

Pacific Northwest Economic Region 2015 Annual Summit



Identifying New Funding Sources to Support Water Infrastructure

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Washington State Department of Agriculture



Columbia River Basin Water Management (Development) Act - 2006

- Department of Ecology directed to aggressively pursue development of new water supplies for both instream and out-of-stream uses
- Significant investment in new storage and conservation
 - Capital: authorization for bonds of up to \$200 million
- 2/3 of funds for study & construction of new storage & pump exchanges
 - 1/3 of new storage for improving streamflows to benefit fish
 - 2/3 of new storage for new out-of-stream uses
- 1/3 of funds for all other water supply projects
- Legislative reporting on water supply and demand forecasts

Water Supply Development Account Uses



- Assess, plan, and develop new storage
- Improve or alter existing storage facilities
- Implement conservation projects
- Any other actions to provide access to new water supplies (e.g., acquisitions, leases, marketing)

Columbia River Basin Water Management (Development) Act - 2006



- Alternatives to groundwater for agricultural users in the Odessa subarea aquifer
- Sources of water supply for pending water right applications
- New uninterruptible supply of water for interruptible water right holders
- New municipal, domestic, industrial and irrigation water needs in basin
- Water for instream purposes

OCR WATER PROJECTS 2014

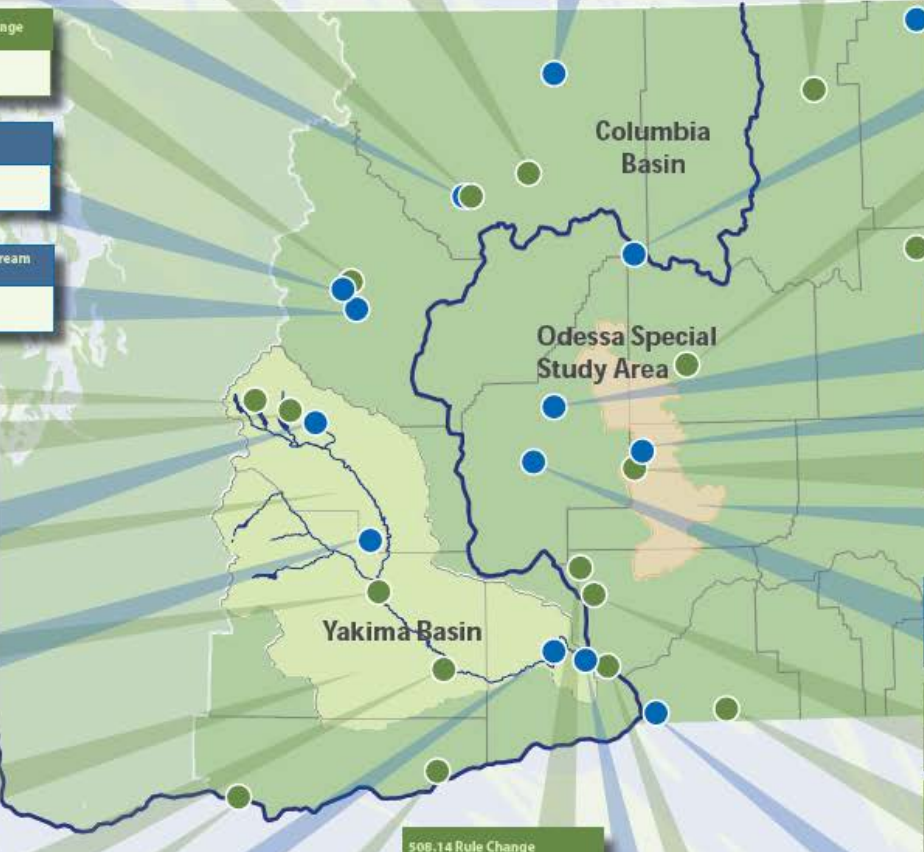
● Completed, Developed
● Active, Under Development
 Locations are approximate

