

Water Banking for Irrigation Districts Is it right for you?

November 29, 2023

Dan Haller, PE, CWRESenior Principal Engineer



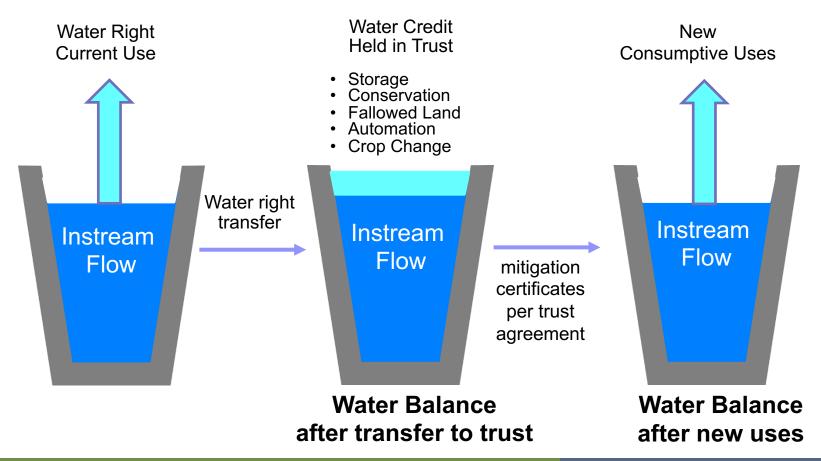
Session Topics

- Water Banking Overview
- Advantages / Fit for your District
- MVID Case Study
- WSID Case Study
- SMID Case Study
- OTID Case Study
- Looking Ahead...



Water Bank Concept

Water banks redistribute water right authority between sellers and buyers.



Advantages / Fit for Your District?

Relinquishment Risk is Lower

RCW <u>90.14.140</u>. "Sufficient cause" for nonuse defined—Rights exempted.

- (2) Notwithstanding any other provisions of RCW <u>90.14.130</u> through <u>90.14.180</u>, there shall be no relinquishment of any water right:
- (h) If such right is a trust water right under chapter 90.38 or 90.42 RCW.

Trust Water Right Agreement

- 5. Both the New Applications and Other New Applications, and their respective Permits once issued, shall be conditioned such that:
 - 5.1 The forfeiture of a Permit or Certificate, or a subsequently issued certificate or portion thereof, does not disturb or prevent the assigned or associated portion of the Trust Water Right from further designation or use under this agreement.
 - 5.2 In the event of forfeiture of a Permit or Certificate described above, Ecology shall notify MVID for the purposes of determining appropriate future designation or uses of the water right.

No loss of priority

RCW 90.03.340

Appropriation procedure—Effective date of water right.

The right acquired by appropriation shall relate back to the date of filing of the original application with the department.

The New Permits relative to the New Applications and Other New Applications will specify the conditions and limitations on the use of water in a manner consistent with the Water held in the MVID Water Bank as mitigation. Conditions relating to measuring and reporting water use will also be included in the permit(s). Permits issued based on New Applications and Other New Applications will have a priority date based on the date filed (pursuant to RCW 90.03.340), provided however, that they will be provisioned to clarify that their priority date for purposes of regulation, adjudication, or any other challenge is equal to the water rights held in Trust Water Rights Program in the MVID forth Exhibit A. Water Bank set in as

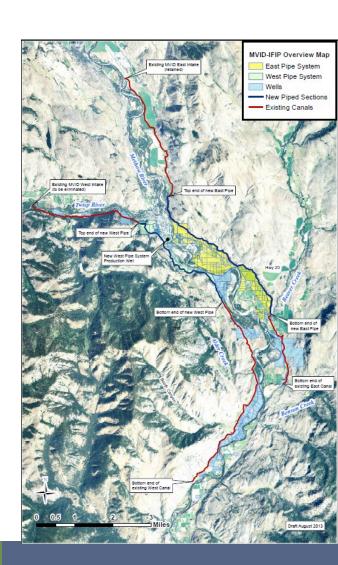
Permitting Certainty

- Obtaining permits from banks are water budget neutral, which qualifies for priority processing under WAC 173-152-050(2)(g).
- Extent and validity of the right is fixed in trust.
- Lower appeal risk for future transactions (largely based on impairment and public interest)

