

# Partnership in Forest Stewardship and Landscape Resilience

Board of Forestry

April 25, 2018



James M. Peña, USDA Regional Forester

Peter Daugherty, Oregon State Forester

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# 2017 PNW Fire Season Review

- 40 Consecutive Days at Preparedness Level 5
- 3,404 Fires in the PNW
  - Oregon: 2,042 Fires and 725,600 acres affected
- 126 Large Fires in the PNW, 75 in Oregon
- 10,358 firefighters and support personnel assigned to fires in the PNW at the peak
- 42 assignments for PNW Incident Management teams

# 2017 PNW Fire Season Review

## Extreme fire behavior examples:

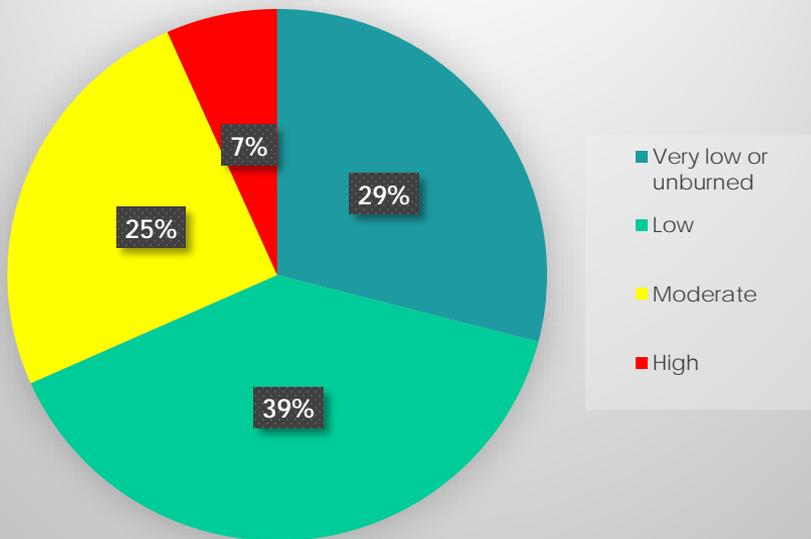
- Chetco Bar Fire made a 6-mile run in one burn period and grew more than 80,000 acres in 48 hours
- Eagle Creek Fire made a 13-mile run overnight, spotted across I-84 and the Columbia River

# 2017 PNW Fire Season Review

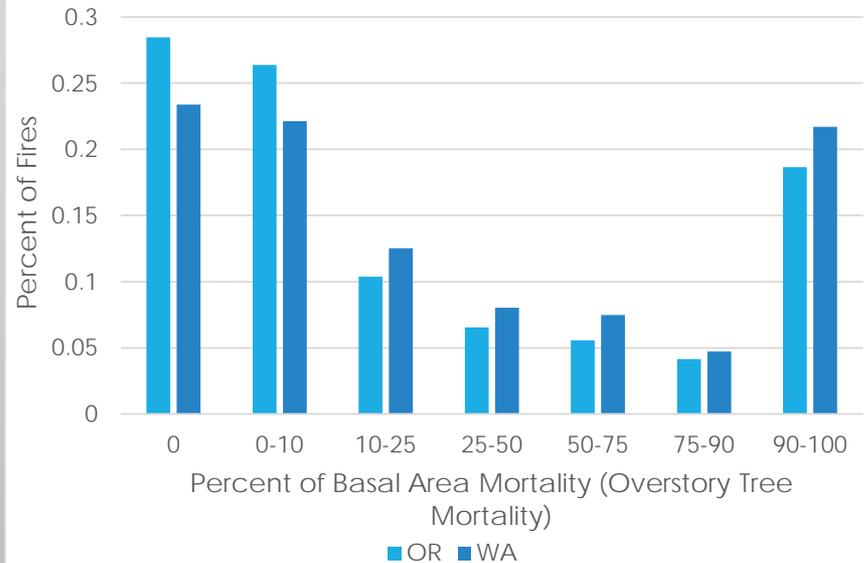
- Significant fire activity on the west side
- Early season, high-elevation, long-duration fires, indicative of drought that Oregon had not recovered from
- Smoke impacted much of the state for weeks, and not just smoke from Oregon fires, but also from British Columbia, Montana and California

# 2017 PNW Fire Season Review

Oregon National Forests Fires Soil Burn Severity



State Summaries of Percent Overstory Mortality



- Overall soil burn severity was largely low to moderate across Oregon
- Less than .2% of the acres burned experienced 90-100 tree mortality

# 2017 PNW Fire Season Successes



- Interagency collaboration, at an all new level:
  - Solar Eclipse preparation
  - Eagle Creek Fire recovery
- No fatalities
- Fewer structures burned than in 2014 or 2015
- Wildland fire is on the radar of our metropolitan areas

# 2018 USDA Forest Service Chief's Letter



- Improve the wildland fire system to more reliably protect responders and the public, sustain communities and conserve the land.
- Engage our partners and our communities to ensure we are sharing risk upstream, to work towards our shared goals and missions.
- Improve forest and rangeland conditions by working at larger scales and increasing active management.

