

## ASWM WATERSHED PROJECT INVENTORY DATA SHEET

3.29.19

**Name and location of watershed:**

Yakima River Basin in Washington

**Size of watershed (in acres):**

3,936,000 acres

**Title of Project/Initiative:**

Yakima River Basin Integrated Plan

**Setting: (please check all that apply)**

- Urban (towns, cities, and suburbs with 2,500 inhabitants or more)
- Rural (anything outside the urban area)
- Inland
- Coastal

**Need/Challenge Addressed (200 word limit):**

The Yakima Basin Integrated Water Management Plan is a commonsense approach to solving water conflicts in the Yakima River Basin. It offers a 30-year vision for responding to drought and changing climate, assuring water is clean and ample, and lands are both protected and productive for growing communities and the natural environment.

**Goals & Objectives (please include ecosystem services/values focused on):**

- Fish passage
- Fish habitat enhancement
- Modifying existing irrigation structures and operations
- Surface storage
- Water market-based reallocation (water banks)
- Groundwater storage
- Enhanced water conservation

**Overall Strategy (i.e., what role do wetlands play in your project?)**

- Restore salmon and steelhead populations from under about 25,000 today to 300,000 by improving fish passage into the Yakima Basin's headwaters and restoring river and stream habitat
- Conserve up to 170,000 acre feet of water through irrigation system upgrades
- Institute a robust water market during drought years to equitably move water from low to high value uses
- Enhance water storage to make up for a declining snowpack due to climate change, beginning with a small pool raise at Cle Elum Reservoir and the installation of a drought year pump to access more stored water in Kachess Reservoir
- Protect 70,000 acres of private land, including over 50,000 acres in the Teanaway River watershed that were acquired by the State of Washington as the first major action under the Yakima Plan in 2013
- Enhanced protection for over 160,000 acres of federal land and about 200 miles of new Wild and Scenic rivers, starting with Wild and Scenic designation of the upper Cle Elum River system

**Techniques Used (please check all that apply):**

- Restoration (the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to former or degraded wetland.)
- Creation (the manipulation of the physical, chemical, or biological characteristics present to develop a wetland that did not previously exist on an upland or deep-water site, resulting in a gain in wetland acres.)
- Enhancement (the manipulation of the physical, chemical, or biological characteristics of a wetland (undisturbed or degraded) site to heighten, intensify, or improve specific function(s) or for a purpose such as water quality improvement, flood water retention or wildlife habitat.)
- Protection (the removal of a threat to, or preventing decline of, wetland conditions by an action in or near a wetland. Includes purchase of land or easement, repairing water control structures or fences, or structural protection such as repairing a barrier island.)

**Team Members:**

- **Team leaders (organizations, agencies or individuals that are responsible for overall project direction, outcomes and financing):** Washington State Dept. of Ecology, US Bureau of Reclamation
- **Partners (organizations, agencies or individuals that are responsible for implementation of the project by agreement or contract):** American Rivers, The Wilderness Society, Trout Unlimited
- **Collaborators (organizations, agencies or individuals that are involved in an advisory role):** Yakima River Basin workgroup, Yakima Nation, regional irrigation districts, environmental organizations.

**Stakeholders (organizations, agencies or individuals that are in some way impacted by the project):**

Yakima Nation, in addition to nearly 400,000 people live within the Yakima River Basin, and the basin supports \$4.5 billion in the agriculture growing and processing industry.

**Overview/history (200 word limit):**

**How many individual projects are currently being implemented or are planned to be implemented within this broader watershed initiative? Please describe.** No information provided.

**Is there a track record of past, completed projects in this watershed? If yes, please describe and provide available information regarding performance/effectiveness.** No information provided.

**Start and end dates (dates can overlap – estimates are acceptable):**

- Planning: 2009-2013
- Implementation: Initial Development Phase 2013-2023; Phase 2 2024-2034; Phase 3 2035-2045
- Monitoring: No information provided.

**Cost – Financing (estimates are acceptable):**

- **Planning:** No information provided.
- **Implementation:** Full Development Costs for- Habitat/Watershed Protection and Enhancement \$480,500,000; Fish Passage (6 projects) \$428,400,000; Surface Water Storage \$2,416,500,000; Regional and Municipal Water Storage \$123,200,000; Structural/Operational Changes \$127,150,000; Enhanced Water Conservation \$429,500,000; Market Driven Reallocation \$2,950,000, Integrated Plan Update Costs \$3,000,000
- **Monitoring:** No information provided.
- **Continual (are there ongoing maintenance costs that will be required?):** No information provided.

**Resulting benefits (please list what was measured and how:**

Flood Control	Water Quality	Discharge	Hydrological Conditions	Wetland Restoration	Biodiversity/Productivity	Listed Species	Economically Important Species	Pub. Access, Rec, Awareness	Other Economic Benefits	Other
	X		X					X	Agriculture	Habitat, Irrigation, Drought Prevention

**Environmental benefits (e.g. water quality improvements, habitat protection or improvement, reduced phosphorus and nitrogen loads, etc.):** The estimated annual value of ecosystem services provided by the Basin’s freshwater, wetlands, grasslands, and forests ranges from \$350 million to \$15 billion

**Financial or Economic Impact Benefits (e.g., avoided damage costs, increase in commercial fish revenue, increase in tourism revenue, etc.):** Total tourism spending is over \$870 million, \$823 million loss in economic output in the Yakima Basin. For every severe drought year, prevent drought-related losses of \$128 million in grain production; \$169 million in vegetable and melon production; and \$151 million in fruit production

**Non-Market Economic Benefits (may be monetized - e.g., increased value of recreation or aesthetics or other improvements using dollar values; or non-monetized descriptions of benefits – e.g., number of people who may benefit from improved recreation or aesthetics or other resulting improvements):** Outdoor recreational expenditures in the YRB in 2015 exceeded \$1.2 billion, and unquantifiable cultural and spiritual values of Salmon and Steelhead to the Yakima Nation.

**Other:** No information provided.

**Are benefits based on actual measures or did you use a model to predict benefits?** Combination of both

**Is there a cost-benefit analysis available? Yes or No (If yes, include a copy with your response)**

Benefit-Cost Ratios ranging from 1.4-3.2 <https://www.usbr.gov/pn/programs/yrbwep/reports/fouraccounts.pdf>

**If you do not have any data currently available in regard to benefits, how do you plan to measure them?** No information provided.

**Where there any innovative designs/technologies/policy changes created to enable the project or that resulted from the project? If so, please describe:** Act was passed to authorize the beginning phases of YRBIP Washington State Legislature passed the Yakima River Basin Water Resource Management Act (Second Substitute Senate Bill 5367), now embodied in RCW 90.38, which authorized implementation of the Integrated Plan.

**Lessons Learned:** No information provided.

**Do you have any images or photos to share?**

No images provided.

**FMI (please include contact name, organization, website, phone number and/or email address):**

TBD, Listed as:

Tim Poppleton

Office of Columbia River web coordinator

[tim.poppleton@ecy.wa.gov](mailto:tim.poppleton@ecy.wa.gov)

509-454-4241