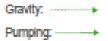
APPENDIX B • WATER MANAGEMENT SCHEMATIC FLOW SHEETS (Golder 2019)

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



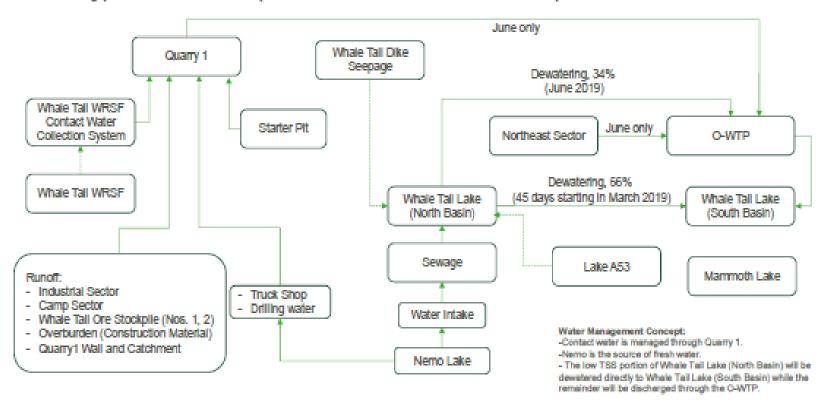


Figure B.1 Water Management Flosheet from Construction to June 2019

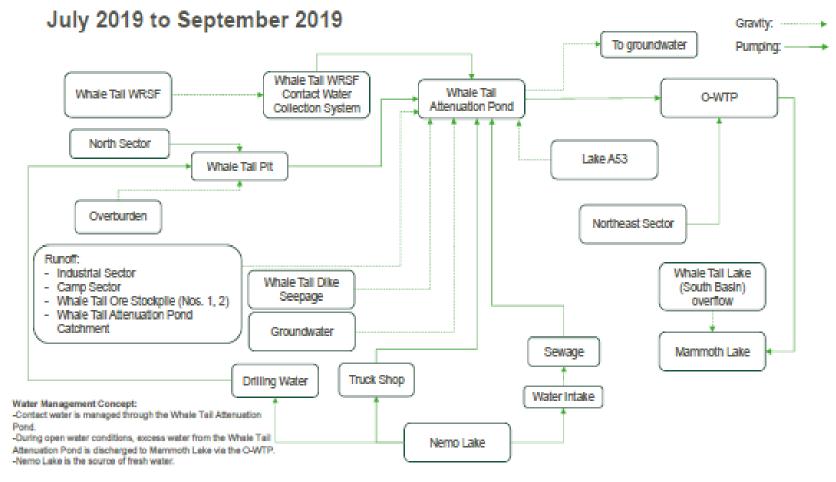


Figure B.2 Water Management Flowsheet during operations from July 2019 to September 2019

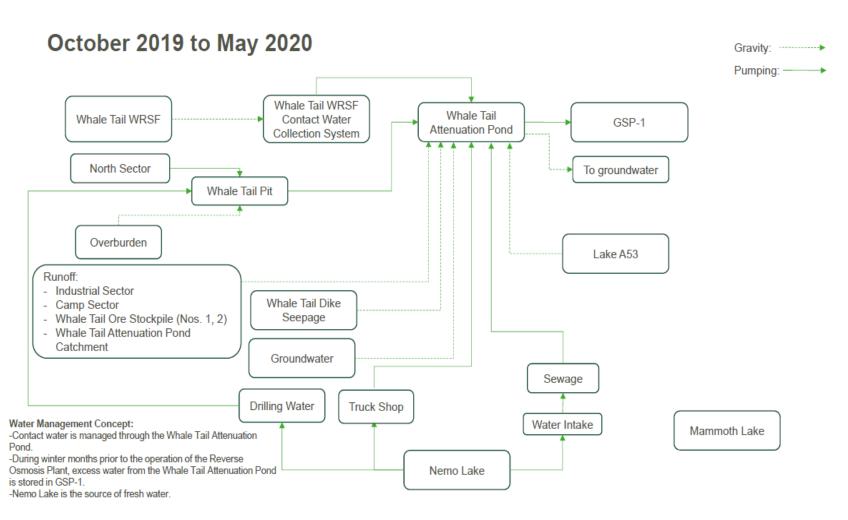


Figure B.3 Water Management Flowsheet during operations from October 2019 to May 2019



