

# Where's the Water?

## Integrating flow into habitat restoration



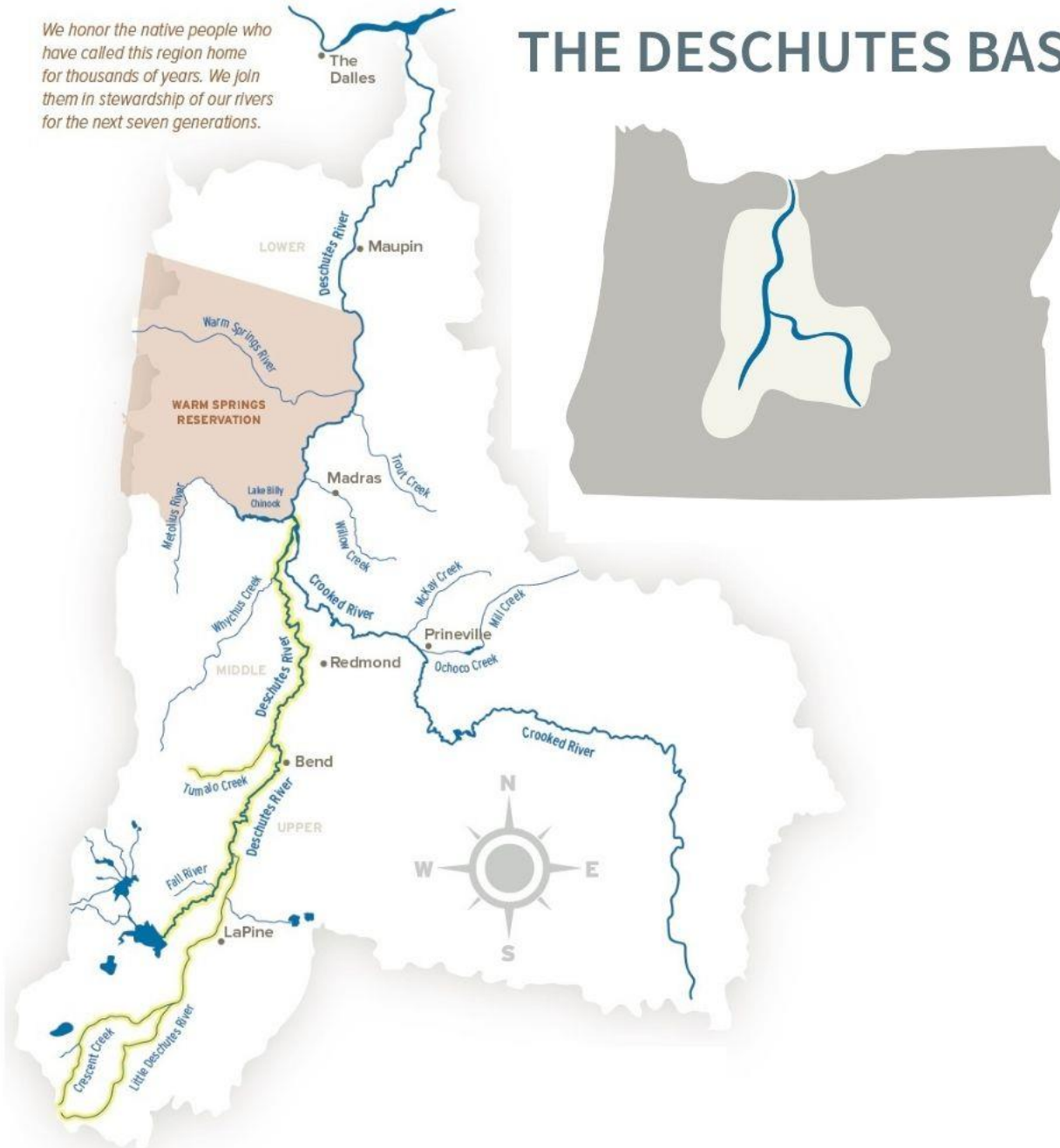
River Restoration Northwest, February 7, 2023  
Kate Fitzpatrick, Executive Director



DESCHUTES RIVER  
CONSERVANCY

*We honor the native people who have called this region home for thousands of years. We join them in stewardship of our rivers for the next seven generations.*

