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CENTRAL OREGON
Irrigation
DISTRICT
Since 1918

Overview
Past
Current
Future
Next Steps

BALANCING WATER DISTRIBUTION WITHIN BASIN

District Offices

1	Tillamook
2	Eugene
3	The Dalles
4	Canyon City
5	Pendleton
6	La Grande
7	Enterprise
8	Baker City
9	Vale
10	Burns
11	Bend
12	Lakeview
13	Medford
14	Grants Pass
15	Roseburg
16	Salem
17	Klamath Falls
18	Hillsboro
19	Coquille
20	Clackamas
21	Condon

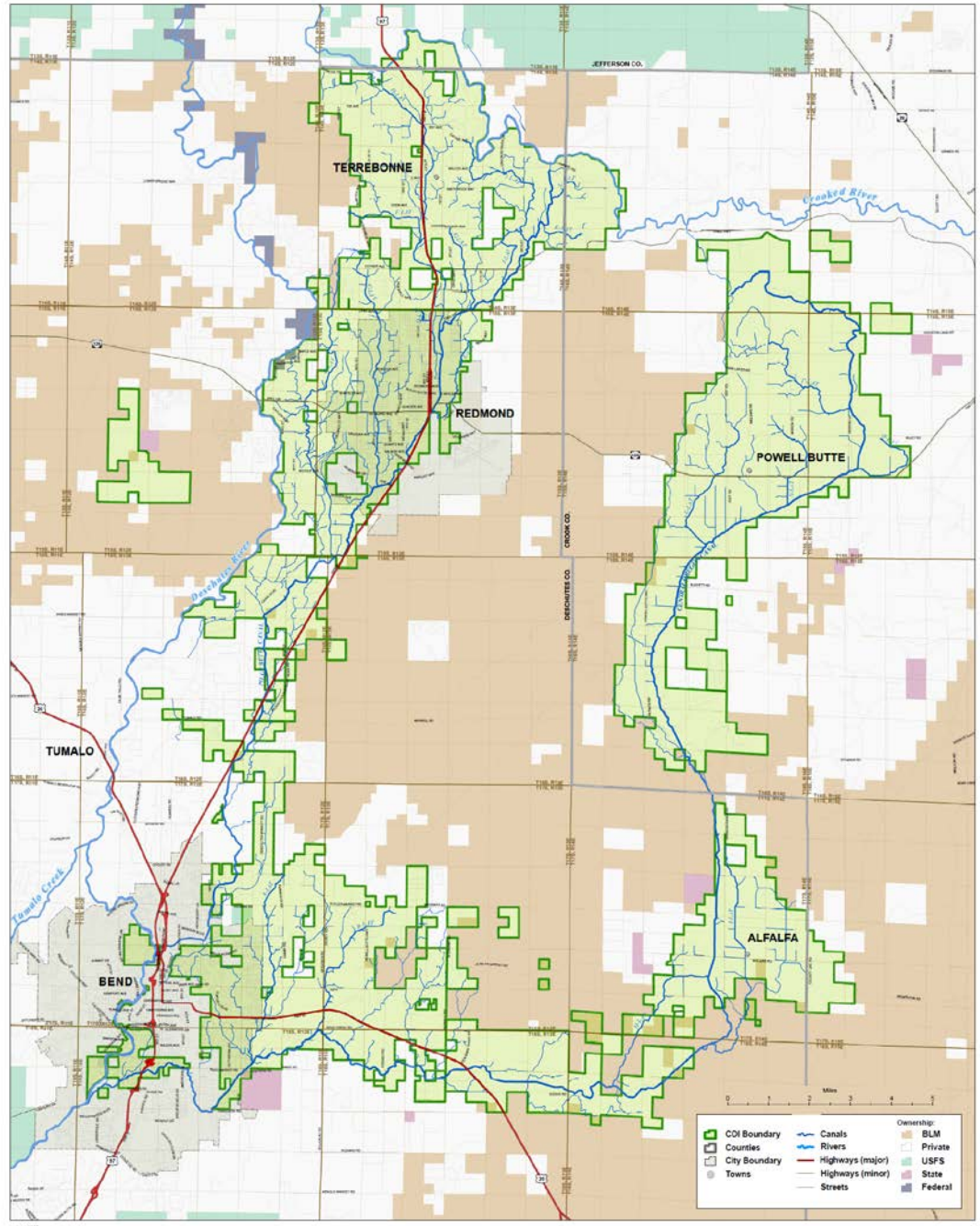
- District office
- Region office
- District boundary
- Region boundary
- County boundary

