



HB3142: Water Conservation & Stream Restoration 2023

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





Redmond

Sisters

Maupin

Bend

Madras

Metolius

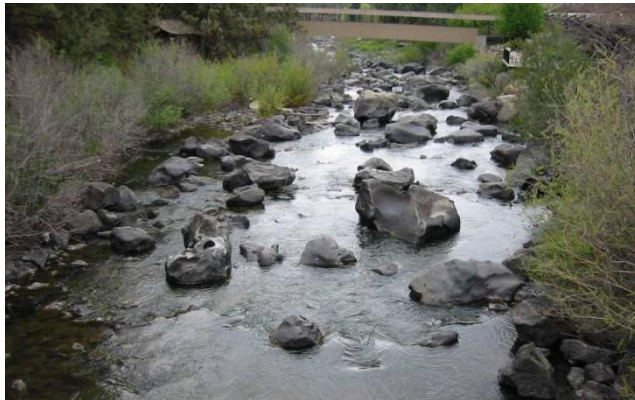
Prineville

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

Key Basin Management Pillars




Issue: Explosive Juniper Intrusion is a Growing Threat to Water and Ecosystem Health



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



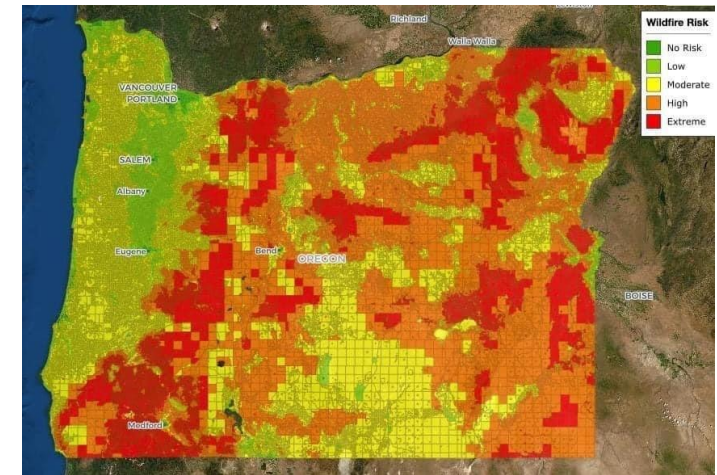
An aerial photograph showing a dense, expansive forest of western juniper trees covering a large area of land. The forest is a mix of green and yellowish-green, suggesting a dry or late summer environment. In the background, there are rolling hills and a valley with some buildings and fields, under a clear blue sky. A semi-transparent green box with white text is overlaid on the lower portion of the image.

“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

- **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)



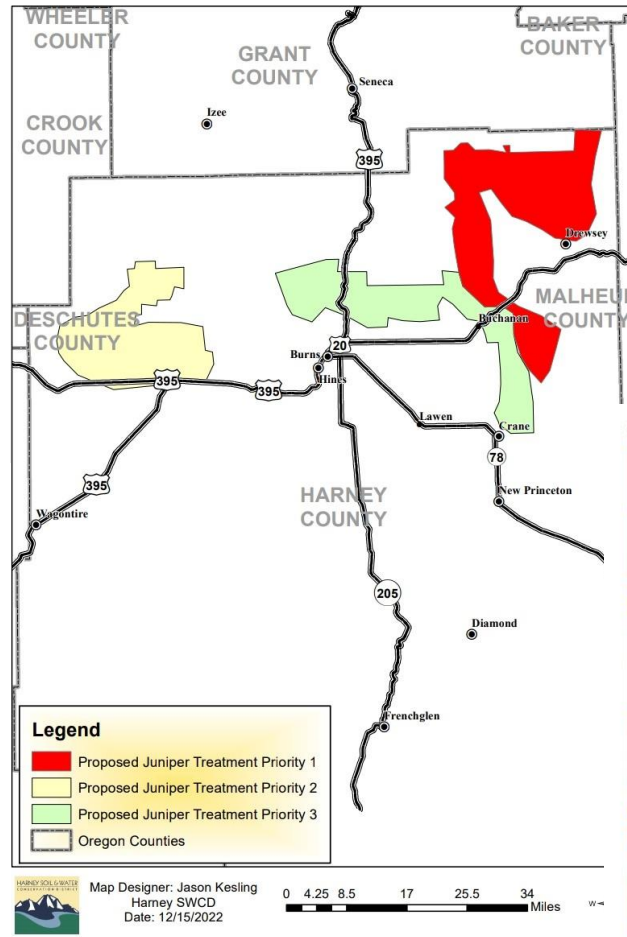
Climate Challenges of Wildfires:

A study by UCLA and University of Chicago environmental scientists finds that forest fires “put twice as much greenhouse gas emissions into the atmosphere as the state’s total reduction in such emissions from 2003 to 2019.” Dr. Michael Jarrett, a lead author of the study, told the *SF Chronicle*: “Wildfire emissions in 2020 essentially negate 18 years of reductions in greenhouse gas emission,” He added, “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.”

