

The Office of Columbia River's 2017-2019 Budget Request



**Columbia River Policy Advisory Group (CRPAG)
August 4th, 2016**

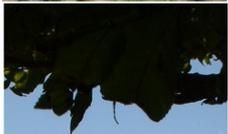


**Presented by
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Budget Development



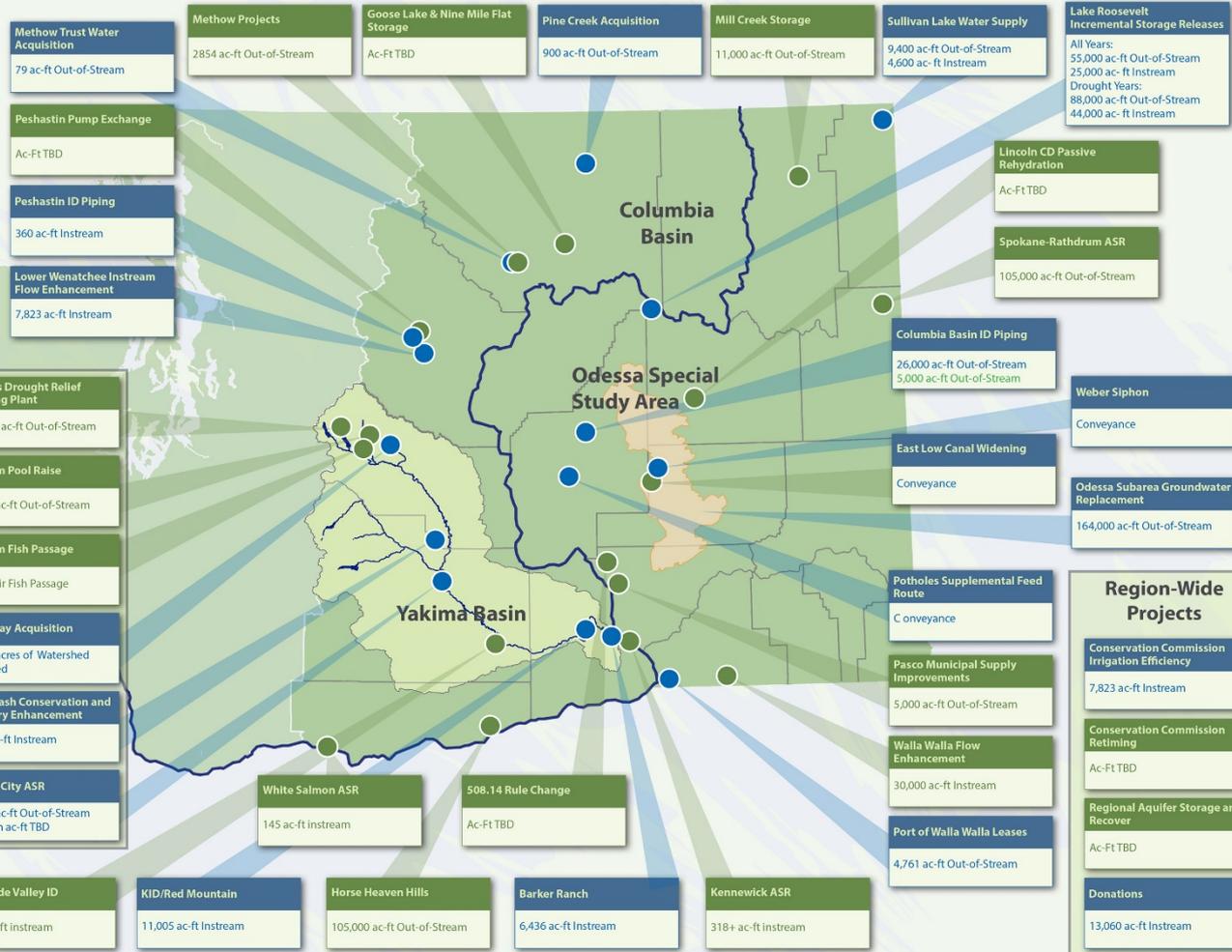
- OCR's 17-19 Budget request reflects the desire to finish water supply projects already underway.
- Generally invest in projects seeking balance:
 - In type of water supply & allocation projects
 - Between mainstem and tributaries in program focus
 - In geographic distribution of projects
 - Between water quantity and overall aquatic resources



