Eagle Gold Project
Project #109030
Heap Leach Facility
2023 Annual Water Balance Modeling Report
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Prepared by:

FORTE DYNAMICS, INC
120 Commerce Drive
Units 3 & 4
Fort Collins, CO 80524
(720) 642-9328

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1. INTRODUCTION

This document has been prepared by Forte Dynamics Inc. (Forte) on behalf of Victoria Gold Corp. (VGC) for the Eagle Gold Project. The purpose of this model is to provide guidance on future water management strategies for the Heap Leach Facility (HLF) and to understand climatic effects on the solution storage facilities. These results will be incorporated into the site wide water balance and water quality model as part of the annual reporting for the Eagle Gold Project.

This report describes the HLF water balance model inputs and outputs. The model has been developed and updated using historic measured data for ore placement, solution measurements and management, and other relevant operational and meteorological data as it pertains to the HLF. Model results include outputs developed for the site wide water balance and water quality models as well as the stochastic projections surrounding the In-Heap Pond. Importantly, the model results, presented herein, do not represent all site wide water management practices associated with the Events Pond, which is dealt with in the site-wide water balance model (Lorax 2023), however they do represent general water management practices associated with the HLF. This model incorporates operational lessons learned for solution management as well as integrating measured In-Heap Pond levels and the extent of stacked and leached ore for the start of the model (January 1, 2023).

2. INPUTS AND ASSUMPTIONS

The HLF Water Balance Model used by Forte makes use of a large array of operational, meteorological, ore hydrodynamic properties, and metallurgical input data. Over the course of operations, ore samples have been collected and tested to characterize ore properties which have been applied in the HLF water balance model. The HLF water balance model incorporates these details surrounding the HLF while providing operations with the ability to utilize measured inputs to better understand solution and pond level management.

2.1 Modeling Timeframe

- **Deterministic Modeling:**
  - Operations modeled from:
    - 1/1/2023 – 12/31/2028: Normal Operations (stacking and leaching of the HLF)
    - 1/1/2029 – 12/31/2029: Residual recovery and make-up water shutoff
      - 2/15/2029 – 10/10/2036: Discharge to treatment at target of 6.5 L/s for 1000m Set, 10 L/s for Climate Change Set
    - 1/1/2030 – 12/31/2031: Solution management (ore rinsing, recirculation, and discharge to treatment)
    - 1/1/2032 – 12/31/2036: Draindown (cover placement, recirculation, and discharge to treatment)
      - 5/1/2032 – 10/31/2032: Cover placement, completed in October.
    - 10/10/2036 – End of Run: Reduced discharge rate based on solution in system with maximum of 6.5 L/s for 1000m Set and 7.5 L/s for Climate Change Set, through to passive treatment.
    - *Resource:* VGC input with guidance from Forte engineering experience
- **Stochastic Modeling:**
  - Operations modeled from:
    - 1/1/2023 – 8/31/2023: Normal Operations (stacking and leaching of the HLF)
    - *Resource:* Unchanged from previous Annual Report (Forte 2022).

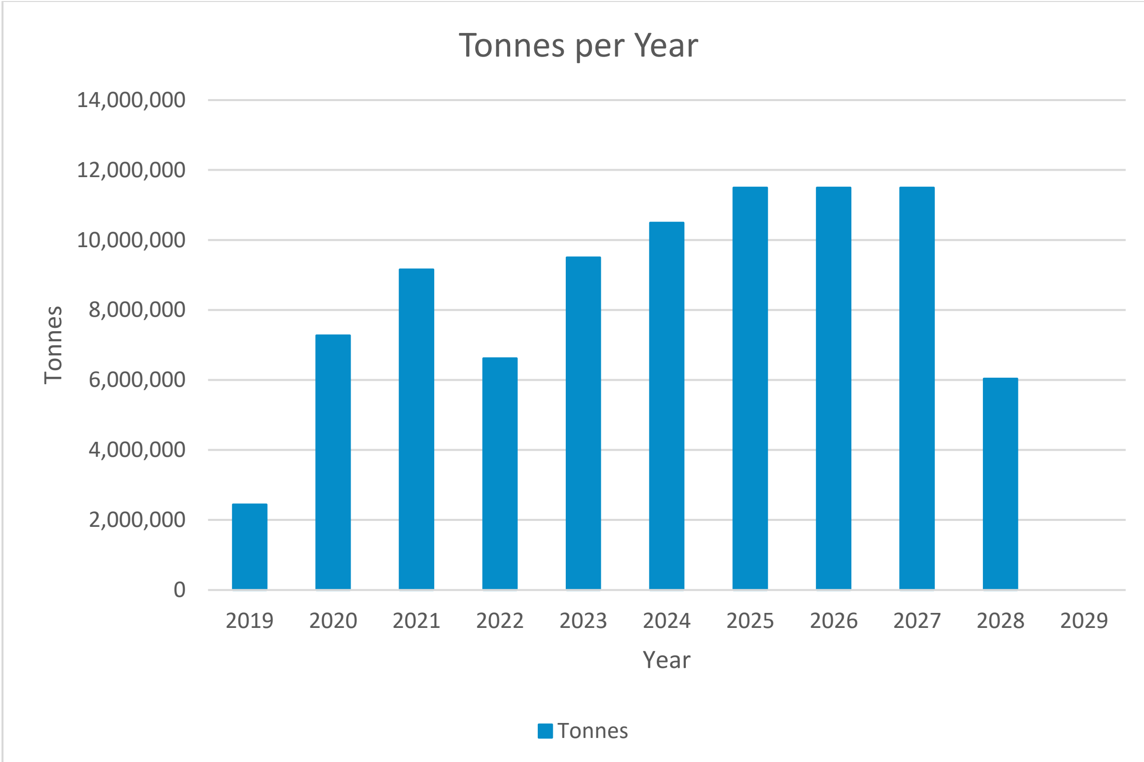
2.2 Ore Properties

- **Initial Moisture Content:**
  - 2.6% by weight
    - *Resource:* Average of the previous year of measured site data
- **Residual Moisture Content:**
  - 8.6% by weight, corresponding to a 7.69% by weight for Brooks-Corey calculations.
    - *Resource:* Unchanged from previous Annual Report (Forte 2022).
- **Active Leaching Ore Moisture Content**
  - 14.35% - 11.46% by weight
    - *Resource:* Unchanged from previous Annual Report (Forte 2022).

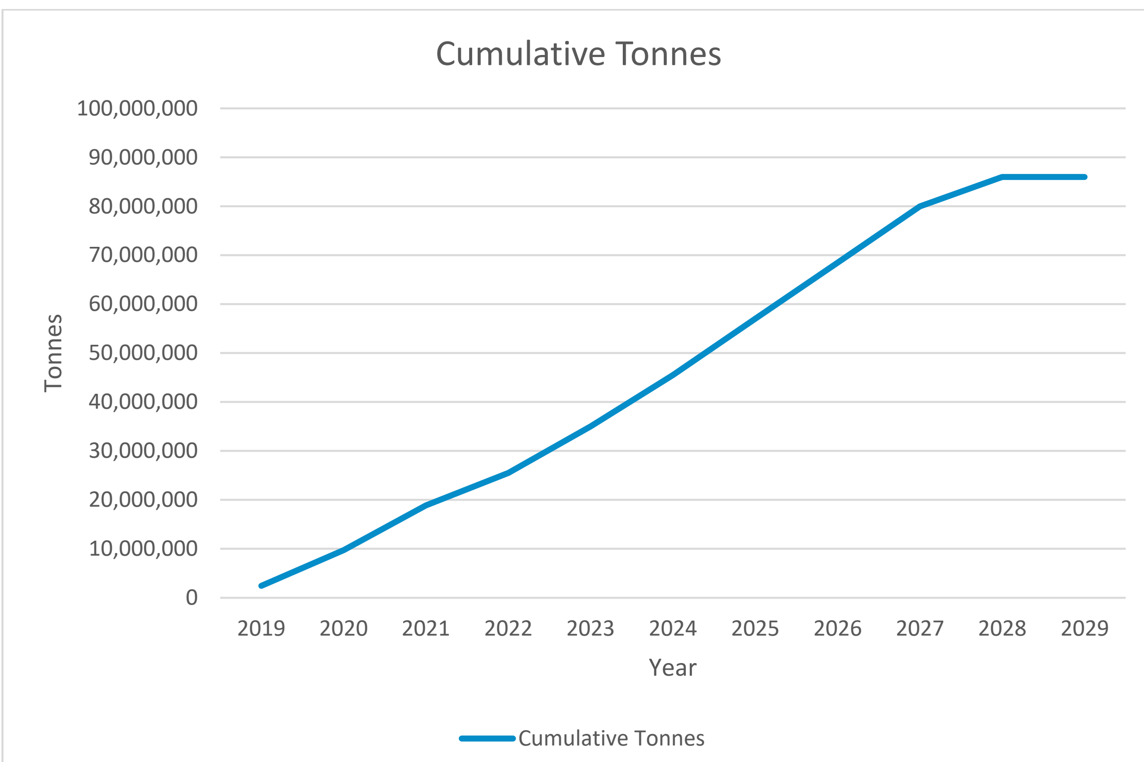
- **Bulk Dry Density**
    - 1.90 tonne/m^3
        - *Resource:* Average of the previous year of measured site data
- **Density Consolidation**
    - Density_Consolidated=Bulk_Density*Overburden_Depth^(Power_Factor), curve fit equation developed from test work with the Power Factor calculated as 0.0195
        - *Resource:* Unchanged from previous Annual Report (Forte 2022).
- **Specific Gravity**
    - 2.65
        - *Resource:* Unchanged from previous Annual Report (Forte 2022).
- **Saturated Hydraulic Conductivity**
    - 0.07268 cm/s (universally scaled down by 1 order of magnitude in model for in-field correction)
        - *Resource:* Unchanged from previous Annual Report (Forte 2022).
- **Saturated Hydraulic Conductivity Consolidation**
    - K_sat_Consolidated=Density_Consolidated*Slope+Intercept, linear fit equation developed from test work with Slope=-0.2285 and Intercept=0.4657
        - *Resource:* Unchanged from previous Annual Report (Forte 2022).
- **SCS Curve Number – Loaded HLF**
    - 70 for un-leached ore, 91 for leached ore
        - *Resource:* Unchanged from previous Annual Report
- **SCS Curve Number – Un-loaded HLF**
    - 99 for un-loaded HLF area, treated as bare LLDPE liner surface.
        - *Resource:* Unchanged from previous Annual Report
- **Closure Material**
    - 31% infiltration for plateau, 37% infiltration for side-slopes of net precipitation
        - *Resource:* based on initial research results on closure covers (Okane 2023)

2.3 Heap Leach Facility Parameters

- **Total Tonnes:**
    - 86Mt (shown in Plot 1 and Plot 2)
        - *Resource:* VGC
- **HLF Phasing:**
    - Phase 1A - 1/1/2019: 210,000 m^2 Total
    - Phase 1B - 9/21/2020: 460,000 m^2 Total
    - Phase 2A - 4/20/2022: 560,000 m^2 Total
    - Phase 2B - 4/16/2023: 668,000 m^2 Total
    - Phase 3 - 4/3/2025: 983,000 m^2 Total



Plot 1 - Mine Plan: Tonnes per Year



Plot 2 - Mine Plan: Cumulative Tonnes

- **Loading Months:**
    - Forecast stacking occurs year-round with reduced loading rates in January through March per the mine plan provided by VGC.
        - Historic loading utilizes actual tonnage placed to date.
        - *Resource:* VGC.
- **Ultimate Elevation:**
    - 1225 m above mean sea level
        - *Resource:* Unchanged from previous Annual Report (Forte 2022).
- **Lift Height:**
    - 10 - 12m
        - *Resource:* Unchanged from previous Annual Report (Forte 2022).
- **Precipitation Soak-Up/Initial Abstraction of Precipitation:**
    - SCS Curve Number Excess Moisture Method Used
        - *Resource:* Unchanged from previous Annual Report (Forte 2022).
- **Evaporation Loss from Drip Emitters:**
    - 0.5% applied in months with average daily temperatures above 0 Celsius.
        - *Resource:* Unchanged from previous Annual Report (Forte 2022).

2.4 Operational Parameters

- **Initial Leach Cycle:**
    - 90 days
        - *Resource:* Average of the previous year of measured site data.
- **Leaching Application Rate (nominal):**
    - 10 L/hr/m^2 target
        - Application rate fluctuates based on area under leach and total flow from the plant.
            - This also varies in forecasting based on solution management practices and recirculation when needed.
        - *Resource:* Average of the previous year of measured site data.
- **Target Plant Flow Rate:**
    - 1800 m^3/hr, varies through start-up and is dependent on the total available area for leaching.
        - *Resource:* Average of the previous year of measured site data.
    - Deterministic Modeling: For the updated Deterministic Model simulations performed by Forte, additional specificity of the plant flow rate and its effect on overall solution management is necessary. This includes allowing for fluctuations of this flow rate to manage the In-Heap Pond solution level by utilizing recirculation as required.
        - *After the forecasting date:* During normal operations (following initial ramp-up during development of the HLF), the Target Plant Flow Rate is 1800 m^3/hr, limited

by the Leaching Application Rate with the Evaporation Loss from Drip Emitters being subtracted off in the applicable months. During the winter months (January through March) the flow rate is managed through reductions as required to account for the reduction in HLF stacking and to maintain In-Heap Pond levels.

- *Once the mine reaches the end of loading:* The Make-up Water supply is turned off, at which point solution is managed through the steady but relatively low discharge of barren solution to treatment while the majority is recirculated, in order to maintain solution levels in the In-Heap Pond and provide one year of additional gold recovery. The duration of additional recirculation for gold recovery in this modeling is assumed to be one year, however this duration may change based on economics. After the one year of recirculation for gold recovery, a two year period. Upon conclusion of this two year period, cover placement is introduced, which is coupled with the on-going recirculation and discharge of barren solution, reducing the total volume of solution in the system. More information for the modeling of Make-up Water, Discharge to Treatment, Leach Cycle, and In-Heap Pond can be found in each of those respective sections.

- **Discharge to Treatment Rate:**
  - 1000 m Climate Series: 6.5 L/s starting 2/15/2029 until model run is completed.
  - Climate Change Climate Series: 10 L/s from 2/15/2029 to 2/1/2032, 7.5 L/s until model run is completed.
    - *Resource:* Updated based on recirculation and cover placement schedules with the elimination of make-up water post stacking per VGC input with guidance from Forte engineering experience.
- **Events Pond Storage:**
  - For the updated model runs for the HLF, the Events Pond is not further evaluated as there are no overflows from the In-Heap Pond during any of the simulations for deterministic or stochastic modeling. The Events Pond is now being captured in the site wide water balance and water quality models by Lorax to more accurately reflect site water management practices. A more complete analysis of the Events Pond and DAS is provided as part of the site wide water balance and water quality model reporting (Lorax 2023).
- **In-Heap Pond Storage Volume:**
  - 59,378 m^3 (always occupied during operation), 57,763 m^3 (maximum available storage volume during operation before overflowing to the Events Pond).
    - *Resource:* Unchanged from previous Annual Report (Forte 2022).
  - <u>Additional Discussion:</u> For all of the modeling simulations performed by Forte, the In-Heap Pond was drawn from in the following way:
    - As much solution as required to maintain the circulation of the targeted flow rate of 1800 m^3/hr during normal operations, with that flow rate acting as the maximum

total withdrawal rate from the In-Heap Pond throughout the entire mine life beginning 1/1/2023.

- After stacking is completed (during the recirculation period) solution is drawn from the pond to maintain pond levels and to maintain the targeted Discharge to Treatment rates, with those rates acting as the maximum solution removal rates from the system beginning 1/1/2029. During this time-frame, make-up water is no longer added to the system to assist with maintaining pond storage levels.

- **Cover Placement:**
  - Cover is assumed to be placed starting 5/1/2032 at a rate of 4,600 m^2/day. This continues for the first year until 10/31/2032, leaving an area of the HLF available for recirculation of solution. Upon completion of draindown, the remainder of the HLF is covered, with placement complete by 10/31/2036.
    - *Resource:* Per VGC and Okane input with guidance from Forte engineering experience.

2.5 Meteorological Inputs and Parameters

For the 2023 Annual Report, Lorax provided Forte with measured meteorological data for the site and incorporated it into an updated set of 1000m data.

- **Extreme Precipitation Reference Event:**
  - 54 mm (24-hr, 100 yr Event)
    - *Resource:* Unchanged from previous Annual Report (Forte 2022).
- **Precipitation Data used in Deterministic Modeling:**
  - Two updated, separate composite sets of data provided by Lorax were used by Forte for the updated water balance model.
    - 1000m Set: The hydrologic 2016 year (Oct 2015 to September 2016) repeated as a typical year from start of 2023 through closure.
    - Climate Change Set: This set has the identical basis as the 1000m set (2016 data repeated for years 2023 through 2099); however, Lorax provided a data set to incorporate the effects of climate change on the weather at the site.
    - *Resource:* Unchanged from previous Annual Report (Forte 2022).
    - Refer to Figures 1-4.
- **Potential Evaporation Data used in Deterministic Modeling:**
  - Two separate composite sets of data provided by Lorax were used by Forte for the updated water balance model.
    - 1000m Set: The hydrologic 2016 year (October 2015 to September 2016) repeated as a typical year from start of 2023 through closure.

        - Climate Change Set: This set has the identical basis as the 1000m set (2016 data repeated for years 2023 through 2099); however, Lorax provided a data set to incorporate the effects of climate change on the weather at the site.
        - *Resource:* Unchanged from previous Annual report (Forte 2022).
        - Refer to Figures 5-8.

- **Temperature Data used in Deterministic Modeling:**
    - Two separate composite sets of data provided by Lorax were used by Forte for the updated water balance model.
        - 1000m Set: hydrologic 2016 year (October 2015 to September 2016) repeated as a typical year from start of 2023 through closure.
        - Climate Change Set: This set has the identical basis as the 1000m set (Site Synthetic through 2021, 2016 data repeated for years 2023 through 2099); however, Lorax provided a data set to incorporate the assumed effects of climate change on the weather at the site.
        - *Resource:* Unchanged from previous Annual report (Forte 2022).
        - Refer to Figures 9-12.
- **Stochastic Sampling and Iterations:**
    - Latin Hypercube Sampling, 100 iterations/realizations
        - *Resource:* Engineering and statistical modeling experience updated to reflect the added robustness and detail of the updated operational model with a quarter day timestep.
- **Precipitation Data used in Stochastic Modeling:**
        - 1/1/2023 to 8/31/2023: WGEN (Richardson and Wright, USDA, 1984) with up-front detailed descriptive statistic parameter generation was used on the 71 years of daily Site Synthetic data. Using the stochastic sampling and iterations described previously, 100 realizations of data were produced for each day of data for Precipitation, Maximum and Minimum Temperature, Evaporation, and Solar Radiation.
        - *Resource:* Lorax (Site Synthetic dataset from 2023-2099 provided to Forte for use in WGEN Stochastic data production).
        - Refer to Figures 13 and 14.
- **Potential Evaporation Data used in Stochastic Modeling:**
        - 1/1/2023 to 8/31/2023: Refer to the Precipitation Data used in Stochastic Modeling section for a description of the methodology used to produce the 100 yearly Realizations of data for Precipitation, Maximum and Minimum Temperature, Evaporation, and Solar Radiation.
        - *Resource:* Lorax (Site Synthetic dataset from 2023-2099 provided to Forte for use in WGEN Stochastic data production).

  - Refer to Figures 15 and 16.
- **Temperature Data used in Stochastic Modeling:**
  - 1/1/2023 to 8/31/2023: Refer to the Precipitation Data used in Stochastic Modeling section for a description of the methodology used to produce the 100 yearly Realizations of data for Precipitation, Maximum and Minimum Temperature, Evaporation, and Solar Radiation. As WGEN outputs the Minimum and Maximum Average Daily Temperature, the Forte model calculates the overall Average Daily Temperature from the WGEN outputs.
  - *Resource:* Lorax (Site Synthetic dataset from 2023-2099 provided to Forte for use in WGEN Stochastic data production).
  - Refer to Figures 17 and 18.
- **Solar Radiation Data used in Stochastic Modeling:**
  - 1/1/2023 to 8/31/2023: Refer to the Precipitation Data used in Stochastic Modeling section for a description of the methodology used to produce the 100 yearly Realizations of data for Precipitation, Maximum and Minimum Temperature, Evaporation, and Solar Radiation. Solar Radiation is used in the calculation of Evapotranspiration for the HLF.
  - *Resource:* Lorax (Site Synthetic dataset from 2023-2099 provided to Forte for use in WGEN Stochastic data production).
  - Refer to Figure 19.
- **Evapotranspiration Calculated:**
  - Specifically, for the HLF, the Eagle Climate Data was used for the Solar Radiation, Wind Speed, and Relative Humidity necessary (along with temperature data from the 1000m and Climate Change data) for the calculation of Evapotranspiration.
  - The ponds utilized the Evaporation data provided in the 1000m and Climate Change datasets.
  - *Resource:* Lorax 1000m data set provided to Forte in 2021.
  - *Resource:* Lorax Climate Change (CC) data set provided to Forte in 2020
  - Calculations/technique determined by Forte from engineering and HLF modeling experience.
- **Sublimation Calculated:**
  - Sublimation is calculated using heat transfer principles and is included implicitly within the Snow 17 (Snow Accumulation and Ablation, Anderson, 2016) submodel used by Forte as discussed in greater detail below. The Snow 17 approach yields similar results to the method used by Lorax for the site wide water balance and water quality model, however in Forte's experience, this approach more closely aligns to measured snowpack and provides a better representation of snow accumulation and snow melt for HLF operations.

  - *Resource:* Lorax 1000m Site Synthetic Data set provide to Forte in 2021.
  - *Resource:* Climate Change (CC) Site Synthetic data set provided to Forte in 2020
  - These data sets provide the necessary inputs for Snow 17 (Snow Accumulation and Ablation, Anderson, 2016).
- o Additional Discussion: Snow 17 uses heat transfer and energy balance methodologies to calculate the energy exchange at the snow-air interface taking into account latent and sensible heat exchange, vapor pressure differential, and dew-point temperature. This model has been calibrated to align to observed snowmelt timing on-site, better capturing the aspect of the HLF and the timing of freshet.

- **Snowfall, Rain, and Melt:**
  - o The division of precipitation between rain and snow and the calculation of Snow Water Equivalent and excess water (rain and melt) are modeled by Forte using the Snow 17 submodel. The Snow 17 submodel takes average daily temperature and precipitation as the critical inputs, and corrects for seasonal solar radiation changes, latitude and altitude in the implicit calculations of melt factor, and lapse rate most notably. Snow 17 also makes use of daily heat deficit, accounting for the internal condition of the snowpack based on the net heat transfer effects due to daily temperature and precipitation at the snow surface. The Snow 17 approach yields similar results to the method used by Lorax for the site wide water balance and water quality model, however in Forte's experience this approach more closely aligns to measured snowpack and provides a better representation of snow accumulation and snow melt for HLF operations.

3. RESULTS AND DISCUSSION

Please refer to Figures 20-35 below for the following discussion of the Deterministic modeling performed from 1/1/2023 through 12/31/2039 and Figures 36 and 37 for the following discussion of the Stochastic modeling performed from 1/1/2023 through 8/31/2023.

3.1 Deterministic Modeling Results

Deterministic modeling of the HLF was performed using two sets of Climate/Meteorological data provided to Forte by Lorax, labeled in the graphs and discussed below as “1000m” and “Climate Change”/ “CC”. The key difference between the 1000m and CC data are changes to account for the impact of climate change on the Eagle site. For the 17-year timeline modeled by Forte in the Deterministic modeling, the results were consolidated into Monthly datasets and graphed as such.

