3)
	Ground-water	Drilling Water	GSP (Brine)	IVR Pit Overflow	North Sector	Whale Tail Attenuation Pond	Drawdown from WTN	IVR WRSF	Direct / Indirect Runoff	Whale Tail Attenuation Pond	IVR Attenuation Pond	Evaporation	Water Retention in Ore to Meadow-bank	Loss to Ground-water		
Oct-21	41,540	1,488	0	0	0	0	0	0	0	41,274	0	0	1,754	0	2.0	8,000
Nov-21	40,200	1,440	0	0	0	0	0	0	0	39,997	0	0	1,643	0	2.0	8,000
Dec-21	41,540	1,488	0	0	0	0	0	0	0	41,274	0	0	1,754	0	-24.4	8,000
Jan-22	42,470	1,488	0	0	0	0	0	0	0	42,204	0	0	1,754	0	-24.4	8,000
Feb-22	38,360	1,344	0	0	0	0	0	0	0	38,273	0	0	1,431	0	-24.4	8,000
Mar-22	42,470	1,488	0	0	0	0	0	0	0	42,204	0	0	1,754	0	-24.4	8,000
Apr-22	41,100	1,440	0	0	0	0	0	0	0	40,897	0	0	1,643	0	-24.4	8,000
May-22	42,470	1,488	0	0	0	0	0	0	0	42,204	0	0	1,754	0	-24.4	8,000
Jun-22	41,100	1,440	0	0	0	0	0	0	123,702	0	164,588	12	1,643	0	-24.4	8,000
Jul-22	42,470	1,488	0	0	0	0	0	0	14,549	0	56,619	134	1,754	0	-24.4	8,000
Aug-22	42,470	1,488	0	0	0	0	0	0	20,292	0	62,361	135	1,754	0	-24.4	8,000
Sep-22	41,100	1,440	0	0	0	0	0	0	39,652	0	80,497	52	1,643	0	-24.4	8,000
Oct-22	42,470	1,488	0	0	0	0	0	0	0	0	42,204	0	1,754	0	-24.4	8,000
Nov-22	41,100	1,440	0	0	0	0	0	0	0	0	40,897	0	1,643	0	-24.4	8,000
Dec-22	42,470	1,488	0	0	0	0	0	0	0	0	42,204	0	1,754	0	-24.4	8,000
Jan-23	42,470	1,488	0	0	0	0	0	0	0	0	42,204	0	1,754	0	-24.4	8,000
Feb-23	38,360	1,344	0	0	0	0	0	0	0	0	38,273	0	1,431	0	-24.4	8,000
Mar-23	42,470	1,488	0	0	0	0	0	0	0	0	42,204	0	1,754	0	-24.4	8,000
Apr-23	41,100	1,440	0	0	0	0	0	0	0	0	40,897	0	1,643	0	-24.4	8,000
May-23	42,470	1,488	0	0	0	0	0	0	0	0	42,204	0	1,754	0	-24.4	8,000
Jun-23	41,100	1,440	0	0	0	0	0	0	123,702	0	164,588	12	1,643	0	-24.4	8,000
Jul-23	42,470	1,488	0	0	0	0	0	0	14,549	0	56,619	134	1,754	0	-24.4	8,000
Aug-23	42,470	1,488	0	0	0	0	0	0	20,292	0	62,361	135	1,754	0	-24.4	8,000
Sep-23	41,100	1,440	0	0	0	0	0	0	39,652	0	80,497	52	1,643	0	-24.4	8,000
Oct-23	42,470	1,488	0	0	0	0	0	0	0	0	42,204	0	1,754	0	-24.4	8,000
Nov-23	41,100	1,440	0	0	0	0	0	0	0	0	40,897	0	1,643	0	-24.4	8,000
Dec-23	42,470	1,488	0	0	0	0	0	0	0	0	42,204	0	1,754	0	-127.6	8,000
Jan-24	42,160	1,488	0	0	0	0	0	0	0	0	41,894	0	1,754	0	-127.6	8,000
Feb-24	39,440	1,392	0	0	0	0	0	0	0	0	39,297	0	1,535	0	-127.6	8,000
Mar-24	42,160	1,488	0	0	0	0	0	0	0	0	41,894	0	1,754	0	-127.6	8,000
Apr-24	40,800	1,440	0	0	0	0	0	0	0	0	40,597	0	1,643	0	-127.6	8,000
May-24	42,160	1,488	0	0	0	0	0	0	0	0	41,894	0	1,754	0	-127.6	8,000
Jun-24	40,800	1,440	0	0	0	0	0	0	123,729	0	164,312	14	1,643	0	-127.6	8,000
Jul-24	42,160	1,488	0	0	0	0	0	0	14,557	0	56,291	160	1,754	0	-127.6	8,000
Aug-24	42,160	1,488	0	0	0	0	0	0	20,300	0	62,033	162	1,754	0	-127.6	8,000
Sep-24	40,800	1,440	0	0	0	0	0	0	39,655	0	80,190	63	1,643	0	-127.6	8,000
Oct-24	42,160	1,488	0	0	0	0	0	0	0	0	41,894	0	1,754	0	-127.6	8,000
Nov-24	40,800	1,440	0	0	0	0	0	0	0	0	40,597	0	1,643	0	-127.6	8,000
Dec-24	42,160	1,488	0	0	0	0	0	0	0	0	41,894	0	1,754	0	-127.6	8,000
Jan-25	42,160	1,488	0	0	0	0	0	0	0	0	41,894	0	1,754	0	-127.6	8,000
Feb-25	38,080	1,344	0	0	0	0	0	0	0	0	37,993	0	1,431	0	-127.6	8,000
Mar-25	42,160	1,488	0	0	0	0	0	0	0	0	41,894	0	1,754	0	-127.6	8,000
Apr-25	40,800	1,440	0	0	0	0	0	0	0	0	40,597	0	1,643	0	-127.6	8,000
May-25	42,160	1,488	0	0	0	0	0	0	0	0	41,894	0	1,754	0	-127.6	8,000
Jun-25	40,800	1,440	0	0	0	0	0	0	123,703	0	164,286	14	1,643	0	-127.6	8,000
Jul-25	42,160	1,488	0	0	0	0	0	0	14,557	0	56,291	160	1,754	0	-127.6	8,000

Date	Inflow (m^3/mon)									Outflow (m^3/mon)					Water Surface Elevation (masl)	Storage (m^3)
	Ground-water	Drilling Water	GSP (Brine)	IVR Pit Overflow	North Sector	Whale Tail Attenuation Pond	Drawdown from WTN	IVR WRSF	Direct / Indirect Runoff	Whale Tail Attenuation Pond	IVR Attenuation Pond	Evaporation	Water Retention in Ore to Meadow-bank	Loss to Ground-water		
Aug-25	42,160	1,488	0	0	0	0	0	0	20,300	0	62,768	162	1,018	0	-127.6	8,000
Sep-25	40,800	1,440	0	0	0	0	0	0	39,655	0	81,833	63	0	0	-127.6	8,000
Oct-25	42,160	1,488	0	0	0	0	0	0	0	0	43,648	0	0	0	-127.6	8,000
Nov-25	40,800	1,440	0	0	0	0	0	0	0	0	42,240	0	0	0	-127.6	8,000
Dec-25	42,160	1,488	0	0	0	0	0	0	0	0	43,648	0	0	0	-127.6	8,000
Jan-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-127.6	8,000
Feb-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-127.6	8,000
Mar-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-127.6	8,000
Apr-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-127.6	8,000
May-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-127.6	8,000
Jun-26	0	0	11,317	0	28,086	64,337	0	62,913	123,733	0	0	105	0	0	-103.1	298,282
Jul-26	0	0	1,327	0	3,294	44,645	0	7,499	15,225	0	0	2,224	0	0	-100.0	368,047
Aug-26	0	0	1,853	0	4,598	47,345	0	10,313	21,107	0	0	2,683	0	0	-96.5	450,579
Sep-26	0	0	3,626	0	8,999	84,823	0	20,178	40,014	0	0	1,168	0	0	-91.3	607,052
Oct-26	0	0	0	0	0	20,343	0	39	0	0	0	0	0	0	-90.6	627,434
Nov-26	0	0	0	0	0	17,413	0	0	0	0	0	0	0	0	-90.1	644,847
Dec-26	0	0	0	0	0	17,922	0	0	0	0	0	0	0	0	-89.5	662,768
Jan-27	0	0	0	0	0	17,850	0	0	0	0	0	0	0	0	-88.9	680,618
Feb-27	0	0	0	0	0	16,065	0	0	0	0	0	0	0	0	-88.4	696,683
Mar-27	0	0	0	0	0	17,727	0	0	0	0	0	0	0	0	-87.9	714,410
Apr-27	0	0	0	0	0	17,095	0	0	0	0	0	0	0	0	-87.4	731,505
May-27	0	0	0	0	0	17,604	0	0	0	0	0	0	0	0	-86.9	749,109
Jun-27	0	0	11,317	199,060	28,086	233,442	0	62,957	123,812	0	0	341	0	0	-71.4	1,407,442
Jul-27	0	0	1,327	96,235	3,294	41,583	0	7,499	16,237	0	0	5,356	0	0	-68.4	1,568,260
Aug-27	0	0	1,853	124,971	4,598	44,689	0	10,313	22,045	0	0	5,615	0	0	-64.6	1,771,114
Sep-27	0	0	3,626	698,468	8,999	82,801	0	20,178	40,516	0	0	2,712	0	0	-52.0	2,622,990
Oct-27	0	0	0	21,276	0	18,685	0	39	0	0	0	0	0	0	-51.5	2,662,989
Nov-27	0	0	0	0	0	15,880	0	0	0	0	0	0	0	0	-51.3	2,678,869
Dec-27	0	0	0	0	0	16,410	0	0	0	0	0	0	0	0	-51.1	2,695,279
Jan-28	0	0	0	0	0	16,412	0	0	0	0	0	0	0	0	-50.9	2,711,691
Feb-28	0	0	0	0	0	15,354	0	0	0	0	0	0	0	0	-50.7	2,727,045
Mar-28	0	0	0	0	0	16,415	0	0	0	0	0	0	0	0	-50.4	2,743,459
Apr-28	0	0	0	0	0	15,886	0	0	0	0	0	0	0	0	-50.2	2,759,346
May-28	0	0	0	0	0	16,417	0	0	0	0	0	0	0	0	-50.0	2,775,763
Jun-28	0	0	11,319	2,428,939	28,092	230,410	0	62,926	124,015	0	0	871	0	0	-20.9	5,660,593
Jul-28	0	0	1,327	96,161	3,294	41,844	0	7,499	18,377	0	0	11,977	0	0	-19.6	5,817,118
Aug-28	0	0	1,853	124,886	4,598	44,934	0	10,313	24,158	0	0	12,216	0	0	-17.9	6,015,643
Sep-28	0	0	3,626	698,403	8,999	82,997	0	20,178	41,276	0	0	5,050	0	0	-11.7	6,866,072
Oct-28	0	0	0	21,274	0	18,851	0	39	0	0	0	0	0	0	-11.4	6,906,236
Nov-28	0	0	0	0	0	16,039	0	0	0	0	0	0	0	0	-11.3	6,922,275
Dec-28	0	0	0	0	0	16,574	0	0	0	0	0	0	0	0	-11.2	6,938,849
Jan-29	0	0	0	0	0	16,574	0	0	0	0	0	0	0	0	-11.0	6,955,423
Feb-29	0	0	0	0	0	14,971	0	0	0	0	0	0	0	0	-10.9	6,970,394
Mar-29	0	0	0	0	0	16,575	0	0	0	0	0	0	0	0	-10.8	6,986,969
Apr-29	0	0	0	0	0	16,041	0	0	0	0	0	0	0	0	-10.7	7,003,009
May-29	0	0	0	0	0	16,576	0	0	0	0	0	0	0	0	-10.6	7,019,585

Date	Inflow (m^3/mon)									Outflow (m^3/mon)					Water Surface Elevation (masl)	Storage (m^3)
	Ground-water	Drilling Water	GSP (Brine)	IVR Pit Overflow	North Sector	Whale Tail Attenuation Pond	Drawdown from WTN	IVR WRSF	Direct / Indirect Runoff	Whale Tail Attenuation Pond	IVR Attenuation Pond	Evaporation	Water Retention in Ore to Meadow-bank	Loss to Ground-water		
Jun-29	15	0	11,317	2,428,403	28,086	230,474	0	62,913	124,162	0	0	1,389	0	0	7.8	9,903,565
Jul-29	147	0	1,327	96,128	3,294	41,932	0	7,499	20,403	0	0	18,246	0	0	8.7	10,056,048
Aug-29	166	0	1,853	124,870	4,598	45,024	0	10,313	26,170	0	0	18,505	0	0	9.7	10,250,536
Sep-29	232	0	3,626	698,390	8,999	83,083	0	20,178	41,999	0	0	7,275	0	0	14.3	11,099,769
Oct-29	310	0	0	21,274	0	18,940	0	39	0	0	0	0	0	0	14.6	11,140,331
Nov-29	303	0	0	0	0	16,125	0	0	0	0	0	0	0	0	14.6	11,156,759
Dec-29	315	0	0	0	0	16,663	0	0	0	0	0	0	0	0	14.7	11,173,738
Jan-30	318	0	0	0	0	16,664	0	0	0	0	0	0	0	0	14.8	11,190,719
Feb-30	289	0	0	0	0	15,051	0	0	0	0	0	0	0	0	14.9	11,206,060
Mar-30	322	0	0	0	0	16,664	0	0	0	0	0	0	0	0	15.0	11,223,047
Apr-30	314	0	0	0	0	16,127	0	0	0	0	0	0	0	0	15.1	11,239,488
May-30	327	0	0	0	0	16,665	0	0	0	0	0	0	0	0	15.2	11,256,480
Jun-30	534	0	11,317	2,428,399	28,086	230,553	0	62,913	124,285	0	0	1,760	0	0	29.4	14,140,807
Jul-30	1,196	0	1,327	96,120	3,294	41,896	0	7,499	21,699	0	0	22,254	0	0	30.1	14,291,584
Aug-30	1,282	0	1,853	124,862	4,598	44,968	0	10,313	27,509	0	0	22,690	0	0	31.0	14,484,279
Sep-30	1,556	0	3,626	698,378	8,999	82,962	0	20,178	42,534	0	0	8,920	0	0	34.7	15,333,592
Oct-30	1,914	0	0	21,273	0	18,744	0	39	0	0	0	0	0	0	34.9	15,375,561
Nov-30	1,863	0	0	0	0	15,933	0	0	0	0	0	0	0	0	35.0	15,393,358
Dec-30	1,937	0	0	0	0	16,462	0	0	0	0	0	0	0	0	35.1	15,411,757
Jan-31	1,949	0	0	0	0	16,460	0	0	0	0	0	0	0	0	35.2	15,430,166
Feb-31	1,770	0	0	0	0	14,865	0	0	0	0	0	0	0	0	35.2	15,446,801
Mar-31	1,971	0	0	0	0	16,456	0	0	0	0	0	0	0	0	35.3	15,465,228
Apr-31	1,919	0	0	0	0	15,923	0	0	0	0	0	0	0	0	35.4	15,483,070
May-31	1,994	0	0	0	0	16,451	0	0	0	0	0	0	0	0	35.5	15,501,516
Jun-31	2,673	0	11,317	2,428,375	28,086	230,191	0	62,913	124,414	0	0	2,147	0	0	47.6	18,387,338
Jul-31	3,447	0	1,327	96,097	3,294	41,408	0	7,499	23,059	0	0	26,462	0	0	48.2	18,537,006
Aug-31	3,479	0	1,853	124,839	4,598	44,485	0	10,313	28,818	0	0	26,780	0	0	48.9	18,728,612
Sep-31	3,494	0	3,626	698,360	8,999	82,506	0	20,178	43,029	0	0	10,444	0	0	52.1	19,578,360
Oct-31	3,735	0	0	21,273	0	18,284	0	39	0	0	0	0	0	0	52.3	19,621,690
Nov-31	3,619	0	0	0	0	15,488	0	0	0	0	0	0	0	0	52.3	19,640,796
Dec-31	3,745	0	0	0	0	16,002	0	0	0	0	0	0	0	0	52.4	19,660,544
Jan-32	3,750	0	0	0	0	16,000	0	0	0	0	0	0	0	0	52.5	19,680,294
Feb-32	3,513	0	0	0	0	14,966	0	0	0	0	0	0	0	0	52.5	19,698,772
Mar-32	3,760	0	0	0	0	15,997	0	0	0	0	0	0	0	0	52.6	19,718,530
Apr-32	3,644	0	0	0	0	15,479	0	0	0	0	0	0	0	0	52.7	19,737,652
May-32	3,770	0	0	0	0	15,993	0	0	0	0	0	0	0	0	52.8	19,757,414
Jun-32	3,983	0	11,319	2,428,881	28,092	229,817	0	62,926	124,531	0	0	2,422	0	0	63.3	22,644,542
Jul-32	4,620	0	1,327	96,106	3,294	41,019	0	7,499	23,713	0	0	28,485	0	0	63.8	22,793,636
Aug-32	4,664	0	1,853	124,831	4,598	44,097	0	10,313	29,512	0	0	28,948	0	0	64.5	22,984,556
Sep-32	4,684	0	3,626	698,348	8,999	82,143	0	20,178	43,365	0	0	11,478	0	0	67.4	23,834,420
Oct-32	5,008	0	0	21,272	0	17,923	0	39	0	0	0	0	0	0	67.5	23,878,662
Nov-32	4,854	0	0	0	0	15,139	0	0	0	0	0	0	0	0	67.6	23,898,656
Dec-32	5,023	0	0	0	0	15,643	0	0	0	0	0	0	0	0	67.6	23,919,322
Jan-33	5,030	0	0	0	0	15,641	0	0	0	0	0	0	0	0	67.7	23,939,992
Feb-33	4,549	0	0	0	0	14,126	0	0	0	0	0	0	0	0	67.8	23,958,668
Mar-33	5,044	0	0	0	0	15,638	0	0	0	0	0	0	0	0	67.8	23,979,350

Date	Inflow (m^3/mon)									Outflow (m^3/mon)					Water Surface Elevation (masl)	Storage (m^3)
	Ground-water	Drilling Water	GSP (Brine)	IVR Pit Overflow	North Sector	Whale Tail Attenuation Pond	Drawdown from WTN	IVR WRSF	Direct / Indirect Runoff	Whale Tail Attenuation Pond	IVR Attenuation Pond	Evaporation	Water Retention in Ore to Meadow-bank	Loss to Ground-water		
Apr-33	4,888	0	0	0	0	15,132	0	0	0	0	0	0	0	0	67.9	23,999,370
May-33	5,058	0	0	0	0	15,635	0	0	0	0	0	0	0	0	68.0	24,020,064
Jun-33	5,242	0	11,317	2,428,345	28,086	229,461	0	62,913	124,620	0	0	2,764	0	0	77.3	26,907,284
Jul-33	5,580	0	1,327	96,055	3,294	40,743	0	7,499	24,919	0	0	32,215	0	0	77.8	27,054,484
Aug-33	5,580	0	1,853	124,797	4,598	43,825	0	10,313	30,676	0	0	32,585	0	0	78.4	27,243,540
Sep-33	5,400	0	3,626	698,316	8,999	81,886	0	20,178	43,757	0	0	12,684	0	0	81.0	28,093,018
Oct-33	5,580	0	0	21,271	0	17,665	0	39	0	0	0	0	0	0	81.1	28,137,574
Nov-33	5,400	0	0	0	0	14,890	0	0	0	0	0	0	0	0	81.2	28,157,864
Dec-33	5,580	0	0	0	0	15,385	0	0	0	0	0	0	0	0	81.3	28,178,830
Jan-34	5,580	0	0	0	0	15,384	0	0	0	0	0	0	0	0	81.3	28,199,794
Feb-34	5,040	0	0	0	0	13,895	0	0	0	0	0	0	0	0	81.4	28,218,728
Mar-34	5,580	0	0	0	0	15,382	0	0	0	0	0	0	0	0	81.4	28,239,690
Apr-34	5,400	0	0	0	0	14,885	0	0	0	0	0	0	0	0	81.5	28,259,974
May-34	5,580	0	0	0	0	15,380	0	0	0	0	0	0	0	0	81.6	28,280,934
Jun-34	6,036	0	11,317	2,428,318	28,086	229,204	0	62,913	124,675	0	0	2,930	0	0	90.1	31,168,554
Jul-34	9,927	0	1,327	96,027	3,294	40,311	0	7,499	25,760	0	0	34,818	0	0	90.5	31,317,880
Aug-34	10,372	0	1,853	124,769	4,598	43,373	0	10,313	31,553	0	0	35,326	0	0	91.1	31,509,384
Sep-34	11,769	0	3,626	698,289	8,999	81,372	0	20,178	44,158	0	0	13,918	0	0	93.5	32,363,856
Oct-34	13,880	0	0	21,270	0	17,051	0	39	0	0	0	0	0	0	93.6	32,416,096
Nov-34	13,531	0	0	0	0	14,291	0	0	0	0	0	0	0	0	93.7	32,443,920
Dec-34	14,082	0	0	0	0	14,761	0	0	0	0	0	0	0	0	93.8	32,472,762
Jan-35	14,184	0	0	0	0	14,755	0	0	0	0	0	0	0	0	93.9	32,501,702
Feb-35	12,900	0	0	0	0	13,322	0	0	0	0	0	0	0	0	93.9	32,527,922
Mar-35	14,379	0	0	0	0	14,743	0	0	0	0	0	0	0	0	94.0	32,557,046
Apr-35	14,014	0	0	0	0	14,261	0	0	0	0	0	0	0	0	94.1	32,585,320
May-35	14,583	0	0	0	0	14,730	0	0	0	0	0	0	0	0	94.2	32,614,634
Jun-35	18,567	0	11,317	2,428,293	28,983	225,518	0	62,913	124,788	0	0	3,268	0	0	102.0	35,511,744
Jul-35	25,032	0	1,327	95,979	3,611	31,009	0	7,737	26,714	0	0	37,770	0	0	102.4	35,665,384
Aug-35	25,508	0	1,853	124,715	5,041	33,536	0	14,361	32,472	0	0	38,199	0	0	103.0	35,864,668
Sep-35	26,424	0	3,626	698,566	9,867	69,951	0	28,101	44,507	0	0	14,990	0	0	105.2	36,730,720
Oct-35	29,003	0	0	21,267	0	3,264	0	39	0	0	0	0	0	0	105.4	36,784,296
Nov-35	28,168	0	0	0	0	828	0	0	0	0	0	0	0	0	105.4	36,813,292
Dec-35	29,208	0	0	0	0	735	0	0	0	0	0	0	0	0	105.5	36,843,236
Jan-36	29,312	0	0	0	0	613	0	0	0	0	0	0	0	0	105.6	36,873,160
Feb-36	27,514	0	0	0	0	462	0	0	0	0	0	0	0	0	105.7	36,901,136
Mar-36	29,511	0	0	0	0	375	0	0	0	0	0	0	0	0	105.7	36,931,020
Apr-36	28,657	0	0	0	0	247	0	0	0	0	0	0	0	0	105.8	36,959,924
May-36	29,714	0	0	0	0	135	0	0	0	0	0	0	0	0	105.9	36,989,772
Jun-36	32,662	0	11,319	2,458,349	30,801	210,078	0	87,661	124,917	0	0	3,579	0	0	113.3	39,941,984
Jul-36	34,962	0	1,327	99,478	3,611	18,580	0	10,399	28,051	0	0	41,906	0	0	113.7	40,096,484
Aug-36	34,765	0	1,853	129,647	5,041	21,827	0	14,361	33,808	0	0	42,374	0	0	114.2	40,295,412
Sep-36	32,898	0	3,626	708,046	9,867	61,212	0	28,101	44,988	0	0	16,471	0	0	116.3	41,167,680
Oct-36	33,256	0	0	21,264	0	2,103	0	39	0	0	0	0	0	0	116.4	41,224,344
Nov-36	32,135	0	0	0	0	0	0	0	0	0	0	0	0	0	116.5	41,256,480
Dec-36	33,158	0	0	0	0	0	0	0	0	0	0	0	0	0	116.6	41,289,636
Jan-37	33,109	0	0	0	0	0	0	0	0	0	0	0	0	0	116.6	41,322,744