OCR Water Projects 2006 - 2016

OCR WATER PROJECTS 2015

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



Yakima Basin Integrated Plan Initial Development Projects

- Kachess Drought Relief Pumping Plant**
200,000 ac-ft Out-of-Stream
- Cle Elum Pool Raise**
14,000 ac-ft Out-of-Stream
- Cle Elum Fish Passage**
Reservoir Fish Passage
- Teamaway Acquisition**
50,272 acres of Watershed Protected

Basin-Wide Projects

- Habitat Enhancement & Restoration through 2015**
3,170 acres of floodplain reconnected
47,921 acres of Little Naches watershed protected
- Enhanced Water Conservation through 2015**
2,874 acre-feet

Other Yakima Basin Integrated Plan Projects

- 226,000 ac-ft Instream & Out-of-Stream

Region-Wide Projects

- Conservation Commission Irrigation Efficiency**
7,823 ac-ft Instream
- Conservation Commission Retiming**
Ac-Ft TBD
- Regional Aquifer Storage and Recover**
Ac-Ft TBD
- Donations**
13,060 ac-ft Instream

Odessa Groundwater Replacement Project



FUNDING:	\$10-15 million
MITIGATION:	\$ 0.5 million
EST. NWS:	87,700 acres (total)
OCR DIR:	Odessa

Where Have We Been: Columbia River Partners MOU, Weber Siphon Complex, Lake Roosevelt Incremental Storage and Releases, Potholes Supplemental Feed Route, and Odessa Subarea Special Study.

Where are We Now: Widening East Low Canal, Lind Coulee Siphon Complex, county road bridge upgrades, radial gates installed, and first canal side pumping plant underway.

Icicle Creek Water Resource Management Strategy

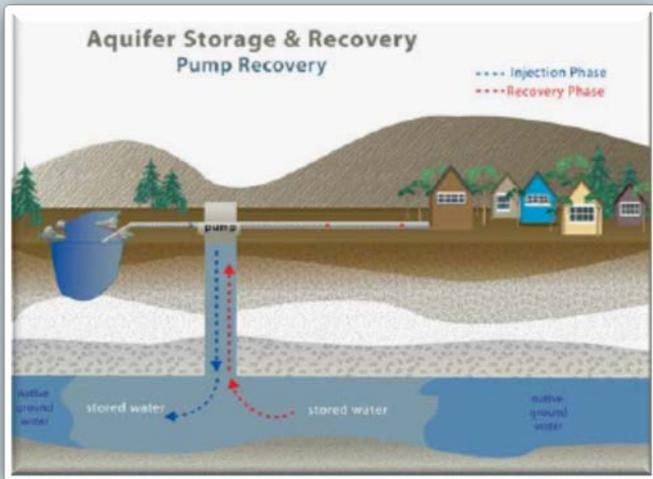


FUNDING: \$3 - 4 million
EST. NWS: 60+ cfs
OCR DIR: Instream, New Water Rights, Interruptible Rights

Where Have We Been: Convened Icicle Workgroup, developed guiding principles & finalized integrated project list of conservation, fish habitat, fish passage, storage optimization & hatchery improvements to meet out-of-stream demands and restore stream flows in Icicle Creek.

Where Are We Now: Initiated Programmatic SEPA EIS, seek funding partners to begin to early action implementation of integrated project.

ASR Exploration and Development



FUNDING: \$2 – 3 million
EST. NWS: TBD
OCR DIR: Instream, New Water Rights, Interruptible Water Rights

Where Have We Been: Invested incrementally in aquifer storage and recovery projects (Boise Cascade, Kennewick, White Salmon, Yakima) over the past decade. Exploration of off-channel storage options.

Where Are We Now: Have a better sense of environmental benefits, economic drivers, and permitting requirements for ASR projects. Still need some level of funding for streamlining and performance reliability of ASR as a water supply development tool.