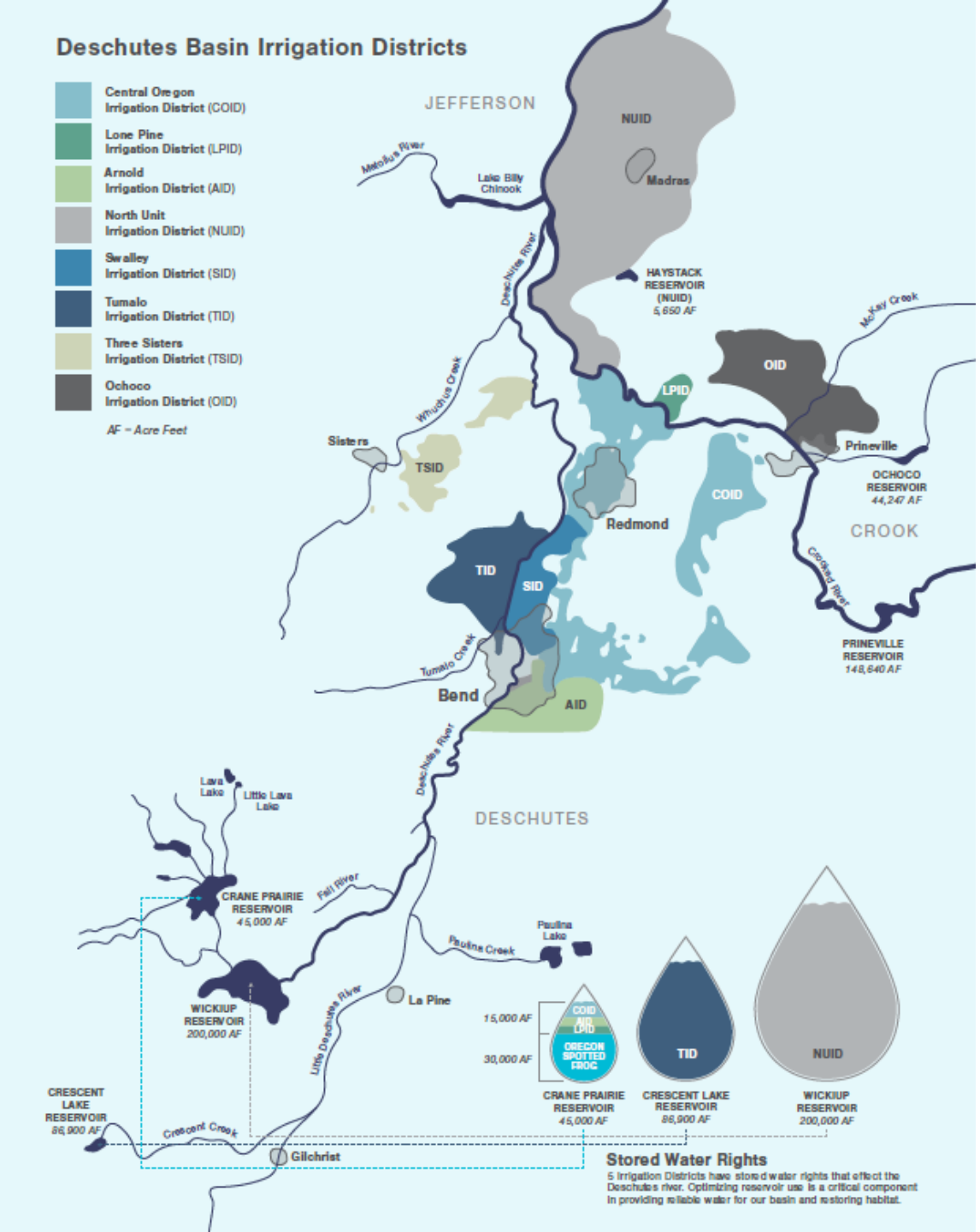
0 10 20 30 40 50 Miles

State of Oregon
Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1266
(503)986-0900
www.wrd.state.or.us

