

The Yakima Beaver Project



Background



- Used to be lots of beaver that did storage and habitat....
- Beavers eliminated by fur trade
- Habitat ills followed....

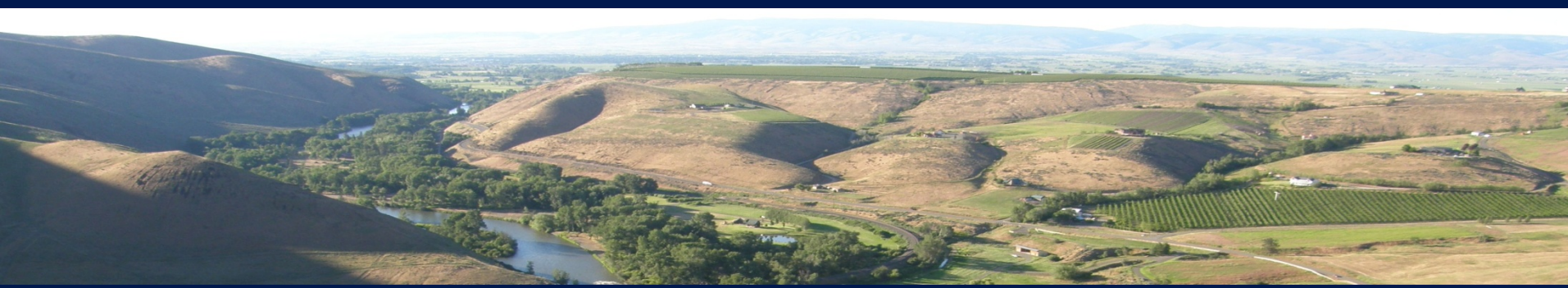


The Museum presents a visual and interpretative experience into the romantic era of the Mountain man and provides a comprehensive overview of the Western Fur Trade's historical significance. Situated in the heart of the country that was once the hub of the Rocky Mountain Rendezvous system (six of the rendezvous of the early 1800s were held in the Green River Valley near present day Pinedale, Wyoming), the Museum stands as a monument to the men and the commerce that opened the West.



Beaver Hat

Yakima Beaver Project Goal



Goal: Restore upper Yakima watersheds

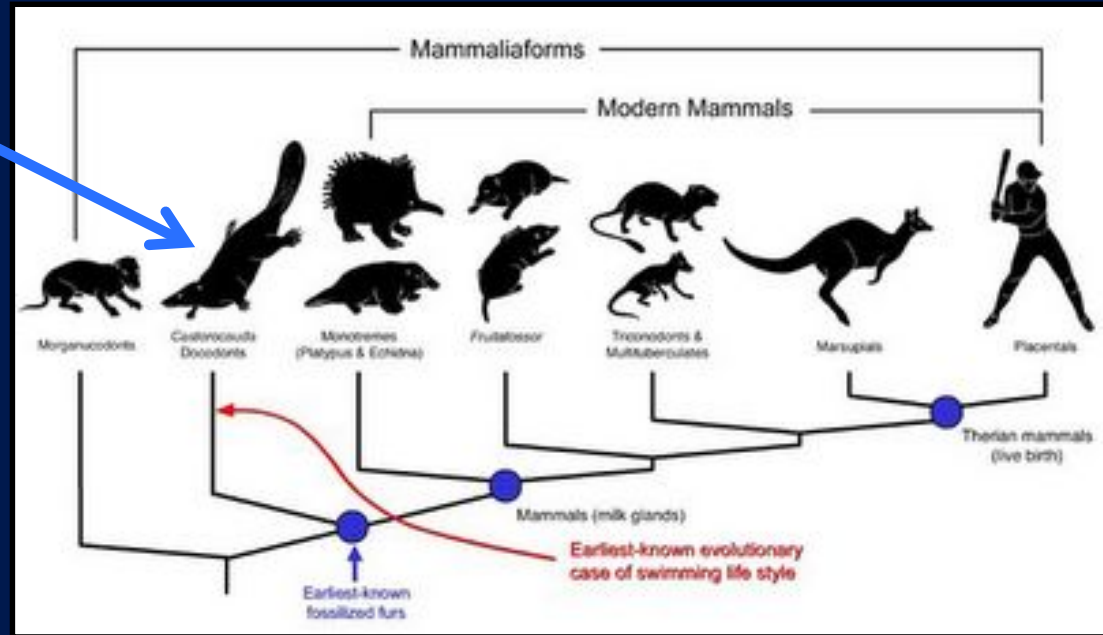
How?