Columbia Basin Project - Coordinated Conservation



FUNDING: \$1.5 – 3 million
EST. NWS: ~34,800 ac-ft (total)
OCR DIR: Odessa

Where Have We Been: OCR began investing with the 3 Columbia Basin Irrigation Districts to implement conservation projects. The conserved water is used to replace groundwater for 10,000 acres of irrigation lands in the Odessa Subarea & for fish and wildlife enhancements.

Where Are We Now: Continue the coordinated conservation program and began water deliveries to direct canal pumpers in 2015.

Horse Heaven Hills - Switzler Canyon Storage



FUNDING: \$1 million
EST. NWS: 44,000 ac-ft
OCR DIR: New Water Rights,
Pending Apps.,
Instream Flows

Where Have We Been: Feasibility and fatal flaw analysis of a surface storage reservoir to be constructed in Switzler Canyon in WRIA 31. Reservoir is filled during periods of water availability on the Columbia River and released from the reservoir as mitigation for new water demands when water is not available.

Where Are We Now: Survey of potential landowners & water users, SEPA EIS scoping.

Walla Walla Basin Integrated Plan



FUNDING: \$0.5 million
EST. NWS: TBD
OCR DIR: Instream Flows

Where Have We Been: Walla Walla Basin Integrated Flow Enhancement Study has been evaluating strategies to increase stream flows in the Walla Walla River Basin.

Where Are We Now: Walla Walla Basin Work Group needs to complete NEPA/SEPA and finalize an integrated project list of water acquisition, conservation, pump exchange, fish habitat, &/or groundwater recharge projects, to restore stream flows in the river.

2017 - 2019 Projects: New Project Proposals



- **Stemilt WRIA 40A, Small Scale Storage Feasibility - \$100,000**

Project Proponent – Chelan County

- **Public Private Partnerships - \$200,000**

Project Proponent – Ecology

- **Colville Tribe - Water Supply Development - \$500,000**

Project Proponent – Colville Tribe

- **Walla Walla Leased Water - \$1 million**

Project Proponent – Ecology

- **Lake Roosevelt Incremental Storage Releases Program - \$1 mill**

Project Proponent – Ecology

2015 - 2017 Projects: New Project Proposals Cont'd



- **Water Acquisitions and Leases - \$1 million**

Project Proponent – Ecology

- **New Water Supply Development Projects - \$1 million**

Project Proponent – Ecology

- **Pasco Basin - 508-14 Rule Making - \$500,000**

Project Proponent – Ecology & US Bureau of Reclamation

- **OCR Staffing and WDFW Staffing Support - \$2 million**

Project Proponent – Ecology & WDFW

- **OCR Facilitation & Leg. Report Support - \$500,000**

Project Proponent – Ecology

Yakima Basin Integrated Plan



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 fallow 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 Wapetox Canal.

Surface Water Storage

1. Build a 162,500 ac-ft off-channel surface storage facility at Wymer on Lnuma 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.



17-19 Yakima Basin Integrated Plan



Yakima Basin Integrated Plan Elements		Projects	Appropriated Funds 2015-2017	Anticipated Funding Request 2017-2019
Habitat	Tributary/Mainstem Habitat Restoration Projects		3	5.4
	Bull Trout Enhancement - Phase 1		1.7	0
	Federal, Tribal and/or Local Habitat Actions		0.3	0
Fish Passage	Cle Elum Dam passage		9	9
	Tieton Dam passage		0.5	0
	Clear Lake Dam passage		0	1.5
Structural & Operational Modifications	Cle Elum Pool Raise		1	3
	KKC		4.2	0
Surface Storage	KDRPP (cost assumes floating plant alternative)		4.3	2.4
	Wymer or Bumping Reservoir		0	3
Groundwater Storage	Regional Storage Options		0.5	1.1
Water Conservation	Agricultural Conservation Projects		4.8	5
	Municipal/Domestic Conservation Programs		0.2	0.1
Market Driven Water Reallocation	General support for markets and banking		0.5	0.6
Totals			\$ 30 million	\$ 31.1 million

2017 - 2019 Capital Budget - Conclusions



- OCRs 17-19 capital budget proposal = **\$35** million.
- YBIPs capital budget proposal = **\$31.1** million.
- Agency budget proposal due to OFM in Sept. 2016.
- After the 17-19 biennium, this leaves approximately zero (\$0) million in OCR's bonding authority.