Regions and Watermaster Districts 2017

CENTRAL OREGON IRRIGATION DISTRICT

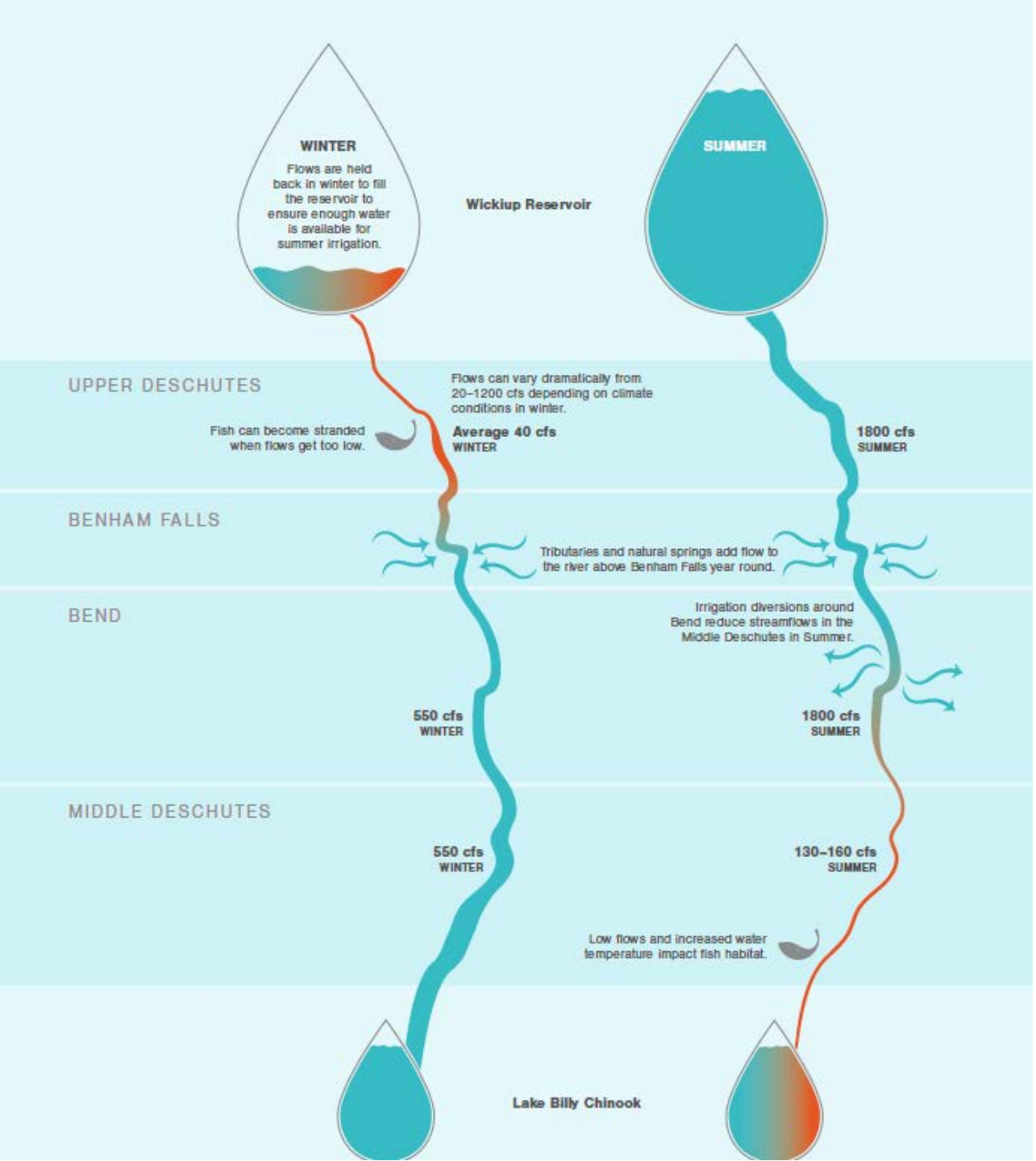




Deschutes Basin Irrigation Districts

PAST

- COID & partners were instrumental in bringing forward the conservation statute.
- Completed 6 conserved water projects resulting in 29 cfs of conserved water protected instream.
- Since 2005, 2,082 acres of COID water permanently transferred instream for groundwater mitigation and flow restoration.
  - 62 cfs in diversion reductions with 36 cfs protected instream.
- Participate in annual instream lease program protecting an average 30 cfs.



