



**PERMIT TO TAKE WATER
PUBLIC MEETING
FOR 2021**

May 24, 2022

Meeting Agenda

- **Welcome**
- **Introductory remarks**
- **Omya report on Water Taking – WSP Golder**
- **Questions on Water Permit**
- **Receipt of submissions and questions**
- **Omya Update**
- **Meeting conclusion**



Permit to Take Water Monitoring and Reporting

Omya Canada Inc.

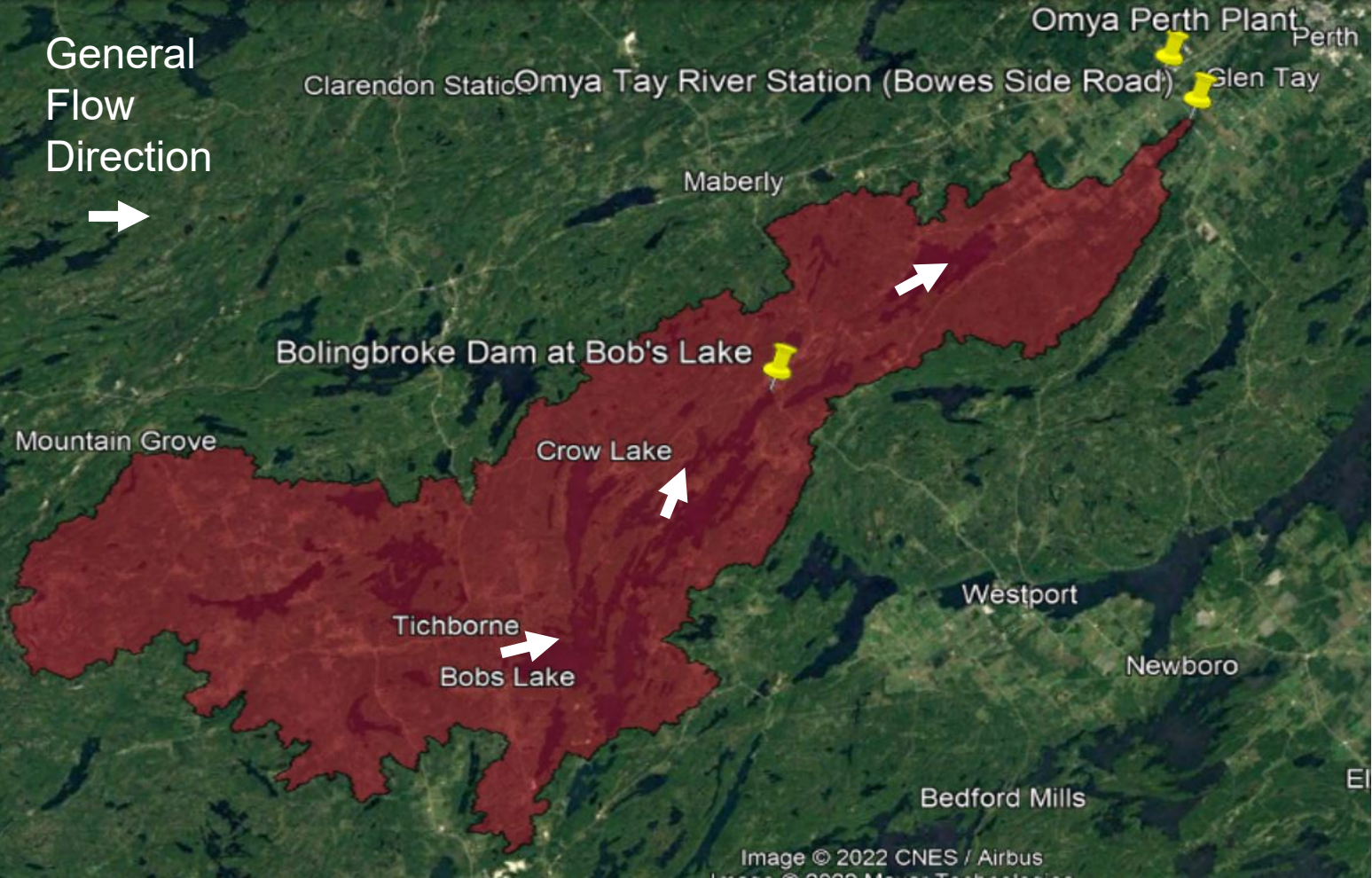
May 18, 2022



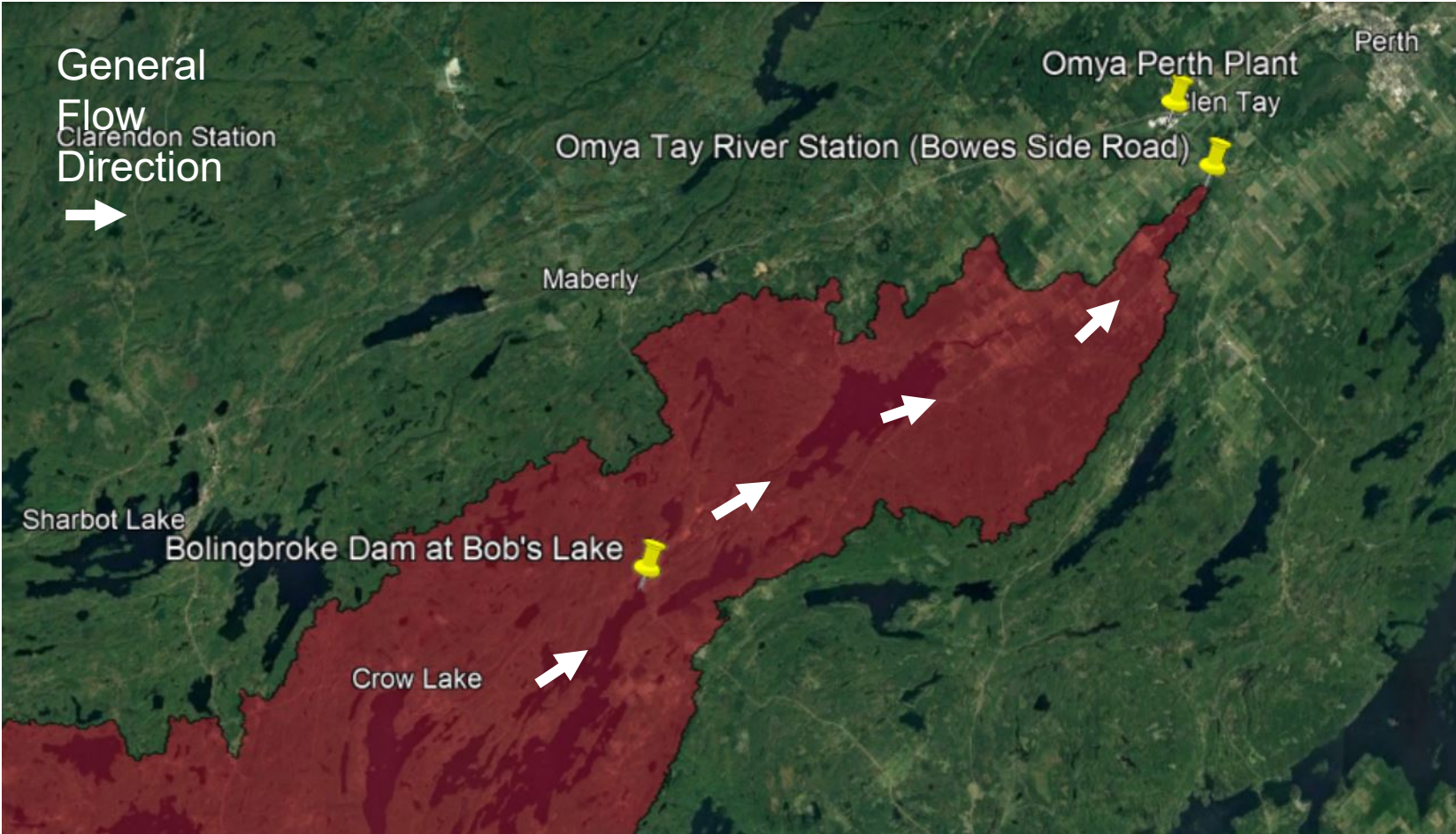
Omya Water Takings

- Omya Canada Inc. completed monitoring as required for Permit To Take Water Number P-300-1069049907 (PTTW)
- Permitted Water Takings include:
 - Groundwater wells (PW1, PW2, PW3, PW4, PW5, PW6, RW1, DP1 and W1)
 - Surface water from the Tay River
- Water takings are recorded using a flow meter and totalizer