Date	Inflow (m^3/mon)									Outflow (m^3/mon)					Water Surface Elevation (masl)	Storage (m^3)
	Ground-water	Drilling Water	GSP (Brine)	IVR Pit Overflow	North Sector	Whale Tail Attenuation Pond	Drawdown from WTN	IVR WRSF	Direct / Indirect Runoff	Whale Tail Attenuation Pond	IVR Attenuation Pond	Evaporation	Water Retention in Ore to Meadow-bank	Loss to Ground-water		
Feb-37	29,863	0	0	0	0	0	0	0	0	0	0	0	0	0	116.7	41,352,608
Mar-37	33,016	0	0	0	0	0	0	0	0	0	0	0	0	0	116.8	41,385,624
Apr-37	31,904	0	0	0	0	0	0	0	0	0	0	0	0	0	116.9	41,417,528
May-37	32,919	0	0	0	0	0	0	0	0	0	0	0	0	0	116.9	41,450,448
Jun-37	29,959	0	11,317	2,459,193	30,795	174,957	0	87,643	124,954	0	0	3,765	0	0	123.8	44,365,500
Jul-37	28,375	0	1,327	99,462	3,611	23,950	0	10,399	28,507	0	0	43,317	0	0	124.2	44,517,816
Aug-37	27,786	0	1,853	129,652	5,041	27,533	0	14,361	34,263	0	0	43,794	0	0	124.6	44,714,508
Sep-37	24,596	0	3,626	708,067	9,867	68,050	0	28,101	45,164	0	0	17,013	0	0	126.7	45,584,968
Oct-37	23,154	0	0	21,265	0	5,414	0	39	0	0	0	0	0	0	126.8	45,634,840
Nov-37	22,289	0	0	0	0	3,143	0	0	0	0	0	0	0	0	126.8	45,660,272
Dec-37	22,913	0	0	0	0	3,350	0	0	0	0	0	0	0	0	126.9	45,686,536
Jan-38	22,793	0	0	0	0	3,453	0	0	0	0	0	0	0	0	126.9	45,712,780
Feb-38	20,484	0	0	0	0	3,207	0	0	0	0	0	0	0	0	127.0	45,736,472
Mar-38	22,568	0	0	0	0	3,646	0	0	0	0	0	0	0	0	127.1	45,762,684
Apr-38	21,733	0	0	0	0	3,620	0	0	0	0	0	0	0	0	127.1	45,788,040
May-38	22,347	0	0	0	0	3,836	0	0	0	0	0	0	0	0	127.2	45,814,220
Jun-38	15,965	0	11,317	2,459,270	30,795	222,646	0	87,643	125,026	0	0	3,981	0	0	133.6	48,762,904
Jul-38	9,674	0	1,327	99,684	3,611	39,051	0	10,399	29,734	0	0	47,114	0	0	134.0	48,909,268
Aug-38	9,309	0	1,853	129,900	5,041	42,147	0	14,361	35,521	0	0	47,727	0	0	134.4	49,099,672
Sep-38	7,578	0	3,626	708,408	9,867	80,317	0	28,101	45,695	0	0	18,647	0	0	136.2	49,964,620
Oct-38	6,460	0	0	21,279	0	16,100	0	39	0	0	0	0	0	0	136.3	50,008,500
Nov-38	6,196	0	0	0	0	13,378	0	0	0	0	0	0	0	0	136.3	50,028,072
Dec-38	6,347	0	0	0	0	13,825	0	0	0	0	0	0	0	0	136.4	50,048,244
Jan-39	6,290	0	0	0	0	13,826	0	0	0	0	0	0	0	0	136.4	50,068,360
Feb-39	5,633	0	0	0	0	12,489	0	0	0	0	0	0	0	0	136.5	50,086,484
Mar-39	6,184	0	0	0	0	13,829	0	0	0	0	0	0	0	0	136.5	50,106,496
Apr-39	5,931	0	0	0	0	13,384	0	0	0	0	0	0	0	0	136.5	50,125,812
May-39	6,074	0	0	0	0	13,831	0	0	0	0	0	0	0	0	136.6	50,145,716
Jun-39	2,439	0	11,317	2,459,982	30,795	227,843	0	87,643	0	0	0	4,275	0	190	142.7	53,086,392
Jul-39	0	0	1,327	102,812	3,611	37,416	0	10,399	0	0	0	49,338	0	1,042	143.0	53,222,032
Aug-39	0	0	1,853	133,549	5,041	40,039	0	14,361	0	0	0	49,923	0	993	143.3	53,402,184
Sep-39	0	0	3,626	714,071	9,867	76,352	0	28,101	0	0	0	19,506	0	753	145.0	54,259,916
Oct-39	0	0	0	21,533	0	9,962	0	39	0	0	0	0	0	575	145.1	54,290,876
Nov-39	0	0	0	0	0	7,400	0	0	0	0	0	0	0	553	145.1	54,297,724
Dec-39	0	0	0	0	0	7,619	0	0	0	0	0	0	0	569	145.1	54,304,776
Jan-40	0	0	0	0	0	7,590	0	0	0	0	0	0	0	566	145.1	54,311,800
Feb-40	0	0	0	0	0	7,075	0	0	0	0	0	0	0	526	145.1	54,318,348
Mar-40	0	0	0	0	0	7,536	0	0	0	0	0	0	0	560	145.2	54,325,324
Apr-40	0	0	0	0	0	7,266	0	0	0	0	0	0	0	539	145.2	54,332,052
May-40	0	0	0	0	0	7,480	0	0	0	0	0	0	0	554	145.2	54,338,976
Jun-40	0	0	11,319	475,142	30,801	46,306	167	87,668	0	0	0	937	0	262	146.3	54,907,868

Table D-9: Mean Annual Water Balance (Whale Tail Attenuation Pond / Whale Tail Lake (North Basin) (Inflows))

Date	Inflow (m^3/mon)																					
	Whale Tail WRSF	Ground-water	Seepage Thru Dike	Ground-water (De-watering)	Truck Shop	Camp Biodisk	Industr. Sector	Camp Sector Runoff	Ore Stock-pile	Over-burden	Catch-ment Runoff	Direct Preci-pitation	Pit Sector	North-east Sector	A53/IVR Att. Pond Sector	North Sector / Sump	Whale Tail Lake (South Basin)	IVR Sector	IVR WRSF	IVR Pit	IVR Pit Sector Runoff (Closure)	Whale Tail Pit	Whale Tail Pit Sector Runoff
Jan-18	0	0	0	0	0	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-18	0	0	0	0	0	2,178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-18	0	0	0	0	0	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-18	0	0	0	0	0	2,334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-18	0	0	0	0	0	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-18	0	0	0	0	0	2,334	0	6,671	0	0	54,274	72,670	90,321	227,063	142,820	30,794	2,297,079	50,719	0	0	0	0	0
Jul-18	0	0	0	0	0	2,412	0	757	0	0	6,355	29,886	9,316	21,559	7,056	3,611	0	5,948	0	0	0	0	0
Aug-18	0	0	0	0	0	2,412	0	0	0	0	8,859	33,169	13,004	32,045	13,580	5,041	0	8,303	0	0	0	0	0
Sep-18	0	0	0	0	0	2,334	0	0	0	0	17,315	31,145	25,455	70,900	42,215	9,867	0	16,251	0	0	0	0	0
Oct-18	0	0	0	0	0	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-18	0	0	0	0	0	2,334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-18	0	0	0	0	0	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-19	0	0	0	0	0	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-19	0	0	0	0	0	2,178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-19	0	0	0	40,500	0	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-19	0	0	0	40,500	0	2,334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-19	0	3,515	6,528	28,350	1,036	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,691	0
Jun-19	104,176	10,500	19,500	0	3,093	2,334	10,745	6,671	5,381	3,511	87,845	1,731	0	0	0	30,795	0	0	0	0	0	158,954	0
Jul-19	12,050	10,850	20,150	0	3,196	2,412	1,218	782	673	412	10,399	359	0	0	0	3,611	0	0	0	0	0	48,311	0
Aug-19	16,586	10,850	20,150	0	3,196	2,412	1,642	1,092	998	575	14,516	399	0	0	0	5,041	0	0	0	0	0	54,052	0
Sep-19	32,015	10,500	19,500	0	3,093	2,334	3,100	2,137	2,067	1,125	28,414	374	0	0	0	9,867	0	0	0	0	0	72,523	0
Oct-19	0	10,850	20,150	0	3,196	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33,950	0
Nov-19	0	10,500	19,500	0	3,093	2,334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32,944	0
Dec-19	0	10,850	20,150	0	3,196	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33,950	0
Jan-20	0	3,720	11,160	0	3,196	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35,810	0
Feb-20	0	3,480	10,440	0	2,990	2,256	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33,673	0
Mar-20	0	3,720	11,160	0	3,196	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35,810	0
Apr-20	0	3,600	10,800	0	3,093	2,334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34,744	0
May-20	0	3,720	11,160	0	3,196	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35,810	0
Jun-20	84,941	3,600	10,800	0	3,093	2,334	7,883	6,672	8,246	3,511	86,891	2,731	0	0	0	30,801	0	0	0	0	0	158,426	0
Jul-20	9,743	3,720	11,160	0	3,196	2,412	912	782	979	412	10,399	359	0	0	0	3,611	0	0	5,734	14,727	0	51,259	0
Aug-20	13,295	3,720	11,160	0	3,196	2,412	1,257	1,092	1,383	575	14,516	399	0	0	0	5,041	0	0	7,958	19,962	0	56,994	0
Sep-20	25,438	3,600	10,800	0	3,093	2,334	2,427	2,137	2,740	1,125	28,414	374	0	0	0	9,867	0	0	15,486	37,656	0	75,534	0
Oct-20	0	3,720	11,160	0	3,196	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	1,537	0	37,249	0
Nov-20	0	3,600	10,800	0	3,093	2,334	0	0	0	0	0	0	0	0	0	0	0	0	0	1,532	0	36,092	0
Dec-20	0	3,720	11,160	0	3,196	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	1,537	0	37,249	0
Jan-21	0	2,790	11,315	0	3,196	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	1,222	0	41,274	0
Feb-21	0	2,520	10,220	0	2,887	2,178	0	0	0	0	0	0	0	0	0	0	0	0	0	1,257	0	37,433	0
Mar-21	0	2,790	11,315	0	3,196	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	1,222	0	41,274	0
Apr-21	0	2,700	10,950	0	3,093	2,334	0	0	0	0	0	0	0	0	0	0	0	0	0	1,237	0	39,997	0
May-21	0	2,790	11,315	0	3,196	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	1,222	0	41,274	0
Jun-21	72,474	2,700	10,950	0	3,093	2,334	6,669	6,671	9,457	3,511	88,680	873	0	0	0	25,356	0	0	43,110	111,284	0	163,679	0
Jul-21	8,486	2,790	11,315	0	3,196	2,412	770	782	1,121	412	10,399	359	0	0	0	2,857	0	0	4,964	14,000	0	55,586	0
Aug-21	11,831	2,790	11,315	0	3,196	2,412	1,058	1,092	1,582	575	14,516	399	0	0	0	3,822	0	0	6,800	19,002	0	61,327	0
Sep-21	23,130	2,700	10,950	0	3,093	2,334	2,039	2,137	3,128	1,125	28,414	374	0	0	0	7,161	0	0	13,062	35,989	0	79,557	0
Oct-21	0	2,790	11,315	0	3,196	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	1,222	0	41,274	0
Nov-21	0	2,700	10,950	0	3,093	2,334	0	0	0	0	0	0	0	0	0	0	0	0	0	1,237	0	39,997	0
Dec-21	0	2,790	11,315	0	3,196	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	1,222	0	41,274	0
Jan-22	0	2,790	11,160	0	3,196	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	1,222	0	42,204	0
Feb-22	0	2,520	10,080	0	2,887	2,178	0	0	0	0	0	0	0	0	0	0	0	0	0	1,257	0	38,273	0

Date	Inflow (m^3/mon)																					
	Whale Tail WRSF	Ground-water	Seepage Thru Dike	Ground-water (De-watering)	Truck Shop	Camp Biodisk	Industr. Sector	Camp Sector Runoff	Ore Stock-pile	Over-burden	Catch-ment Runoff	Direct Preci-pitation	Pit Sector	North-east Sector	A53/IVR Att. Pond Sector	North Sector / Sump	Whale Tail Lake (South Basin)	IVR Sector	IVR WRSF	IVR Pit	IVR Pit Sector Runoff (Closure)	Whale Tail Pit	Whale Tail Pit Sector Runoff
Mar-22	0	2,790	11,160	0	3,196	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	1,222	0	42,204	0
Apr-22	0	2,700	10,800	0	3,093	2,334	0	0	0	0	0	0	0	0	0	0	0	0	0	1,237	0	40,897	0
May-22	0	2,790	11,160	0	3,196	2,412	0	0	0	0	0	0	0	0	0	0	0	0	0	1,222	0	42,204	0
Jun-22	0	2,700	10,800	0	0	0	5,456	6,671	10,670	3,511	88,577	979	0	0	0	0	0	0	0	0	0	0	0
Jul-22	0	2,790	11,160	0	0	0	628	782	1,263	412	10,399	359	0	0	0	0	0	0	0	0	0	0	0
Aug-22	0	2,790	11,160	0	0	0	860	1,092	1,780	575	14,516	399	0	0	0	0	0	0	0	0	0	0	0
Sep-22	0	2,700	10,800	0	0	0	1,650	2,137	3,517	1,125	28,414	374	0	0	0	0	0	0	0	0	0	0	0
Oct-22	0	2,790	11,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-22	0	2,700	10,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-22	0	2,790	11,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-23	0	2,790	11,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-23	0	2,520	10,080	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-23	0	2,790	11,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-23	0	2,700	10,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-23	0	2,790	11,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-23	0	2,700	10,800	0	0	0	4,692	6,671	11,329	3,511	88,530	873	0	0	0	0	0	0	0	0	0	0	0
Jul-23	0	2,790	11,160	0	0	0	548	782	1,329	412	10,378	359	0	0	0	0	0	0	0	0	0	0	0
Aug-23	0	2,790	11,160	0	0	0	762	1,092	1,855	575	14,483	399	0	0	0	0	0	0	0	0	0	0	0
Sep-23	0	2,700	10,800	0	0	0	1,485	2,137	3,630	1,125	28,340	374	0	0	0	0	0	0	0	0	0	0	0
Oct-23	0	2,790	11,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-23	0	2,700	10,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-23	0	2,790	11,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-24	0	2,790	11,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-24	0	2,610	10,440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-24	0	2,790	11,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-24	0	2,700	10,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-24	0	2,790	11,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-24	0	2,700	10,800	0	0	0	4,462	6,672	11,332	3,511	88,217	874	0	0	0	0	0	0	0	0	0	0	0
Jul-24	0	2,790	11,160	0	0	0	521	782	1,329	412	10,339	359	0	0	0	0	0	0	0	0	0	0	0
Aug-24	0	2,790	11,160	0	0	0	724	1,092	1,855	575	14,428	399	0	0	0	0	0	0	0	0	0	0	0
Sep-24	0	2,700	10,800	0	0	0	1,411	2,137	3,630	1,125	28,233	374	0	0	0	0	0	0	0	0	0	0	0
Oct-24	0	2,790	11,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-24	0	2,700	10,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-24	0	2,790	11,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-25	0	2,790	11,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-25	0	2,520	10,080	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-25	0	2,790	11,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-25	0	2,700	10,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-25	0	2,790	11,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-25	0	2,700	10,800	0	0	0	9,290	6,671	6,586	3,511	88,321	873	0	0	0	0	0	0	0	0	0	0	0
Jul-25	0	2,790	11,160	0	0	0	1,196	782	670	412	10,363	359	0	0	0	0	0	0	0	0	0	0	0
Aug-25	0	2,790	11,160	0	0	0	1,820	1,092	791	575	14,476	399	0	0	0	0	0	0	0	0	0	0	0
Sep-25	0	2,700	10,800	0	0	0	3,854	2,137	1,270	1,125	28,353	374	0	0	0	0	0	0	0	0	0	0	0
Oct-25	0	2,790	11,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-25	0	2,700	10,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-25	0	2,790	11,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-26	0	4,588	17,568	0	0	328	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
Feb-26	0	4,144	15,868	0	0	336	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-26	0	4,588	17,568	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-26	0	4,440	17,002	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-26	0	4,588	17,568	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Date	Inflow (m^3/mon)																					
	Whale Tail WRSF	Ground-water	Seepage Thru Dike	Ground-water (De-watering)	Truck Shop	Camp Biodisk	Industr. Sector	Camp Sector Runoff	Ore Stock-pile	Over-burden	Catch-ment Runoff	Direct Preci-pitation	Pit Sector	North-east Sector	A53/IVR Att. Pond Sector	North Sector / Sump	Whale Tail Lake (South Basin)	IVR Sector	IVR WRSF	IVR Pit	IVR Pit Sector Runoff (Closure)	Whale Tail Pit	Whale Tail Pit Sector Runoff
Jun-26	0	4,602	15,346	0	0	360	15,195	6,671	931	3,511	82,279	7,452	0	0	106,517	0	0	0	0	0	0	0	0
Jul-26	0	4,934	14,033	0	0	372	1,782	782	109	412	9,332	4,207	0	0	11,278	0	0	0	0	0	0	0	0
Aug-26	0	4,976	13,601	0	0	372	2,487	1,092	152	575	13,026	4,669	0	0	16,210	0	0	0	0	0	0	0	0
Sep-26	0	4,870	12,610	0	0	360	4,869	2,137	298	1,125	25,498	4,384	0	0	33,686	0	0	0	0	0	0	0	0
Oct-26	0	5,073	12,618	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-26	0	4,917	12,134	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-26	0	5,088	12,459	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-27	0	5,096	12,379	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-27	0	4,609	11,118	0	0	336	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-27	0	5,109	12,243	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-27	0	4,951	11,782	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-27	0	5,123	12,107	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-27	0	5,037	10,912	0	0	360	15,195	6,671	931	3,511	79,578	10,228	0	0	106,517	0	0	0	0	0	0	0	0
Jul-27	0	5,310	10,608	0	0	372	1,782	782	109	412	9,332	4,207	0	0	11,278	0	0	0	0	0	0	0	0
Aug-27	0	5,325	10,610	0	0	372	2,487	1,092	152	575	13,026	4,669	0	0	16,210	0	0	0	0	0	0	0	0
Sep-27	0	5,200	10,274	0	0	360	4,869	2,137	298	1,125	25,498	4,384	0	0	33,686	0	0	0	0	0	0	0	0
Oct-27	0	5,413	10,622	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-27	0	5,240	10,280	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-27	0	5,416	10,623	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-28	0	5,417	10,623	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-28	0	5,068	9,938	0	0	348	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-28	0	5,419	10,623	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-28	0	5,246	10,281	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-28	0	5,422	10,624	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-28	0	5,313	10,288	0	0	360	15,199	6,672	931	3,511	79,594	10,230	0	0	106,539	0	0	0	0	0	0	0	0
Jul-28	0	5,543	10,633	0	0	372	1,782	782	109	412	9,332	4,207	0	0	11,278	0	0	0	0	0	0	0	0
Aug-28	0	5,547	10,633	0	0	372	2,487	1,092	152	575	13,026	4,669	0	0	16,210	0	0	0	0	0	0	0	0
Sep-28	0	5,379	10,290	0	0	360	4,869	2,137	298	1,125	25,498	4,384	0	0	33,686	0	0	0	0	0	0	0	0
Oct-28	0	5,568	10,633	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-28	0	5,389	10,290	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-28	0	5,569	10,633	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-29	0	5,569	10,633	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-29	0	5,031	9,604	0	0	336	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-29	0	5,570	10,633	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-29	0	5,391	10,290	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-29	0	5,571	10,633	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-29	0	5,417	10,290	0	0	360	15,195	6,671	931	3,511	79,578	10,228	0	0	106,517	0	0	0	0	0	0	0	0
Jul-29	0	5,633	10,633	0	0	372	1,782	782	109	412	9,332	4,207	0	0	11,278	0	0	0	0	0	0	0	0
Aug-29	0	5,636	10,633	0	0	372	2,487	1,092	152	575	13,026	4,669	0	0	16,210	0	0	0	0	0	0	0	0
Sep-29	0	5,465	10,290	0	0	360	4,869	2,137	298	1,125	25,498	4,384	0	0	33,686	0	0	0	0	0	0	0	0
Oct-29	0	5,658	10,633	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-29	0	5,475	10,290	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-29	0	5,658	10,633	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-30	0	5,659	10,633	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-30	0	5,111	9,604	0	0	336	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-30	0	5,659	10,633	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-30	0	5,477	10,290	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-30	0	5,660	10,633	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-30	0	5,493	10,290	0	0	360	15,195	6,671	931	3,511	79,578	10,228	0	0	106,517	0	0	0	0	0	0	0	0
Jul-30	0	5,596	10,633	0	0	372	1,782	782	109	412	9,332	4,207	0	0	11,278	0	0	0	0	0	0	0	0
Aug-30	0	5,580	10,633	0	0	372	2,487	1,092	152	575	13,026	4,669	0	0	16,210	0	0	0	0	0	0	0	0