Historical Deschutes River Flows

Current

Habitat Conservation Plan Update

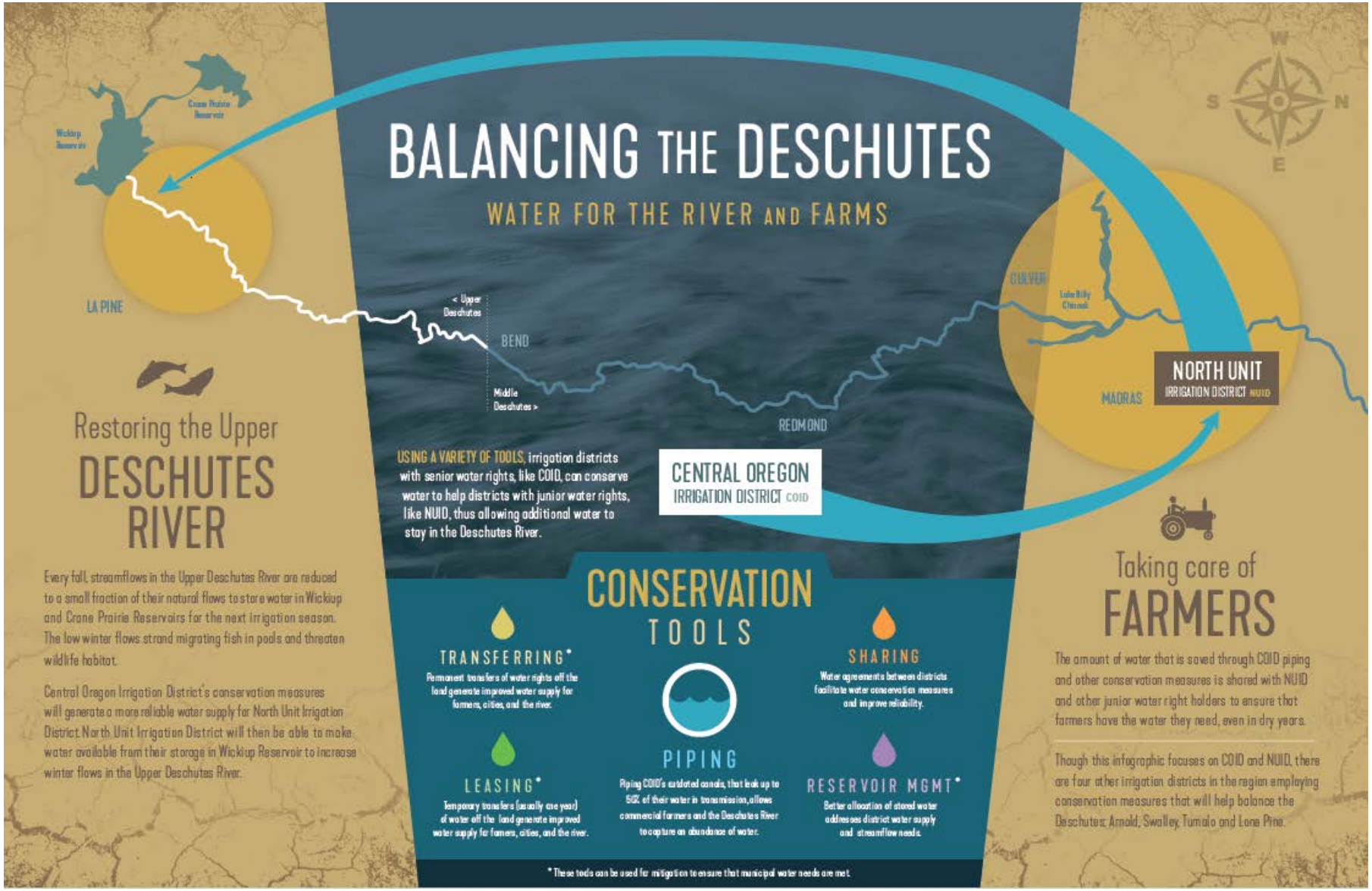
Basin Study Work Group Update
Studies identified:

- Changing conditions, water demand, and a suite of options to meet them.