Watershed Boundary at Omya Tay River Station



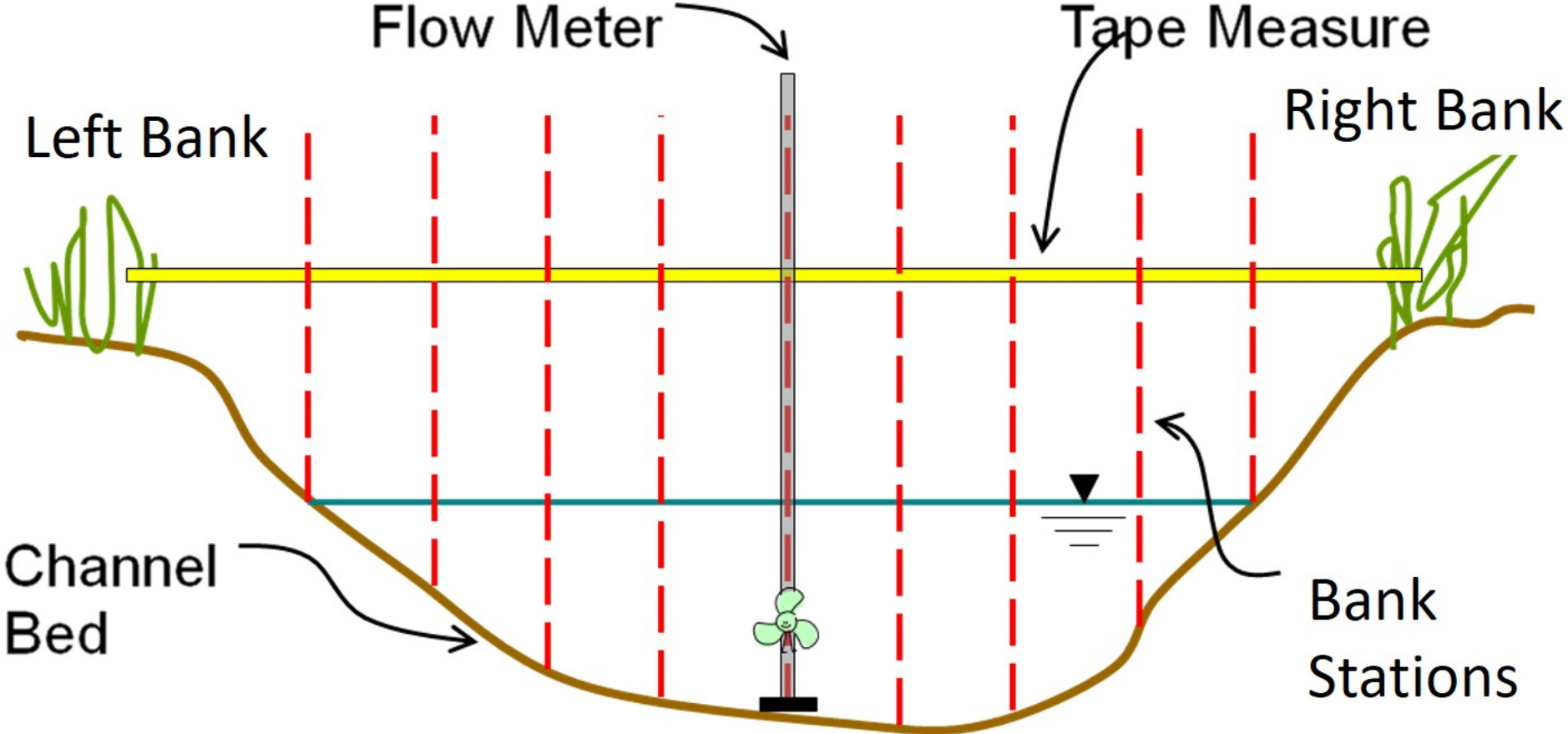
Site Location



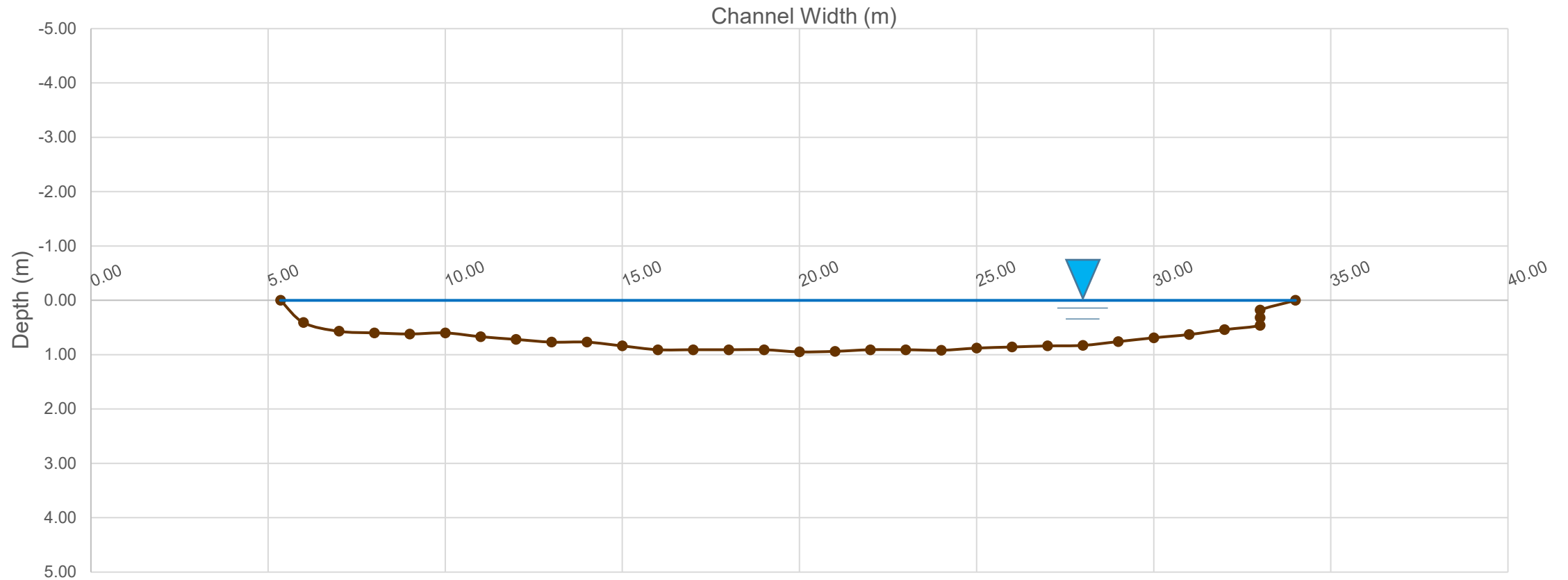
Tay River Monitoring

- Tay River is controlled upstream by the Bolingbroke Dam at Bob's Lake
- Hydrometric monitoring station maintained by Omya near Bowes Road
- Hydrometric monitoring station includes staff gauge and water level meter and data logger
- Streamflow records were derived from daily water level records using an open water rating curve and adjusted to account for ice conditions