Date	Inflow (m^3/mon)																					
	Whale Tail WRSF	Ground-water	Seepage Thru Dike	Ground-water (De-watering)	Truck Shop	Camp Biodisk	Industr. Sector	Camp Sector Runoff	Ore Stock-pile	Over-burden	Catch-ment Runoff	Direct Preci-pitation	Pit Sector	North-east Sector	A53/IVR Att. Pond Sector	North Sector / Sump	Whale Tail Lake (South Basin)	IVR Sector	IVR WRSF	IVR Pit	IVR Pit Sector Runoff (Closure)	Whale Tail Pit	Whale Tail Pit Sector Runoff
Sep-30	0	5,341	10,290	0	0	360	4,869	2,137	298	1,125	25,498	4,384	0	0	33,686	0	0	0	0	0	0	0	0
Oct-30	0	5,461	10,633	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-30	0	5,283	10,290	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-30	0	5,457	10,633	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-31	0	5,455	10,633	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-31	0	4,925	9,604	0	0	336	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-31	0	5,451	10,633	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-31	0	5,273	10,290	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-31	0	5,446	10,633	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-31	0	5,125	10,286	0	0	360	15,195	6,671	931	3,511	79,578	10,228	0	0	106,517	0	0	0	0	0	0	0	0
Jul-31	0	5,135	10,607	0	0	372	1,782	782	109	412	9,332	4,207	0	0	11,278	0	0	0	0	0	0	0	0
Aug-31	0	5,125	10,605	0	0	372	2,487	1,092	152	575	13,026	4,669	0	0	16,210	0	0	0	0	0	0	0	0
Sep-31	0	4,922	10,253	0	0	360	4,869	2,137	298	1,125	25,498	4,384	0	0	33,686	0	0	0	0	0	0	0	0
Oct-31	0	5,049	10,585	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-31	0	4,884	10,244	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-31	0	5,046	10,585	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-32	0	5,044	10,584	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-32	0	4,717	9,901	0	0	348	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-32	0	5,041	10,584	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-32	0	4,877	10,242	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-32	0	5,038	10,583	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-32	0	4,778	10,217	0	0	360	15,199	6,672	931	3,511	79,594	10,230	0	0	106,539	0	0	0	0	0	0	0	0
Jul-32	0	4,825	10,526	0	0	372	1,782	782	109	412	9,332	4,207	0	0	11,278	0	0	0	0	0	0	0	0
Aug-32	0	4,818	10,524	0	0	372	2,487	1,092	152	575	13,026	4,669	0	0	16,210	0	0	0	0	0	0	0	0
Sep-32	0	4,637	10,176	0	0	360	4,869	2,137	298	1,125	25,498	4,384	0	0	33,686	0	0	0	0	0	0	0	0
Oct-32	0	4,767	10,507	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-32	0	4,612	10,167	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-32	0	4,765	10,506	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-33	0	4,764	10,506	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-33	0	4,302	9,489	0	0	336	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-33	0	4,761	10,505	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-33	0	4,607	10,166	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-33	0	4,759	10,504	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-33	0	4,544	10,142	0	0	360	15,195	6,671	931	3,511	79,578	10,228	0	0	106,517	0	0	0	0	0	0	0	0
Jul-33	0	4,629	10,447	0	0	372	1,782	782	109	412	9,332	4,207	0	0	11,278	0	0	0	0	0	0	0	0
Aug-33	0	4,625	10,444	0	0	372	2,487	1,092	152	575	13,026	4,669	0	0	16,210	0	0	0	0	0	0	0	0
Sep-33	0	4,459	10,097	0	0	360	4,869	2,137	298	1,125	25,498	4,384	0	0	33,686	0	0	0	0	0	0	0	0
Oct-33	0	4,591	10,424	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-33	0	4,443	10,088	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-33	0	4,590	10,423	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-34	0	4,589	10,423	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-34	0	4,145	9,414	0	0	336	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-34	0	4,588	10,422	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-34	0	4,439	10,086	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-34	0	4,587	10,421	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-34	0	4,372	10,053	0	0	360	15,195	6,671	931	3,511	79,578	10,228	0	0	106,517	0	0	0	0	0	0	0	0
Jul-34	0	4,328	10,316	0	0	372	1,782	782	109	412	9,332	4,207	0	0	11,278	0	0	0	0	0	0	0	0
Aug-34	0	4,307	10,309	0	0	372	2,487	1,092	152	575	13,026	4,669	0	0	16,210	0	0	0	0	0	0	0	0
Sep-34	0	4,089	9,949	0	0	360	4,869	2,137	298	1,125	25,498	4,384	0	0	33,686	0	0	0	0	0	0	0	0
Oct-34	0	4,147	10,254	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-34	0	4,009	9,922	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Date	Inflow (m^3/mon)																					
	Whale Tail WRSF	Ground-water	Seepage Thru Dike	Ground-water (De-watering)	Truck Shop	Camp Biodisk	Industr. Sector	Camp Sector Runoff	Ore Stock-pile	Over-burden	Catch-ment Runoff	Direct Preci-pitation	Pit Sector	North-east Sector	A53/IVR Att. Pond Sector	North Sector / Sump	Whale Tail Lake (South Basin)	IVR Sector	IVR WRSF	IVR Pit	IVR Pit Sector Runoff (Closure)	Whale Tail Pit	Whale Tail Pit Sector Runoff
Dec-34	0	4,138	10,251	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-35	0	4,134	10,249	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-35	0	3,729	9,256	0	0	336	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-35	0	4,125	10,246	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-35	0	3,987	9,914	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-35	0	4,115	10,243	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-35	0	3,777	9,839	0	0	360	15,195	6,671	931	3,511	79,578	10,228	0	0	106,517	0	0	0	0	0	0	0	0
Jul-35	0	3,571	9,986	0	0	372	1,782	782	109	412	9,332	4,207	0	0	11,278	0	0	0	0	0	0	0	0
Aug-35	0	3,531	9,954	0	0	372	2,487	1,092	152	575	13,026	4,669	0	0	16,210	0	0	0	0	0	0	0	0
Sep-35	0	3,271	9,515	0	0	360	4,869	2,137	298	1,125	25,498	4,384	0	0	33,686	0	0	0	0	0	0	0	0
Oct-35	0	3,238	9,718	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-35	0	3,125	9,398	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-35	0	3,221	9,704	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-36	0	3,213	9,697	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-36	0	2,997	9,065	0	0	348	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-36	0	3,196	9,684	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-36	0	3,085	9,365	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-36	0	3,179	9,670	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-36	0	2,736	9,082	0	0	360	15,199	6,672	931	3,511	79,594	10,230	0	0	106,539	0	0	0	0	0	0	0	0
Jul-36	0	2,629	9,213	0	0	372	1,782	782	109	412	9,332	4,207	0	0	11,278	0	0	0	0	0	0	0	0
Aug-36	0	2,632	9,214	0	0	372	2,487	1,092	152	575	13,026	4,669	0	0	16,210	0	0	0	0	0	0	0	0
Sep-36	0	2,558	8,920	0	0	360	4,869	2,137	298	1,125	25,498	4,384	0	0	33,686	0	0	0	0	0	0	0	0
Oct-36	0	2,655	9,220	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-36	0	2,570	8,923	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-36	0	2,657	9,220	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-37	0	2,657	9,220	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-37	0	2,401	8,328	0	0	336	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-37	0	2,659	9,221	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-37	0	2,574	8,923	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-37	0	2,660	9,221	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-37	0	2,604	8,931	0	0	360	15,195	6,671	931	3,511	79,794	10,005	0	0	106,517	0	0	0	0	0	0	0	0
Jul-37	0	2,735	9,242	0	0	372	1,782	782	109	412	9,332	4,207	0	0	11,278	0	0	0	0	0	0	0	0
Aug-37	0	2,764	9,260	0	0	372	2,487	1,092	152	575	13,026	4,669	0	0	16,210	0	0	0	0	0	0	0	0
Sep-37	0	2,788	9,030	0	0	360	4,869	2,137	298	1,125	25,498	4,384	0	0	33,686	0	0	0	0	0	0	0	0
Oct-37	0	2,992	9,398	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-37	0	2,901	9,098	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-37	0	3,003	9,405	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-38	0	3,009	9,409	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-38	0	2,723	8,501	0	0	336	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-38	0	3,020	9,416	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-38	0	2,928	9,115	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-38	0	3,031	9,422	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-38	0	3,207	9,290	0	0	360	15,195	6,671	931	3,511	79,578	10,228	0	0	106,517	0	0	0	0	0	0	0	0
Jul-38	0	3,451	9,934	0	0	372	1,782	782	109	412	9,332	4,207	0	0	11,278	0	0	0	0	0	0	0	0
Aug-38	0	3,406	9,986	0	0	372	2,487	1,092	152	575	13,026	4,669	0	0	16,210	0	0	0	0	0	0	0	0
Sep-38	0	3,120	9,870	0	0	360	4,869	2,137	298	1,125	25,498	4,384	0	0	33,686	0	0	0	0	0	0	0	0
Oct-38	0	3,056	10,395	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-38	0	2,950	10,068	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-38	0	3,042	10,412	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-39	0	3,035	10,420	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-39	0	2,735	9,418	0	0	336	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Date	Inflow (m^3/mon)																					
	Whale Tail WRSF	Ground-water	Seepage Thru Dike	Ground-water (De-watering)	Truck Shop	Camp Biodisk	Industr. Sector	Camp Sector Runoff	Ore Stock-pile	Over-burden	Catch-ment Runoff	Direct Preci-pitation	Pit Sector	North-east Sector	A53/IVR Att. Pond Sector	North Sector / Sump	Whale Tail Lake (South Basin)	IVR Sector	IVR WRSF	IVR Pit	IVR Pit Sector Runoff (Closure)	Whale Tail Pit	Whale Tail Pit Sector Runoff
Mar-39	0	3,022	10,435	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-39	0	2,918	10,106	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-39	0	3,008	10,451	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-39	0	2,451	10,596	0	0	360	15,195	6,671	931	3,511	79,578	10,228	0	0	106,517	0	0	0	0	0	0	0	0
Jul-39	0	1,659	10,073	0	0	372	1,782	782	109	412	9,332	4,207	0	0	11,278	0	0	0	0	0	0	0	0
Aug-39	0	1,547	9,717	0	0	372	2,487	1,092	152	575	13,026	4,669	0	0	16,210	0	0	0	0	0	0	0	0
Sep-39	0	1,028	7,909	0	0	360	4,869	2,137	298	1,125	25,498	4,384	0	0	33,686	0	0	0	0	0	0	0	0
Oct-39	0	600	6,705	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-39	0	574	6,466	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-39	0	586	6,660	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-40	0	579	6,638	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-40	0	536	6,190	0	0	348	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-40	0	566	6,597	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-40	0	541	6,363	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-40	0	553	6,555	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-40	0	72	3,734	0	0	360	15,199	6,672	931	3,511	59,801	64,087	0	0	106,539	0	0	0	0	1,723,190	346,427	0	156,950
Jul-40	0	0	2,007	0	0	372	1,782	782	109	412	6,305	47,563	0	0	11,278	0	0	0	0	0	55,104	0	23,221
Aug-40	0	0	1,927	0	0	372	2,487	1,092	152	575	8,801	52,993	0	0	16,210	0	0	0	0	0	162,582	0	32,404
Sep-40	0	0	1,486	0	0	360	4,869	2,137	298	1,125	17,228	51,108	0	0	33,686	0	0	0	0	0	734,678	0	63,347
Oct-40	0	0	1,207	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,556	0	5
Nov-40	0	0	1,167	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-40	0	0	1,204	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-41	0	0	1,203	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-41	0	0	1,086	0	0	336	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-41	0	0	1,201	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-41	0	0	1,162	0	0	360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-41	0	0	1,199	0	0	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-41	0	0	329	0	0	360	15,195	6,671	931	3,511	53,766	131,140	0	0	106,517	0	0	0	0	0	2,578,835	0	196,708
Jul-41	0	0	0	0	0	372	1,782	782	109	412	6,305	57,670	0	0	11,278	0	0	0	0	0	56,409	0	22,968
Aug-41	0	0	0	0	0	372	2,487	1,092	152	575	8,801	64,269	0	0	16,210	0	0	0	0	0	164,562	0	32,054
Sep-41	0	0	0	0	0	33	4,869	2,137	298	1,125	17,228	60,763	0	0	33,686	0	0	0	0	0	703,959	0	62,716
Oct-41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21,987	0	0
Nov-41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jan-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apr-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-42	0	0	0	0	0	0	15,195	6,671	931	3,511	53,766	133,790	0	0	106,517	0	0	0	0	0	2,560,783	0	108,625
Jul-42	0	0	0	0	0	0	1,782	782	109	412	6,305	55,026	0	0	11,278	0	0	0	0	0	138,235	0	12,738
Aug-42	0	0	0	0	0	0	2,487	1,092	152	575	8,801	61,070	0	0	16,210	0	0	0	0	0	166,001	0	17,781
Sep-42	0	0	0	0	0	0	4,869	2,137	298	1,125	17,228	57,344	0	0	33,686	0	0	0	0	0	716,185	0	34,805
Oct-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21,987	0	0
Nov-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table D-10: Mean Annual Water Balance (Whale Tail Attenuation Pond / Whale Tail Lake (North Basin) (Outflows))

Date	Outflow (m^3/mon)											Water Level (masl)	Storage (m^3)
	Lake A16 (Mammoth Lake)	Dewatering to Whale Tail Lake (South Basin) bypass C-WTP	Dewatering to Whale Tail Lake (South Basin) through C-WTP	O-WTP	S-WTP (Brackish)	IVR Attenuation Pond	Groundwater	Evaporation	Drawdown to WT Pit	WTN to Pits	GSP (Brine)		
Jan-18	0	0	0	0	0	0	0	0	0	0	0	152.50	3,032,117
Feb-18	0	0	0	0	0	0	0	0	0	0	0	152.51	3,034,295
Mar-18	0	0	0	0	0	0	0	0	0	0	0	152.51	3,036,707
Apr-18	0	0	0	0	0	0	0	0	0	0	0	152.51	3,039,041
May-18	0	0	0	0	0	0	0	0	0	0	0	152.52	3,041,453
Jun-18	2,980,614	0	0	0	0	0	0	5,878	0	0	0	152.50	3,029,705
Jul-18	20,092	0	0	0	0	0	0	66,809	0	0	0	152.50	3,029,705
Aug-18	48,929	0	0	0	0	0	0	67,484	0	0	0	152.50	3,029,705
Sep-18	189,359	0	0	0	0	0	0	26,123	0	0	0	152.50	3,029,705
Oct-18	0	0	0	0	0	0	0	0	0	0	0	152.50	3,032,117
Nov-18	0	0	0	0	0	0	0	0	0	0	0	152.51	3,034,451
Dec-18	0	0	0	0	0	0	0	0	0	0	0	152.51	3,036,863
Jan-19	0	0	0	0	0	0	0	0	0	0	0	152.51	3,039,275
Feb-19	0	0	0	0	0	0	0	0	0	0	0	152.52	3,041,453
Mar-19	0	1,190,400	0	0	0	0	0	0	0	0	0	150.50	1,893,965
Apr-19	0	806,400	345,600	0	0	0	0	0	0	0	0	147.39	784,799
May-19	0	0	804,720	0	0	0	1,808	0	0	0	0	139.11	23,803
Jun-19	0	0	0	453,499	0	0	5,400	140	0	0	0	137.82	10,000
Jul-19	0	0	0	108,040	0	0	5,580	803	0	0	0	137.82	10,000
Aug-19	0	0	0	125,117	0	0	5,580	811	0	0	0	137.82	10,000
Sep-19	0	0	0	181,336	0	0	5,400	314	0	0	0	137.82	10,000
Oct-19	0	0	0	0	0	0	5,580	0	0	0	0	141.70	74,978
Nov-19	0	0	0	0	0	0	5,400	0	0	0	4,717	143.50	133,232
Dec-19	0	0	0	0	0	0	5,580	0	0	0	64,978	143.50	133,232
Jan-20	0	0	0	0	0	0	26,660	0	0	0	29,638	143.50	133,232
Feb-20	0	0	0	0	0	0	24,940	0	0	0	27,899	143.50	133,232
Mar-20	0	0	0	0	0	0	26,660	0	0	0	29,638	143.50	133,232
Apr-20	0	0	0	0	0	0	25,800	0	0	0	28,771	143.50	133,232
May-20	0	0	0	0	0	0	26,660	0	0	0	29,638	143.50	133,232
Jun-20	0	0	0	507,141	0	0	25,800	221	0	0	0	137.82	10,000
Jul-20	0	0	0	91,941	0	0	26,660	803	0	0	0	137.82	10,000
Aug-20	0	0	0	115,489	0	0	26,660	811	0	0	0	137.82	10,000
Sep-20	0	0	0	194,912	0	0	25,800	314	0	0	0	137.82	10,000
Oct-20	0	0	0	0	31,000	0	26,660	0	0	0	0	138.01	11,614
Nov-20	0	0	0	0	30,000	0	25,800	0	0	0	0	138.19	13,265
Dec-20	0	0	0	0	31,000	0	26,660	0	0	0	0	138.35	14,879
Jan-21	0	0	0	0	31,000	0	32,550	0	0	0	0	138.22	13,538
Feb-21	0	0	0	0	28,000	0	29,400	0	0	0	0	138.12	12,633
Mar-21	0	0	0	0	31,000	0	32,550	0	0	0	0	137.98	11,292
Apr-21	0	0	0	0	30,000	0	31,500	0	0	0	0	137.83	10,103
May-21	0	0	0	0	29,762	0	32,550	0	0	0	0	137.82	10,000
Jun-21	0	0	0	519,270	0	0	31,500	71	0	0	0	137.82	10,000
Jul-21	0	0	0	86,097	0	0	32,550	803	0	0	0	137.82	10,000
Aug-21	0	0	0	108,355	0	0	32,550	811	0	0	0	137.82	10,000

Date	Outflow (m^3/mon)											Water Level (masl)	Storage (m^3)
	Lake A16 (Mammoth Lake)	Dewatering to Whale Tail Lake (South Basin) bypass C-WTP	Dewatering to Whale Tail Lake (South Basin) through C-WTP	O-WTP	S-WTP (Brackish)	IVR Attenuation Pond	Groundwater	Evaporation	Drawdown to WT Pit	WTN to Pits	GSP (Brine)		
Sep-21	0	0	0	183,380	0	0	31,500	314	0	0	0	137.82	10,000
Oct-21	0	0	0	0	29,659	0	32,550	0	0	0	0	137.82	10,000
Nov-21	0	0	0	0	28,812	0	31,500	0	0	0	0	137.82	10,000
Dec-21	0	0	0	0	29,659	0	32,550	0	0	0	0	137.82	10,000
Jan-22	0	0	0	0	29,194	0	33,790	0	0	0	0	137.82	10,000
Feb-22	0	0	0	0	26,675	0	30,520	0	0	0	0	137.82	10,000
Mar-22	0	0	0	0	29,194	0	33,790	0	0	0	0	137.82	10,000
Apr-22	0	0	0	0	0	0	32,700	0	0	0	0	140.06	38,362
May-22	0	0	0	0	0	0	33,790	0	0	0	0	141.42	67,555
Jun-22	0	0	0	0	0	154,140	32,700	79	0	0	0	137.82	10,000
Jul-22	0	0	0	0	0	0	26,990	803	0	0	0	137.82	10,000
Aug-22	0	0	0	0	0	0	32,360	811	0	0	0	137.82	10,000
Sep-22	0	0	0	0	0	17,704	32,700	314	0	0	0	137.82	10,000
Oct-22	0	0	0	0	0	0	13,950	0	0	0	0	137.82	10,000
Nov-22	0	0	0	0	0	0	13,500	0	0	0	0	137.82	10,000
Dec-22	0	0	0	0	0	0	13,950	0	0	0	0	137.82	10,000
Jan-23	0	0	0	0	0	0	13,950	0	0	0	0	137.82	10,000
Feb-23	0	0	0	0	0	0	12,600	0	0	0	0	137.82	10,000
Mar-23	0	0	0	0	0	0	13,950	0	0	0	0	137.82	10,000
Apr-23	0	0	0	0	0	0	13,500	0	0	0	0	137.82	10,000
May-23	0	0	0	0	0	0	13,950	0	0	0	0	137.82	10,000
Jun-23	0	0	0	0	0	96,334	32,700	71	0	0	0	137.82	10,000
Jul-23	0	0	0	0	0	0	26,955	803	0	0	0	137.82	10,000
Aug-23	0	0	0	0	0	0	32,303	811	0	0	0	137.82	10,000
Sep-23	0	0	0	0	0	17,577	32,700	314	0	0	0	137.82	10,000
Oct-23	0	0	0	0	0	0	13,950	0	0	0	0	137.82	10,000
Nov-23	0	0	0	0	0	0	13,500	0	0	0	0	137.82	10,000
Dec-23	0	0	0	0	0	0	13,950	0	0	0	0	137.82	10,000
Jan-24	0	0	0	0	0	0	13,950	0	0	0	0	137.82	10,000
Feb-24	0	0	0	0	0	0	13,050	0	0	0	0	137.82	10,000
Mar-24	0	0	0	0	0	0	13,950	0	0	0	0	137.82	10,000
Apr-24	0	0	0	0	0	0	13,500	0	0	0	0	137.82	10,000
May-24	0	0	0	0	0	0	13,950	0	0	0	0	137.82	10,000
Jun-24	0	0	0	0	0	95,796	32,700	71	0	0	0	137.82	10,000
Jul-24	0	0	0	0	0	0	26,889	803	0	0	0	137.82	10,000
Aug-24	0	0	0	0	0	0	32,211	811	0	0	0	137.82	10,000
Sep-24	0	0	0	0	0	17,397	32,700	314	0	0	0	137.82	10,000
Oct-24	0	0	0	0	0	0	13,950	0	0	0	0	137.82	10,000
Nov-24	0	0	0	0	0	0	13,500	0	0	0	0	137.82	10,000
Dec-24	0	0	0	0	0	0	13,950	0	0	0	0	137.82	10,000
Jan-25	0	0	0	0	0	0	13,950	0	0	0	0	137.82	10,000
Feb-25	0	0	0	0	0	0	12,600	0	0	0	0	137.82	10,000
Mar-25	0	0	0	0	0	0	13,950	0	0	0	0	137.82	10,000
Apr-25	0	0	0	0	0	0	13,500	0	0	0	0	137.82	10,000
May-25	0	0	0	0	0	0	13,950	0	0	0	0	137.82	10,000