# THE DESCHUTES BASIN



# OUTLINE

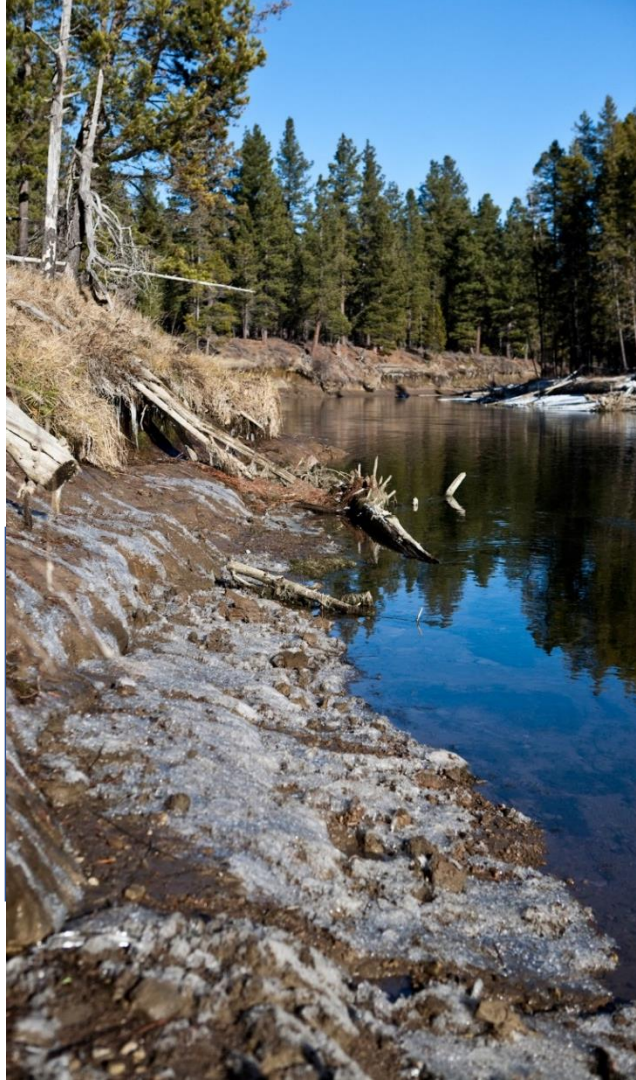


- Why Flow Restoration?
- Water Rights 101
- Flow Restoration Tools
- Examples

## Deschutes River

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98% of flows were diverted for irrigation



## Whychus Creek

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Every 2 out of 3 years, the creek would run dry