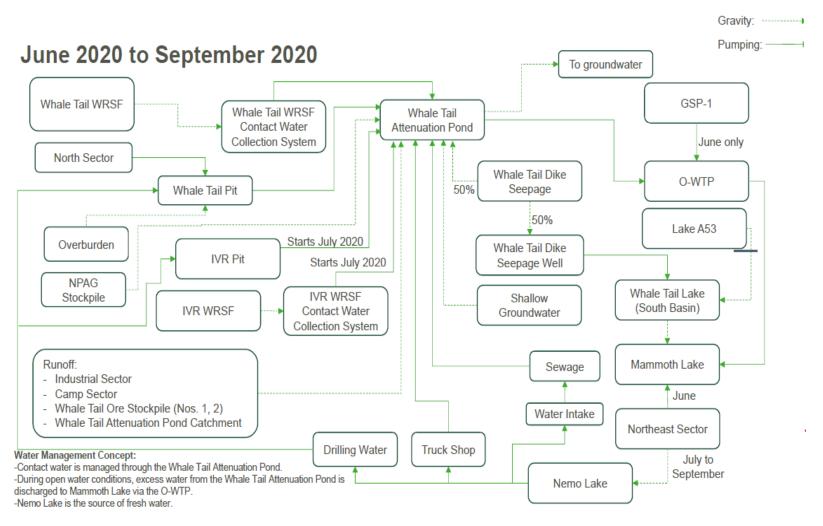


Figure B.4 Water Management Flowsheet during operations from June 2019 to September 2019

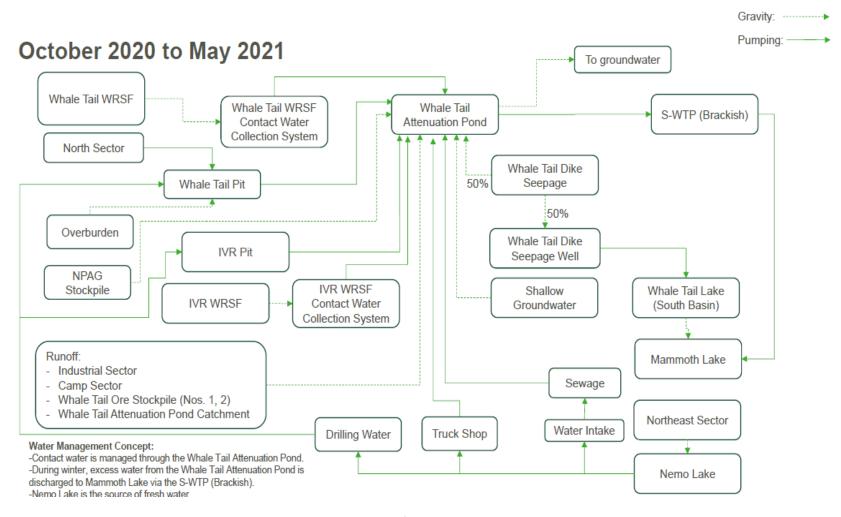


Figure B.5 Water Management Flowsheet during operations from October 2020 to May 2021

