



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

Purpose

This document is intended to provide board members of the Arrowsmith Water Service (AWS) and the Englishman River Water Service (ERWS) 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. Following the Order set out by the Province of BC, when a flow release reduction from Arrowsmith Dam is allowed so that less than 1.6m³/s of flow is recorded at the flow gauge, water use conservation measures are enacted for users of the ERWS. The details of the Order can be found on the City of Parksville website within the AWS section.

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



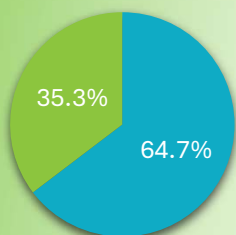
June 2026

**ERWS WTP
Production**
233,699 m³

RDN Share of ERWS
82,550 m³

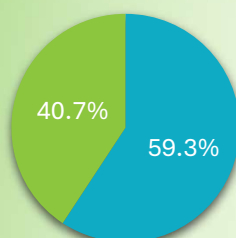
**Parksville Share of
ERWS**
151,149 m³

June 2026 ERWS Consumption Percentages



■ Parksville ■ RDN

Year to Date ERWS Consumption Percentages



■ Parksville ■ RDN

Arrowsmith Water Service

June was a busy month at the Arrowsmith Dam, with operators carrying out routine inspections and removing debris from the spillway. Generator load testing was successfully completed, and the electrical isolator for the dam level transducer was replaced.

Operators also continued to carefully manage reservoir releases to maintain a flow of 1.0 m³/s at hydrometric gauge 08HB002. This measured approach helps conserve water for later in the season, while ensuring sufficient river flows are maintained to support environmental flow needs.

New survey monuments and prisms will be installed at the dam in July, and the dam survey will be conducted at that time. In preparation for this work, key tasks were completed in June, including:

- Prisms weather shields that will be mounted to the dam were fabricated.
- Koers Engineering prepared a layout for the weather shields that will protect the survey prisms.
- Staff started working with a structural engineer to develop safety enhancements that will provide improved access to the top of the dam's west side.

Englishman River Water Service

June was a busy operational month, with operators responding to increased seasonal demands, fluctuating raw water conditions, and several intake and equipment related issues. Through proactive adjustments to flow rates, chemical dosing, and membrane operating parameters, operators maintained reliable and consistent plant performance throughout the month.

Routine operational activities were completed, including plant rounds, fish impingement checks, laboratory testing, analyzer QA/QC, data management, and continuous process monitoring.

Routine safety activities included crew talks, safety checks, and review of the safe work procedure for intake cleaning.

Key activities completed by operators in June:

- Cleaning of intake screens and the inside of the intake structure.
- Managing of low intake levels and high raw water turbidity early in the month.
- Tearing down and repairing the Amiad strainer.
- Cleaning and calibrating analyzers.
- Receiving and transferring chemicals.
- Responding to several SCADA callouts.

Overall, the plant remained well controlled despite changing conditions. Operators provided routine monitoring, preventative maintenance, and timely responses to maintain treatment performance and system reliability.

EDI installed a temperature probe downstream of the intake. The City's temperature and turbidity sonde remains out of service as it has not yet been repaired.



