Shifting Land Management Policy: Older Forests, Fire, Habitat, Timber

Western Forest Economists

Mindy Crandall / Mike Buffo May 23,2024



Federal lands



Mature and old growth

On Earth Day 2022, the Biden Administration released an executive order to "conserve mature and old-growth forests" and "foster long-term…forest health through climate-smart reforestation," including these goals:

- Pursue wildfire mitigation strategies.
- Identify and inventory mature an old-growth forests.
- "Institutionalize" climate-spart management and conservation strategies that address threats to mature and old growth forests on Federal lands.



Old-growth and mature inventory

USFS and BLM manage approximately 178 million acres of forest, with over 200 regional vegetation types.

- Old-growth: 33 million acres (18% of forest lands)
- Mature: 80 million acres (45% of forest lands)



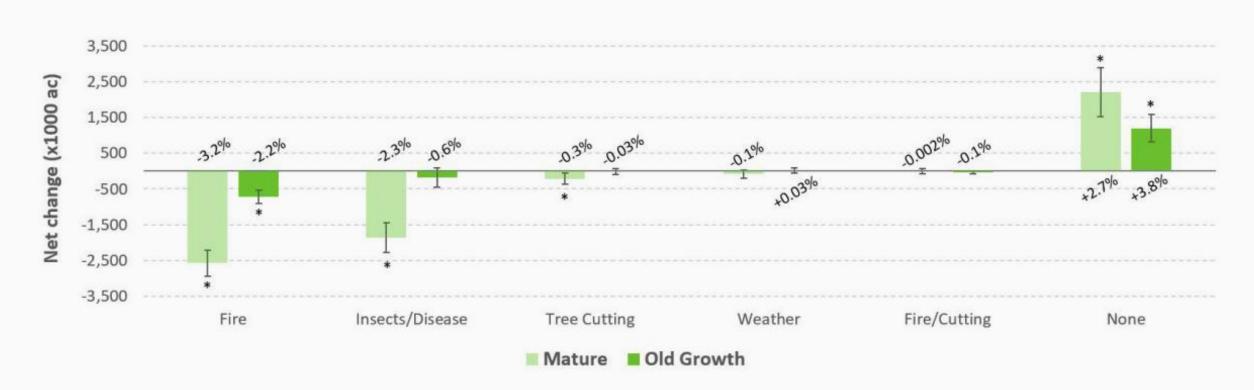
Old-growth ponderosa pine forest stand on the Fremont-Winema National Forest, Oregon. USDA Forest Service photo.



Threat analysis

- "Currently, wildfire, exacerbated by climate change and fire exclusion, is the leading threat to mature and old-growth forests, followed by insects and disease."
- "Tree cutting (any removal of trees) is currently a relatively minor threat, despite having been a major disturbance historically."





A total of 30,864 Forest Inventory and Analysis (FIA) plots, representing 81.5 million acres of mature and 31 million acres of old growth, were measured twice between 2000 and 2020. Net changes in mature and old-growth area (based on the definitions used in the mature and old-growth inventory) are shown above. Error bars represent 95 percent confidence intervals and asterisks indicate a statistically significant change.

Source: Analysis of Threats to Mature and Old-Growth Forests, Introductory Report.



Implementation

- The USFS intends to update all 128 forest plans in a process called the "National Old-Growth Amendment."
- "The proposed amendment focuses on wildfire resilience, climate change adaptation, tribal inclusion, sustainable communities, and overall old-growth forest health..."
- A draft EIS is expected this summer with completion of the process in early 2025.



Northwest Forest Plan

• A management plan for 24.5 million acres across Washington, Oregon, and California within the range of the Northern Spotted Owl.

Management Unit	Acres
17 National Forests	19,400,000
7 BLM Districts	2,700,000
6 National Parks	2,200,000
Other	165,000





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Modernization

- "Management practices, science, resource needs and local economies have changed in the past 25 years, and current forest plans do not reflect the latest scientific information or emerging issues."
- "Critical to modernizing current plans is meaningful input from local and state government, tribes and the public at large."



How will the plan change?

- "Final decisions about changes related to management actions in land use allocations are undetermined, but boundaries for Northwest Forest Plan land use allocations are not being altered."
- Addressing wildfire threats is "a top priority."
- Goal to provide "sustainable and predictable supply of timber and nontimber forest products."