1. Remove “problem” beavers from valley
2. Place beavers in holding facility
3. Release beaver in key upper watersheds
 - Teanaway River – Indian Creek, Jack Creek etc.
 - Taneum Creek
 - Manastash Creek
4. Monitor success

Beaver evolution



Prehistoric GIANT Beaver



The prehistoric GIANT BEAVER was the size of a black bear!

VISITORS CONTROL THE ACTION OF THREE DIRE WOLVES ATTACKING THE GIANT ANCIENT BEAVER.



Our trees are too small....

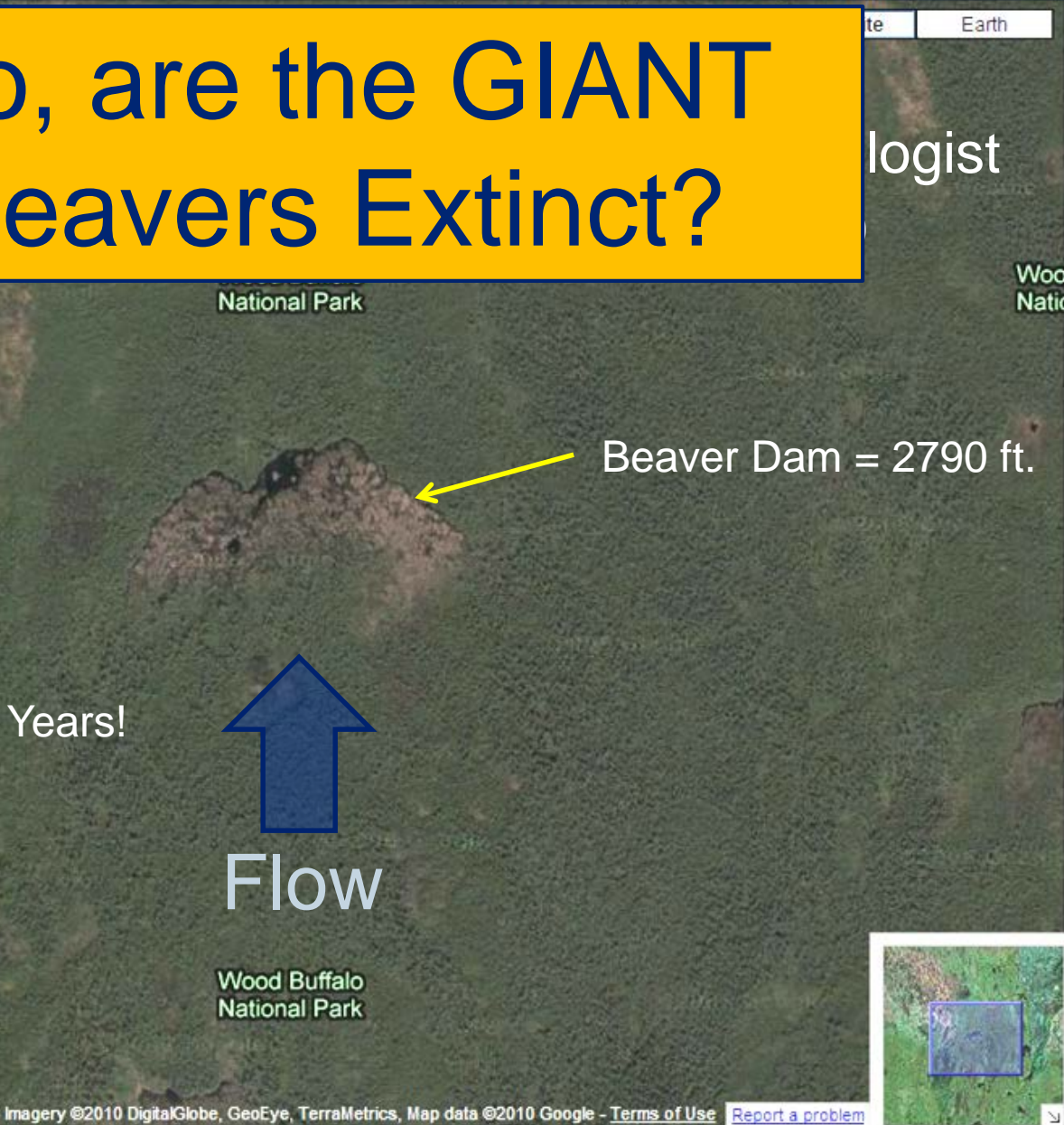


Prehistoric Giant Beaver

World's Longest Beaver Dam.....



So, are the GIANT
beavers Extinct?



Time to build = 20 Years!
(estimated)



Why care about Beaver?



- Coho rearing in Beaver Ponds have much higher fitness and survival.

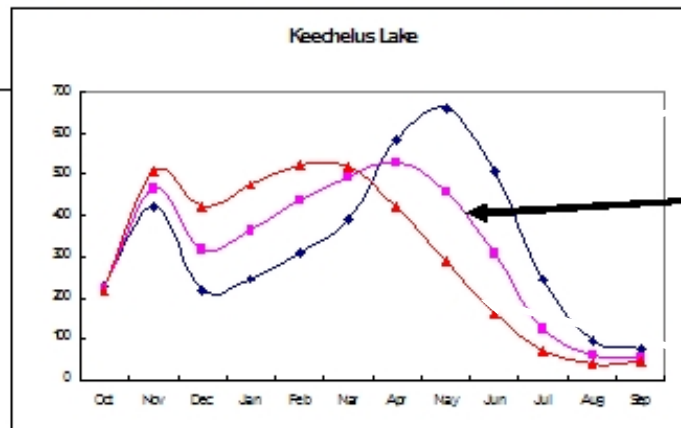
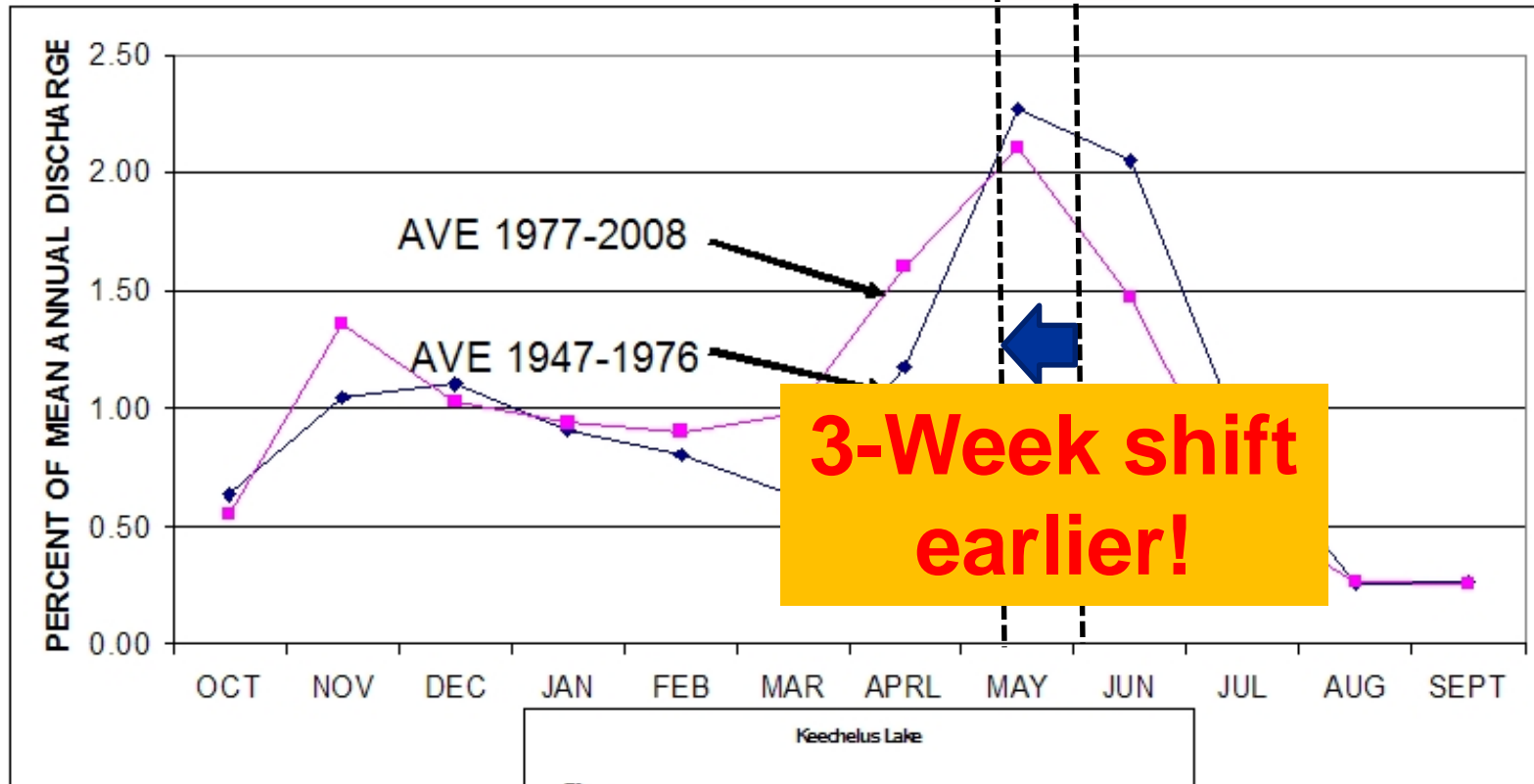