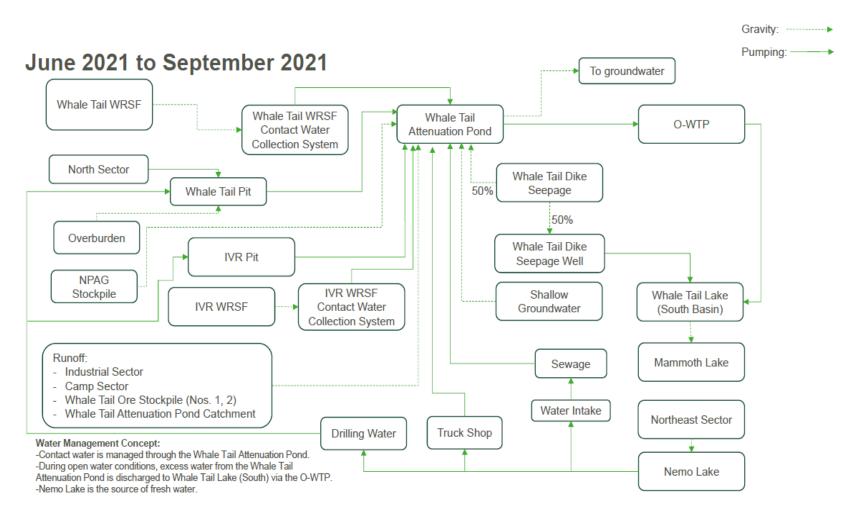


Figure B.6 Water Management Flowsheet during operations from June 2021 to September 2021

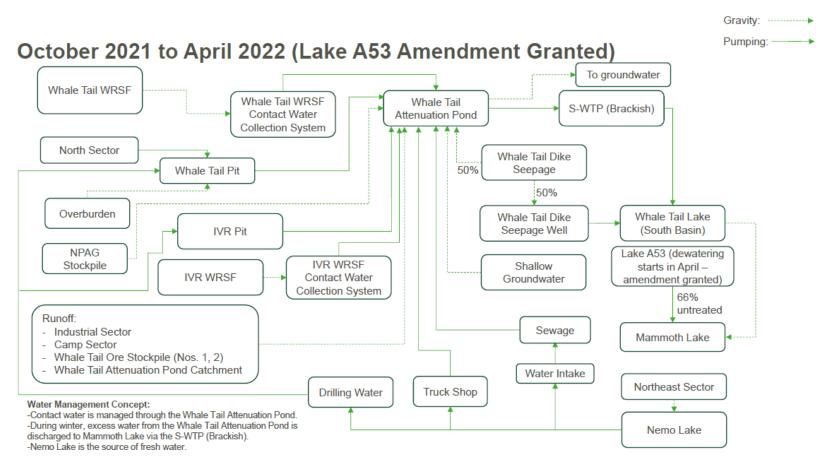


Figure B.7 Water Management Flowsheet during operations from October 2021 to April 2022