Date	Outflow (m^3/mon)											Water Level (masl)	Storage (m^3)
	Lake A16 (Mammoth Lake)	Dewatering to Whale Tail Lake (South Basin) bypass C-WTP	Dewatering to Whale Tail Lake (South Basin) through C-WTP	O-WTP	S-WTP (Brackish)	IVR Attenuation Pond	Groundwater	Evaporation	Drawdown to WT Pit	WTN to Pits	GSP (Brine)		
Jun-25	0	0	0	0	0	95,980	32,700	71	0	0	0	137.82	10,000
Jul-25	0	0	0	0	0	0	26,930	803	0	0	0	137.82	10,000
Aug-25	0	0	0	0	0	0	32,291	811	0	0	0	137.82	10,000
Sep-25	0	0	0	0	0	17,599	32,700	314	0	0	0	137.82	10,000
Oct-25	0	0	0	0	0	0	13,950	0	0	0	0	137.82	10,000
Nov-25	0	0	0	0	0	0	13,500	0	0	0	0	137.82	10,000
Dec-25	0	0	0	0	0	0	13,950	0	0	0	0	137.82	10,000
Jan-26	0	0	0	0	0	0	0	0	0	0	0	139.71	32,488
Feb-26	0	0	0	0	0	0	0	0	0	0	0	140.79	52,837
Mar-26	0	0	0	0	0	0	0	0	0	0	0	141.72	75,365
Apr-26	0	0	0	0	0	0	0	0	0	0	0	142.47	97,167
May-26	0	0	0	0	0	0	0	0	0	0	0	143.14	119,696
Jun-26	0	0	0	0	0	0	0	603	0	69,973	0	146.30	291,982
Jul-26	0	0	0	0	0	0	0	9,404	0	37,836	0	146.30	291,982
Aug-26	0	0	0	0	0	0	0	9,499	0	47,662	0	146.30	291,982
Sep-26	0	0	0	0	0	0	0	3,677	0	86,160	0	146.30	291,982
Oct-26	0	0	0	0	0	0	0	0	0	18,062	0	146.30	291,982
Nov-26	0	0	0	0	0	0	0	0	0	17,410	0	146.30	291,982
Dec-26	0	0	0	0	0	0	0	0	0	17,919	0	146.30	291,982
Jan-27	0	0	0	0	0	0	0	0	0	17,847	0	146.30	291,982
Feb-27	0	0	0	0	0	0	0	0	0	16,063	0	146.30	291,982
Mar-27	0	0	0	0	0	0	0	0	0	17,725	0	146.30	291,982
Apr-27	0	0	0	0	0	0	0	0	0	17,093	0	146.30	291,982
May-27	0	0	0	0	0	0	0	0	0	17,602	0	146.30	291,982
Jun-27	0	0	0	0	0	0	0	827	0	238,111	0	146.30	291,982
Jul-27	0	0	0	0	0	0	0	9,404	0	34,787	0	146.30	291,982
Aug-27	0	0	0	0	0	0	0	9,499	0	45,019	0	146.30	291,982
Sep-27	0	0	0	0	0	0	0	3,677	0	84,154	0	146.30	291,982
Oct-27	0	0	0	0	0	0	0	0	0	16,407	0	146.30	291,982
Nov-27	0	0	0	0	0	0	0	0	0	15,880	0	146.30	291,982
Dec-27	0	0	0	0	0	0	0	0	0	16,410	0	146.30	291,982
Jan-28	0	0	0	0	0	0	0	0	0	16,412	0	146.30	291,982
Feb-28	0	0	0	0	0	0	0	0	0	15,354	0	146.30	291,982
Mar-28	0	0	0	0	0	0	0	0	0	16,415	0	146.30	291,982
Apr-28	0	0	0	0	0	0	0	0	0	15,886	0	146.30	291,982
May-28	0	0	0	0	0	0	0	0	0	16,417	0	146.30	291,982
Jun-28	0	0	0	0	0	0	0	827	0	237,809	0	146.30	291,982
Jul-28	0	0	0	0	0	0	0	9,404	0	35,046	0	146.30	291,982
Aug-28	0	0	0	0	0	0	0	9,499	0	45,264	0	146.30	291,982
Sep-28	0	0	0	0	0	0	0	3,677	0	84,349	0	146.30	291,982
Oct-28	0	0	0	0	0	0	0	0	0	16,573	0	146.30	291,982
Nov-28	0	0	0	0	0	0	0	0	0	16,039	0	146.30	291,982
Dec-28	0	0	0	0	0	0	0	0	0	16,574	0	146.30	291,982
Jan-29	0	0	0	0	0	0	0	0	0	16,574	0	146.30	291,982
Feb-29	0	0	0	0	0	0	0	0	0	14,971	0	146.30	291,982

Date	Outflow (m^3/mon)											Water Level (masl)	Storage (m^3)
	Lake A16 (Mammoth Lake)	Dewatering to Whale Tail Lake (South Basin) bypass C-WTP	Dewatering to Whale Tail Lake (South Basin) through C-WTP	O-WTP	S-WTP (Brackish)	IVR Attenuation Pond	Groundwater	Evaporation	Drawdown to WT Pit	WTN to Pits	GSP (Brine)		
Mar-29	0	0	0	0	0	0	0	0	0	16,575	0	146.30	291,982
Apr-29	0	0	0	0	0	0	0	0	0	16,041	0	146.30	291,982
May-29	0	0	0	0	0	0	0	0	0	16,576	0	146.30	291,982
Jun-29	0	0	0	0	0	0	0	827	0	237,869	0	146.30	291,982
Jul-29	0	0	0	0	0	0	0	9,404	0	35,135	0	146.30	291,982
Aug-29	0	0	0	0	0	0	0	9,499	0	45,353	0	146.30	291,982
Sep-29	0	0	0	0	0	0	0	3,677	0	84,435	0	146.30	291,982
Oct-29	0	0	0	0	0	0	0	0	0	16,663	0	146.30	291,982
Nov-29	0	0	0	0	0	0	0	0	0	16,125	0	146.30	291,982
Dec-29	0	0	0	0	0	0	0	0	0	16,663	0	146.30	291,982
Jan-30	0	0	0	0	0	0	0	0	0	16,664	0	146.30	291,982
Feb-30	0	0	0	0	0	0	0	0	0	15,051	0	146.30	291,982
Mar-30	0	0	0	0	0	0	0	0	0	16,664	0	146.30	291,982
Apr-30	0	0	0	0	0	0	0	0	0	16,127	0	146.30	291,982
May-30	0	0	0	0	0	0	0	0	0	16,665	0	146.30	291,982
Jun-30	0	0	0	0	0	0	0	827	0	237,945	0	146.30	291,982
Jul-30	0	0	0	0	0	0	0	9,404	0	35,098	0	146.30	291,982
Aug-30	0	0	0	0	0	0	0	9,499	0	45,297	0	146.30	291,982
Sep-30	0	0	0	0	0	0	0	3,677	0	84,310	0	146.30	291,982
Oct-30	0	0	0	0	0	0	0	0	0	16,466	0	146.30	291,982
Nov-30	0	0	0	0	0	0	0	0	0	15,933	0	146.30	291,982
Dec-30	0	0	0	0	0	0	0	0	0	16,462	0	146.30	291,982
Jan-31	0	0	0	0	0	0	0	0	0	16,460	0	146.30	291,982
Feb-31	0	0	0	0	0	0	0	0	0	14,865	0	146.30	291,982
Mar-31	0	0	0	0	0	0	0	0	0	16,456	0	146.30	291,982
Apr-31	0	0	0	0	0	0	0	0	0	15,923	0	146.30	291,982
May-31	0	0	0	0	0	0	0	0	0	16,451	0	146.30	291,982
Jun-31	0	0	0	0	0	0	0	827	0	237,574	0	146.30	291,982
Jul-31	0	0	0	0	0	0	0	9,404	0	34,611	0	146.30	291,982
Aug-31	0	0	0	0	0	0	0	9,499	0	44,814	0	146.30	291,982
Sep-31	0	0	0	0	0	0	0	3,677	0	83,855	0	146.30	291,982
Oct-31	0	0	0	0	0	0	0	0	0	16,006	0	146.30	291,982
Nov-31	0	0	0	0	0	0	0	0	0	15,488	0	146.30	291,982
Dec-31	0	0	0	0	0	0	0	0	0	16,002	0	146.30	291,982
Jan-32	0	0	0	0	0	0	0	0	0	16,000	0	146.30	291,982
Feb-32	0	0	0	0	0	0	0	0	0	14,966	0	146.30	291,982
Mar-32	0	0	0	0	0	0	0	0	0	15,997	0	146.30	291,982
Apr-32	0	0	0	0	0	0	0	0	0	15,479	0	146.30	291,982
May-32	0	0	0	0	0	0	0	0	0	15,993	0	146.30	291,982
Jun-32	0	0	0	0	0	0	0	827	0	237,204	0	146.30	291,982
Jul-32	0	0	0	0	0	0	0	9,404	0	34,220	0	146.30	291,982
Aug-32	0	0	0	0	0	0	0	9,499	0	44,426	0	146.30	291,982
Sep-32	0	0	0	0	0	0	0	3,677	0	83,493	0	146.30	291,982
Oct-32	0	0	0	0	0	0	0	0	0	15,645	0	146.30	291,982
Nov-32	0	0	0	0	0	0	0	0	0	15,139	0	146.30	291,982

Date	Outflow (m^3/mon)											Water Level (masl)	Storage (m^3)
	Lake A16 (Mammoth Lake)	Dewatering to Whale Tail Lake (South Basin) bypass C-WTP	Dewatering to Whale Tail Lake (South Basin) through C-WTP	O-WTP	S-WTP (Brackish)	IVR Attenuation Pond	Groundwater	Evaporation	Drawdown to WT Pit	WTN to Pits	GSP (Brine)		
Dec-32	0	0	0	0	0	0	0	0	0	15,642	0	146.30	291,982
Jan-33	0	0	0	0	0	0	0	0	0	15,641	0	146.30	291,982
Feb-33	0	0	0	0	0	0	0	0	0	14,126	0	146.30	291,982
Mar-33	0	0	0	0	0	0	0	0	0	15,638	0	146.30	291,982
Apr-33	0	0	0	0	0	0	0	0	0	15,132	0	146.30	291,982
May-33	0	0	0	0	0	0	0	0	0	15,635	0	146.30	291,982
Jun-33	0	0	0	0	0	0	0	827	0	236,849	0	146.30	291,982
Jul-33	0	0	0	0	0	0	0	9,404	0	33,946	0	146.30	291,982
Aug-33	0	0	0	0	0	0	0	9,499	0	44,154	0	146.30	291,982
Sep-33	0	0	0	0	0	0	0	3,677	0	83,236	0	146.30	291,982
Oct-33	0	0	0	0	0	0	0	0	0	15,388	0	146.30	291,982
Nov-33	0	0	0	0	0	0	0	0	0	14,890	0	146.30	291,982
Dec-33	0	0	0	0	0	0	0	0	0	15,385	0	146.30	291,982
Jan-34	0	0	0	0	0	0	0	0	0	15,384	0	146.30	291,982
Feb-34	0	0	0	0	0	0	0	0	0	13,894	0	146.30	291,982
Mar-34	0	0	0	0	0	0	0	0	0	15,382	0	146.30	291,982
Apr-34	0	0	0	0	0	0	0	0	0	14,885	0	146.30	291,982
May-34	0	0	0	0	0	0	0	0	0	15,380	0	146.30	291,982
Jun-34	0	0	0	0	0	0	0	827	0	236,587	0	146.30	291,982
Jul-34	0	0	0	0	0	0	0	9,404	0	33,513	0	146.30	291,982
Aug-34	0	0	0	0	0	0	0	9,499	0	43,701	0	146.30	291,982
Sep-34	0	0	0	0	0	0	0	3,677	0	82,719	0	146.30	291,982
Oct-34	0	0	0	0	0	0	0	0	0	14,773	0	146.30	291,982
Nov-34	0	0	0	0	0	0	0	0	0	14,291	0	146.30	291,982
Dec-34	0	0	0	0	0	0	0	0	0	14,761	0	146.30	291,982
Jan-35	0	0	0	0	0	0	0	0	0	14,755	0	146.30	291,982
Feb-35	0	0	0	0	0	0	0	0	0	13,321	0	146.30	291,982
Mar-35	0	0	0	0	0	0	0	0	0	14,743	0	146.30	291,982
Apr-35	0	0	0	0	0	0	0	0	0	14,261	0	146.30	291,982
May-35	0	0	0	0	0	0	0	0	0	14,730	0	146.30	291,982
Jun-35	0	0	0	0	0	0	3,120	827	0	232,659	0	146.30	291,982
Jul-35	0	0	0	0	0	0	8,234	9,404	0	24,192	0	146.30	291,982
Aug-35	0	0	0	0	0	0	8,728	9,499	0	33,841	0	146.30	291,982
Sep-35	0	0	0	0	0	0	10,250	3,677	0	71,217	0	146.30	291,982
Oct-35	0	0	0	0	0	0	12,353	0	0	976	0	146.30	291,982
Nov-35	0	0	0	0	0	0	12,059	0	0	824	0	146.30	291,982
Dec-35	0	0	0	0	0	0	12,566	0	0	731	0	146.30	291,982
Jan-36	0	0	0	0	0	0	12,673	0	0	609	0	146.30	291,982
Feb-36	0	0	0	0	0	0	11,952	0	0	458	0	146.30	291,982
Mar-36	0	0	0	0	0	0	12,880	0	0	372	0	146.30	291,982
Apr-36	0	0	0	0	0	0	12,566	0	0	243	0	146.30	291,982
May-36	0	0	0	0	0	0	13,090	0	0	131	0	146.30	291,982
Jun-36	0	0	0	0	0	0	16,767	827	0	217,259	0	146.30	291,982
Jul-36	0	0	0	0	0	0	18,924	9,404	0	11,788	0	146.30	291,982
Aug-36	0	0	0	0	0	0	18,767	9,499	0	22,163	0	146.30	291,982

Date	Outflow (m^3/mon)											Water Level (masl)	Storage (m^3)
	Lake A16 (Mammoth Lake)	Dewatering to Whale Tail Lake (South Basin) bypass C-WTP	Dewatering to Whale Tail Lake (South Basin) through C-WTP	O-WTP	S-WTP (Brackish)	IVR Attenuation Pond	Groundwater	Evaporation	Drawdown to WT Pit	WTN to Pits	GSP (Brine)		
Sep-36	0	0	0	0	0	0	17,568	3,677	0	62,590	0	146.30	291,982
Oct-36	0	0	0	0	0	0	17,566	0	0	0	0	146.24	286,663
Nov-36	0	0	0	0	0	0	16,961	0	0	0	0	146.19	281,555
Dec-36	0	0	0	0	0	0	17,488	0	0	0	0	146.13	276,316
Jan-37	0	0	0	0	0	0	17,449	0	0	0	0	146.07	271,118
Feb-37	0	0	0	0	0	0	15,726	0	0	0	0	146.01	266,456
Mar-37	0	0	0	0	0	0	17,374	0	0	0	0	145.95	261,334
Apr-37	0	0	0	0	0	0	16,777	0	0	0	0	145.88	256,414
May-37	0	0	0	0	0	0	17,297	0	0	0	0	145.81	251,370
Jun-37	0	0	0	0	0	0	15,228	809	0	177,869	0	146.30	291,982
Jul-37	0	0	0	0	0	0	13,682	9,404	0	17,165	0	146.30	291,982
Aug-37	0	0	0	0	0	0	13,224	9,499	0	27,885	0	146.30	291,982
Sep-37	0	0	0	0	0	0	11,010	3,677	0	69,487	0	146.30	291,982
Oct-37	0	0	0	0	0	0	9,615	0	0	3,147	0	146.30	291,982
Nov-37	0	0	0	0	0	0	9,213	0	0	3,146	0	146.30	291,982
Dec-37	0	0	0	0	0	0	9,428	0	0	3,353	0	146.30	291,982
Jan-38	0	0	0	0	0	0	9,334	0	0	3,456	0	146.30	291,982
Feb-38	0	0	0	0	0	0	8,350	0	0	3,210	0	146.30	291,982
Mar-38	0	0	0	0	0	0	9,159	0	0	3,649	0	146.30	291,982
Apr-38	0	0	0	0	0	0	8,780	0	0	3,623	0	146.30	291,982
May-38	0	0	0	0	0	0	8,986	0	0	3,839	0	146.30	291,982
Jun-38	0	0	0	0	0	0	4,304	827	0	230,355	0	146.30	291,982
Jul-38	0	0	0	0	0	0	0	9,404	0	32,254	0	146.30	291,982
Aug-38	0	0	0	0	0	0	0	9,499	0	42,477	0	146.30	291,982
Sep-38	0	0	0	0	0	0	0	3,677	0	81,670	0	146.30	291,982
Oct-38	0	0	0	0	0	0	0	0	0	13,823	0	146.30	291,982
Nov-38	0	0	0	0	0	0	0	0	0	13,378	0	146.30	291,982
Dec-38	0	0	0	0	0	0	0	0	0	13,825	0	146.30	291,982
Jan-39	0	0	0	0	0	0	0	0	0	13,827	0	146.30	291,982
Feb-39	0	0	0	0	0	0	0	0	0	12,489	0	146.30	291,982
Mar-39	0	0	0	0	0	0	0	0	0	13,829	0	146.30	291,982
Apr-39	0	0	0	0	0	0	0	0	0	13,384	0	146.30	291,982
May-39	0	0	0	0	0	0	0	0	0	13,831	0	146.30	291,982
Jun-39	0	0	0	0	0	0	0	827	0	235,209	0	146.30	291,982
Jul-39	0	0	0	0	0	0	0	9,404	0	30,601	0	146.30	291,982
Aug-39	0	0	0	0	0	0	0	9,499	0	40,348	0	146.30	291,982
Sep-39	0	0	0	0	0	0	0	3,677	0	77,617	0	146.30	291,982
Oct-39	0	0	0	0	0	0	0	0	0	7,677	0	146.30	291,982
Nov-39	0	0	0	0	0	0	0	0	0	7,399	0	146.30	291,982
Dec-39	0	0	0	0	0	0	0	0	0	7,618	0	146.30	291,982
Jan-40	0	0	0	0	0	0	0	0	0	7,589	0	146.30	291,982
Feb-40	0	0	0	0	0	0	0	0	0	7,074	0	146.30	291,982
Mar-40	0	0	0	0	0	0	0	0	0	7,535	0	146.30	291,982
Apr-40	0	0	0	0	0	0	0	0	0	7,265	0	146.30	291,982
May-40	0	0	0	0	0	0	0	0	0	7,479	0	146.30	291,982

Date	Outflow (m^3/mon)											Water Level (masl)	Storage (m^3)
	Lake A16 (Mammoth Lake)	Dewatering to Whale Tail Lake (South Basin) bypass C-WTP	Dewatering to Whale Tail Lake (South Basin) through C-WTP	O-WTP	S-WTP (Brackish)	IVR Attenuation Pond	Groundwater	Evaporation	Drawdown to WT Pit	WTN to Pits	GSP (Brine)		
Jun-40	0	0	0	0	0	0	0	5,183	167	48,088	0	149.70	2,726,015
Jul-40	0	0	0	0	0	0	0	106,324	139	0	0	149.74	2,768,487
Aug-40	0	0	0	0	0	0	0	107,817	134	0	0	149.90	2,940,131
Sep-40	0	0	0	0	0	0	0	42,866	106	0	0	150.70	3,807,479
Oct-40	0	0	0	0	0	0	0	0	90	0	0	150.70	3,811,528
Nov-40	0	0	0	0	0	0	0	0	87	0	0	150.71	3,812,968
Dec-40	0	0	0	0	0	0	0	0	90	0	0	150.71	3,814,455
Jan-41	0	0	0	0	0	0	0	0	90	0	0	150.71	3,815,941
Feb-41	0	0	0	0	0	0	0	0	81	0	0	150.71	3,817,282
Mar-41	0	0	0	0	0	0	0	0	89	0	0	150.71	3,818,766
Apr-41	0	0	0	0	0	0	0	0	87	0	0	150.71	3,820,201
May-41	0	0	0	0	0	0	0	0	89	0	0	150.71	3,821,683
Jun-41	0	0	0	0	0	0	121	10,607	30	0	0	153.29	6,904,887
Jul-41	0	0	0	0	0	0	319	128,917	0	0	0	153.31	6,933,737
Aug-41	0	0	0	0	0	0	319	130,759	0	0	0	153.44	7,093,233
Sep-41	757,031	0	0	0	0	0	243	50,964	27	0	0	153.50	7,171,781

