Arrowsmith Water Service and Englishman River Water Service
Monthly Update – January 2026

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 m^3 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 m^3/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

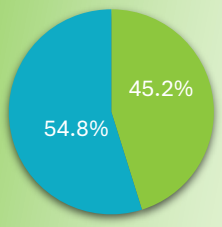
January 2026

ERWS WTP Production
116,830 m^3

RDN Share of ERWS
64,062 m^3

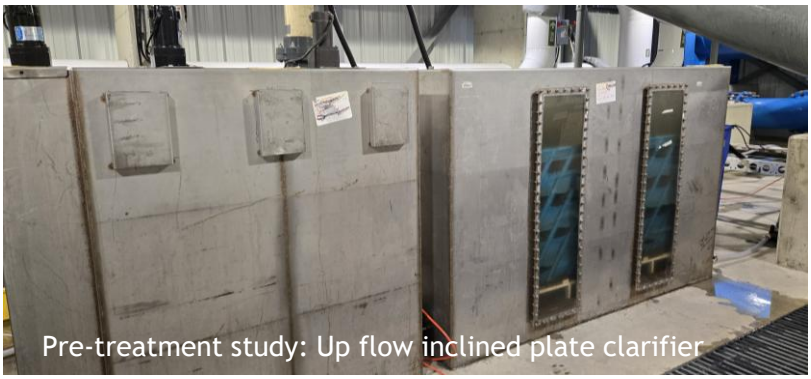
Parksville Share of ERWS
52,768 m^3

January ERWS Consumption Percentages



Englishman River Water Service

- January was characterized by heavy rainfall, including atmospheric river events that caused operational issues. Despite the challenges, operators responded effectively and addressed the issues quickly.
- Pre-treatment study (Associated Engineering):
    - Three site visits were completed in January. Raw water conditions from two significant storm events were successfully captured.


Pre-treatment study: Up flow inclined plate clarifier

- Spill-containment resealing (Metro Testing and Engineering):
    - This project is to ensure all expansion joints in the chemical containment cells are sealed with flexible materials capable of accommodating movement and to provide long-term durability.
    - On site work started on January 12 and continued through the month.
    - With the chemical room resealing project underway, operators reduced the onsite chemical volumes by ordering sodium hypochlorite in totes instead of bulk tankers.
- The RDN's water consumption for January was higher than usual likely due to the piloting of their Aquifer Storage and Recovery system.

Arrowsmith Water Service

- The Arrowsmith Dam was near capacity by the end of January (figure 1).
- Snow Water Equivalent near the dam was at its lowest level for 8 days in January (figure 2).