- **In-Heap Pond Volume vs In-Heap Pond Max Pumpable Volume**
  - There was no overflow from the In-Heap Pond to the Events Pond in the forecast model runs.
  - As noted above in Section 2.4, the HLF WBM considers the change in storage volume of the In-Heap Pond only. Modelling of the Events Pond is provided in Lorax (2023).
  - Refer to Figures 20-23.
- **Total Flow to Plant and Drainage from HLF**
  - The Total Flow to Plant (presumed to flow through the plant with negligible changes in volume pumped back to the HLF) and Drainage from HLF rates represent the measured and forecasted values of the “barren” solution flow rate pumped to the HLF and the “pregnant” solution reporting back to the In-Heap Pond from the HLF, respectively.
  - Total Flow to Plant:
    - From approximately 1/1/2023 to 12/31/2028, this flow rate is primarily a function of the Target Plant Flow Rate of 1800 m^3/hr and maintained near the 1800 m^3/hr target throughout most of this time period. Variations in this rate are attributed to solution management practices to prevent the In-Heap Pond from overflowing. Additionally, variations in the Make-Up Water supply are used to indicate that water is being added into the system to maintain the Target Plant Flow Rate (Figure 24 and Figure 25). Variations in leaching flow rate also coincide with the winter months when stacking rates are decreased to manage pond levels. This typically occurs from January through the freshet runoff until approximately mid-April, when there is sufficient volume of solution maintained in the In-Heap Pond for the Total Flow to Plant to consistently meet the target leaching demand of approximately 1800 m^3/hr. In the event that there is not enough solution to meet the Target Plant Flow Rate requirement, the demand for Make-Up Water is triggered as shown in Figure 28 and Figure 29.
    - After 12/31/2028, the Total Flow to Plant demand for solution from the In-Heap Pond becomes secondary after the last ore loaded onto the HLF. Solution from the

In-Heap Pond is actively pumped out to be discharged to treatment (at a low but steady flow rate) as the top priority and the remaining solution/water is recirculated to the HLF for storage within the ore to maintain appropriate In-Heap Pond levels while residual gold recovery continues. Additionally, make-up water is eliminated to reduce the net surplus of solution within the HLF, still allowing for recirculation near the target flow rate.

        - Beyond 12/31/2036 for the 1000m Climate Series and the Climate Change Climate Series, the In-Heap Pond reaches sufficiently low levels that there is no longer a need for continuous recirculation of solution. At this point, the Total Flow to Plant is zero in perpetuity, and the flow from the In-Heap Pond is directed to the HLF passive treatment system. After 2036, cover placement is complete, further reducing infiltration into the system.
    - Drainage from HLF
        - Generally, the Drainage from Heap is a function of the Total Flow to Plant, Make-Up Water, and meteorological factors. Energy transfer (e.g. sublimation of snow and evapotranspiration) is applied at the surface of the HLF as well as the percentage of precipitation (rain or melt) that infiltrates into the HLF. Note that the portion of this precipitation that does not infiltrate into the HLF reports to the In-Heap Pond by running off the HLF or exposed liner then infiltrates into the ore at the lowest surface elevation of the HLF.
    - Refer to Figures 24-27.
- **Make-Up Water and Discharge to Treatment Rates**
    - The Make-Up Water is the difference between the solution demand for leaching of ore on the HLF and the available solution in both the In-Heap sent through the plant. The Make-Up Water requirement is generally seasonal, until the Make-Up Water supply is shut-off after stacking is complete on 12/31/2028. Once the runoff from snow melt is completed by the end of April to early May each year, the demand for Make-Up Water from an outside source begins to increase and fluctuate through the summer until the average temperature falls below 0 Celsius. Once the site is generally below freezing in October, precipitation no longer adds significantly to the In-Heap Pond Volume and the requirement for Make-Up Water reaches its highest levels throughout the remaining period of the winter, as the mine continues to stack new ore on the HLF.
    - The Discharge to Treatment Rates were determined by Forte to maintain In-Heap Pond levels and to prevent overflow to the Events Pond. This discharge is used during the recirculation periods, including residual gold recovery, rinsing with CN destruct, and draindown.

   - 1000m Climate Series: On 1/1/2029, discharge to treatment begins at a constant rate of 6.5 L/s. This rate is maintained without interruption until the end of the model run when passive closure is reached.
   - Climate Change Climate Series: On 1/1/2029, discharge to treatment begins at a constant rate of 10 L/s. This rate is maintained without interruption until it is decreased on 2/1/2032 to 7.5 L/s (aligning with cover placement) per calibration model runs and Forte engineering judgement. These rates are increased over the 1000 Climate Series, given the increased overall quantity of precipitation in the latter years of the Climate Change Climate Series, and to prevent the In-Heap Pond from overflowing during initiation of draindown of the HLF.
  - Refer to Figures 28-31.
- **Snow Water Equivalent**
  - The Snow Water Equivalent (SWE) as modeled by the Snow 17 method shows both the 1000m and Climate Change datasets with SWE reaching a peak in early April, reaching zero (signifying complete melt) by end of April to early May, and beginning to increase again in September of each year. The Climate Change dataset yields greater maximum and lesser minimum SWE values than the repeated 1000m dataset indicating that some years the overall effect of the increased temperature will outweigh the effect of the increased precipitation resulting in lower SWE values, while in other years the exact reversal of effects is seen.
  - Refer to Figures 32-35.

3.2 Stochastic Modeling Results

Stochastic modeling of the HLF was performed using Climate/Meteorological data generated utilizing WGEN and historic data records provided by Lorax. For each model run, the stochastically created Climate/Meteorological data was applied. The basis of the stochastically generated data is the 71-year Site Synthetic data provided by Lorax which was used in the WGEN model to produce 100 realizations of daily climate data for a single-year record. For the 8-month timeline modeled by Forte in the Stochastic modeling, the results were consolidated into weekly datasets and graphed as such.

- **In-Heap Pond Volume vs In-Heap Pond Max Pumpable Volume**
  - There was no overflow from the In-Heap Pond to the Events Pond in the forecast model runs.
  - As noted above in Section 2.4, the HLF WBM considers the change in storage volume of the In-Heap Pond only. Modelling of the Events Pond is provided in Lorax (2023).
  - Refer to Figure 36.

- **Snow Water Equivalent**
  - For the Stochastic modeling, the simulated SWE values reach their maximum around early April with all of the maximum SWE values between 170mm and 240mm. In all datasets, the SWE shows a decrease from the peak value to about zero over the course of late-April to early-May with variations correlated to the climate input data, especially precipitation and temperature.
  - Refer to Figure 37.

4. CONCLUSION/SUMMARY

4.1 Deterministic Modeling

For the modeled period:

- There is no overflow from the In-Heap Pond to the Events Pond.
  - Implicit in this is that there was no release to the environment during this period.
  - The HLF can maintain the no overflows by applying water management strategies, specifically, by turning off the supply of Make-Up Water, utilizing Discharge to Treatment, and by maintaining secondary recirculatory pumping after all of the ore has been loaded onto the HLF.

4.2 Stochastic Modeling

All stochastically generated climate datasets are presented on a weekly basis.

There is a 0% probability of overflow from the In-Heap Pond at any point in 2023 for the HLF model results presented herein. As noted above, this model does not incorporate all the site-wide water management strategies, specifically surrounding the Events Pond which is captured in the site-wide water balance and water quality modeling.

5. REFERENCES

- Reference 1: Forte 2022 – Annual Water Balance Modeling Report
- Reference 2: Lorax 2023 – Site-wide Water Balance and Water Quality Model Report
- Reference 3: Okane 2023 – Okane Consulting Communication 03.10.2023

FIGURES

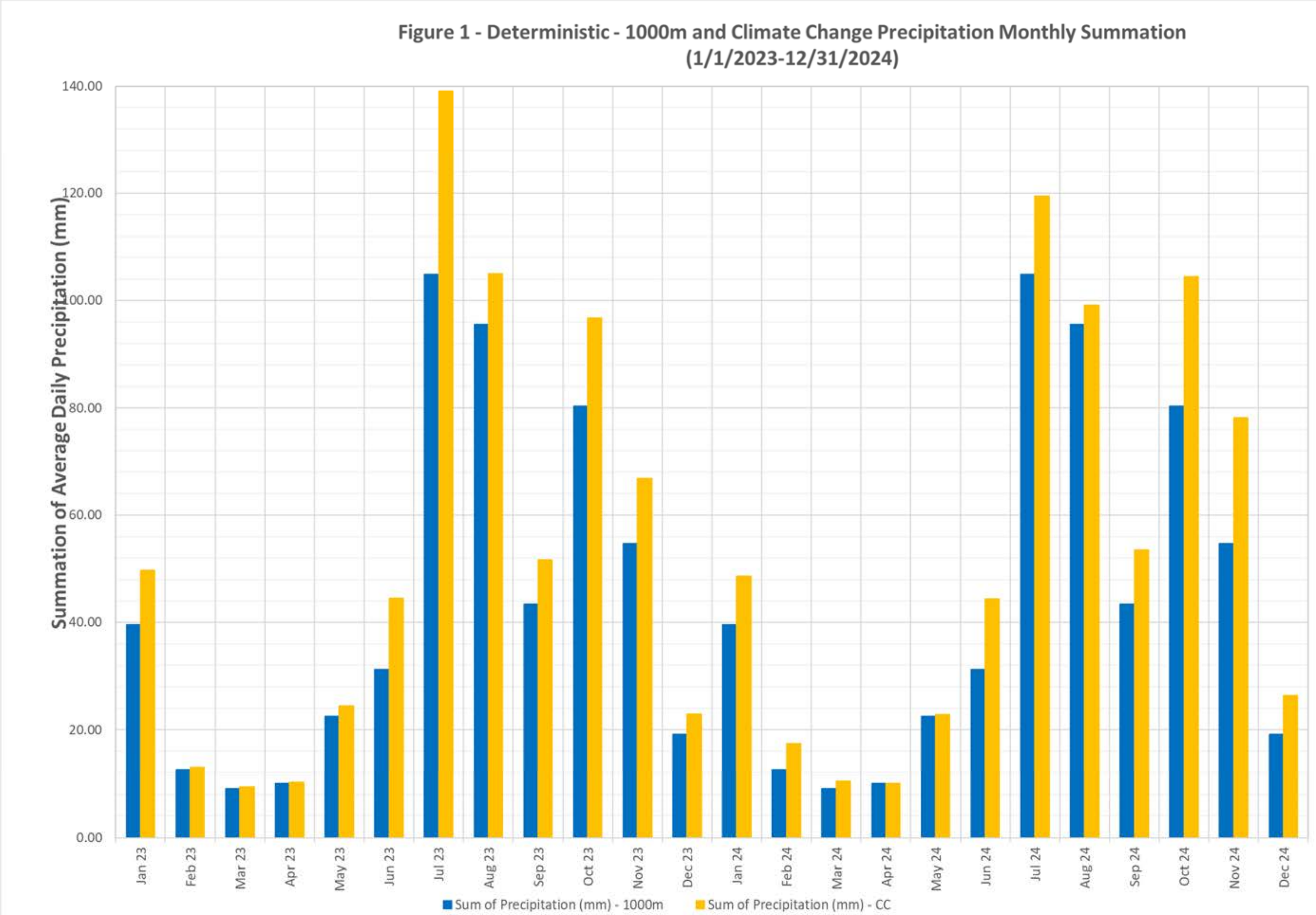


Figure 1 - Deterministic - 1000m and Climate Change Precipitation Monthly Summation
(1/1/2023-12/31/2024)
Summation of Average Daily Precipitation (mm)
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
Jan 23
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May 23
Jun 23
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Mar 24
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Oct 24
Nov 24
Dec 24
Sum of Precipitation (mm) - 1000m
Sum of Precipitation (mm) - CC

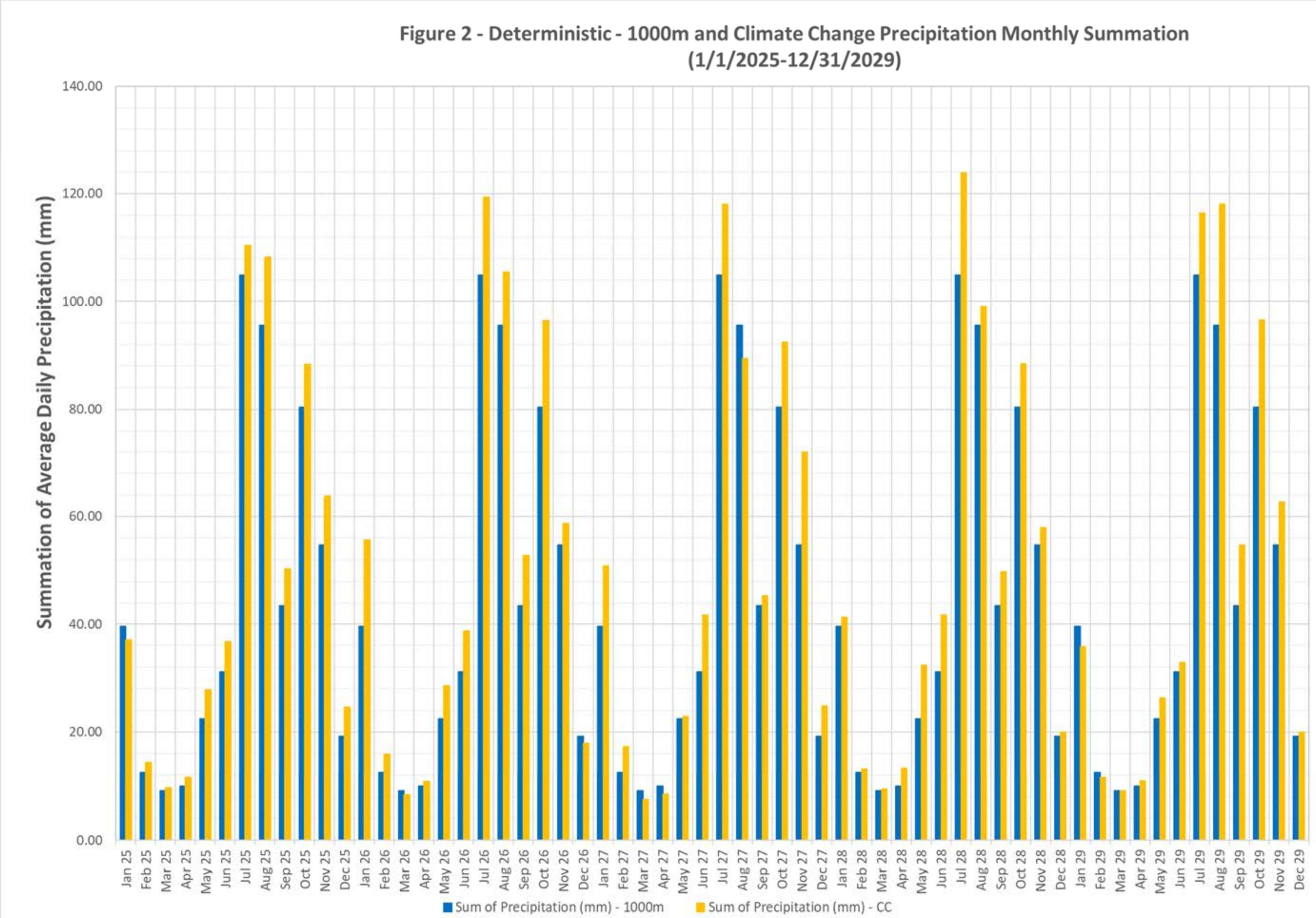
Figure 2 - Deterministic - 1000m and Climate Change Precipitation Monthly Summation (1/1/2025-12/31/2029)
Summation of Average Daily Precipitation (mm)
0.00
20.00
40.00
60.00
80.00
100.00
120.00
140.00
Jan 25
Feb 25
Mar 25
Apr 25
May 25
Jun 25
Jul 25
Aug 25
Sep 25
Oct 25
Nov 25
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Sum of Precipitation (mm) - 1000m
Sum of Precipitation (mm) - CC

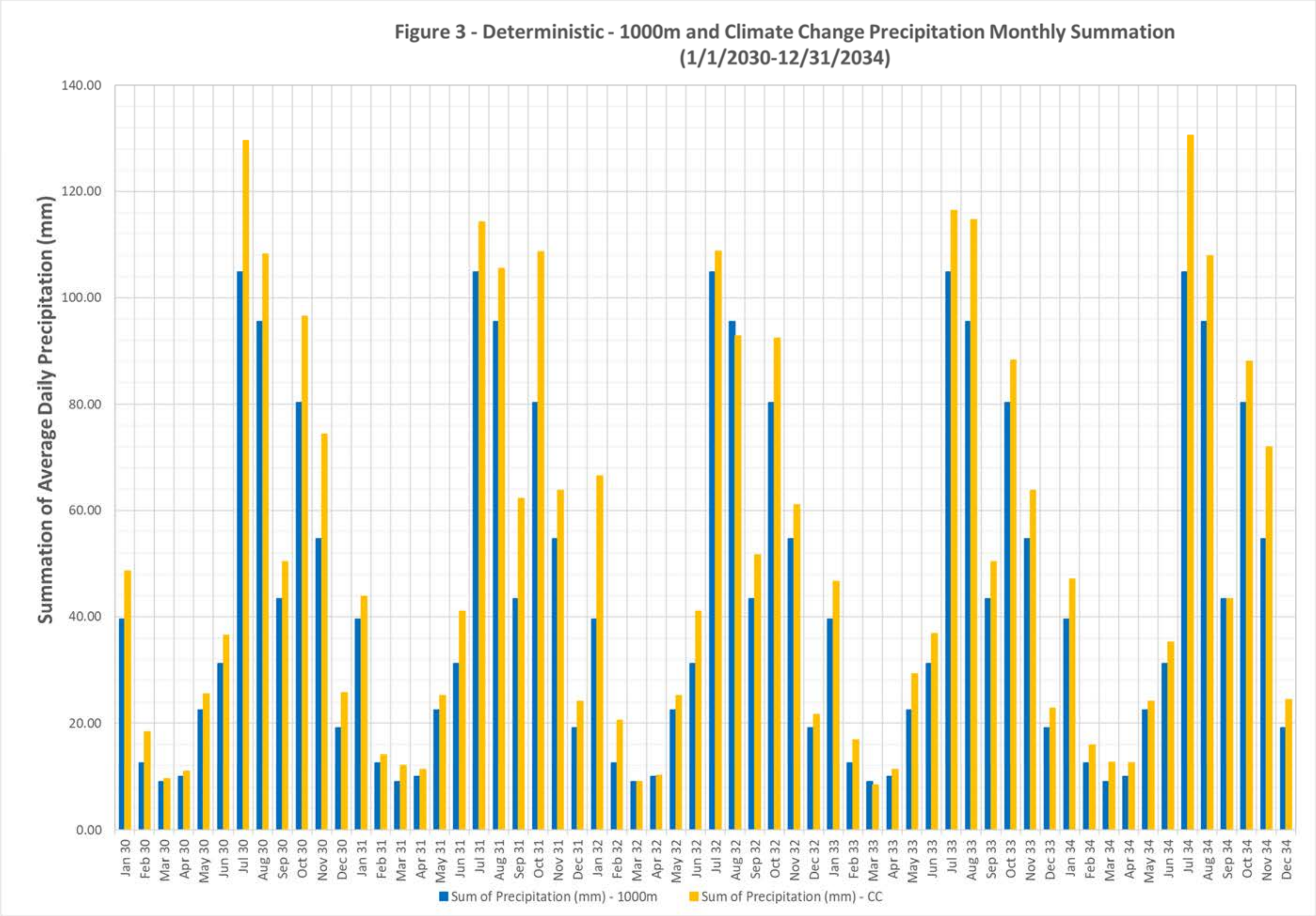


Figure 3 - Deterministic - 1000m and Climate Change Precipitation Monthly Summation (1/1/2030-12/31/2034)
Summation of Average Daily Precipitation (mm)
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
Jan 30
Feb 30
Mar 30
Apr 30
May 30
Jun 30
Jul 30
Aug 30
Sep 30
Oct 30
Nov 30
Dec 30
Jan 31
Feb 31
Mar 31
Apr 31
May 31
Jun 31
Jul 31
Aug 31
Sep 31
Oct 31
Nov 31
Dec 31
Jan 32
Feb 32
Mar 32
Apr 32
May 32
Jun 32
Jul 32
Aug 32
Sep 32
Oct 32
Nov 32
Dec 32
Jan 33
Feb 33
Mar 33
Apr 33
May 33
Jun 33
Jul 33
Aug 33
Sep 33
Oct 33
Nov 33
Dec 33
Jan 34
Feb 34
Mar 34
Apr 34
May 34
Jun 34
Jul 34
Aug 34
Sep 34
Oct 34
Nov 34
Dec 34
Sum of Precipitation (mm) - 1000m
Sum of Precipitation (mm) - CC

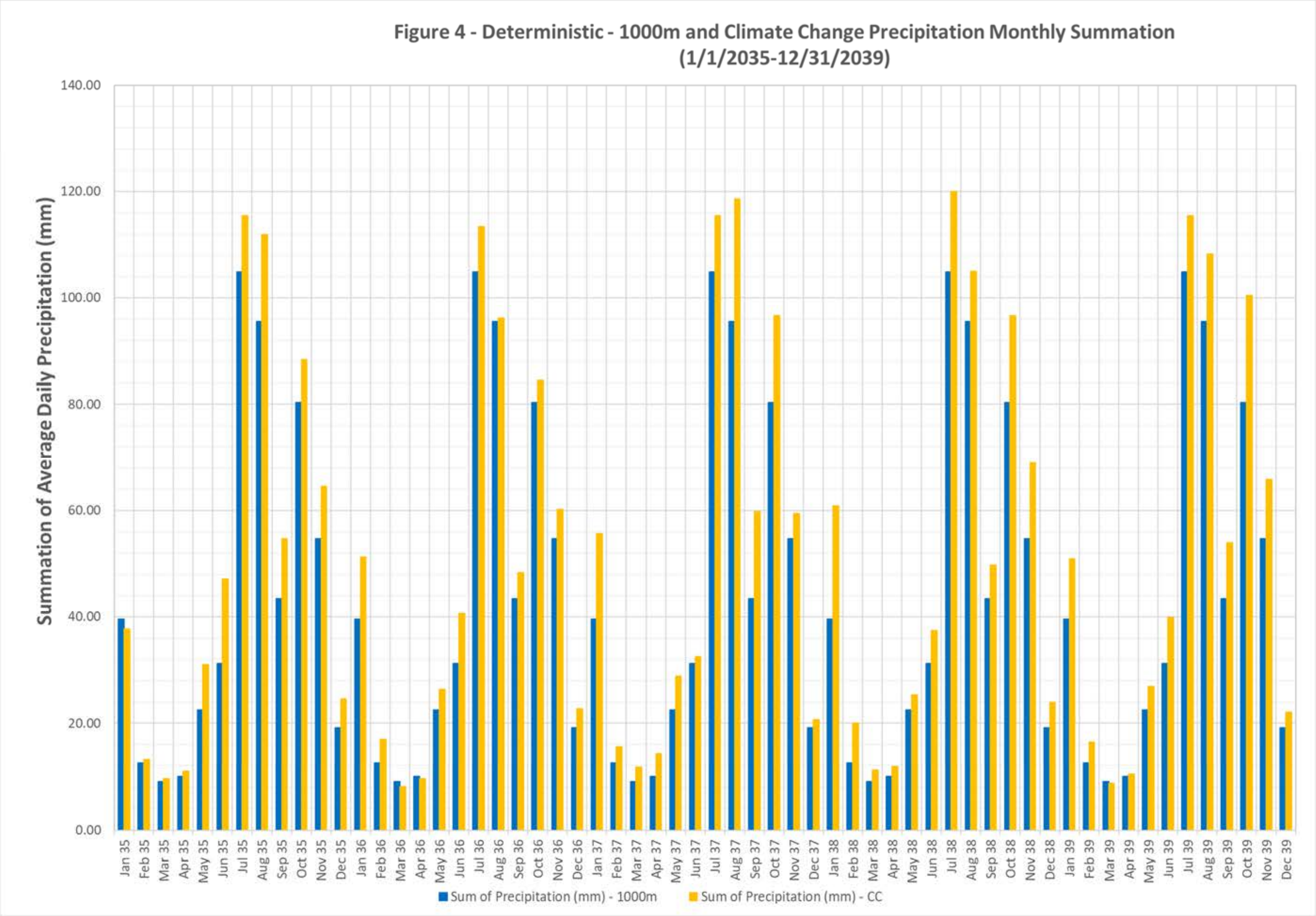


Figure 4 - Deterministic - 1000m and Climate Change Precipitation Monthly Summation
(1/1/2035-12/31/2039)
Summation of Average Daily Precipitation (mm)
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
Jan 35 Feb 35 Mar 35 Apr 35 May 35 Jun 35 Jul 35 Aug 35 Sep 35 Oct 35 Nov 35 Dec 35
Jan 36 Feb 36 Mar 36 Apr 36 May 36 Jun 36 Jul 36 Aug 36 Sep 36 Oct 36 Nov 36 Dec 36
Jan 37 Feb 37 Mar 37 Apr 37 May 37 Jun 37 Jul 37 Aug 37 Sep 37 Oct 37 Nov 37 Dec 37
Jan 38 Feb 38 Mar 38 Apr 38 May 38 Jun 38 Jul 38 Aug 38 Sep 38 Oct 38 Nov 38 Dec 38
Jan 39 Feb 39 Mar 39 Apr 39 May 39 Jun 39 Jul 39 Aug 39 Sep 39 Oct 39 Nov 39 Dec 39
Sum of Precipitation (mm) - 1000m
Sum of Precipitation (mm) - CC