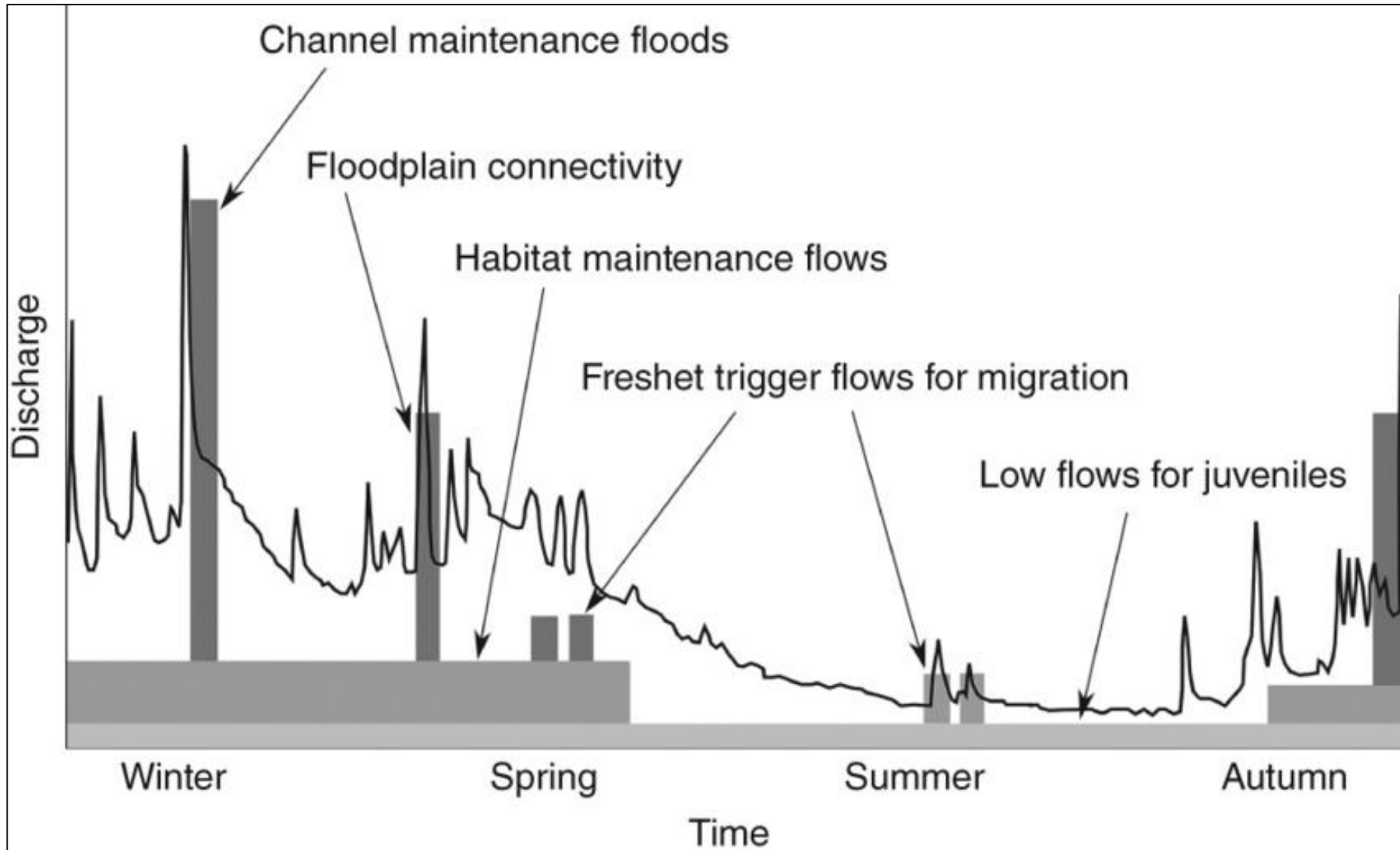
## Crooked River

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Extensively diverted flows would leave only a trickle of water at Smith Rock



# Flow Components to Consider



# Water Rights 101

- Public owns water; managed by states
- Doctrine of Prior Appropriation- 1<sup>st</sup> in Time, 1<sup>st</sup> in Right
- “Appurtenancy”
- “Use it or Lose it”
- “Beneficial Use”
  - In Oregon, “instream use” not “beneficial use” until 1987



# Flow Restoration Tools

- Instream Leases
- Instream Transfers
- Management Agreements
- Allocations of Conserved Water
- → Basin-wide Water Banking