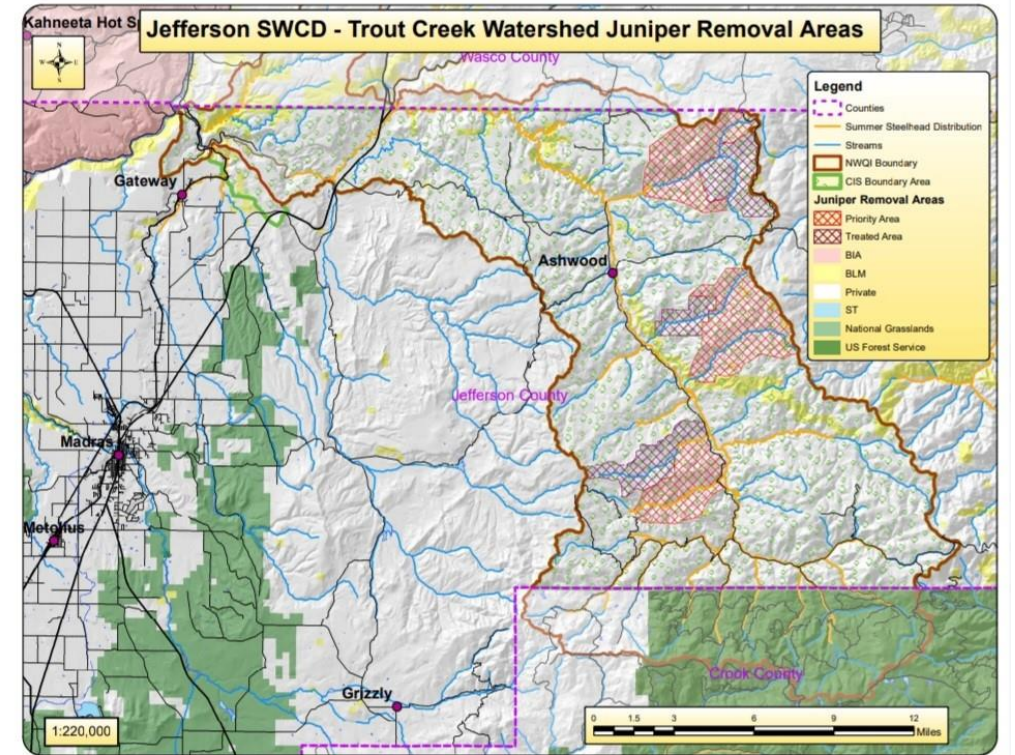
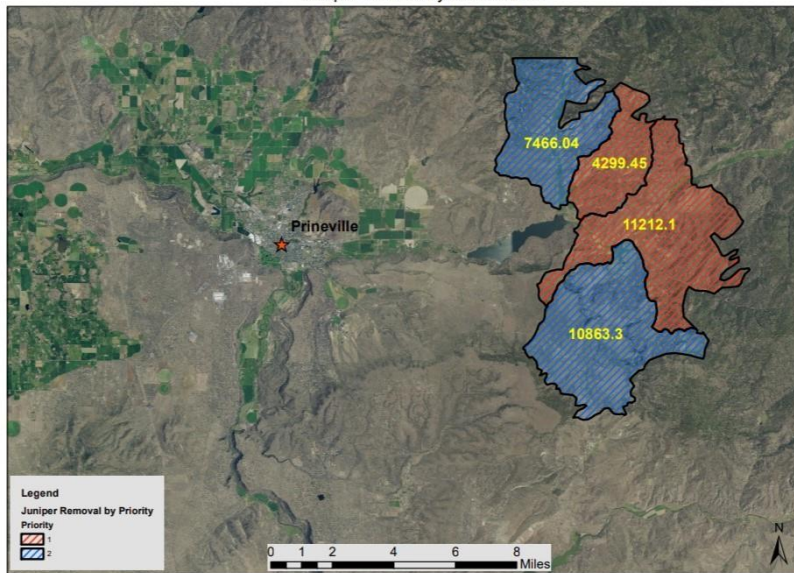
<https://www.sfchronicle.com/bayarea/article/A-new-study-shows-just-how-awful-California-s-17515186.php>

Hit the Ground Running

Harney SWCD Priority for Juniper Cutting



Juniper Bill Priority Watersheds



REMOVAL – TROUT CREEK WATERSHED

BEFORE



Beaver Creek Watershed – Nov 2019

AFTER



Beaver Creek Watershed – June 2022

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REMEMBER ONE FACT:

1 year = 225% increase in flows



Broad Support

Cities
Counties
Agriculture
Irrigation districts
Conservation districts
River and fish advocates
Economic development organizations





Questions:

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