Methow Trust Water Acquisition 52 ac-ft Out-of-Stream	Methow Projects 2854 ac-ft Out-of-Stream	Goose Lake & Nine Mile Flat Storage Ac-Ft TBD	Pine Creek Acquisition 900 ac-ft Out-of-Stream	Mill Creek Storage 11,000 ac-ft Out-of-Stream	Sullivan Lake Water Supply 9,400 ac-ft Out-of-Stream 4,600 ac-ft Instream	Lake Roosevelt Incremental Storage Releases All Years: 55,000 ac-ft Out-of-Stream 25,000 ac-ft Instream Drought Years: 88,000 ac-ft Out-of-Stream 44,000 ac-ft Instream
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Peshastin Pump Exchange Ac-Ft TBD	Peshastin ID Piping 360 ac-ft Instream	Lincoln CD Passive Rehydration Ac-Ft TBD	Spokane-Rathdrum ASR 105,000 ac-ft Out-of-Stream
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Lower Wenatchee Instream Flow Enhancement 1,493 ac-ft Instream	Columbia Basin ID Piping 26,000 ac-ft Out-of-Stream 5,000 ac-ft Out-of-Stream	Weber Siphon Conveyance
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Kachess Drought Relief Pumping Plant 200,000 ac-ft Out-of-Stream	Cle Elum Pool Raise 14,000 ac-ft Out-of-Stream
Basin-Wide Habitat Enhancement & Restoration 8 Obstructions Removed 83+ Miles of River Improved 1,174+ Acres Enccompassed	Teanaway Acquisition 50,272 acres of Watershed Protected
Yakima City ASR 10,000 ac-ft Out-of-Stream Instream ac-ft TBD	Manastash Conservation and Tributary Enhancement 1,300 ac-ft Instream
Yakima Basin Integrated Plan 226,000 ac-ft Instream & Out-of-Stream (Basin-Wide)	Other Yakima Basin Integrated Plan Projects