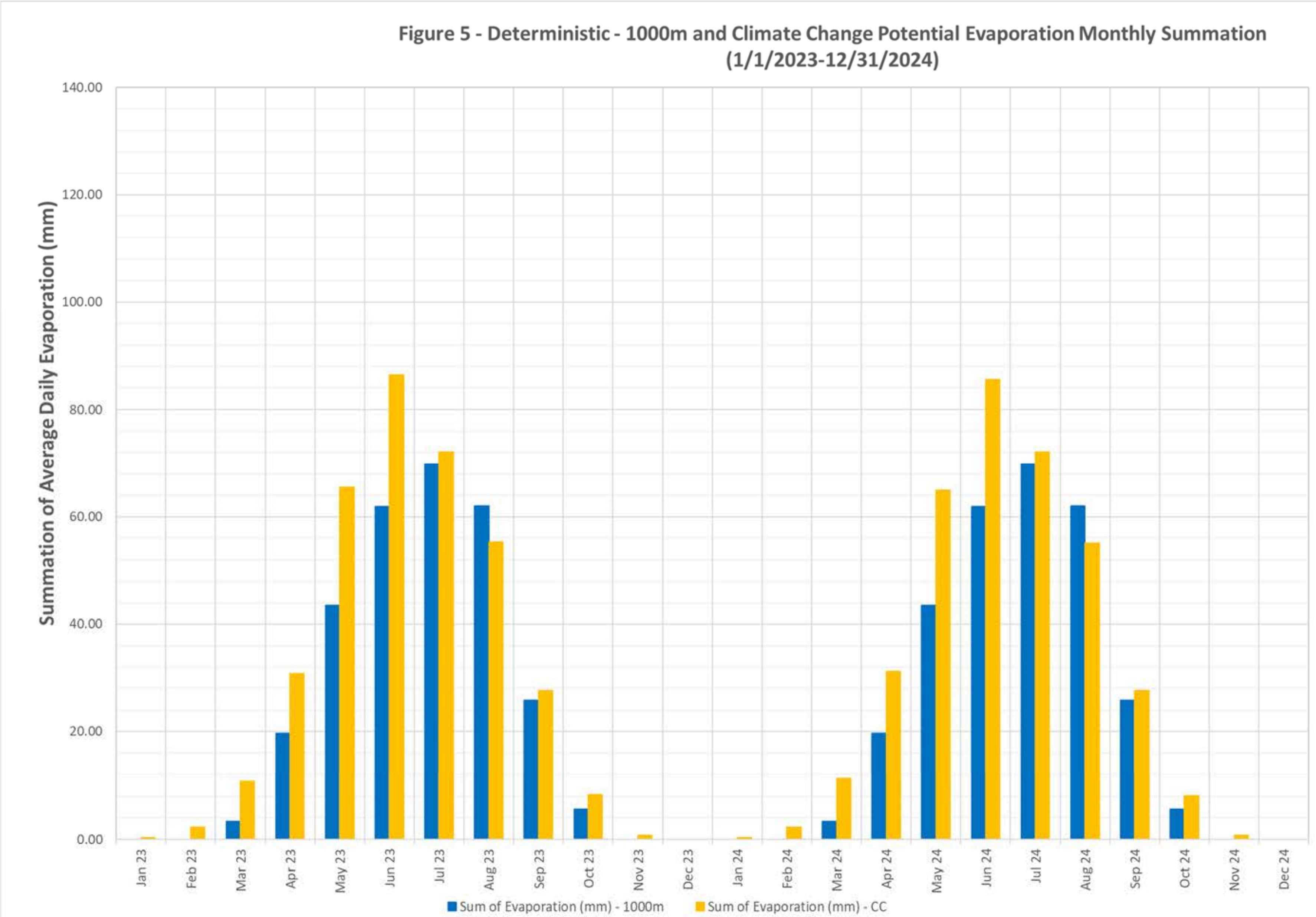
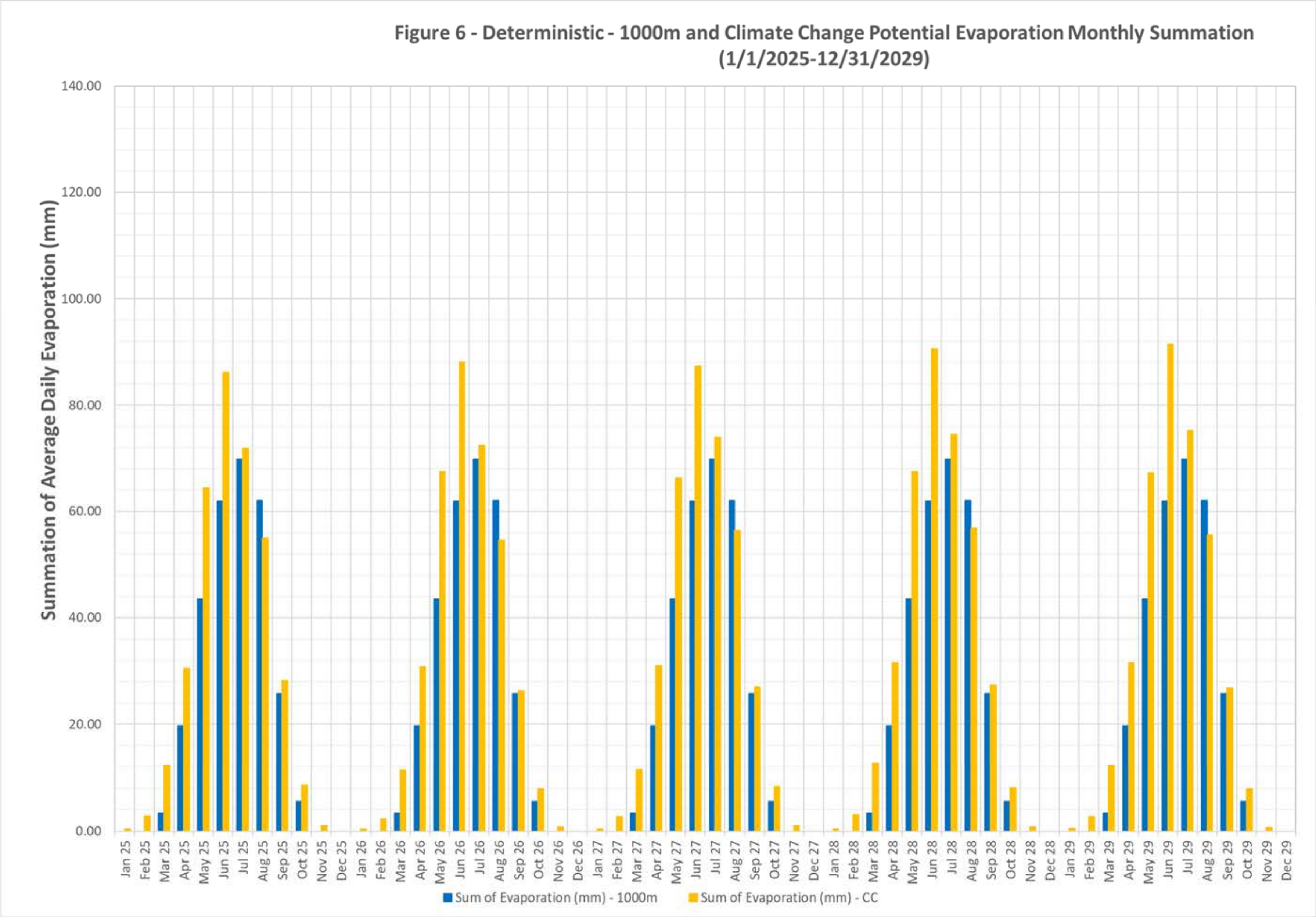


Figure 5 - Deterministic - 1000m and Climate Change Potential Evaporation Monthly Summation
(1/1/2023-12/31/2024)
Summation of Average Daily Evaporation (mm)
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
Jan 23
Feb 23
Mar 23
Apr 23
May 23
Jun 23
Jul 23
Aug 23
Sep 23
Oct 23
Nov 23
Dec 23
Jan 24
Feb 24
Mar 24
Apr 24
May 24
Jun 24
Jul 24
Aug 24
Sep 24
Oct 24
Nov 24
Dec 24
Sum of Evaporation (mm) - 1000m
Sum of Evaporation (mm) - CC



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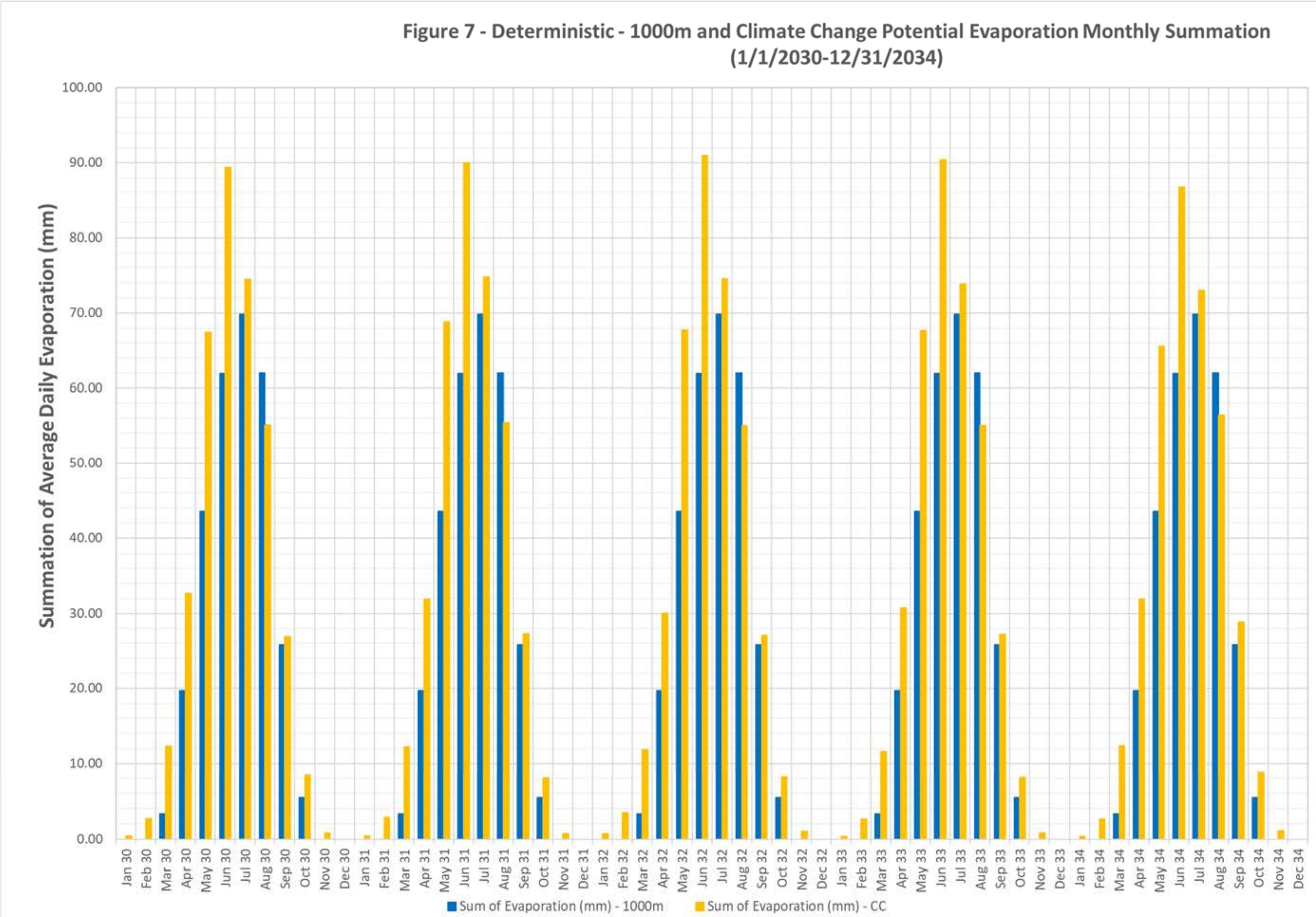


Figure 7 - Deterministic - 1000m and Climate Change Potential Evaporation Monthly Summation (1/1/2030-12/31/2034)
Summation of Average Daily Evaporation (mm)
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
Jan 30 Feb 30 Mar 30 Apr 30 May 30 Jun 30 Jul 30 Aug 30 Sep 30 Oct 30 Nov 30 Dec 30
Jan 31 Feb 31 Mar 31 Apr 31 May 31 Jun 31 Jul 31 Aug 31 Sep 31 Oct 31 Nov 31 Dec 31
Jan 32 Feb 32 Mar 32 Apr 32 May 32 Jun 32 Jul 32 Aug 32 Sep 32 Oct 32 Nov 32 Dec 32
Jan 33 Feb 33 Mar 33 Apr 33 May 33 Jun 33 Jul 33 Aug 33 Sep 33 Oct 33 Nov 33 Dec 33
Jan 34 Feb 34 Mar 34 Apr 34 May 34 Jun 34 Jul 34 Aug 34 Sep 34 Oct 34 Nov 34 Dec 34
Sum of Evaporation (mm) - 1000m
Sum of Evaporation (mm) - CC

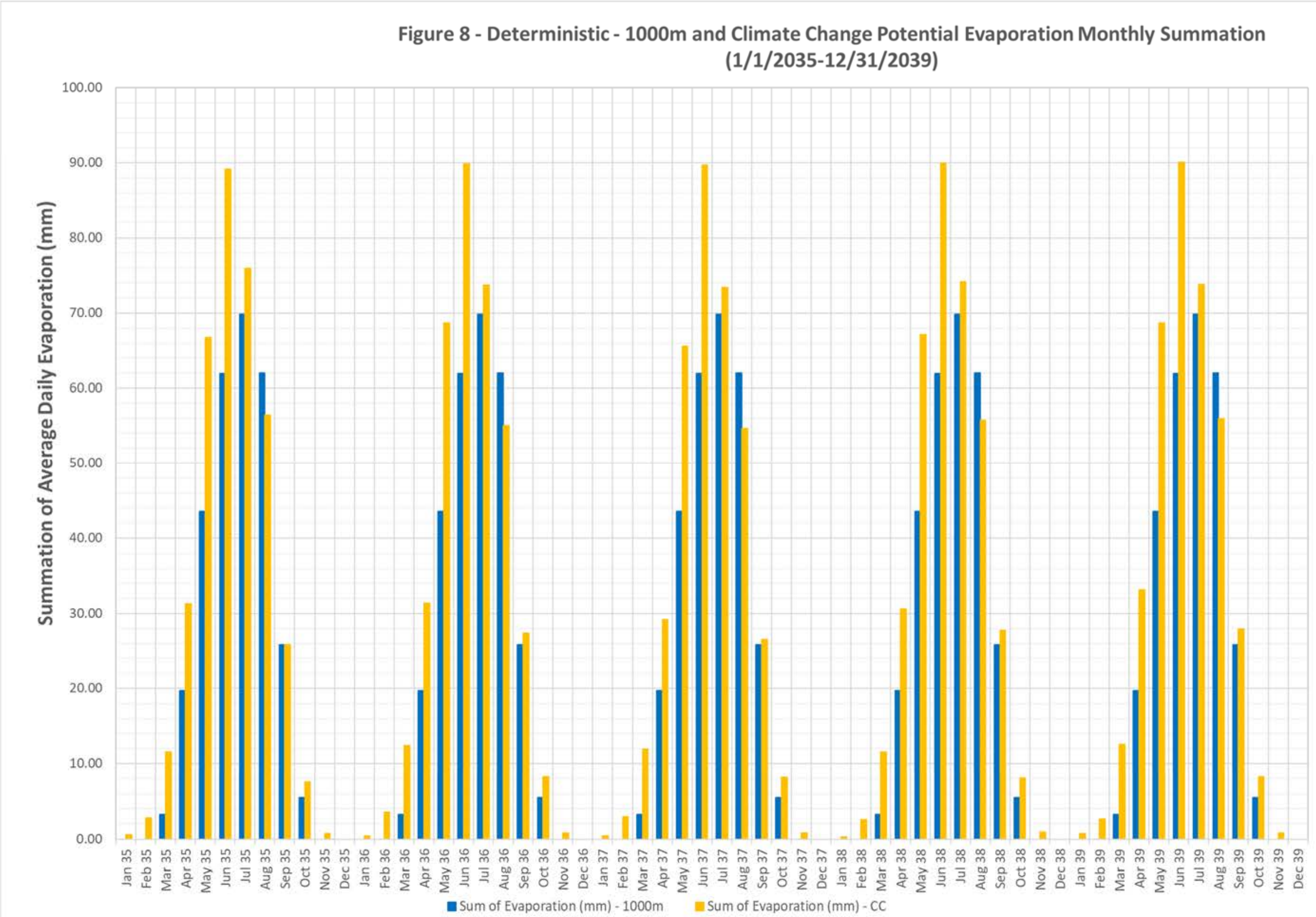


Figure 8 - Deterministic - 1000m and Climate Change Potential Evaporation Monthly Summation
(1/1/2035-12/31/2039)
Summation of Average Daily Evaporation (mm)
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
Sum of Evaporation (mm) - 1000m
Sum of Evaporation (mm) - CC

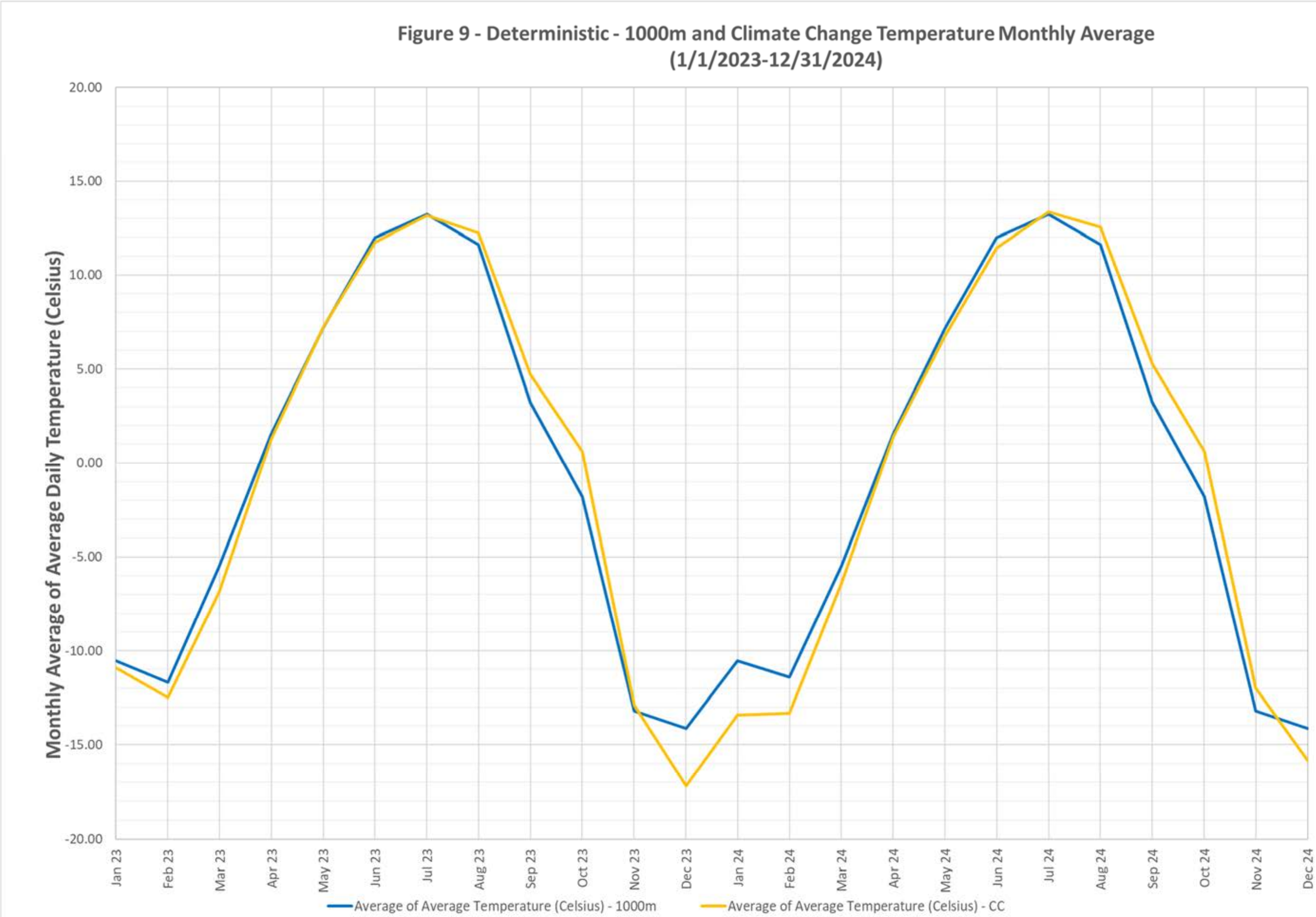


Figure 9 - Deterministic - 1000m and Climate Change Temperature Monthly Average
(1/1/2023-12/31/2024)
Monthly Average of Average Daily Temperature (Celsius)
20.00
15.00
10.00
5.00
0.00
-5.00
-10.00
-15.00
-20.00
Jan 23
Feb 23
Mar 23
Apr 23
May 23
Jun 23
Jul 23
Aug 23
Sep 23
Oct 23
Nov 23
Dec 23
Jan 24
Feb 24
Mar 24
Apr 24
May 24
Jun 24
Jul 24
Aug 24
Sep 24
Oct 24
Nov 24
Dec 24
Average of Average Temperature (Celsius) - 1000m
Average of Average Temperature (Celsius) - CC