Timeline

- Summer 2024: Draft EIS
- Fall 2024: Final EIS
- Early 2025: NWFP amendment complete

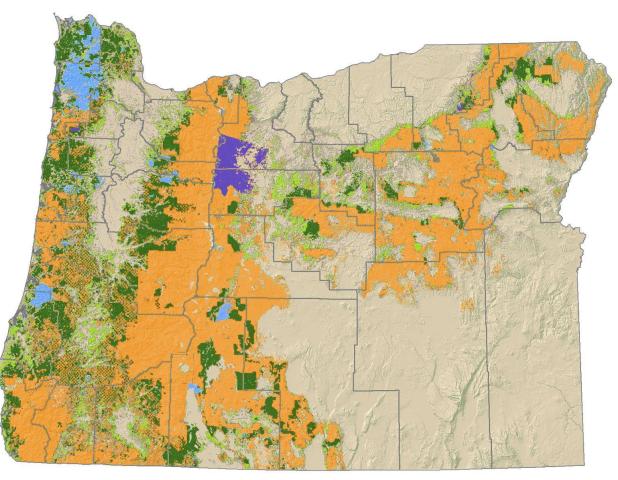


Oregon State Forests



State Forests

- State managed for "greatest permanent value."
- About 3% of the state's forest and 6% of harvest.
 - Revenue supports management and county services.
- Older stands provide habitat for T&E species.

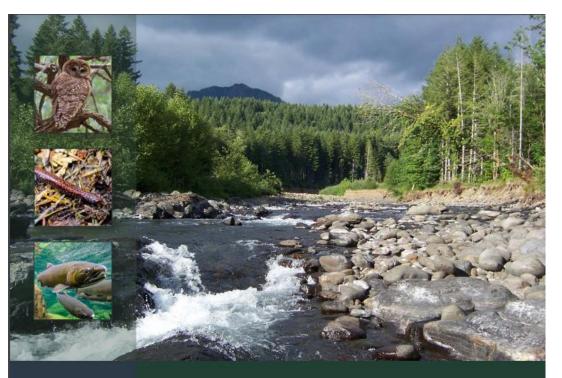






Habitat Conservation Plan

- Mechanism to comply with the ESA
- Allows for landscape-level planning
 - Habitat Conservation Areas
 - Riparian Conservation Areas



FEBRUARY 2022

WESTERN OREGON STATE FORESTS HABITAT CONSERVATION PLAN PUBLIC DRAFT



Planning not over yet

- At least another year before completed Final EIS
- Delayed due to changes in harvest projections.
 - The Draft EIS overstated harvest by about 20%, compared to recent estimates.