Figure 1. Arrowsmith Dam Lake Level

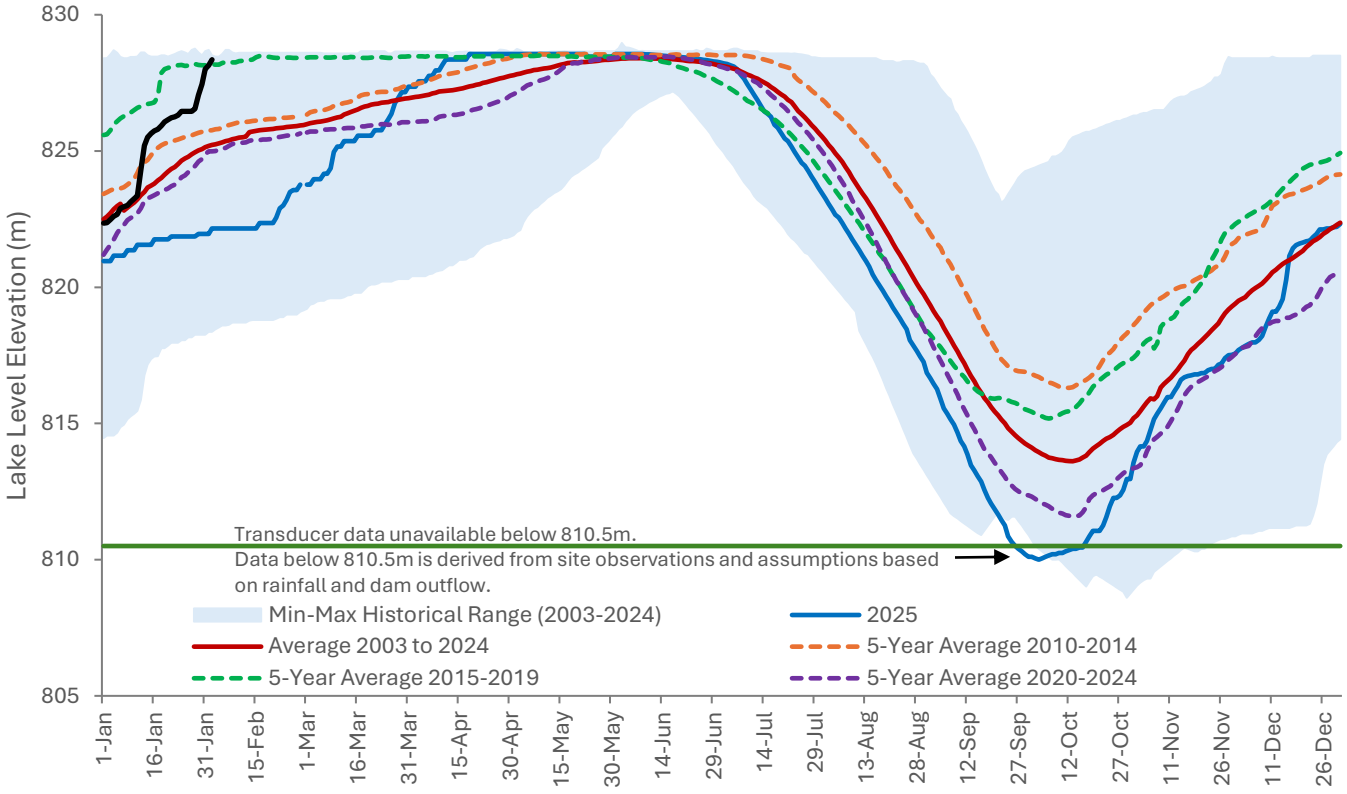


Figure 2. Snow Water Equivalent – Station 3B26P

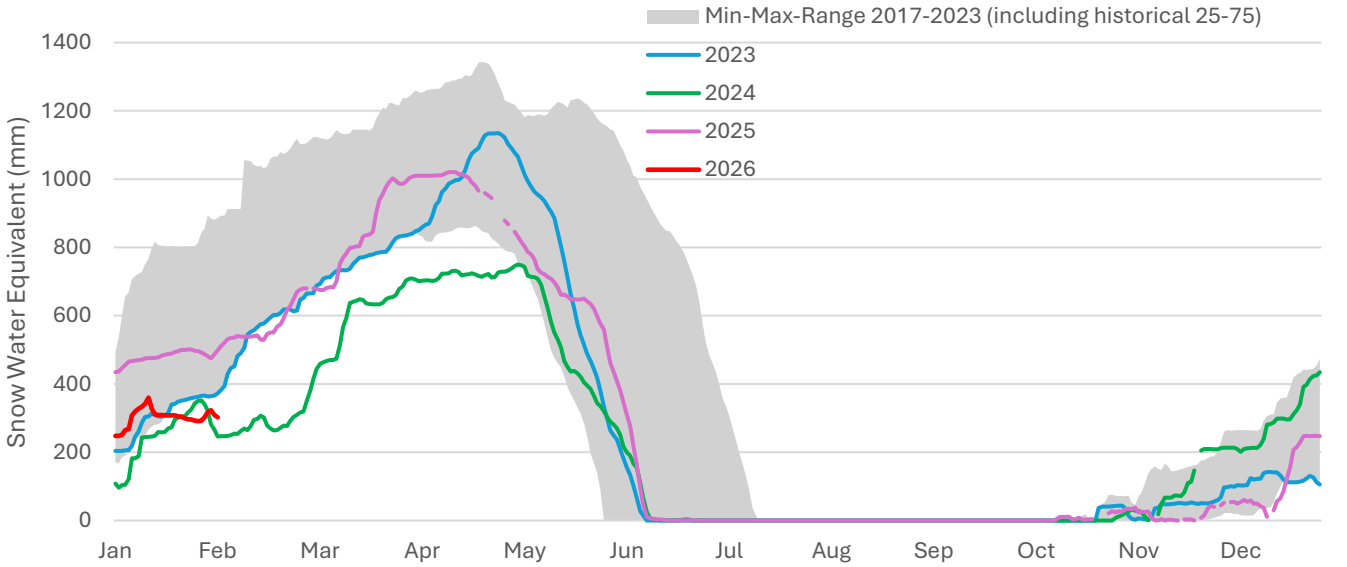


Figure 3. **Englishman River Watershed**