Auvil Fruit Company

Water Conservation and Water Banking Project





Office of Columbia River

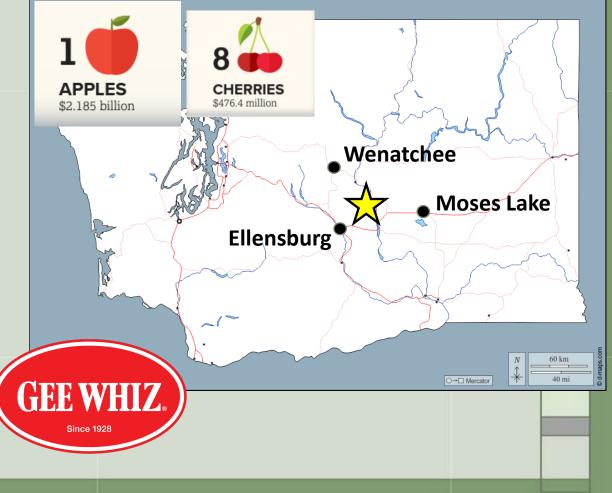
Presented by:

Heather Hazlett, Trust Water Coordinator

Photo Credit: Auvil Fruit Company, Inc.

Auvil Fruit Company

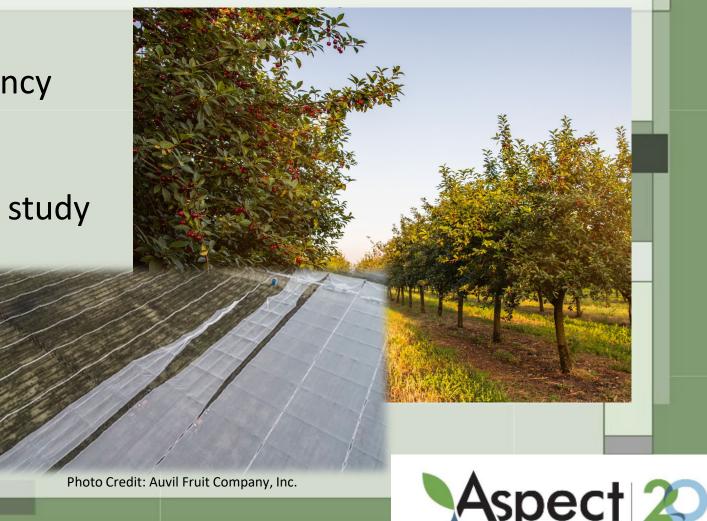
- Producing commercial tree fruit since 1928
- Premium apples and cherries
- Sold in U.S. and several other countries
- Major segment of economy



Auvil's Proposal: Joint Study of Conserved Water

- 2006-2017 Irrigation efficiency improvements
- OCR and Aspect Consulting study how much water saved
- Conserved water to mitigate for new uses







Ecology's vision and mission

Our Mission

To protect, preserve, and enhance Washington's environment for current and future generations.

Our Vision

Our innovative partnerships protect and sustain healthy land, air, and water in harmony with a strong economy.

OCR's Mission



To "<u>aggressively pursue</u>" water solutions that meet:

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Out-of-Stream Needs: Families, Industry, Farms

- AND -

Instream Needs: Fish, Ecosystems, Recreation

(RCW 90.90.005)

Legislative Directives to OCR:

Develop new supply for municipal domestic, industrial, and irrigation uses

Put water instream when needed most

Enhance supply for existing rights curtailed in droughts





Photo Credits: Aspect Consulting and Auvil Fruit Co., Inc.

The Efficiency Improvements

Drip System and Soil Moisture Monitors

Shade Cloth Coverage

Removing Thirsty Poplar Trees



Aspect Consulting

> Photo Credit: Auvil Fruit Co.

Photo Credit:

Co-Funded Study

Two weather stations:

Under shade cloth
 In the open orchard

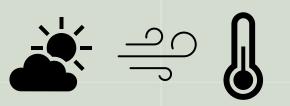




Photo Credit: Aspect Consulting



Effect of Shade Cloth Coverage

Decrease in Evapotranspiration (ET) due to:

↑ 34% Relative humidity↓ 55% Wind speed

Soil moisture stability
3% Cooler air temp



Photo Credit: Aspect Consulting



Water demand reduced ~ 50%!