MVID Case Study

Methow Valley ID Water Bank

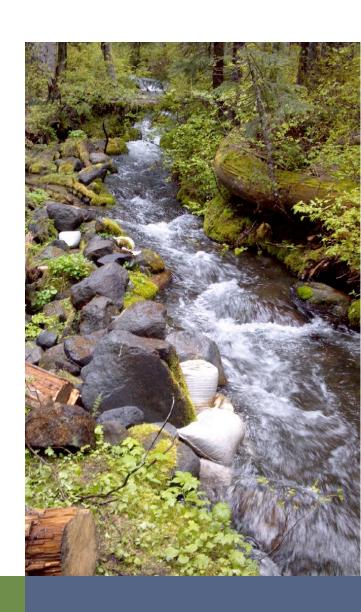
- MVID Rehabilitation Project, Piping east canal, piping west canal and wells
- 11 cfs (2,854 ac-ft) savings in Twisp River,
 2 cfs (360 ac-ft) in Alder Creek, reach
 benefits in Methow River
- Seasonal transfer of 124 ac-ft consumptive use to Twisp for year-round municipal at \$2,222/ac-ft CU.
- Twisp received 248 ac-ft municipal mitigation right (50% CU, recognizing wastewater, lawn return flow).
- Remaining banked water utilized to improve service to MVID customers.



WSID Case Study

White Salmon ID Water Bank

- WSID formed in 1920's. Northwestern Electric Co. objected to diversions which would diminish their senior power right.
- WSID dug a canal to import water
 8 cfs from the Lewis River drainage
 into White Salmon River drainage.
- Condit Dam removal in 2011 allowed
 8 cfs to transition to new uses.
- WSID formed a 5,781 ac-ft water bank.
- Sold 1445 ac-ft to City of White Salmon for \$1,350 / ac-ft plus 3%/year inflation over 20 years plus permitting costs.
- Proceeds assisted in canal improvements.



SMID Case Study

SMID Needs







- \$80 Million in necessary infrastructure upgrades
- Grant funding difficulties
- Source reliability
- Water right compliance

Changes in Water Demand (Urbanization)

Small Parcels

- 1 acre or smaller
- Used an indicator parcel approach



Changes in Water Demand (Larger Parcels) - Nonirrigable

- Urbanization
- Land Use Change (i.e. industrial)
- Impervious areas









Changes in Water Demand (Larger Parcels) - Irrigable

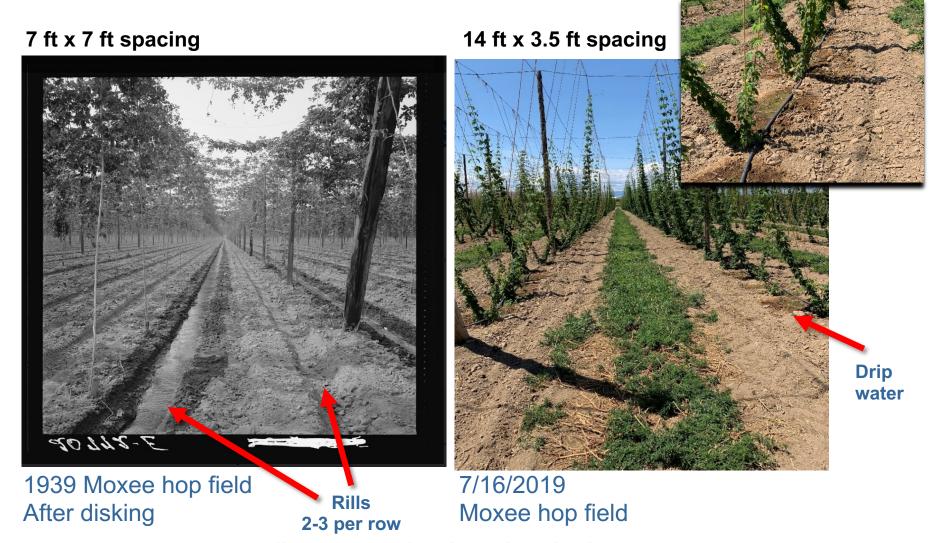
Fallowed Areas and Land Use Changes

7/9/1996 10/13/2018





Irrigation Method - Rill vs Drip



Source: Dorothea Lang photos. Moxee area. http://depts.washington.edu/labpics/zenPhoto/depress/lange/

