

There are seven reservoirs located within the Alpine Lakes Wilderness Area that have been used as supply for the Icicle-Peshastin Irrigation District and the US Fish and Wildlife Service Leavenworth National Fish Hatchery: Upper and Lower Snow, Nada, Colchuck, Eightmile, Klonaqua, and Square Lake Reservoirs. The dams on these lakes were built between the 1920s and the mid-1940s.

To operate these reservoirs, trips are made by helicopter or on foot to manually turn release values. Because of the time and cost to adjust values, trips are sometimes only made at the beginning of the season to open the values and at the end of the season to close the valves, but more frequently in drought years to augment downstream water supply. In average years, water is released from Upper and Lower Snow, and Nada Reservoirs. In addition, water is released from one of the remaining four lakes to facilitate operation and maintenance by the District.

The purpose of the Alpine Lakes Optimization, Modernization and Automation project is to provide automated valve control to facilitate annual releases from all of the reservoirs for instream flow benefit in non-drought years, and both instream flow and irrigation supply in drought years. This project will provide approximately 30 cfs of instream flow benefit in Icicle Creek, with the ability to adaptively manage releases. This project will also improve operational practices for the irrigation district.













In 2014, the County investigated the feasibility of radio telemetry at each lake and concluded automation is feasible.

WHAT ARE IPID'S MAINTENANCE AND **MODIFICATION RIGHTS FOR THE ALPINE LAKES FACILITIES?**

Under the land exchange agreement recorded with the Chelan **County recorder's office IPID retained several rights to the land,** including:

"a nonexclusive, perpetual easement across, though, along, and upon the property described herein for the purposes of maintenance, repair, operation, modification, upgrading and replacement of all facilities presently located in or upon the property..."

Lower Klonaqua Lake Gate Chamber Open with Gate Actuator









Nada Lake Solar Panel Installation for Monitoring Equipment