

Water Banking in the Yakima Basin



COLDWATER FISHERIES AND THEIR WATERSHEDS

Water banking

Means the "deposit" of a water use entitlement with a person or entity that makes it available for withdrawal by the depositor or another person or entity, either at the same time and place or later in time or at another place.

Classical definition is with multiple buyers & sellers



Yakima Water Banks-How did we get here?



- Over appropriated water supply
- Groundwater well impacts to senior water right holders
- New water needed to accommodate growth
- Fish stocks are threatened
- Re-occuring drought conditions

Yakima Basin-Hydrology 101

- Dendritic drainage, with tributary streams and rivers, annual runoff from 2.5 – 5 MAF; 1 MAF in 5 reservoirs
- "One bucket" management; unified entitlements to runoff and storage
- All surface water claims are adjudicated.
 - TWSA is a cumulative limit on all May 10, 1905 and earlier entitlements
 - If TWSA is short of satisfying entitlements, junior users are shut off and May 10, 1905 rights are proportionately reduced based on entitlements.
 - Groundwater and surface connectivity
 - Time immemorial water right in U&A fishing areas:
 - Target flows for incubation and rearing Quackenbush, 1980
 - Target flows (300-600 cfs) at Parker and Prosser YRBWEP 1994



What problems can a water bank solve

Improved reliability of water supply during

drought years

Seasonal water reliability

Promotion of market tools



 Promoting water conservation by encouraging water right holders to bank water rights they are not using



Resolving issues of groundwater and surface water holders

Current Yakima Water Bank functions

- Drought response mitigation:
 - Periodic water shortages result in curtailment of post-1905 water rights and pro-rationing of 1905 water rights
 - > 1. Water for proratable users who purchase water rights
 - > 2. Water for post-1905 out-of-priority domestic/municipal use
- Groundwater management for new uses:
 - In 1999, Ecology, USBR, and YN settled a 6-year law suit and agreed to a USGS study, coupled with conservative water resources management (i.e. mitigated permits) in the interim.
 - USGS Final Report and Model released in Sept 2011
 - Upper Kittitas Water Budget Neutral projects since 2009 adoption of WAC 173-539A
 - > 1. Mitigated permits and permit-exempt uses (water budget neutral)

Conceptual Model - Yakima Mitigation Bank

Financial Consideration Seller Buyer "Designation" Agreement **Water Right** - Permit relating to TWR conveyed to TWRP - Reservoir Secondary Permit management for instream flow - Out-of-Priority Use Consent & mitigation for designated uses Ecology - Storage Contract TWRP - TWR Management Agreement WTWG **USBR**

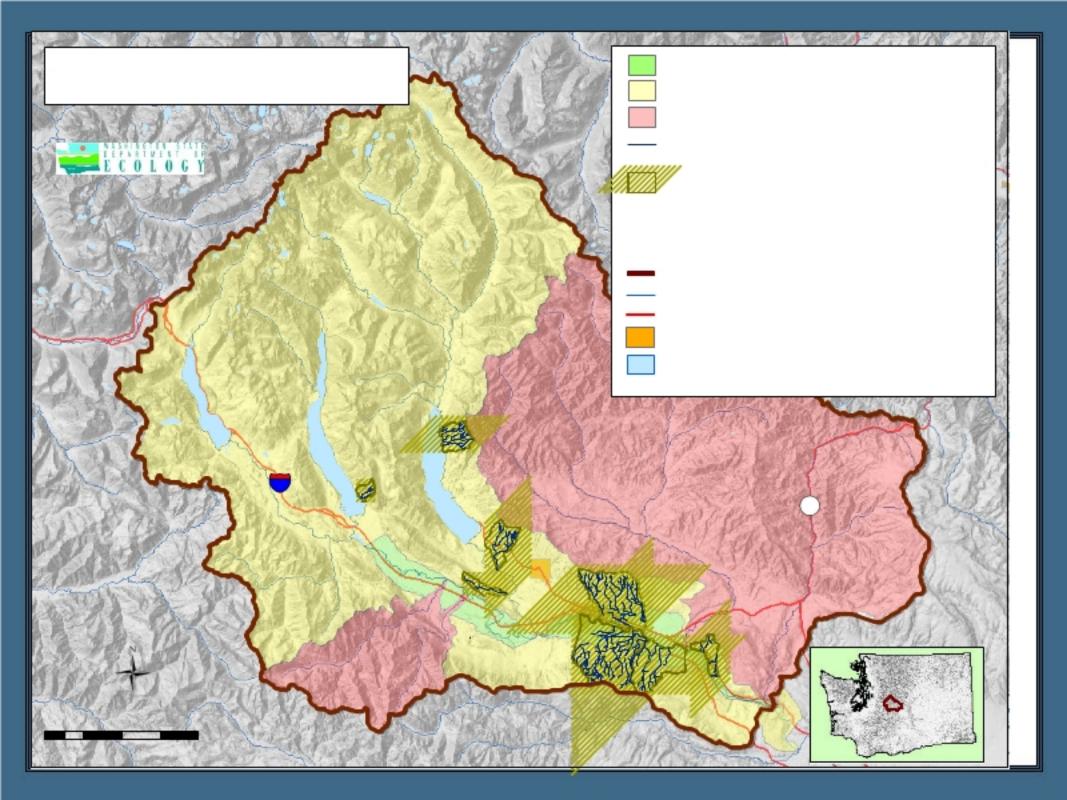
> TWRP = Trust Water Right Program WTWG = Water Transfer Work Group USBR = U.S. Bureau of Reclamation