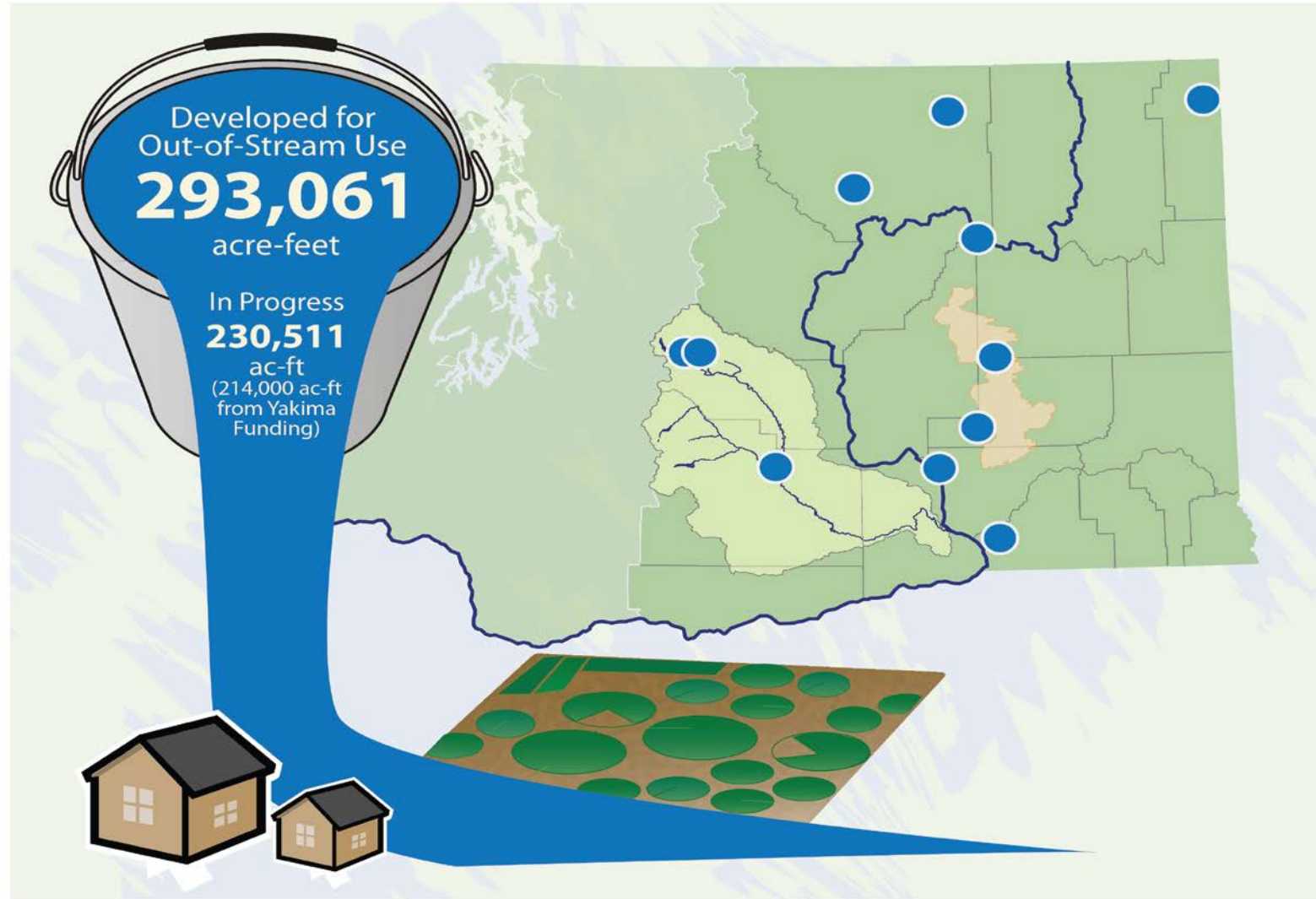


East Low Canal Widening Conveyance	Odessa Subarea Groundwater Replacement 164,000 ac-ft Out-of-Stream
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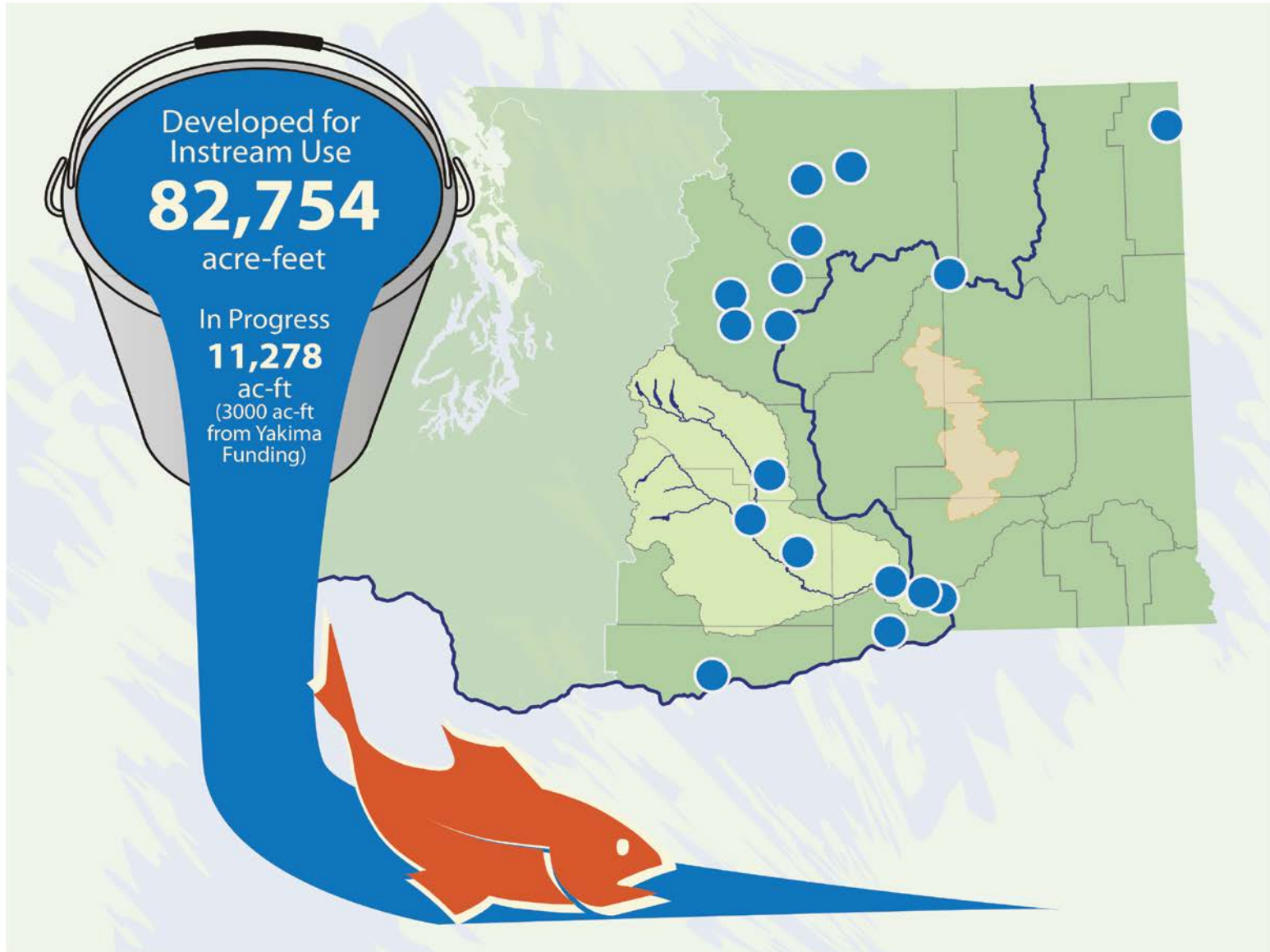
Potholes Supplemental Feed Route Conveyance	Region-Wide Projects
Pasco Municipal Supply Improvements 5,000 ac-ft Out-of-Stream	Conservation Commission Irrigation Efficiency Ac-Ft TBD
Walla Walla Flow Enhancement 30,000 ac-ft Instream	Conservation Commission Retiming Ac-Ft TBD
Port of Walla Walla Leases 4,761 ac-ft Out-of-Stream	Regional Aquifer Storage and Recover Ac-Ft TBD
	Donations 13,060 ac-ft ac-ft Instream