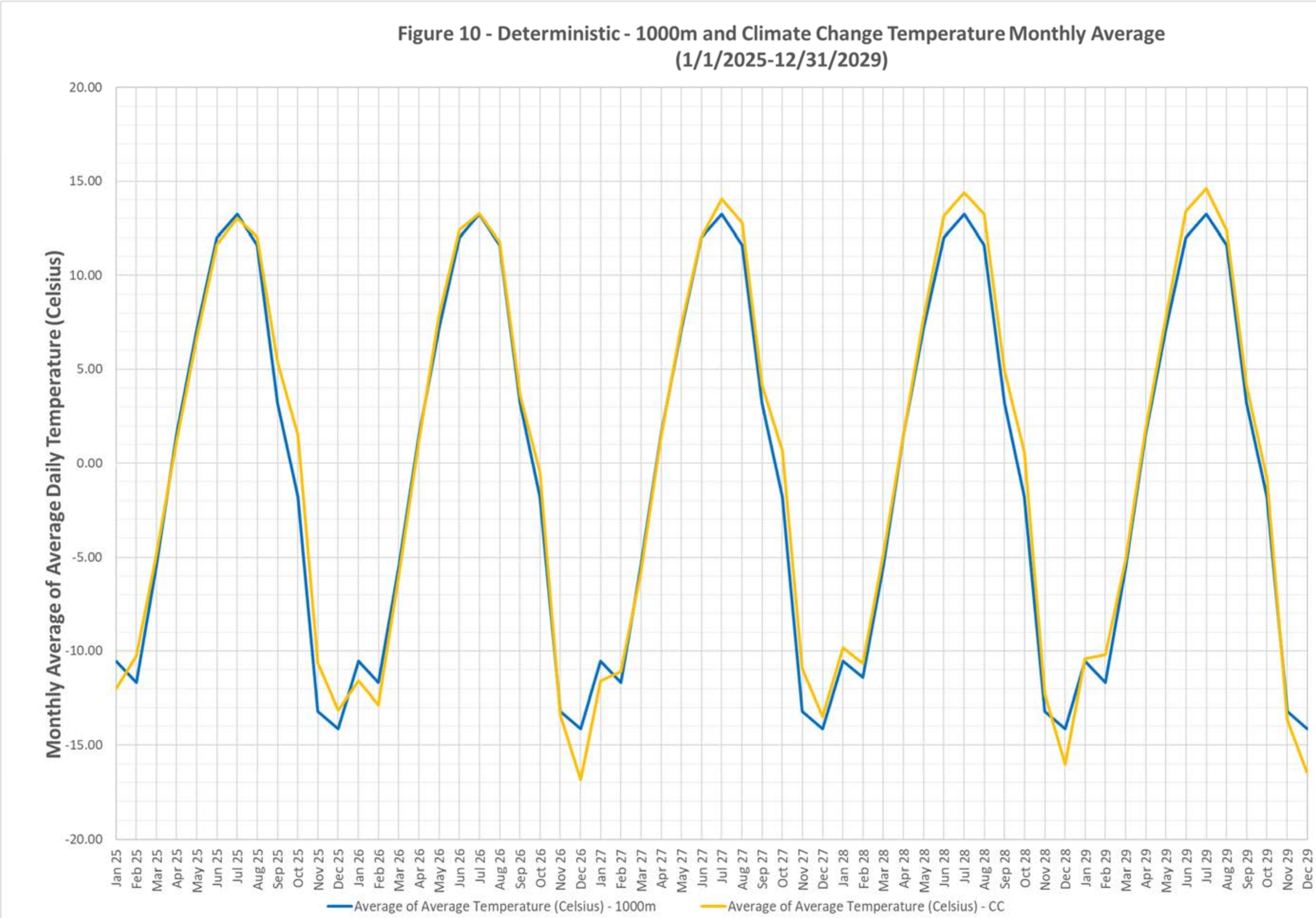


Figure 10 - Deterministic - 1000m and Climate Change Temperature Monthly Average
(1/1/2025-12/31/2029)
Monthly Average of Average Daily Temperature (Celsius)
20.00
15.00
10.00
5.00
0.00
-5.00
-10.00
-15.00
-20.00
Jan 25 Feb 25 Mar 25 Apr 25 May 25 Jun 25 Jul 25 Aug 25 Sep 25 Oct 25 Nov 25 Dec 25
Jan 26 Feb 26 Mar 26 Apr 26 May 26 Jun 26 Jul 26 Aug 26 Sep 26 Oct 26 Nov 26 Dec 26
Jan 27 Feb 27 Mar 27 Apr 27 May 27 Jun 27 Jul 27 Aug 27 Sep 27 Oct 27 Nov 27 Dec 27
Jan 28 Feb 28 Mar 28 Apr 28 May 28 Jun 28 Jul 28 Aug 28 Sep 28 Oct 28 Nov 28 Dec 28
Jan 29 Feb 29 Mar 29 Apr 29 May 29 Jun 29 Jul 29 Aug 29 Sep 29 Oct 29 Nov 29 Dec 29
Average of Average Temperature (Celsius) - 1000m
Average of Average Temperature (Celsius) - CC

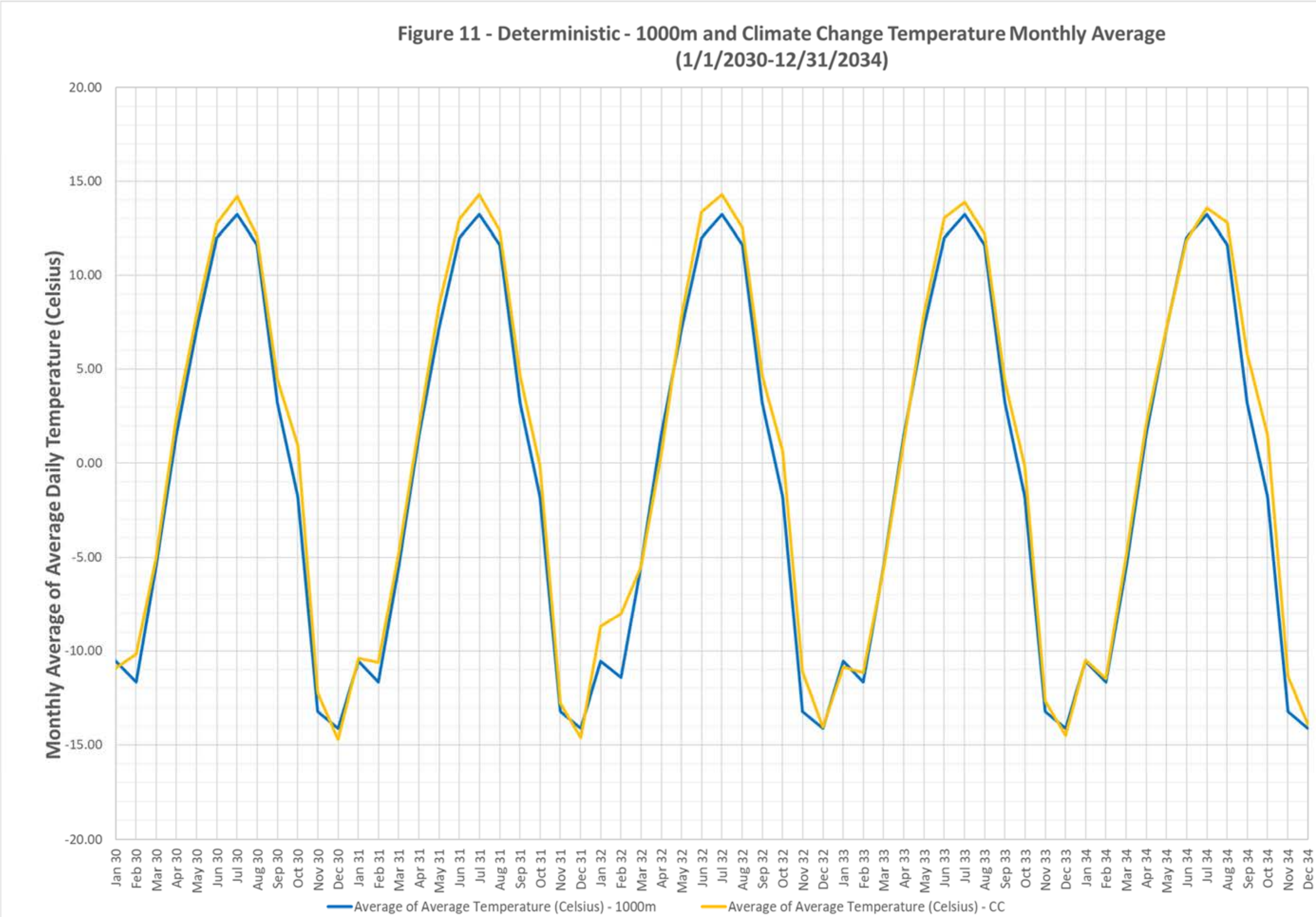


Figure 11 - Deterministic - 1000m and Climate Change Temperature Monthly Average (1/1/2030-12/31/2034)
Monthly Average of Average Daily Temperature (Celsius)
20.00
15.00
10.00
5.00
0.00
-5.00
-10.00
-15.00
-20.00
Jan 30
Feb 30
Mar 30
Apr 30
May 30
Jun 30
Jul 30
Aug 30
Sep 30
Oct 30
Nov 30
Dec 30
Jan 31
Feb 31
Mar 31
Apr 31
May 31
Jun 31
Jul 31
Aug 31
Sep 31
Oct 31
Nov 31
Dec 31
Jan 32
Feb 32
Mar 32
Apr 32
May 32
Jun 32
Jul 32
Aug 32
Sep 32
Oct 32
Nov 32
Dec 32
Jan 33
Feb 33
Mar 33
Apr 33
May 33
Jun 33
Jul 33
Aug 33
Sep 33
Oct 33
Nov 33
Dec 33
Jan 34
Feb 34
Mar 34
Apr 34
May 34
Jun 34
Jul 34
Aug 34
Sep 34
Oct 34
Nov 34
Dec 34
Average of Average Temperature (Celsius) - 1000m
Average of Average Temperature (Celsius) - CC

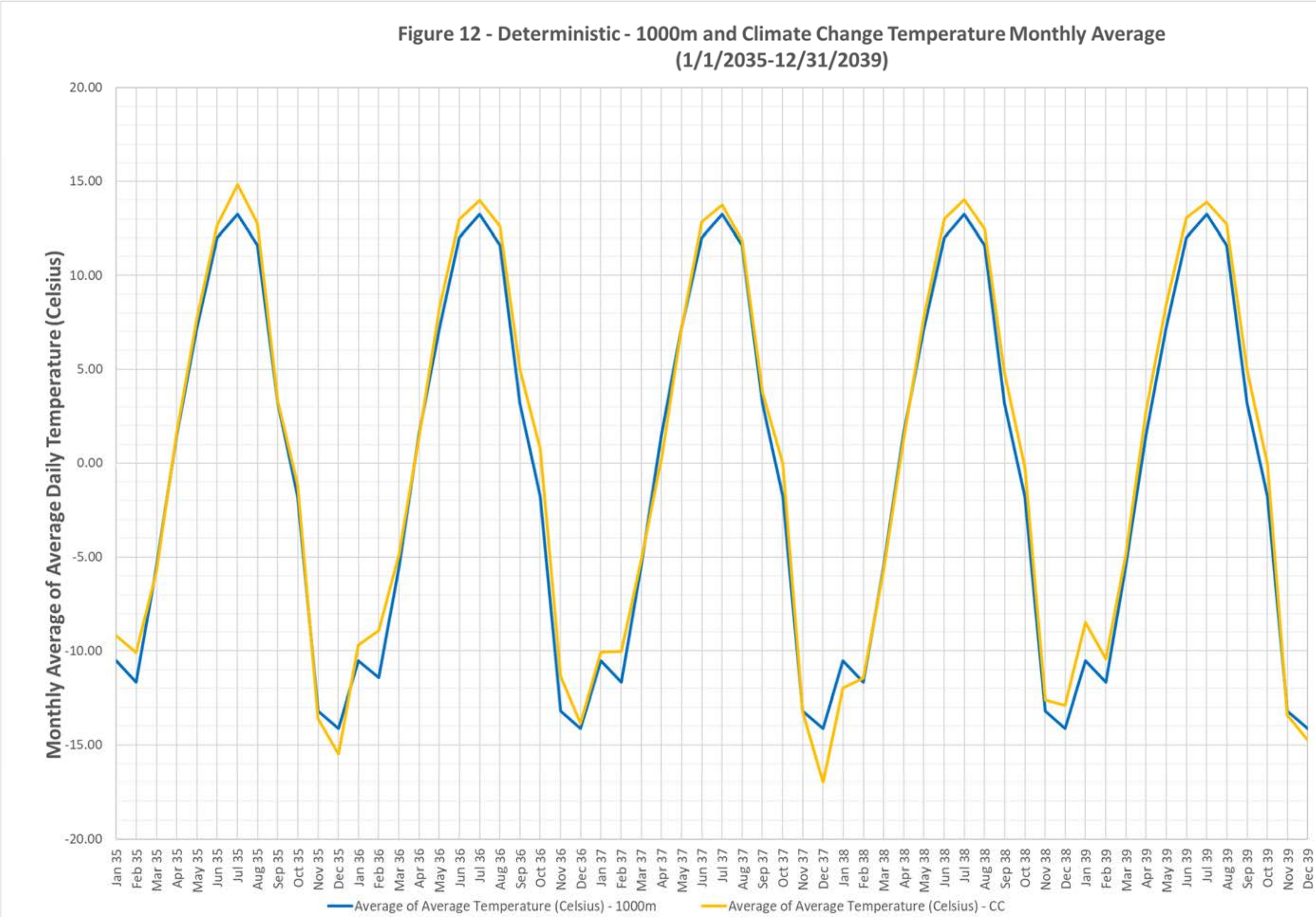


Figure 12 - Deterministic - 1000m and Climate Change Temperature Monthly Average
(1/1/2035-12/31/2039)
Monthly Average of Average Daily Temperature (Celsius)
20.00
15.00
10.00
5.00
0.00
-5.00
-10.00
-15.00
-20.00
Jan 35
Dec 39
Average of Average Temperature (Celsius) - 1000m
Average of Average Temperature (Celsius) - CC

