

Icicle Creek

Integrated Water Resource Management Plan

ICICLE WORK GROUP

APRIL 2016

In 2012, the Icicle Work Group (IWG), a diverse set of stakeholders representing local, state and federal agencies, tribes, irrigation and agricultural interests and environmental organizations, convened to find a solution to chronic water supply problems affecting families, farms, and fish in the Icicle Creek Basin. Their work resulted in the adoption of an integrated package of projects to meet agricultural and domestic water supply needs while increasing the amount of instream flow required to maintain healthy fish populations.

The Projects

Alpine Lakes Reservoirs Optimization, Modernization and Automation

Modernize and optimize releases of seven existing reservoirs. All water supplied benefits instream flow. Leavenworth National Fish Hatchery and Icicle-Peshastin Irrigation benefit from automated rather than manual operation of the reservoirs.

Irrigation Efficiencies

Piping and lining of Cascade Orchard Irrigation Company and Icicle-Peshastin Irrigation District canals to conserve water for fish.

Domestic Conservation Efficiencies

Pipe replacement, metering and technical assistance to conserve domestic water supply.

Leavenworth National Fish Hatchery Conservation, Water Quality Improvements

Projects to improve LNFH water supply and reliability to enhance tribal and recreational fish harvest:

- Groundwater Augmentation - Restore diminished groundwater supply through new well construction to meet temperature and pathogen standards.
- Effluent Pumpback - Utilize hatchery effluent water to augment groundwater supply and instream flows.
- Hatchery Conservation - Install recirculating tanks to benefit instream flows.

Eightmile Lake Restoration Project

Restore Eightmile Lake Reservoir to permitted high water mark for instream flow and to improve agricultural reliability and provide domestic supply benefits.

Water Markets

Create a voluntary Icicle water market to improve agricultural reliability.

Habitat Protection and Enhancement

Restoring, improving and protecting habitat throughout the Icicle Creek Watershed for fish and wildlife.



ICICLE CREEK INTEGRATED WATER RESOURCE MANAGEMENT PLAN PROJECTS

Fish Passage

Improve fish passage in Icicle Creek by assessing and removing barriers.

Protect Tribal Fishery

Implement an adaptive management plan to monitor and protect tribal harvest.

Fish Screen Compliance

Replace all fish screens that are out of compliance on Icicle Creek.

Instream Flow Rule Amendment

Modify Icicle Instream Flow Rule (WAC 173-545) for domestic supplies concurrent with increased flows in Icicle Creek.

Icicle Creek Workgroup Membership

Confederated Tribes of the Yakama Indian Nation

Icicle and Peshastin Irrigation District

Confederated Tribes of the Colville Reservation

City of Leavenworth

U.S. Bureau of Reclamation

City of Cashmere

U.S. Fish and Wildlife Service – Leavenworth National Fish Hatchery

Chelan County

National Oceanic and Atmospheric Administration Fisheries

Cascade Orchard Irrigation Company

Washington State Department of Fish and Wildlife

Icicle Creek Watershed Council

Washington Water Trust

Washington State Department of Ecology

U.S. Forest Service

Trout Unlimited – Washington Water Project