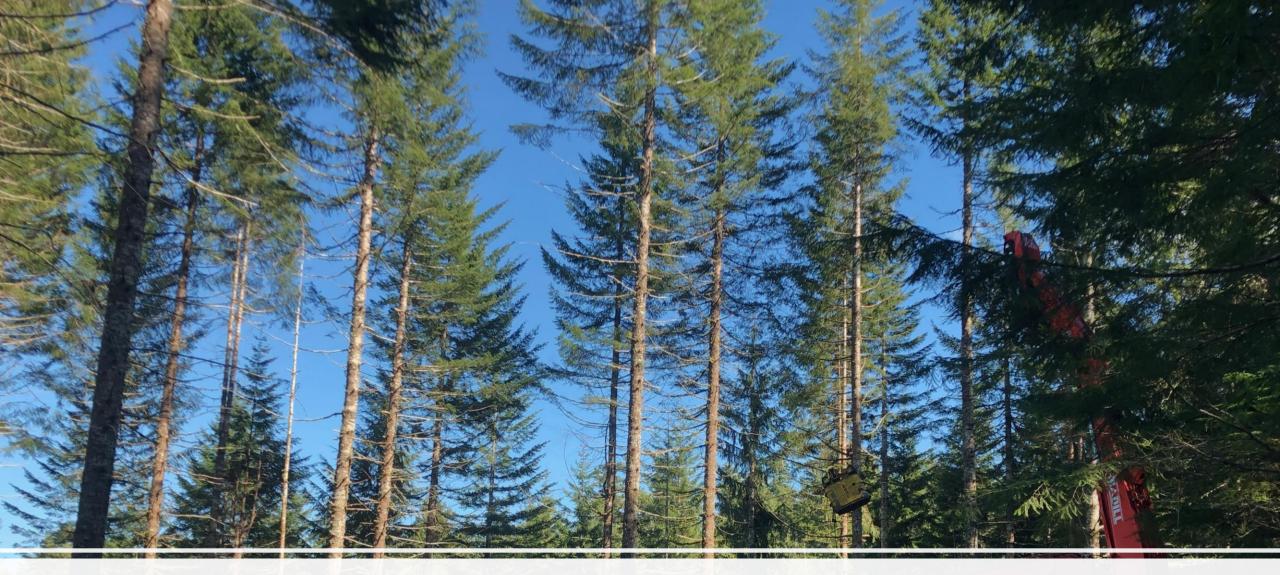
Outlook

- Possibility of reduced timber harvest in moist forests.
- Increase in fuels treatments of all types in dry forests.
 - Will it be enough?
 - How much prescribed or cultural burning will occur?
 - Is operator capacity available?
 - Will any wood products be generated?



Private lands





Changes to the Oregon Forest Practices Act

Photo: M. Crandal



The build up

- "a lot of pressure from different directions" (NGO) ... "a steady drumbeat" (IND) ... "build up over time" (AGN)
- Conservation groups enacting change on public lands + waning influence of industry
 - "big timber ran Oregon...until fairly recently" (AGN)
 - "I'd see us fighting over...trees on federal land & next door it was slicked off" (NGO)
- 2015 lawsuit over water quality standards enforcement cost state \$1 mil in grant funding
- 2017 *"Freedom from Aerially Sprayed Pesticides Ordinance"* in Lincoln Co. (struck down in 2019)

Dueling initiatives

Title of initiative filed in 2019	Action	Group
Expands area around forest waterbodies where aerial pesticide spraying is prohibited, logging operations are limited	Amends a state statute	Forest Waters Petitioners
Expands area around forest waterbodies where aerial pesticide spraying prohibited; increases notice requirements for spraying	Amends a state statute	Forest Waters Petitioners
Expands to 50/100 feet the area around waterbodies where commercial logging operations limited; exceptions	Amends a state statute	Forest Waters Petitioners
Compensation required if laws eliminate "substantially all" value to landowner of their land/portion thereof	Amends state constitution	Landowner Petitioners
Allows Forestry Board to block laws passed by legislature/voters regulating forest practices; effect unclear	Amends a state statute	Landowner Petitioners
Changes Forestry Board composition; restricts governor's appointment authority; eliminates financial interest restrictions for board members	Amends a state statute	Landowner Petitioners

Why negotiate?

"They have gobs of money, and we know we're never going to be able to compete in that arena. We've got a good idea. We think it polls well. But what happens when \$30 million gets spent to make it sound bad?" (NGO)

"We had acres and value at risk - and the other side, they have no skin in the game." (IND)

Trying to do business with looming regulation changes ...uncertainty was the "bane of our existence" (IND)

"Which one overrides the other and which becomes the law of the land? ... it was a little bit of a wild west as to how that was all going to shake out" (IND)

"It's not spending \$4 million on a ballot initiative; it's spending \$4 million every year on a ballot initiative over and over again..." (AGN)

Research results in prep. Please do not cite



The Oregon Private Forest Accord

Photo from Wild Salmon Center, https://wildsalmoncenter.org/2023/09/13/a-year-in-oregons-private-forest-accord-is-taking-shape/

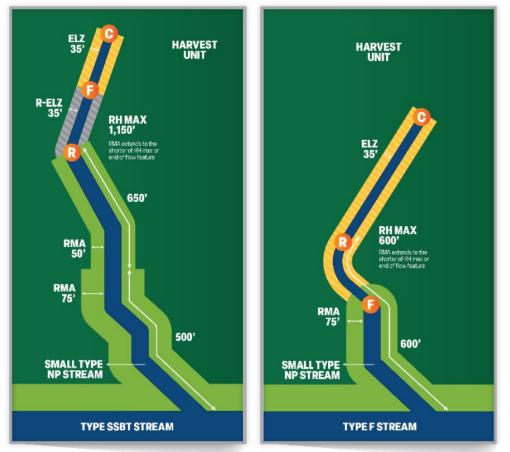
Changes in chemical application rules

- F & D streams: larger of 75' or RMA width
- N streams: 50'
- 300' from dwellings (structure), schools (property edge), water intakes
- Electronic notification established

