

Blind River GS Monthly Report – May 2022

Production

Unit #1 (to Town Hall):

RGM: 00.00 kWh

RGM = Revenue Grade Meter

Unit #2 (to STP):

RGM: 16,714 kWh

Downtime

Unit #1 was down for the month.

Unit #2 was offline for 8 days at the beginning of the month due to the tail end of freshet. It was started as soon as the water level came up and stabilized at the headpond as the unit could then run without cavitation.

Maintenance

78.5 hours onsite for regular maintenance service, and over 28 hours of on call coverage.

- A summary of the work completed includes: Unit #2 start up maintenance procedure, mechanical gate adjustment, dropping and pulling logs, meeting with MNR to review log and gate leakage, sealing bays for season while allowing for necessary leakage, and daily checks consisting of sweeping, daily measurements and records, trash rack cleaning, observations, etc.
- Monthly Alarm testing was completed at the start and end of April, so will be done next on June 1st.
- General cleaning and sanitizing was performed regularly.
- Davit crane is due for annual inspection in June, along with hoisting gear. Scheduled for end of June.
- Headgate dimensions obtained and provided to engineering team to develop quote for both calculating headgate weight under hydraulic force (when the turbine is dewatered, and the headgate is sealed) and also to provide drawings for upgraded headgate hoisting system. Initial quote received and requesting to separate into two individually quoted items. This will allow us to seek additional quotes for the hoisting system based on the calculated load, as some are standard rated systems that include drawings in the package.
- Continuous Safety Services Inspection with our Electrical Safety Authority Inspector on May 27th.

Repair Work

Powerhouse:

- The lighting fixtures were inspected last month as one was out. We are looking into replacing bulbs where possible but may have to change out the ballast. Lighting is still adequate, so this will be scheduled when both units are down during the summer.
- We have been investigating water coming into the plant through the ceiling. We will continue to monitor access points and while we plan to investigate thoroughly during summer down time, we will shut down earlier if warranted at any point to complete the work sooner.

Unit #1:

- Last month we were prepping to open unit #1 for repair and start up by end of May. We have been sourcing options and suppliers for building the new hoisting rig. To continue we require engineering to ensure hoisting equipment purchased and installed is properly rated for the load. We have obtained a quote, as mentioned above, that we will request to be split so that we have an updated load calculation to work with now and can plan for the update to the system next year. We will continue to source additional quotes for the upgrade once we have the calculated load finalized.

Unit #2:

- None. Offline for cavitation due to freshet at the start of the month. Before starting up, we checked belt condition, alignment, and tension, packing lubrication, pilot bearing set screw torque and we greased the generator and pilot bearing.

Other Issues

On May 4th we met with MNR at the site to investigate the leakage under the logs of Bay 4, and the leakage of the mechanical gate in Bay 5. Both areas were reviewed with the underwater camera. Still too much flow to properly inspect the gate, but the MNR believes the debris has cleared from the sill of Bay 4. Some of the leakage may be due to warping in the stop logs. We have tried various configurations of seating the logs (switching bottom log out), however the results remain the same.

Water Management

During this month, the Target Water Level range was from 0.60 to 0.66 and the Compliance Water Level range was from 0.60 to 0.76. We are to stay within these levels for the months of April and May.

We had no out of compliance incidents this month. All logs were out at the start of the month and were replaced over the course of the month as freshet slowed down.

Figure 1 is a graph of the water level from May 1st to May 31st.

Figure 2 is the chart with the exact water levels and number of logs out (or equivalent).

