

Icicle Strategy

About The Icicle Creek Water Strategy Programmatic Environmental Impact Statement

ICICLE WORK GROUP

JANUARY 2019

The Icicle Basin

Icicle Creek is a major tributary to the Wenatchee River in Chelan County. The Icicle Creek watershed encompasses an area of approximately 212 square miles most of which is undeveloped and resides in the Alpine Lakes Wilderness and the Wenatchee National Forest. Flows from Icicle Creek support a range of demands ranging from domestic waters supply and agricultural irrigation to habitat for fish. Taken together, these demands on the watershed are often greater than the water supply needed to meet them.

In December 2012, Chelan County and Washington Department of Ecology's Office of Columbia River co-convoked the Icicle Work Group (IWG) to find collaborative solutions to chronic water supply problems in the basin. The IWG is made up of a diverse set of stakeholders representing local, state and federal agencies, tribes, irrigation and agricultural interests and environmental organizations.

Guiding Principles for an Icicle Creek Water Strategy

The IWG developed the following principles to guide them in developing a strategy:

- Improve Stream flows.
- Improve sustainability at the Leavenworth National Fish Hatchery.
- Protect tribal and non-tribal fish harvest.
- Improve water supply for domestic use.
- Improve agricultural reliability.
- Enhance Icicle Creek habitat.
- Comply with state and federal law and wilderness acts.

The preferred alternative was chosen because it best meets our guiding principles, has the highest likelihood of funding and the lowest environmental footprint.



ICICLE STRATEGY

The purpose of the Icicle Creek Work Group ("Work Group") is to develop a comprehensive Icicle Strategy through a collaborative process that will achieve diverse benefits defined by all of the Guiding Principles below. The Work Group will use best available science to identify and support water management solutions that lead to implementation of high-priority water resource projects within the Icicle Creek drainage.

- ICICLE STRATEGY**
- i. Conservation
 - ii. Groundwater Augmentation
 - iii. Pump Exchange
 - iv. Modification of Existing Storage
 - v. New Storage
 - vi. Water Markets
 - vii. Fish Passage and Screening
 - viii. Habitat Improvement
 - ix. Tribal Fishery Enhancement

Icicle Work Group Co-Conveners

Chelan County Department of Natural Resources

DEPARTMENT OF ECOLOGY
State of Washington

Ecology Office of Columbia River

Programmatic Environmental Impact Statement

In January, 2019, Chelan County and the Washington Department of Ecology issued a programmatic environmental impact statement (PEIS) which, evaluated four alternatives and one no-action alternative. Alternative 1 was selected as the preferred alternative because it best met the Icicle Working Groups guiding principles, had the highest likelihood of funding and the lowest environmental footprint.

The Alternatives

- **Alternative 1 (Preferred Alternative):** The first alternative consists of 12 projects that work in concert to achieve the Guiding Principles. This alternative was selected as the Preferred Alternative. The package is a mix of conservation and storage projects, including automating and optimizing reservoir releases at seven Alpine Lakes; efforts to make hatchery, irrigation, and domestic use more efficient; enhancement of habitat, fish passage, and fish screening; and protection of tribal and non-tribal fisheries. The suite of projects proposed under Alternative 1 is estimated to cost \$81.7 million, which includes a 25 percent contingency. These projects are anticipated to provide 85 cfs and 30,419 acre-feet of water.
- **Alternative 2:** This alternative builds on the foundation of Alternative 1, but replaces the Alpine Lakes Optimization project with pump exchange project. Alternative 2 is estimated to cost \$91 million, which includes a 25 percent contingency, and provide 80 cfs and 26,438 acre-feet of water.
- **Alternative 3:** This alternative also builds on the foundation of Alternative 1, but focuses on project selection outside the Alpine Lakes Wilderness Area through the inclusion of greater reliance on conservation and pump exchange projects. Because supply and demand cannot be matched well without storage, it also includes a legislative change for instream flow impacts that would occur when conserved water is not able to fully meet demand in-time and in-place. This is a requirement given recent Supreme Court clarity in the Foster v. Yelm case. Alternative 3 is estimated to cost



\$89 million, which includes a 25 percent contingency, and provide 67 cfs and 22,838 acre-feet of water.

- **Alternative 4:** This alternative provides a greater emphasis on development of water supplies, with enhancements to Eightmile Lake and storage improvements at the Upper Klonauqua and Snow Lakes. This alternative was selected to evaluate the value of greater flexibility in shaping water availability to meet future changes in both supply and demand. Alternative 4 would cost the most and provide the most water. The estimated cost, which includes a 25 percent contingency, is \$96 million. This alternative would provide 153 cfs and 35,383 acre-feet of water.
- **No-action Alternative:** The No-action Alternative was presented to show the impacts of not implementing the Icicle Strategy. Under the No-action Alternative, some projects may be developed, although it is unlikely all would be implemented. Funding for projects may be harder to obtain without an integrated solution, resulting in slower implementation of projects that do succeed without IWG support.

Public Participation

The public participated in the Icicle PEIS decision making process by reading and commenting on the draft PEIS during a comment period held from May 31 through June 30, 2018. A public meeting was held in Bellevue, Washington on June 25th, 2018 and was followed by a hearing in Leavenworth, Washington on June 27, 2018.

Over 8,800 comments were returned in the form of letters and emails sent throughout the comment period as well as handwritten comments and oral comments provided at the public hearing.

Availability

The Final Programmatic Environmental Impact Statement for the Icicle Water Management Strategy is available for download and review online at <https://fortress.wa.gov/ecy/publications/SummaryPages/1812016.html>