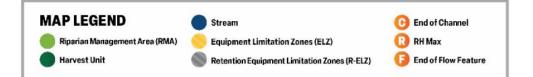
Image from Google Earth

Area	Classification	Pre-PFA (ft)	PFA Standard (diff)	PFA SWO Min. (diff)
Western Oregon	Large SSBT & F	100 (20)	110 (+10)	100 (-10)
	Medium SSBT	80 (70 relief, 20)	110 (+30-40)	80 (-30)
	Small SSBT	60 (50 relief, 20)	100 (+40)	60 (-40)
	Medium F	70	110 (+40)	70 (-40)
	Small F	50	100 (+50)	50 (-50)
	Significant wetlands (estuary)	100 – 200	300 (+100)	300
Eastern Oregon	Large SSBT & F	100 (20)	100	100
	Medium SSBT & F	80/70 (20)	100 (+20-30)	80 (-20)
	Small SSBT & F	60/50 (20)	75 (+15-25)	60 (-15)
	Important Springs	50 – 100	50 - 100	50 - 100
Statewide	Large D	70	70	70
	Medium D	50	50	50
	Small D	20	20	20
	Sig. wetlands (non-estuary)	100	100	100
	Bog	50 - 100	50 - 100	50 - 100

Western Small Type Np Stream & Equipment Limitation Zones



These diagrams are examples only and are not to scale. Conditions and requirements may differ.



Eastern Small Type Np Stream & Equipment Limitation Zones



These diagrams are examples only and are not to scale. Conditions and requirements may differ.



ELZ & R-ELZ? Retention: all trees <6" and shrub species retained

SFO & Forest Credit

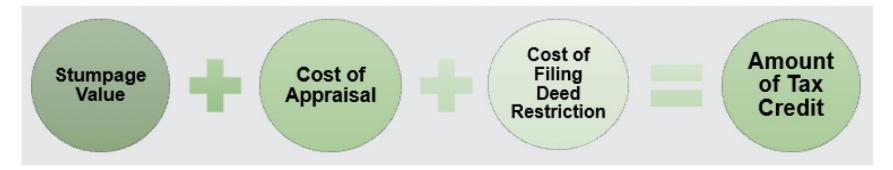
Adopt the *standard* RMA over the SFO *minimum*

FCA filed as a deed restriction with the county

Cannot harvest in the FCA for 50 years

Tax credit can be used lump sum, spread out, or held for future use

Credit can be passed to others in event of death; in case of sale, FCA remains



Riparian Management Buffers in the Oregon Coast Range

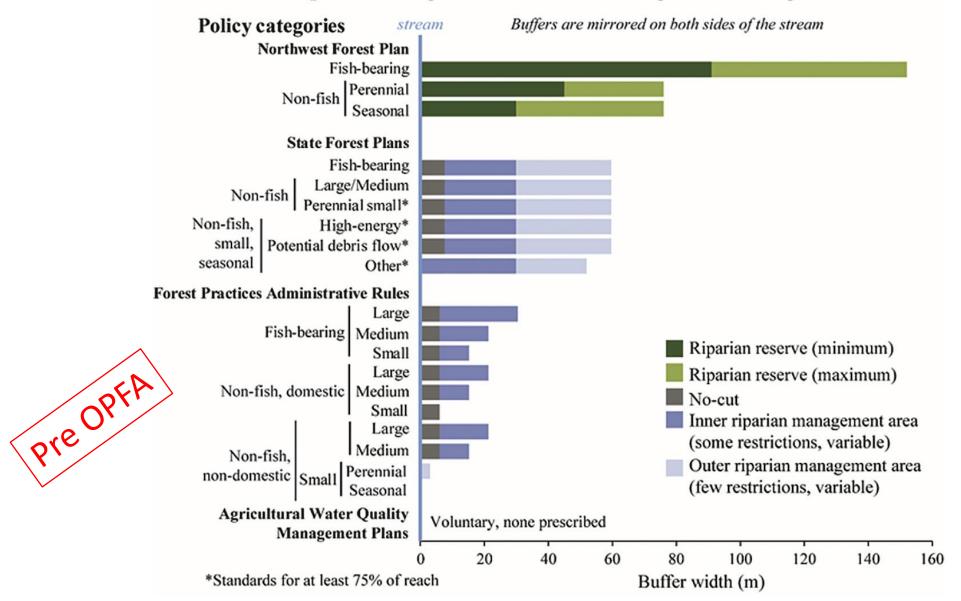
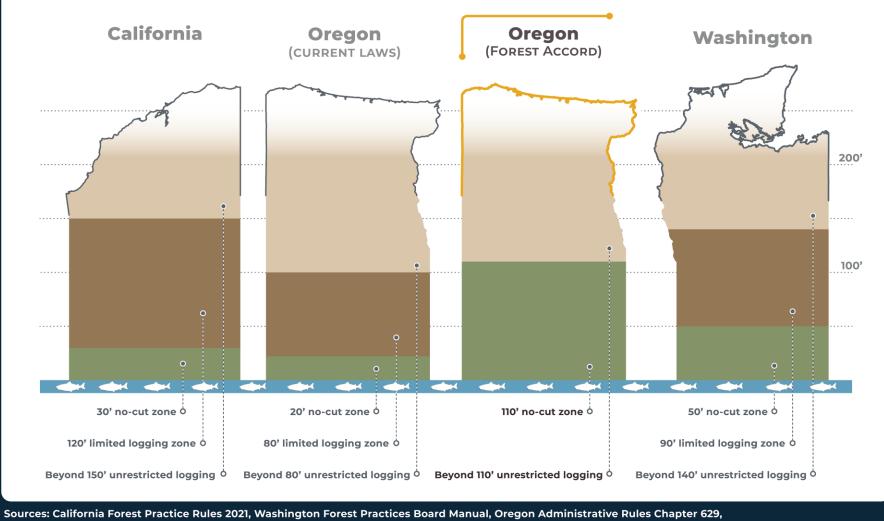


