Wenatchee River, Chelan County

Upper Columbia Salmon Recovery Region Indicators

Human Population: 142,200

Counties: Chelan, Douglas, and Okanogan.

Treaty Tribes: Colville Confederated Tribes and Yakama Nation.

Listed Fish: steelhead (endangered), spring Chinook (endangered), bull trout (threatened).

Regional Recovery Organization: Upper Columbia Regional Salmon Recovery Board.

Recovery Planning Status: Draft recovery plan for upper Columbia bull trout, steelhead, and Chinook due in June 2005.

WRIAs / Water Resource Inventory Areas

44 Moses Coulee
45 Wenatchee
46 Entiat
48 Methow
49 Okanogan
50 Foster

© ROLLIE GEPPERT

Water Quality Status

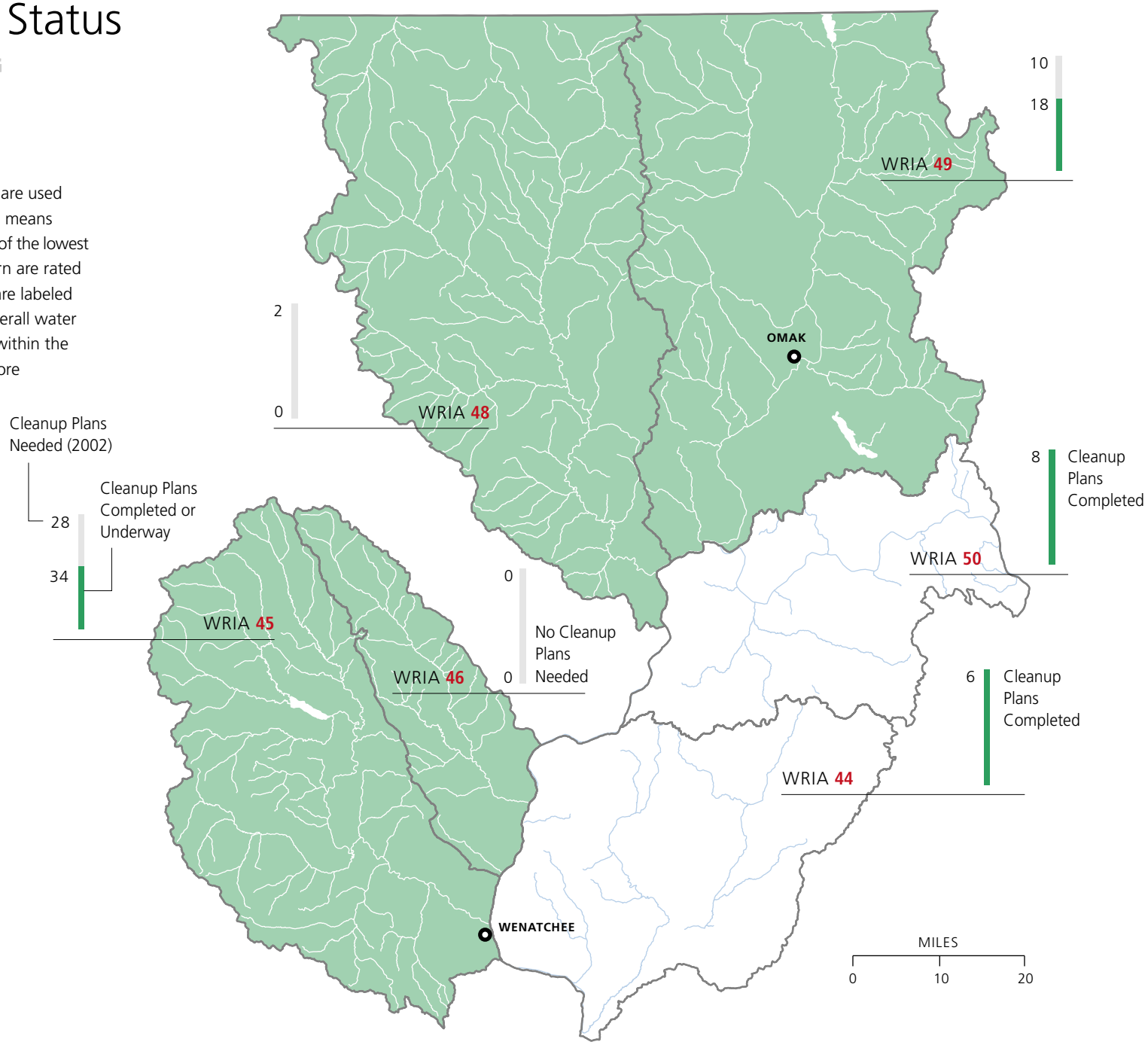
AND WHAT WE'RE DOING

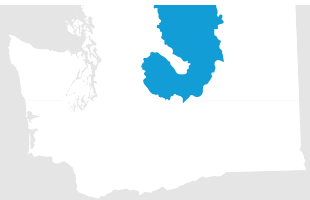
On our map, dissolved oxygen, pH, temperature, and fecal coliform are used to construct an index. A good rating means the averages for the last five years are of the lowest concern. Waters of moderate concern are rated fair, and waters of highest concern are labeled as poor. Although the index rates overall water quality in a basin, specific locations within the basin may not be meeting one or more of these standards. Cleanup plans completed, underway, or remaining on the 2002 TMDL list are shown by WRIA.

Water Quality Status Index for Salmon and Watersheds

- Good Condition
- Fair Condition
- Poor Condition
- Insufficient Data

DATA SOURCE: WASHINGTON DEPARTMENT OF ECOLOGY.