Sunnyside Valley ID 7,815 ac-ft instream	508.14 Rule Change Ac-Ft TBD	KID/Red Mountain 11,005 ac-ft Instream	Horse Heaven Hills 105,000 ac-ft Out-of-Stream	Barker Ranch 6,436 ac-ft Instream	Kennewick ASR 318+ ac-ft Instream
White Salmon ASR 145 ac-ft Instream					

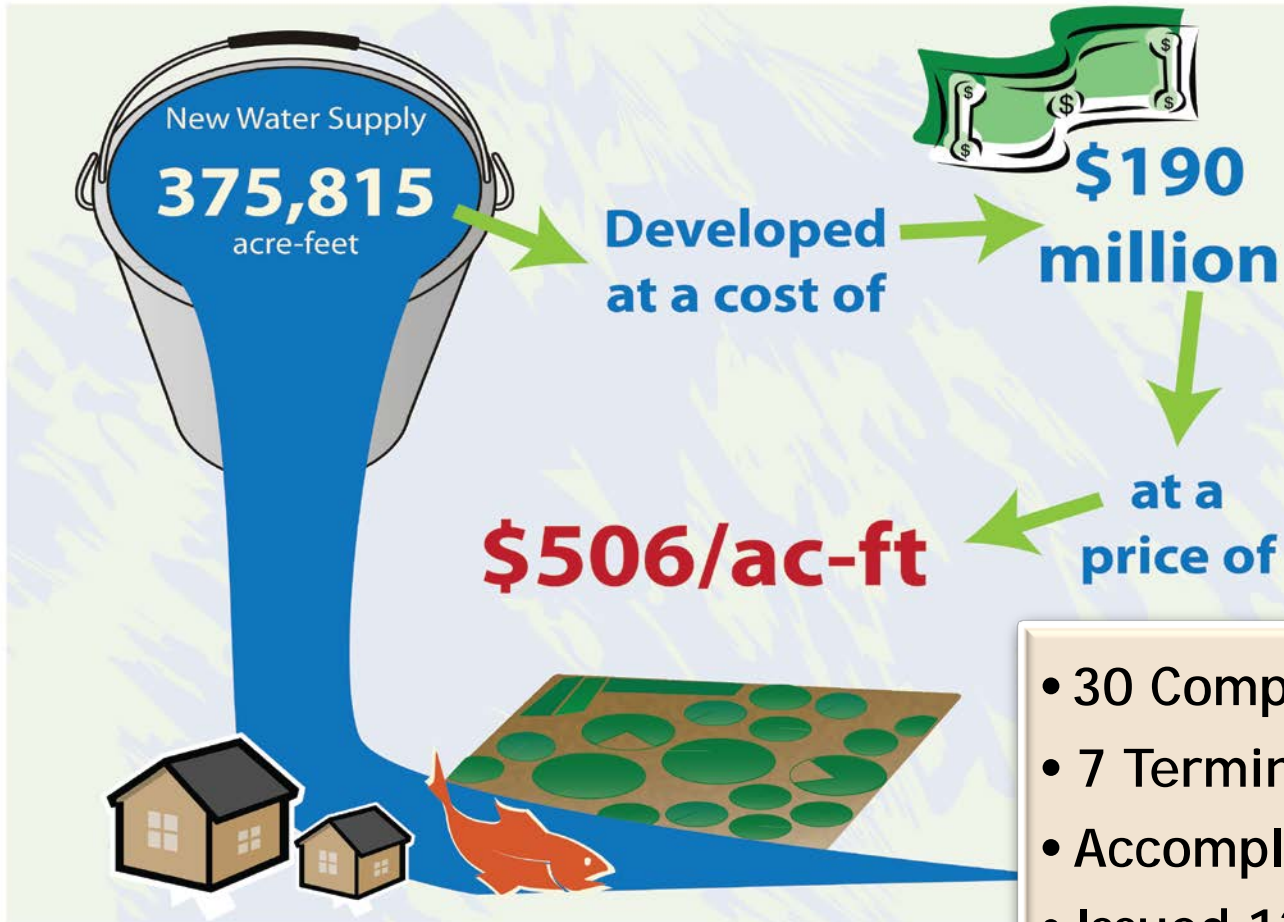
Acre-Feet Out-of-Stream



Acre-Feet Instream

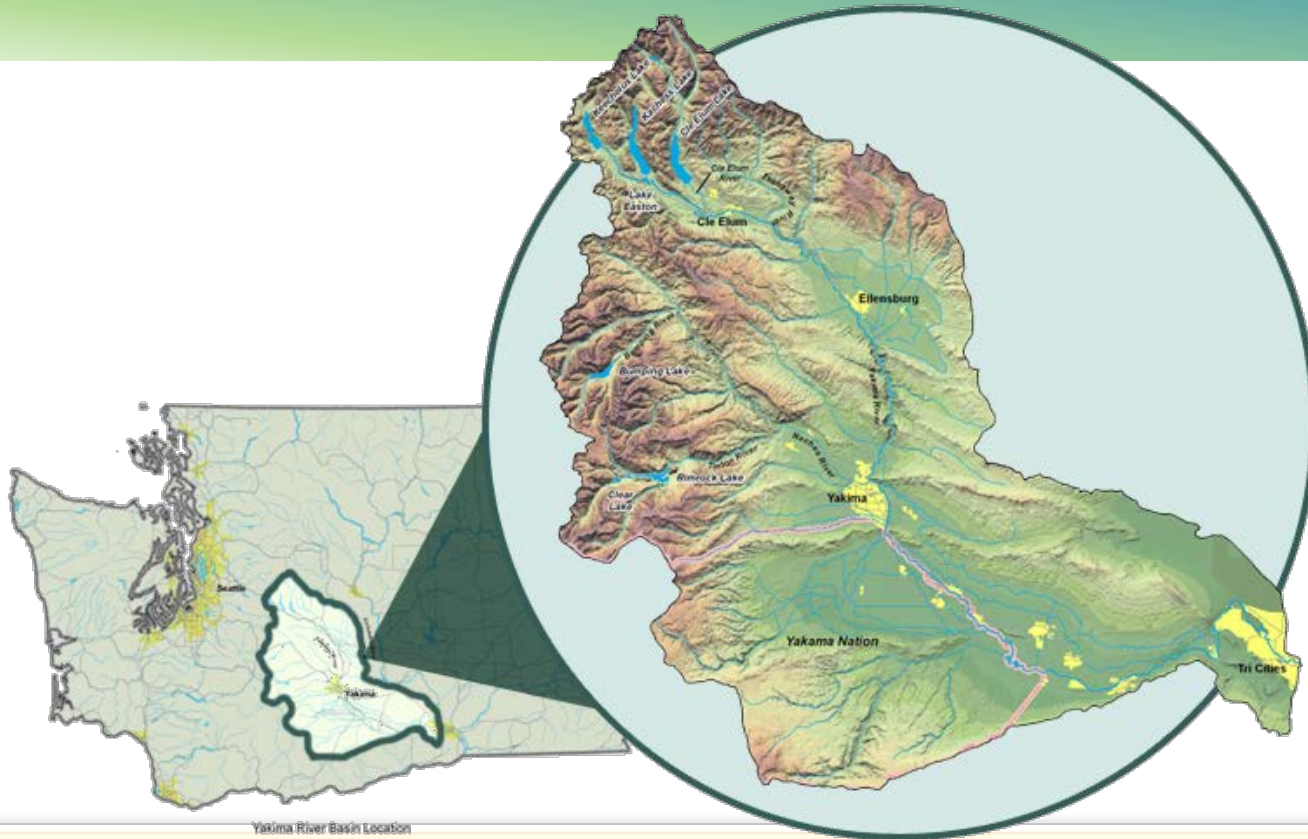


Cost Per Acre-Foot



- 30 Completed Projects
- 7 Terminated Projects
- Accomplished all 5 mandates
- Issued 128 permit decisions
- 2 Supply and Demand Forecasts

Yakima River Basin Overview



- Basin size: 6,155 sq. miles
- Population: 360,000
- \$3.2 billion agriculture economy
- Historically, second only to Snake River in supporting salmon and steelhead runs



BUILDING A FUTURE FOR WATER, WILDLIFE AND WORKING LANDS

YAKIMA RIVER BASIN INTEGRATED WATER RESOURCE MANAGEMENT PLAN

Reservoir Fish Passage

Provide fish passage at:

1. Clear Lake
2. Cle Elum
3. Bumping
4. Tieton (Rimrock)
5. Keechelus
6. Kachess

Enhanced Water Conservation

1. Implement an agricultural water conservation program designed to conserve up to 170,000 acre-feet of water in good water years.
2. Create a fund to promote water use efficiency basin-wide using voluntary, incentive-based programs. Focus on outdoor uses as top priority.

Habitat/Watershed Protection & Enhancement

1. Protect ~70,000 acres of land by acquiring high elevation portions of the watershed and forest and shrub steppe habitat.
2. Evaluate potential wilderness area and wild and scenic river designations to protect streams and habitat.
3. Create a habitat enhancement program to address reach-level floodplain restoration priorities and restore access to key tributaries.

Market Reallocation

Employ a water market and/or a water bank to improve water supply in the Yakima River basin. Market reallocation would be conducted in two phases:

The near-term phase would continue existing water marketing and banking programs in the basin, but take additional steps to reduce barriers to water transfers.

The long-term program would focus on facilitating water transfers between irrigation districts. This would allow an irrigation district to follow land within the district and lease water rights for that land outside the district.