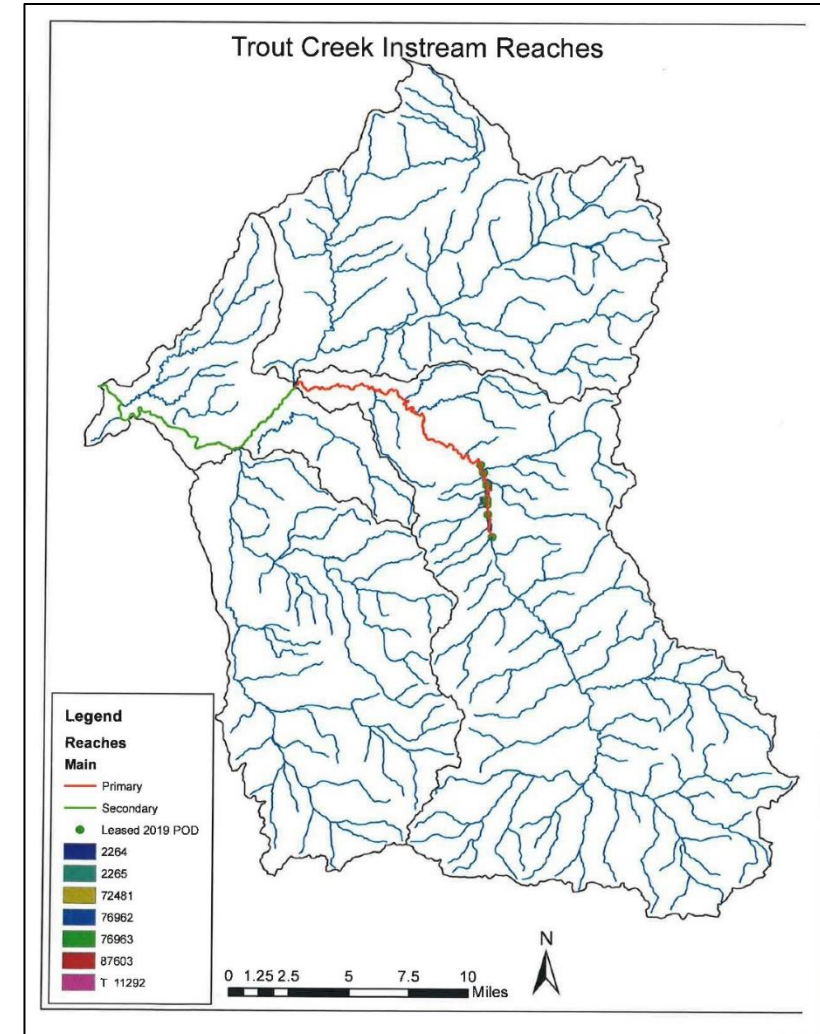


# Example 1. Trout Creek

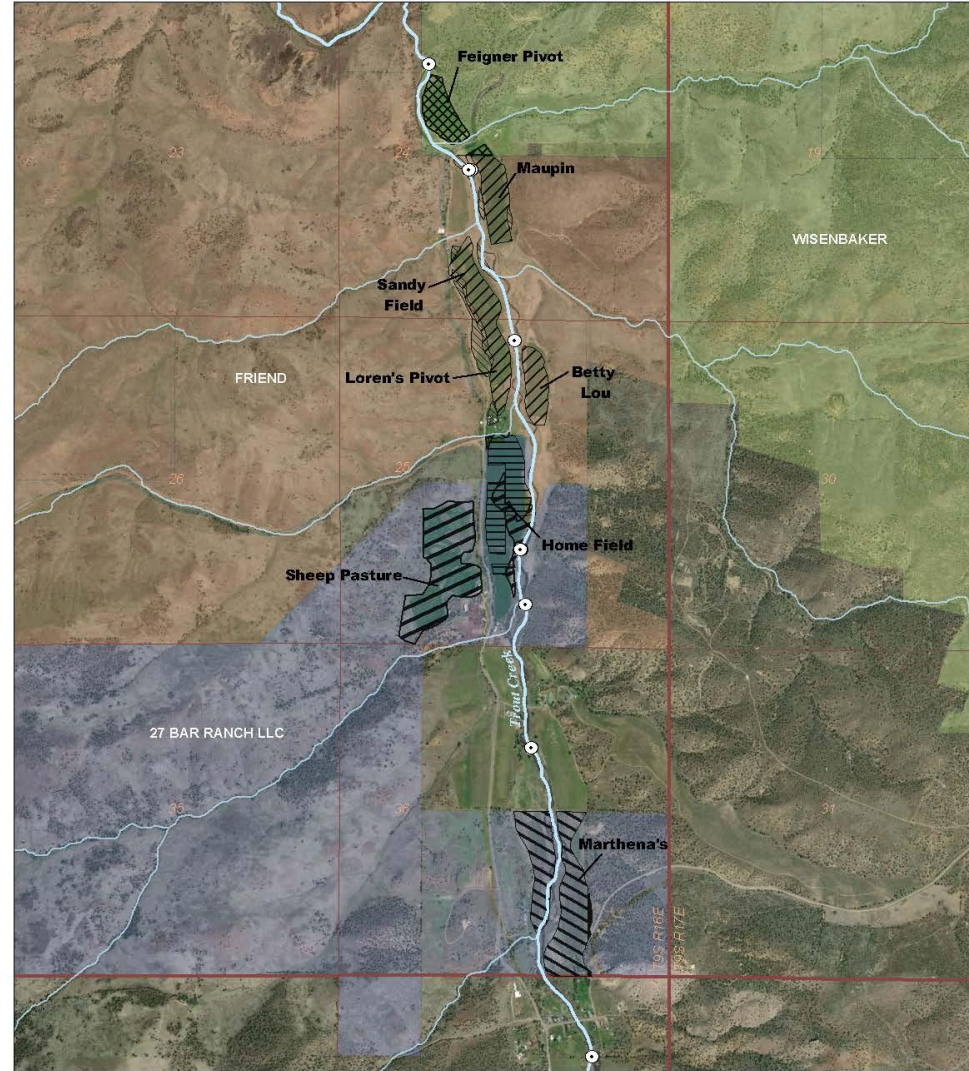
## One Landowner, 1 Tool



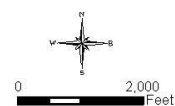
- Important steelhead tributary
- Flow need prioritized in one reach in mid-late summer
- Several large landowners
- Complementary habitat work



# Trout Creek Forbearance Agreement



Source:  
 Jefferson County GIS data,  
 OWRD Water Rights Information System  
 ESRI imagery  
 holmes\_forbearance\_aerial.mxd\_03/25/20