Upper Columbia Salmon Recovery Region

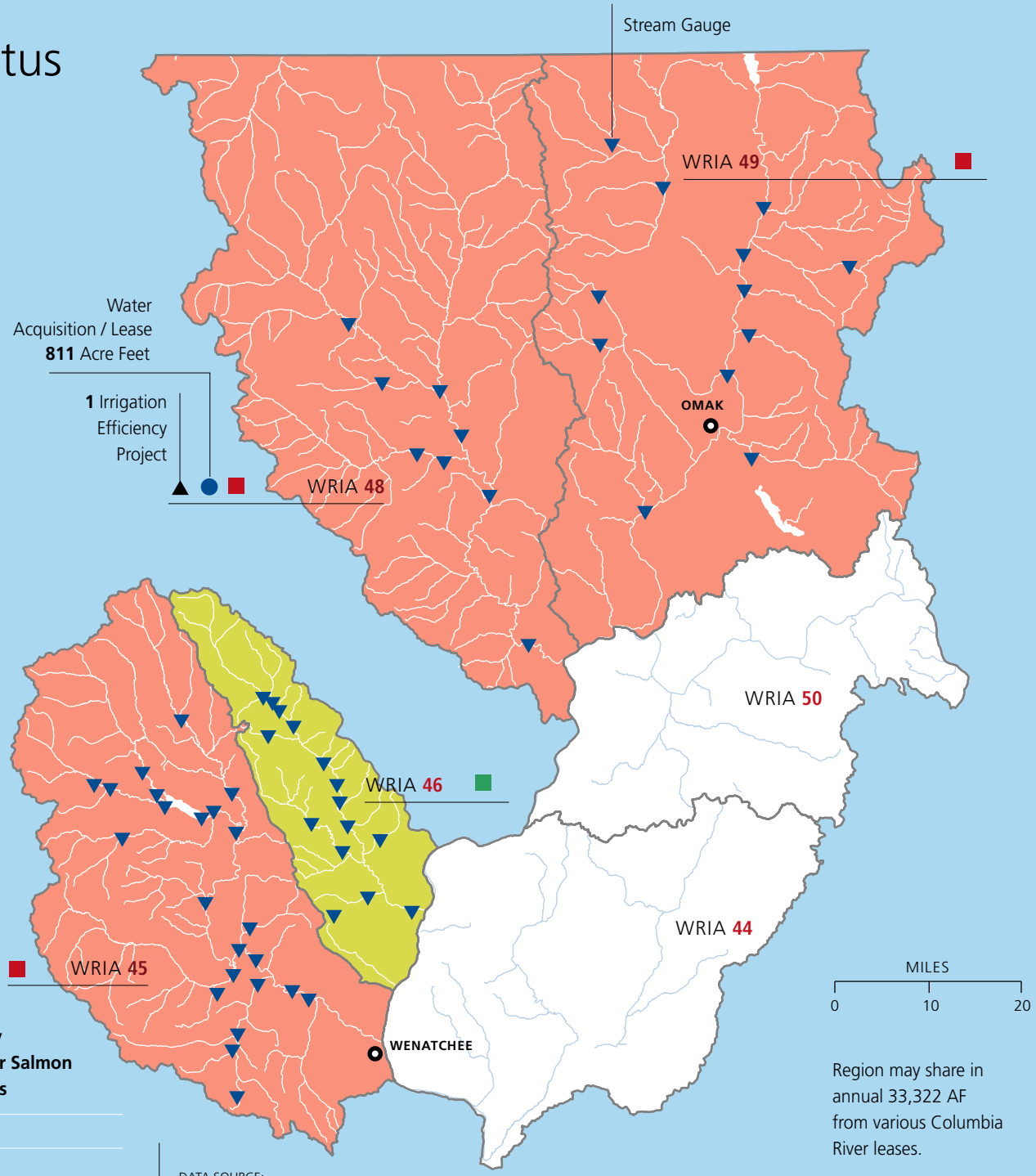
Water Quantity Status

AND WHAT WE'RE DOING

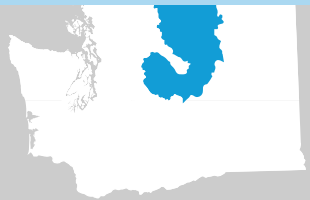
On our map a "water-critical basin" is an over-appropriated watershed where more water could be withdrawn from rivers and streams, especially in late summer and early fall when flows are naturally low. A "low flow" basin is one experiencing significant pressure for increased water use and rapidly declining flows for fish. Significant actions to address low flows for salmon include instream flow rules, closures, water acquisitions and leases, and irrigation efficiencies.

Projects / Programs Addressing Water Quantity for Salmon and Watersheds

- ▼ Stream Gauges
- ● Water Acquisition / Lease in Annual Acre Feet
- ■ Instream Flow Set for WRIA
- ■ Flow Recommendations Identified
- ▲ Irrigation Efficiency Projects



Region may share in annual 33,322 AF from various Columbia River leases.