Streamflow Measurements

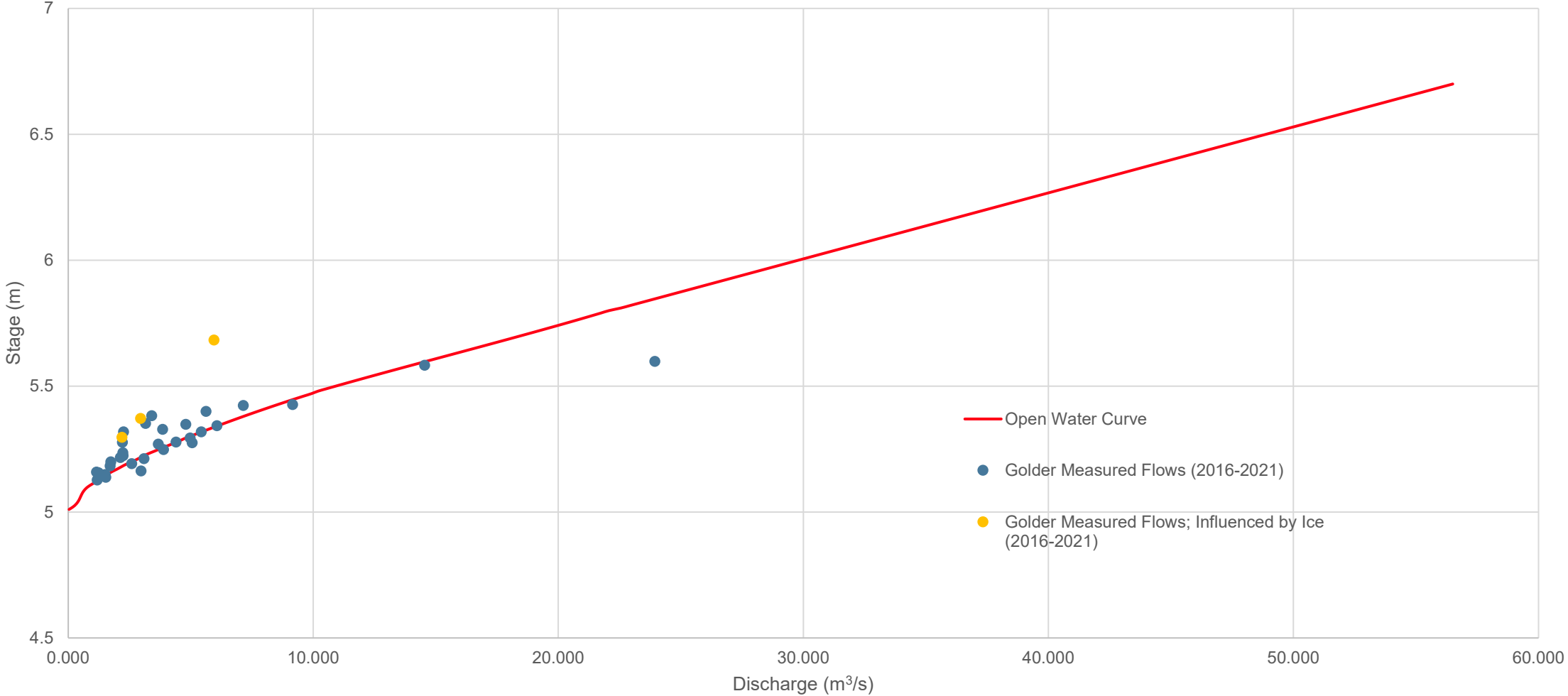


Tay River Cross Section

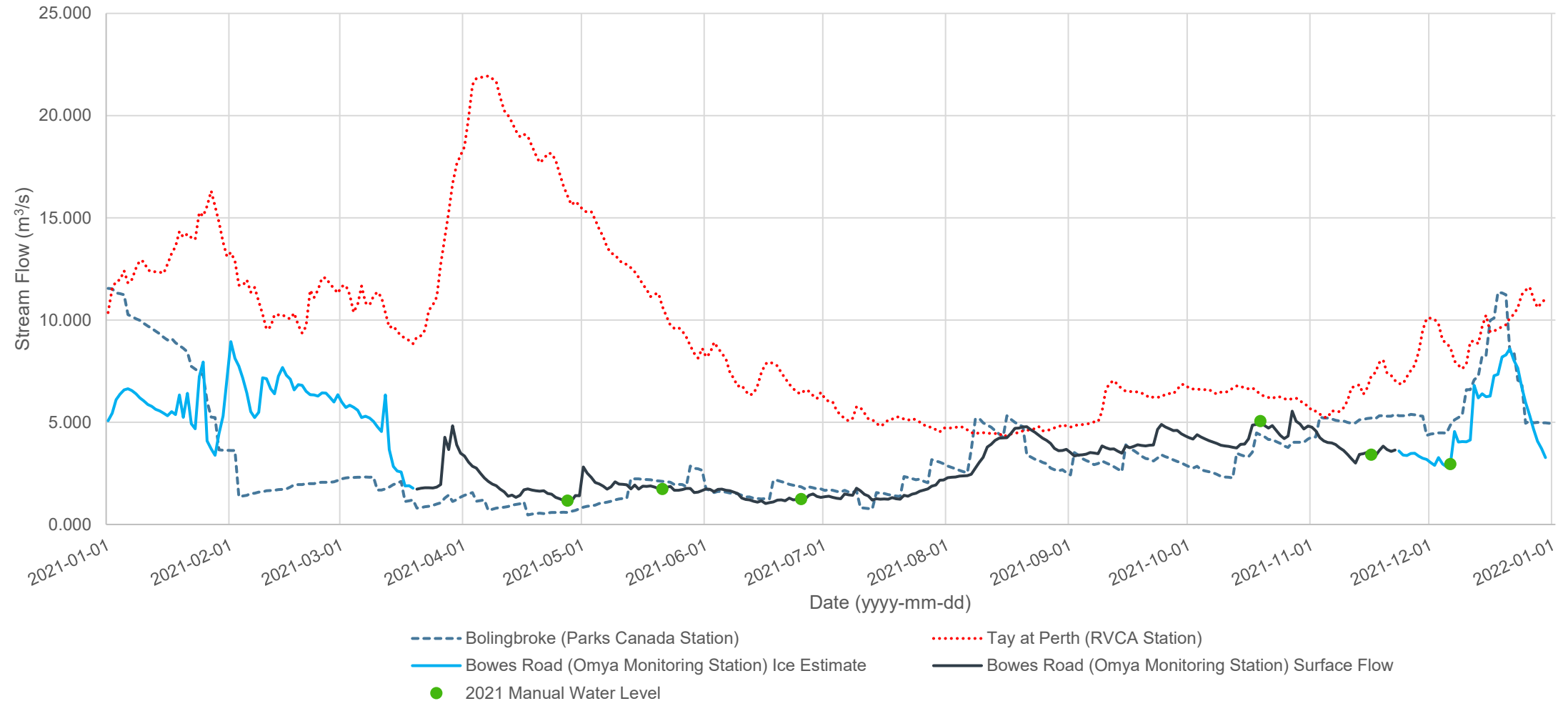


*Bed geometry measurements recorded in May 2019

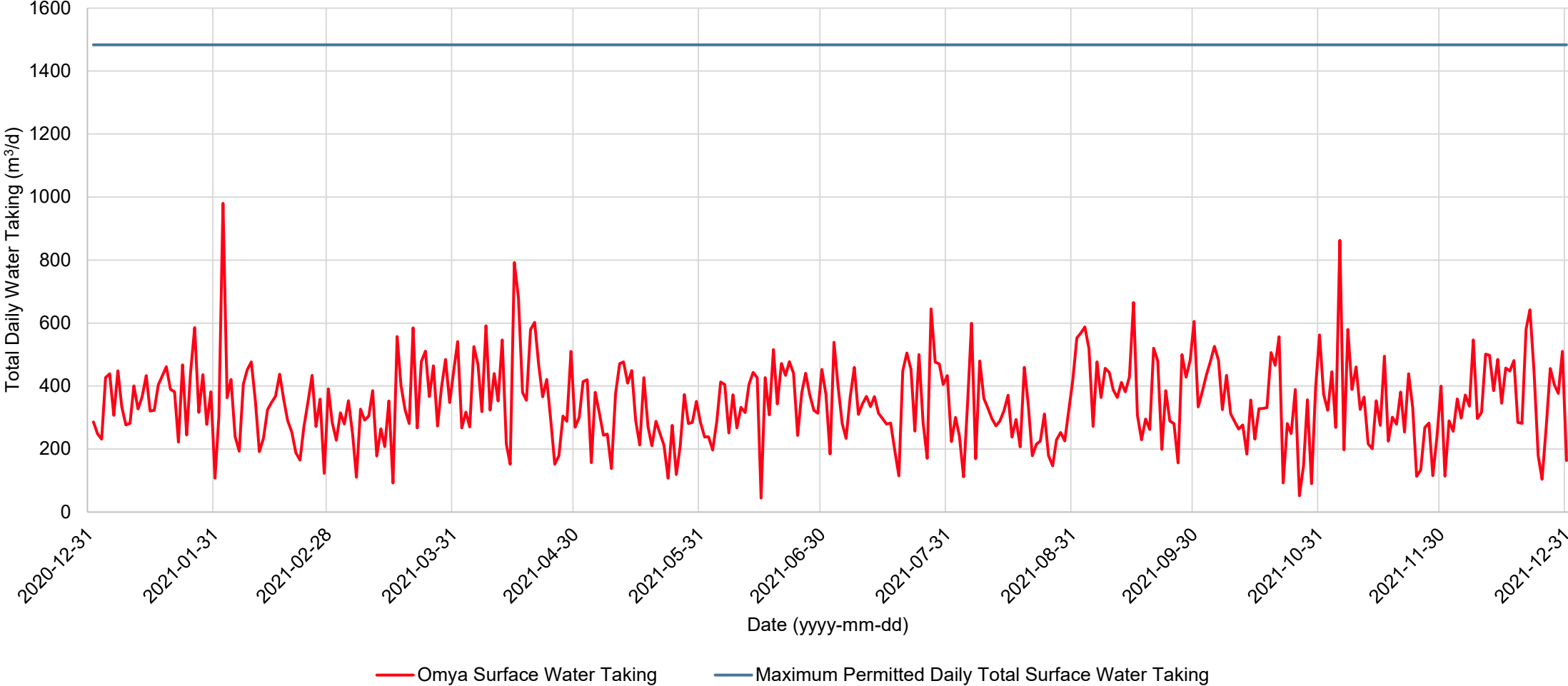
