



Arrowsmith Water Service and Englishman River Water Service Monthly Update - December 2025

Purpose

This document is intended to provide board members of the Arrowsmith Water Service and the Englishman River Water Service with an update on the status of the joint ventures. This document is also publicly accessible through the City of Parksville's website.

Background

Arrowsmith Water Service (AWS) was established as a joint venture between the Regional District of Nanaimo (RDN), City of Parksville (Parksville), and the Town of Qualicum Beach to develop a regional water supply system. In 1996, AWS applied for a water licence to construct the Arrowsmith Dam. A conditional licence was granted in March 1997, authorizing the Dam to store 9,000,000 m³ of water for community supply and conservation.

Each year, from June 1 to October 31 — defined as the 'operating season' — water is released from Arrowsmith Dam to augment baseflow in the Englishman River. A Water Survey of Canada (WSC) hydrometric flow gauge (08HB002) is installed in the river near the City of Parksville to monitor flow levels and ensure operational requirements are met. When river flow drops below 1.6 m³/s during the operating season, watering restrictions are enacted for users of the Englishman River Water Service (ERWS).

In 2011, the ERWS was established, as a joint venture between Parksville and the RDN, to enable year-round water withdrawal from the Englishman River. Parksville received a Permit to Operate the Englishman River Water Treatment Plant on November 8, 2019.



Arrowsmith Dam



Ultrafiltration Membranes at the water treatment plant

Englishman River Water Service

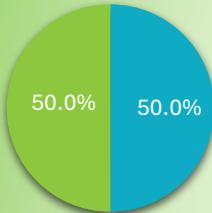
December 2025

ERWS WTP Production
125,093 m³

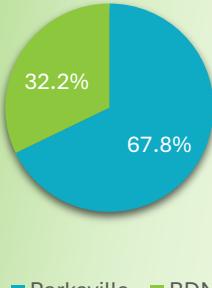
RDN Share of ERWS
62,571 m³

Parksville Share of ERWS
62,522 m³

December ERWS Consumption Percentages



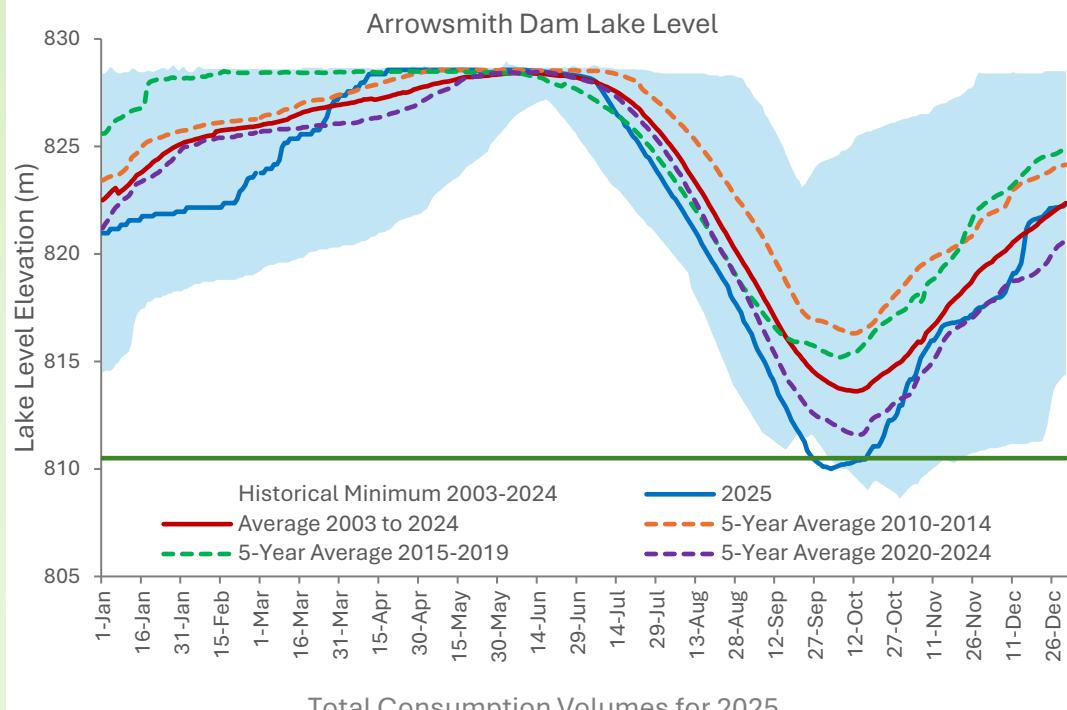
Total 2025 ERWS Consumption Percentages



- Associated Engineering and ATAP Infrastructure Management setup and conducted pilot testing of their clarifier and roughing filter systems. Additional un-aided sedimentation piloting was carried out as well.
- Site safety remained the top priority during the ongoing pretreatment study activities and regular plant operations. Operators and contractors at the site maintained situational awareness and kept the site organized and safe.
- This month the RDN's water consumption is higher than usual as piloting for their Aquifer Storage and Recovery system is being completed.

Arrowsmith Water Service

- Staff did one final trip to the dam for a visual inspection. At the time, the generator was serviced and re-fueled.
- The dam lake level was at the historical average by the end of the year (see figure below).



Total Consumption Volumes for 2025

Treated Groundwater (Wells)	Treated Surface Water (WTP)	Parksville Total Consumption	Parksville WTP Share	RDN WTP Share
752,267 m ³	1,828,220 m ³	1,990,962 m ³	1,238,695 m ³	589,525 m ³

Figure 1. Englishman River Watershed.