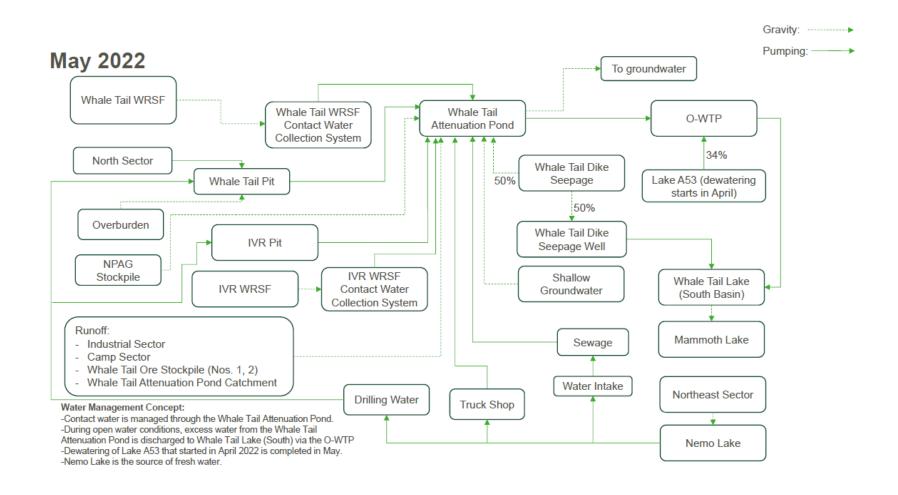


Figure B.8 Water Management Flowsheet during operations May 2022



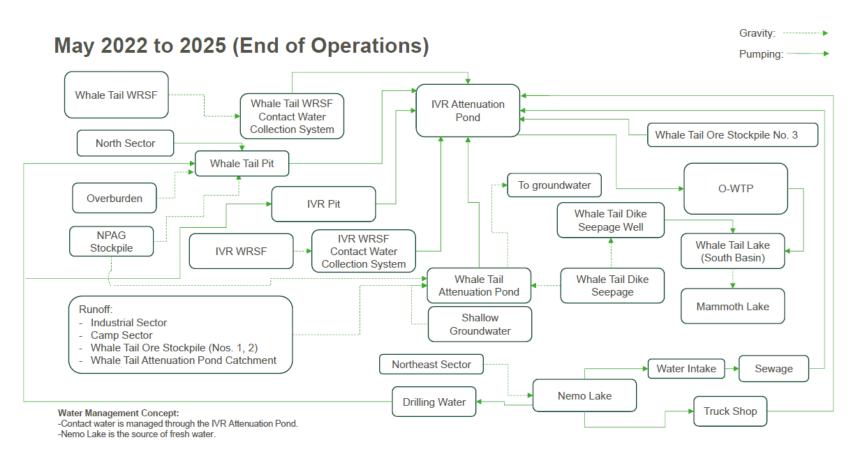
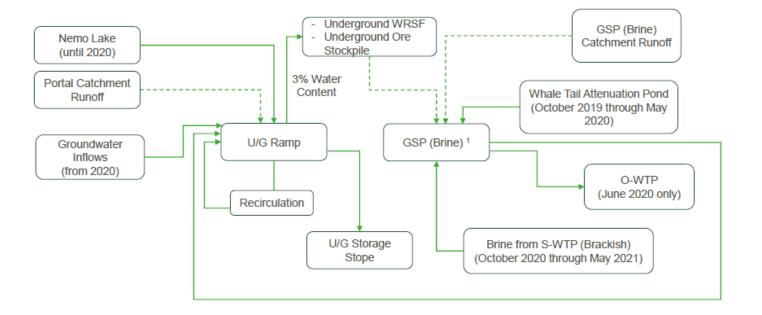


Figure B.9 Water Management Flowsheet during operations from May 2022 to the End of Operations (2025)

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.

Figure B.10 Water Management Flowsheet during Underground Operations from Q4 2019 to the End of 2020