- Beavers engineer for free
- Beavers store water – water is what fish swim in.
- Beavers are cool! And.....

Yakima Hydrograph shifts over time



Yakima River at Martin (Inflow to Keechelus Lake)



The plans call for beaver reintroduction

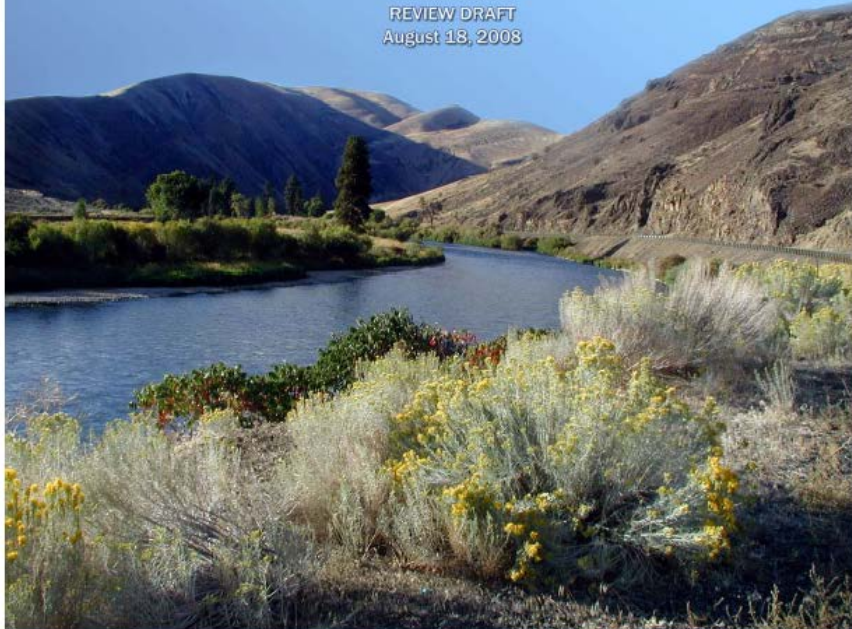


YAKIMA STEELHEAD RECOVERY PLAN

Extracted from the
2005 Yakima Subbasin Salmon Recovery Plan

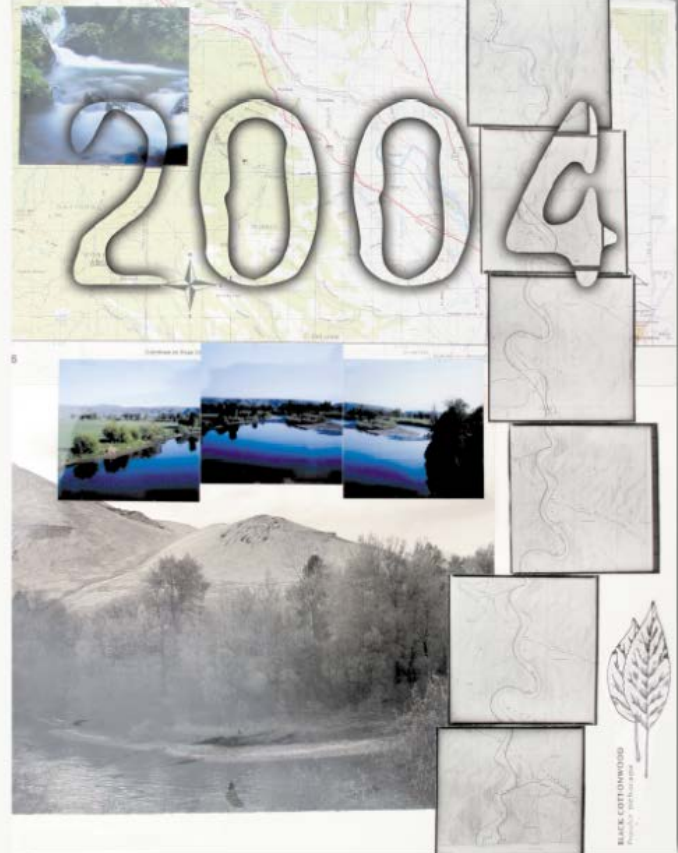
With Updates

REVIEW DRAFT
August 18, 2008



Prepared by
the Yakima Basin Fish & Wildlife Recovery Board

YAKIMA SUBBASIN PLAN



YAKIMA SUBBASIN
FISH AND WILDLIFE
PLANNING BOARD

SUPPLEMENT
NOVEMBER 26, 2004

Methow Beaver project example: Step 1 GIS



Pacific Biodiversity Institute

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Legend

Beaver Model - Priority Reach Selections for Beaver Reintroduction

- Gradient Class:
- less than 3 percent
 - less than 6 percent
 - less than 9 percent
 - less than 12 percent

