Yakama Nation's Wetlands and Riparian Restoration Project

Project Number 1992-06200

Summary of Accomplishments November 2008

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Background: This project began in 1992. It is designed to protect, restore and manage floodplain lands along anadromous fish-bearing waterways in the agricultural portion of the Yakama Reservation. The goals of the project are to protect and restore at least 27,000 acres of floodplain habitats, integrating fish and wildlife restoration with Yakama cultural restoration. Lands are protected through purchase, lease and easement. Large, contiguous areas are targeted for restoration. The restoration of floodplain ecological function is the primary means of achieving these goals. Channels and wetlands are reconnected, and the lands once removed from the floodplain are allowed to flood again. This project goes beyond simple stream buffers in that the whole floodplain is restored. Hydrologic reconnection in this manner allows for natural reintroduction of native wetland and riparian plants. Upland areas are reseeded to native grasses. Funding by BPA covers the land protection, some of the monitoring, and the land management. Large restoration projects are funded through a variety of federal and non-Federal sources.

Biological Opinion Issues Related to this Project:

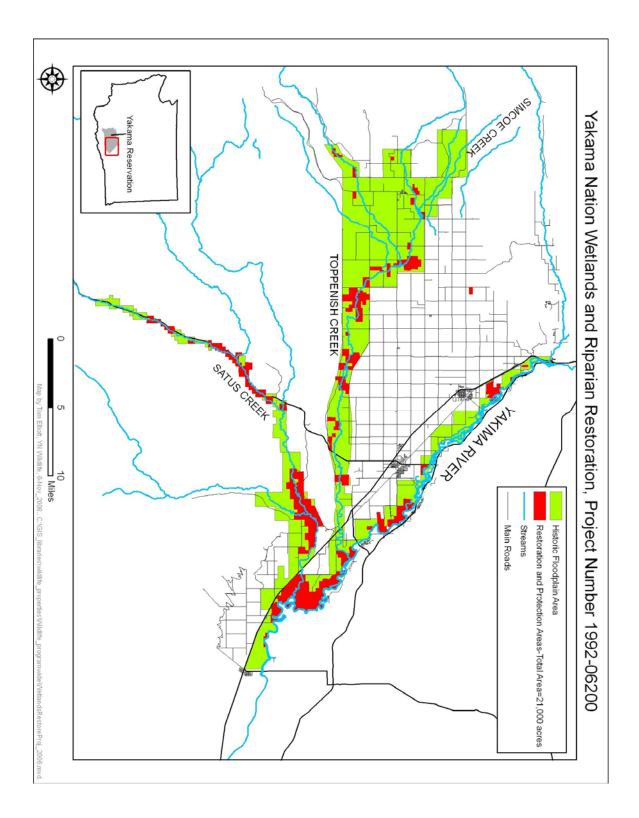
- Two of the four Yakima Basin steelhead populations spawn and rear in the Toppenish and Satus Watersheds. They represent about half of the basin's steelhead production.
- Project area contains fall, winter and spring rearing habitat for adult and juvenile steelhead in addition to being the migration corridor for the entire Toppenish and Satus Steelhead populations.
- A significant proportion of the steelhead redds in the Satus Watershed occur in project-protected areas.

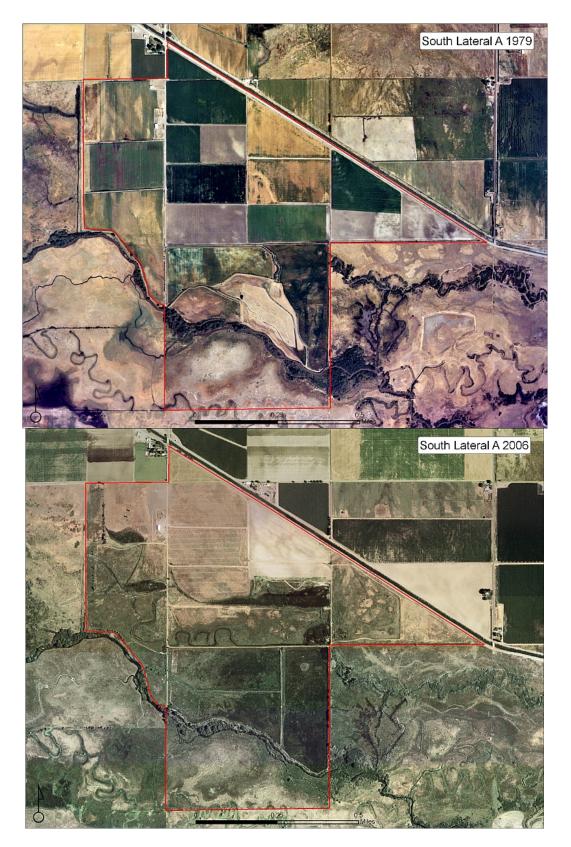
Accomplishments:

- Over 21,000 acres of floodplain lands protected and undergoing restoration
- Over 115 miles of creek and river channel protected
- Over 40 miles of channels reconnected
- Over 1500 acres of Toppenish and Satus Creek irrigation water rights acquired, including <u>all</u> of the water rights of Satus Creek
- Over 4,000 acres of wetlands restored and protected
- Eight houses removed from floodplain areas
- All major fish passage blockages have been removed in project area
- Millions of dollars in cost share have been secured to add to this effort

Major Funding Partners:

- Federal BPA, BOR, BIA, NRCS, FmHA, USFWS, NAWCA, USGS
- Non-Federal Pheasants Forever, Ducks Unlimited, Grant County PUD, Audubon Society, Washington Waterfowl Association, Central Washington University





South Lateral A property in 1979 under agricultural production, and in 2006 with restored hydrology and vegetation communities.