Upper Columbia Salmon Recovery Region

Water Quantity Status Index for Salmon and Watersheds

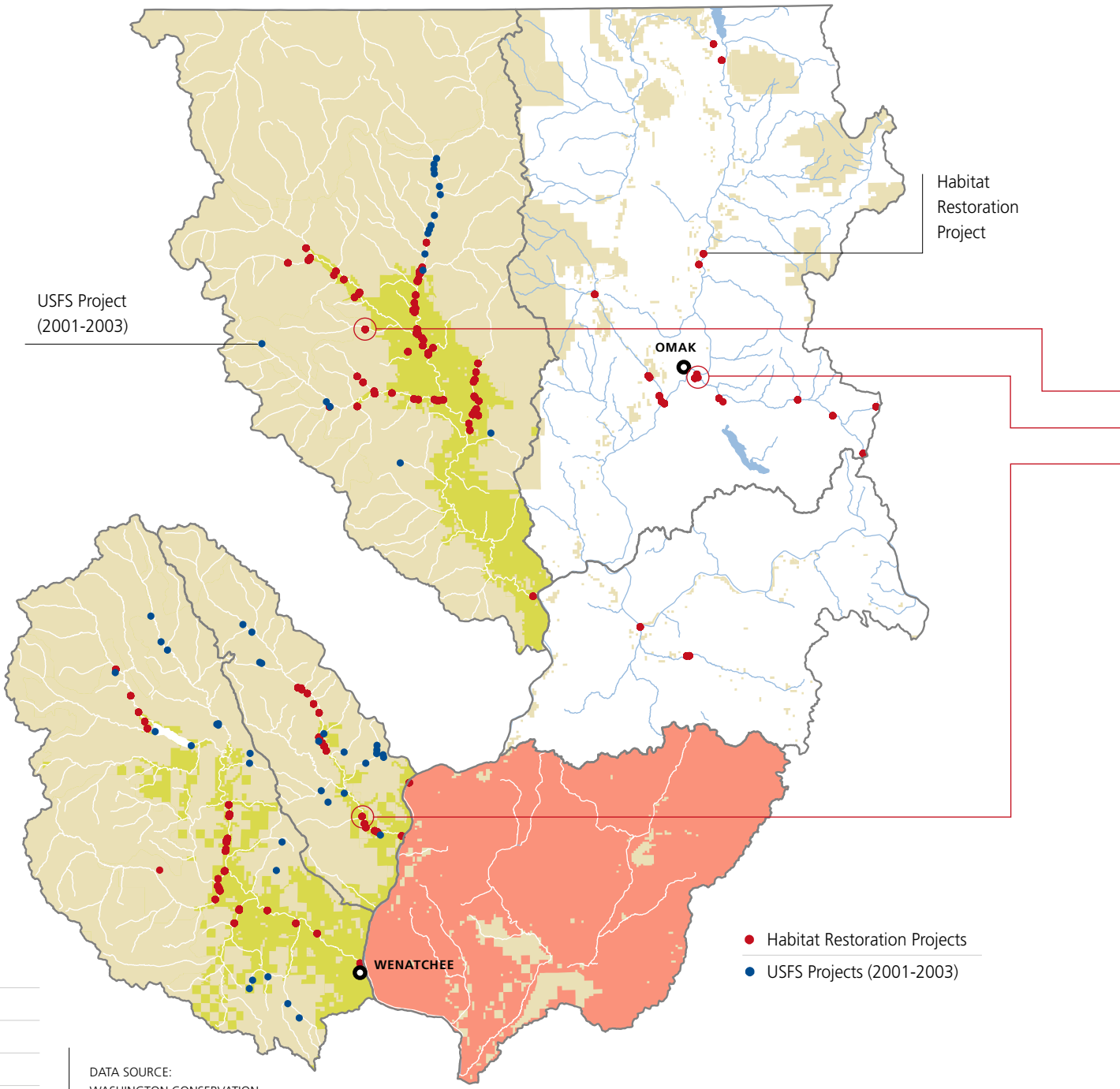
- Low Flow
- Critical
- Not Categorized

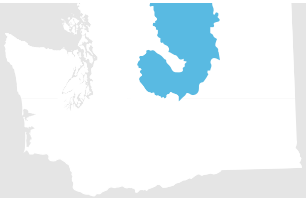
DATA SOURCE: WASHINGTON DEPARTMENT OF ECOLOGY

Habitat Quality Status

AND WHAT WE'RE DOING

On our map
a single salmon habitat rating is depicted for each watershed that produces salmon or steelhead. This rating is a distillation of individual Limiting Factors Analyses reports for floodplain, sedimentation, riparian, and instream conditions. Although a single rating does not allow for the often varying conditions found within each WRIA and between each rated category, it is useful for a broad perspective on conditions for salmon spawning and rearing. Many watersheds now have in-depth analyses that will be available in recovery plans due in June 2005. Projects funded by the Salmon Recovery Funding Board, tribes, or the US Forest Service that are intended to improve stream habitat conditions are shown.





Upper Columbia Salmon Recovery Region

Habitat Quality Status Index

- Good Condition
- Fair Condition
- Poor Condition
- Insufficient Data
- Federal Lands

DATA SOURCE:
WASHINGTON CONSERVATION COMMISSION, INTERAGENCY COMMITTEE FOR OUTDOOR RECREATION, WASHINGTON DEPARTMENT OF FISH AND WILDLIFE, US FOREST SERVICE.