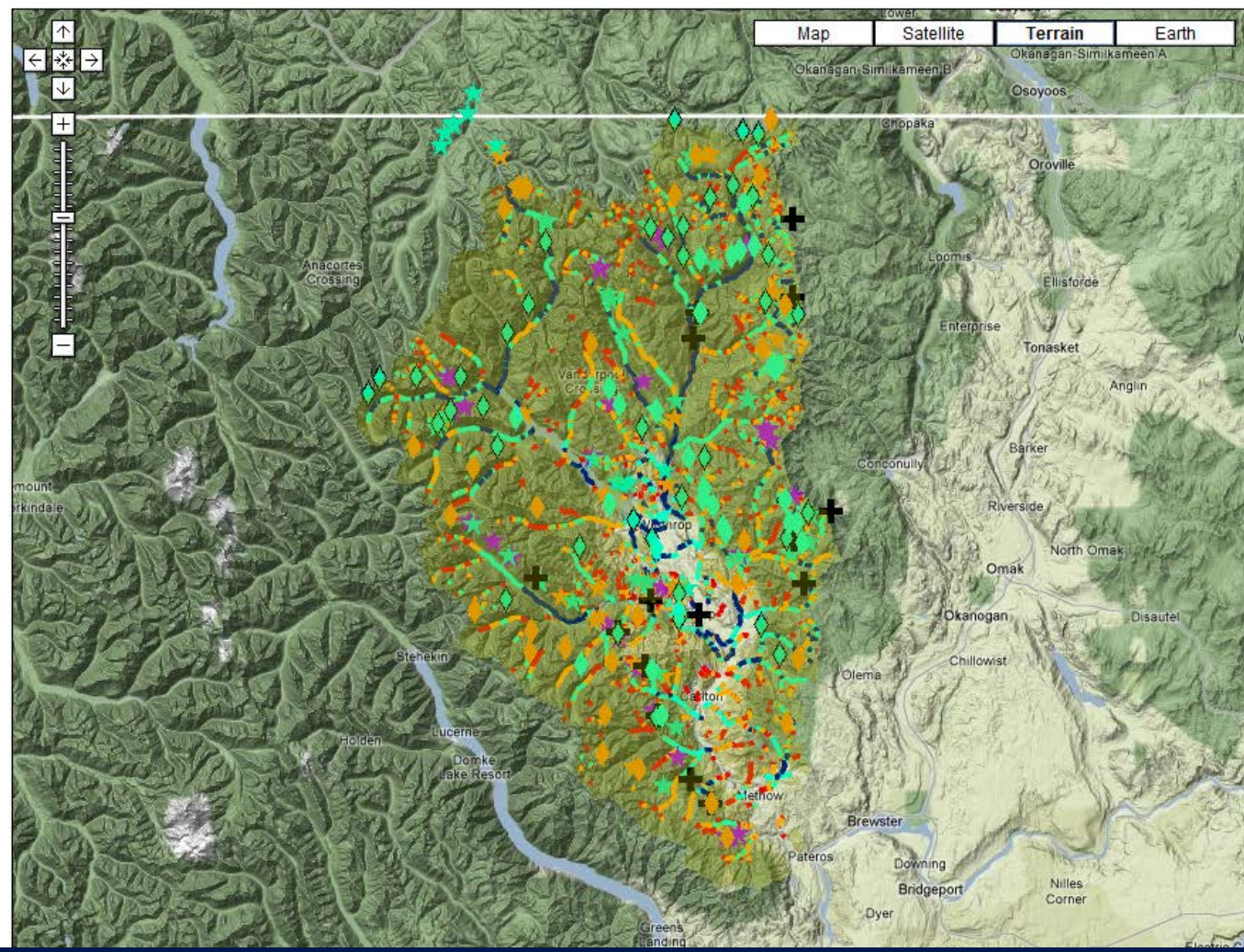
Historic Beaver Sightings

- 1930s - Existing Beaver
- 1930s - Good Habitat - No Beaver
- 1930s - Beaver Reintroduction
- 1956 - Beaver Dam Sighting