Figure 1. Arrowsmith Dam Reservoir Level

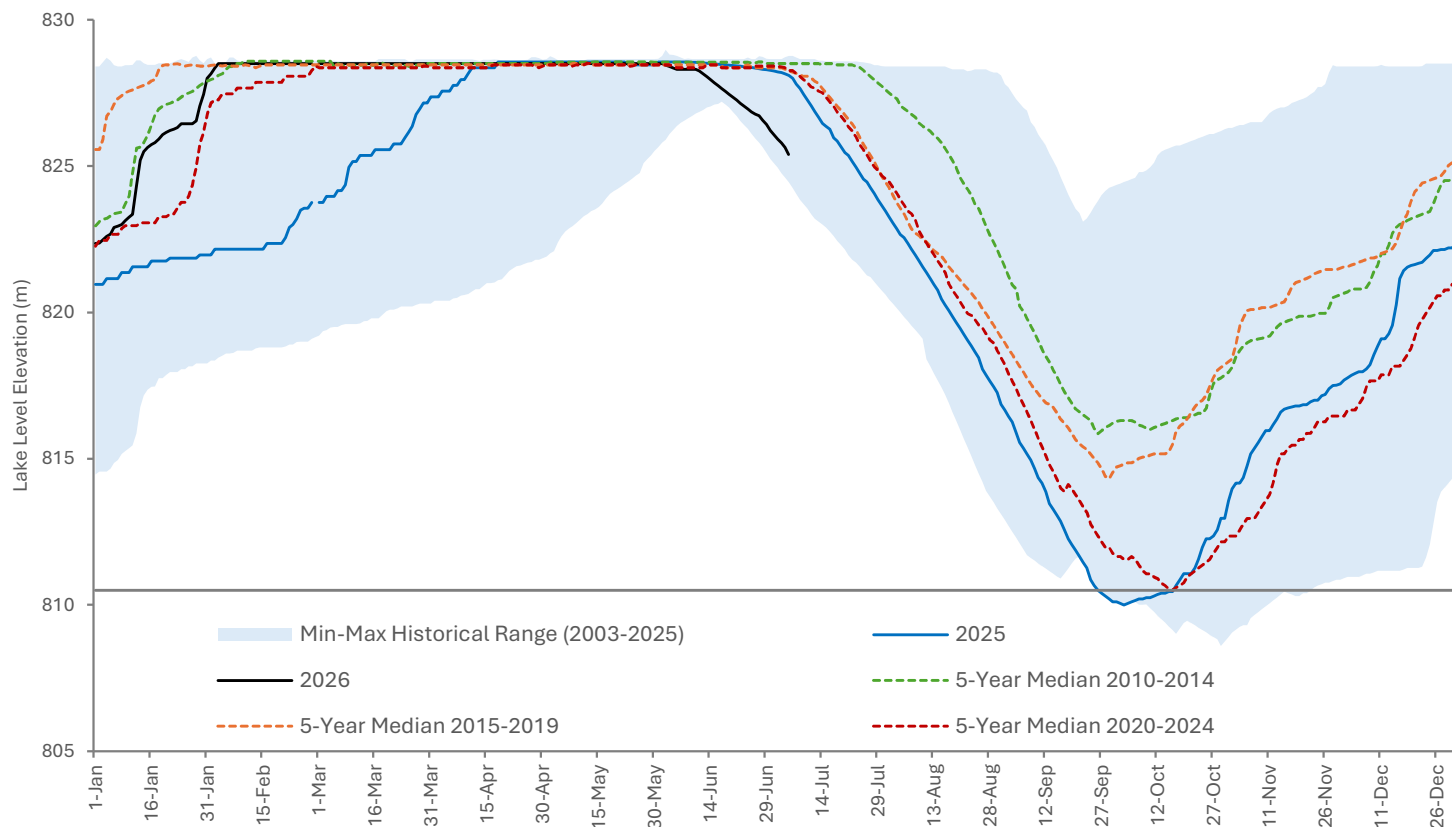


Figure 2. Water Survey of Canada Hydrometric Gauge 08HB002