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



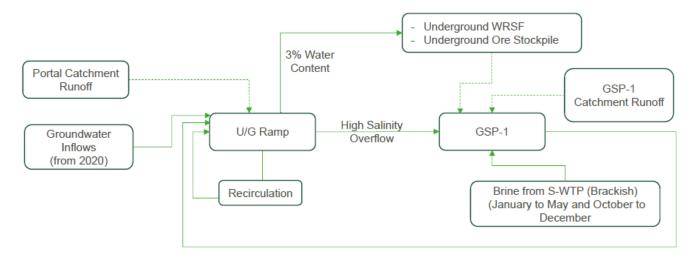


Figure B.11 Water Management Flowsheet during Underground Operations in 2021

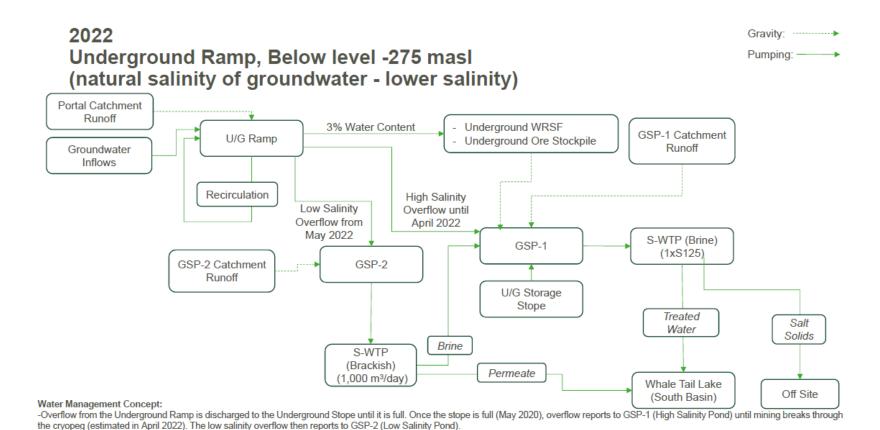
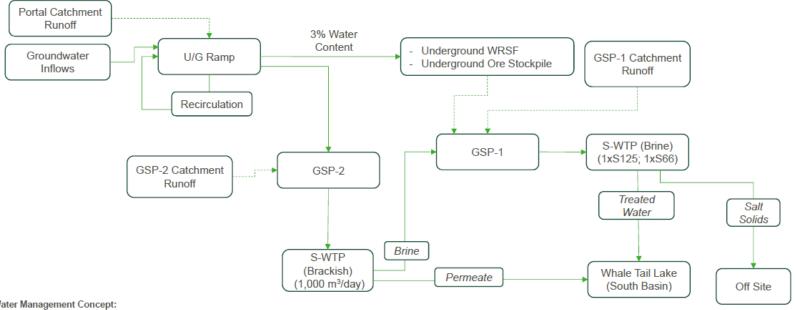


Figure B.12 Water Management Flowsheet during Underground Operations in 2022

-Treated high salinity flows (from GSP-1) are discharged to Whale Tail Lake (South Basin) via S-WTP (Brine)
-Treated low salinity flows (from GSP-2) are discharged to Whale Tail Lake (South Basin) via S-WTP (Brackish)

2023, 2024 Underground Ramp, Below level -275 masl (natural salinity of groundwater - lower salinity)





Water Management Concept:

Figure B.13 Water Management Flowsheet during Underground Operations in 2023 and 2024

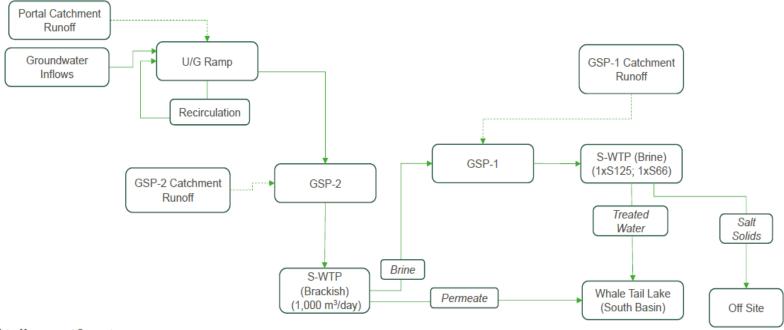
⁻Overflow from the Underground Ramp is discharged to the Underground Stope until it is full. Once the stope is full (May 2020), overflow reports to GSP-1 (High Salinity Pond) until mining breaks through the cryopeg (estimated in April 2022). The low salinity overflow then reports to GSP-2 (Low Salinity Pond).

⁻Treated high salinity flows (from GSP-1) are discharged to Whale Tail Lake (South Basin) via S-WTP (Brine). The capacity is increased in January 2023

⁻Treated low salinity flows (from GSP-2) are discharged to Whale Tail Lake (South Basin) via S-WTP (Brackish)

2025 Underground Ramp, Below level -275 masl (natural salinity of groundwater - lower salinity)





Water Management Concept:

-Mining from underground completed at end of 2024.