The challenge:

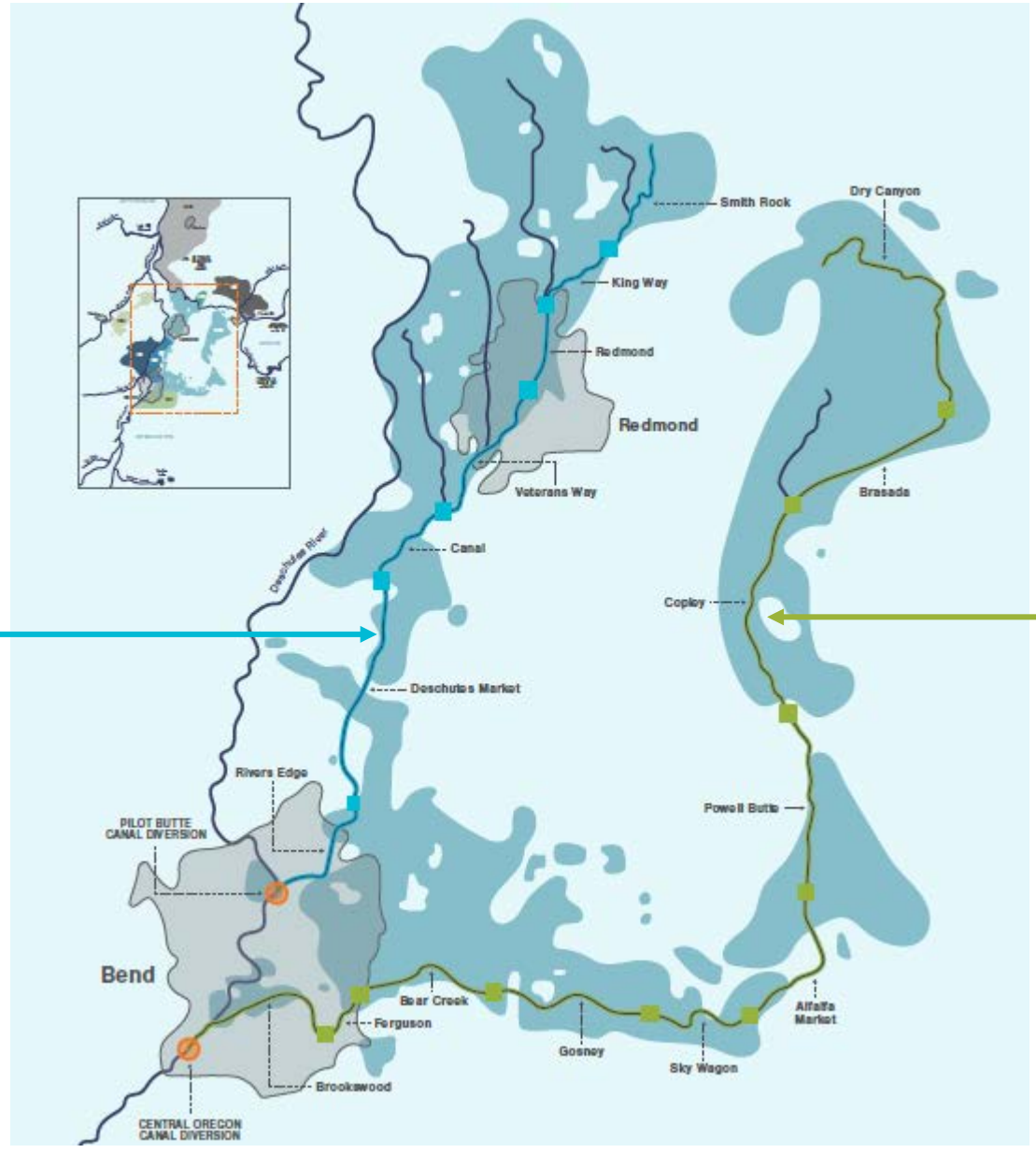
- Rules may not be in place to embrace the opportunities.