Figure 13 - Stochastic Precipitation Data Used - Weekly Summation

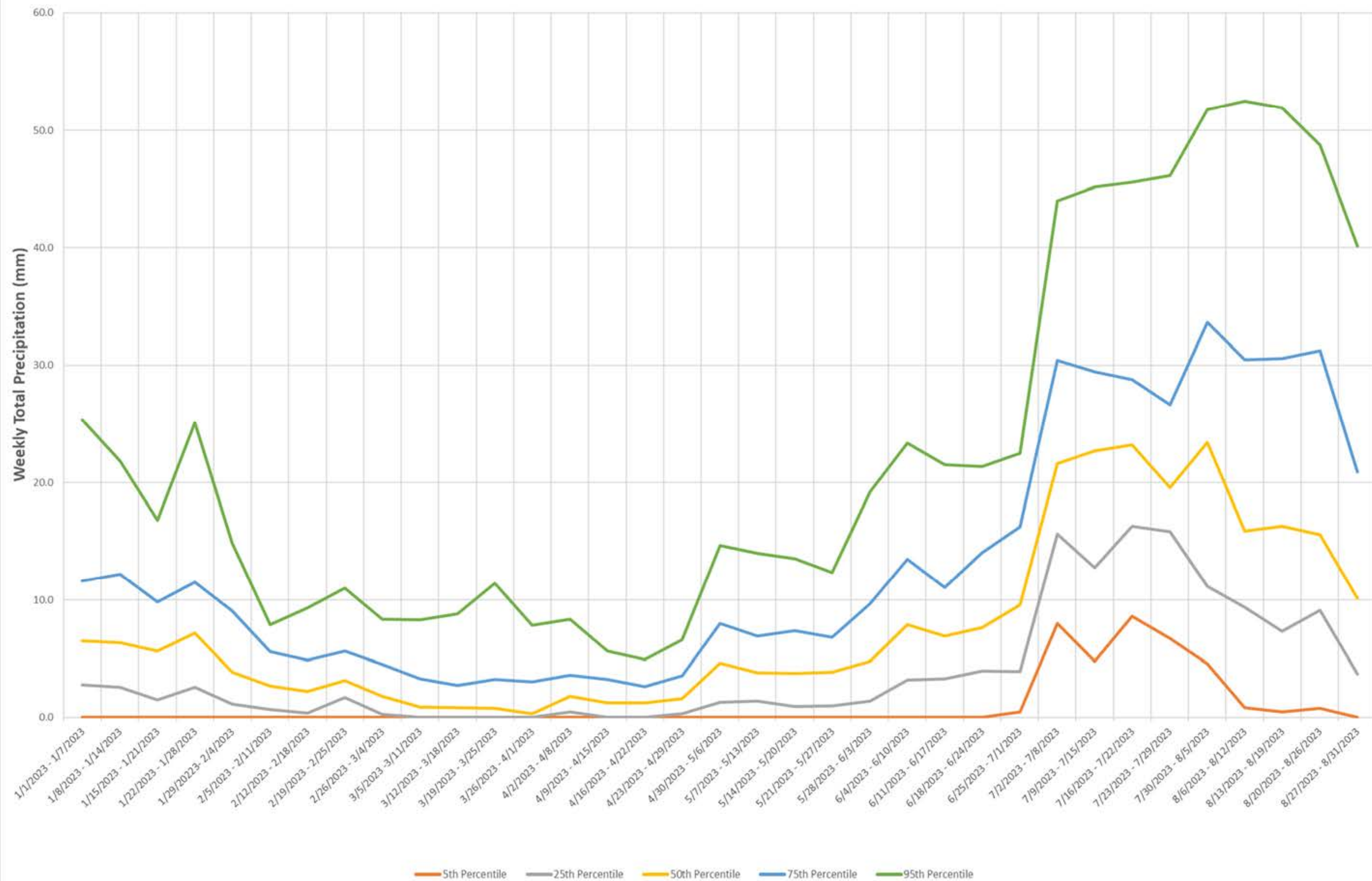


Figure 14 - Stochastic Precipitation Data Used - Weekly Cumulative

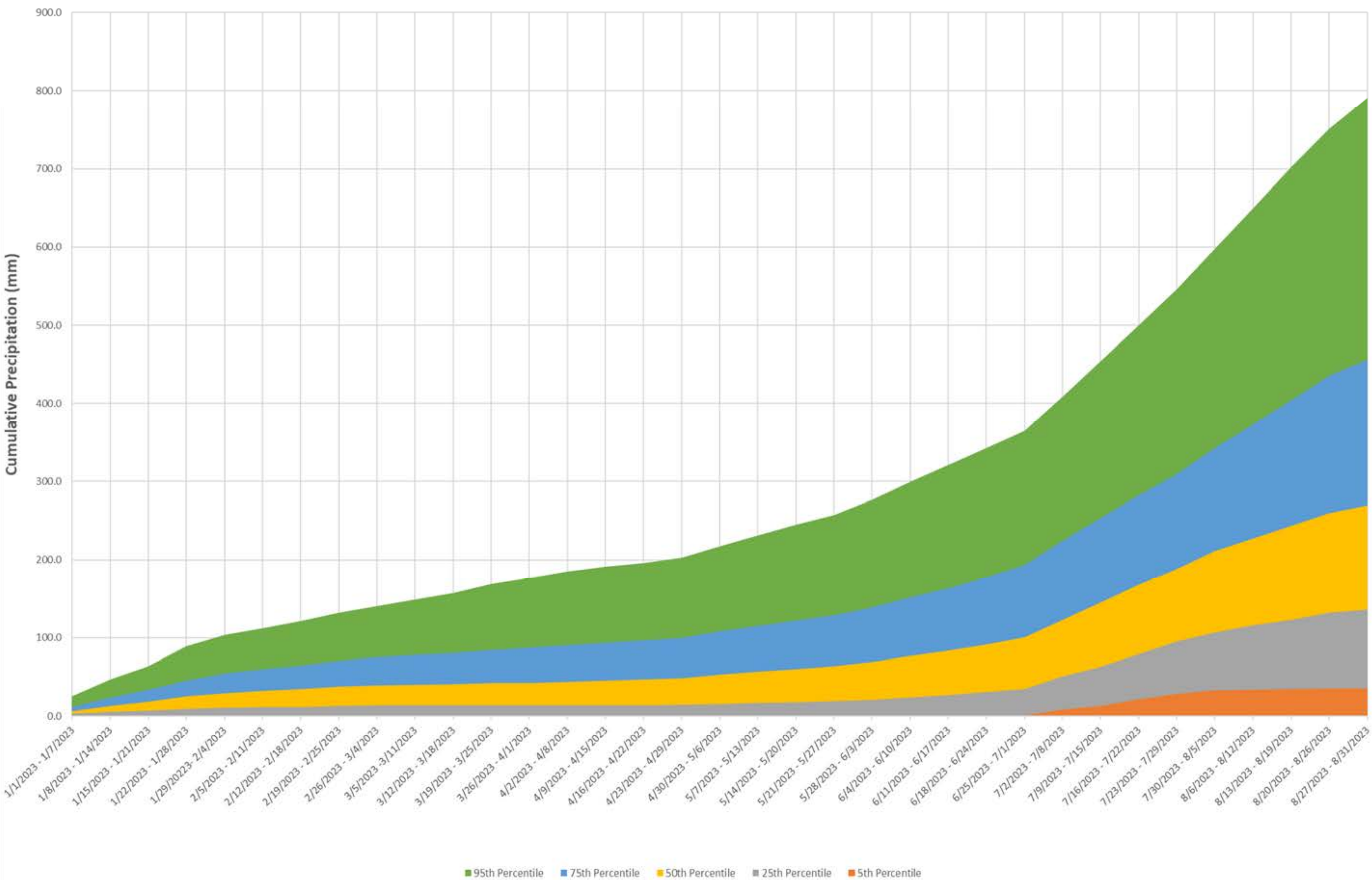


Figure 15 - Stochastic Evaporation Data Used - Weekly Summation

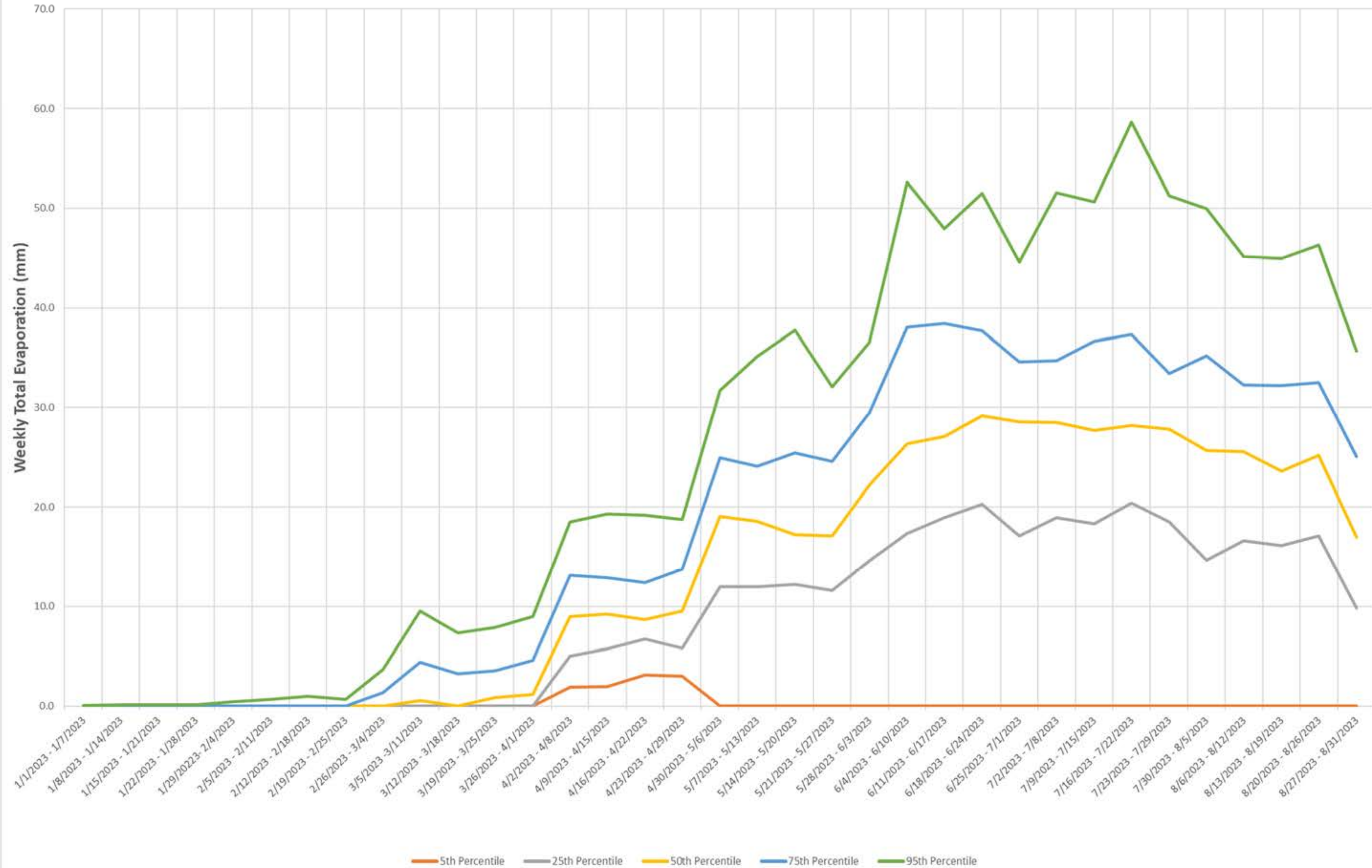


Figure 16 - Stochastic Evaporation Data Used - Weekly Cumulative

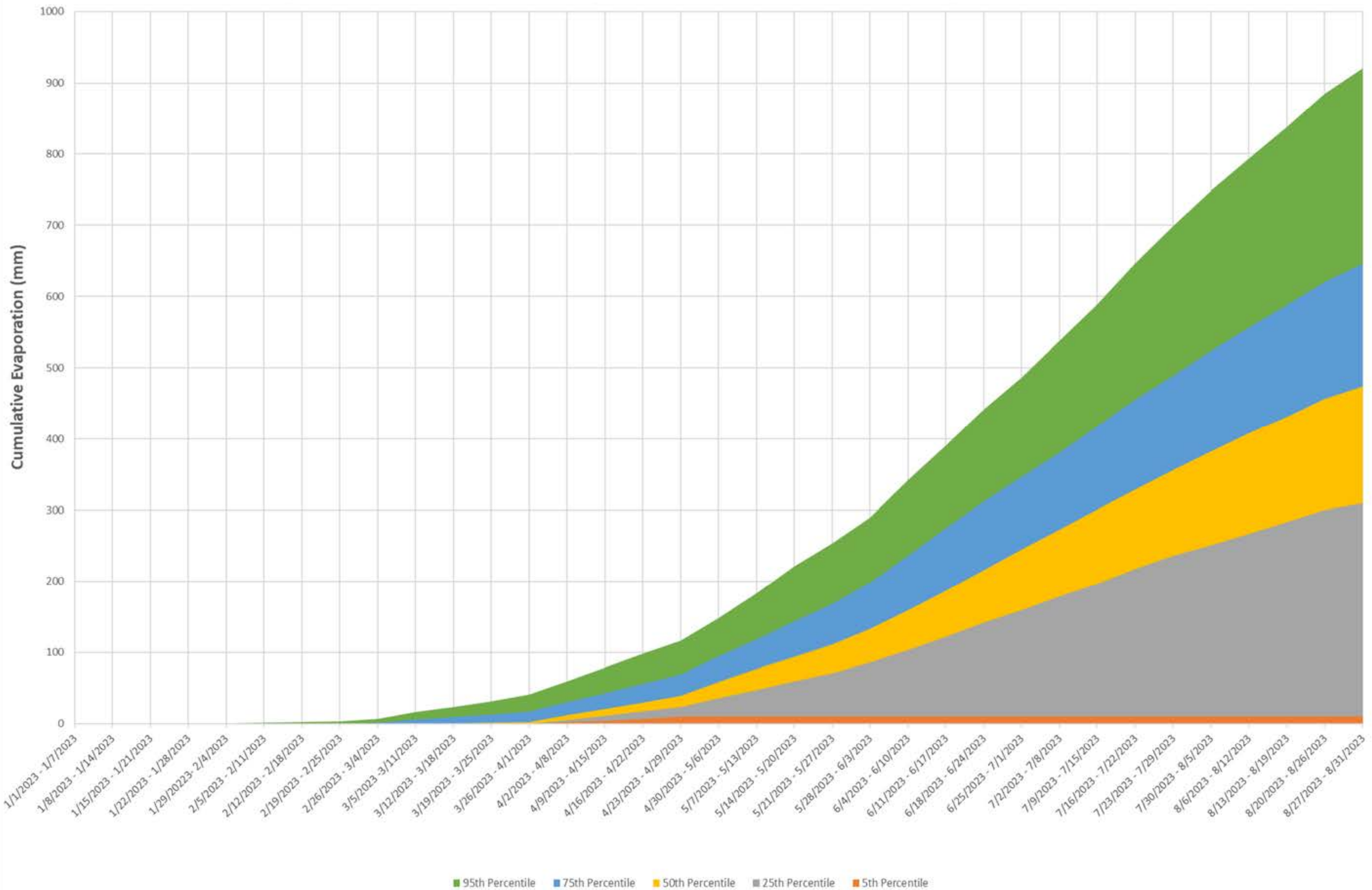


Figure 17 - Stochastic Minimum Temperature Data Used - Weekly Average

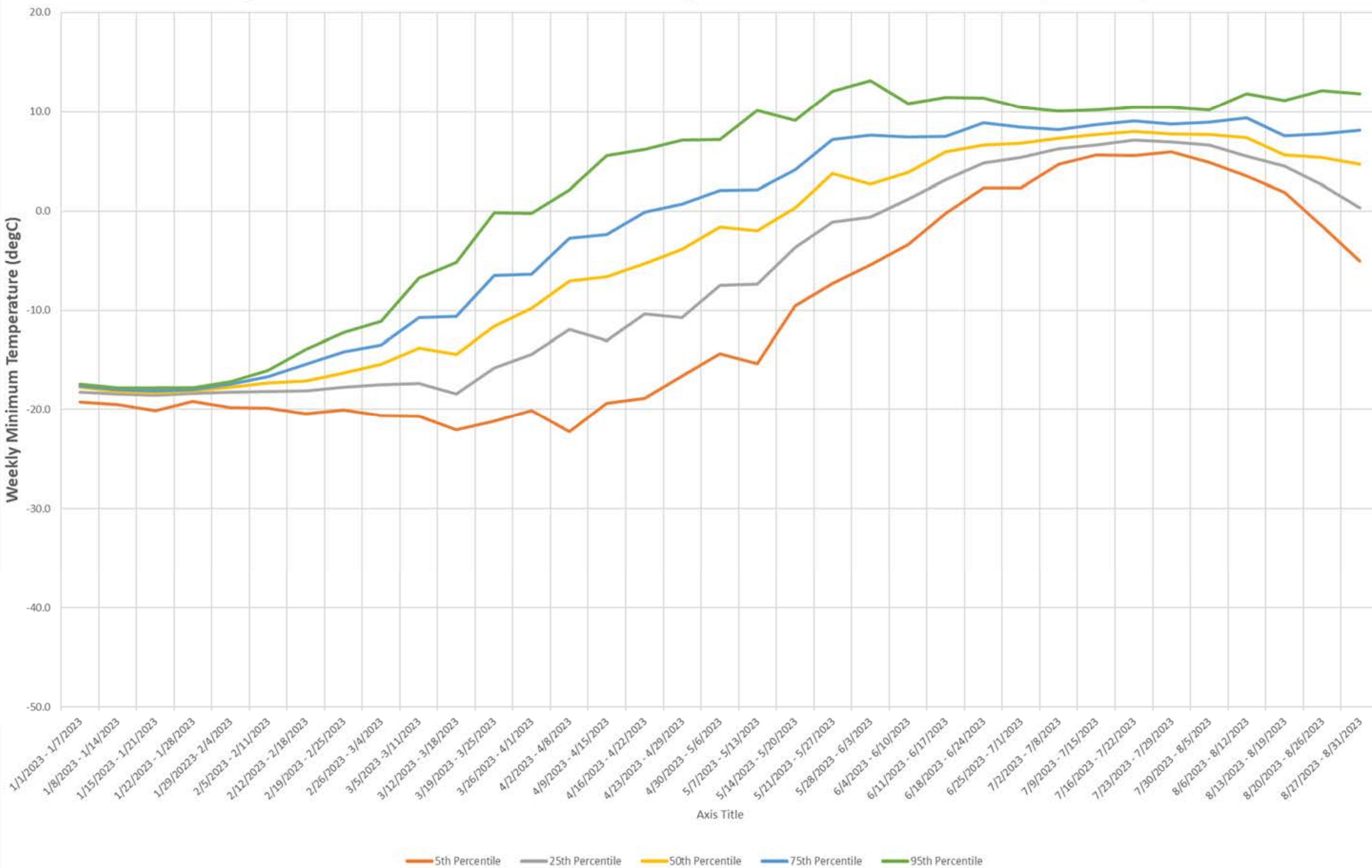
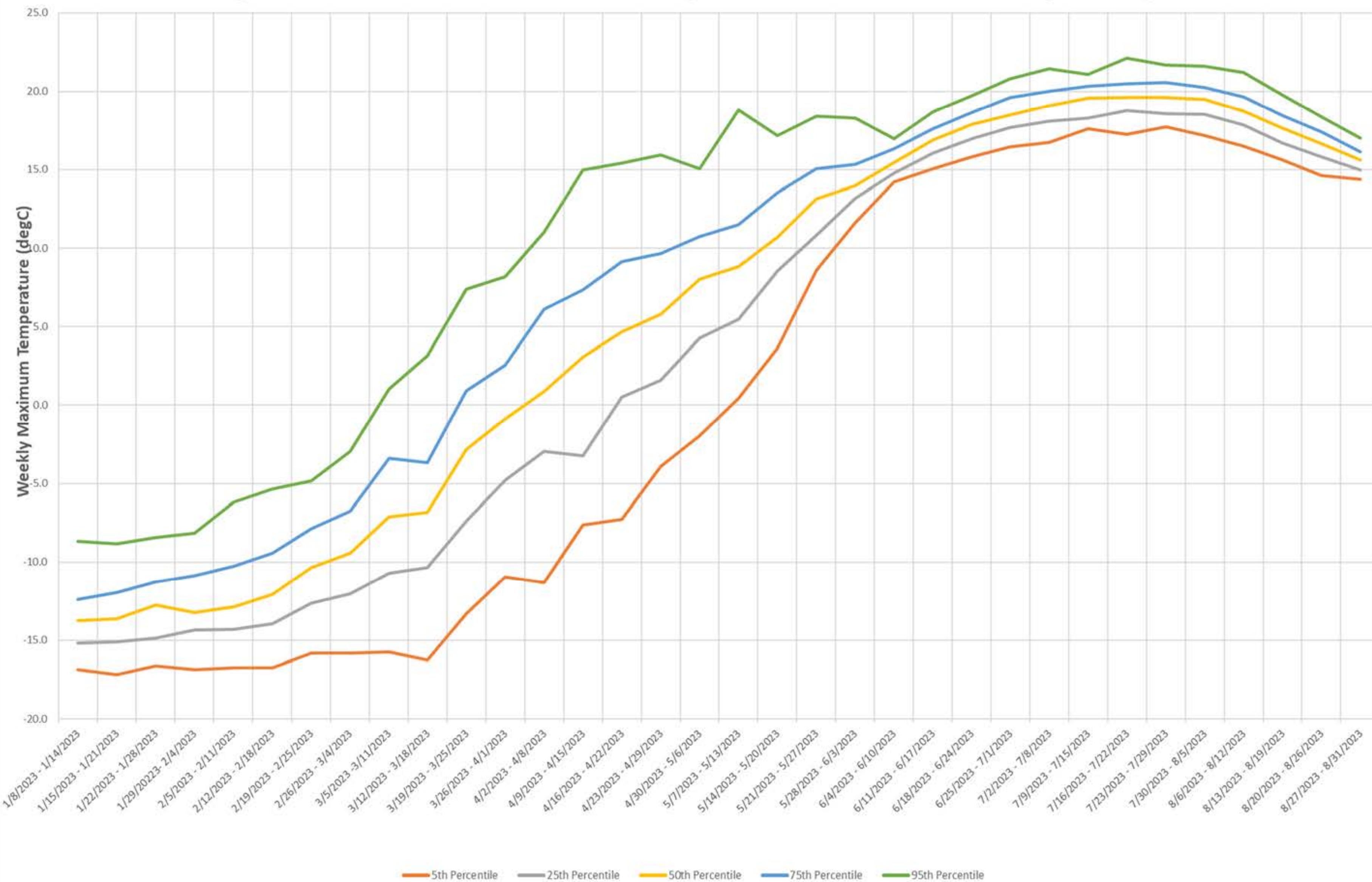


Figure 18 - Stochastic Maximum Temperature Data Used - Weekly Average



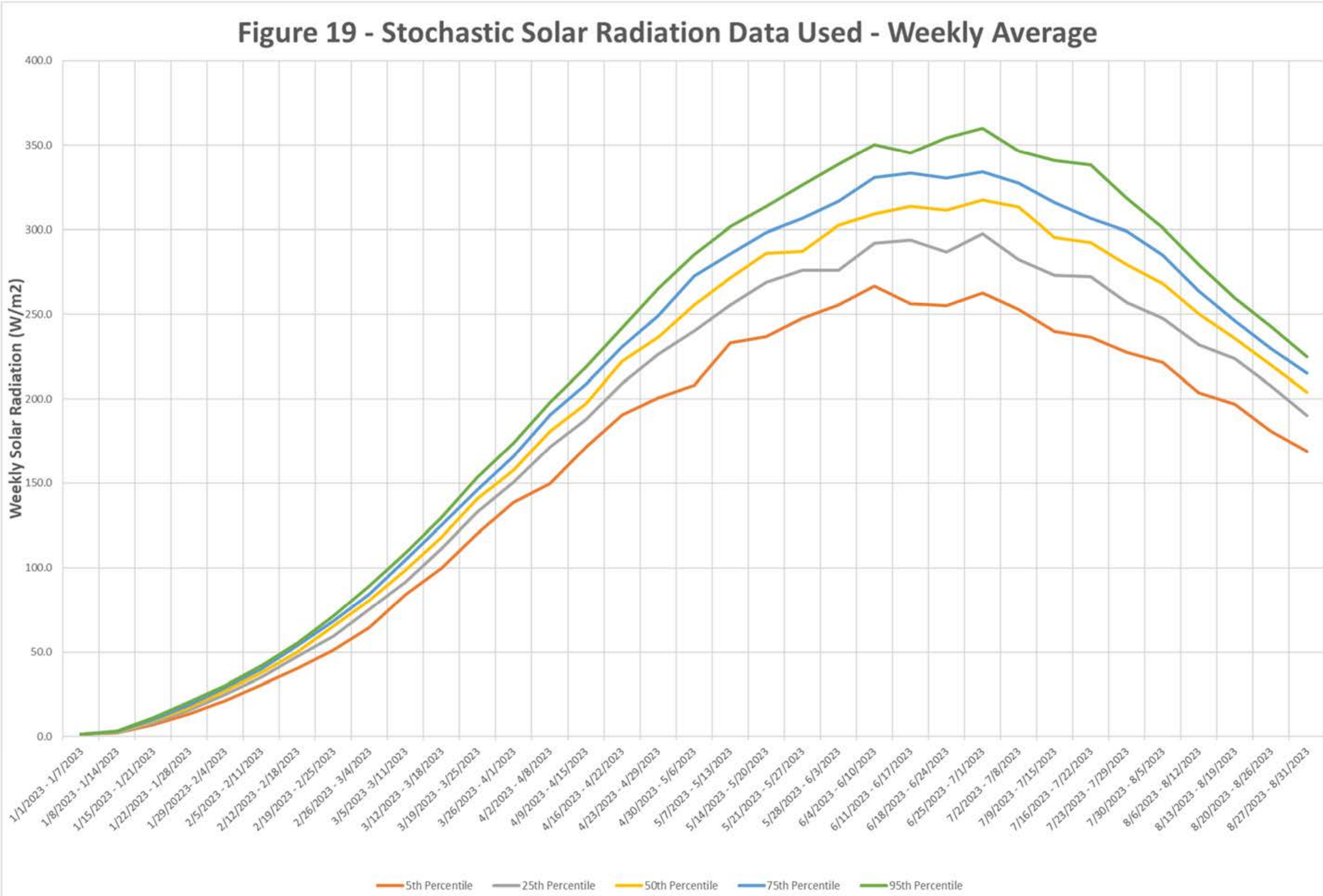


Figure 19 - Stochastic Solar Radiation Data Used - Weekly Average
Weekly Solar Radiation (W/m2)
400.0
350.0
300.0
250.0
200.0
150.0
100.0
50.0
0.0
5th Percentile
25th Percentile
50th Percentile
75th Percentile
95th Percentile

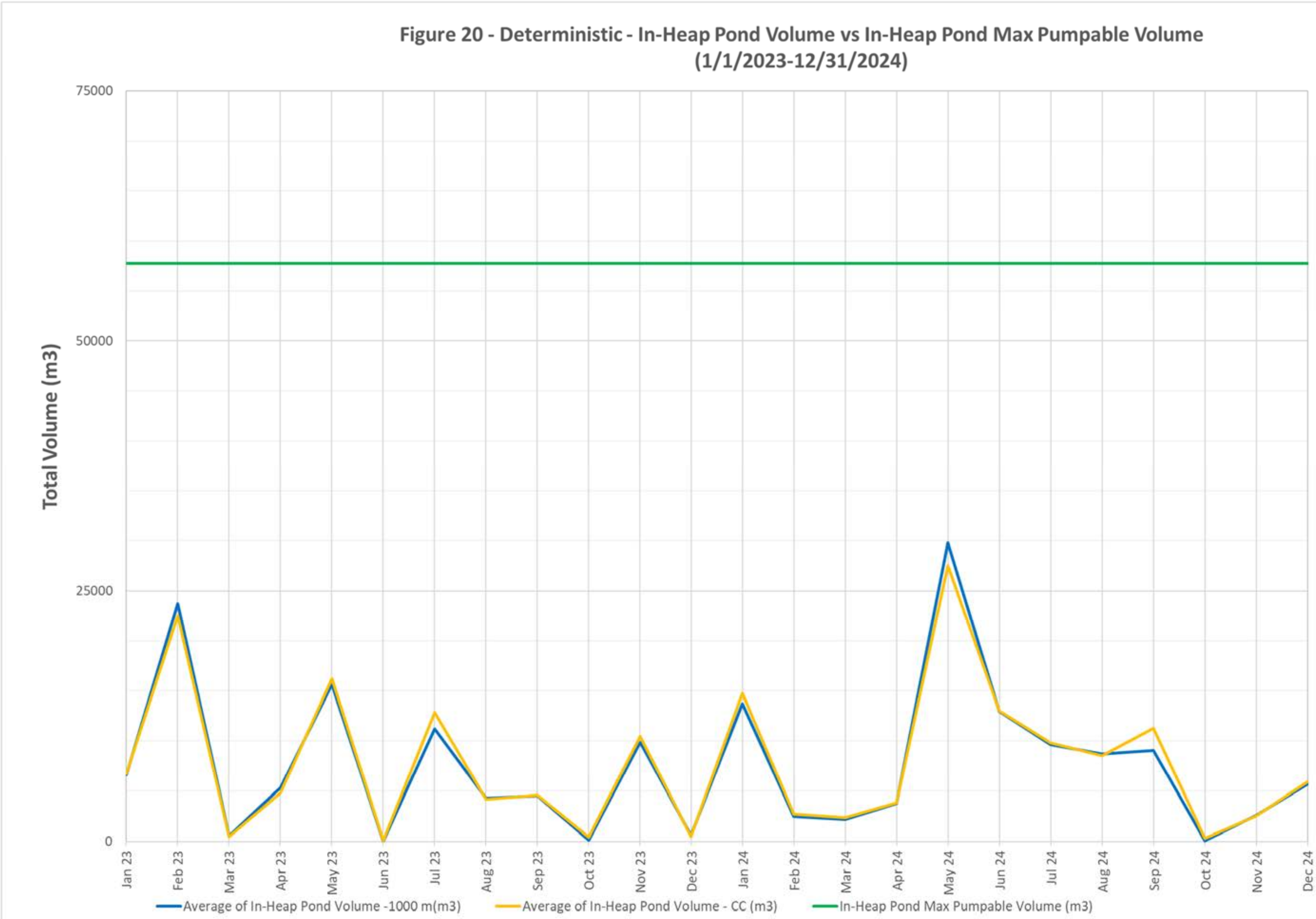


Figure 20 - Deterministic - In-Heap Pond Volume vs In-Heap Pond Max Pumpable Volume
(1/1/2023-12/31/2024)
75000
50000
25000
0
Total Volume (m3)
Jan 23
Feb 23
Mar 23
Apr 23
May 23
Jun 23
Jul 23
Aug 23
Sep 23
Oct 23
Nov 23
Dec 23
Jan 24
Feb 24
Mar 24
Apr 24
May 24
Jun 24
Jul 24
Aug 24
Sep 24
Oct 24
Nov 24
Dec 24
Average of In-Heap Pond Volume -1000 m(m3)
Average of In-Heap Pond Volume - CC (m3)
In-Heap Pond Max Pumpable Volume (m3)

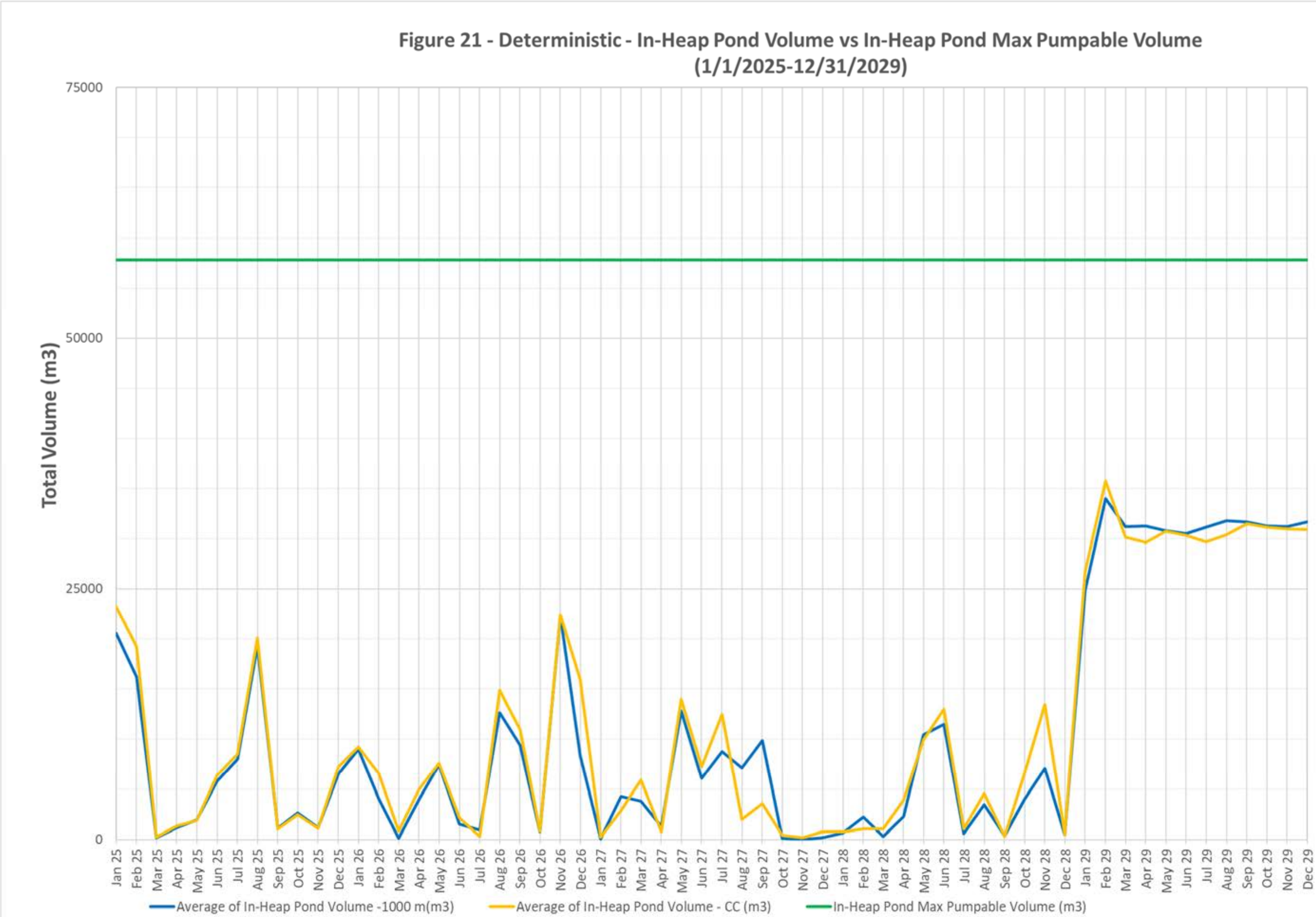


Figure 21 - Deterministic - In-Heap Pond Volume vs In-Heap Pond Max Pumpable Volume
(1/1/2025-12/31/2029)
Total Volume (m3)
75000
50000
25000
0
Jan 25
Feb 25
Mar 25
Apr 25
May 25
Jun 25
Jul 25
Aug 25
Sep 25
Oct 25
Nov 25
Dec 25
Jan 26
Feb 26
Mar 26
Apr 26
May 26
Jun 26
Jul 26
Aug 26
Sep 26
Oct 26
Nov 26
Dec 26
Jan 27
Feb 27
Mar 27
Apr 27
May 27
Jun 27
Jul 27
Aug 27
Sep 27
Oct 27
Nov 27
Dec 27
Jan 28
Feb 28
Mar 28
Apr 28
May 28
Jun 28
Jul 28
Aug 28
Sep 28
Oct 28
Nov 28
Dec 28
Jan 29
Feb 29
Mar 29
Apr 29
May 29
Jun 29
Jul 29
Aug 29
Sep 29
Oct 29
Nov 29
Dec 29
Average of In-Heap Pond Volume -1000 m(m3)
Average of In-Heap Pond Volume - CC (m3)
In-Heap Pond Max Pumpable Volume (m3)