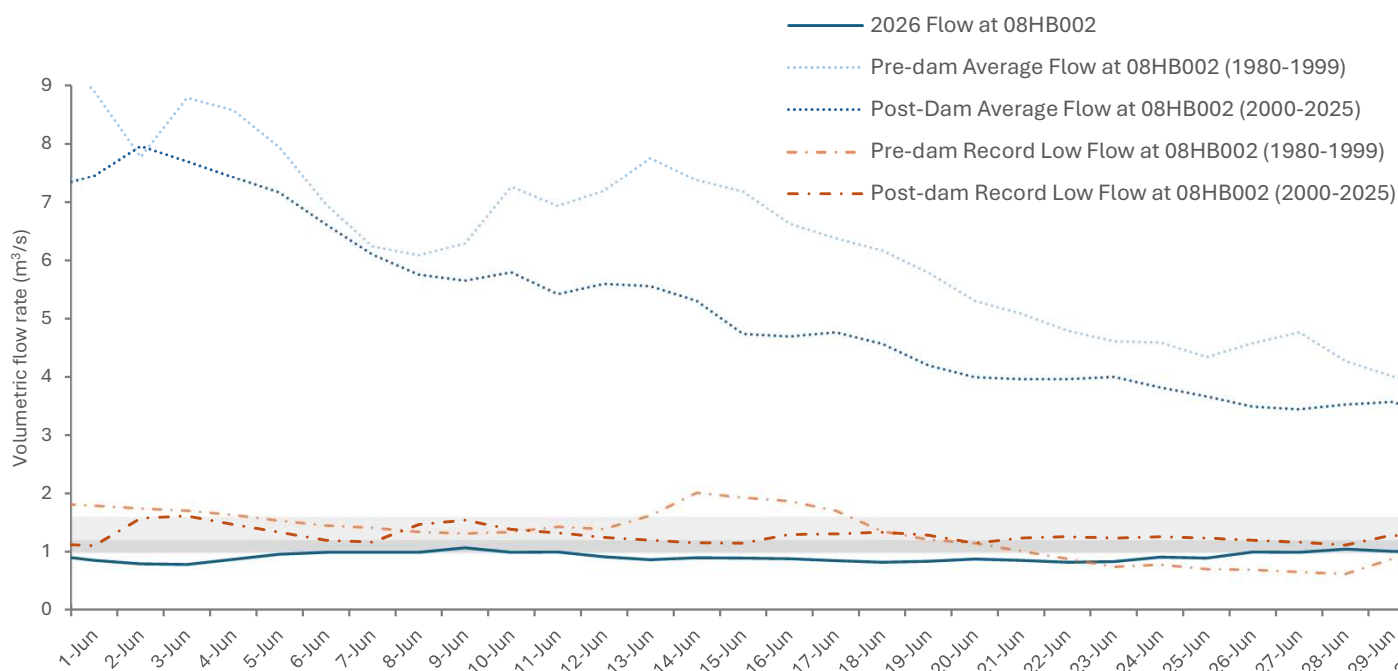




Figure 3. ERWS Water Consumption

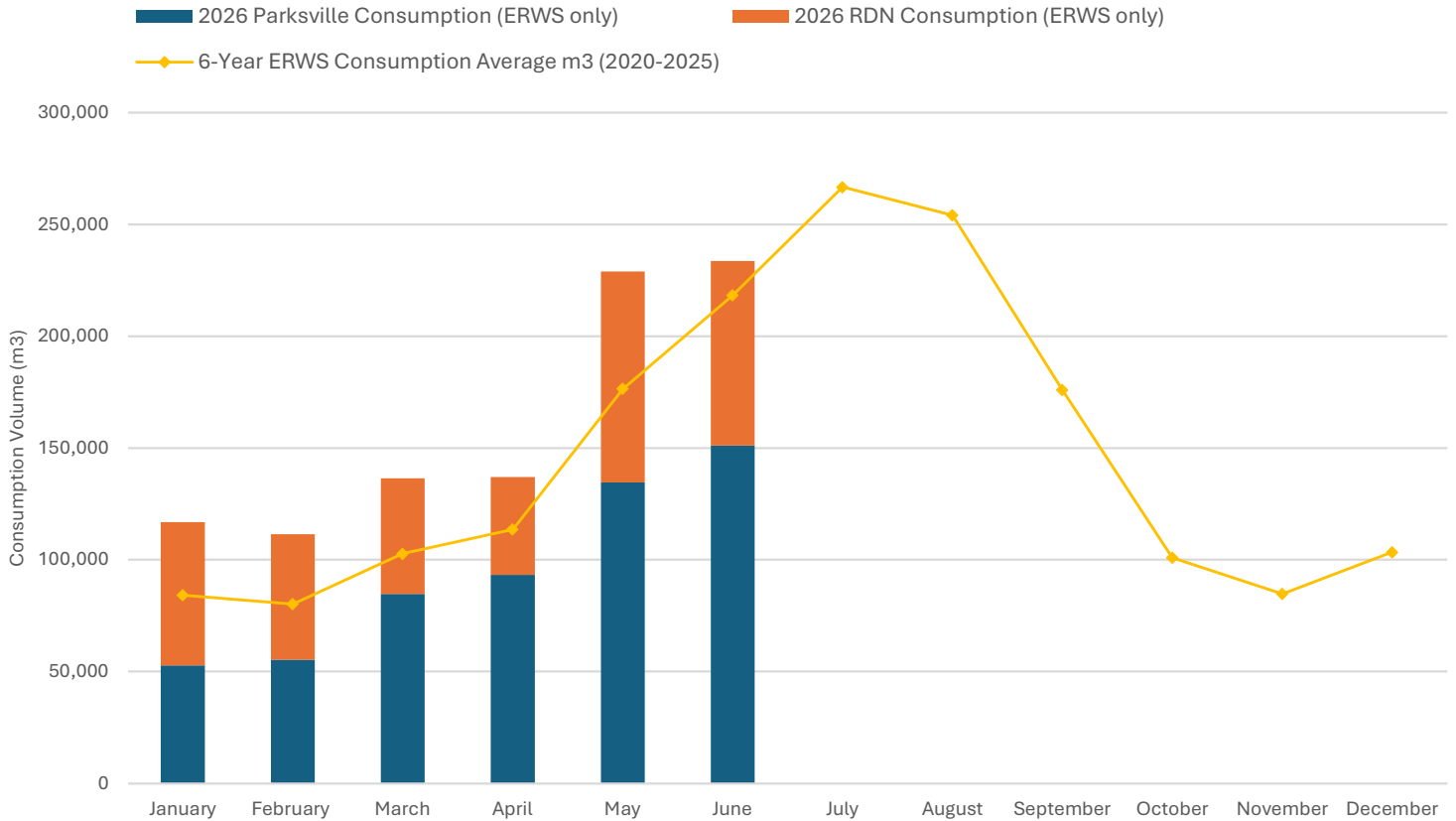


