HB3003: Biomass TC / Water Conservation & Stream Restoration

Managing Juniper for Ecological Benefits,
Doug Riggs, C.O. Cities Organization (COCO)

CENTRAL OREGON CITIES ORGANIZATION

Redmond

Sisters

Maupin

Bend

Madras

Metolius

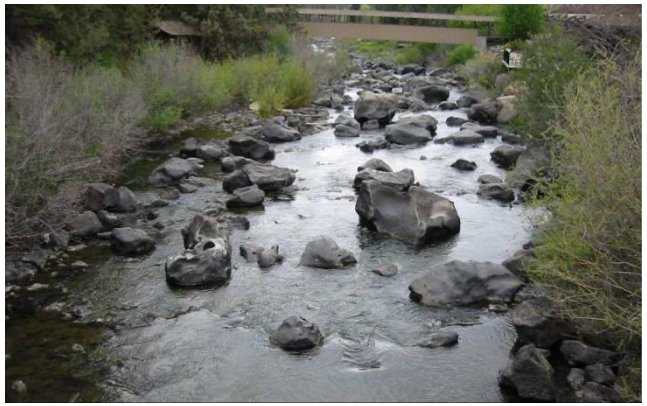
Prineville

LaPine

Culver

Deschutes Basin

- Unique hydrology and a history of working together to solve water challenges
- Bi-partisan, legislatively created statutory water management structure (2001, 2003, 2005, 2013)
- **New science** points to tools to benefit Deschutes Basin **and other regions**



Flows in Middle Deschutes Increased by 4 X

Restoration of areas such as Whychus Creek

All cities metered and following water conservation measures

Lining and piping of canals saving millions of gallons of water

Issue: <u>Explosive</u> Juniper Intrusion is a Growing Threat to Water/Ecosystem Health and Climate

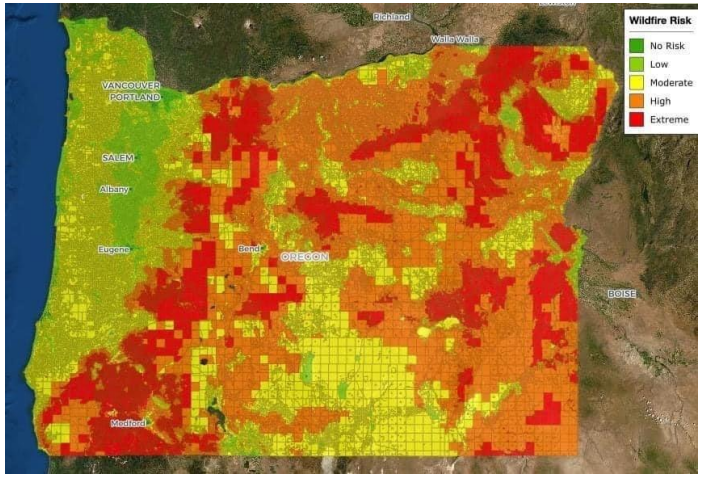
1,000% increase in Juniper coverage in past 60 years
9-17 can consume 100% of annual precipitation
Crowds out all native grasses, species
Drains streams and tributaries
Leads to massive wildfire risks and carbon emissions

"A tenfold expansion of western juniper (Juniperus occidentalis spp. occidentalis) into the sagebrush steppe has led to the degradation of the economic and ecological potential of these landscapes."

Brianna S. Sabin, Oregon State University, June, 2006

HB3142/HB3003

- **7 regions** (Deschutes, Crook, Jefferson, Harney, Wheeler, Lake, Klamath to be added)
- **7 existing** on-the-ground organizations (6 SWCDs and 1 County)
- Funding **fast tracked** (i.e. Project Turnkey, FutureReady)
- Target: Improving **water resources and ecological health**
- Monitoring/Scientific Direction: ***Oregon State University***
- Other benefits: native grasses, sage grouse, mule deer, **wildfire reduction** (emissions, cost savings)
- Workforce Benefit
- Maps already in progress. Regions plan to hit the ground running this summer/fall
- ***Sustainability (Goal of HB3003)***



Climate Challenges of Wildfires:

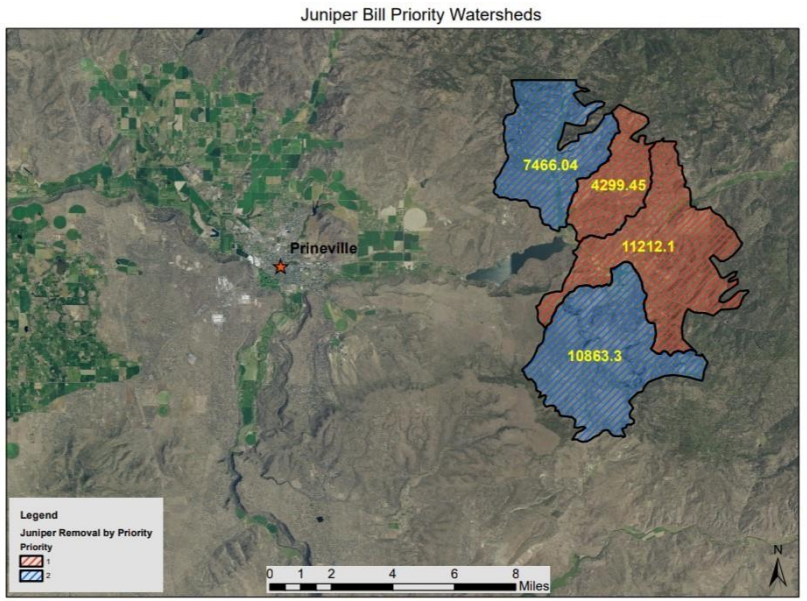
UCLA/University of Chicago Study:

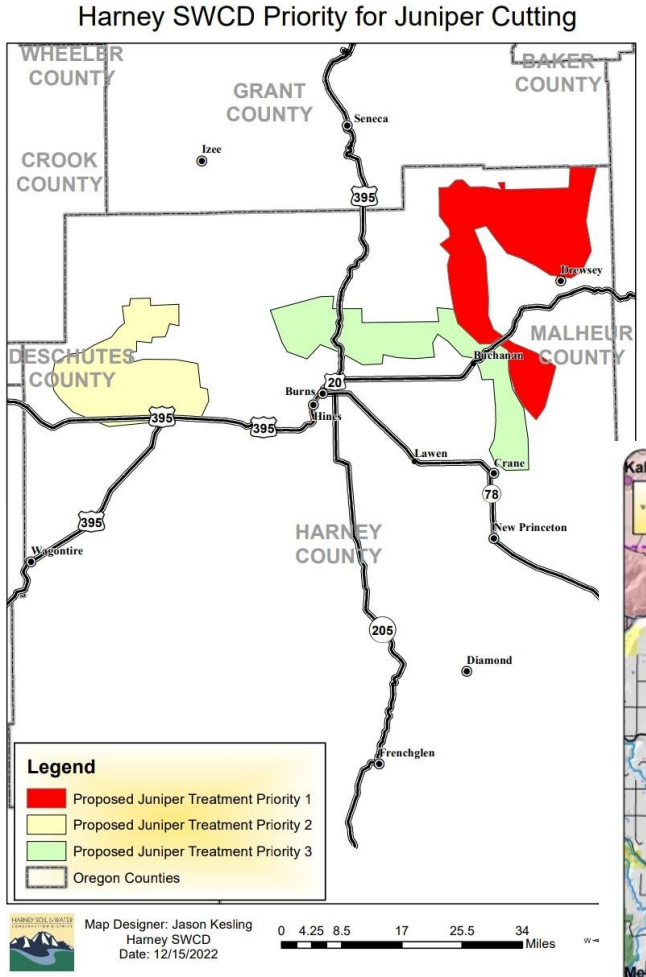
Dr. Michael Jarrett, a lead author of the study:

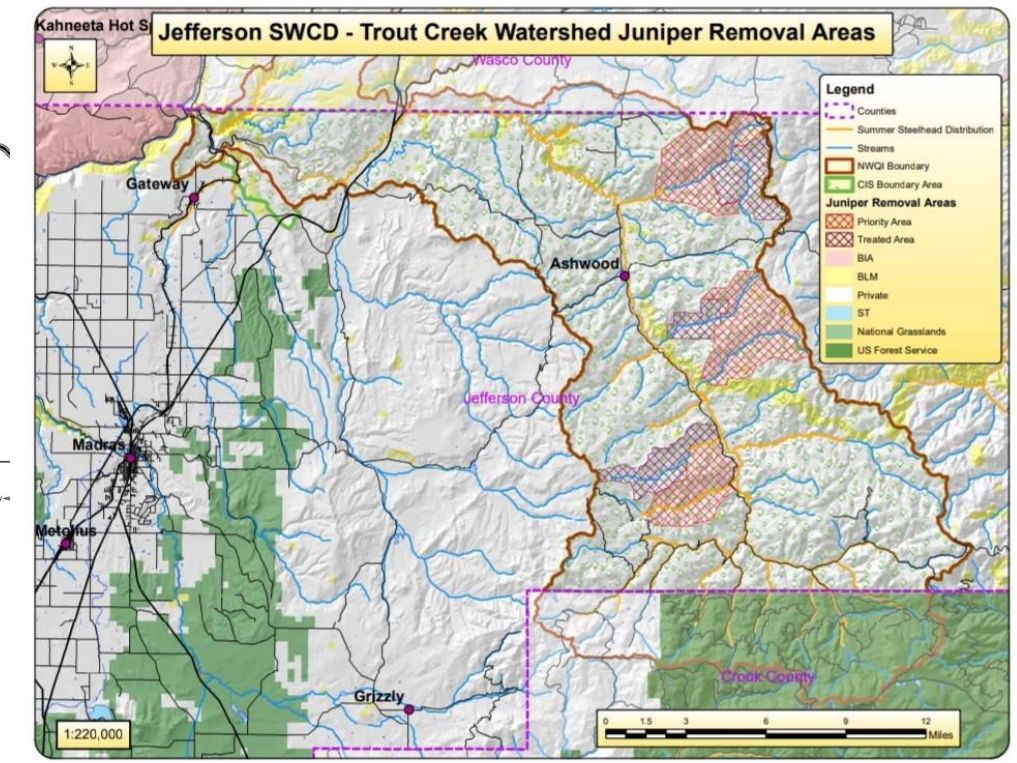
“Wildfire emissions in 2020 essentially negated 18 years of reductions in greenhouse gas emission. The positive impact of all that hard work over almost two decades is at risk of being swept aside by the smoke produced in a single year of record-breaking wildfires.”

https://www.sfchronicle.com/bayarea/article/A-new-study-shows-just-how-awful-California-s-17515186.php

Hit the Ground Running







REMOVAL – TROUT CREEK WATERSHED

BEFORE

AFTER

Dozens of Studies

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Ochoa C.G., P. Caruso, G. Ray, T. Deboodt, W.T. Jarvis, and S.J. Guldan. 2018. Ecohydrologic connections in semiarid watershed systems of central Oregon U.S.A. *Water*, 10(181): 1–19.

Josaitis, R.M. 1991. The effects of western juniper occupancy on changes in soil characteristics in relation to shrub and grass establishment in Owyhee County, Idaho. Thesis. University of Idaho. 109 pp

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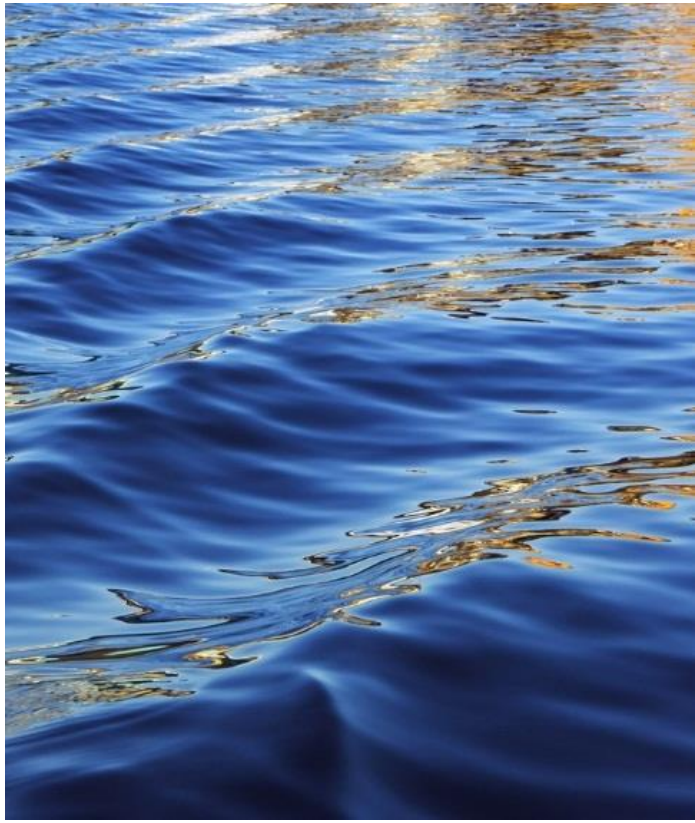
REMEMBER TWO FACTS:

1 year = 225% increase in flows

99.1% reduction in emissions

Broad Support for Proposals

Cities
Counties
Agriculture
Irrigation districts
Conservation districts
River and fish advocates
Confederated Tribes of the Warm Springs
Economic development organizations/Workforce



Questions:

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