Rating Curve



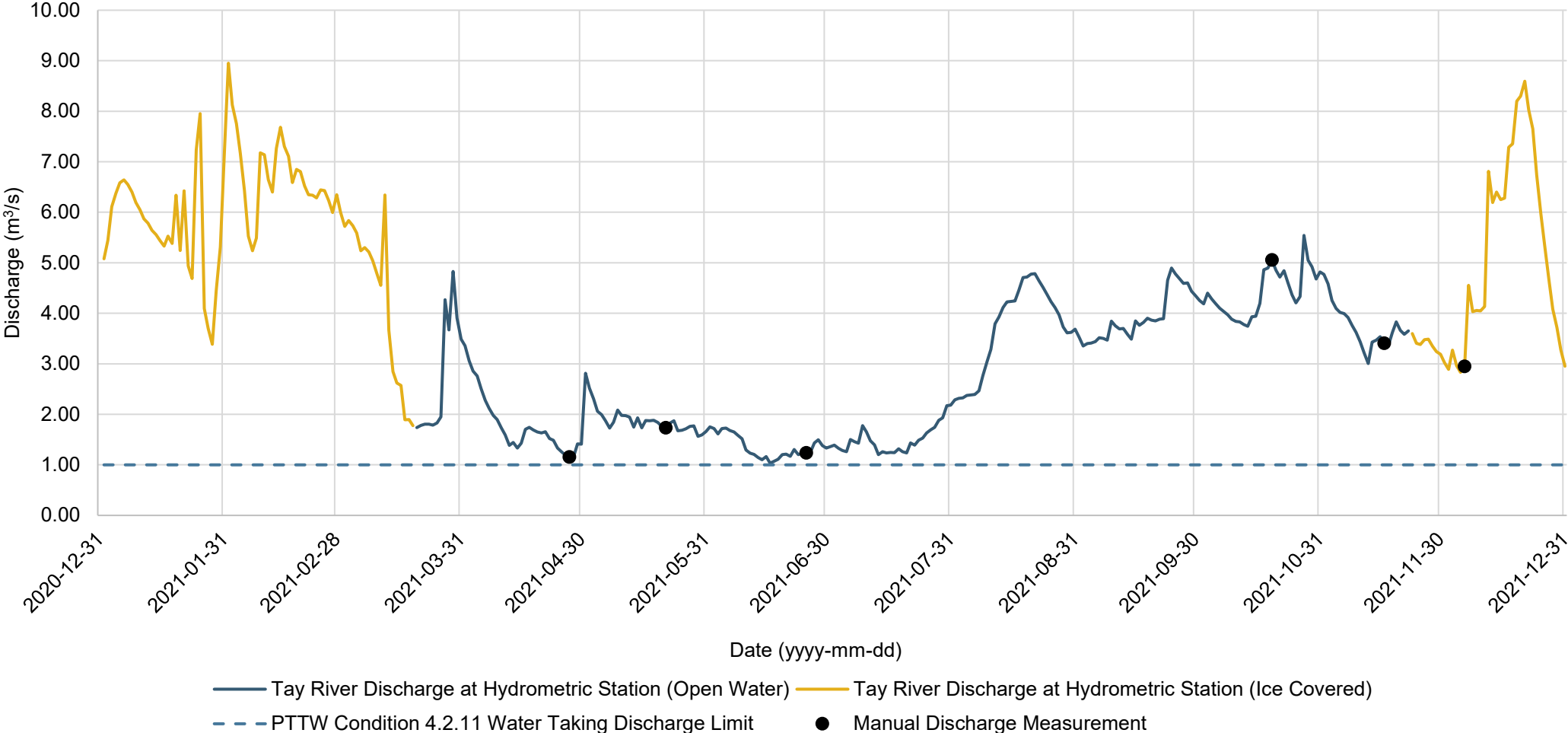
Tay River Discharge 2021



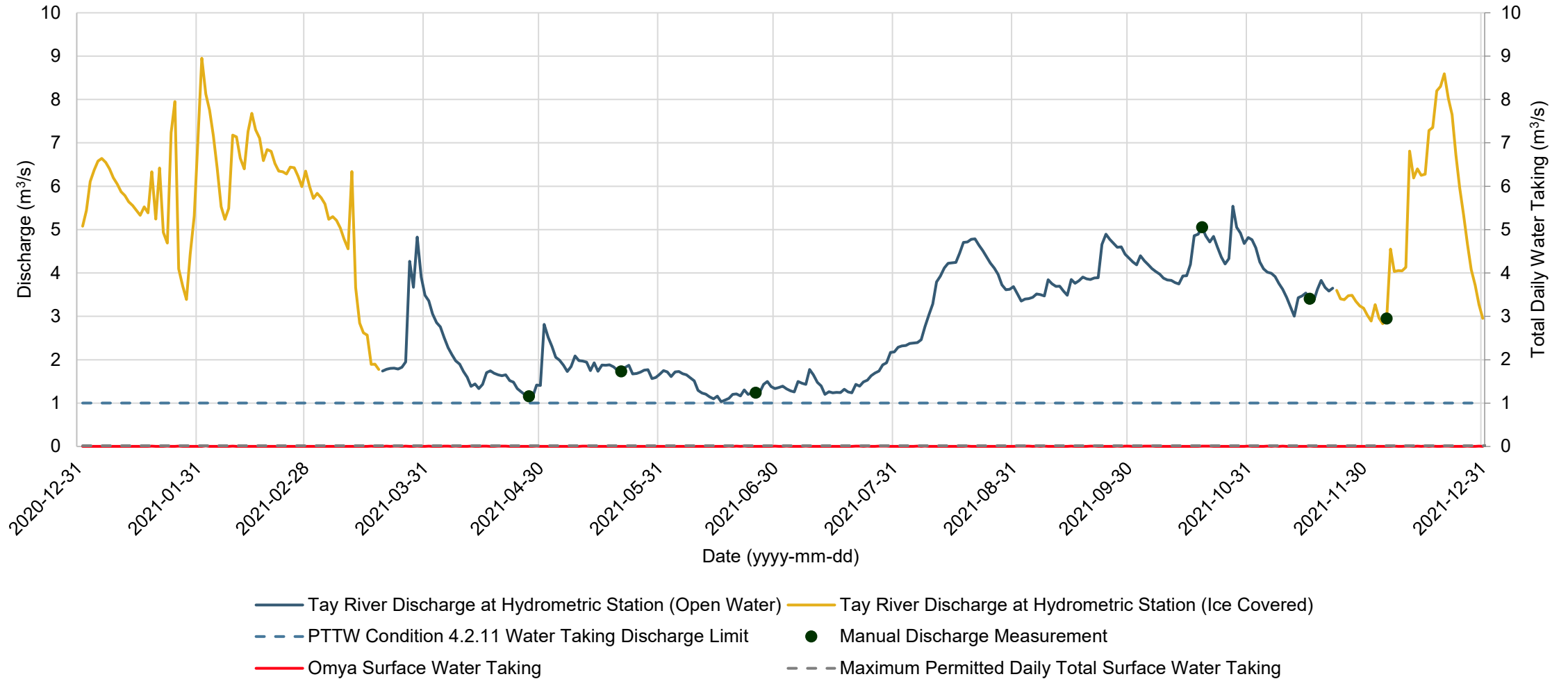
Tay River Water Taking 2021



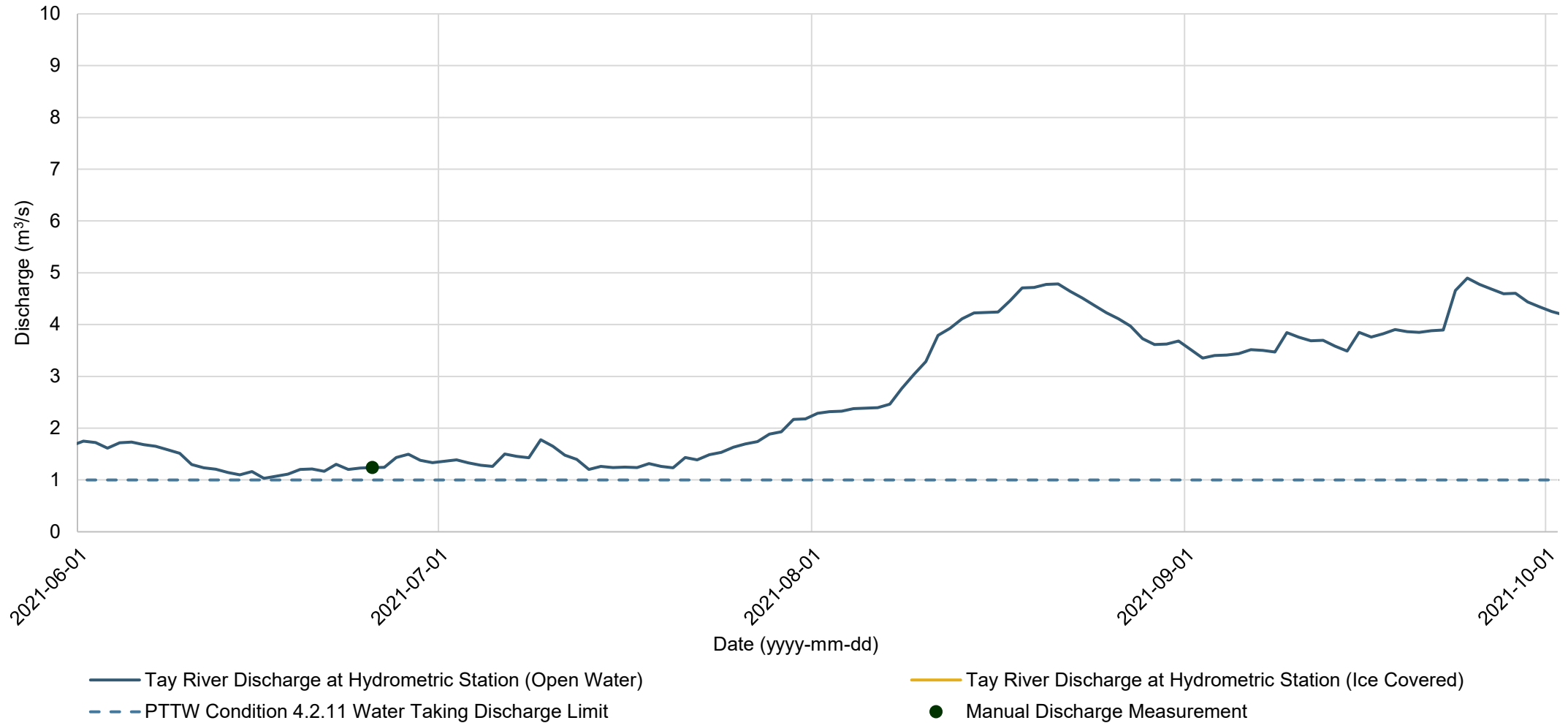
2021 Tay River Discharge