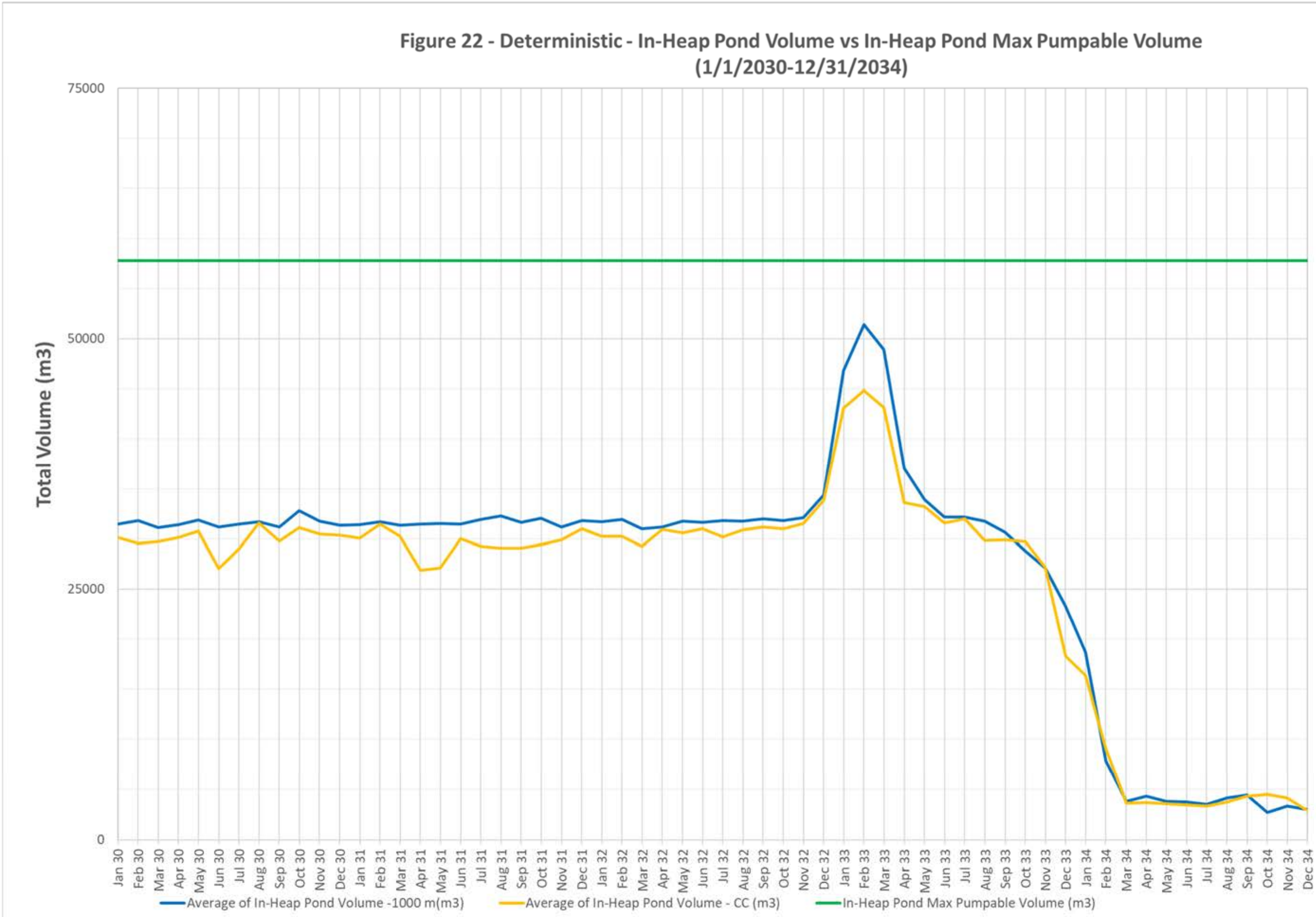


Figure 22 - Deterministic - In-Heap Pond Volume vs In-Heap Pond Max Pumpable Volume
(1/1/2030-12/31/2034)
Total Volume (m3)
75000
50000
25000
0
Jan 30
Feb 30
Mar 30
Apr 30
May 30
Jun 30
Jul 30
Aug 30
Sep 30
Oct 30
Nov 30
Dec 30
Jan 31
Feb 31
Mar 31
Apr 31
May 31
Jun 31
Jul 31
Aug 31
Sep 31
Oct 31
Nov 31
Dec 31
Jan 32
Feb 32
Mar 32
Apr 32
May 32
Jun 32
Jul 32
Aug 32
Sep 32
Oct 32
Nov 32
Dec 32
Jan 33
Feb 33
Mar 33
Apr 33
May 33
Jun 33
Jul 33
Aug 33
Sep 33
Oct 33
Nov 33
Dec 33
Jan 34
Feb 34
Mar 34
Apr 34
May 34
Jun 34
Jul 34
Aug 34
Sep 34
Oct 34
Nov 34
Dec 34
Average of In-Heap Pond Volume -1000 m(m3)
Average of In-Heap Pond Volume - CC (m3)
In-Heap Pond Max Pumpable Volume (m3)

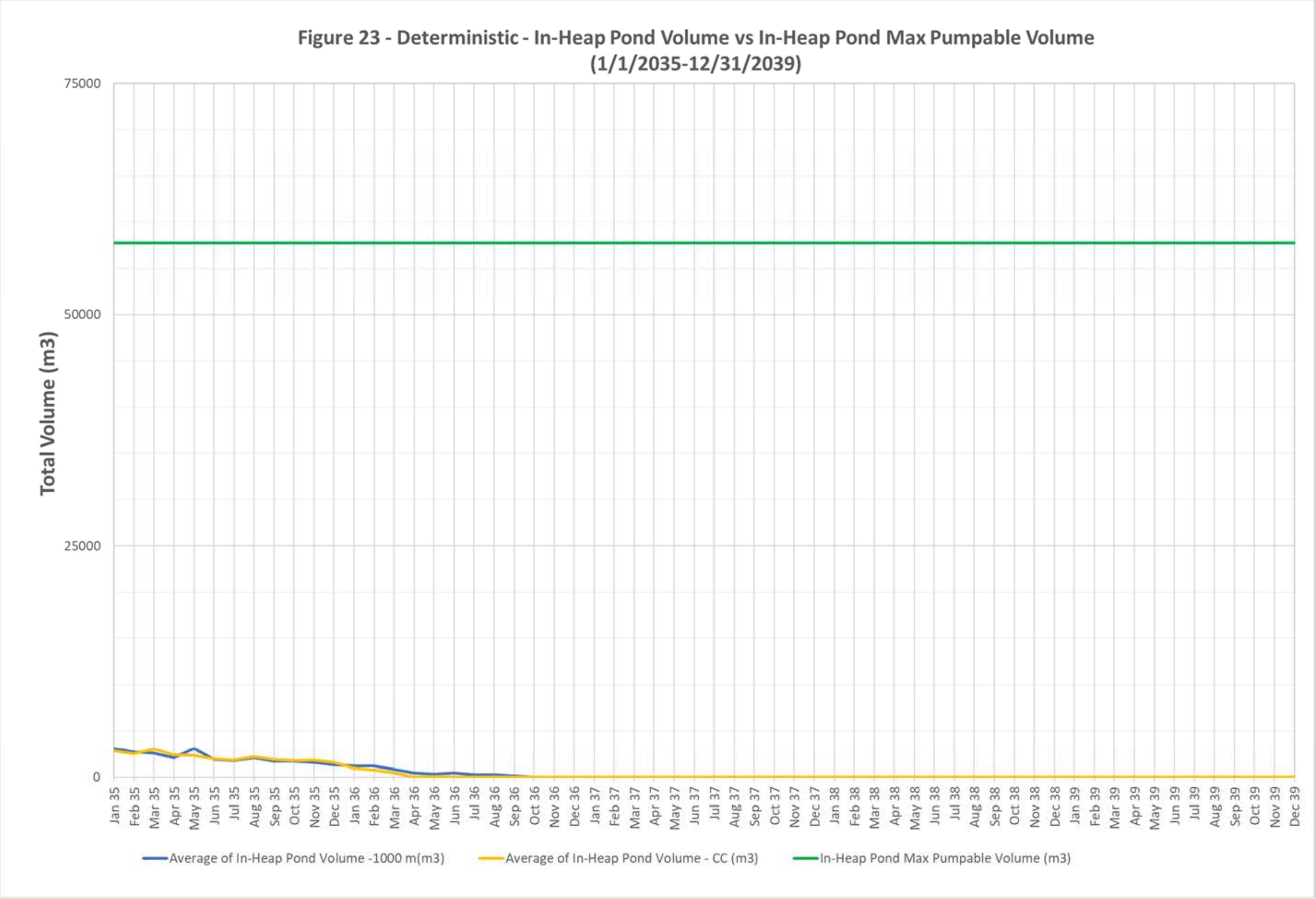


Figure 23 - Deterministic - In-Heap Pond Volume vs In-Heap Pond Max Pumpable Volume
(1/1/2035-12/31/2039)
75000
50000
25000
0
Total Volume (m3)
Jan 35
Dec 39
Average of In-Heap Pond Volume -1000 m(m3)
Average of In-Heap Pond Volume - CC (m3)
In-Heap Pond Max Pumpable Volume (m3)

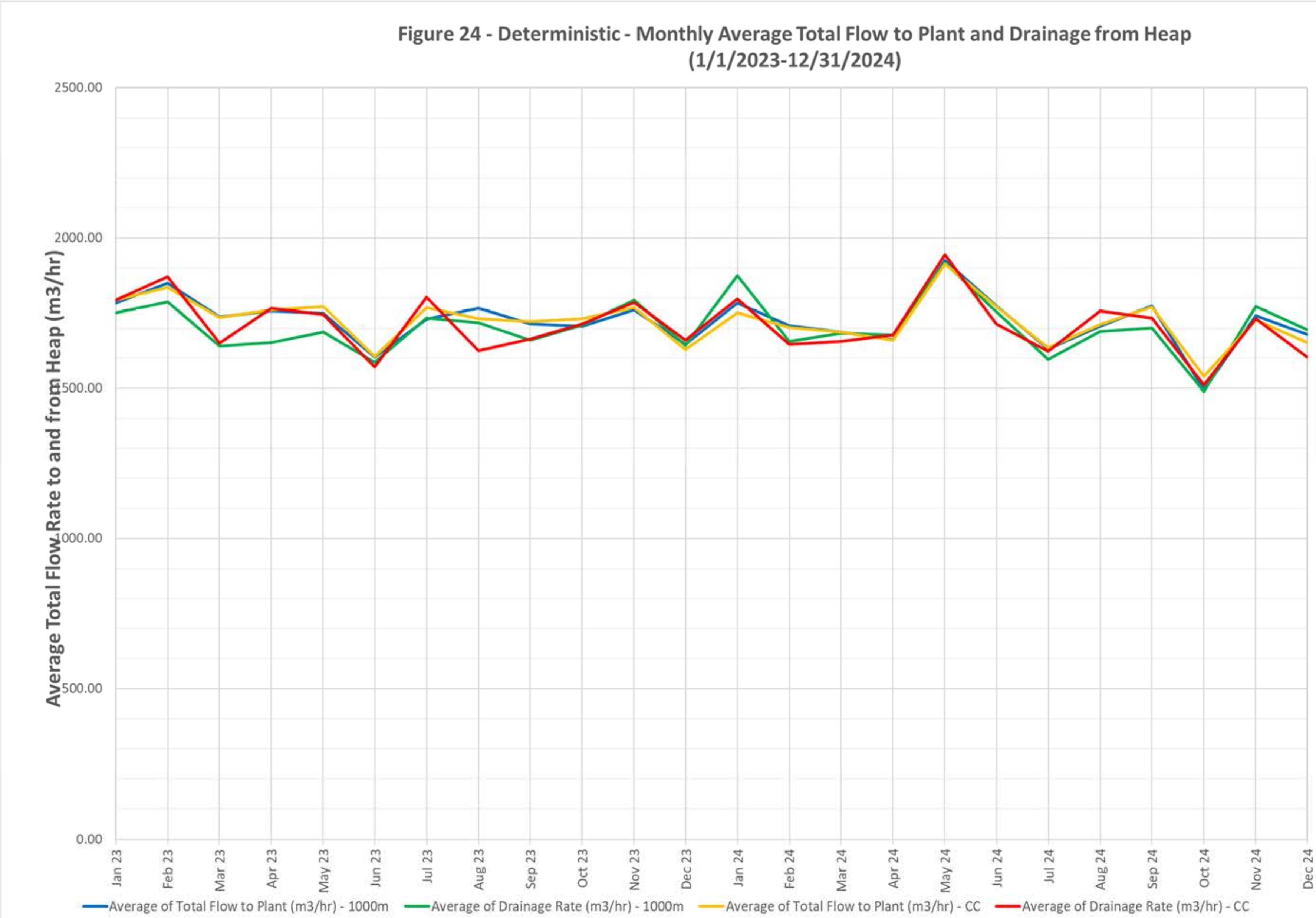


Figure 24 - Deterministic - Monthly Average Total Flow to Plant and Drainage from Heap (1/1/2023-12/31/2024)
Average Total Flow Rate to and from Heap (m3/hr)
2500.00
2000.00
1500.00
1000.00
500.00
0.00
Jan 23
Feb 23
Mar 23
Apr 23
May 23
Jun 23
Jul 23
Aug 23
Sep 23
Oct 23
Nov 23
Dec 23
Jan 24
Feb 24
Mar 24
Apr 24
May 24
Jun 24
Jul 24
Aug 24
Sep 24
Oct 24
Nov 24
Dec 24
Average of Total Flow to Plant (m3/hr) - 1000m
Average of Drainage Rate (m3/hr) - 1000m
Average of Total Flow to Plant (m3/hr) - CC
Average of Drainage Rate (m3/hr) - CC

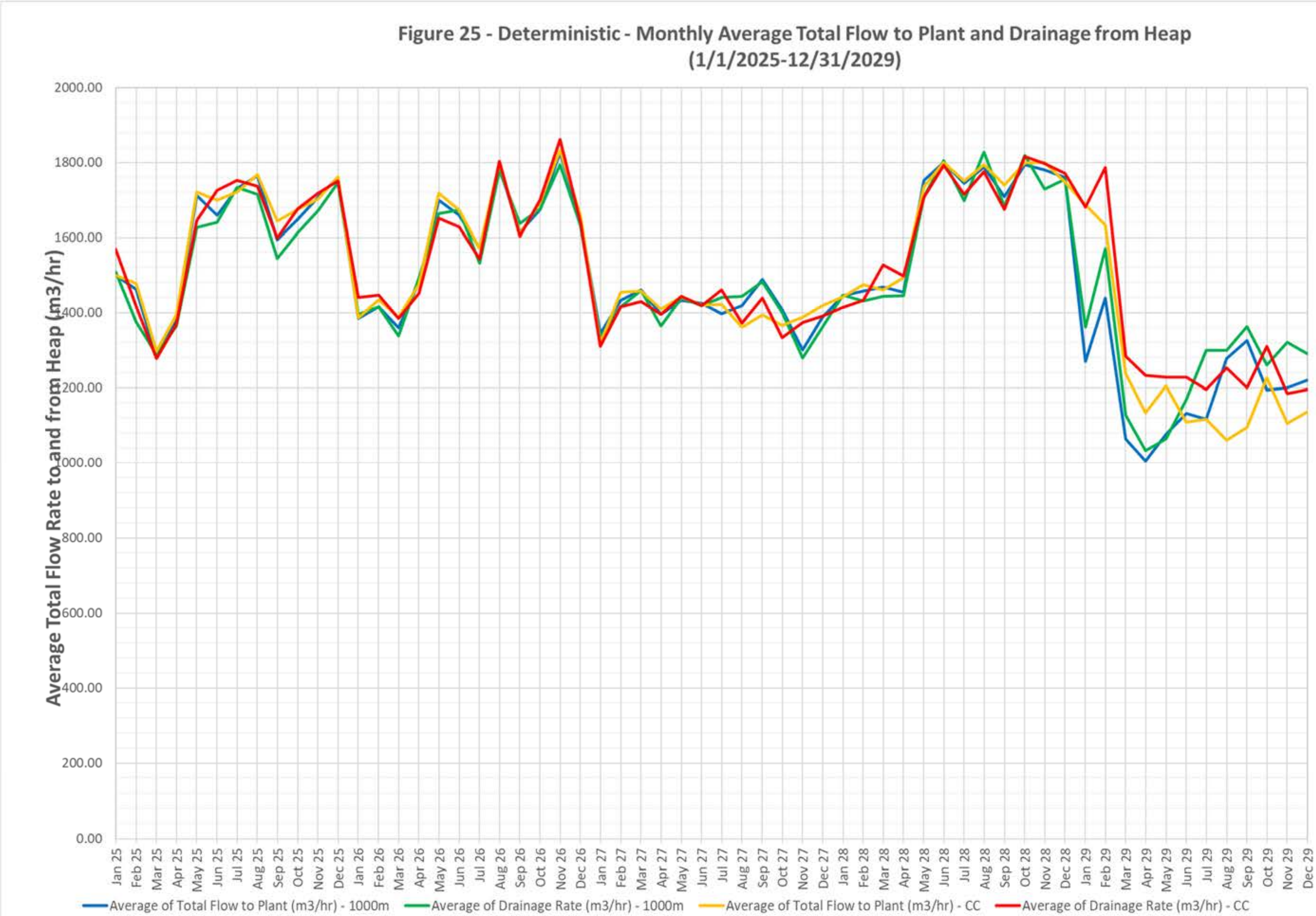


Figure 25 - Deterministic - Monthly Average Total Flow to Plant and Drainage from Heap
(1/1/2025-12/31/2029)
Average Total Flow Rate to and from Heap (m3/hr)
2000.00
1800.00
1600.00
1400.00
1200.00
1000.00
800.00
600.00
400.00
200.00
0.00
Jan 25 Feb 25 Mar 25 Apr 25 May 25 Jun 25 Jul 25 Aug 25 Sep 25 Oct 25 Nov 25 Dec 25 Jan 26 Feb 26 Mar 26 Apr 26 May 26 Jun 26 Jul 26 Aug 26 Sep 26 Oct 26 Nov 26 Dec 26 Jan 27 Feb 27 Mar 27 Apr 27 May 27 Jun 27 Jul 27 Aug 27 Sep 27 Oct 27 Nov 27 Dec 27 Jan 28 Feb 28 Mar 28 Apr 28 May 28 Jun 28 Jul 28 Aug 28 Sep 28 Oct 28 Nov 28 Dec 28 Jan 29 Feb 29 Mar 29 Apr 29 May 29 Jun 29 Jul 29 Aug 29 Sep 29 Oct 29 Nov 29 Dec 29
Average of Total Flow to Plant (m3/hr) - 1000m
Average of Drainage Rate (m3/hr) - 1000m
Average of Total Flow to Plant (m3/hr) - CC
Average of Drainage Rate (m3/hr) - CC

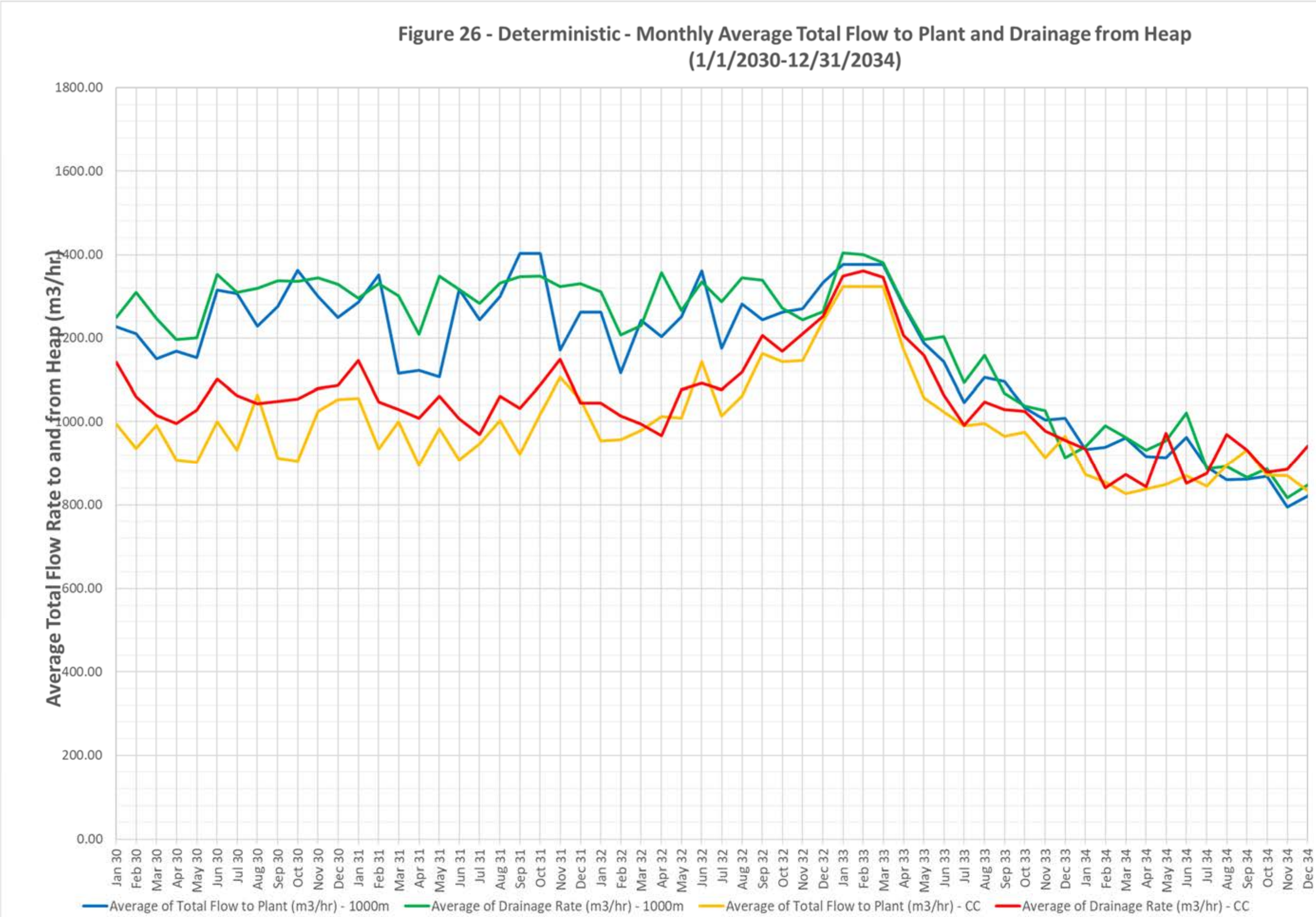


Figure 26 - Deterministic - Monthly Average Total Flow to Plant and Drainage from Heap
(1/1/2030-12/31/2034)
Average Total Flow Rate to and from Heap (m3/hr)
1800.00
1600.00
1400.00
1200.00
1000.00
800.00
600.00
400.00
200.00
0.00
Jan 30
Feb 30
Mar 30
Apr 30
May 30
Jun 30
Jul 30
Aug 30
Sep 30
Oct 30
Nov 30
Dec 30
Jan 31
Feb 31
Mar 31
Apr 31
May 31
Jun 31
Jul 31
Aug 31
Sep 31
Oct 31
Nov 31
Dec 31
Jan 32
Feb 32
Mar 32
Apr 32
May 32
Jun 32
Jul 32
Aug 32
Sep 32
Oct 32
Nov 32
Dec 32
Jan 33
Feb 33
Mar 33
Apr 33
May 33
Jun 33
Jul 33
Aug 33
Sep 33
Oct 33
Nov 33
Dec 33
Jan 34
Feb 34
Mar 34
Apr 34
May 34
Jun 34
Jul 34
Aug 34
Sep 34
Oct 34
Nov 34
Dec 34
Average of Total Flow to Plant (m3/hr) - 1000m
Average of Drainage Rate (m3/hr) - 1000m
Average of Total Flow to Plant (m3/hr) - CC
Average of Drainage Rate (m3/hr) - CC