Blind River Water Levels - May 2022

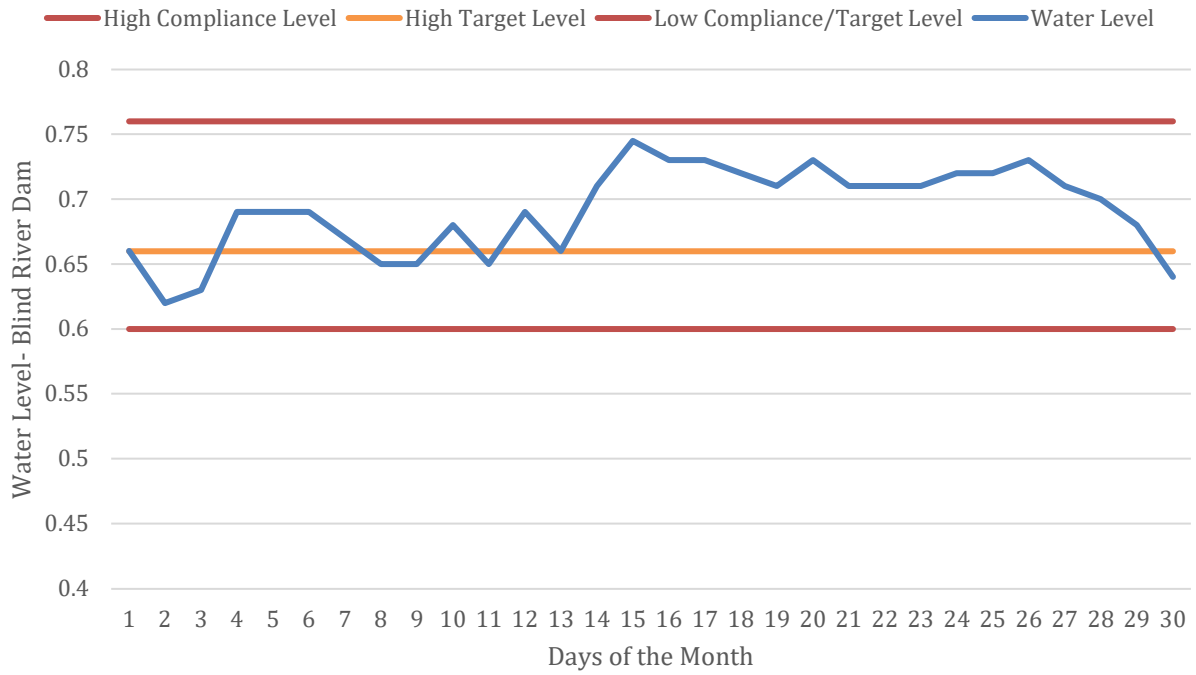


Figure 1: Water Level Graph

2022 MONTHLY WATER LEVEL LOG				
Station:	Town Dam		Month:	May
			WMP Compliance Range:	.60 to .76 mStaff
Date	Water Level	Ruler	Logs Out & Equivalent Flow	Comments/Actions
May 1, 2022	0.66	557	33	Up to 10mm rain forecasted (04-29)
May 2, 2022	0.62	557	24	
May 3, 2022	0.63	557	20	1mm forecasted (05/01) (10-15mm rain forecasted (04-29))
May 4, 2022	0.69	557	22	
May 5, 2022	0.69	557	22	
May 6, 2022	0.69	557	22	
May 7, 2022	0.67	557	22	
May 8, 2022	0.65	557	20	
May 9, 2022	0.65	557	17	
May 10, 2022	0.68	557	17	
May 11, 2022	0.65	557	17	
May 12, 2022	0.69	557	11	
May 13, 2022	0.66	557	2	
May 14, 2022	0.71	557	2	
May 15, 2022	0.745	557	2	
May 16, 2022	0.73	557	4	
May 17, 2022	0.73	557	4	
May 18, 2022	0.72	557	4	
May 19, 2022	0.71	557	4	80% of up to 5mm rain forecasted as of 2022-05-17
May 20, 2022	0.73	557	4	80% of up to 15mm rain forecasted as of 2022-05-17/ Dam at .70
May 21, 2022	0.71	557	4	80% of up to 2-4mm rain forecasted as of 2022-05-17
May 22, 2022	0.71	557	4	
May 23, 2022	0.71	557	4	
May 24, 2022	0.72	557	4	
May 25, 2022	0.72	557	5.5	80% of up to 15mm rain forecasted in 24hrs as of today
May 26, 2022	0.73	557	5.5	70% chance of 1mm from 10am to 9pm
May 27, 2022	0.71	557	5.5	
May 28, 2022	0.7	557	5.5	
May 29, 2022	0.68	557	5.5	60% of up to 5mm rain forecasted as of 2022-05-26
May 30, 2022	0.64	557	4.5	
May 31, 2022	0.65	557	5	

Figure 2: Water Level Chart