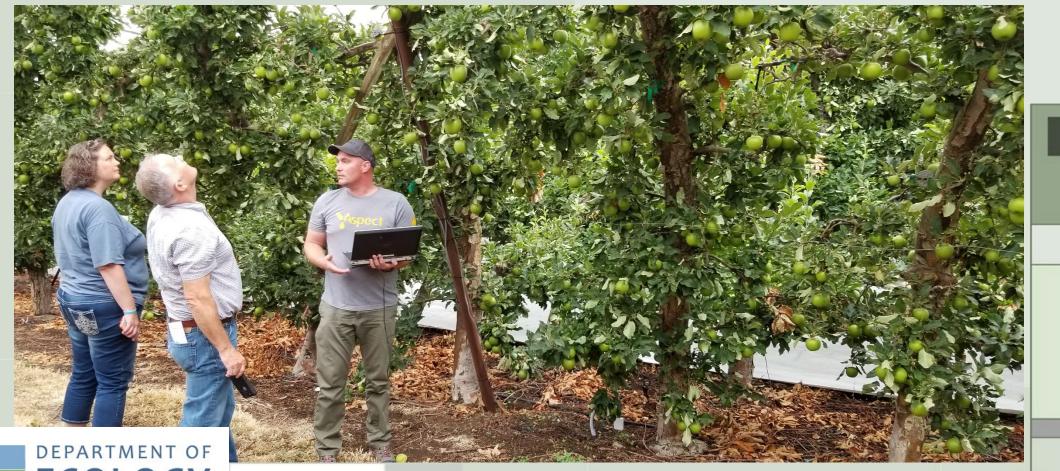
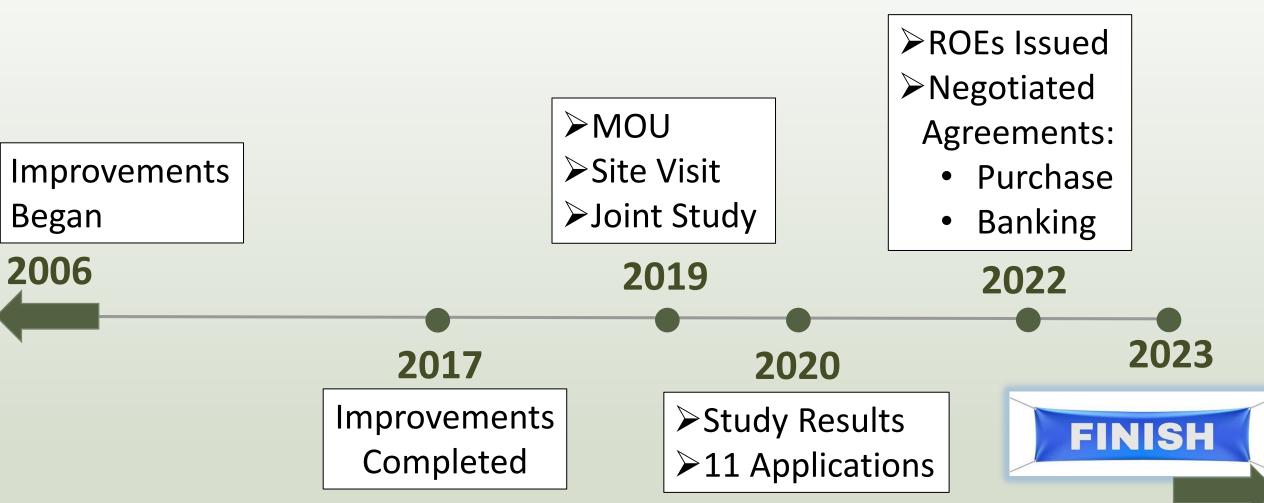