### Forbearance Acres

	T11292		76962
	2264		76963
	2265		87603
	72481		

### Land Owner

	27 Bar Ranch LLC		Township
	Friend		Section
	Wisembaker		Point of diversion

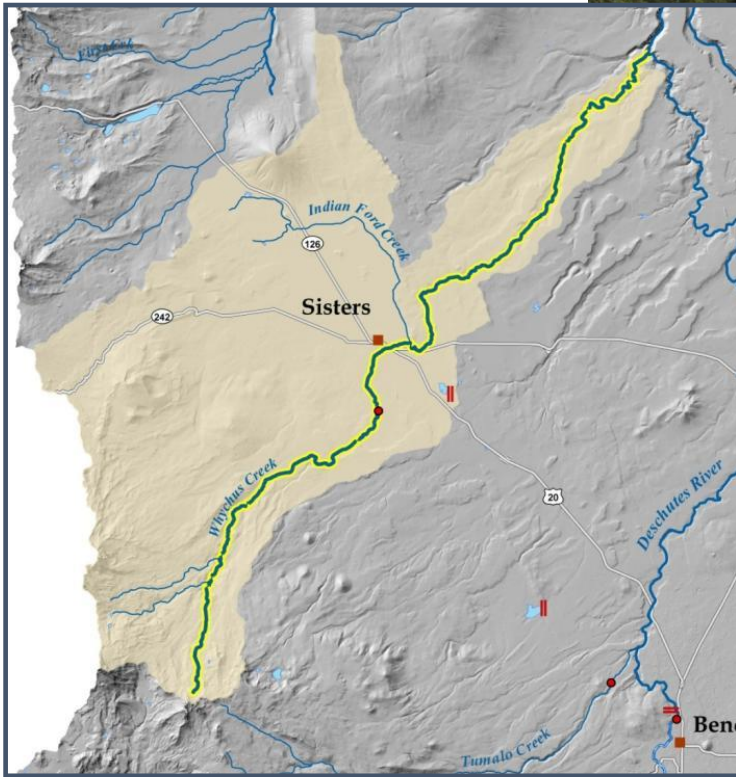


# Trout Creek

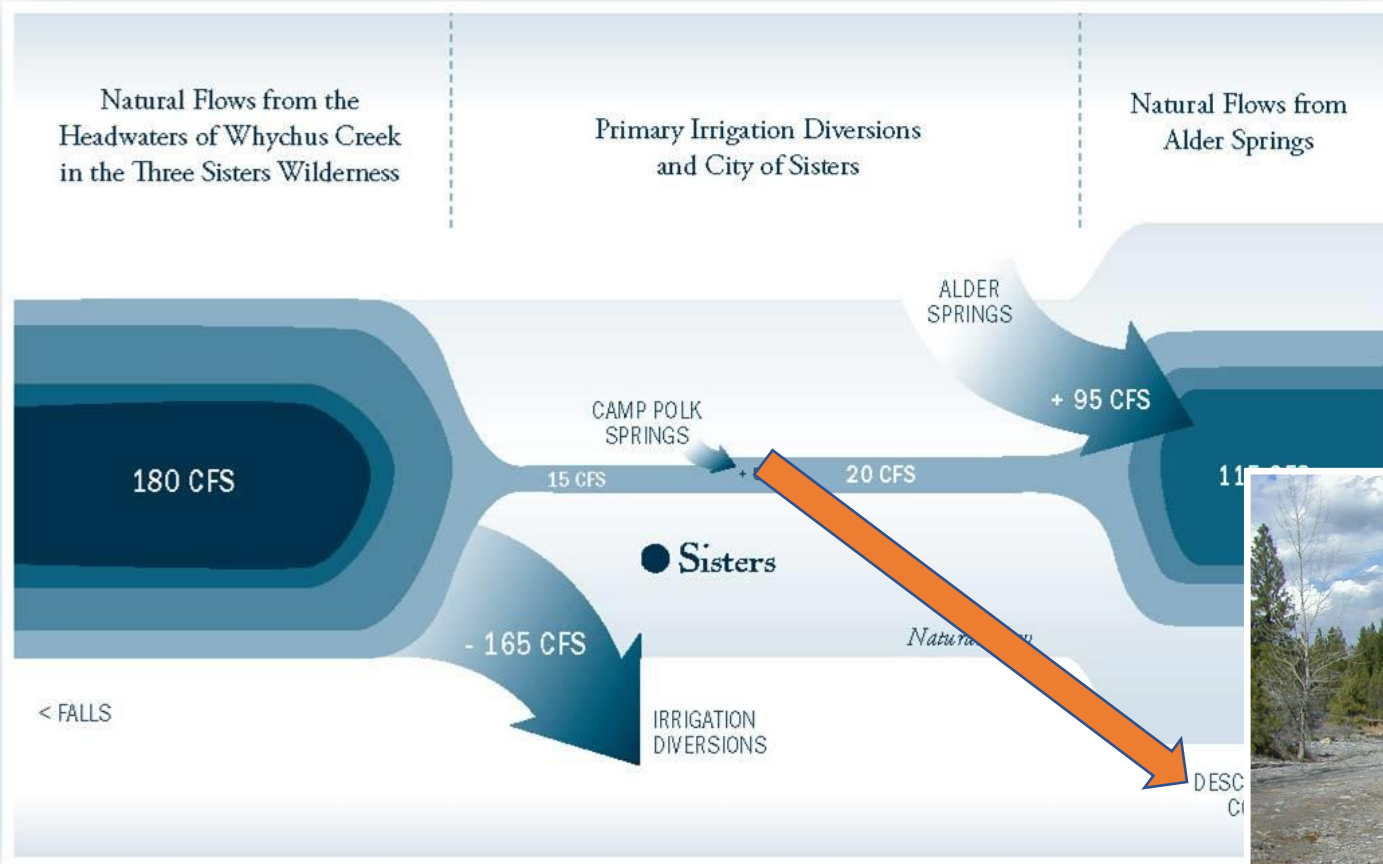


# Example 2. Whychus Creek

“Medium” amount of water users, several tools