- 1990s - Unknown
- 1990s - No Active Beaver
- 1990s - Active Beaver
- Public Lands

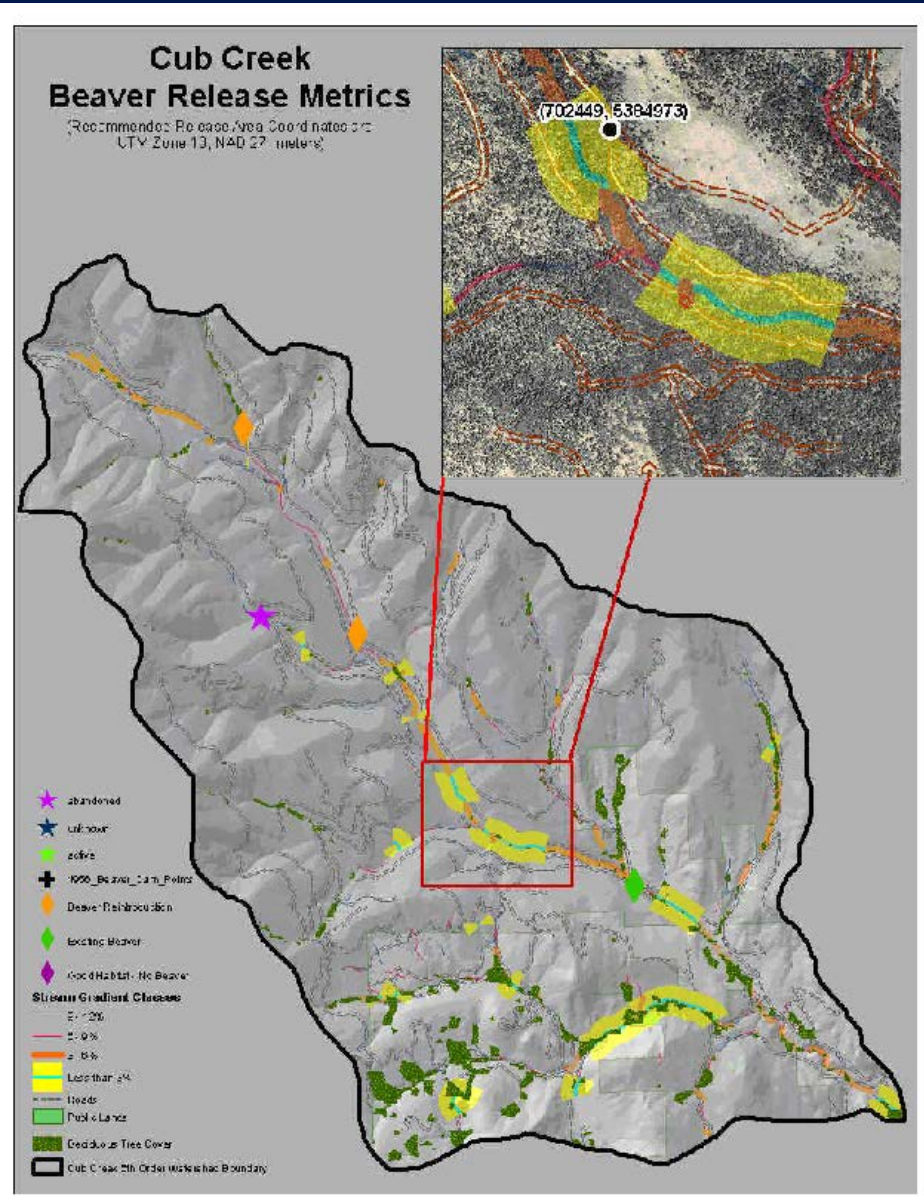
Download the KML files from this webmap for viewing in Google Earth