Photo Credit: Aspect Consulting

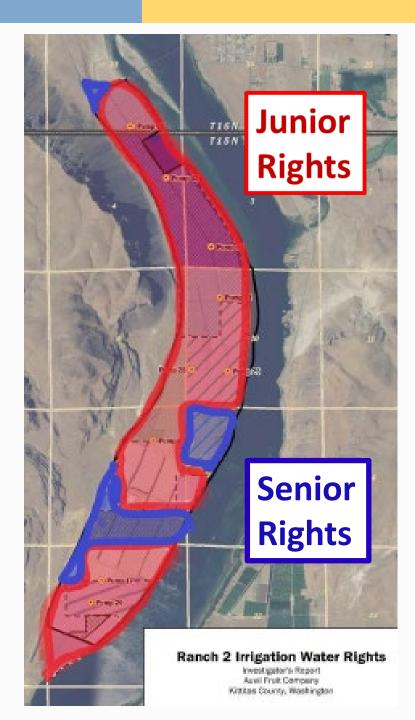
Timeline

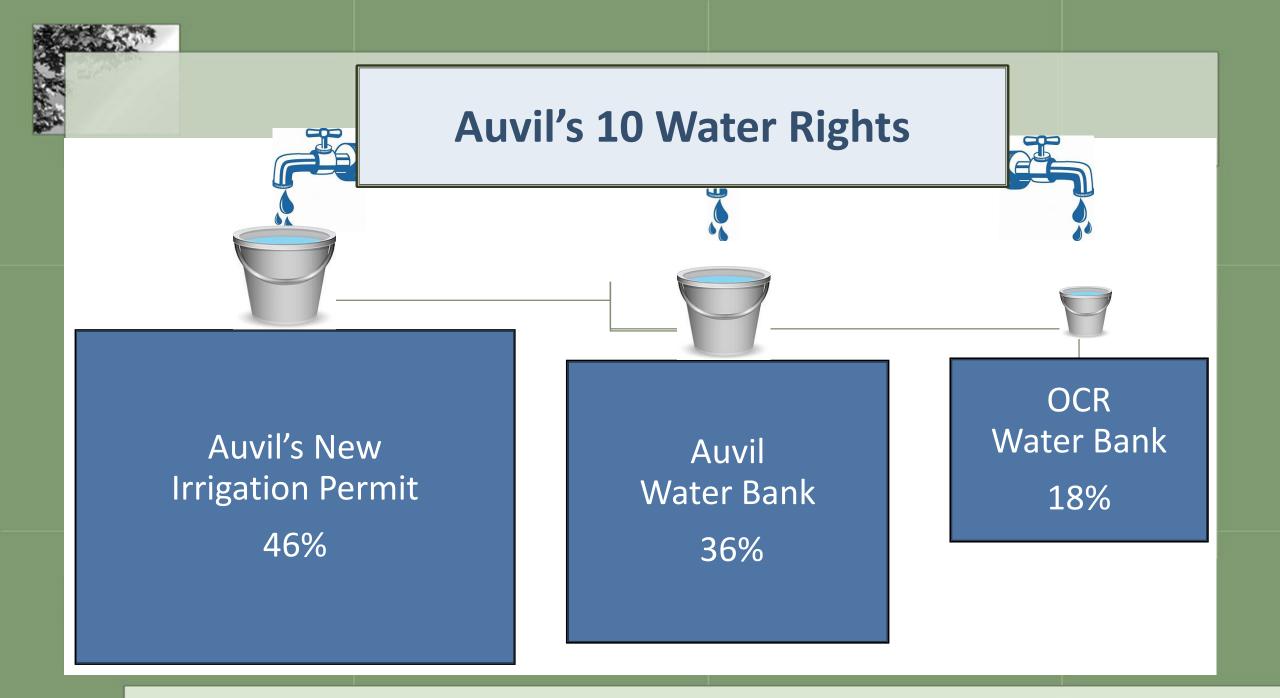




Water Right Problems

The interruptible (junior) portion of the water rights puts certain areas of Auvil's orchards at high risk during drought

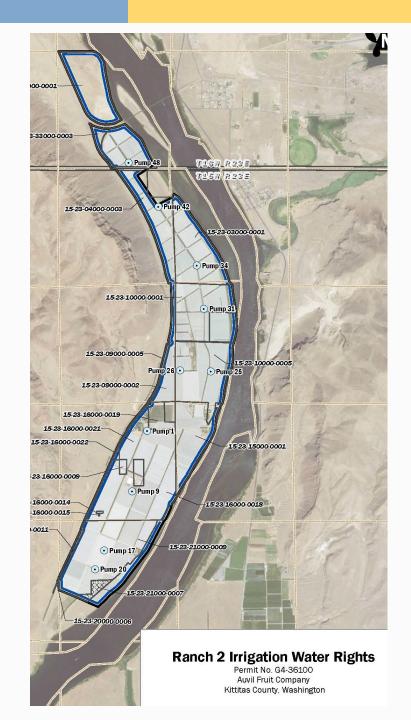




Improving Drought Resilience

Blend senior and junior rights evenly over the entire place of use

> To reduce risk of tree damage and loss



Negotiations

Purchase and Sale Agreement

- Quit Claim Deed to Trust
- Permit for Orchard Irrigation
- ✓ Water Banking Agreement
 - Mitigation Allotment Form
 - Trust Water Certificates

Tracking Future Compliance

- Compliance meetings with Ecology by April 1 of 2024 and 2025
- Report to Ecology annually:
 - Water use quantities;
 - Water bank accounting required by RCW 90.42.170; and
 - Proof of continuing compliance with Change ROE provisions

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Water Master Oversight

- Ecology is responsible for compliance and enforcement of Washington's water laws
- Particular emphasis in basins where Ecology has spent funds

 OCR's dedicated Water Master monitors areas where OCR has made investments

Quantities in OCR's Water Bank

Consumptive Water Rights:

1,164.6 ac-ft \$1,000 per acre-foot

Highest Value



Non-Consumptive Water Rights:

266.5 ac-ft \$100 per acre-foot



Closing the Deal

- Pay Purchase Price
- Sign Banking Agreement
- Deed Rights to Trust
- 21 Trust Certificates
- New Irrigation Permit and Certificate





Thank you

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