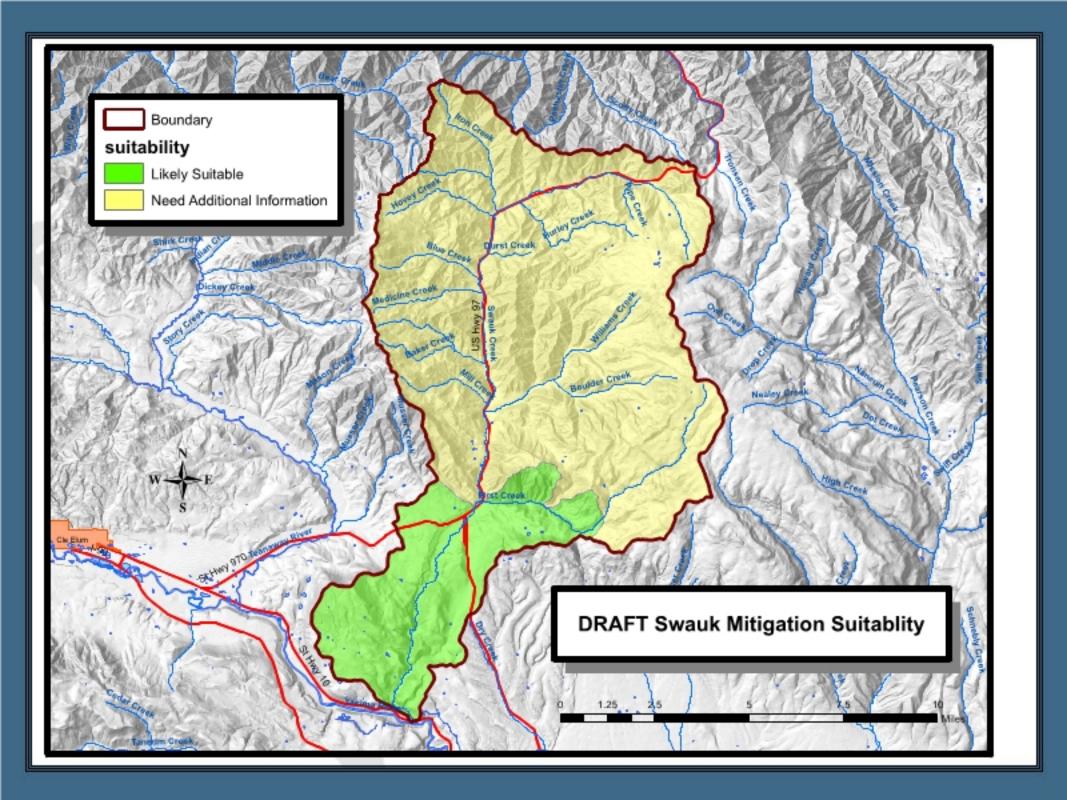
Kittitas Water Banks

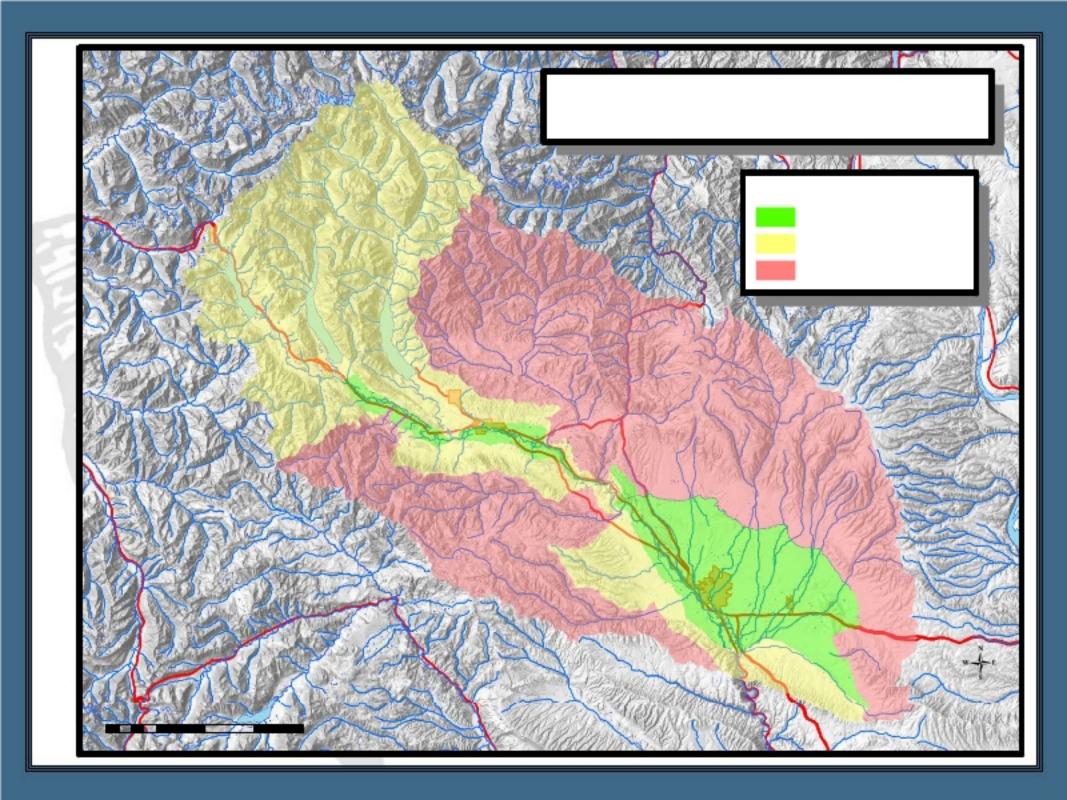
- Currently, 6 water banks approved throughout upper and lower Kittitas
- Mitigation = a pre-1905 water right held by Ecology in the trust water right program of <u>equivalent or greater</u>
 <u>consumptive use</u>
- The primary purpose has been to reallocate pre-1905 water rights from irrigation use (a seasonal use) to domestic and municipal use (year-round uses)

