

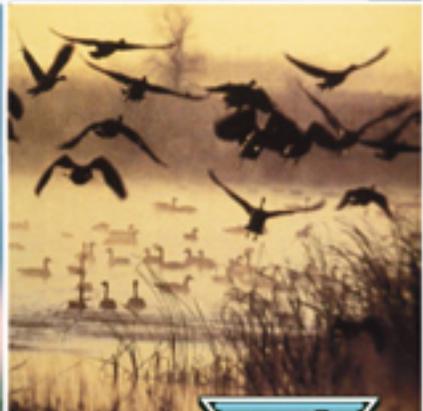
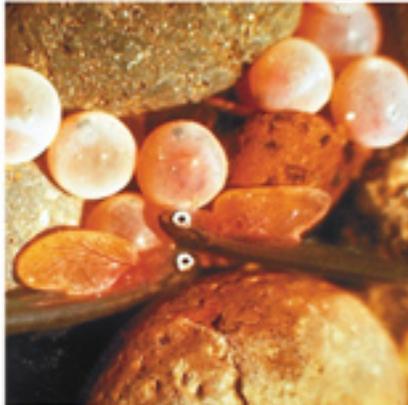
Yakima River Basin Side Channels Project



Final Report 2003 - 2004

February 2005

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Yakima Side Channels
Contract Number 00004339
Final Report
Project Number 199705100
Subbasin: Yakima

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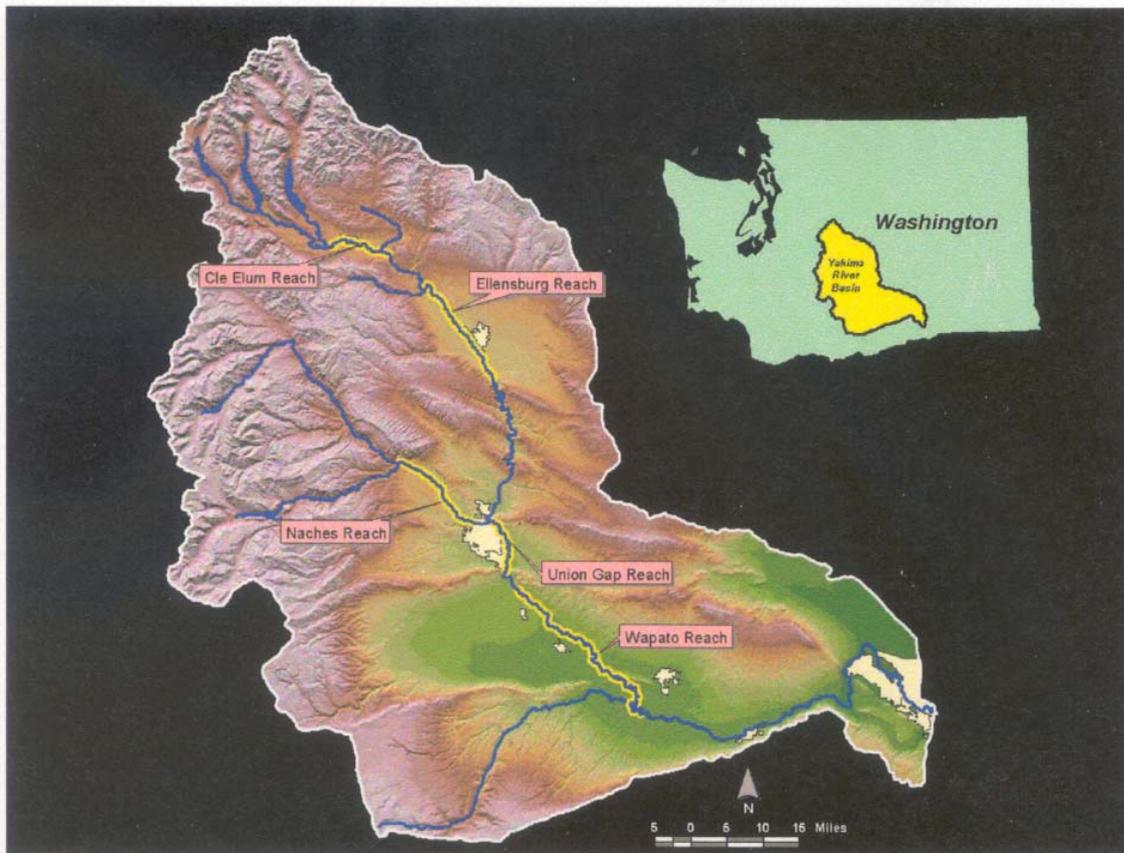
Introduction

The Yakima Side Channels Project (YSC) is a co-managed project, involving the Washington Department of Fish and Wildlife and the Yakama Nation's Yakima-Klickitat Fisheries Project (YKFP). The YKFP has taken the lead on the project. The YSC contributes toward restoration of anadromous fish, as well as benefiting terrestrial wildlife, through actions that protect and restore productive mainstem rearing habitats within alluvial reaches of the Yakima Subbasin. Protection efforts involve purchase of property and water rights. Restoration is achieved through surface water and floodplain reconnection, introduction of large woody debris, fencing and revegetation. The project has been on-going since 1997. From inception through the present, the project has protected over 900 acres in twelve parcels that contain healthy and functional side channel, wetland, and riparian forest habitats.