Toppenish Creek incised channel, before (top photo) and after grade control was installed - 2008. Natural vegetation restoration will occur with restored hydrology.



Yakima River Bank erosion -2008. River barbs were installed to move the erosive potential of the river away from the bank. This will allow for vegetation restoration to ensue.





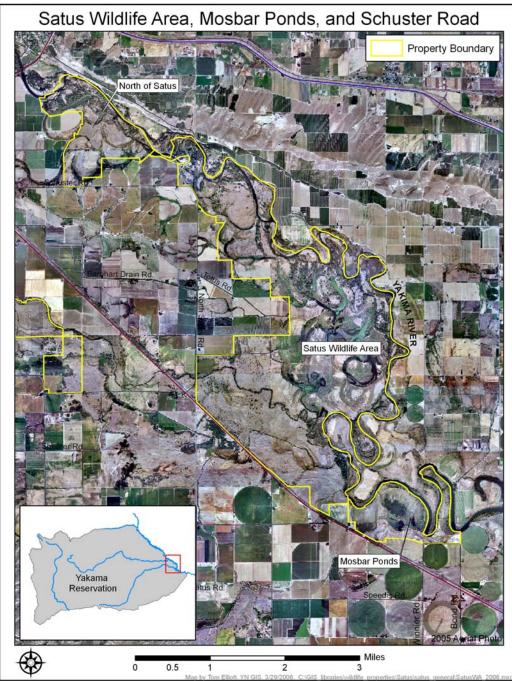
Wetland area restored along Toppenish Creek. This wetland had been converted to a barley field decades ago. It is now a productive floodplain wetland reconnected to the creek.

S. Lat A-Photo Point 6



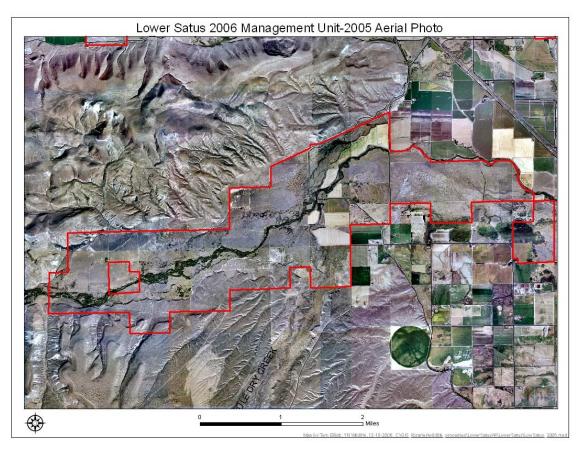


Portion of Toppenish Creek showing no riparian vegetation in 1995, soon after property was purchased. By 2006 the native riparian vegetation grew in so thick the creek itself is not visible in the photo. This revegetation occurred due to the restored hydrology of the property. No planting was conducted here.

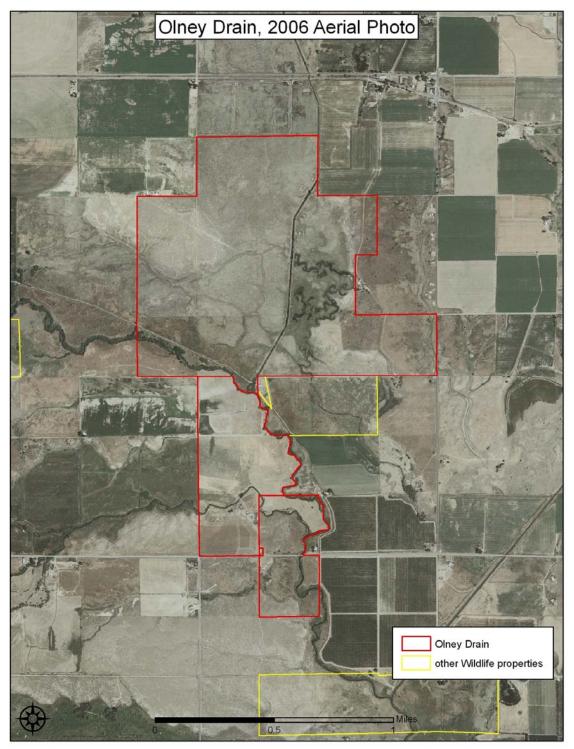


Select Aerial Photos of Protected Properties

Satus Wildlife Area – Wide floodplain area comprising the confluence of Toppenish and Satus Creeks with the Yakima River.



Lower Satus Wildlife Area – Disconnected channels are being reconnected on this property. Disturbance occurred here over 75 years ago.



Olney Drain Wildlife Area – This area was protected by this project. Planning is underway for restoration. The last major blockage of Toppenish Creek was removed here by Yakama Nation's Watershed Project.