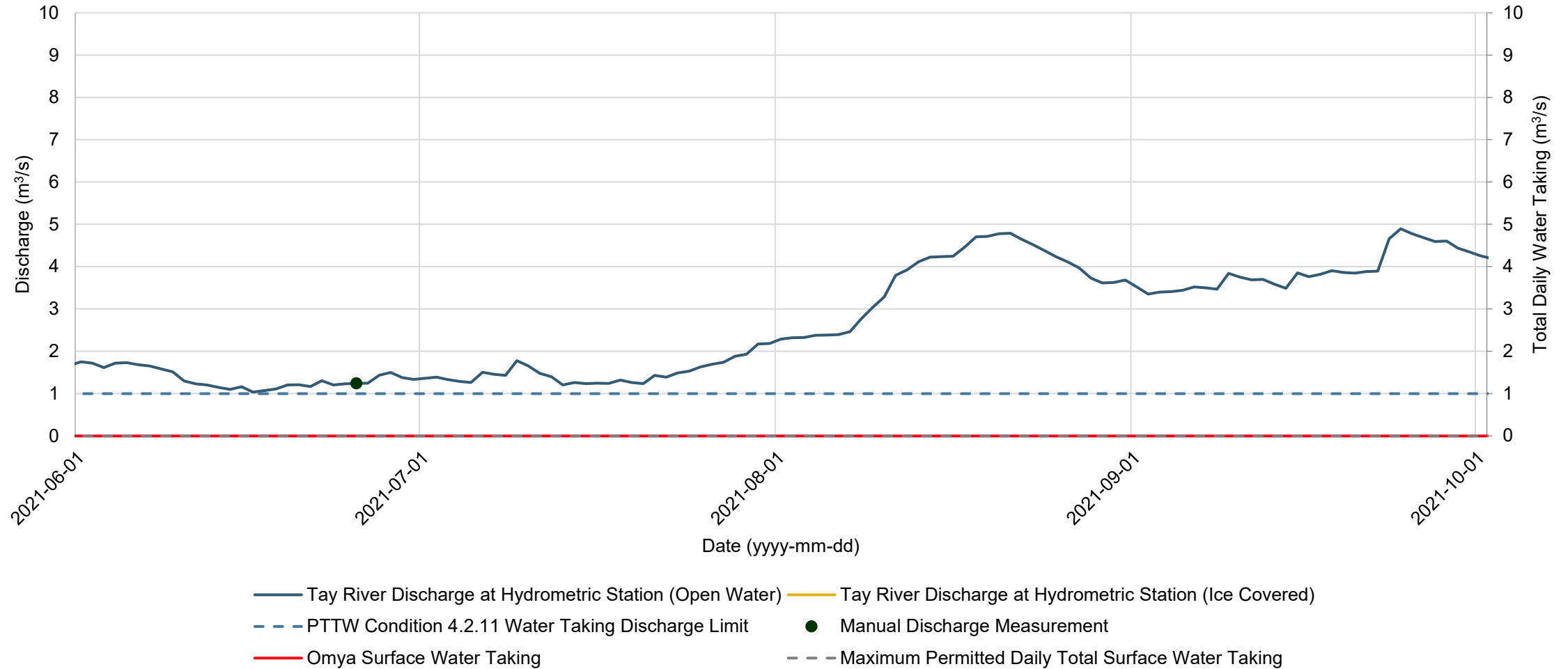
2021 Tay River Discharge



2021 Tay River Discharge



2021 Tay River Discharge



Tay River Surface Water Takings

- Hypothetically, when the river flow is equal to 1.0 m³/s (The minimum River flow for water taking), the maximum permitted water taking is still only 2.0% of the river flow.
- Flow at the hydrometric station was recorded to be over 1.0 m/s for the duration of 2021.