Table D-11: Mean Annual Water Balance (IVR Pit)

Date	Inflow (m^3/mon)								Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Drilling Water	Ground-water	Whale Tail WRSF Runoff	IVR Diversion	Whale Tail Lake (South Basin) Drawdown	Whale Tail Lake (South Basin) Overflow	WT WRSF	Natural / Direct Runoff	Whale Tail Attenuation Pond	IVR Attenuation Pond	Evaporation	Water Retention in Ore to Meadow-bank	Overflow to WT Pit	Overflow to WT North		
Jan-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Feb-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mar-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Apr-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jun-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jul-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aug-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sep-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oct-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nov-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dec-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jan-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Feb-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mar-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Apr-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jun-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jul-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aug-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sep-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oct-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nov-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dec-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jan-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Feb-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mar-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Apr-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jun-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jul-20	2,976	0	0	0	0	0	0	13,243	14,727	0	53	1,439	0	0	130.2	1,000
Aug-20	2,976	0	0	0	0	0	0	18,479	19,962	0	54	1,439	0	0	130.2	1,000
Sep-20	2,880	0	0	0	0	0	0	36,144	37,656	0	21	1,348	0	0	130.2	1,000
Oct-20	2,976	0	0	0	0	0	0	0	1,537	0	0	1,439	0	0	130.2	1,000
Nov-20	2,880	0	0	0	0	0	0	0	1,532	0	0	1,348	0	0	130.2	1,000
Dec-20	2,976	0	0	0	0	0	0	0	1,537	0	0	1,439	0	0	122.1	1,000
Jan-21	2,976	0	0	0	0	0	0	0	1,222	0	0	1,754	0	0	122.1	1,000
Feb-21	2,688	0	0	0	0	0	0	0	1,257	0	0	1,431	0	0	122.1	1,000
Mar-21	2,976	0	0	0	0	0	0	0	1,222	0	0	1,754	0	0	122.1	1,000
Apr-21	2,880	0	0	0	0	0	0	0	1,237	0	0	1,643	0	0	122.1	1,000
May-21	2,976	0	0	0	0	0	0	0	1,222	0	0	1,754	0	0	122.1	1,000
Jun-21	2,880	0	2,731	0	0	0	0	107,324	111,284	0	9	1,643	0	0	122.1	1,000
Jul-21	2,976	0	379	0	0	0	0	12,501	14,000	0	102	1,754	0	0	122.1	1,000
Aug-21	2,976	0	612	0	0	0	0	17,270	19,002	0	103	1,754	0	0	122.1	1,000

Date	Inflow (m^3/mon)								Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Drilling Water	Ground-water	Whale Tail WRSF Runoff	IVR Diversion	Whale Tail Lake (South Basin) Drawdown	Whale Tail Lake (South Basin) Overflow	WT WRSF	Natural / Direct Runoff	Whale Tail Attenuation Pond	IVR Attenuation Pond	Evaporation	Water Retention in Ore to Meadow-bank	Overflow to WT Pit	Overflow to WT North		
Sep-21	2,880	0	1,359	0	0	0	0	33,433	35,989	0	40	1,643	0	0	122.1	1,000
Oct-21	2,976	0	0	0	0	0	0	0	1,222	0	0	1,754	0	0	122.1	1,000
Nov-21	2,880	0	0	0	0	0	0	0	1,237	0	0	1,643	0	0	122.1	1,000
Dec-21	2,976	0	0	0	0	0	0	0	1,222	0	0	1,754	0	0	74.3	1,000
Jan-22	2,976	0	0	0	0	0	0	0	1,222	0	0	1,754	0	0	74.3	1,000
Feb-22	2,688	0	0	0	0	0	0	0	1,257	0	0	1,431	0	0	74.3	1,000
Mar-22	2,976	0	0	0	0	0	0	0	1,222	0	0	1,754	0	0	74.3	1,000
Apr-22	2,880	0	0	0	0	0	0	0	1,237	0	0	1,643	0	0	74.3	1,000
May-22	2,976	0	0	0	0	0	0	0	1,222	0	0	1,754	0	0	74.3	1,000
Jun-22	2,880	0	5,987	0	0	0	0	100,812	0	108,031	5	1,643	0	0	74.3	1,000
Jul-22	2,976	0	702	0	0	0	0	11,839	0	13,709	54	1,754	0	0	74.3	1,000
Aug-22	2,976	0	980	0	0	0	0	16,519	0	18,667	54	1,754	0	0	74.3	1,000
Sep-22	2,880	0	1,918	0	0	0	0	32,308	0	35,442	21	1,643	0	0	74.3	1,000
Oct-22	2,976	0	0	0	0	0	0	0	0	1,222	0	1,754	0	0	74.3	1,000
Nov-22	2,880	0	0	0	0	0	0	0	0	1,237	0	1,643	0	0	74.3	1,000
Dec-22	2,976	0	0	0	0	0	0	0	0	1,222	0	1,754	0	0	58.6	1,000
Jan-23	2,976	0	0	0	0	0	0	0	0	1,222	0	1,754	0	0	58.6	1,000
Feb-23	2,688	0	0	0	0	0	0	0	0	1,257	0	1,431	0	0	58.6	1,000
Mar-23	2,976	0	0	0	0	0	0	0	0	1,222	0	1,754	0	0	58.6	1,000
Apr-23	2,880	0	0	0	0	0	0	0	0	1,237	0	1,643	0	0	58.6	1,000
May-23	2,976	0	0	0	0	0	0	0	0	1,222	0	1,754	0	0	58.6	1,000
Jun-23	2,880	0	5,987	0	0	0	0	100,812	0	108,031	4	1,643	0	0	58.6	1,000
Jul-23	2,976	0	702	0	0	0	0	11,838	0	13,711	51	1,754	0	0	58.6	1,000
Aug-23	2,976	0	980	0	0	0	0	16,518	0	18,669	51	1,754	0	0	58.6	1,000
Sep-23	2,880	0	1,918	0	0	0	0	32,308	0	35,443	20	1,643	0	0	58.6	1,000
Oct-23	2,976	0	0	0	0	0	0	0	0	1,222	0	1,754	0	0	58.6	1,000
Nov-23	2,880	0	0	0	0	0	0	0	0	1,237	0	1,643	0	0	58.6	1,000
Dec-23	2,976	0	0	0	0	0	0	0	0	1,222	0	1,754	0	0	58.6	1,000
Jan-24	2,976	0	0	0	0	0	0	0	0	1,222	0	1,754	0	0	58.6	1,000
Feb-24	2,784	0	0	0	0	0	0	0	0	1,249	0	1,535	0	0	58.6	1,000
Mar-24	2,976	0	0	0	0	0	0	0	0	1,222	0	1,754	0	0	58.6	1,000
Apr-24	2,880	0	0	0	0	0	0	0	0	1,237	0	1,643	0	0	58.6	1,000
May-24	2,976	0	0	0	0	0	0	0	0	1,222	0	1,754	0	0	58.6	1,000
Jun-24	2,880	0	5,988	0	0	0	0	100,832	0	108,053	4	1,643	0	0	58.6	1,000
Jul-24	2,976	0	702	0	0	0	0	11,838	0	13,711	51	1,754	0	0	58.6	1,000
Aug-24	2,976	0	980	0	0	0	0	16,518	0	18,669	51	1,754	0	0	58.6	1,000
Sep-24	2,880	0	1,918	0	0	0	0	32,308	0	35,443	20	1,643	0	0	58.6	1,000
Oct-24	2,976	0	0	0	0	0	0	0	0	1,222	0	1,754	0	0	58.6	1,000
Nov-24	2,880	0	0	0	0	0	0	0	0	1,237	0	1,643	0	0	58.6	1,000
Dec-24	2,976	0	0	0	0	0	0	0	0	1,222	0	1,754	0	0	46.3	1,000
Jan-25	2,976	0	0	0	0	0	0	0	0	1,222	0	1,754	0	0	46.3	1,000
Feb-25	2,688	0	0	0	0	0	0	0	0	1,257	0	1,431	0	0	46.3	1,000
Mar-25	2,976	0	0	0	0	0	0	0	0	1,222	0	1,754	0	0	46.3	1,000
Apr-25	2,880	0	0	0	0	0	0	0	0	1,237	0	1,643	0	0	46.3	1,000
May-25	2,976	0	0	0	0	0	0	0	0	1,222	0	1,754	0	0	46.3	1,000

Date	Inflow (m^3/mon)								Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Drilling Water	Ground-water	Whale Tail WRSF Runoff	IVR Diversion	Whale Tail Lake (South Basin) Drawdown	Whale Tail Lake (South Basin) Overflow	WT WRSF	Natural / Direct Runoff	Whale Tail Attenuation Pond	IVR Attenuation Pond	Evaporation	Water Retention in Ore to Meadow-bank	Overflow to WT Pit	Overflow to WT North		
Jun-25	2,880	0	5,987	0	0	0	0	100,811	0	108,033	2	1,643	0	0	46.3	1,000
Jul-25	2,976	0	702	0	0	0	0	11,830	0	13,728	26	1,754	0	0	46.3	1,000
Aug-25	2,976	0	980	0	0	0	0	16,510	0	19,422	26	1,018	0	0	46.3	1,000
Sep-25	2,880	0	1,918	0	0	0	0	32,304	0	37,093	10	0	0	0	46.3	1,000
Oct-25	2,976	0	0	0	0	0	0	0	0	2,976	0	0	0	0	46.3	1,000
Nov-25	2,880	0	0	0	0	0	0	0	0	2,880	0	0	0	0	46.3	1,000
Dec-25	2,976	0	0	0	0	0	0	0	0	2,976	0	0	0	0	46.3	1,000
Jan-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46.3	1,000
Feb-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46.3	1,000
Mar-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46.3	1,000
Apr-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46.3	1,000
May-26	0	0	0	0	619,468	0	0	0	0	0	0	0	0	0	82.3	620,468
Jun-26	0	0	8,381	68,589	1,350,000	0	90,179	101,011	0	0	604	0	0	0	106.8	2,238,025
Jul-26	0	0	983	8,043	1,395,000	0	10,574	15,764	0	0	12,197	0	0	0	118.8	3,656,192
Aug-26	0	0	1,372	11,228	1,395,000	0	14,761	21,536	0	0	15,731	0	0	0	127.9	5,084,357
Sep-26	0	0	2,686	21,977	1,350,000	0	28,894	34,766	0	0	7,584	0	0	0	134.9	6,515,096
Oct-26	0	0	0	0	1,395,000	0	0	0	0	0	0	0	0	0	141.0	7,910,096
Nov-26	0	0	0	0	45,000	0	0	0	0	0	0	0	0	0	141.2	7,955,096
Dec-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	141.2	7,955,096
Jan-27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	141.2	7,955,096
Feb-27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	141.2	7,955,096
Mar-27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	141.2	7,955,096
Apr-27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	141.2	7,955,096
May-27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	141.2	7,955,096
Jun-27	0	0	8,381	68,589	0	2,085,087	90,179	101,598	0	0	2,364	0	199,060	0	149.3	10,107,506
Jul-27	0	0	983	8,043	0	85,134	10,574	21,527	0	0	30,026	0	96,235	0	149.3	10,107,506
Aug-27	0	0	1,372	11,228	0	101,733	14,761	26,207	0	0	30,330	0	124,971	0	149.3	10,107,506
Sep-27	0	0	2,686	21,977	0	620,535	28,894	36,117	0	0	11,740	0	698,468	0	149.3	10,107,506
Oct-27	0	0	0	0	0	21,276	0	0	0	0	0	0	21,276	0	149.3	10,107,506
Nov-27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Dec-27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jan-28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Feb-28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Mar-28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Apr-28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
May-28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jun-28	0	0	8,383	68,603	0	2,162,685	90,198	101,712	0	0	2,642	0	2,428,939	0	149.3	10,107,506
Jul-28	0	0	983	8,043	0	85,060	10,574	21,527	0	0	30,026	0	96,161	0	149.3	10,107,506
Aug-28	0	0	1,372	11,228	0	101,648	14,761	26,207	0	0	30,330	0	124,886	0	149.3	10,107,506
Sep-28	0	0	2,686	21,977	0	620,470	28,894	36,117	0	0	11,740	0	698,403	0	149.3	10,107,506
Oct-28	0	0	0	0	0	21,274	0	0	0	0	0	0	21,274	0	149.3	10,107,506
Nov-28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Dec-28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jan-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Feb-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506

Date	Inflow (m^3/mon)								Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Drilling Water	Ground-water	Whale Tail WRSF Runoff	IVR Diversion	Whale Tail Lake (South Basin) Drawdown	Whale Tail Lake (South Basin) Overflow	WT WRSF	Natural / Direct Runoff	Whale Tail Attenuation Pond	IVR Attenuation Pond	Evaporation	Water Retention in Ore to Meadow-bank	Overflow to WT Pit	Overflow to WT North		
Mar-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Apr-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
May-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jun-29	0	0	8,381	68,589	0	2,162,204	90,179	101,691	0	0	2,642	0	2,428,403	0	149.3	10,107,506
Jul-29	0	0	983	8,043	0	85,027	10,574	21,527	0	0	30,026	0	96,128	0	149.3	10,107,506
Aug-29	0	0	1,372	11,228	0	101,632	14,761	26,207	0	0	30,330	0	124,870	0	149.3	10,107,506
Sep-29	0	0	2,686	21,977	0	620,457	28,894	36,117	0	0	11,740	0	698,390	0	149.3	10,107,506
Oct-29	0	0	0	0	0	21,274	0	0	0	0	0	0	21,274	0	149.3	10,107,506
Nov-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Dec-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jan-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Feb-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Mar-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Apr-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
May-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jun-30	0	0	8,381	68,589	0	2,162,200	90,179	101,691	0	0	2,642	0	2,428,399	0	149.3	10,107,506
Jul-30	0	0	983	8,043	0	85,020	10,574	21,527	0	0	30,026	0	96,120	0	149.3	10,107,506
Aug-30	0	0	1,372	11,228	0	101,624	14,761	26,207	0	0	30,330	0	124,862	0	149.3	10,107,506
Sep-30	0	0	2,686	21,977	0	620,445	28,894	36,117	0	0	11,740	0	698,378	0	149.3	10,107,506
Oct-30	0	0	0	0	0	21,273	0	0	0	0	0	0	21,273	0	149.3	10,107,506
Nov-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Dec-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jan-31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Feb-31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Mar-31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Apr-31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
May-31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jun-31	0	0	8,381	68,589	0	2,162,177	90,179	101,691	0	0	2,642	0	2,428,375	0	149.3	10,107,506
Jul-31	0	0	983	8,043	0	84,996	10,574	21,527	0	0	30,026	0	96,097	0	149.3	10,107,506
Aug-31	0	0	1,372	11,228	0	101,601	14,761	26,207	0	0	30,330	0	124,839	0	149.3	10,107,506
Sep-31	0	0	2,686	21,977	0	620,427	28,894	36,117	0	0	11,740	0	698,360	0	149.3	10,107,506
Oct-31	0	0	0	0	0	21,273	0	0	0	0	0	0	21,273	0	149.3	10,107,506
Nov-31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Dec-31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jan-32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Feb-32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Mar-32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Apr-32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
May-32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jun-32	0	0	8,383	68,603	0	2,162,627	90,198	101,712	0	0	2,642	0	2,428,881	0	149.3	10,107,506
Jul-32	0	0	983	8,043	0	85,005	10,574	21,527	0	0	30,026	0	96,106	0	149.3	10,107,506
Aug-32	0	0	1,372	11,228	0	101,593	14,761	26,207	0	0	30,330	0	124,831	0	149.3	10,107,506
Sep-32	0	0	2,686	21,977	0	620,415	28,894	36,117	0	0	11,740	0	698,348	0	149.3	10,107,506
Oct-32	0	0	0	0	0	21,272	0	0	0	0	0	0	21,272	0	149.3	10,107,506
Nov-32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506

Date	Inflow (m^3/mon)								Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Drilling Water	Ground-water	Whale Tail WRSF Runoff	IVR Diversion	Whale Tail Lake (South Basin) Drawdown	Whale Tail Lake (South Basin) Overflow	WT WRSF	Natural / Direct Runoff	Whale Tail Attenuation Pond	IVR Attenuation Pond	Evaporation	Water Retention in Ore to Meadow-bank	Overflow to WT Pit	Overflow to WT North		
Dec-32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jan-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Feb-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Mar-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Apr-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
May-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jun-33	0	0	8,381	68,589	0	2,162,146	90,179	101,691	0	0	2,642	0	2,428,345	0	149.3	10,107,506
Jul-33	0	0	983	8,043	0	84,955	10,574	21,527	0	0	30,026	0	96,055	0	149.3	10,107,506
Aug-33	0	0	1,372	11,228	0	101,559	14,761	26,207	0	0	30,330	0	124,797	0	149.3	10,107,506
Sep-33	0	0	2,686	21,977	0	620,383	28,894	36,117	0	0	11,740	0	698,316	0	149.3	10,107,506
Oct-33	0	0	0	0	0	21,271	0	0	0	0	0	0	21,271	0	149.3	10,107,506
Nov-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Dec-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jan-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Feb-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Mar-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Apr-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
May-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jun-34	0	0	8,381	68,589	0	2,162,119	90,179	101,691	0	0	2,642	0	2,428,318	0	149.3	10,107,506
Jul-34	0	0	983	8,043	0	84,926	10,574	21,527	0	0	30,026	0	96,027	0	149.3	10,107,506
Aug-34	0	0	1,372	11,228	0	101,531	14,761	26,207	0	0	30,330	0	124,769	0	149.3	10,107,506
Sep-34	0	0	2,686	21,977	0	620,356	28,894	36,117	0	0	11,740	0	698,289	0	149.3	10,107,506
Oct-34	0	0	0	0	0	21,270	0	0	0	0	0	0	21,270	0	149.3	10,107,506
Nov-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Dec-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jan-35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Feb-35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Mar-35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Apr-35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
May-35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jun-35	0	0	8,381	68,589	0	2,162,095	90,179	101,691	0	0	2,642	0	2,428,293	0	149.3	10,107,506
Jul-35	0	0	983	8,043	0	84,878	10,574	21,527	0	0	30,026	0	95,979	0	149.3	10,107,506
Aug-35	0	0	1,372	11,228	0	101,477	14,761	26,207	0	0	30,330	0	124,715	0	149.3	10,107,506
Sep-35	0	0	2,686	21,977	0	620,283	29,244	36,117	0	0	11,740	0	698,566	0	149.3	10,107,506
Oct-35	0	0	0	0	0	21,267	0	0	0	0	0	0	21,267	0	149.3	10,107,506
Nov-35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Dec-35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jan-36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Feb-36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Mar-36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Apr-36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
May-36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jun-36	0	0	10,583	68,603	0	2,162,408	117,685	101,712	0	0	2,642	0	2,458,349	0	149.3	10,107,506
Jul-36	0	0	1,404	8,043	0	84,733	13,796	21,527	0	0	30,026	0	99,478	0	149.3	10,107,506
Aug-36	0	0	1,960	11,228	0	101,322	19,259	26,207	0	0	30,330	0	129,647	0	149.3	10,107,506

Date	Inflow (m^3/mon)								Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Drilling Water	Ground-water	Whale Tail WRSF Runoff	IVR Diversion	Whale Tail Lake (South Basin) Drawdown	Whale Tail Lake (South Basin) Overflow	WT WRSF	Natural / Direct Runoff	Whale Tail Attenuation Pond	IVR Attenuation Pond	Evaporation	Water Retention in Ore to Meadow-bank	Overflow to WT Pit	Overflow to WT North		
Sep-36	0	0	3,836	21,977	0	620,157	37,700	36,117	0	0	11,740	0	708,046	0	149.3	10,107,506
Oct-36	0	0	0	0	0	21,264	0	0	0	0	0	0	21,264	0	149.3	10,107,506
Nov-36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Dec-36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jan-37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Feb-37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Mar-37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Apr-37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
May-37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jun-37	0	0	11,974	68,589	0	2,161,920	117,661	101,691	0	0	2,642	0	2,459,193	0	149.3	10,107,506
Jul-37	0	0	1,404	8,043	0	84,718	13,796	21,527	0	0	30,026	0	99,462	0	149.3	10,107,506
Aug-37	0	0	1,960	11,228	0	101,327	19,259	26,207	0	0	30,330	0	129,652	0	149.3	10,107,506
Sep-37	0	0	3,836	21,977	0	620,177	37,700	36,117	0	0	11,740	0	708,067	0	149.3	10,107,506
Oct-37	0	0	0	0	0	21,265	0	0	0	0	0	0	21,265	0	149.3	10,107,506
Nov-37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Dec-37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jan-38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Feb-38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Mar-38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Apr-38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
May-38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jun-38	0	0	11,974	68,589	0	2,161,997	117,661	101,691	0	0	2,642	0	2,459,270	0	149.3	10,107,506
Jul-38	0	0	1,404	8,043	0	84,939	13,796	21,527	0	0	30,026	0	99,684	0	149.3	10,107,506
Aug-38	0	0	1,960	11,228	0	101,575	19,259	26,207	0	0	30,330	0	129,900	0	149.3	10,107,506
Sep-38	0	0	3,836	21,977	0	620,519	37,700	36,117	0	0	11,740	0	708,408	0	149.3	10,107,506
Oct-38	0	0	0	0	0	21,279	0	0	0	0	0	0	21,279	0	149.3	10,107,506
Nov-38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Dec-38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jan-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Feb-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Mar-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Apr-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
May-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jun-39	0	0	11,974	68,589	0	2,161,997	117,661	101,691	0	0	2,642	0	2,459,982	0	149.3	10,107,506
Jul-39	0	0	1,404	8,043	0	84,939	13,796	21,527	0	0	30,026	0	102,812	0	149.3	10,107,506
Aug-39	0	0	1,960	11,228	0	101,575	19,259	26,207	0	0	30,330	0	133,549	0	149.3	10,107,506
Sep-39	0	0	3,836	21,977	0	620,519	37,700	36,117	0	0	11,740	0	714,071	0	149.3	10,107,506
Oct-39	0	0	0	0	0	21,279	0	0	0	0	0	0	21,533	0	149.3	10,107,506
Nov-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Dec-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jan-40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Feb-40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Mar-40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Apr-40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
May-40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506