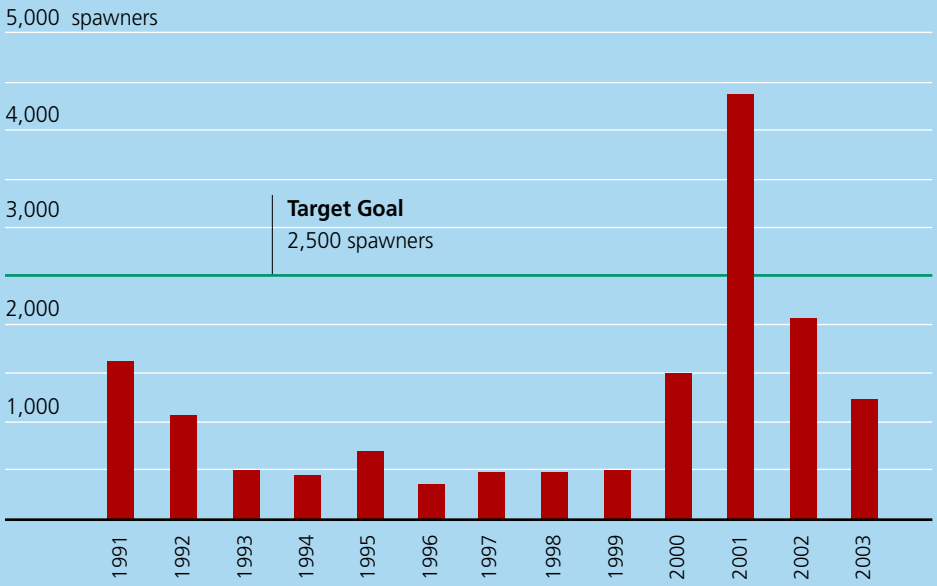
Wolf Creek Fish Screen
The Yakima Screen Shop designed, built, and installed a screen and by-pass system that will allow steelhead, Chinook, and bull trout to move along this tributary to the Methow River.

Omak Creek Restoration
The Colville Tribe, working with local timber mill owners, restored a section of Omak Creek to improve riparian habitat and reduce bank erosion.

Entiat River Rock Vortex Weirs
Landowners, working with the Chelan County Conservation District, placed these structures in the Entiat River as part of a plan to restore the river.

Upper Columbia River Wild Steelhead

- Spawner abundance for 1 of 3 populations.
- Target Goal from NOAA-Fisheries.