Historic Beaver Sightings

Priority Reach Selections by Gradient Class



Methow GIS Analysis: Sub-watershed



Step 2: Capturing a beaver



Temporary beaver “lodge”



- Typical Lodge cost:
- 20-25 cinder blocks (\$2/block)
 - Plywood (\$20/sheet)
 - Ramp (\$20)
 - PVC Awning (\$40-50)

Transferring the beaver for delivery



Bringing some play toys along



Carrying the clients to their new home



The new homestead



Temporary Lodge and small pond

Temporary Lodge and small pond



Front view



Side view



Oua La! Water storage and fish rearing



Outreach and Education



Beaver Relocation Project



A coalition of partners, including the Methow Conservancy, Pacific Biodiversity Institute, US Forest Service, the National Fish and Wildlife Foundation, Ecotrust, Washington Audubon, the Washington Department of Fish and Wildlife, and the US Fish and Wildlife Service Winthrop National Fish Hatchery, have come together in the Methow River watershed to begin addressing water issues using a natural tool. A plan to remove beavers from places where they conflict with landowners and release them in unoccupied habitat higher in the watershed was originally developed in 2001, based on the experience of biologists, hydrologists, and aquatic ecologists in other Western states. The partners have agreed that water quality improvements are needed, the time is right, and have all contributed to the development of a working plan for beaver restoration.

In this project we will move the beavers to places in the National Forest where they will not cause future problems and where they can increase stream complexity, increase riparian vegetation, increase groundwater recharge, capture stream sediment, and delay stream runoff. In so doing we hope to provide significant, measurable improvements to water quality. This project is a new and different partnership for all the parties concerned. It requires stepping out of traditional roles and collaborating in creative ways.



Beavers Improve Streams



Beavers create dams in streams. The benefits are many.

- They create riparian habitat through which riparian fishes and animals can move.
- They create stream complexity in riparian areas by creating pools, riffles, and other water features.
- They slow down the flow of stream water, creating an opportunity for sediment to settle, which increases streamflow for riparian birds, fish, and beaver habitat for fish.



The beavers in the Methow River watershed are part of a project to restore beavers to riparian habitat in the 1900s. Beavers were almost entirely absent when they were largely eliminated from the riparian lands in the Methow Valley near 1900. Photo: Ecotrust.

The Methow Conservancy is working with the Winthrop National Fish Hatchery, the US Forest Service, the National Fish and Wildlife Foundation, Pacific Biodiversity Institute, the Washington Department of Fish and Wildlife, Ecotrust, Audubon, the Yakima County National Audubon Society, and the Washington Forestry Science Center to move beavers from places where they caused problems to areas where their natural engineering can once again create healthy stream systems.