-Treated high salinity flows (from GSP-1) are discharged to Whale Tail Lake (South Basin) via S-WTP (Brine). The capacity is increased in January 2023

-Treated low salinity flows (from GSP-2) are discharged to Whale Tail Lake (South Basin) via S-WTP (Brackish)

Figure B.14 Water Management Flowsheet during Underground Operations in 2025

Gravity: ····· Closure: Active Pit and U/G Flooding - General Principle Pumping: -IVR Contact IVR WRSF Water Collection **IVR** Attenuation Pond System Whale Tail WRSF Whale Tail WRSF Contact Water Collection System Groundwater North Sector GSP-1 Sequence of filling: U/G Runoff: **IVR Pit** - Ore Stockpiles Whale Tail Pit Whale Tail Lake - Whale Tail Camp Whale Tail Lake (North - Industrial Sector Basin) (South Basin) Clean Catchment Sewage Water Management Concept: Whale Tail Dike -Promote re-filling in the order shown. Seepage -At closure, IVR Attenuation Pond, GSP-1, GSP-2 are all pumped down then backfilled. Northeast Sector They are then allowed to drain passively by GSP-2 gravity.

Figure B.15 Water Management Flowsheet during Closure (Active Pit and Underground flooding)

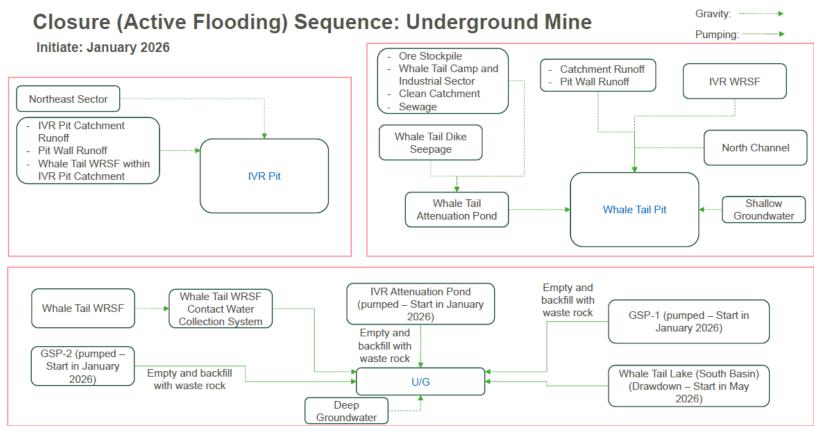
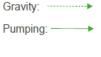


Figure B.16 Water Management Flowsheet during Closure (Active Flooding Underground Mine)

Closure (Active Flooding) Sequence: IVR Pit

Initiate: Following Refilling of Underground Mine



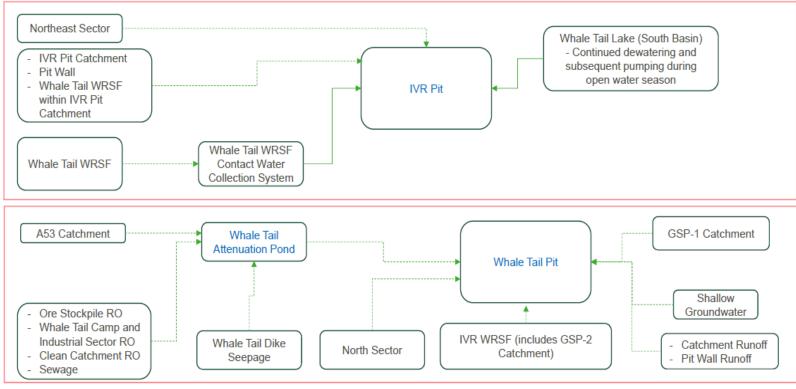


Figure B.17 Water Management Flowsheet during Closure (Active Flooding IVR Pit)