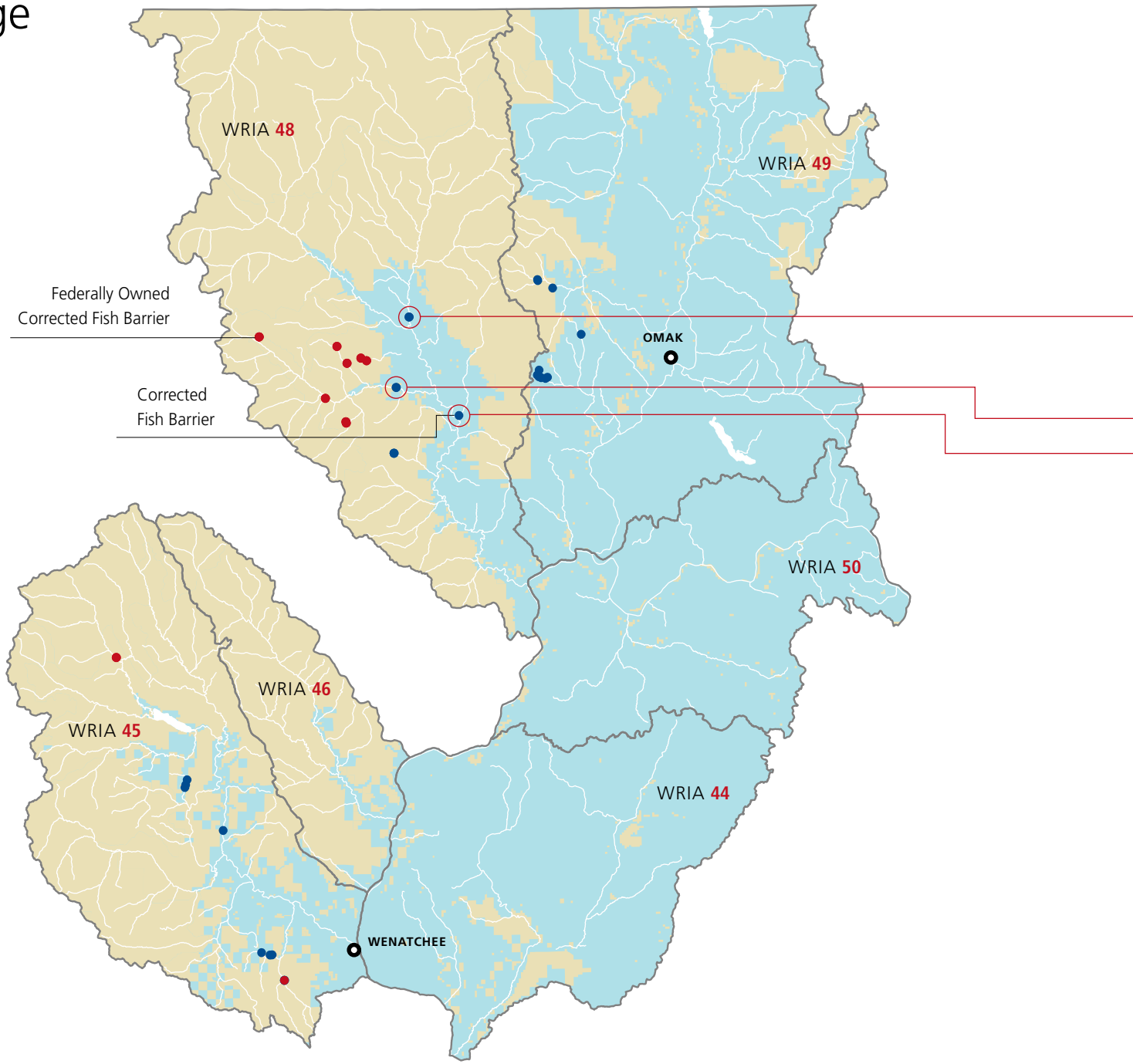
DATA SOURCE: CRAWFORD AND VOLKHARDT (2004)

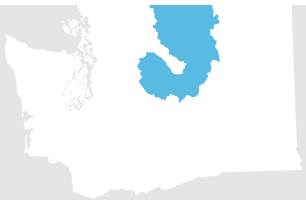
Barriers to Fish Passage

AND WHAT WE'RE DOING

On our map
we have chosen to depict barriers independent from the habitat quality map because impaired access to streams is one of the more significant factors limiting salmon. We depict only blockages affecting anadromous fish, and do not show bull trout blockages. The effort to document locations of fish passage barriers repaired since 1999 was just initiated this year (2004), so some projects may not be displayed on this map. This map shows completed projects funded by the Salmon Recovery Funding Board, Washington Department of Transportation, Washington Department of Natural Resources, local governments, or US Forest Service that remove barriers for anadromous fish. We expect ongoing mapping efforts will continue to reveal projects.