Structural & Operational Changes

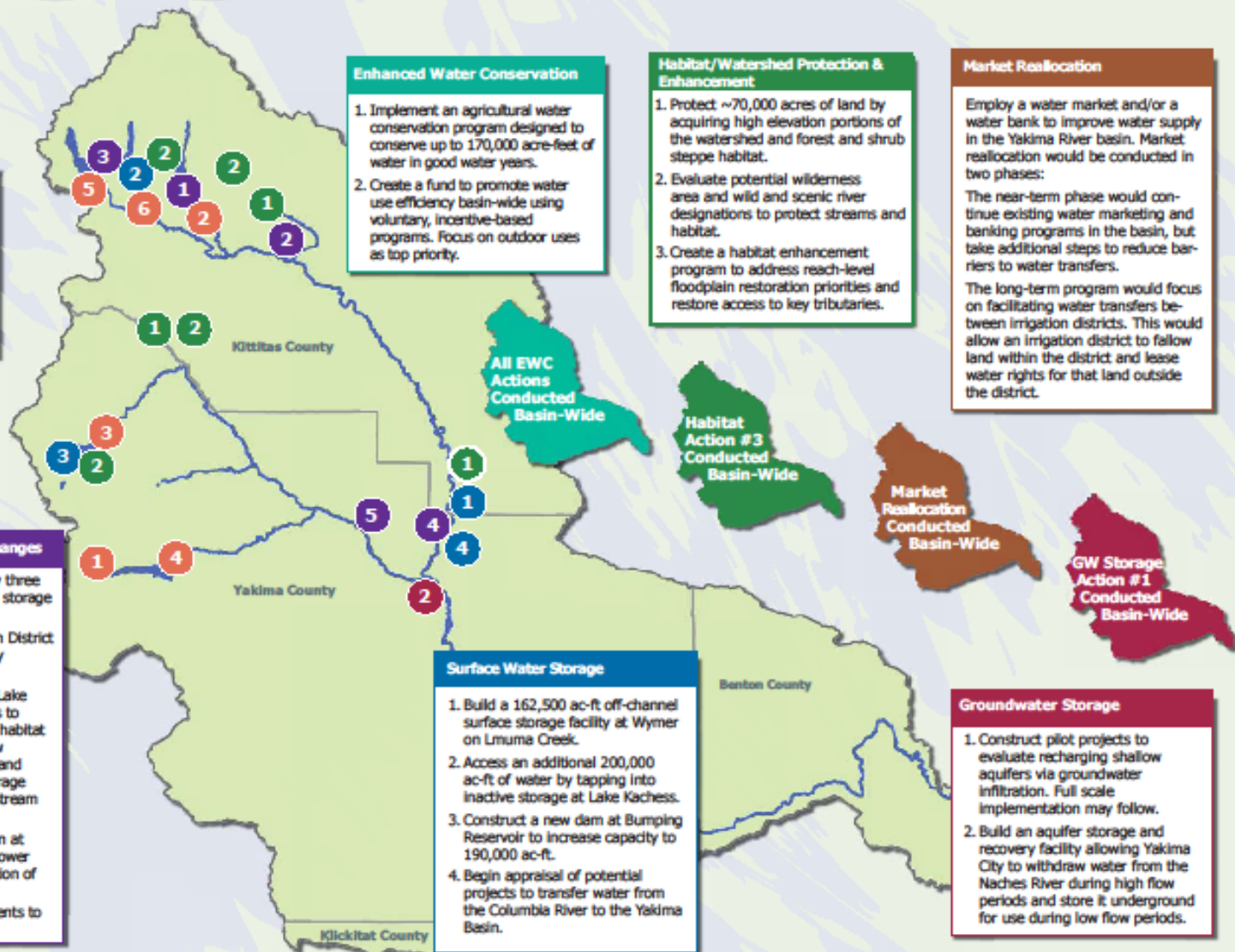
1. Raise the Cle Elum Pool by three feet to add 14,600 ac-ft in storage capacity.
2. Modify Kittitas Reclamation District canals to provide efficiency savings.
3. Construct a pipeline from Lake Keechelus to Lake Kachess to reduce flows and improve habitat conditions during high flow releases below Keechelus and to provide more water storage in Lake Kachess for downstream needs.
4. Decrease power generation at Roza Dam and Chandler power plant to support outmigration of juvenile fish.
5. Make efficiency improvements to the Wapatox Canal.