# Flow: When and Where



# Flow Tools

## Piping

- 166,506 linear feet of pipe (over 31 miles)
- 28.91 cfs restored instream



## Leasing

- 350-400 acres leased annually
- 7.5 cfs restored annually



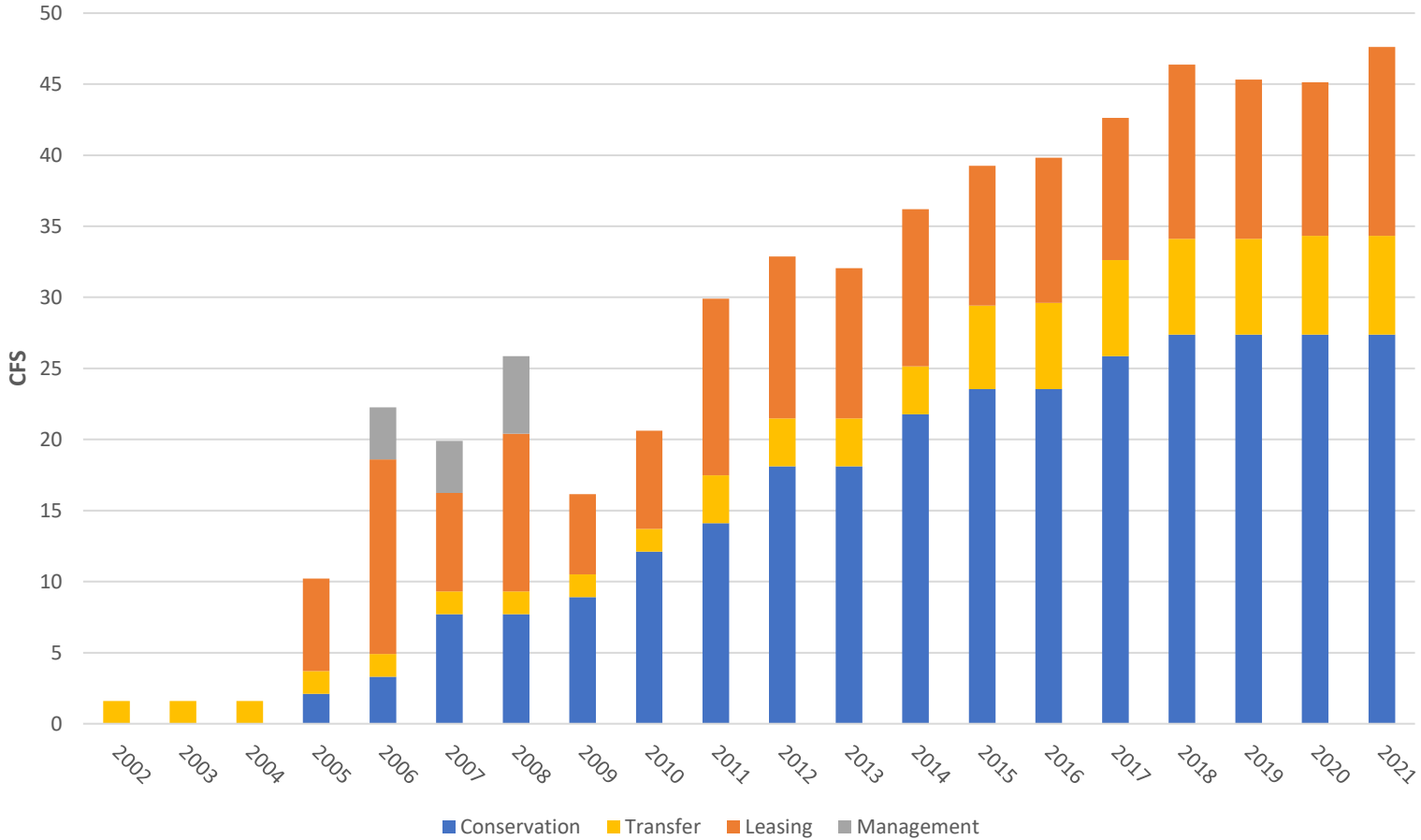
## Acquisitions

- Instream transfers
- 4.5 cfs permanently restored