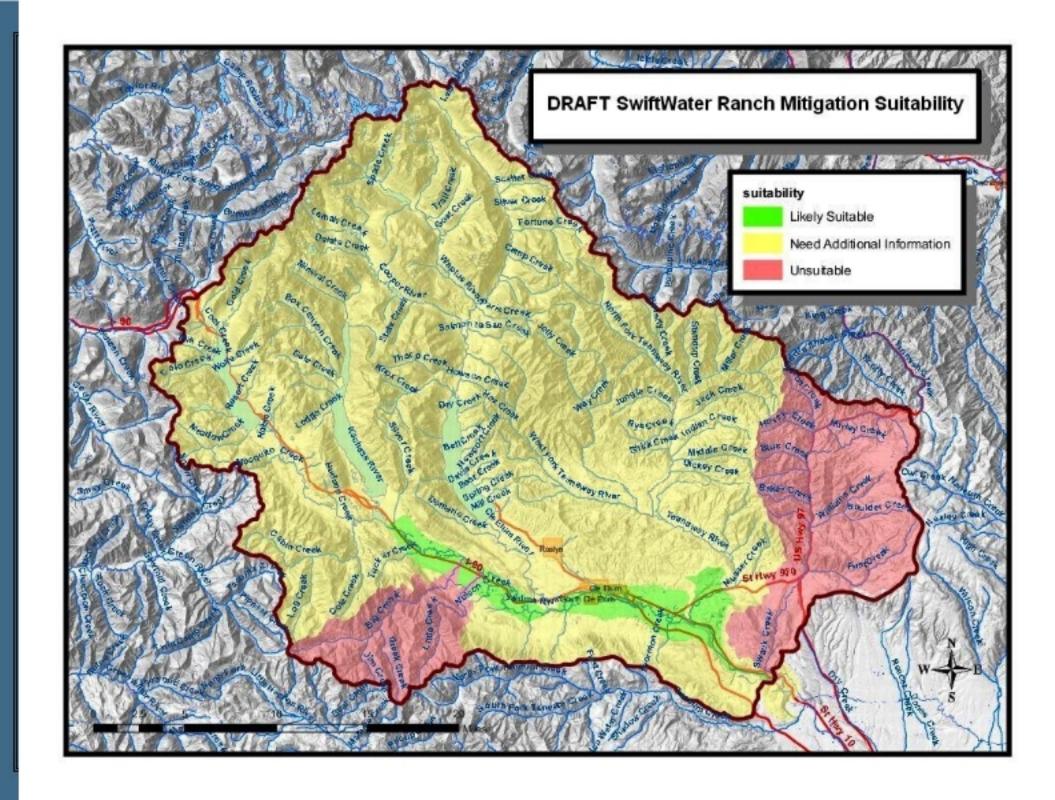


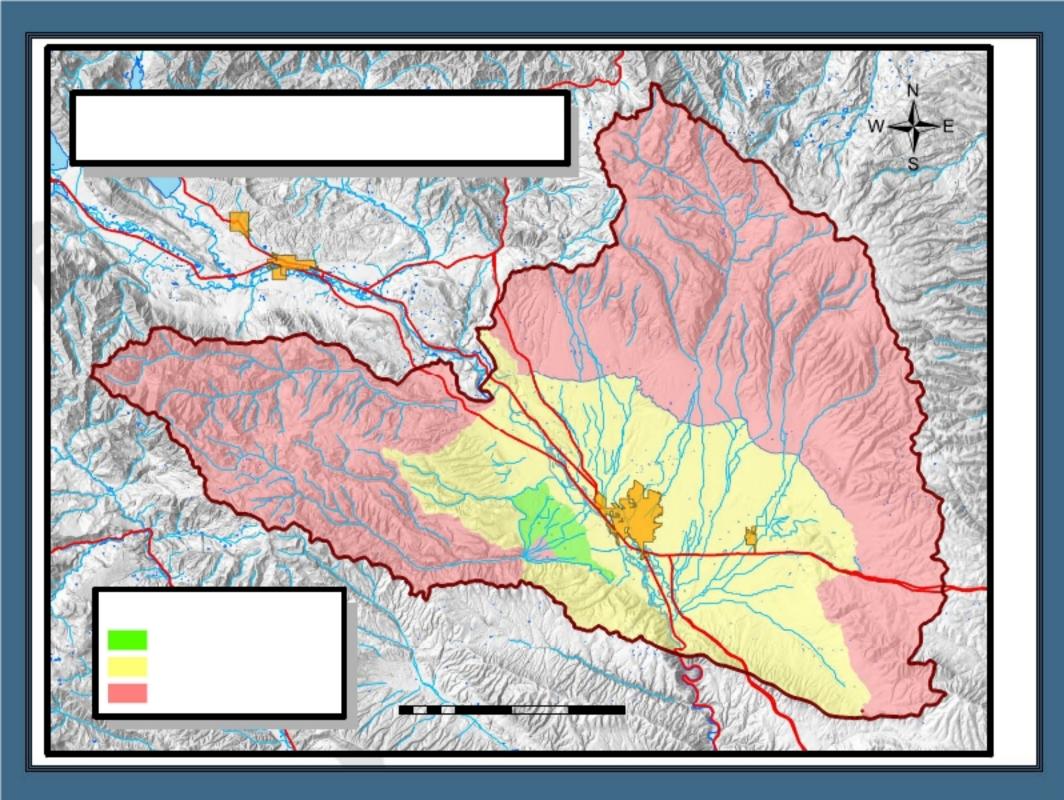


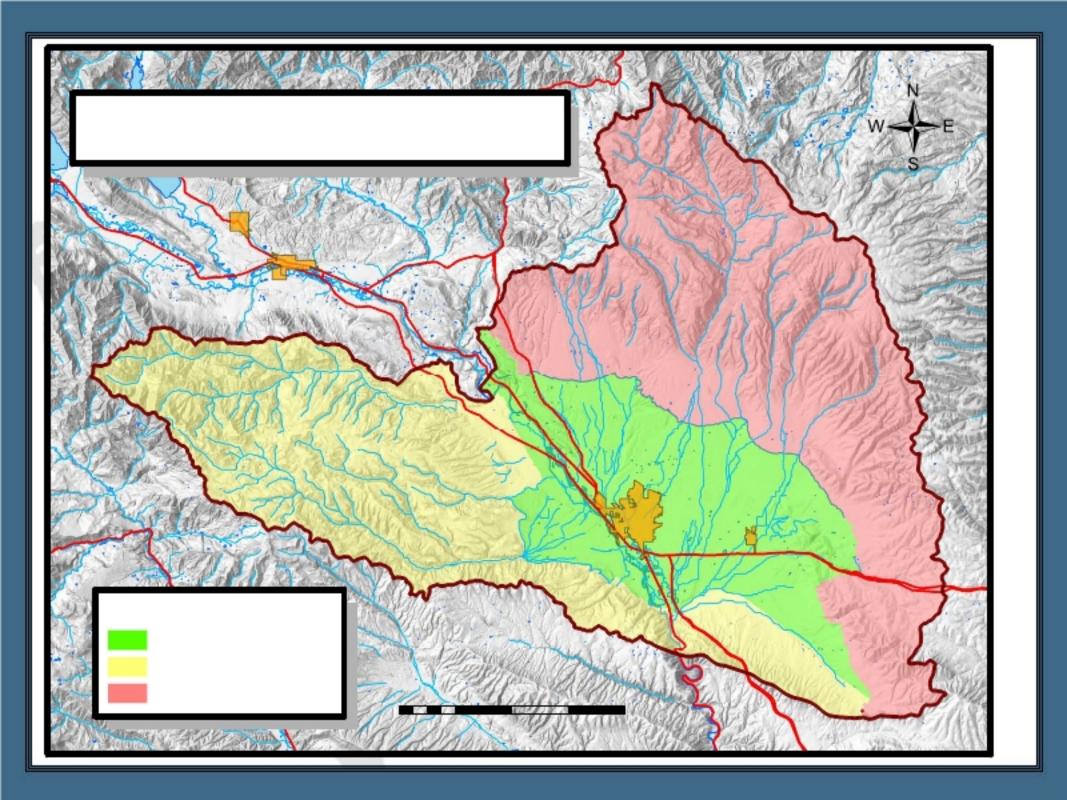




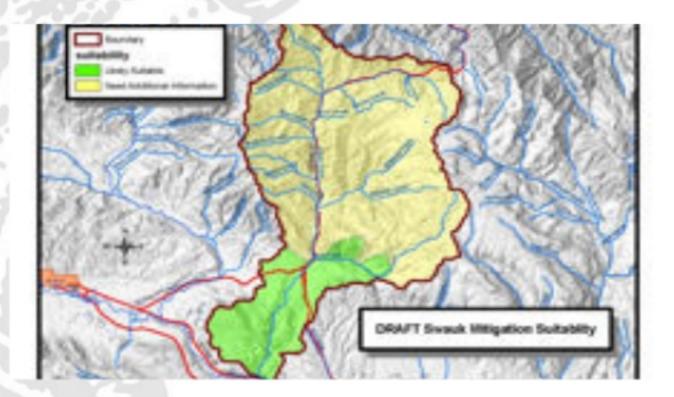








Lower Kittitas





Manastash Creek Bank

- Water Right Holder with Class 1 and Class 3 irrigation and stockwater, Kittitas Irrigation District
- Enhancement of flows for fish and mitigation of exempt wells on existing and new housing developments, and continued irrigation of a portion of agricultural lands
- 4 year process
- Transfers are not inexpensive

535 AF for instream flow and 85 for mitigation and water banking purposes



Use of mitigation-Mitigation may be the objective, but mitigation for what impact?

- Is it to prevent impairment to existing out-of-stream rights?
- Is it to resolve conflict with an adopted instream flow?
- Is it to offset a negative impact to water quality or fish habitat?
- Is a work-around to a "closure" to new diversions or withdrawals?
- Or, planning (e.g., drought preparedness, climate change, etc.) for the future?
- Can mitigation projects be crafted to protect or enhance ecologicallysignificant low flows?
- Is there a useful place for out-of-kind or out-of-place mitigation projects?

Kittitas Water Exchange

Yakima Basin portal page:

http://www.ecy.wa.gov/programs/wr/cro/yakimabasin.html

Kittitas Water Exchange:

http://www.ecy.wa.gov/programs/wr/cro/wtrxchng.html