- Corrected Fish Barrier
- US Forest Service Corrected Fish Barrier
- Federal Lands





Upper Columbia Salmon Recovery Region

DATA SOURCE:
WASHINGTON DEPARTMENT OF FISH AND WILDLIFE,
US FOREST SERVICE

MILES
0 10 20

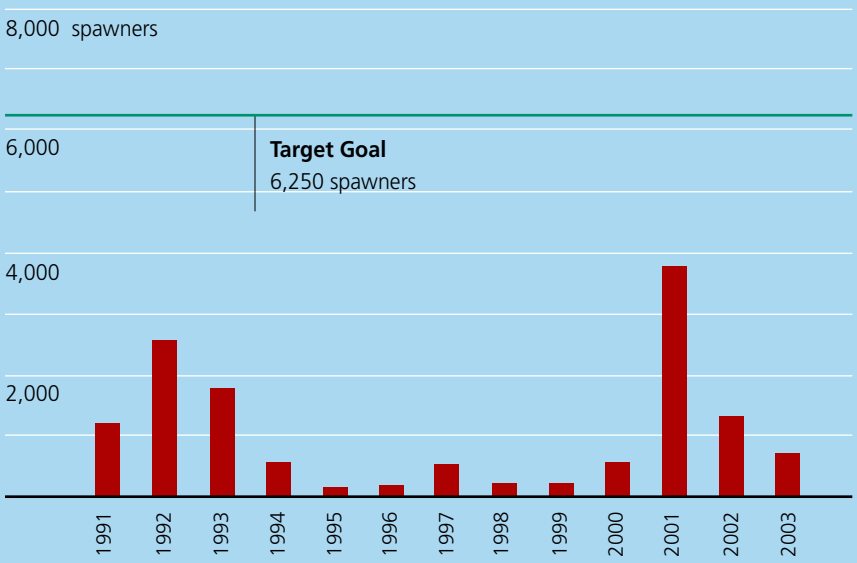
Fulton Canal Fish Screen
Specialists from the Yakima Screen Shop replaced an old fish screen that did not meet state or federal standards and was harming fish.

Twisp Power Ditch Fish Screen
This new screen replaces an old one that was causing problems for juvenile Chinook, steelhead, and bull trout on the Twisp River.

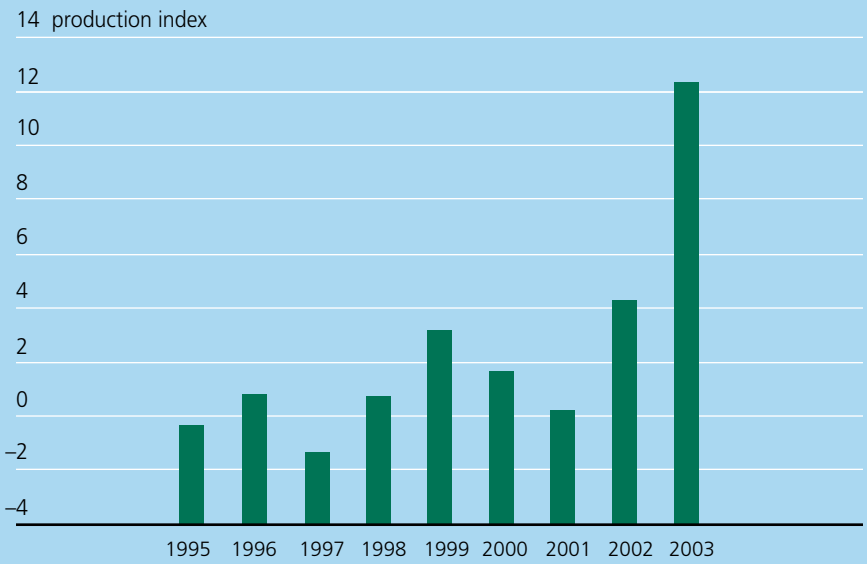
Beaver Creek Watershed Fish Passage
Three new fish screens are being installed to replace inadequately or unscreened diversions on Beaver Creek, helping steelhead, Chinook, and bull trout.

Upper Columbia River Wild Spring Chinook

- Composite spawner abundance and target goal for 3 of 12 populations.
- Target Goal from NOAA-Fisheries



Upper Columbia River Wild Spring Chinook Smolt Production Index



DATA SOURCE: CRAWFORD AND VOLHARDT (2004)