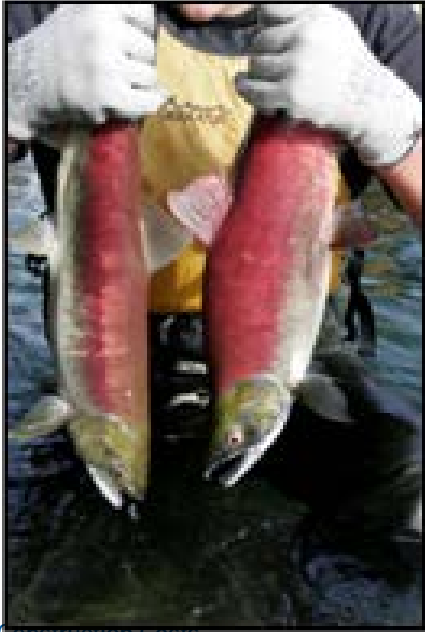


McIntyre Dam Fish Passage Overshot Gates and Riffle

Oliver, BC



Construction Costs

\$1.3M

Completion Date

October 2010

Client

Okanagan Nation Alliance

Contact

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Associated Engineering was retained by the Okanagan Nation Alliance to design and construct 5 new overshot gates at the McIntyre Dam to allow traditional sockeye salmon passage to resume beyond the structure. Since its original construction 95 years earlier, salmon and fish passage and migration stopped at this structure.

McIntyre Dam controls water levels in Vaseux Lake and Okanagan River flows between Vaseux and Osoyoos Lakes, as part of the Okanagan Lake Regulation System (OLRS). The OLRS is owned, operated and maintained by the BC Ministry of Environment (MOE) through its Water Stewardship Division in Penticton.

To meet the design required meeting minimum water levels upstream for the Town of Oliver irrigation canal, the downstream water level was raised 1.8 m through the design of a salmon-friendly riffle (rock weir). The upgraded dam included a new concrete structure to house the overshot gates, automated level controls and water measurement, new actuators and wire cables, steel walkways, riverbank riprap design and telecommunications.

The work was multi-faceted, with high level involvement from DFO, Navigable Waters, First Nations, communities, and special interest groups. Associated Engineering was responsible for the concept, preliminary, final design, tendering and Construction Administration. Construction was completed in October, 2010. In the second year of operation, over 40,000 fish migrated upstream. This number continues to grow exponentially as salmon populations re-develop.