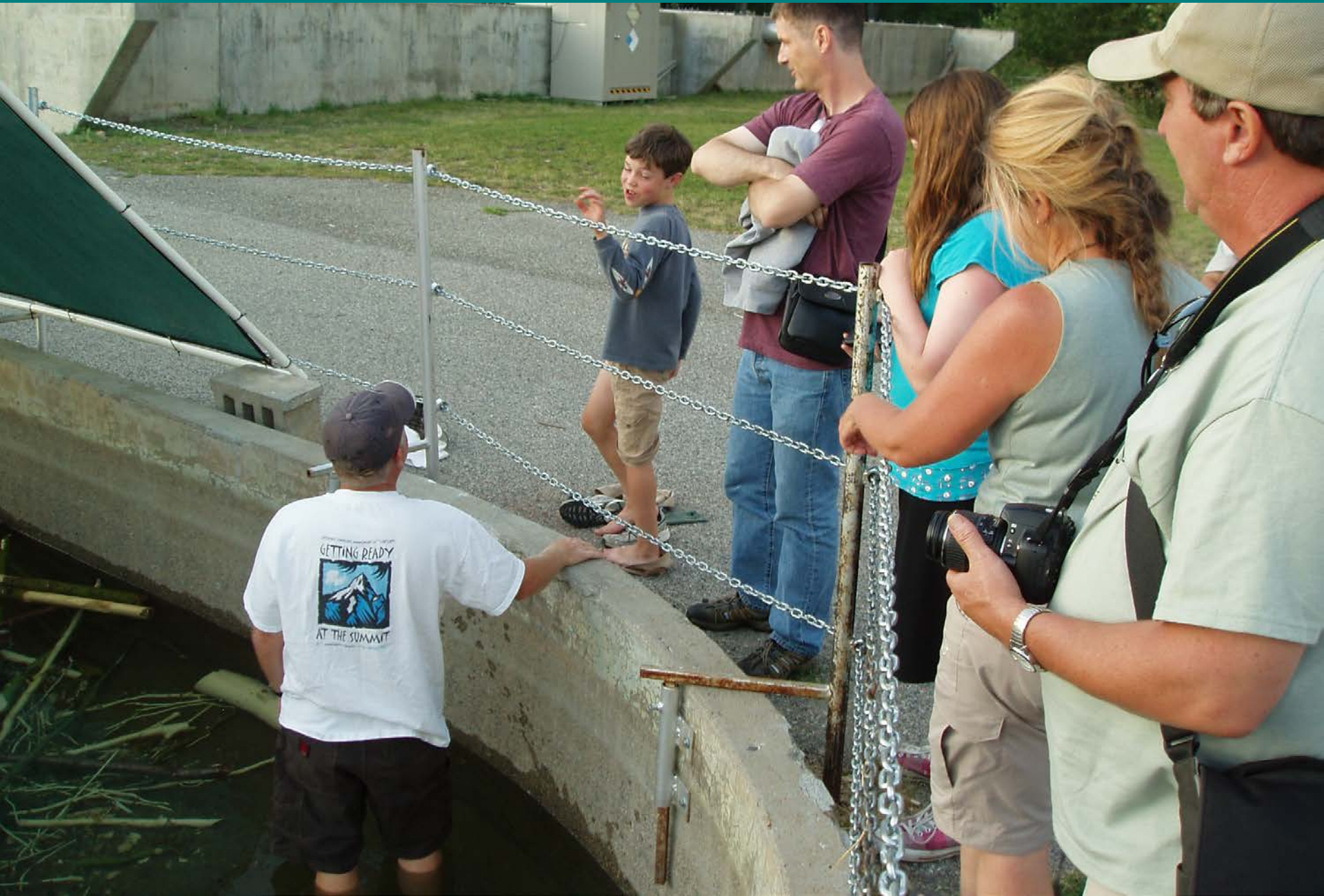
Beaver ponds

- capture sediment
- provide riparian and winter habitat for young salmon
- are natural water treatment areas that provide habitat for fish
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- are natural water treatment areas that provide habitat for fish



The beaver restoration project provides food for the stream system. Photo: Ecotrust.

The Dare.....



The Dive....



Success!



The little ones don't bite.....



A happy ending.....



The End