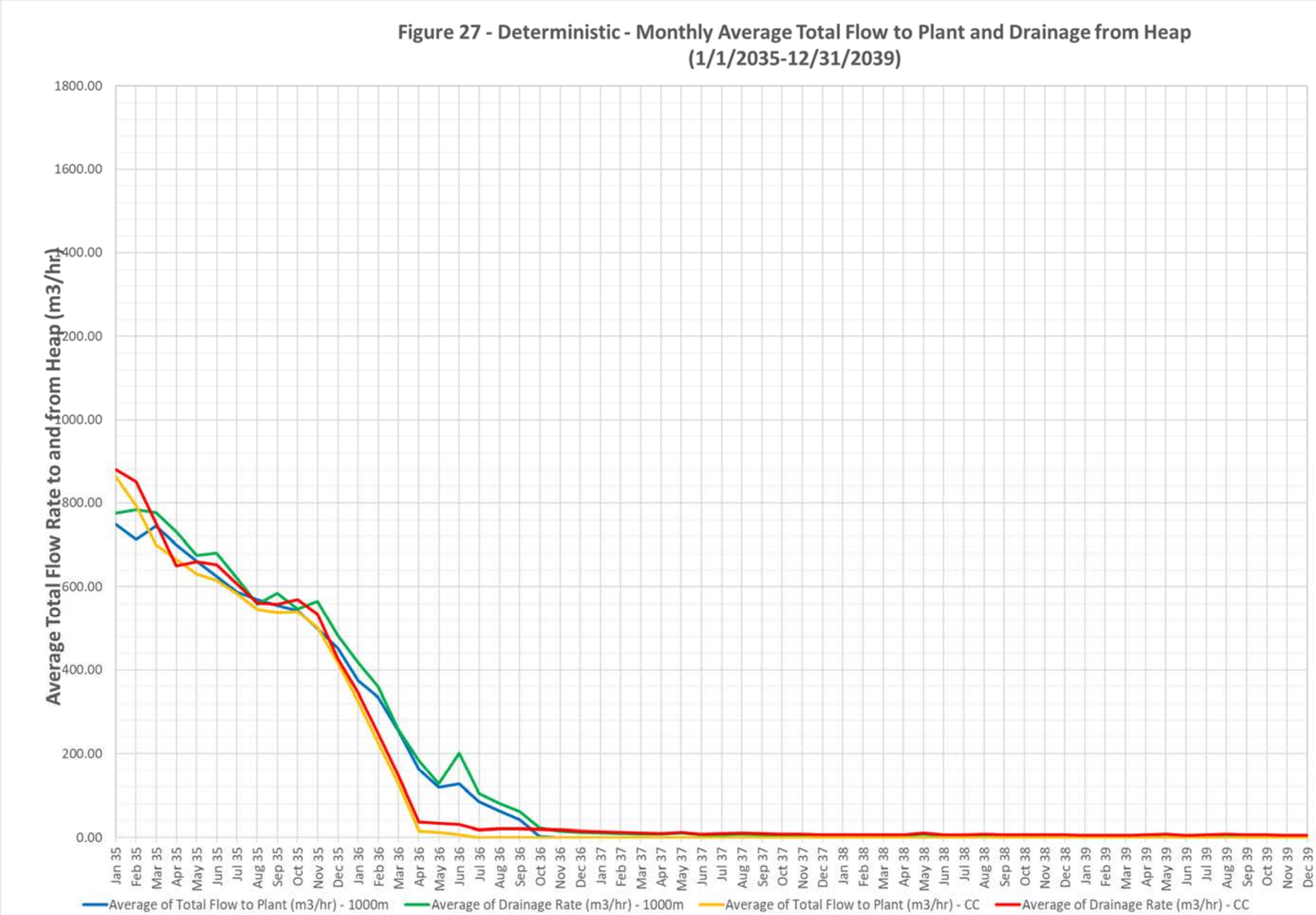


Figure 27 - Deterministic - Monthly Average Total Flow to Plant and Drainage from Heap (1/1/2035-12/31/2039)
Average Total Flow Rate to and from Heap (m3/hr)
1800.00
1600.00
1400.00
1200.00
1000.00
800.00
600.00
400.00
200.00
0.00
Average of Total Flow to Plant (m3/hr) - 1000m
Average of Drainage Rate (m3/hr) - 1000m
Average of Total Flow to Plant (m3/hr) - CC
Average of Drainage Rate (m3/hr) - CC

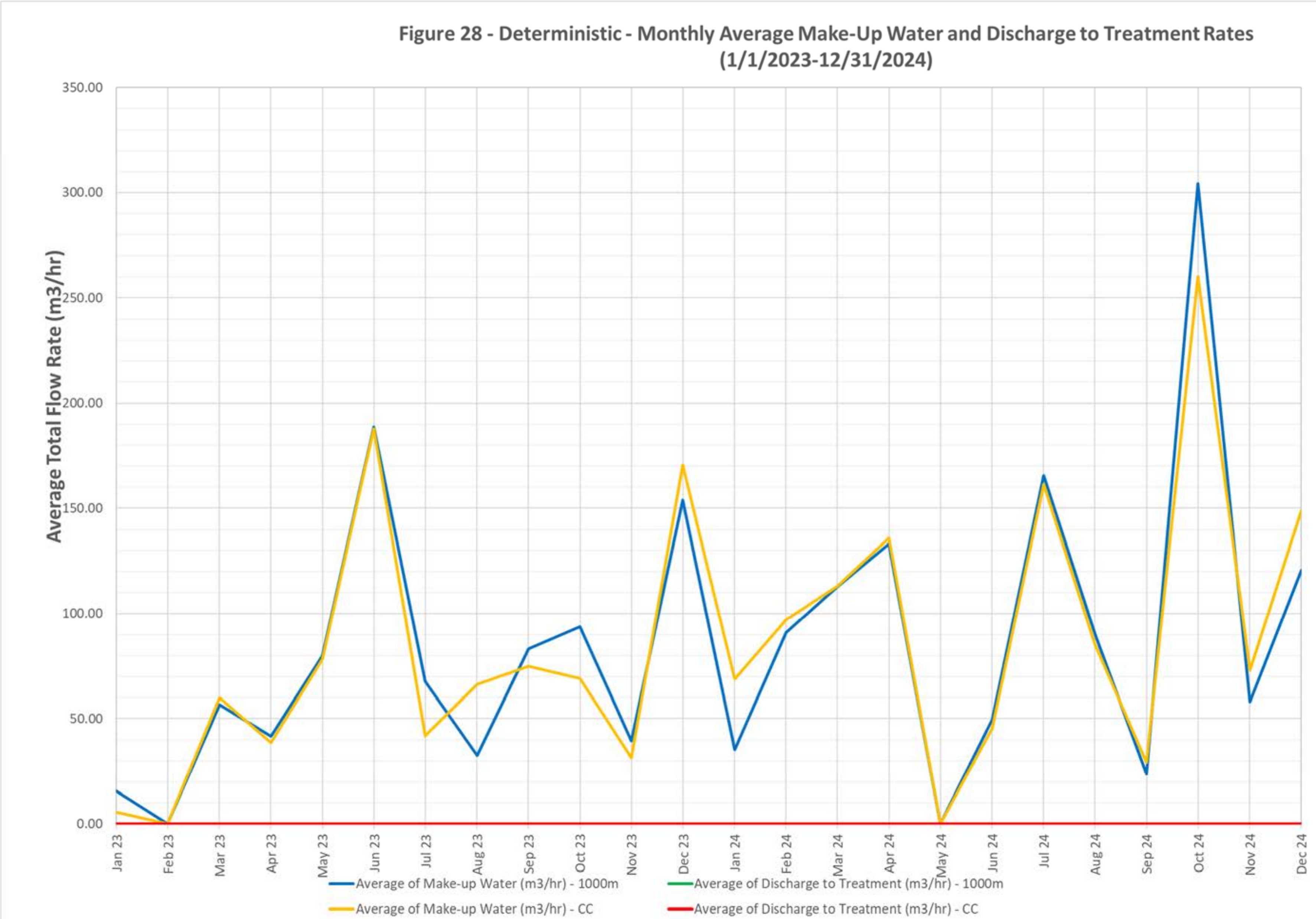


Figure 28 - Deterministic - Monthly Average Make-Up Water and Discharge to Treatment Rates (1/1/2023-12/31/2024)
Average Total Flow Rate (m3/hr)
350.00
300.00
250.00
200.00
150.00
100.00
50.00
0.00
Jan 23
Feb 23
Mar 23
Apr 23
May 23
Jun 23
Jul 23
Aug 23
Sep 23
Oct 23
Nov 23
Dec 23
Jan 24
Feb 24
Mar 24
Apr 24
May 24
Jun 24
Jul 24
Aug 24
Sep 24
Oct 24
Nov 24
Dec 24
Average of Make-up Water (m3/hr) - 1000m
Average of Discharge to Treatment (m3/hr) - 1000m
Average of Make-up Water (m3/hr) - CC
Average of Discharge to Treatment (m3/hr) - CC

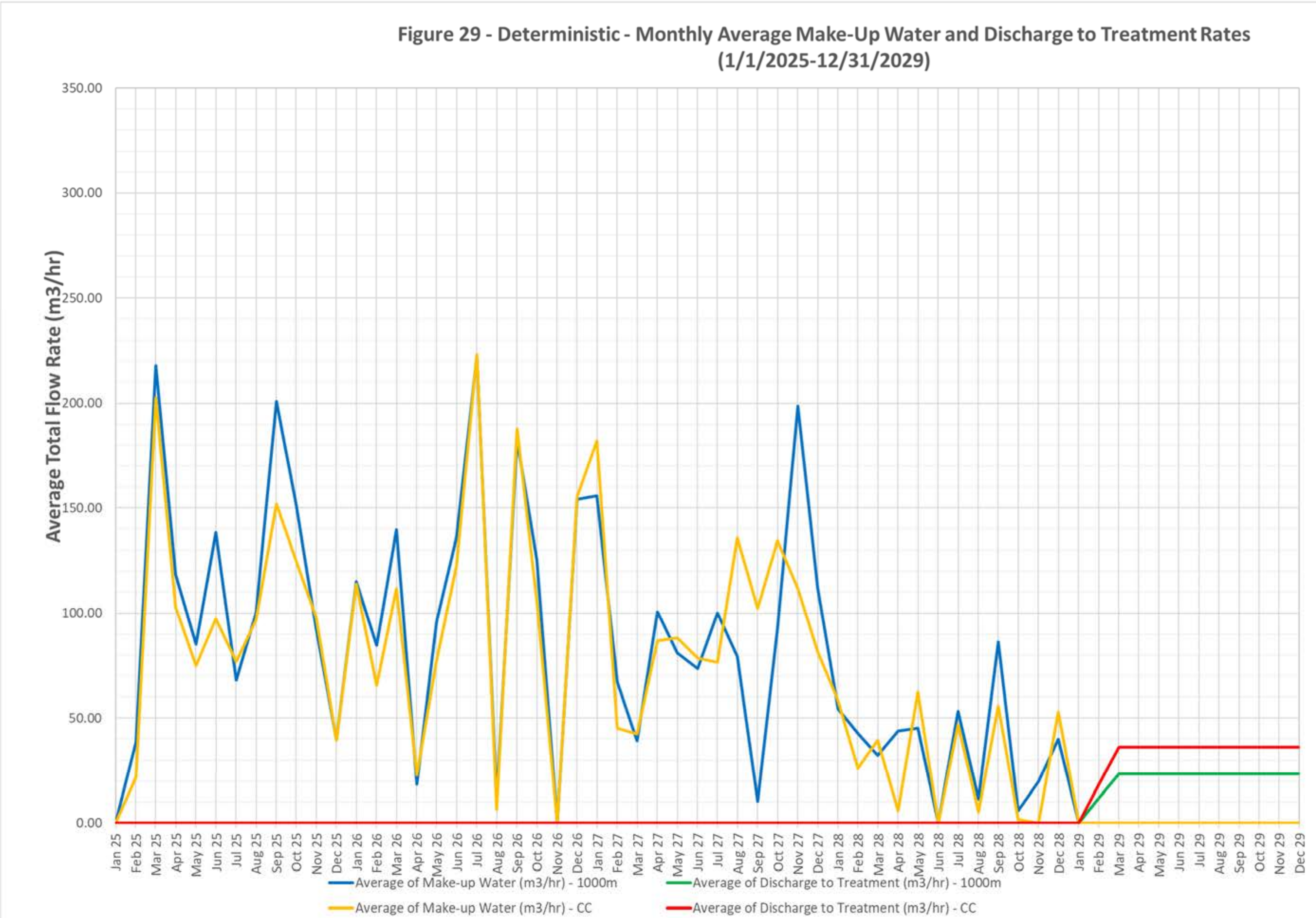


Figure 29 - Deterministic - Monthly Average Make-Up Water and Discharge to Treatment Rates (1/1/2025-12/31/2029)
Average Total Flow Rate (m3/hr)
350.00
300.00
250.00
200.00
150.00
100.00
50.00
0.00
Jan 25 Feb 25 Mar 25 Apr 25 May 25 Jun 25 Jul 25 Aug 25 Sep 25 Oct 25 Nov 25 Dec 25
Jan 26 Feb 26 Mar 26 Apr 26 May 26 Jun 26 Jul 26 Aug 26 Sep 26 Oct 26 Nov 26 Dec 26
Jan 27 Feb 27 Mar 27 Apr 27 May 27 Jun 27 Jul 27 Aug 27 Sep 27 Oct 27 Nov 27 Dec 27
Jan 28 Feb 28 Mar 28 Apr 28 May 28 Jun 28 Jul 28 Aug 28 Sep 28 Oct 28 Nov 28 Dec 28
Jan 29 Feb 29 Mar 29 Apr 29 May 29 Jun 29 Jul 29 Aug 29 Sep 29 Oct 29 Nov 29 Dec 29
Average of Make-up Water (m3/hr) - 1000m
Average of Discharge to Treatment (m3/hr) - 1000m
Average of Make-up Water (m3/hr) - CC
Average of Discharge to Treatment (m3/hr) - CC

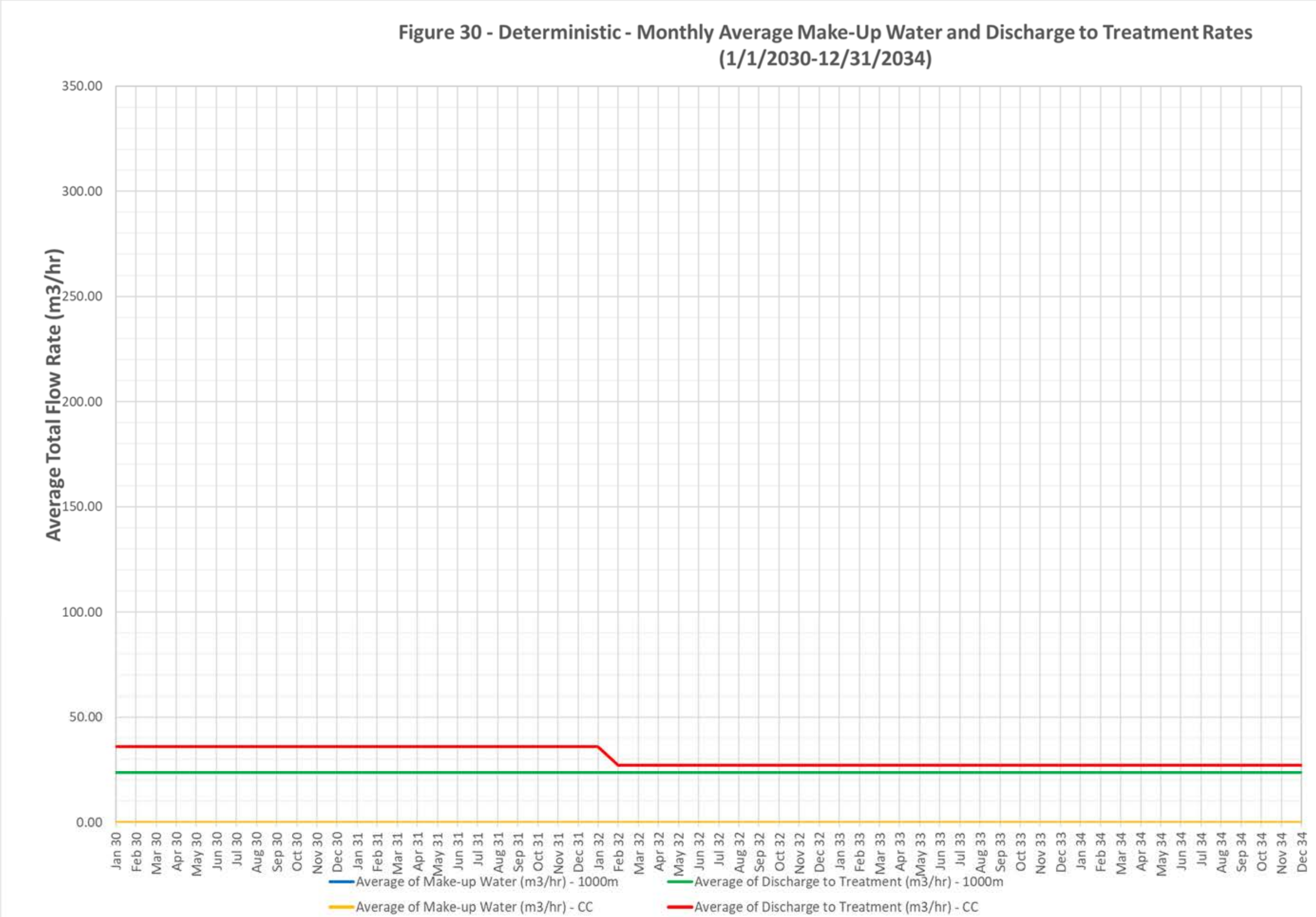


Figure 30 - Deterministic - Monthly Average Make-Up Water and Discharge to Treatment Rates (1/1/2030-12/31/2034)
Average Total Flow Rate (m3/hr)
350.00
300.00
250.00
200.00
150.00
100.00
50.00
0.00
Jan 30
Dec 34
Average of Make-up Water (m3/hr) - 1000m
Average of Discharge to Treatment (m3/hr) - 1000m
Average of Make-up Water (m3/hr) - CC
Average of Discharge to Treatment (m3/hr) - CC

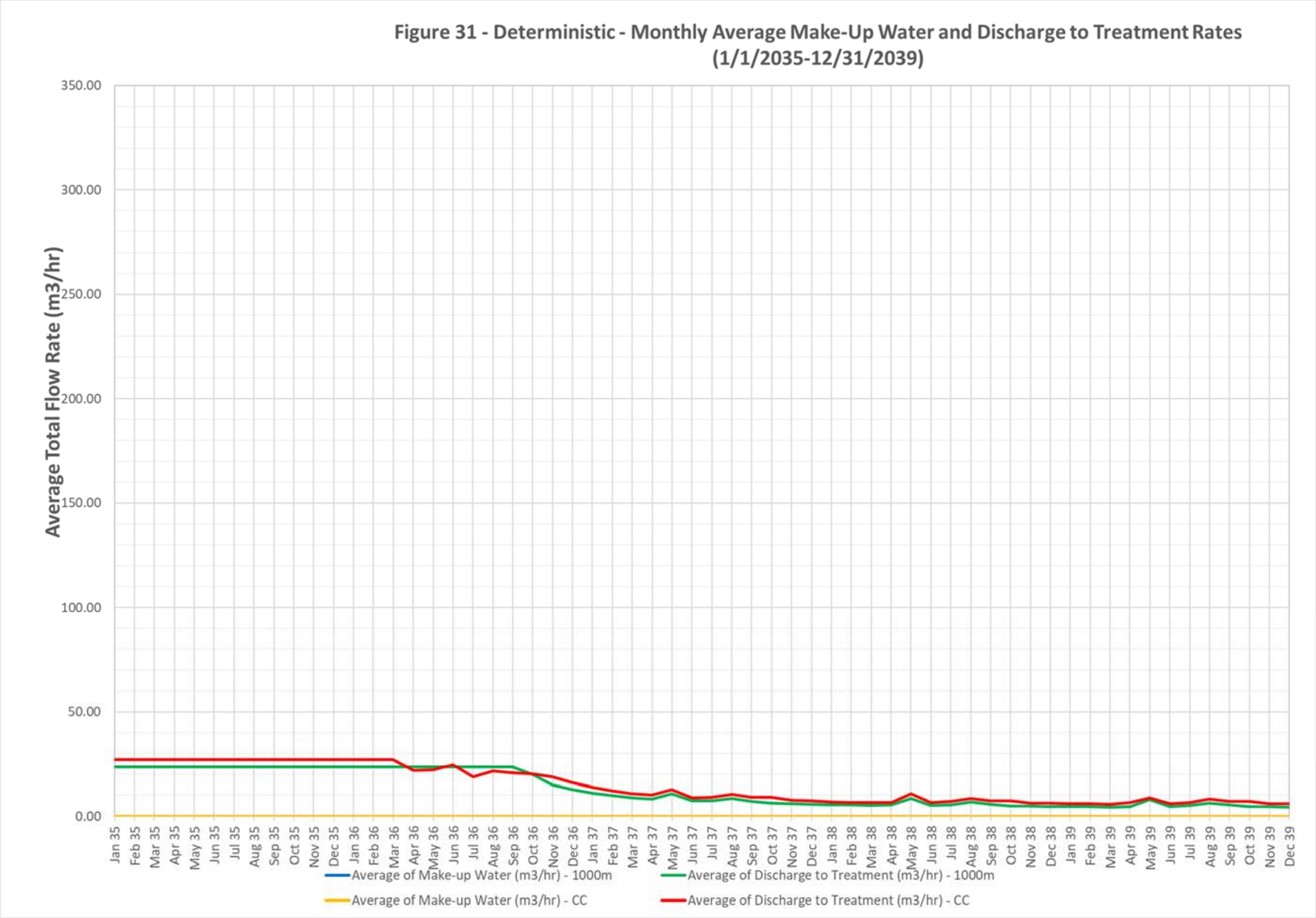


Figure 31 - Deterministic - Monthly Average Make-Up Water and Discharge to Treatment Rates (1/1/2035-12/31/2039)
Average Total Flow Rate (m3/hr)
350.00
300.00
250.00
200.00
150.00
100.00
50.00
0.00
Jan 35 Feb 35 Mar 35 Apr 35 May 35 Jun 35 Jul 35 Aug 35 Sep 35 Oct 35 Nov 35 Dec 35 Jan 36 Feb 36 Mar 36 Apr 36 May 36 Jun 36 Jul 36 Aug 36 Sep 36 Oct 36 Nov 36 Dec 36 Jan 37 Feb 37 Mar 37 Apr 37 May 37 Jun 37 Jul 37 Aug 37 Sep 37 Oct 37 Nov 37 Dec 37 Jan 38 Feb 38 Mar 38 Apr 38 May 38 Jun 38 Jul 38 Aug 38 Sep 38 Oct 38 Nov 38 Dec 38 Jan 39 Feb 39 Mar 39 Apr 39 May 39 Jun 39 Jul 39 Aug 39 Sep 39 Oct 39 Nov 39 Dec 39
Average of Make-up Water (m3/hr) - 1000m
Average of Discharge to Treatment (m3/hr) - 1000m
Average of Make-up Water (m3/hr) - CC
Average of Discharge to Treatment (m3/hr) - CC