Date	Inflow (m^3/mon)								Outflow (m^3/mon)						Water Surface Elevation (masl)	Storage (m^3)
	Drilling Water	Ground-water	Whale Tail WRSF Runoff	IVR Diversion	Whale Tail Lake (South Basin) Drawdown	Whale Tail Lake (South Basin) Overflow	WT WRSF	Natural / Direct Runoff	Whale Tail Attenuation Pond	IVR Attenuation Pond	Evaporation	Water Retention in Ore to Meadow-bank	Overflow to WT Pit	Overflow to WT North		
Jun-40	0	0	11,974	68,603	0	2,251,446	117,685	97,337	0	0	2,289	0	475,142	1,723,190	149.3	10,107,506
Jul-40	0	0	1,404	8,043	0	23,801	13,796	8,060	0	0	0	0	0	0	149.3	10,107,506
Aug-40	0	0	1,960	11,228	0	118,895	19,259	11,239	0	0	0	0	0	0	149.3	10,107,506
Sep-40	0	0	3,836	21,977	0	649,271	37,700	21,894	0	0	0	0	0	0	149.3	10,107,506
Oct-40	0	0	0	0	0	2,556	0	0	0	0	0	0	0	0	149.3	10,107,506
Nov-40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Dec-40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jan-41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Feb-41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Mar-41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Apr-41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
May-41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jun-41	0	0	11,974	68,589	0	2,313,442	117,661	0	0	0	0	0	0	0	149.3	10,107,506
Jul-41	0	0	1,404	8,043	0	25,392	13,796	0	0	0	0	0	0	0	149.3	10,107,506
Aug-41	0	0	1,960	11,228	0	121,272	19,259	0	0	0	0	0	0	0	149.3	10,107,506
Sep-41	0	0	3,836	21,977	0	653,473	3,475	0	0	0	0	0	0	0	149.3	10,107,506
Oct-41	0	0	0	0	0	21,843	0	0	0	0	0	0	0	0	149.3	10,107,506
Nov-41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Dec-41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jan-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Feb-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Mar-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Apr-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
May-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Jun-42	0	0	11,974	68,589	0	2,331,549	0	0	0	0	0	0	0	0	149.3	10,107,506
Jul-42	0	0	1,404	8,043	0	102,666	0	0	0	0	0	0	0	0	149.3	10,107,506
Aug-42	0	0	1,960	11,228	0	119,271	0	0	0	0	0	0	0	0	149.3	10,107,506
Sep-42	0	0	3,836	21,977	0	637,527	0	0	0	0	0	0	0	0	149.3	10,107,506
Oct-42	0	0	0	0	0	21,843	0	0	0	0	0	0	0	0	149.3	10,107,506
Nov-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506
Dec-42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149.3	10,107,506

Table D-12: Mean Annual Water Balance (IVR WRSF)

Date	Inflow (m^3/mon)					Outflow (m^3/mon)					Storage (m^3)
	Rainfall Runoff	SWE Runoff	IVR WRSF Runoff	IVR WRSF Seepage	GSP (Brackish Water)	Whale Tail (North Basin)	Whale Tail Attenuation Pond	North East Sector	IVR Attenuation Pond	Whale Tail Pit	
Jan-18	0	0	0	0	0	0	0	0	0	0	0
Feb-18	0	0	0	0	0	0	0	0	0	0	0
Mar-18	0	0	0	0	0	0	0	0	0	0	0
Apr-18	0	0	0	0	0	0	0	0	0	0	0
May-18	0	0	0	0	0	0	0	0	0	0	0
Jun-18	16,567	34,153	0	0	0	50,719	0	0	0	0	0
Jul-18	5,948	0	0	0	0	5,948	0	0	0	0	0
Aug-18	8,303	0	0	0	0	8,303	0	0	0	0	0
Sep-18	16,251	0	0	0	0	16,251	0	0	0	0	0
Oct-18	0	0	0	0	0	0	0	0	0	0	0
Nov-18	0	0	0	0	0	0	0	0	0	0	0
Dec-18	0	0	0	0	0	0	0	0	0	0	0
Jan-19	0	0	0	0	0	0	0	0	0	0	0
Feb-19	0	0	0	0	0	0	0	0	0	0	0
Mar-19	0	0	0	0	0	0	0	0	0	0	0
Apr-19	0	0	0	0	0	0	0	0	0	0	0
May-19	0	0	0	0	0	0	0	0	0	0	0
Jun-19	16,567	34,153	0	0	0	0	0	50,720	0	0	0
Jul-19	5,948	0	0	0	0	0	0	5,948	0	0	0
Aug-19	8,303	0	0	0	0	0	0	8,303	0	0	0
Sep-19	16,251	0	0	0	0	0	0	16,251	0	0	0
Oct-19	0	0	0	0	0	0	0	0	0	0	0
Nov-19	0	0	0	0	0	0	0	0	0	0	0
Dec-19	0	0	0	0	0	0	0	0	0	0	0
Jan-20	0	0	0	0	0	0	0	0	0	0	0
Feb-20	0	0	0	0	0	0	0	0	0	0	0
Mar-20	0	0	0	0	0	0	0	0	0	0	0
Apr-20	0	0	0	0	0	0	0	0	0	0	0
May-20	0	0	0	0	0	0	0	0	0	0	0
Jun-20	15,560	32,087	1,542	0	0	0	0	49,189	0	0	0
Jul-20	5,520	0	214	0	0	0	5,734	0	0	0	0
Aug-20	7,613	0	345	0	0	0	7,958	0	0	0	0
Sep-20	14,721	0	765	0	0	0	15,486	0	0	0	0
Oct-20	0	0	0	0	0	0	0	0	0	0	0
Nov-20	0	0	0	0	0	0	0	0	0	0	0
Dec-20	0	0	0	0	0	0	0	0	0	0	0
Jan-21	0	0	0	0	0	0	0	0	0	0	0
Feb-21	0	0	0	0	0	0	0	0	0	0	0
Mar-21	0	0	0	0	0	0	0	0	0	0	0
Apr-21	0	0	0	0	0	0	0	0	0	0	0
May-21	0	0	0	0	0	0	0	0	0	0	0
Jun-21	11,596	23,905	7,609	0	0	0	43,110	0	0	0	0
Jul-21	3,981	0	983	0	0	0	4,964	0	0	0	0
Aug-21	5,298	0	1,502	0	0	0	6,800	0	0	0	0
Sep-21	9,873	0	3,189	0	0	0	13,062	0	0	0	0
Oct-21	0	0	0	0	0	0	0	0	0	0	0

Date	Inflow (m^3/mon)					Outflow (m^3/mon)					Storage (m^3)
	Rainfall Runoff	SWE Runoff	IVR WRSF Runoff	IVR WRSF Seepage	GSP (Brackish Water)	Whale Tail (North Basin)	Whale Tail Attenuation Pond	North East Sector	IVR Attenuation Pond	Whale Tail Pit	
Nov-21	0	0	0	0	0	0	0	0	0	0	0
Dec-21	0	0	0	0	0	0	0	0	0	0	0
Jan-22	0	0	0	0	0	0	0	0	0	0	0
Feb-22	0	0	0	0	0	0	0	0	0	0	0
Mar-22	0	0	0	0	0	0	0	0	0	0	0
Apr-22	0	0	0	0	0	0	0	0	0	0	0
May-22	0	0	0	0	0	0	0	0	0	0	0
Jun-22	7,103	14,642	12,666	0	0	0	0	0	34,411	0	0
Jul-22	2,550	0	1,485	0	0	0	0	0	4,035	0	0
Aug-22	3,559	0	2,073	0	0	0	0	0	5,633	0	0
Sep-22	6,967	0	4,058	0	0	0	0	0	11,026	0	0
Oct-22	0	0	0	0	0	0	0	0	0	0	0
Nov-22	0	0	0	0	0	0	0	0	0	0	0
Dec-22	0	0	0	0	0	0	0	0	0	0	0
Jan-23	0	0	0	0	0	0	0	0	0	0	0
Feb-23	0	0	0	0	0	0	0	0	0	0	0
Mar-23	0	0	0	0	0	0	0	0	0	0	0
Apr-23	0	0	0	0	0	0	0	0	0	0	0
May-23	0	0	0	0	0	0	0	0	0	0	0
Jun-23	6,240	12,864	18,407	0	0	0	0	0	37,511	0	0
Jul-23	2,184	0	2,282	0	0	0	0	0	4,465	0	0
Aug-23	2,968	0	3,360	0	0	0	0	0	6,328	0	0
Sep-23	5,654	0	6,915	0	0	0	0	0	12,568	0	0
Oct-23	0	0	0	0	0	0	0	0	0	0	0
Nov-23	0	0	0	0	0	0	0	0	0	0	0
Dec-23	0	0	0	0	0	0	0	0	0	0	0
Jan-24	0	0	0	0	0	0	0	0	0	0	0
Feb-24	0	0	0	0	0	0	0	0	0	0	0
Mar-24	0	0	0	0	0	0	0	0	0	0	0
Apr-24	0	0	0	0	0	0	0	0	0	0	0
May-24	0	0	0	0	0	0	0	0	0	0	0
Jun-24	3,080	6,351	32,564	0	0	0	0	0	41,994	0	0
Jul-24	966	0	3,974	0	0	0	0	0	4,940	0	0
Aug-24	1,151	0	5,769	0	0	0	0	0	6,919	0	0
Sep-24	1,872	0	11,718	0	0	0	0	0	13,590	0	0
Oct-24	0	0	0	0	0	0	0	0	0	0	0
Nov-24	0	0	0	0	0	0	0	0	0	0	0
Dec-24	0	0	0	0	0	0	0	0	0	0	0
Jan-25	0	0	0	0	0	0	0	0	0	0	0
Feb-25	0	0	0	0	0	0	0	0	0	0	0
Mar-25	0	0	0	0	0	0	0	0	0	0	0
Apr-25	0	0	0	0	0	0	0	0	0	0	0
May-25	0	0	0	0	0	0	0	0	0	0	0
Jun-25	552	1,138	41,216	0	0	0	0	0	42,906	0	0
Jul-25	198	0	4,833	0	0	0	0	0	5,031	0	0
Aug-25	277	0	6,747	0	0	0	0	0	7,023	0	0
Sep-25	541	0	13,206	0	0	0	0	0	13,748	0	0

Date	Inflow (m^3/mon)					Outflow (m^3/mon)					Storage (m^3)
	Rainfall Runoff	SWE Runoff	IVR WRSF Runoff	IVR WRSF Seepage	GSP (Brackish Water)	Whale Tail (North Basin)	Whale Tail Attenuation Pond	North East Sector	IVR Attenuation Pond	Whale Tail Pit	
Oct-25	0	0	0	0	0	0	0	0	0	0	0
Nov-25	0	0	0	0	0	0	0	0	0	0	0
Dec-25	0	0	0	0	0	0	0	0	0	0	0
Jan-26	0	0	0	0	0	0	0	0	0	0	0
Feb-26	0	0	0	0	0	0	0	0	0	0	0
Mar-26	0	0	0	0	0	0	0	0	0	0	0
Apr-26	0	0	0	0	0	0	0	0	0	0	0
May-26	0	0	0	0	0	0	0	0	0	0	0
Jun-26	551	1,136	57,704	0	3,522	0	0	0	0	62,913	0
Jul-26	198	0	6,767	0	535	0	0	0	0	7,499	0
Aug-26	276	0	9,446	0	591	0	0	0	0	10,313	0
Sep-26	541	0	18,489	0	1,148	0	0	0	0	20,178	0
Oct-26	0	0	0	0	39	0	0	0	0	39	0
Nov-26	0	0	0	0	0	0	0	0	0	0	0
Dec-26	0	0	0	0	0	0	0	0	0	0	0

Table D-13: Mean Annual Water Balance (Lake A53 / IVR Attenuation Pond)

Date	Inflow (m^3/mon)									Outflow (m^3/mon)							Water Surface Elevation (masl)	Storage (m^3)
	Whale Tail Att. Pond	IVR Pit	IVR WRSF	North Sump	Whale Tail WRSF	Whale Tail Pit	Truck Shop	Camp Biodisk	Direct / Indirect Runoff	Whale Tail Lake (North Basin)	Whale Tail Lake (South Basin)	C-WTP	Evapo-ration	Under-ground	O-WTP	Bypass C-WTP		
Jan-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Feb-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Mar-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Apr-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
May-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Jun-18	0	0	0	0	0	0	0	0	144,093	142,820	0	0	1,273	0	0	0	161.73	154,735
Jul-18	0	0	0	0	0	0	0	0	21,524	7,056	0	0	14,467	0	0	0	161.73	154,735
Aug-18	0	0	0	0	0	0	0	0	28,194	13,580	0	0	14,614	0	0	0	161.73	154,735
Sep-18	0	0	0	0	0	0	0	0	47,872	42,215	0	0	5,657	0	0	0	161.73	154,735
Oct-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Nov-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Dec-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Jan-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Feb-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Mar-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Apr-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
May-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Jun-19	0	0	0	0	0	0	0	0	144,092	0	142,819	0	1,273	0	0	0	161.73	154,735
Jul-19	0	0	0	0	0	0	0	0	21,524	0	7,056	0	14,467	0	0	0	161.73	154,735
Aug-19	0	0	0	0	0	0	0	0	28,194	0	13,580	0	14,614	0	0	0	161.73	154,735
Sep-19	0	0	0	0	0	0	0	0	47,872	0	42,215	0	5,657	0	0	0	161.73	154,735
Oct-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Nov-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Dec-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Jan-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Feb-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Mar-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Apr-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
May-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Jun-20	0	0	0	0	0	0	0	0	144,122	0	142,849	0	1,273	0	0	0	161.73	154,735
Jul-20	0	0	0	0	0	0	0	0	21,524	0	7,056	0	14,467	0	0	0	161.73	154,735
Aug-20	0	0	0	0	0	0	0	0	28,194	0	13,580	0	14,614	0	0	0	161.73	154,735
Sep-20	0	0	0	0	0	0	0	0	47,872	0	42,215	0	5,657	0	0	0	161.73	154,735
Oct-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Nov-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Dec-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Jan-21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Feb-21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Mar-21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Apr-21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
May-21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Jun-21	0	0	0	0	0	0	0	0	144,092	0	142,819	0	1,273	0	0	0	161.73	154,735
Jul-21	0	0	0	0	0	0	0	0	21,524	0	7,056	0	14,467	0	0	0	161.73	154,735
Aug-21	0	0	0	0	0	0	0	0	28,194	0	13,580	0	14,614	0	0	0	161.73	154,735
Sep-21	0	0	0	0	0	0	0	0	47,872	0	42,215	0	5,657	0	0	0	161.73	154,735

Date	Inflow (m^3/mon)									Outflow (m^3/mon)							Water Surface Elevation (masl)	Storage (m^3)
	Whale Tail Att. Pond	IVR Pit	IVR WRSF	North Sump	Whale Tail WRSF	Whale Tail Pit	Truck Shop	Camp Biodisk	Direct / Indirect Runoff	Whale Tail Lake (North Basin)	Whale Tail Lake (South Basin)	C-WTP	Evapo-ration	Under-ground	O-WTP	Bypass C-WTP		
Oct-21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Nov-21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Dec-21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Jan-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Feb-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Mar-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.73	154,735
Apr-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	103,157	160.53	51,578
May-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50,578	0	158.33	1,000
Jun-22	144,531	108,031	34,411	18,873	69,463	159,102	2,990	2,256	143,744	0	0	683,172	228	0	0	0	158.33	1,000
Jul-22	3,220	13,709	4,035	2,213	10,549	60,279	3,196	2,412	17,533	0	0	115,024	2,123	0	0	0	158.33	1,000
Aug-22	0	18,667	5,633	3,089	11,654	62,176	3,196	2,412	24,204	0	0	128,886	2,144	0	0	0	158.33	1,000
Sep-22	17,114	35,442	11,026	6,047	22,636	79,825	3,093	2,334	46,303	0	0	222,991	830	0	0	0	158.33	1,000
Oct-22	590	1,222	0	0	767	43,526	3,196	2,412	0	0	0	0	0	0	0	0	160.55	52,713
Nov-22	0	1,237	0	0	0	40,895	3,093	2,334	0	0	0	0	0	0	0	0	161.22	100,273
Dec-22	0	1,222	0	0	0	42,206	3,196	2,412	0	0	0	0	0	0	0	0	161.68	149,309
Jan-23	0	1,222	0	0	0	42,204	3,196	2,412	0	0	0	0	0	0	0	0	162.03	198,342
Feb-23	0	1,257	0	0	0	38,268	2,887	2,178	0	0	0	0	0	0	0	0	162.31	242,932
Mar-23	0	1,222	0	0	0	42,209	3,196	2,412	0	0	0	0	0	0	0	0	162.58	291,971
Apr-23	0	1,237	0	0	0	40,895	3,093	2,334	0	0	0	0	0	0	0	0	162.83	339,531
May-23	0	1,222	0	0	0	42,206	3,196	2,412	0	0	0	0	0	0	0	0	163.06	388,567
Jun-23	93,124	108,031	37,511	18,873	69,463	160,463	3,093	2,334	135,405	0	0	864,000	1,734	0	0	0	161.70	151,129
Jul-23	3,210	13,711	4,465	2,213	10,549	60,279	3,196	2,412	16,823	0	0	263,267	3,720	0	0	0	158.33	1,000
Aug-23	0	18,669	6,328	3,089	11,654	62,176	3,196	2,412	22,222	0	0	127,601	2,144	0	0	0	158.33	1,000
Sep-23	16,991	35,443	12,568	6,047	22,636	79,825	3,093	2,334	41,904	0	0	220,012	830	0	0	0	158.33	1,000
Oct-23	586	1,222	0	0	767	43,526	3,196	2,412	0	0	0	0	0	0	0	0	160.55	52,709
Nov-23	0	1,237	0	0	0	40,895	3,093	2,334	0	0	0	0	0	0	0	0	161.22	100,269
Dec-23	0	1,222	0	0	0	42,206	3,196	2,412	0	0	0	0	0	0	0	0	161.68	149,304
Jan-24	0	1,222	0	0	0	41,904	3,196	2,412	0	0	0	0	0	0	0	0	162.03	198,038
Feb-24	0	1,249	0	0	0	39,293	2,990	2,256	0	0	0	0	0	0	0	0	162.32	243,826
Mar-24	0	1,222	0	0	0	41,898	3,196	2,412	0	0	0	0	0	0	0	0	162.58	292,554
Apr-24	0	1,237	0	0	0	40,595	3,093	2,334	0	0	0	0	0	0	0	0	162.83	339,814
May-24	0	1,222	0	0	0	41,896	3,196	2,412	0	0	0	0	0	0	0	0	163.06	388,539
Jun-24	92,604	108,053	41,994	18,876	69,477	160,186	3,093	2,334	116,795	0	0	864,000	1,704	0	0	0	161.56	136,247
Jul-24	3,192	13,711	4,940	2,213	10,549	59,952	3,196	2,412	14,576	0	0	246,519	3,470	0	0	0	158.33	1,000
Aug-24	0	18,669	6,919	3,089	11,654	61,847	3,196	2,412	19,222	0	0	124,865	2,144	0	0	0	158.33	1,000
Sep-24	16,817	35,443	13,590	6,047	22,636	79,518	3,093	2,334	36,080	0	0	214,727	830	0	0	0	158.33	1,000
Oct-24	580	1,222	0	0	767	43,216	3,196	2,412	0	0	0	0	0	0	0	0	160.55	52,393
Nov-24	0	1,237	0	0	0	40,595	3,093	2,334	0	0	0	0	0	0	0	0	161.21	99,652
Dec-24	0	1,222	0	0	0	41,896	3,196	2,412	0	0	0	0	0	0	0	0	161.67	148,378
Jan-25	0	1,222	0	0	0	41,894	3,196	2,412	0	0	0	0	0	0	0	0	162.02	197,102
Feb-25	0	1,257	0	0	0	37,988	2,887	2,178	0	0	0	0	0	0	0	0	162.31	241,411
Mar-25	0	1,222	0	0	0	41,899	3,196	2,412	0	0	0	0	0	0	0	0	162.57	290,141
Apr-25	0	1,237	0	0	0	40,595	3,093	2,334	0	0	0	0	0	0	0	0	162.82	337,401
May-25	0	1,222	0	0	0	41,896	3,196	2,412	0	0	0	0	0	0	0	0	163.05	386,126
Jun-25	92,779	108,033	42,906	18,873	69,463	160,162	3,093	2,334	107,182	0	0	864,000	1,678	0	0	0	161.46	125,272
Jul-25	3,201	13,728	5,031	2,213	10,549	59,952	3,196	2,412	13,572	0	0	234,820	3,305	0	0	0	158.33	1,000

Date	Inflow (m^3/mon)									Outflow (m^3/mon)							Water Surface Elevation (masl)	Storage (m^3)
	Whale Tail Att. Pond	IVR Pit	IVR WRSF	North Sump	Whale Tail WRSF	Whale Tail Pit	Truck Shop	Camp Biodisk	Direct / Indirect Runoff	Whale Tail Lake (North Basin)	Whale Tail Lake (South Basin)	C-WTP	Evapo-ration	Under-ground	O-WTP	Bypass C-WTP		
Aug-25	0	19,422	7,023	3,089	11,654	62,559	3,196	2,412	18,140	0	0	125,351	2,144	0	0	0	158.33	1,000
Sep-25	17,012	37,093	13,748	6,047	22,636	81,130	3,093	2,334	34,433	0	0	216,695	830	0	0	0	158.33	1,000
Oct-25	587	2,976	0	0	767	44,968	3,196	2,412	0	0	0	0	0	0	0	0	160.61	55,906
Nov-25	0	2,880	0	0	0	42,240	3,093	2,334	0	0	0	0	0	0	0	0	161.28	106,453
Dec-25	0	2,976	0	0	0	43,648	3,196	2,412	0	0	0	0	0	0	0	0	161.76	158,685
Jan-26	0	0	0	0	0	1,408	103	114	0	4	0	0	0	160,306	0	0	157.75	0
Feb-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	157.75	0
Mar-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	157.75	0
Apr-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	157.75	0
May-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	157.75	0
Jun-26	0	0	0	0	0	0	0	0	106,676	106,517	0	0	159	0	0	0	157.75	0
Jul-26	0	0	0	0	0	0	0	0	13,089	11,278	0	0	1,811	0	0	0	157.75	0
Aug-26	0	0	0	0	0	0	0	0	18,039	16,210	0	0	1,829	0	0	0	157.75	0
Sep-26	0	0	0	0	0	0	0	0	34,394	33,686	0	0	708	0	0	0	157.75	0
Oct-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	157.75	0
Nov-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	157.75	0
Dec-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	157.75	0