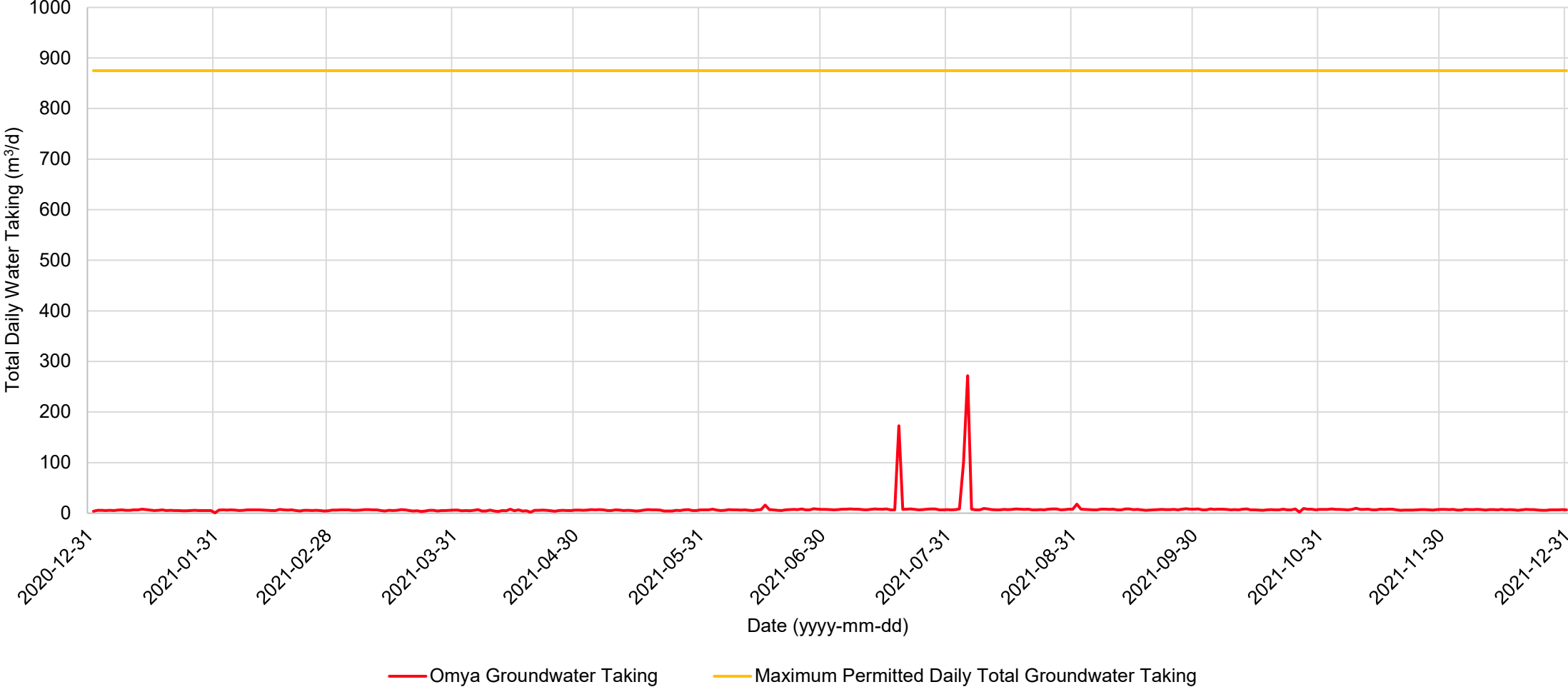
Tay River Surface Water Takings

- The maximum permitted daily surface water taking amount of 1,483,000 L/day was not exceeded in 2021
- The maximum daily surface water taking in 2021 was 980,400 L/day
- Maximum instantaneous permitted surface water taking is 1,030 L/min
- The maximum instantaneous permitted surface water taking was not exceeded in 2021 for the available period of record
- The daily permitted amount was not exceeded during hydrant testing

