



**Update #7
September 2023**

AWS/ERWS Operations August Updates

- Much of BC is under Drought Level 4 or 5 conditions. Additional efforts are in place to provide ongoing monitoring of the Englishman River watershed, dam level, and river flow due to the dry and warm weather extending into September and October.
- The Englishman River baseflow dropped to 0.1 m³/s for an extended period and required significant supplement from the Arrowsmith Dam (75,000 m³ per day in August). As a result, a meeting was conducted with the Ministry of Forests, Snaw-Naw-As First Nation, Department of Fisheries and Oceans, Island Health, and Regional District of Nanaimo to review the September and October levels and flows and plan the City's management response.
- The province issued a protection order under the Water Sustainability Act. The City will reduce the release rate from the Arrowsmith Dam to 0.7 m³/s September 8 and further reduce on September 25 and October 17 to 0.6 m³/s and 0.5 m³/s (respectively) to maintain and prolong the river baseflow to October. A copy of the order is posted on the City's website. Enhanced monitoring has been put in place to maintain the target flow rate at the hydrometric gauge.
- Staff consulted with Mosaic and the roadwork repair from the Arrowsmith dam to the antenna will be included in their fall program.
- River turbidity meters for the Fish Monitoring Program were serviced and calibrated by contractor.



Photo of Englishman River level near the Intake (by Justin Hicking). This was after the Arrowsmith dam was reduced to 0.7 m³/s.

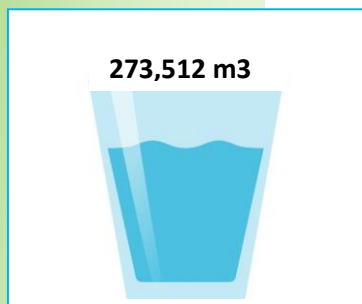
Upcoming Work

- The City is fortunate to have two water sources for community use and will increase the well production further as our groundwater reserve systems are in a healthy condition. This will help reduce the river withdrawal rate and save that flow for fish habitat and to support the river ecological system.
- An engineer will conduct a site inspection of the Arrowsmith dam. The work is required annually as part of the yearend reporting to the Province Dam Safety Division.
- As part of the preventative maintenance program, contractors will service the air blowers, compressors, UV reactors, HVAC system, and analyzers.

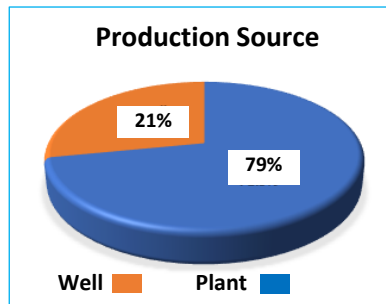
Watershed and Dam Level Update

- Arrowsmith Lake dam was **40% full** (elevation 815.0m, end of August 31, 2023), below August's normal range of 56%.

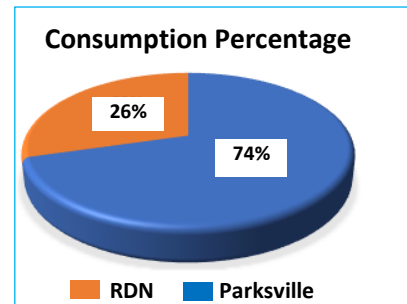
Monthly Production and Consumption Facts



Parkville wells and ERWS totals



Parkville wells and ERWS totals



Well water not included in percentages.