Table D-14: Mean Annual Water Balance (Whale Tail Lake (South Basin) - Inflows)

Date	Inflow (m^3/mon)										Water Surface Elevation (masl)	Storage (m^3)
	Rainfall Runoff	SWE Runoff	Lake A18	Lake A53	Lake A55	Lake A60	Lake A62	Lake A65	Whale Tail Dike Seepage Pumping Station	Whale Tail Lake (North Basin)	Discharge from O-WTP	
Jan-18	0	0	0	0	0	0	0	0	0	0	0	152.49	4,591,416
Feb-18	0	0	0	0	0	0	0	0	0	0	0	152.49	4,585,679
Mar-18	0	0	0	0	0	0	0	0	0	0	0	152.48	4,579,327
Apr-18	0	0	0	0	0	0	0	0	0	0	0	152.47	4,573,180
May-18	0	0	0	0	0	0	0	0	0	0	0	152.47	4,566,828
Jun-18	112,177	225,813	941,469	0	415,340	223,042	78,288	346,307	0	0	0	152.50	4,597,768
Jul-18	68,508	0	25,899	0	24,542	0	5,090	0	0	0	0	152.53	4,624,426
Aug-18	84,473	0	68,679	0	43,559	4,182	8,679	12,153	0	0	0	152.66	4,746,623
Sep-18	119,620	0	270,738	0	124,239	60,824	23,588	95,468	0	0	0	153.36	5,403,654
Oct-18	0	0	0	0	0	0	0	0	0	0	0	153.36	5,403,654
Nov-18	0	0	0	0	0	0	0	0	0	0	0	153.36	5,403,654
Dec-18	0	0	0	0	0	0	0	0	0	0	0	153.36	5,403,654
Jan-19	0	0	0	0	0	0	0	0	0	0	0	153.36	5,403,654
Feb-19	0	0	0	0	0	0	0	0	0	0	0	153.36	5,403,654
Mar-19	0	0	0	0	0	0	0	0	0	1,152,000	0	154.33	6,542,045
Apr-19	0	0	0	0	0	0	0	0	0	1,152,000	0	154.82	7,680,875
May-19	0	0	0	0	0	0	0	0	0	806,400	0	155.08	8,469,638
Jun-19	486,506	981,853	0	142,819	0	223,041	47,295	0	0	0	0	155.60	10,295,270
Jul-19	297,043	0	0	7,056	0	0	0	0	0	0	0	155.58	10,200,469
Aug-19	366,399	0	0	13,580	0	4,182	0	0	0	0	0	155.57	10,183,629
Sep-19	530,211	0	0	42,215	0	60,824	0	0	0	0	0	155.70	10,644,343
Oct-19	0	0	0	0	0	0	0	0	0	0	0	155.69	10,618,303
Nov-19	0	0	0	0	0	0	0	0	0	0	0	155.68	10,593,103
Dec-19	0	0	0	0	0	0	0	0	0	0	0	155.68	10,567,063
Jan-20	0	0	0	0	0	0	0	0	10,800	0	0	155.67	10,546,553
Feb-20	0	0	0	0	0	0	0	0	10,440	0	0	155.67	10,527,703
Mar-20	0	0	0	0	0	0	0	0	11,160	0	0	155.66	10,507,553
Apr-20	0	0	0	0	0	0	0	0	10,800	0	0	155.66	10,488,053
May-20	0	0	0	0	0	0	0	0	11,160	0	0	155.65	10,467,903
Jun-20	503,366	1,013,939	0	142,849	0	223,088	0	0	10,800	0	0	156.00	11,832,960
Jul-20	308,735	0	0	7,056	0	0	0	0	11,160	0	0	155.97	11,719,568
Aug-20	378,066	0	0	13,580	0	4,182	0	0	11,160	0	0	155.96	11,683,826
Sep-20	534,388	0	0	42,215	0	60,824	0	0	10,800	0	0	156.00	11,832,960
Oct-20	0	0	0	0	0	0	0	0	11,160	0	0	155.99	11,812,810
Nov-20	0	0	0	0	0	0	0	0	10,800	0	0	155.99	11,793,310
Dec-20	0	0	0	0	0	0	0	0	11,160	0	0	155.98	11,773,160
Jan-21	0	0	0	0	0	0	0	0	11,310	0	0	155.98	11,752,850
Feb-21	0	0	0	0	0	0	0	0	10,220	0	0	155.98	11,734,510
Mar-21	0	0	0	0	0	0	0	0	11,315	0	0	155.97	11,714,205
Apr-21	0	0	0	0	0	0	0	0	10,950	0	0	155.97	11,694,555
May-21	0	0	0	0	0	0	0	0	11,315	0	0	155.96	11,674,250
Jun-21	503,717	1,013,628	0	142,819	0	223,041	0	0	10,950	0	501,995	156.00	11,832,960
Jul-21	309,044	0	0	7,056	0	0	0	0	11,315	0	100,593	155.99	11,805,781
Aug-21	378,980	0	0	13,580	0	4,182	0	0	11,315	0	107,637	156.00	11,832,960

Date	Inflow (m^3/mon)											Water Surface Elevation (masl)	Storage (m^3)
	Rainfall Runoff	SWE Runoff	Lake A18	Lake A53	Lake A55	Lake A60	Lake A62	Lake A65	Whale Tail Dike Seepage Pumping Station	Whale Tail Lake (North Basin)	Discharge from O-WTP		
Sep-21	534,464	0	0	42,215	0	60,824	0	0	10,950	0	180,764	156.00	11,832,960
Oct-21	0	0	0	0	0	0	0	0	11,315	0	30,497	156.00	11,832,960
Nov-21	0	0	0	0	0	0	0	0	10,950	0	24,487	156.00	11,832,960
Dec-21	0	0	0	0	0	0	0	0	11,315	0	25,213	156.00	11,832,960
Jan-22	0	0	0	0	0	0	0	0	11,165	0	24,827	156.00	11,832,960
Feb-22	0	0	0	0	0	0	0	0	10,080	0	22,665	156.00	11,832,960
Mar-22	0	0	0	0	0	0	0	0	11,160	0	24,824	156.00	11,832,960
Apr-22	0	0	0	0	0	0	0	0	10,800	0	102,199	156.00	11,832,960
May-22	0	0	0	0	0	0	0	0	11,160	0	55,213	156.00	11,832,960
Jun-22	503,723	1,013,628	0	0	0	223,041	0	0	10,800	0	671,493	156.00	11,832,960
Jul-22	309,116	0	0	0	0	0	0	0	11,160	0	141,916	156.00	11,826,617
Aug-22	379,023	0	0	0	0	4,182	0	0	11,160	0	137,075	156.00	11,832,960
Sep-22	534,464	0	0	0	0	60,824	0	0	10,800	0	228,895	156.00	11,832,960
Oct-22	0	0	0	0	0	0	0	0	11,160	0	9,596	156.00	11,814,960
Nov-22	0	0	0	0	0	0	0	0	10,800	0	1,800	155.99	11,796,960
Dec-22	0	0	0	0	0	0	0	0	11,160	0	1,860	155.99	11,778,360
Jan-23	0	0	0	0	0	0	0	0	11,160	0	2,760	155.98	11,760,660
Feb-23	0	0	0	0	0	0	0	0	10,080	0	2,520	155.98	11,744,700
Mar-23	0	0	0	0	0	0	0	0	11,160	0	2,790	155.97	11,727,030
Apr-23	0	0	0	0	0	0	0	0	10,800	0	2,700	155.97	11,709,930
May-23	0	0	0	0	0	0	0	0	11,160	0	2,790	155.96	11,692,260
Jun-23	503,718	1,013,628	0	0	0	223,041	0	0	10,800	0	862,550	156.00	11,832,960
Jul-23	309,137	0	0	0	0	0	0	0	11,160	0	312,198	156.00	11,832,960
Aug-23	379,026	0	0	0	0	4,182	0	0	11,160	0	156,010	156.00	11,832,960
Sep-23	534,464	0	0	0	0	60,824	0	0	10,800	0	244,950	156.00	11,832,960
Oct-23	0	0	0	0	0	0	0	0	11,160	0	11,023	156.00	11,815,860
Nov-23	0	0	0	0	0	0	0	0	10,800	0	2,700	155.99	11,798,760
Dec-23	0	0	0	0	0	0	0	0	11,160	0	2,790	155.99	11,781,090
Jan-24	0	0	0	0	0	0	0	0	11,160	0	2,790	155.98	11,763,420
Feb-24	0	0	0	0	0	0	0	0	10,440	0	2,610	155.98	11,746,890
Mar-24	0	0	0	0	0	0	0	0	11,160	0	2,790	155.97	11,729,220
Apr-24	0	0	0	0	0	0	0	0	10,800	0	2,700	155.97	11,712,120
May-24	0	0	0	0	0	0	0	0	11,160	0	2,790	155.97	11,694,450
Jun-24	503,718	1,013,939	0	0	0	223,088	0	0	10,800	0	862,550	156.00	11,832,960
Jul-24	309,137	0	0	0	0	0	0	0	11,160	0	285,162	156.00	11,832,960
Aug-24	379,026	0	0	0	0	4,182	0	0	11,160	0	153,297	156.00	11,832,960
Sep-24	534,464	0	0	0	0	60,824	0	0	10,800	0	239,753	156.00	11,832,960
Oct-24	0	0	0	0	0	0	0	0	11,160	0	10,845	156.00	11,815,860
Nov-24	0	0	0	0	0	0	0	0	10,800	0	2,700	155.99	11,798,760
Dec-24	0	0	0	0	0	0	0	0	11,160	0	2,790	155.99	11,781,090
Jan-25	0	0	0	0	0	0	0	0	11,160	0	2,790	155.98	11,763,420
Feb-25	0	0	0	0	0	0	0	0	10,080	0	2,520	155.98	11,747,460
Mar-25	0	0	0	0	0	0	0	0	11,160	0	2,790	155.97	11,729,790
Apr-25	0	0	0	0	0	0	0	0	10,800	0	2,700	155.97	11,712,690
May-25	0	0	0	0	0	0	0	0	11,160	0	2,790	155.97	11,695,020

Date	Inflow (m^3/mon)											Water Surface Elevation (masl)	Storage (m^3)
	Rainfall Runoff	SWE Runoff	Lake A18	Lake A53	Lake A55	Lake A60	Lake A62	Lake A65	Whale Tail Dike Seepage Pumping Station	Whale Tail Lake (North Basin)	Discharge from O-WTP		
Jun-25	503,718	1,013,628	0	0	0	223,041	0	0	10,800	0	862,550	156.00	11,832,960
Jul-25	309,137	0	0	0	0	0	0	0	11,160	0	284,491	156.00	11,832,960
Aug-25	379,026	0	0	0	0	4,182	0	0	11,160	0	153,740	156.00	11,832,960
Sep-25	534,464	0	0	0	0	60,824	0	0	10,800	0	241,670	156.00	11,832,960
Oct-25	0	0	0	0	0	0	0	0	11,160	0	10,920	156.00	11,815,860
Nov-25	0	0	0	0	0	0	0	0	10,800	0	2,700	155.99	11,798,760
Dec-25	0	0	0	0	0	0	0	0	11,160	0	2,790	155.99	11,781,090
Jan-26	0	0	0	0	0	0	0	0	0	0	90	155.98	11,763,572
Feb-26	0	0	0	0	0	0	0	0	0	0	0	155.98	11,747,668
Mar-26	0	0	0	0	0	0	0	0	0	0	0	155.97	11,730,060
Apr-26	0	0	0	0	0	0	0	0	0	0	0	155.97	11,713,020
May-26	0	0	0	0	0	0	0	0	0	0	0	155.61	10,300,412
Jun-26	502,784	1,013,628	0	0	0	223,041	0	0	0	0	0	155.70	10,639,547
Jul-26	291,656	0	0	0	0	0	2,889	0	0	0	0	155.28	9,157,926
Aug-26	331,149	0	0	0	15,234	4,182	14,848	0	0	0	0	154.86	7,784,061
Sep-26	417,814	0	0	0	125,159	60,824	24,224	0	0	0	0	154.54	6,936,833
Oct-26	0	0	0	0	0	0	0	0	0	0	0	153.48	5,524,225
Nov-26	0	0	0	0	0	0	0	0	0	0	0	153.46	5,507,185
Dec-26	0	0	0	0	0	0	0	0	0	0	0	153.44	5,489,577
Jan-27	0	0	0	0	0	0	0	0	0	0	0	153.43	5,471,969
Feb-27	0	0	0	0	0	0	0	0	0	0	0	153.41	5,456,065
Mar-27	0	0	0	0	0	0	0	0	0	0	0	153.39	5,438,457
Apr-27	0	0	0	0	0	0	0	0	0	0	0	153.37	5,421,417
May-27	0	0	0	0	0	0	0	0	0	0	0	153.36	5,403,809
Jun-27	112,526	225,812	918,965	0	415,338	223,041	78,288	328,183	0	0	0	153.50	5,547,803
Jul-27	72,308	0	25,899	0	24,542	0	5,090	0	0	0	0	153.50	5,547,803
Aug-27	87,877	0	68,679	0	43,559	4,182	8,679	12,153	0	0	0	153.50	5,547,803
Sep-27	120,418	0	270,738	0	124,239	60,824	23,588	95,468	0	0	0	153.50	5,547,803
Oct-27	0	0	0	0	0	0	0	0	0	0	0	153.48	5,530,134
Nov-27	0	0	0	0	0	0	0	0	0	0	0	153.47	5,513,034
Dec-27	0	0	0	0	0	0	0	0	0	0	0	153.45	5,495,363

Table D-15: Mean Annual Water Balance (Whale Tail Lake (South Basin) - Outflows)

Date	Outflow (m^3/mon)										Water Surface Elevation (masl)	Storage (m^3)
	Whale Tail Lake (North Basin)	Lake A16 (Mammoth Lake)	Ground-water Infiltration	IVR Pit	Camp Use	Dust Control	Truck Shop	Drilling Water	Evaporation	UG / IVR Pit		
Jan-18	0	0	0	0	2,412	0	3,196	744	0	0	152.49	4,591,416
Feb-18	0	0	0	0	2,178	0	2,887	672	0	0	152.49	4,585,679
Mar-18	0	0	0	0	2,412	0	3,196	744	0	0	152.48	4,579,327
Apr-18	0	0	0	0	2,334	0	3,093	720	0	0	152.47	4,573,180
May-18	0	0	0	0	2,412	0	3,196	744	0	0	152.47	4,566,828
Jun-18	2,297,079	0	0	0	2,334	0	3,093	1,068	7,921	0	152.50	4,597,768
Jul-18	0	0	0	0	2,412	0	3,196	1,488	90,285	0	152.53	4,624,426
Aug-18	0	0	0	0	2,412	0	3,196	1,488	92,434	0	152.66	4,746,623
Sep-18	0	0	0	0	0	0	0	0	37,445	0	153.36	5,403,654
Oct-18	0	0	0	0	0	0	0	0	0	0	153.36	5,403,654
Nov-18	0	0	0	0	0	0	0	0	0	0	153.36	5,403,654
Dec-18	0	0	0	0	0	0	0	0	0	0	153.36	5,403,654
Jan-19	0	0	0	0	0	0	0	0	0	0	153.36	5,403,654
Feb-19	0	0	0	0	0	0	0	0	0	0	153.36	5,403,654
Mar-19	0	0	13,609	0	0	0	0	0	0	0	154.33	6,542,045
Apr-19	0	0	13,170	0	0	0	0	0	0	0	154.82	7,680,875
May-19	0	0	17,637	0	0	0	0	0	0	0	155.08	8,469,638
Jun-19	0	0	25,200	0	0	0	0	0	30,683	0	155.60	10,295,270
Jul-19	0	0	26,040	0	0	0	0	0	372,860	0	155.58	10,200,469
Aug-19	0	0	26,040	0	0	0	0	0	374,961	0	155.57	10,183,629
Sep-19	0	0	25,200	0	0	0	0	0	147,336	0	155.70	10,644,343
Oct-19	0	0	26,040	0	0	0	0	0	0	0	155.69	10,618,303
Nov-19	0	0	25,200	0	0	0	0	0	0	0	155.68	10,593,103
Dec-19	0	0	26,040	0	0	0	0	0	0	0	155.68	10,567,063
Jan-20	0	0	31,310	0	0	0	0	0	0	0	155.67	10,546,553
Feb-20	0	0	29,290	0	0	0	0	0	0	0	155.67	10,527,703
Mar-20	0	0	31,310	0	0	0	0	0	0	0	155.66	10,507,553
Apr-20	0	0	30,300	0	0	0	0	0	0	0	155.66	10,488,053
May-20	0	0	31,310	0	0	0	0	0	0	0	155.65	10,467,903
Jun-20	0	463,661	30,300	0	0	0	0	0	35,023	0	156.00	11,832,960
Jul-20	0	0	31,310	0	0	0	0	0	409,034	0	155.97	11,719,568
Aug-20	0	0	31,310	0	0	0	0	0	411,419	0	155.96	11,683,826
Sep-20	0	308,605	30,300	0	0	0	0	0	160,188	0	156.00	11,832,960
Oct-20	0	0	31,310	0	0	0	0	0	0	0	155.99	11,812,810
Nov-20	0	0	30,300	0	0	0	0	0	0	0	155.99	11,793,310
Dec-20	0	0	31,310	0	0	0	0	0	0	0	155.98	11,773,160
Jan-21	0	0	31,620	0	0	0	0	0	0	0	155.98	11,752,850
Feb-21	0	0	28,560	0	0	0	0	0	0	0	155.98	11,734,510
Mar-21	0	0	31,620	0	0	0	0	0	0	0	155.97	11,714,205
Apr-21	0	0	30,600	0	0	0	0	0	0	0	155.97	11,694,555
May-21	0	0	31,620	0	0	0	0	0	0	0	155.96	11,674,250
Jun-21	0	2,170,763	30,600	0	0	0	0	0	36,077	0	156.00	11,832,960
Jul-21	0	13,579	31,620	0	0	0	0	0	409,988	0	155.99	11,805,781
Aug-21	0	42,617	31,620	0	0	0	0	0	414,278	0	156.00	11,832,960
Sep-21	0	638,196	30,600	0	0	0	0	0	160,421	0	156.00	11,832,960
Oct-21	0	10,192	31,620	0	0	0	0	0	0	0	156.00	11,832,960

Date	Outflow (m^3/mon)										Water Surface Elevation (masl)	Storage (m^3)
	Whale Tail Lake (North Basin)	Lake A16 (Mammoth Lake)	Ground-water Infiltration	IVR Pit	Camp Use	Dust Control	Truck Shop	Drilling Water	Evaporation	UG / IVR Pit		
Nov-21	0	4,837	30,600	0	0	0	0	0	0	0	156.00	11,832,960
Dec-21	0	4,908	31,620	0	0	0	0	0	0	0	156.00	11,832,960
Jan-22	0	4,372	31,620	0	0	0	0	0	0	0	156.00	11,832,960
Feb-22	0	4,185	28,560	0	0	0	0	0	0	0	156.00	11,832,960
Mar-22	0	4,364	31,620	0	0	0	0	0	0	0	156.00	11,832,960
Apr-22	0	82,399	30,600	0	0	0	0	0	0	0	156.00	11,832,960
May-22	0	34,753	31,620	0	0	0	0	0	0	0	156.00	11,832,960
Jun-22	0	2,355,990	30,600	0	0	0	0	0	36,095	0	156.00	11,832,960
Jul-22	0	26,704	31,620	0	0	0	0	0	410,211	0	156.00	11,826,617
Aug-22	0	79,066	31,620	0	0	0	0	0	414,411	0	156.00	11,832,960
Sep-22	0	643,961	30,600	0	0	0	0	0	160,421	0	156.00	11,832,960
Oct-22	0	7,136	31,620	0	0	0	0	0	0	0	156.00	11,814,960
Nov-22	0	0	30,600	0	0	0	0	0	0	0	155.99	11,796,960
Dec-22	0	0	31,620	0	0	0	0	0	0	0	155.99	11,778,360
Jan-23	0	0	31,620	0	0	0	0	0	0	0	155.98	11,760,660
Feb-23	0	0	28,560	0	0	0	0	0	0	0	155.98	11,744,700
Mar-23	0	0	31,620	0	0	0	0	0	0	0	155.97	11,727,030
Apr-23	0	0	30,600	0	0	0	0	0	0	0	155.97	11,709,930
May-23	0	0	31,620	0	0	0	0	0	0	0	155.96	11,692,260
Jun-23	0	2,406,357	30,600	0	0	0	0	0	36,080	0	156.00	11,832,960
Jul-23	0	190,599	31,620	0	0	0	0	0	410,276	0	156.00	11,832,960
Aug-23	0	104,338	31,620	0	0	0	0	0	414,420	0	156.00	11,832,960
Sep-23	0	660,017	30,600	0	0	0	0	0	160,421	0	156.00	11,832,960
Oct-23	0	7,663	31,620	0	0	0	0	0	0	0	156.00	11,815,860
Nov-23	0	0	30,600	0	0	0	0	0	0	0	155.99	11,798,760
Dec-23	0	0	31,620	0	0	0	0	0	0	0	155.99	11,781,090
Jan-24	0	0	31,620	0	0	0	0	0	0	0	155.98	11,763,420
Feb-24	0	0	29,580	0	0	0	0	0	0	0	155.98	11,746,890
Mar-24	0	0	31,620	0	0	0	0	0	0	0	155.97	11,729,220
Apr-24	0	0	30,600	0	0	0	0	0	0	0	155.97	11,712,120
May-24	0	0	31,620	0	0	0	0	0	0	0	155.97	11,694,450
Jun-24	0	2,408,905	30,600	0	0	0	0	0	36,080	0	156.00	11,832,960
Jul-24	0	163,563	31,620	0	0	0	0	0	410,276	0	156.00	11,832,960
Aug-24	0	101,624	31,620	0	0	0	0	0	414,420	0	156.00	11,832,960
Sep-24	0	654,820	30,600	0	0	0	0	0	160,421	0	156.00	11,832,960
Oct-24	0	7,485	31,620	0	0	0	0	0	0	0	156.00	11,815,860
Nov-24	0	0	30,600	0	0	0	0	0	0	0	155.99	11,798,760
Dec-24	0	0	31,620	0	0	0	0	0	0	0	155.99	11,781,090
Jan-25	0	0	31,620	0	0	0	0	0	0	0	155.98	11,763,420
Feb-25	0	0	28,560	0	0	0	0	0	0	0	155.98	11,747,460
Mar-25	0	0	31,620	0	0	0	0	0	0	0	155.97	11,729,790
Apr-25	0	0	30,600	0	0	0	0	0	0	0	155.97	11,712,690
May-25	0	0	31,620	0	0	0	0	0	0	0	155.97	11,695,020
Jun-25	0	2,409,117	30,600	0	0	0	0	0	36,080	0	156.00	11,832,960
Jul-25	0	162,893	31,620	0	0	0	0	0	410,276	0	156.00	11,832,960
Aug-25	0	102,067	31,620	0	0	0	0	0	414,420	0	156.00	11,832,960
Sep-25	0	656,737	30,600	0	0	0	0	0	160,421	0	156.00	11,832,960