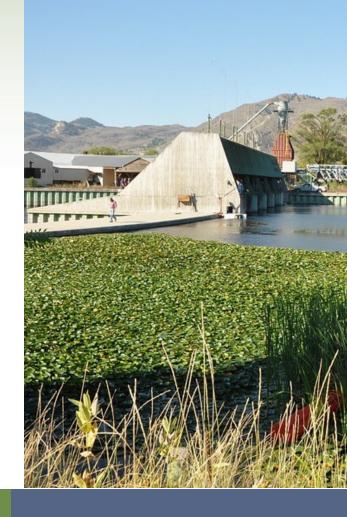
SMID Water Bank Auction to-date

- About 9,000 ac-ft in surplus water
- Two auctions in 2023, one internal, one external
- 5,950 ac-ft (lease) and 382 ac-ft (for sale) through
 Western Water Market
- Lease revenue totalling \$1.9M and purchases of \$5M (all offered water sold, only about 10% leased so far)
- 2023 Drought mitigation partnership with Ecology

OTID Background

OTID Water Bank Efforts to-date

- About 10,000 ac-ft in surplus water
 - Conservation, fallowed land
- 2019 Drought Year Leases partnered with Ecology
- Some small lease/sales between 2019 and 2023
- Major negotiation in 2022 –
 2023 with Chelan PUD



Chelan PUD Lease (2023)

Sunday, November 26, 2023



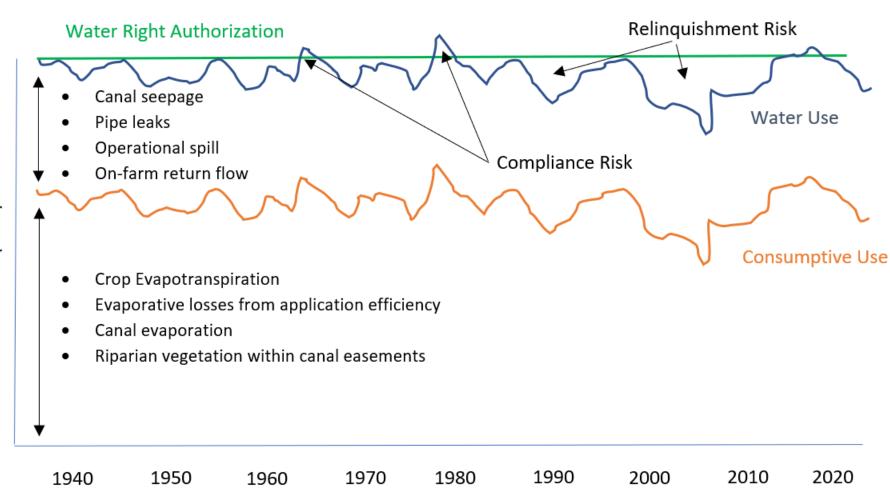
Chelan County PUD gains access to Okanogan County water in \$1 million annual lease

Chelan PUD will lease the water source for about \$1 million annually at \$250 per acre-foot per year. Commissioners approved the mitigation water supply agreement unanimously at the Monday board meeting as part of the PUD's federal requirements for operating dams.