Planning for the Future


BALANCING THE DESCHUTES
WATER FOR THE RIVER AND FARMS
Crane Prairie Reservoir
Wickiup Reservoir
LA PINE
< Upper Deschutes
BEND
Middle Deschutes >
REDMOND
CULVER
Lake Billy Chinook
MADRAS
NORTH UNIT IRRIGATION DISTRICT NUID
CENTRAL OREGON IRRIGATION DISTRICT COID
USING A VARIETY OF TOOLS, irrigation districts with senior water rights, like COID, can conserve water to help districts with junior water rights, like NUID, thus allowing additional water to stay in the Deschutes River.
Restoring the Upper
DESCHUTES RIVER
Every fall, streamflows in the Upper Deschutes River are reduced to a small fraction of their natural flows to store water in Wickiup and Crane Prairie Reservoirs for the next irrigation season. The low winter flows strand migrating fish in pools and threaten wildlife habitat.
Central Oregon Irrigation District's conservation measures will generate a more reliable water supply for North Unit Irrigation District. North Unit Irrigation District will then be able to make water available from their storage in Wickiup Reservoir to increase winter flows in the Upper Deschutes River.
CONSERVATION TOOLS
TRANSFERRING*
Permanent transfers of water rights off the land generate improved water supply for farmers, cities, and the river.
LEASING*
Temporary transfers (usually one year) of water off the land generate improved water supply for farmers, cities, and the river.
PIPING
Piping COID's outdated canals, that leak up to 50% of their water in transmission, allows commercial farmers and the Deschutes River to capture an abundance of water.
SHARING
Water agreements between districts facilitate water conservation measures and improve reliability.
RESERVOIR MGMT*
Better allocation of stored water addresses district water supply and streamflow needs.
* These tools can be used for mitigation to ensure that municipal water needs are met.
Taking care of
FARMERS
The amount of water that is saved through COID piping and other conservation measures is shared with NUID and other junior water right holders to ensure that farmers have the water they need, even in dry years.
Though this infographic focuses on COID and NUID, there are four other irrigation districts in the region employing conservation measures that will help balance the Deschutes: Arnold, Swalley, Tumalo and Lone Pine.

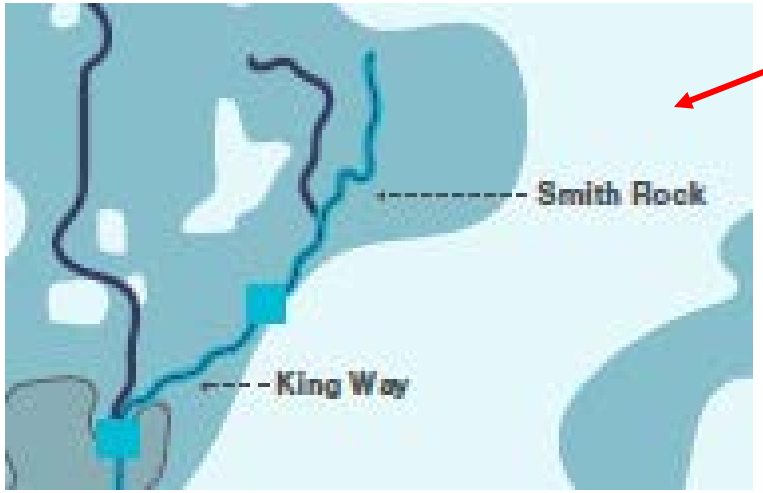
SYSTEM IMPROVEMENT …conservation potential

