Yakima River Basin Water Enhancement Program

YRBWEP to

YBIP

Yakima Basin Integrated Plan

HOW 30 YEARS OF STUDIES, PARTNERSHIPS,
FISH PASSAGE AND CONSERVATION
CREATED WASHINGTON'S MOST
SUCCESSFUL INTEGRATED WATER
MANAGEMENT PLAN.

STUDIES AUTHORIZED

1979



After a devastating drought in 1977, Congress directed the Bureau of Reclamation to work with the State of Washington to conduct studies and develop a plan to provide water for irrigation, treaty rights, aquatic life and fish habitat. This effort was titled the Yakima River Basin Water Enhancement Program (YRBWEP)

Early studies identified fish passage issues. The Hoover Power Plant Act of 1984 authorized fish passage facilities throughout the Yakima Basin, partially funded by the Bonneville Power Administration. YRBWEP 1 designed and enacted fish passage basinwide.



1984

YRBWEP 1
Fish Passage

YRBWEP 2
Voluntary
Conservation

1994



After the 1992-1994 drought, legislation authorized water conservation and instream flow projects. Costs for water conservation are shared by Reclamation, the Washington Dept. of Ecology and irrigators. 2/3rds of irrigation water conserved remains instream to help with flows, while 1/3 is retained by irrigators for use in drought years.

Following another drought in 2005, Reclamation and Ecology built on YRBWEP 1 and 2 by creating a stakeholder workgroup to address other elements of the water supply and fisheries issue. In 2009, this group began developing the Yakima Basin Integrated Plan (YBIP), a watershed-scale approach to sustainable water supply for fish, families, farms and forests.

2009

YBIP
(YRBWEP 3)
Yakima Basin
Integrated

Plan.



PHASE 2 2024-2034 PHASE 3 2035-2045

YBIP is a 30 year package of actions divided into three 10-year phases of its own.









Seven Elements

YBIP projects must align with seven elements that support these four goals. These seven elements were designed to work together, with many projects providing benefits for both water supply and ecosystem restoration:



Fish Passage - Upstream and downstream passage for anadromous and resident fish will be established at all Reclamation reservoirs, allowing access to high quality, cold-water habitat essential for restoring depleted runs of fish.



Structural and Operational Changes to Existing Infrastructure - Much of the Yakima River basin's federal and non-federal infrastructure is more than a century old. By implementing measures like increasing canal efficiency, balancing reservoir levels and making operational changes, water managers can benefit both agricultural supply and fish habitat.



Increased Surface Water Storage - YBIP will provide 450,000 acre-feet of new surface water storage. The Initial Development Phase storage project accesses 200,000 acre-feet of inactive storage at Kachess Reservoir via a new pumping plant facility and 14,600 acer-feet from raising the level of Cle Elum Reservoir. Building a new reservoir (Wymer) and expanding Bumping Reservoir are proposed for later phases.



Groundwater Storage - Additional water supplies will be gained by intentionally storing water in aquifers, and then either pumping it or allowing it to return to the river to improve flows, meet demands and reduce water temperatures.



Enhancement of Habitat - Fish and wildlife habitat enhancement in the basin includes floodplain restoration, flow improvement, removing fish passage barriers, screening diversions, and land and river corridor protection.



Water Conservation - Conserving up to 170,000 acre-feet of water per year is the goal of the agricultural side of this program, allowing better instream flows for fish and more precise delivery and use of water. Local governments actively encourage improvements in water conservation from individual homeowners for indoor and outdoor use.



Market Reallocation –YBIP proponents are developing short and long-term strategies to increase market reallocation of water.