Surface Water Storage

1. Build a 162,500 ac-ft off-channel surface storage facility at Wymer on Lmuma Creek.
2. Access an additional 200,000 ac-ft of water by tapping into inactive storage at Lake Kachess.
3. Construct a new dam at Bumping Reservoir to increase capacity to 190,000 ac-ft.
4. Begin appraisal of potential projects to transfer water from the Columbia River to the Yakima Basin.

Groundwater Storage

1. Construct pilot projects to evaluate recharging shallow aquifers via groundwater infiltration. Full scale implementation may follow.
2. Build an aquifer storage and recovery facility allowing Yakima City to withdraw water from the Naches River during high flow periods and store it underground for use during low flow periods.



Initial Development Phase

- Addresses first implementation in first 10 years of 30 year plan
- Advances all seven plan elements
- Represents just under 1/3 of estimated plan costs (about \$900M)



Initial Development Phase

- Kachess Drought Relief Pumping Plant (\$205M)
 - Bull Trout Enhancement Plan
 - Keechelus-to-Kachess Conveyance (\$159M)
 - 3 foot pool raise at Lake Cle Elum (\$18M)
 - Cle Elum Reservoir Fish Passage (\$125M)
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- Evaluate, design, construct second fish passage facility at Tieton Dam (\$100M)
 - Habitat and land acquisitions (\$100M)
 - Aquifer Storage and Recovery (\$6M)
 - Agricultural Conservation (\$85M)
 - Water Marketing (\$0.5M)

Yakima River Basin Water Resource Management Act of 2013 - SSSB 5367



Funding

- State commits to 50% of the cost of Integrated Plan, remaining 50% non-state (federal, local, private)
- Funding ration does not apply to individual projects
- Ecology and State Treasurer prepared a cost estimate and financing plan in December 2014

Yakima River Basin Integrated Water Resource Management Plan - Cost Estimate and Financing Plan Legislative Report (December 2014)



Primary State Capital Funding Mechanisms

- Bond sales with debt financing by the legislature
- Establish long-term dedicated revenue stream(s) such as tolls, special taxes, or fees
- Both approaches could involve repayment agreements with end users

Yakima River Basin Integrated Water Resource Management Plan - Cost Estimate and Financing Plan Legislative Report (December 2014)



Dedicated Revenue Stream Options

- Local property tax levies
- State public utility tax
- Local sales tax (1/10 percent increase would raise \$7M per year in Yakima Basin counties)
- City utility taxes
- Local improvement districts/utility local improvement districts
- Municipal bonds

Senate Bill 5628 - Stormwater, Flood Control, and Water Supply Infrastructure Funding



Grant Process

- Competitive grant program - evaluate and rank
- Recommend to Governor for inclusion in budget
- Legislative appropriation needed
- Projects can be removed but not added
- Project proponents must provide 25% match of the non-federal share of project costs (match includes funds, land, in-kind contributions)

Senate Bill 5628 - Stormwater, Flood Control, and Water Supply Infrastructure Funding



Statewide Special Assessment on Property

- \$35 residential less than or = 1 acre
- \$60 residential >1 acre to 5 acres
- \$90 residential >5 acres
- \$125 non-residential less than or = 1 acre
- \$250 non-residential >1 acre to 5 acres
- \$375 non-residential >5 to 10 acres
- \$500 non-residential >10 acres

West Coast Infrastructure Exchange (WCX)



- Formed by Washington, Oregon, California, and British Columbia
- 501(c) non-profit
- Board of Directors appointed by Governors and Treasurers
- A free resource for public agencies exploring innovative infrastructure options

West Coast Infrastructure Exchange (WCX)



Public-Private Partnerships

- Publically owned
- Privately financed
- Long-term, performance-based relationship
- Risk transfer from public to private sectors

West Coast Infrastructure Exchange (WCX)



Candidate Projects

- \$100+ million in capital costs
- Opportunity for design innovation
- Projects lacking access to traditional public funding or financing sources
- Proponent with stable revenue stream (for example, large irrigation districts)

QUESTIONS?



Photo courtesy of Tom Ring