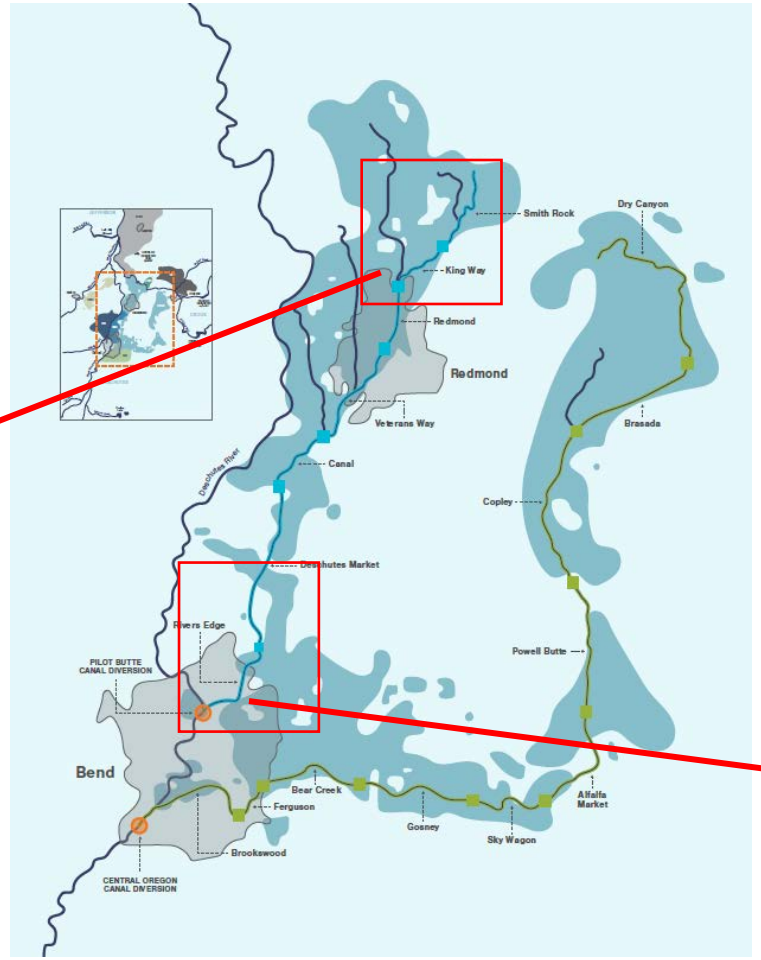
Pilot Butte Canal
156 cfs
(59,163 AF)



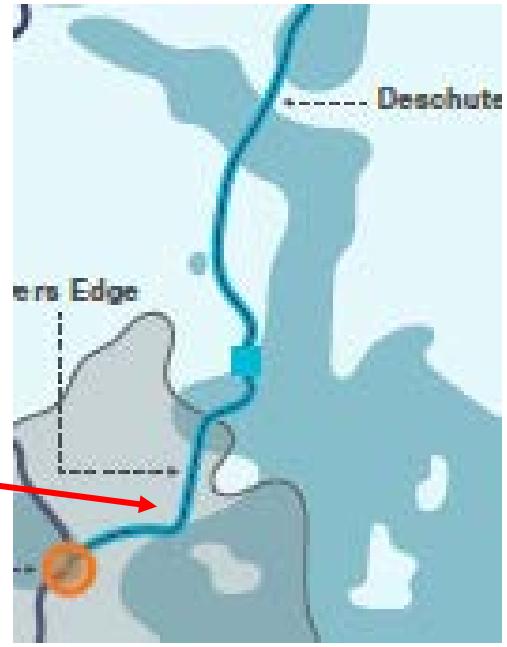
Central Oregon Canal
99 cfs
(37,300 AF)

Phase 1
31cfs





Phase 2
37cfs



Capital Projects

Next Steps

- Reduce NUID reliance on Wickiup storage by transferring COID conserved water to NUID lands.
- Transfer off NUID water, exchanging it with the senior COID conserved water.
- Transfer Wickiup storage instream during winter season.

In Addition:

- Create mitigation credits from the instreamed storage for growing Central Oregon cities.
  - Winter storage releases may balance the negative impact on winter flows caused by current, seasonal mitigation.

What Worked in the Past Doesn't Work in the Future

Transferring COID urbanizing acres instream for groundwater mitigation is no longer a viable option.

- COID Instream transfers do not increase winter flows in the upper Deschutes River.

- Does not help junior irrigation district partners reduce dependence on storage.

Finding Flexible Solutions

Form a workgroup, including OWRD staff, irrigation districts, municipal partners, and others, to develop solutions.