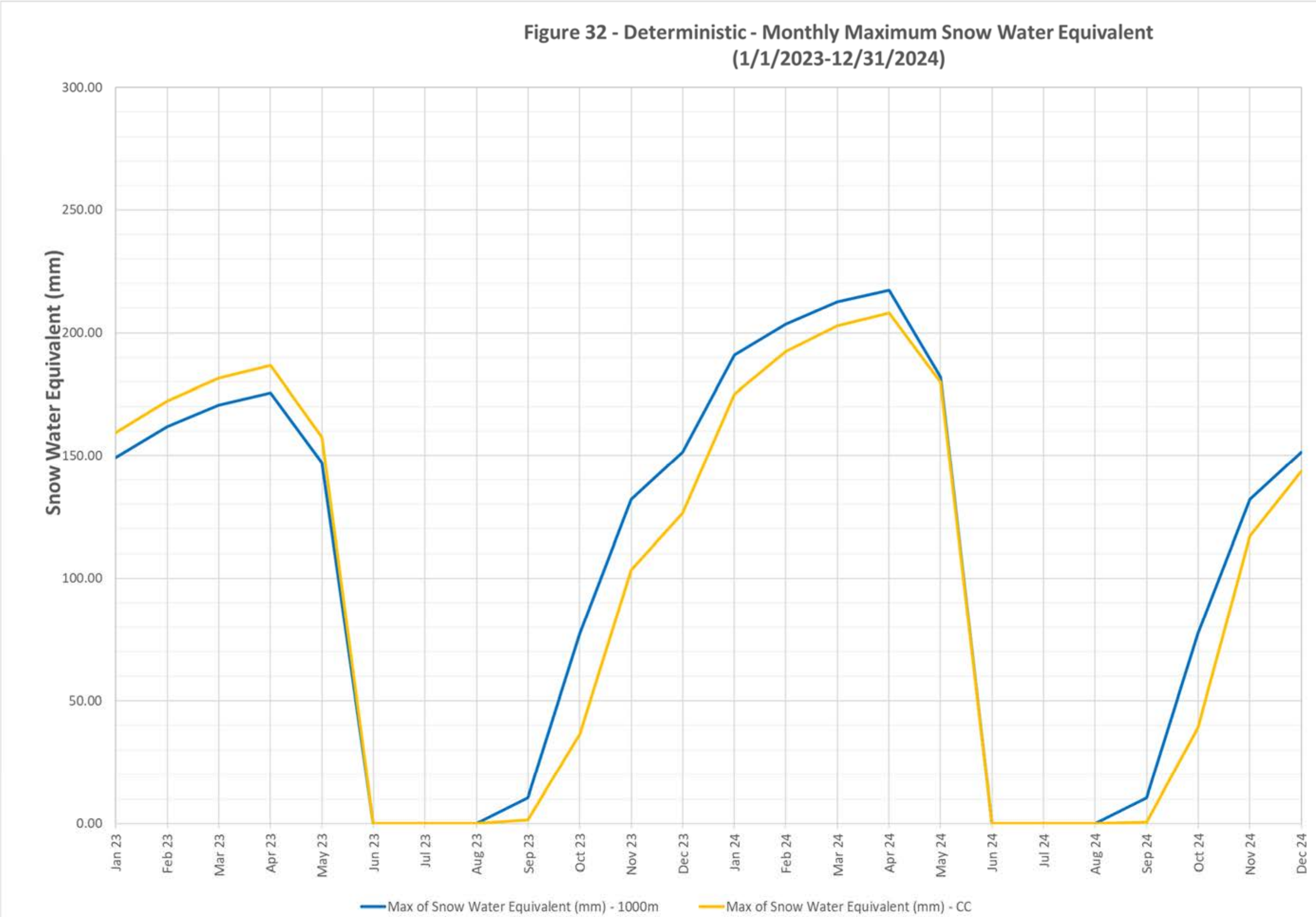


Figure 32 - Deterministic - Monthly Maximum Snow Water Equivalent
(1/1/2023-12/31/2024)
Snow Water Equivalent (mm)
300.00
250.00
200.00
150.00
100.00
50.00
0.00
Jan 23
Feb 23
Mar 23
Apr 23
May 23
Jun 23
Jul 23
Aug 23
Sep 23
Oct 23
Nov 23
Dec 23
Jan 24
Feb 24
Mar 24
Apr 24
May 24
Jun 24
Jul 24
Aug 24
Sep 24
Oct 24
Nov 24
Dec 24
Max of Snow Water Equivalent (mm) - 1000m
Max of Snow Water Equivalent (mm) - CC

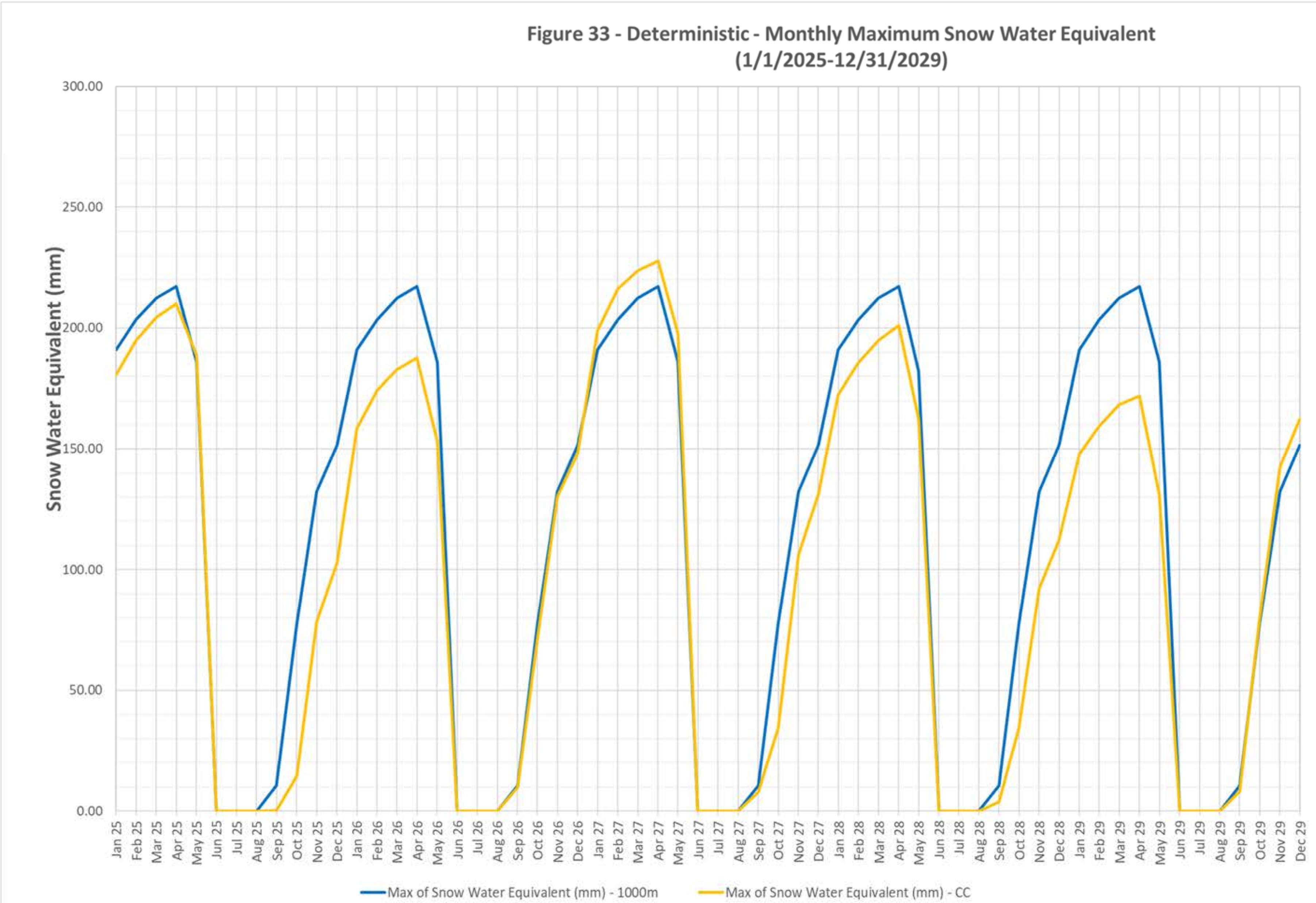


Figure 33 - Deterministic - Monthly Maximum Snow Water Equivalent
(1/1/2025-12/31/2029)
Snow Water Equivalent (mm)
300.00
250.00
200.00
150.00
100.00
50.00
0.00
Jan 25 Feb 25 Mar 25 Apr 25 May 25 Jun 25 Jul 25 Aug 25 Sep 25 Oct 25 Nov 25 Dec 25 Jan 26 Feb 26 Mar 26 Apr 26 May 26 Jun 26 Jul 26 Aug 26 Sep 26 Oct 26 Nov 26 Dec 26 Jan 27 Feb 27 Mar 27 Apr 27 May 27 Jun 27 Jul 27 Aug 27 Sep 27 Oct 27 Nov 27 Dec 27 Jan 28 Feb 28 Mar 28 Apr 28 May 28 Jun 28 Jul 28 Aug 28 Sep 28 Oct 28 Nov 28 Dec 28 Jan 29 Feb 29 Mar 29 Apr 29 May 29 Jun 29 Jul 29 Aug 29 Sep 29 Oct 29 Nov 29 Dec 29
Max of Snow Water Equivalent (mm) - 1000m
Max of Snow Water Equivalent (mm) - CC

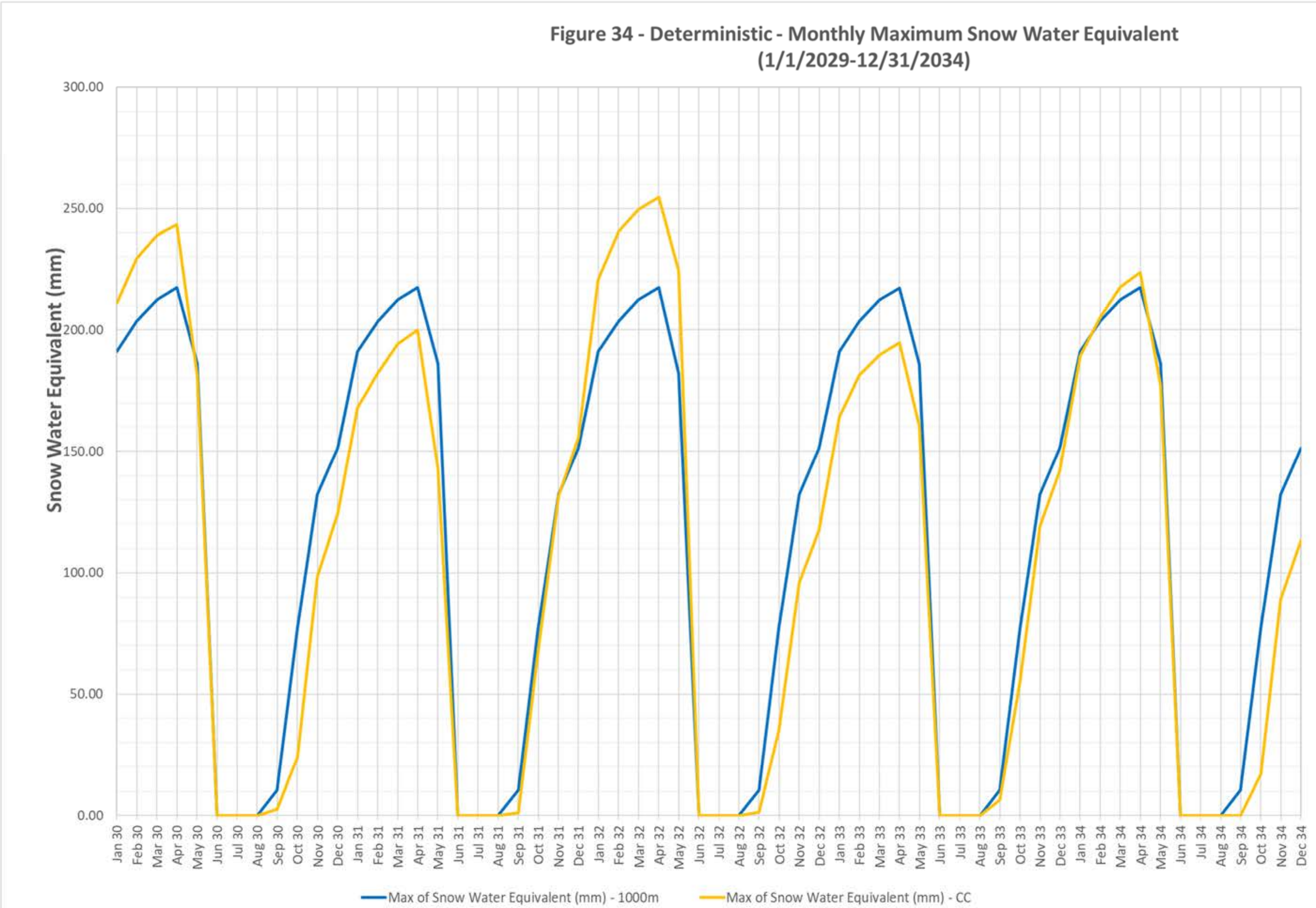


Figure 34 - Deterministic - Monthly Maximum Snow Water Equivalent
(1/1/2029-12/31/2034)
Snow Water Equivalent (mm)
300.00
250.00
200.00
150.00
100.00
50.00
0.00
Max of Snow Water Equivalent (mm) - 1000m
Max of Snow Water Equivalent (mm) - CC

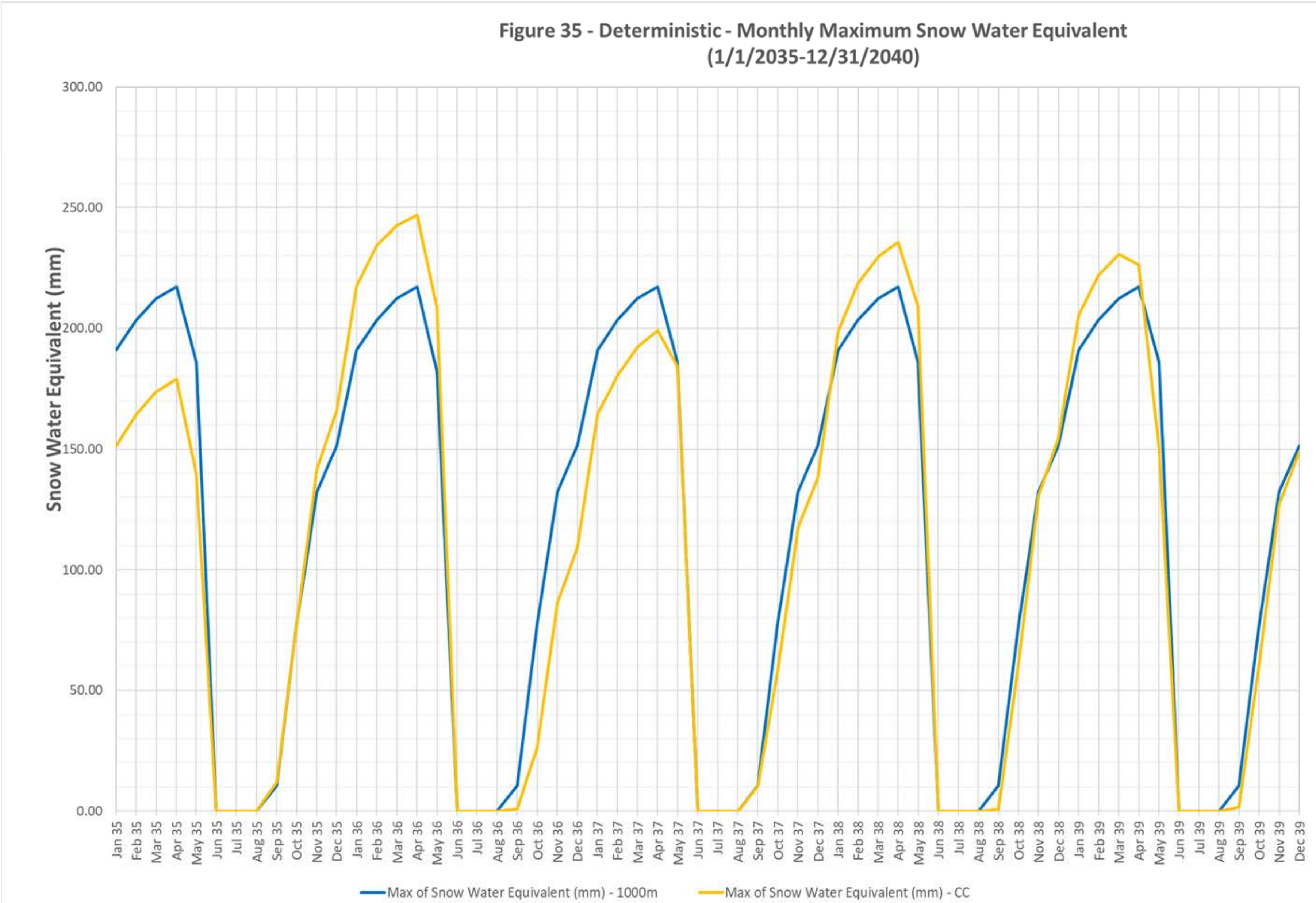


Figure 35 - Deterministic - Monthly Maximum Snow Water Equivalent
(1/1/2035-12/31/2040)
Snow Water Equivalent (mm)
300.00
250.00
200.00
150.00
100.00
50.00
0.00
Jan 35
Feb 35
Mar 35
Apr 35
May 35
Jun 35
Jul 35
Aug 35
Sep 35
Oct 35
Nov 35
Dec 35
Jan 36
Feb 36
Mar 36
Apr 36
May 36
Jun 36
Jul 36
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Jan 39
Feb 39
Mar 39
Apr 39
May 39
Jun 39
Jul 39
Aug 39
Sep 39
Oct 39
Nov 39
Dec 39
Max of Snow Water Equivalent (mm) - 1000m
Max of Snow Water Equivalent (mm) - CC

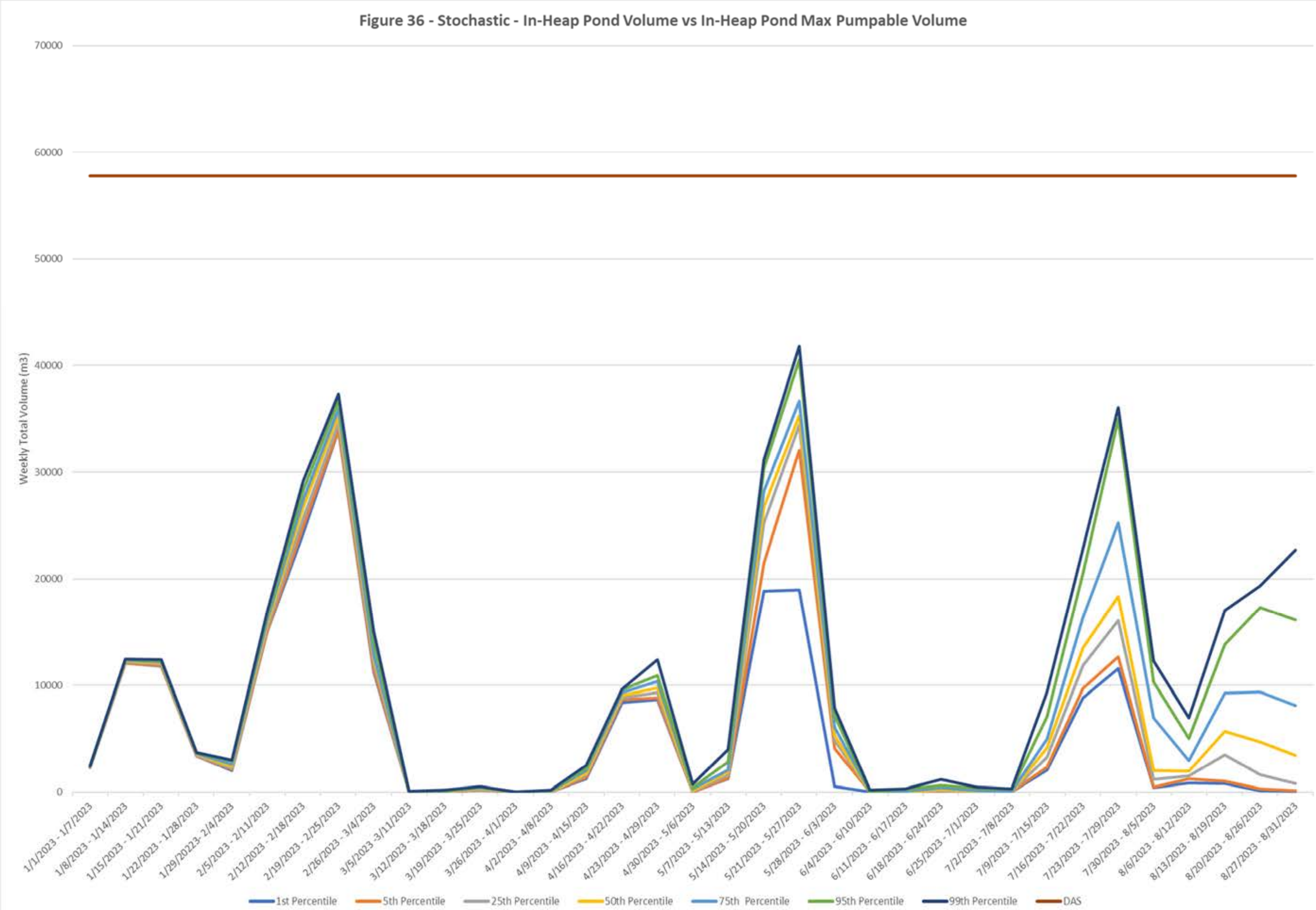
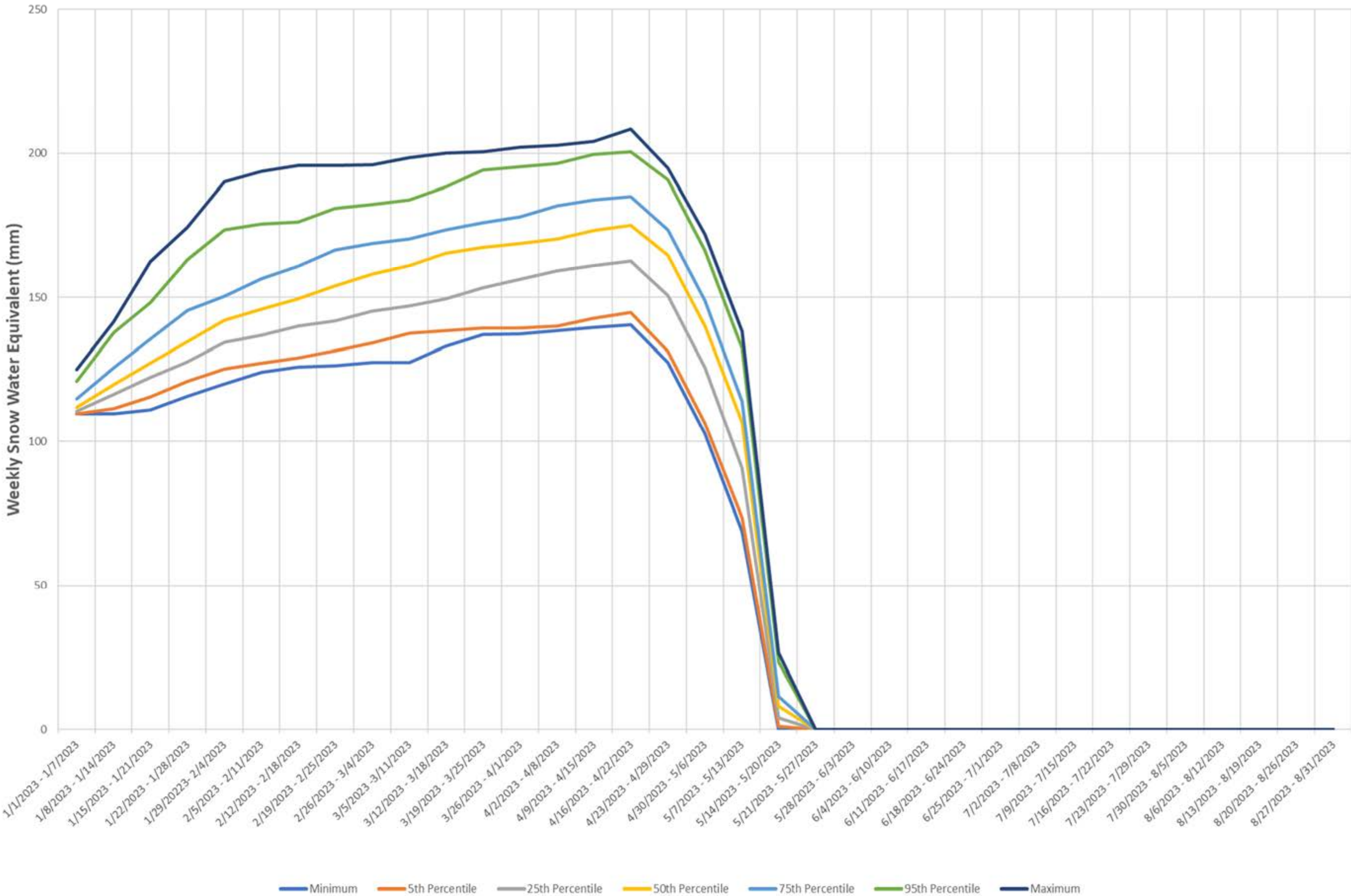


Figure 36 - Stochastic - In-Heap Pond Volume vs In-Heap Pond Max Pumpable Volume
Weekly Total Volume (m3)
70000
60000
50000
40000
30000
20000
10000
0
1st Percentile
5th Percentile
25th Percentile
50th Percentile
75th Percentile
95th Percentile
99th Percentile
DAS

Figure 37 - Stochastic Snow Water Equivalent- Weekly Average



www.fortedynamics.com
120 Commerce Drive, Unit 3-4, Fort Collins, CO 80524
Phone: +1 (720) 642-9359 info@fortedynamics.com