Date	Outflow (m^3/mon)										Water Surface Elevation (masl)	Storage (m^3)
	Whale Tail Lake (North Basin)	Lake A16 (Mammoth Lake)	Ground-water Infiltration	IVR Pit	Camp Use	Dust Control	Truck Shop	Drilling Water	Evaporation	UG / IVR Pit		
Oct-25	0	7,560	31,620	0	0	0	0	0	0	0	156.00	11,815,860
Nov-25	0	0	30,600	0	0	0	0	0	0	0	155.99	11,798,760
Dec-25	0	0	31,620	0	0	0	0	0	0	0	155.99	11,781,090
Jan-26	0	0	17,236	0	372	0	0	0	0	0	155.98	11,763,572
Feb-26	0	0	15,568	0	336	0	0	0	0	0	155.98	11,747,668
Mar-26	0	0	17,236	0	372	0	0	0	0	0	155.97	11,730,060
Apr-26	0	0	16,680	0	360	0	0	0	0	0	155.97	11,713,020
May-26	0	0	17,236	0	372	0	0	0	0	1,395,000	155.61	10,300,412
Jun-26	0	0	16,680	0	360	0	0	0	33,278	1,350,000	155.70	10,639,547
Jul-26	0	0	17,236	0	372	0	0	0	363,559	1,395,000	155.28	9,157,926
Aug-26	0	0	17,236	0	372	0	0	0	326,669	1,395,000	154.86	7,784,061
Sep-26	0	0	16,680	0	360	0	0	0	108,209	1,350,000	154.54	6,936,833
Oct-26	0	0	17,236	0	372	0	0	0	0	1,395,000	153.48	5,524,225
Nov-26	0	0	16,680	0	360	0	0	0	0	0	153.46	5,507,185
Dec-26	0	0	17,236	0	372	0	0	0	0	0	153.44	5,489,577
Jan-27	0	0	17,236	0	372	0	0	0	0	0	153.43	5,471,969
Feb-27	0	0	15,568	0	336	0	0	0	0	0	153.41	5,456,065
Mar-27	0	0	17,236	0	372	0	0	0	0	0	153.39	5,438,457
Apr-27	0	0	16,680	0	360	0	0	0	0	0	153.37	5,421,417
May-27	0	0	17,236	0	372	0	0	0	0	0	153.36	5,403,809
Jun-27	0	0	16,680	2,132,151	360	0	0	0	8,968	0	153.50	5,547,803
Jul-27	0	0	17,253	8,173	372	0	0	0	102,041	0	153.50	5,547,803
Aug-27	0	0	17,260	104,427	372	0	0	0	103,072	0	153.50	5,547,803
Sep-27	0	0	16,723	638,292	360	0	0	0	39,899	0	153.50	5,547,803
Oct-27	0	0	17,297	0	372	0	0	0	0	0	153.48	5,530,134
Nov-27	0	0	16,740	0	360	0	0	0	0	0	153.47	5,513,034
Dec-27	0	0	17,298	0	372	0	0	0	0	0	153.45	5,495,363

Table D-16: Mean Annual Water Balance (Water Treatment (Inflows))

Date	Inflow (m^3/mon)											
	Metal Treatment						C-WTP	S-WTP (Brackish)		S-WTP (Brine)	Bypass	Total Inflows
	Quarry 1	Whale Tail Attenuation Pond	GSP (Brine)	IVR Attenuation Pond (Contact Water)	Northeast Sector	IVR Attenuation Pond (Lake A53 Dewatering)	Whale Tail Lake (North Basin)	Whale Tail Attenuation Pond	GSP (Brackish Water)	GSP (Brine)	A53 Bypass	
Jan-18	0	0	0	0	0	0	0	0	0	0	0	0
Feb-18	0	0	0	0	0	0	0	0	0	0	0	0
Mar-18	0	0	0	0	0	0	0	0	0	0	0	0
Apr-18	0	0	0	0	0	0	0	0	0	0	0	0
May-18	0	0	0	0	0	0	0	0	0	0	0	0
Jun-18	0	0	0	0	0	0	0	0	0	0	0	0
Jul-18	0	0	0	0	0	0	0	0	0	0	0	0
Aug-18	0	0	0	0	0	0	0	0	0	0	0	0
Sep-18	0	0	0	0	0	0	0	0	0	0	0	0
Oct-18	0	0	0	0	0	0	0	0	0	0	0	0
Nov-18	0	0	0	0	0	0	0	0	0	0	0	0
Dec-18	0	0	0	0	0	0	0	0	0	0	0	0
Jan-19	0	0	0	0	0	0	0	0	0	0	0	0
Feb-19	0	0	0	0	0	0	0	0	0	0	0	0
Mar-19	0	0	0	0	0	0	0	0	0	0	0	0
Apr-19	0	0	0	0	0	0	345,600	0	0	0	0	345,600
May-19	0	0	0	0	0	0	804,720	0	0	0	0	804,720
Jun-19	185,399	453,499	0	0	227,062	0	0	0	0	0	0	865,960
Jul-19	0	108,040	0	0	21,559	0	0	0	0	0	0	129,599
Aug-19	0	125,117	0	0	32,045	0	0	0	0	0	0	157,162
Sep-19	0	181,336	0	0	70,900	0	0	0	0	0	0	252,236
Oct-19	0	0	0	0	0	0	0	0	0	0	0	0
Nov-19	0	0	0	0	0	0	0	0	0	0	0	0
Dec-19	0	0	0	0	0	0	0	0	0	0	0	0
Jan-20	0	0	0	0	0	0	0	0	0	0	0	0
Feb-20	0	0	0	0	0	0	0	0	0	0	0	0
Mar-20	0	0	0	0	0	0	0	0	0	0	0	0
Apr-20	0	0	0	0	0	0	0	0	0	0	0	0
May-20	0	0	0	0	0	0	0	0	0	0	0	0
Jun-20	0	507,141	235,792	0	227,110	0	0	0	0	0	0	970,043
Jul-20	0	91,941	414	0	0	0	0	0	0	0	0	92,355
Aug-20	0	115,489	0	0	0	0	0	0	0	0	0	115,489
Sep-20	0	194,912	0	0	0	0	0	0	0	0	0	194,912
Oct-20	0	0	0	0	0	0	0	31,000	0	0	0	31,000
Nov-20	0	0	0	0	0	0	0	30,000	0	0	0	30,000
Dec-20	0	0	0	0	0	0	0	31,000	0	0	0	31,000
Jan-21	0	0	0	0	0	0	0	31,000	0	0	0	31,000
Feb-21	0	0	0	0	0	0	0	28,000	0	0	0	28,000
Mar-21	0	0	0	0	0	0	0	31,000	0	0	0	31,000
Apr-21	0	0	0	0	0	0	0	30,000	0	0	0	30,000
May-21	0	0	0	0	0	0	0	29,762	0	0	0	29,762
Jun-21	0	519,270	0	0	0	0	0	0	0	0	0	519,270

Date	Inflow (m^3/mon)											
	Metal Treatment						C-WTP	S-WTP (Brackish)		S-WTP (Brine)	Bypass	Total Inflows
	Quarry 1	Whale Tail Attenuation Pond	GSP (Brine)	IVR Attenuation Pond (Contact Water)	Northeast Sector	IVR Attenuation Pond (Lake A53 Dewatering)	Whale Tail Lake (North Basin)	Whale Tail Attenuation Pond	GSP (Brackish Water)	GSP (Brine)	A53 Bypass	
Jul-21	0	86,097	0	0	0	0	0	0	0	0	0	86,097
Aug-21	0	108,355	0	0	0	0	0	0	0	0	0	108,355
Sep-21	0	183,380	0	0	0	0	0	0	0	0	0	183,380
Oct-21	0	0	0	0	0	0	0	29,659	0	0	0	29,659
Nov-21	0	0	0	0	0	0	0	28,812	0	0	0	28,812
Dec-21	0	0	0	0	0	0	0	29,659	0	0	0	29,659
Jan-22	0	0	0	0	0	0	0	29,194	0	0	0	29,194
Feb-22	0	0	0	0	0	0	0	26,675	0	0	0	26,675
Mar-22	0	0	0	0	0	0	0	29,194	0	0	0	29,194
Apr-22	0	0	0	0	0	0	0	0	0	1,740	103,157	104,897
May-22	0	0	0	0	0	50,578	0	0	0	1,860	0	52,438
Jun-22	0	0	0	683,172	0	0	0	0	18,149	1,800	0	703,120
Jul-22	0	0	0	115,024	0	0	0	0	8,107	1,860	0	124,991
Aug-22	0	0	0	128,886	0	0	0	0	8,332	1,860	0	139,078
Sep-22	0	0	0	222,991	0	0	0	0	8,758	1,800	0	233,549
Oct-22	0	0	0	0	0	0	0	0	0	1,860	0	1,860
Nov-22	0	0	0	0	0	0	0	0	0	1,800	0	1,800
Dec-22	0	0	0	0	0	0	0	0	0	1,860	0	1,860
Jan-23	0	0	0	0	0	0	0	0	0	2,790	0	2,790
Feb-23	0	0	0	0	0	0	0	0	0	2,520	0	2,520
Mar-23	0	0	0	0	0	0	0	0	0	2,790	0	2,790
Apr-23	0	0	0	0	0	0	0	0	0	2,700	0	2,700
May-23	0	0	0	0	0	0	0	0	0	2,790	0	2,790
Jun-23	0	0	0	864,000	0	0	0	0	30,000	2,700	0	896,700
Jul-23	0	0	0	263,267	0	0	0	0	31,000	2,790	0	297,057
Aug-23	0	0	0	127,601	0	0	0	0	31,000	2,790	0	161,391
Sep-23	0	0	0	220,012	0	0	0	0	30,000	2,700	0	252,712
Oct-23	0	0	0	0	0	0	0	0	0	2,790	0	2,790
Nov-23	0	0	0	0	0	0	0	0	0	2,700	0	2,700
Dec-23	0	0	0	0	0	0	0	0	0	2,790	0	2,790
Jan-24	0	0	0	0	0	0	0	0	0	2,790	0	2,790
Feb-24	0	0	0	0	0	0	0	0	0	2,610	0	2,610
Mar-24	0	0	0	0	0	0	0	0	0	2,790	0	2,790
Apr-24	0	0	0	0	0	0	0	0	0	2,700	0	2,700
May-24	0	0	0	0	0	0	0	0	0	2,790	0	2,790
Jun-24	0	0	0	864,000	0	0	0	0	30,000	2,700	0	896,700
Jul-24	0	0	0	246,519	0	0	0	0	31,000	2,790	0	280,309
Aug-24	0	0	0	124,865	0	0	0	0	31,000	2,790	0	158,655
Sep-24	0	0	0	214,727	0	0	0	0	30,000	2,700	0	247,427
Oct-24	0	0	0	0	0	0	0	0	0	2,790	0	2,790
Nov-24	0	0	0	0	0	0	0	0	0	2,700	0	2,700
Dec-24	0	0	0	0	0	0	0	0	0	2,790	0	2,790
Jan-25	0	0	0	0	0	0	0	0	0	2,790	0	2,790

Date	Inflow (m^3/mon)											
	Metal Treatment						C-WTP	S-WTP (Brackish)		S-WTP (Brine)	Bypass	Total Inflows
	Quarry 1	Whale Tail Attenuation Pond	GSP (Brine)	IVR Attenuation Pond (Contact Water)	Northeast Sector	IVR Attenuation Pond (Lake A53 Dewatering)	Whale Tail Lake (North Basin)	Whale Tail Attenuation Pond	GSP (Brackish Water)	GSP (Brine)	A53 Bypass	
Feb-25	0	0	0	0	0	0	0	0	0	2,520	0	2,520
Mar-25	0	0	0	0	0	0	0	0	0	2,790	0	2,790
Apr-25	0	0	0	0	0	0	0	0	0	2,700	0	2,700
May-25	0	0	0	0	0	0	0	0	0	2,790	0	2,790
Jun-25	0	0	0	864,000	0	0	0	0	30,000	2,700	0	896,700
Jul-25	0	0	0	234,820	0	0	0	0	31,000	2,790	0	268,610
Aug-25	0	0	0	125,351	0	0	0	0	31,000	2,790	0	159,141
Sep-25	0	0	0	216,695	0	0	0	0	30,000	2,700	0	249,395
Oct-25	0	0	0	0	0	0	0	0	0	2,790	0	2,790
Nov-25	0	0	0	0	0	0	0	0	0	2,700	0	2,700
Dec-25	0	0	0	0	0	0	0	0	0	2,790	0	2,790

Table D-17: Mean Annual Water Balance (Water Treatment (Outflows))

Date	Outflow (m^3/mon)							
	Bypass	Lake A16 (Mammoth Lake) / Whale Tail Lake (South Basin)					GSP (Brine)	Total Discharge
	Bypass to Mammoth Lake	C-WTP & O-WTP to Mammoth Lake	C-WTP & O-WTP to Whale Tail Lake (South Basin)	S-WTP (Brackish) Permeate to Mammoth Lake	S-WTP (Brackish) Permeate to Whale Tail Lake (South Basin)	S-WTP (Brine) Permeate to Whale Tail Lake (South Basin)	S-WTP (Brackish) Brine to Brine Storage Pond	
Jan-18	0	0	0	0	0	0	0	0
Feb-18	0	0	0	0	0	0	0	0
Mar-18	0	0	0	0	0	0	0	0
Apr-18	0	0	0	0	0	0	0	0
May-18	0	0	0	0	0	0	0	0
Jun-18	0	0	0	0	0	0	0	0
Jul-18	0	0	0	0	0	0	0	0
Aug-18	0	0	0	0	0	0	0	0
Sep-18	0	0	0	0	0	0	0	0
Oct-18	0	0	0	0	0	0	0	0
Nov-18	0	0	0	0	0	0	0	0
Dec-18	0	0	0	0	0	0	0	0
Jan-19	0	0	0	0	0	0	0	0
Feb-19	0	0	0	0	0	0	0	0
Mar-19	0	0	0	0	0	0	0	0
Apr-19	0	0	345,600	0	0	0	0	345,600
May-19	0	0	804,720	0	0	0	0	804,720
Jun-19	0	865,960	0	0	0	0	0	865,960
Jul-19	0	129,599	0	0	0	0	0	129,599
Aug-19	0	157,162	0	0	0	0	0	157,162
Sep-19	0	252,236	0	0	0	0	0	252,236
Oct-19	0	0	0	0	0	0	0	0
Nov-19	0	0	0	0	0	0	0	0
Dec-19	0	0	0	0	0	0	0	0
Jan-20	0	0	0	0	0	0	0	0
Feb-20	0	0	0	0	0	0	0	0
Mar-20	0	0	0	0	0	0	0	0
Apr-20	0	0	0	0	0	0	0	0
May-20	0	0	0	0	0	0	0	0
Jun-20	0	970,043	0	0	0	0	0	970,043
Jul-20	0	92,355	0	0	0	0	0	92,355
Aug-20	0	115,489	0	0	0	0	0	115,489
Sep-20	0	194,912	0	0	0	0	0	194,912
Oct-20	0	0	0	26,350	0	0	4,650	31,000
Nov-20	0	0	0	25,500	0	0	4,500	30,000
Dec-20	0	0	0	26,350	0	0	4,650	31,000
Jan-21	0	0	0	26,350	0	0	4,650	31,000
Feb-21	0	0	0	23,800	0	0	4,200	28,000
Mar-21	0	0	0	26,350	0	0	4,650	31,000
Apr-21	0	0	0	25,500	0	0	4,500	30,000
May-21	0	0	0	25,298	0	0	4,464	29,762
Jun-21	0	0	519,270	0	0	0	0	519,270

Date	Outflow (m^3/mon)							
	Bypass	Lake A16 (Mammoth Lake) / Whale Tail Lake (South Basin)					GSP (Brine)	Total Discharge
	Bypass to Mammoth Lake	C-WTP & O-WTP to Mammoth Lake	C-WTP & O-WTP to Whale Tail Lake (South Basin)	S-WTP (Brackish) Permeate to Mammoth Lake	S-WTP (Brackish) Permeate to Whale Tail Lake (South Basin)	S-WTP (Brine) Permeate to Whale Tail Lake (South Basin)	S-WTP (Brackish) Brine to Brine Storage Pond	
Jul-21	0	0	86,097	0	0	0	0	86,097
Aug-21	0	0	108,355	0	0	0	0	108,355
Sep-21	0	0	183,380	0	0	0	0	183,380
Oct-21	0	0	0	0	25,210	0	4,449	29,659
Nov-21	0	0	0	0	24,490	0	4,322	28,812
Dec-21	0	0	0	0	25,210	0	4,449	29,659
Jan-22	0	0	0	0	24,815	0	4,379	29,194
Feb-22	0	0	0	0	22,674	0	4,001	26,675
Mar-22	0	0	0	0	24,815	0	4,379	29,194
Apr-22	103,157	0	0	0	0	1,740	0	104,897
May-22	0	0	50,578	0	0	1,860	0	52,438
Jun-22	0	0	683,172	0	15,426	1,800	2,722	703,120
Jul-22	0	0	115,024	0	6,891	1,860	1,216	124,991
Aug-22	0	0	128,886	0	7,082	1,860	1,250	139,078
Sep-22	0	0	222,991	0	7,445	1,800	1,314	233,549
Oct-22	0	0	0	0	0	1,860	0	1,860
Nov-22	0	0	0	0	0	1,800	0	1,800
Dec-22	0	0	0	0	0	1,860	0	1,860
Jan-23	0	0	0	0	0	2,790	0	2,790
Feb-23	0	0	0	0	0	2,520	0	2,520
Mar-23	0	0	0	0	0	2,790	0	2,790
Apr-23	0	0	0	0	0	2,700	0	2,700
May-23	0	0	0	0	0	2,790	0	2,790
Jun-23	0	0	864,000	0	25,500	2,700	4,500	896,700
Jul-23	0	0	263,267	0	26,350	2,790	4,650	297,057
Aug-23	0	0	127,601	0	26,350	2,790	4,650	161,391
Sep-23	0	0	220,012	0	25,500	2,700	4,500	252,712
Oct-23	0	0	0	0	0	2,790	0	2,790
Nov-23	0	0	0	0	0	2,700	0	2,700
Dec-23	0	0	0	0	0	2,790	0	2,790
Jan-24	0	0	0	0	0	2,790	0	2,790
Feb-24	0	0	0	0	0	2,610	0	2,610
Mar-24	0	0	0	0	0	2,790	0	2,790
Apr-24	0	0	0	0	0	2,700	0	2,700
May-24	0	0	0	0	0	2,790	0	2,790
Jun-24	0	0	864,000	0	25,500	2,700	4,500	896,700
Jul-24	0	0	246,519	0	26,350	2,790	4,650	280,309
Aug-24	0	0	124,865	0	26,350	2,790	4,650	158,655
Sep-24	0	0	214,727	0	25,500	2,700	4,500	247,427
Oct-24	0	0	0	0	0	2,790	0	2,790
Nov-24	0	0	0	0	0	2,700	0	2,700
Dec-24	0	0	0	0	0	2,790	0	2,790
Jan-25	0	0	0	0	0	2,790	0	2,790

Date	Outflow (m^3/mon)							
	Bypass	Lake A16 (Mammoth Lake) / Whale Tail Lake (South Basin)					GSP (Brine)	Total Discharge
	Bypass to Mammoth Lake	C-WTP & O-WTP to Mammoth Lake	C-WTP & O-WTP to Whale Tail Lake (South Basin)	S-WTP (Brackish) Permeate to Mammoth Lake	S-WTP (Brackish) Permeate to Whale Tail Lake (South Basin)	S-WTP (Brine) Permeate to Whale Tail Lake (South Basin)	S-WTP (Brackish) Brine to Brine Storage Pond	
Feb-25	0	0	0	0	0	2,520	0	2,520
Mar-25	0	0	0	0	0	2,790	0	2,790
Apr-25	0	0	0	0	0	2,700	0	2,700
May-25	0	0	0	0	0	2,790	0	2,790
Jun-25	0	0	864,000	0	25,500	2,700	4,500	896,700
Jul-25	0	0	234,820	0	26,350	2,790	4,650	268,610
Aug-25	0	0	125,351	0	26,350	2,790	4,650	159,141
Sep-25	0	0	216,695	0	25,500	2,700	4,500	249,395
Oct-25	0	0	0	0	0	2,790	0	2,790
Nov-25	0	0	0	0	0	2,700	0	2,700
Dec-25	0	0	0	0	0	2,790	0	2,790

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