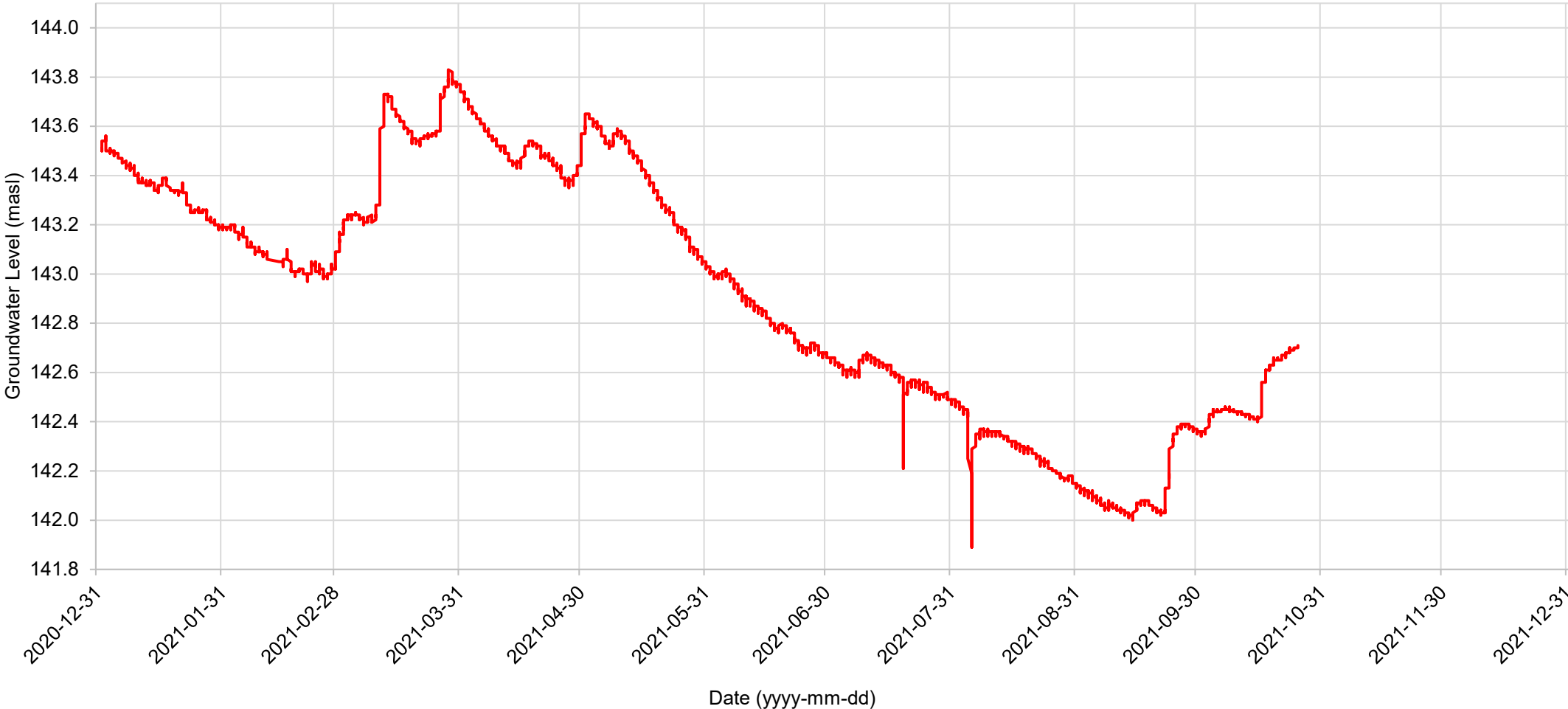
Groundwater Well Takings

- The maximum permitted amount for daily groundwater takings, 875,000 L/day (875 m³/day), was not exceeded in 2021
- The maximum per minute water taking limit for individual wells were not exceeded during 2021, except for very short duration spikes in March and April for PW2 (greater than 60 L/min), and in June for PW5 (greater than 100 L/min) and one event in March for PW6 (greater than 100 L/min)
- Water was not taken at a rate greater than 50,000 L/day more than seven consecutive days

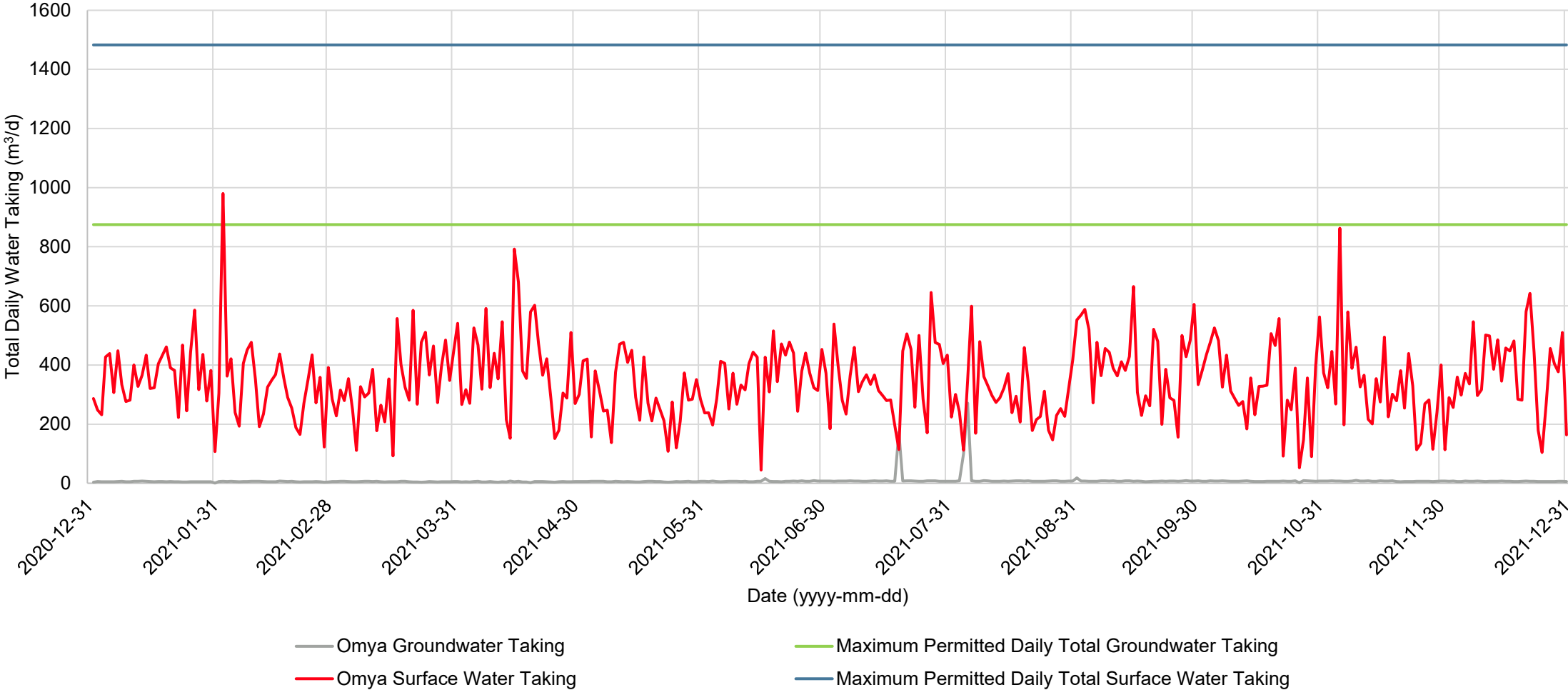
Daily Groundwater Takings 2021



Hourly Groundwater Elevations at Groundwater Monitoring Well M3 (PGMN Well W083) 2021



Surface Water and Groundwater Takings 2021



Summary

- Daily water taking permitted amounts were not exceeded for the groundwater wells and the Tay River surface water takings.
- Maximum instantaneous (L/min) and overall daily amounts were not exceeded for the available records with the exception of a few short duration spikes at PW2, PW5, and PW6.
- Surface water takings occurred when river flow was above 1.0 m³/s; no impacts on the downstream river were expected.



Floor Open

Questions

Comments

Requests

Copies of the report can be requested from: jeff.lee@omya.com

Omya Values



- **Plant and Quarry employ 80 persons plus Contractors and a significant number of Service Providers. The viability of this operation extends benefits to hundreds of families and individuals in the area.**
- **Despite the Covid-19 pandemic, demand for our products has been steady to strong. Customers who purchase products produced at the plant and from the Quarry have been pleased as we continue to keep up with demand. Many industries and businesses in North America are struggling to secure the raw materials needed to produce their products.**



Omya Update - Community Initiatives

- **Adopt-a-Highway at Two Locations (511 and Christie Lake Road)**
- **Trail Head Parking for community use**
- **Open Houses at Quarry where guided bus tours take place with food and beverages provided – decision and dates pending**
- **School & Science Class visits full with learning presentations**
- **Various Sponsorships**



Meeting is Concluded

Thank You For Coming