Gravity: -----Closure (Active Flooding) Sequence: Whale Tail Pit Pumping: — Initiate: Following Refilling of IVR Pit Northeast Sector Whale Tail Lake (South Basin) - Initial Dewatering and - IVR Catchment subsequent pumping during - Pit Wall open water season **IVR Pit** - Whale Tail WRSF (Full to 149.3 m) within IVR Pit Catchment Whale Tail WRSF Contact Water Whale Tail WRSF Collection System A53 Catchment Whale Tail Attenuation Pond GSP-1 Catchment Whale Tail Pit Ore Stockpile RO - Whale Tail Camp and Shallow Industrial Sector RO Groundwater Clean Catchment Runoff Sewage IVR WRSF (includes GSP-2 Whale Tail Dike Catchment Runoff North Sector Catchment) Seepage Pit Wall Runoff

Figure B.18 Water Management Flowsheet during Closure (Active Flooding Whale Tail Pit)

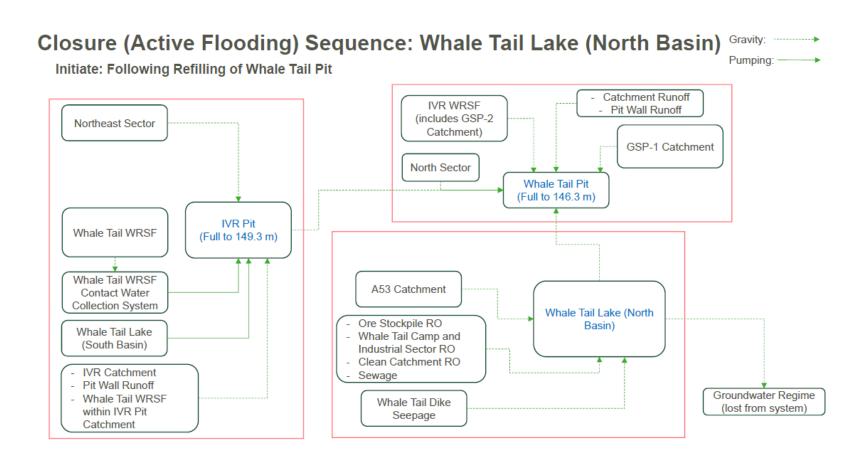


Figure B.19 Water Management Flowsheet during Closure (Active Flooding Whale Tail Lake/North Basin)

Post-closure General, Whale Tail Lake

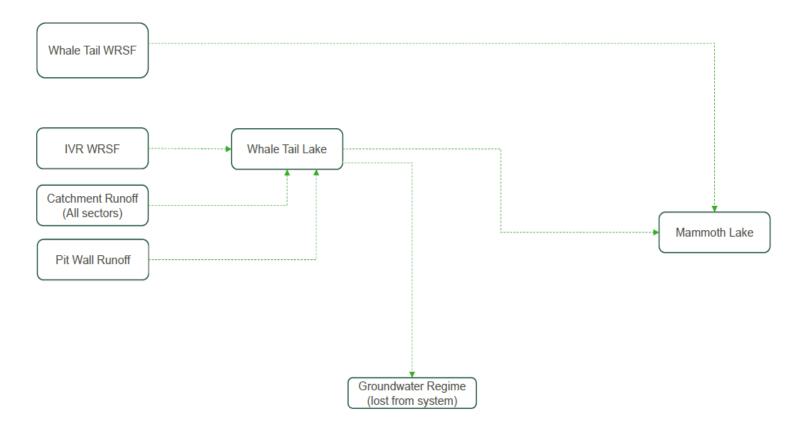


Figure B.20 Water Management Flowsheet during the Post-Closure (General Whale Tail Lake)

APPENDIX C • SELECTED YEARLY WATER BALANCE DATA

Water balances for each storage facilities are provided in Appendix D of the Whale Tail Pit - Expansion Project Mean Annual Water Balance (Golder 2019d) under mean annual climate conditions for the operational phase.