Among major Columbia River tributaries, the Yakima is unique in that approximately 40% of the watershed consists of alluvial reaches. At these locations, the channel has access to broad, unconfined floodplains with abundant side channels, backwater sloughs, and riparian wetlands. Project efforts are focused primarily in four reaches of the Yakima River including the Cle Elum, Ellensburg, Union Gap, and the Lower Naches (see the figure below). These reaches were targeted for YSC actions based on studies of groundwater/surface water interactions, hyporheic functions, historical and present floodplain connectivity and fish resources. This work was conducted by the University of Montana and Central Washington University.

Most properties within target reaches are in private ownership. For example, within a 12-mile segment of the Cle Elum reach, over 700 residential lots have been subdivided. Habitat function at many locations has suffered as both legal and illegal activities have occurred on private parcels. To complicate matters, the upper Yakima watershed is now experiencing unprecedented residential growth. The Seattle downtown area lies only 80 miles to the west, and rapid influx of new residents has occurred. Kittitas County is listed as the second fastest growing county in Washington State (Yakima Herald-Republic, 8/2/04).

The physical characteristics in the project reaches include broad floodplains with multiple channels that flow through extensive riparian/wetland complexes. Project areas lie upstream of ridges that act to delimit groundwater flow down the stream gradient. Groundwater reemerges in the channel, charging the stream with nutrient-rich and thermally stable water. Although some areas have lost floodplain connectivity through human activities, strongholds of productivity remain. In many cases, restoration can be undertaken to reconnect the features that make these areas productive.



Priority Reaches

Project Accomplishments

Over 900 acres have been permanently protected. Most notably, 450 acres have been purchased in the Cle Elum Reach, most of which is adjacent the Cle Elum Supplementation and Research facility. Approximately 100 acres of complex floodplain habitat has been protected adjacent to the Easton acclimation site. Seven parcels have been protected in the lower Naches that total over 230 acres. Five of these parcels are contiguous.

In addition to these protection efforts, the Hanson Ponds floodplain restoration project was facilitated with preparatory work under YSC. The Hanson project is the largest floodplain reconnection project undertaken to date in the Yakima Subbasin. Restoration involved reconnection of the gravel pit ponds to the mainstem, allowing for the creation of a 5000' side channel. A one mile-long levee road was decommissioned through mechanical ripping, seeding and revegetation with native bare root plants. Over 100 stems of large woody debris were placed in the created side channel and mainstem river. A pedestrian-only trail was created along the alignment of the former levee road. Funding was garnered from seven distinct sources, under a partnership with the City of Cle Elum and Washington Department of Transportation. The Hanson project continues to serve as model for collaborative watershed restoration.

The most significant projects are illustrated in the table below.

Property acquisition summary for the Yakima Side Channels Project by reach (1997- 2004).

Easton/Cle Elum Reach (Kittitas County) <41% of Cle Elum geomorphic floodplain is still connected <39% of Easton geomorphic floodplain is still connected						
Property Name/Tax Id	Acquisition Date	Location	Acreage	Price-Cost Share	Preservation Attributes	Comments
Lanphere 2013120300036; 2013130110001; 2013130210001; 201312120300003	4/4/02	Easton	96.06	\$701,000	Mainstem Yakima River habitat and side channels. Prime spawning reach.	Adjacent to Easton acclimation site.
Scatter Creek I	1/4/02	Cle Elum River confluence	107	\$645,840		Adjacent to Cle Elum Hatchery
Scatter Creek II	6/27/02	Cle Elum River confluence	310	\$1,860,000		Adjacent to Cle Elum Hatchery
Dixon	7/00	Cle Elum River confluence	30.7	\$189,950		Adjacent to Cle Elum Hatchery
Lower Naches Reach (Yakima County) <43% geomorphic floodplain is still connected						
Property Name/Tax Id	Acquisition Date	Location	Acreage	Price-Cost Share	Preservation Attributes	Comments
Foster 171425-44401; 181431-22404?	1998	S. Naches Rd; left bank of Naches River, west of McLaughlin Rd	59.98	\$144,000 Cost Share: \$17,000 MCRFEG		In Open Open Space Program
Rosen 171410-42401; 171410-42402		61 Fortune Rd	49.72	\$107,000		Revegetation planned for spring of 2005. Yakima County Corrections Crew to fund and complete work under SRFB grant.
Peterson 171410-41001		South Naches/ Lewis Rd	34.97	\$43,000		
Swanson 171410-41401			6			
Young 171410-41400			25	\$58,250		
Brown 171411-33001	9/04	8130 Hwy 12	33.75	Cost Share: SFRB		
Harris 171409-11402; 11411;11404	9/04	S. Naches Rd/ Klockhammer Rd	27	Cost Share: \$30,000 WWT		

Union Gap Reach (Yakima County) <40% of the geomorphic floodplain is still connected						
Property Name/Tax Id	Acquisition Date	Location	Acreage	Price-Cost Share	Preservation Attributes	Comments
Henne 191205-41003	12/00	I-82, Yakima/Union Gap	139.37	\$229,961 Cost Share: \$22,996 MCRFEG		Under review for admittance into Open Space Taxation Program in 2005.
Total Acres Conserved: ~920						

Conclusion

While this report is titled "final", it serves only to describe the YSC project goal and results during this contract period. It is anticipated that the YSC will continue to achieve results, once the BPA has reconciled internal concerns regarding habitat protection.