Figure 4. Parkville Consumption During Water Conservation Level 2 and 3

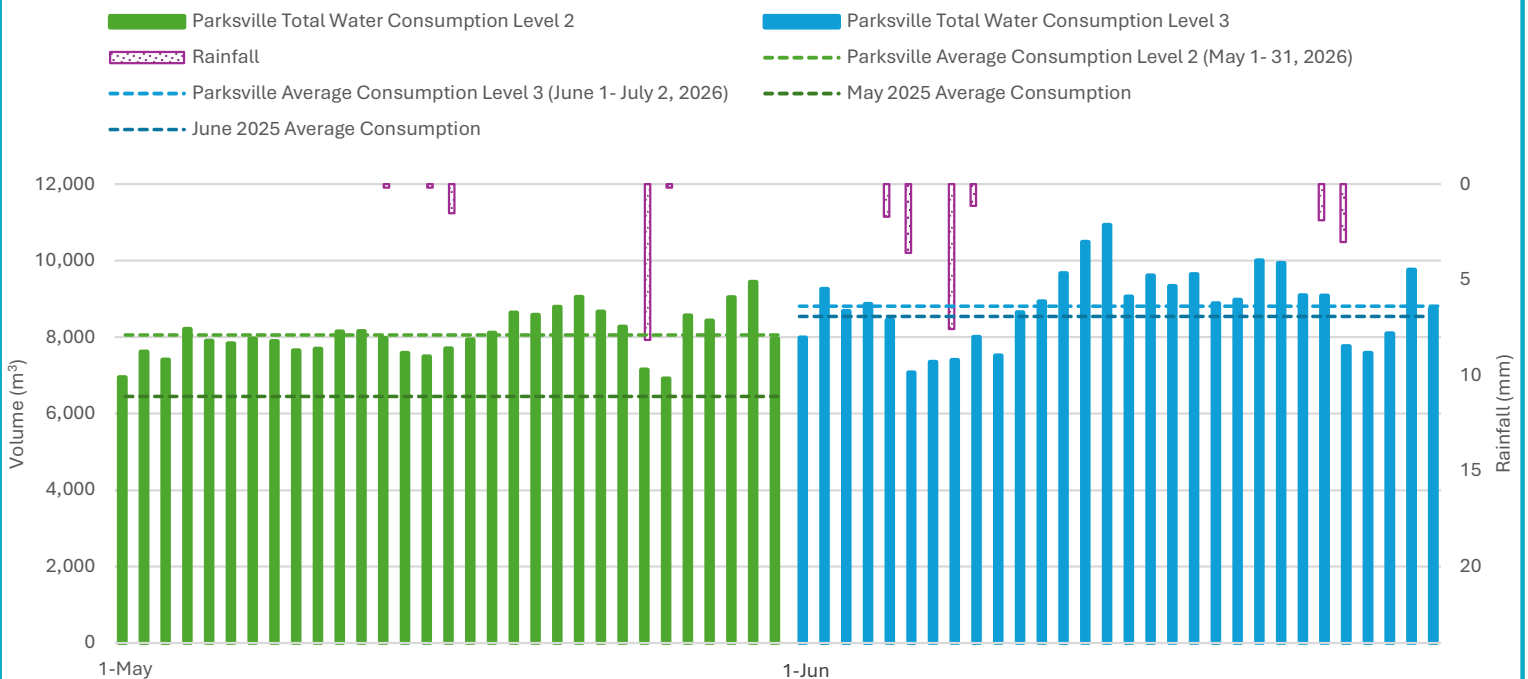


Figure 5. Englishman River Watershed