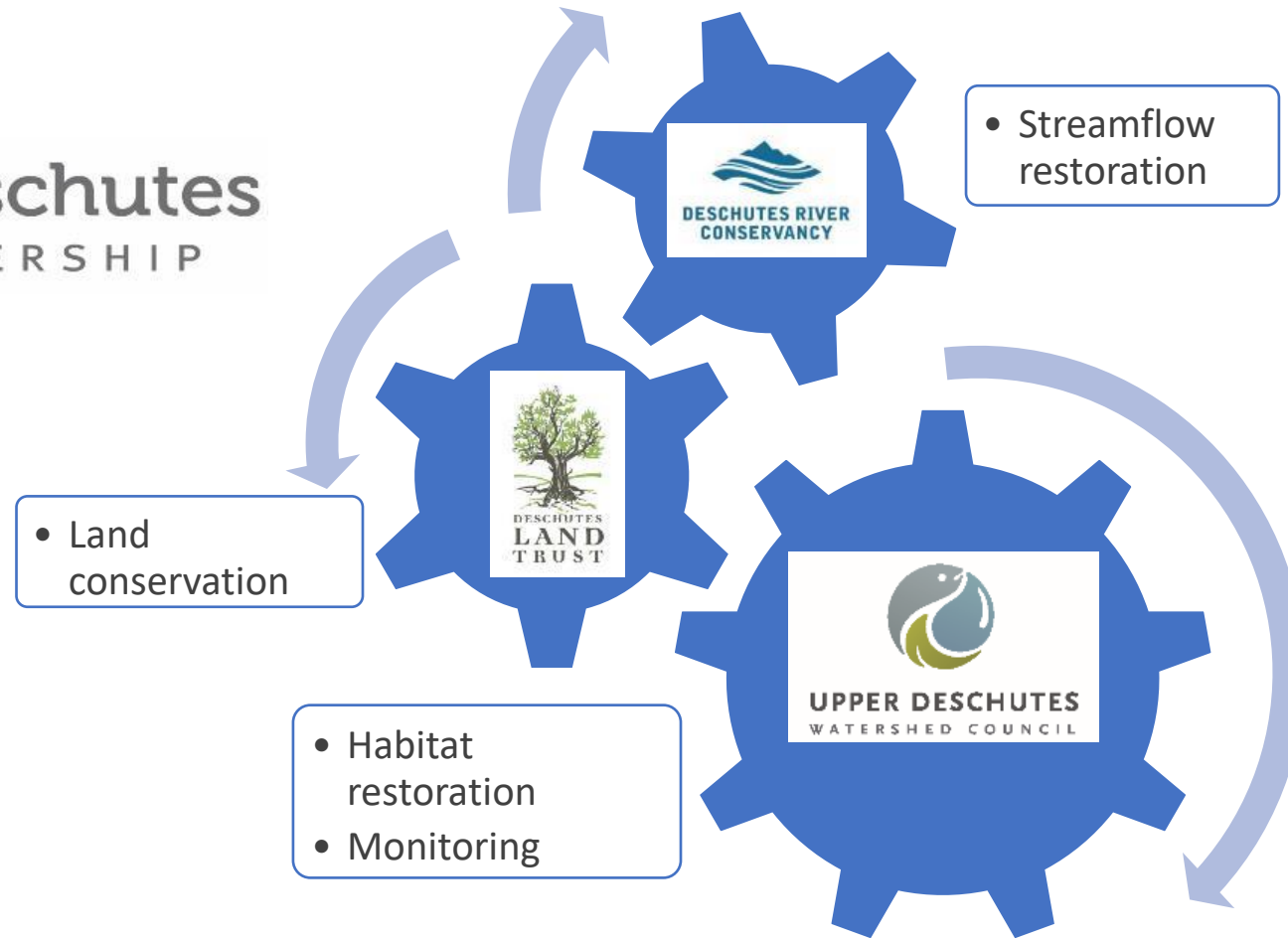


# Whychus Streamflow Results

Whychus: Maximum Rates 2002-2021



# Integration with Restoration



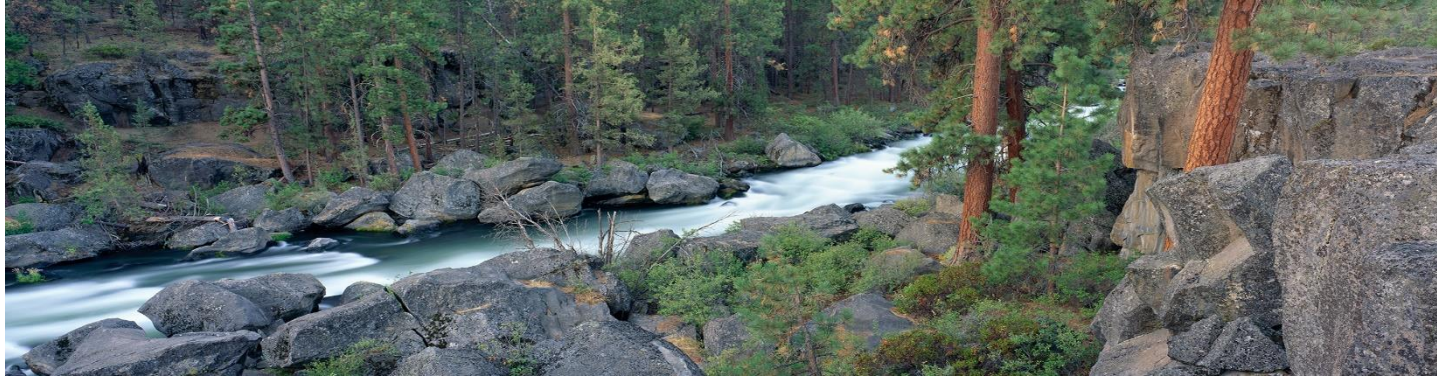
# Outcomes

- 43 cfs flow restored
- 9.5 stream miles; 3,100 acres protected
- 6/6 fish passage barriers removed
- 4.5 miles of stream; 385 acres restored