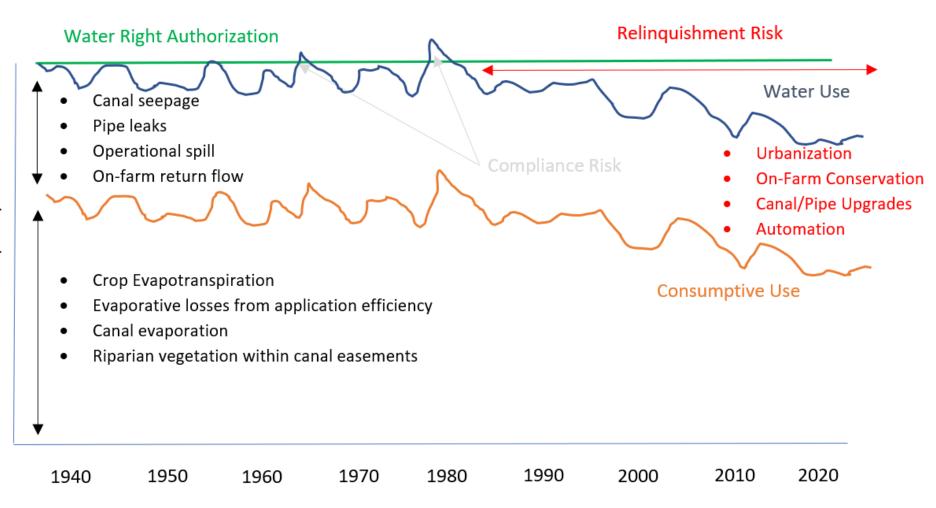
The lease of 4,000 acre-feet ensured a steady revenue stream to offset
District operations and provided significant instream flow benefit and new
mitigation for downstream PUD operations

Looking Ahead... Is it a good fit for my district?

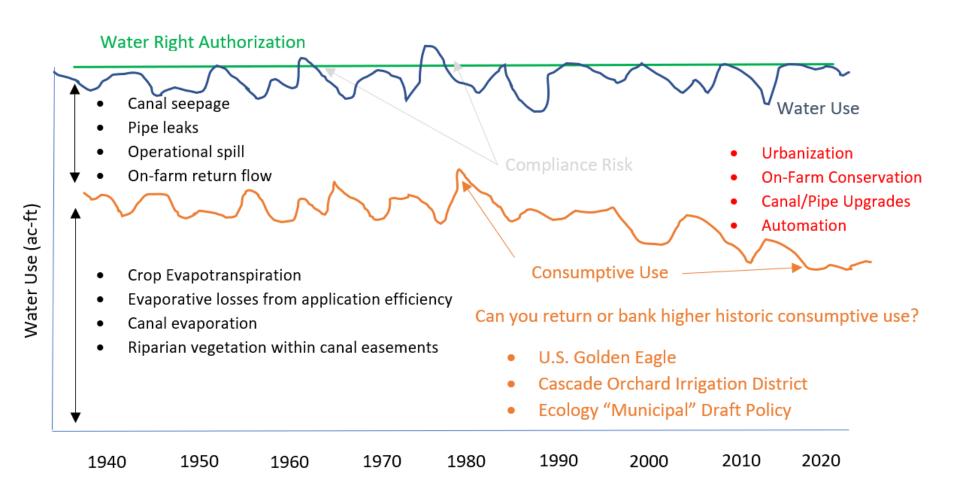
District Water Use is Complex



Relinquishment risk can increase



And now "recency" public interest test can diminish rights



Looking Ahead...

The stakes are high . . .

- Wholesale consumptive use valuation is on the order of \$2,500 to \$3,500 / acre-foot / CU sold
 - □ For every 1,000 ac-ft of CU saved, that is \$2.5 to \$3.5 million (sold)
- Wholesale consumptive use valuation is on the order of \$125 to \$250 / acre-foot / year CU leased
 - □ For every 1,000 ac-ft of CU saved, that is \$125K to \$250K / year leased
- Tributary prices can be several times these wholesale values
- Water right sales/leases can be an additional infrastructure funding option for districts

Recommendations

- Use your water for a beneficial use
- Document your use
- If you can't use your water, donate it
- Declare your intent to repurpose historic savings
- Audit and repurpose your CU in a "timely" manner
- Reset the relinquishment clock often
- Track Ecology policy and case law
- Let you voice be heard

Questions?