Figure from Boisjolie et al. (2017). Legal ecotones: A comparative analysis of riparian policy protection in the Oregon Coast Range, USA. *Journal of Environmental Management* 197: 206-220.



Private Forest Accord rules for salmon stream buffers will catch Oregon up with Washington and California.

Buffer rules for a 12' salmon stream in the West Cascades

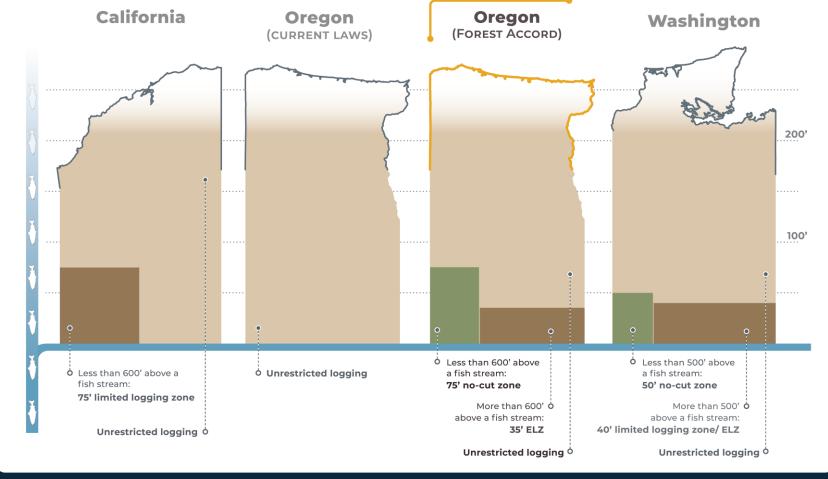


and the signed Private Forest Accord terms sheet

https://www.sightline.org/2022/02/09/passing-the-private-forest-accord-would-help-oregon-catch-up-with-washington-and-california/

Sightline Sightline Catches Oregon up with Washington and California.

Buffer rules for a 6', West Cascades, non-fish, tributary stream, flowing into a fish stream. Rules get stricter near confluence with fish stream.



Sources: California Forest Practice Rules 2021, Washington Forest Practices Board Manual, Oregon Administrative Rules Chapter 629, and the signed Private Forest Accord terms sheet

https://www.sightline.org/2022/02/09/passing-the-private-forest-accord-would-help-oregon-catch-up-with-washington-and-california/

Other notable changes

- Stream crossings for 100-year flow
- Avoid roads in critical locations
- Forest Road Inventory & Assessment for large landowners, improvements within 20 years
- Road Condition Assessment for small landowners
- Pursuing statewide HCP

In summary

Oregon private forest restrictions more in line with WA, CA

Research and anecdotes: prices, discount rates adjusting with regs, risk

Oregon federal forest management may see increased fuels treatment and more, less or the same amount of timber harvest.

Oregon State Forests will see reduced harvest and larger conservation blocks.

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