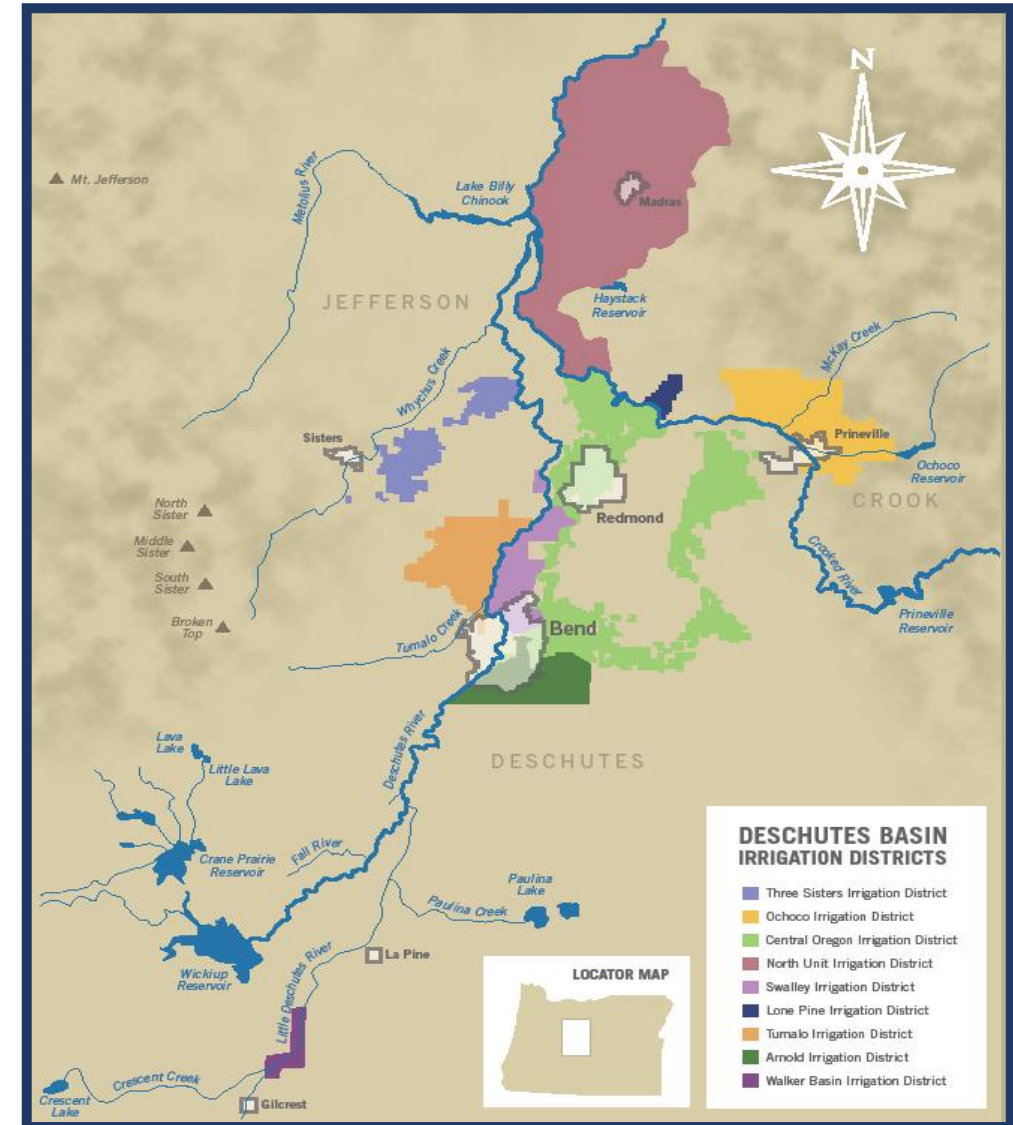


# Example 3. Deschutes Mainstem 6 irrigation districts; 3 reservoirs, all the tools



# Deschutes Water Distribution

District	Priority
Swalley	1899
Central Oregon	1900 & 1907
Lone Pine	1900
Tumalo	1905
Arnold	1905
North Unit	1913
Deschutes River	1983



# EVERY TOOL IN THE BOX!



- 75 cfs instream transfers
- 40 cfs instream leases
- 100 miles of irrigation canals piped
- >300 cubic feet per second restored to basin streams
- >\$200M public investment in water
- Must pair with extensive habitat work

## • 2022 Water Bank Pilot



# Water Banking

Moving water around to meet needs



*Local. Voluntary. Flexible.*

**\*Accountability & Transparency**

# Roadmap to Flow Restoration



- Understand flow needs
- Understand water rights & policy context
- Understand social context
- Identify appropriate tool(s)
- Negotiate, fund, implement & monitor deals
- Integrate with habitat partnerships!

# Thank You



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