- Evaluate current ORS & OAR
  - COID pilot project
- Develop legislation

Thank you

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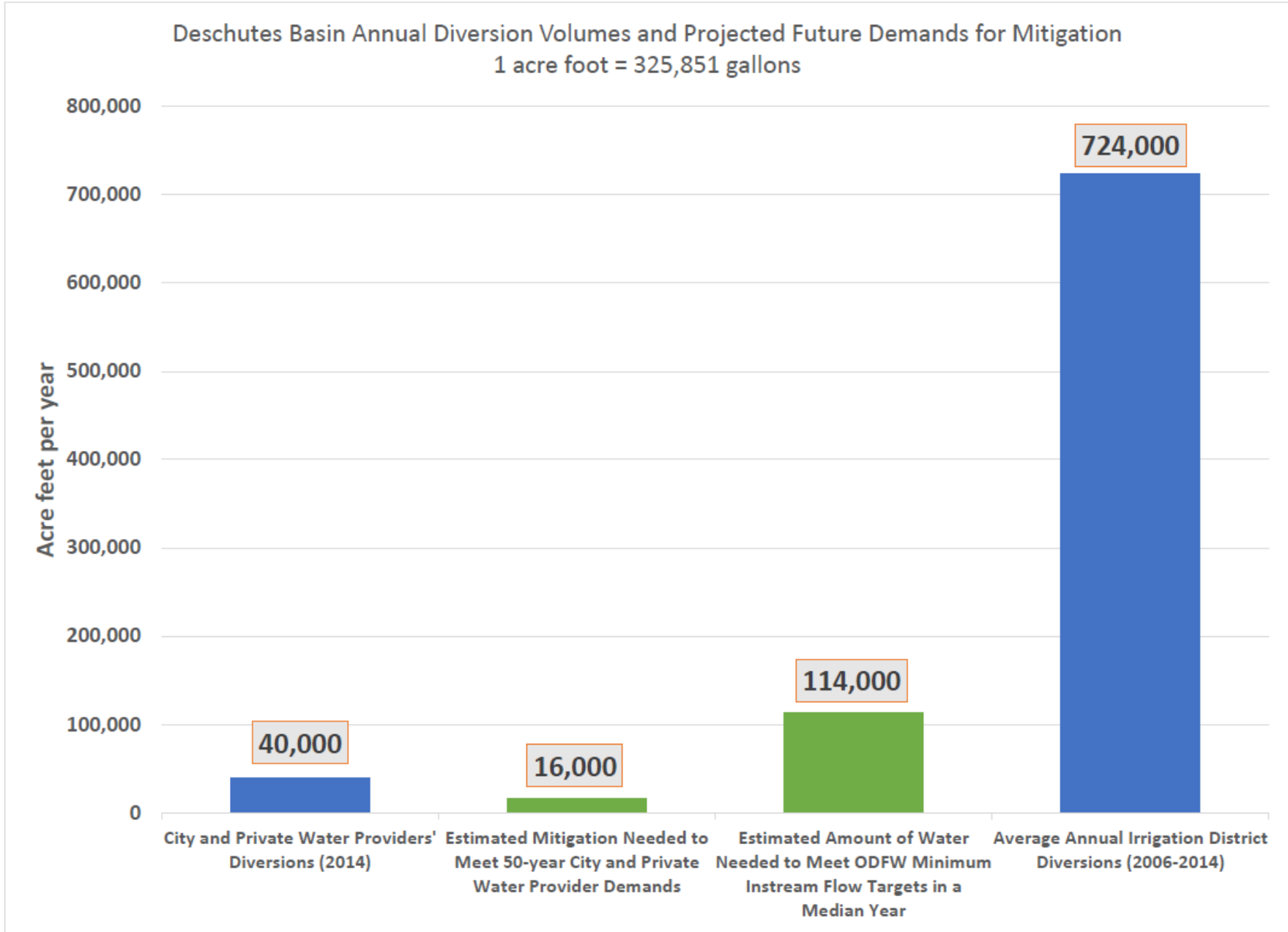
Since 1918


Deschutes Basin Annual Diversion Volumes and Projected Future Demands for Mitigation
1 acre foot = 325,851 gallons
Acre feet per year
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
40,000
16,000
114,000
724,000
City and Private Water Providers' Diversions (2014)
Estimated Mitigation Needed to Meet 50-year City and Private Water Provider Demands
Estimated Amount of Water Needed to Meet ODFW Minimum Instream Flow Targets in a Median Year
Average Annual Irrigation District Diversions (2006-2014)