

## Blind River GS Monthly Report – April 2022

### Production

Unit #1 (to Town Hall):

RGM: 00.00 kWh

*RGM = Revenue Grade Meter*

Unit #2 (to STP):

RGM: 1,281 kWh

### Downtime

Unit #1 was down for the month.

Unit #2 was offline for most of the month due to freshet as the units cavitate with the turbulent water.

### Maintenance

37.25 hours onsite for regular maintenance service, and over 25 hours of on call coverage.

- A summary of the work completed includes: mechanical gate adjustment, daily checks that include sweeping, water level and water temperature recording, and trash rack cleaning.
- All logs were removed from the dam over the course of the month.
- Monthly Alarm testing was completed on April 1<sup>st</sup> and 29<sup>th</sup>. No false calls for first high water alarm this month, so will hold on to scheduling service. We have cameras inside to investigate remotely if needed. Danny investigating a battery failure alarm. If we need to service alarm for that, will get the first high water sensor looked at during the same visit.
- General cleaning was performed regularly, including disinfecting of high touch points and shared equipment and tools.
- No greasing as units were offline.
- Powerhouse gutters were cleaned on the 13<sup>th</sup>.
- H&S inspection was completed on the 9<sup>th</sup>. Davit crane is due for annual inspection in June, along with hoisting gear.
- Headgate was weighed on April 21<sup>st</sup> with Sling Choker and it weighs 760lbs without being sealed.

### 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.
- Water coming into the plant through the ceiling will need to be investigated as it is becoming a hazard. We will plan to investigate this during summer down time also. We may need to hose down the roof to find the source. Suspect a hole in membrane or build up around the hatches.

Unit #1:

- Prepping to open unit for repair and start up by end of May. Sourcing options and suppliers for building the new hoisting rig. Sourcing required engineering to ensure hoisting gear purchased and installed is properly rated.

Unit #2:

- None. Offline for cavitation due to freshet and number of logs required to be out of dam. Will check belt alignment and tension, packing and pilot bearing set screw before restarting when water levels stabilize.

## Other Issues

As noted in previous reports there is a significant leak under the logs in the bay closest to the mechanical gate. As all logs were out, MNR confirmed that they are coming out at the start of May to investigate and will do further investigation as the logs are replaced. They will look at the leak under the logs of Bay 4, and the hinge of the mechanical gate in Bay 5.

## 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 under compliance incidents this month. Beginning at the end of the first week of April, we received several rainstorms ranging from 20 to 50mm. This combined with the amount of snow and ice that were making their way down the watershed during freshet (spring thaw) made it difficult to bring water levels down and hold them within compliance levels.

We coordinated with upstream dams and the MNR to hold back what we could while receiving all the precipitation, however on April 17<sup>th</sup>, despite having done everything we could, mother nature still rose the water level over 0.76. We were unable to bring the water level back down into compliance until April 28<sup>th</sup> but continued to communicate and work together with MNR to do so.

Figure 1 is a graph of the water level from April 1<sup>st</sup> to April 30<sup>th</sup>.

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

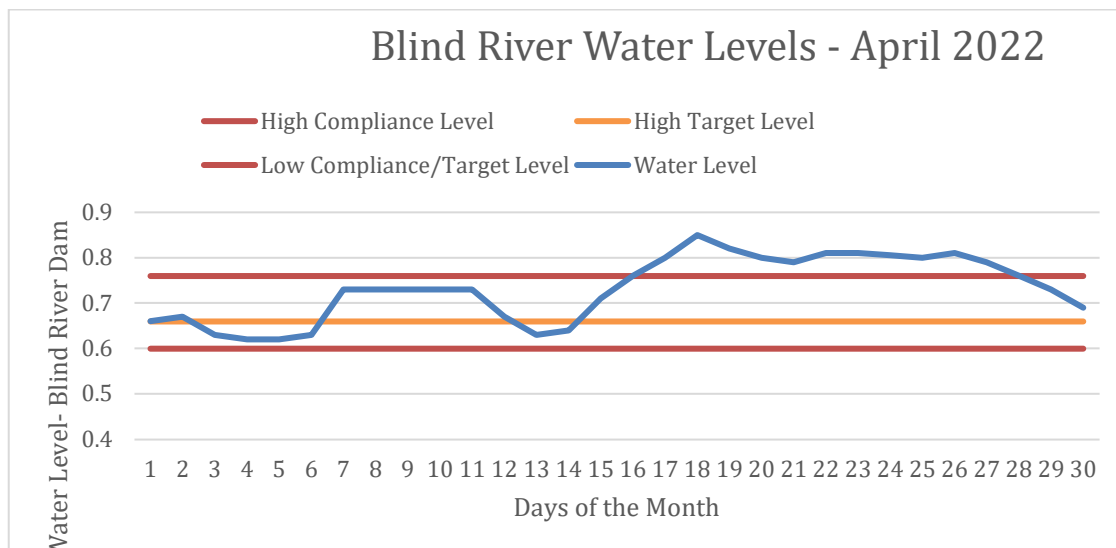


Figure 1: Water Level Graph

## 2022 MONTHLY WATER LEVEL LOG

Generating Station:	Town Dam		Month:	April	
			WMP Compliance Range:	.60 to .76 mStaff	
Date	Water Level	Ruler	Logs Out & Equivalent Flow	Comments/Actions	Water Temp - Celsius
April 1, 2022	0.66	557	17		
April 2, 2022	0.67	557	18		
April 3, 2022	0.63	557	17		
April 4, 2022	0.62	557	16		2
April 5, 2022	0.62	557	16		-2
April 6, 2022	0.63	557	19	20-30 mm forecasted next 24hrs	0
April 7, 2022	0.73	557	26		
April 8, 2022	0.73	557	29		-2
April 9, 2022	0.73	557	29		
April 10, 2022	0.73	557	29		
April 11, 2022	0.73	557	30	All permitted logs out.	0
April 12, 2022	0.67	557	30	Rainfall warning 30-50mm until Thursday afternoon.	0
April 13, 2022	0.63	557	30	Rainfall warning 20-40mm	6
April 14, 2022	0.64	557	30	Rainfall warning up to 50mm. Ends today 10AM	
April 15, 2022	0.71	557	30		
April 16, 2022	0.76	557	30		
April 17, 2022	0.8	557	30		
April 18, 2022	0.85	557	32	Approved by MNR to remove last log in Bay 2 and 3.	6
April 19, 2022	0.82	557	32		6
April 20, 2022	0.8	557	33		-1
April 21, 2022	0.79	557	33	2-4mm rain forecasted	-1
April 22, 2022	0.81	557	33	Less than 1mm rain forecasted	0
April 23, 2022	0.81	557	33	10-15mm rain forecasted	
April 24, 2022	0.805	557	33	less than 5mm rain forecasted	
April 25, 2022	0.8	557	33		-0.5
April 26, 2022	0.81	557	33		-0.3
April 27, 2022	0.79	557	33		0
April 28, 2022	0.76	557	33		
April 29, 2022	0.73	557	33		0
April 30, 2022	0.69	557	33		

Figure 2: Water Level Chart