# 2018 USDA Forest Service Chief's Letter



- Set expectations to increase and diversify partnerships that deliver outcomes through shared stewardship.
- Foster innovation and capacity to streamline processes.
- Remain committed to the goals of the National Cohesive Wildland Fire Management Strategy: to create resilient landscapes, fire adapted communities and safe and effective wildfire response that bases decisions on risk analysis.
- Extinguish fire when needed; use fire where allowable; manage our natural resources; and as a nation, live with wildland fire.

# Fire Funding Fix



- More certainty in our budget
- Reduced risk of fire transfer
- More focus on improving forest health and keeping fires from threatening lives and communities

# 2018 Fire Season Preparedness

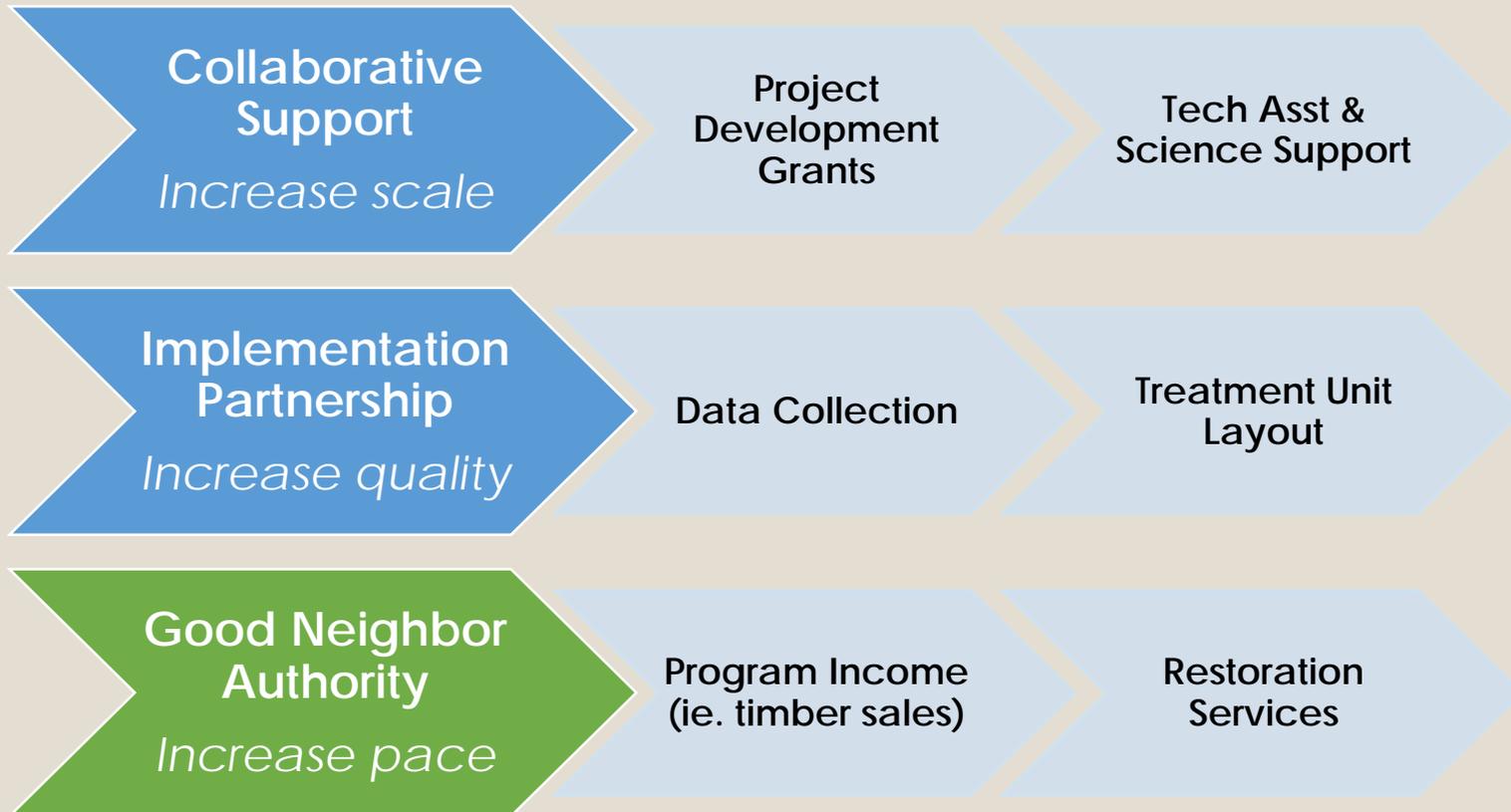


- Forest Service fire personnel in R6: approximately 1600
- Engines: 130
- Type 2 Handcrews: 30
- Interagency Hotshot Crews: 12 (10 FS, 2 BLM)
- Smokejumpers: 80 (target number)
- Rappellers: 130 (target number)
- Helicopters: 17 (14 USFS, 3 BLM)
- Fixed Wing Aircraft: 20
- Airtankers: 2 (1 VLAT and 1 LAT) housed in PNW, but under national contracts so often committed elsewhere
- 8 type 2 IMTs and 2 type 1 IMTs

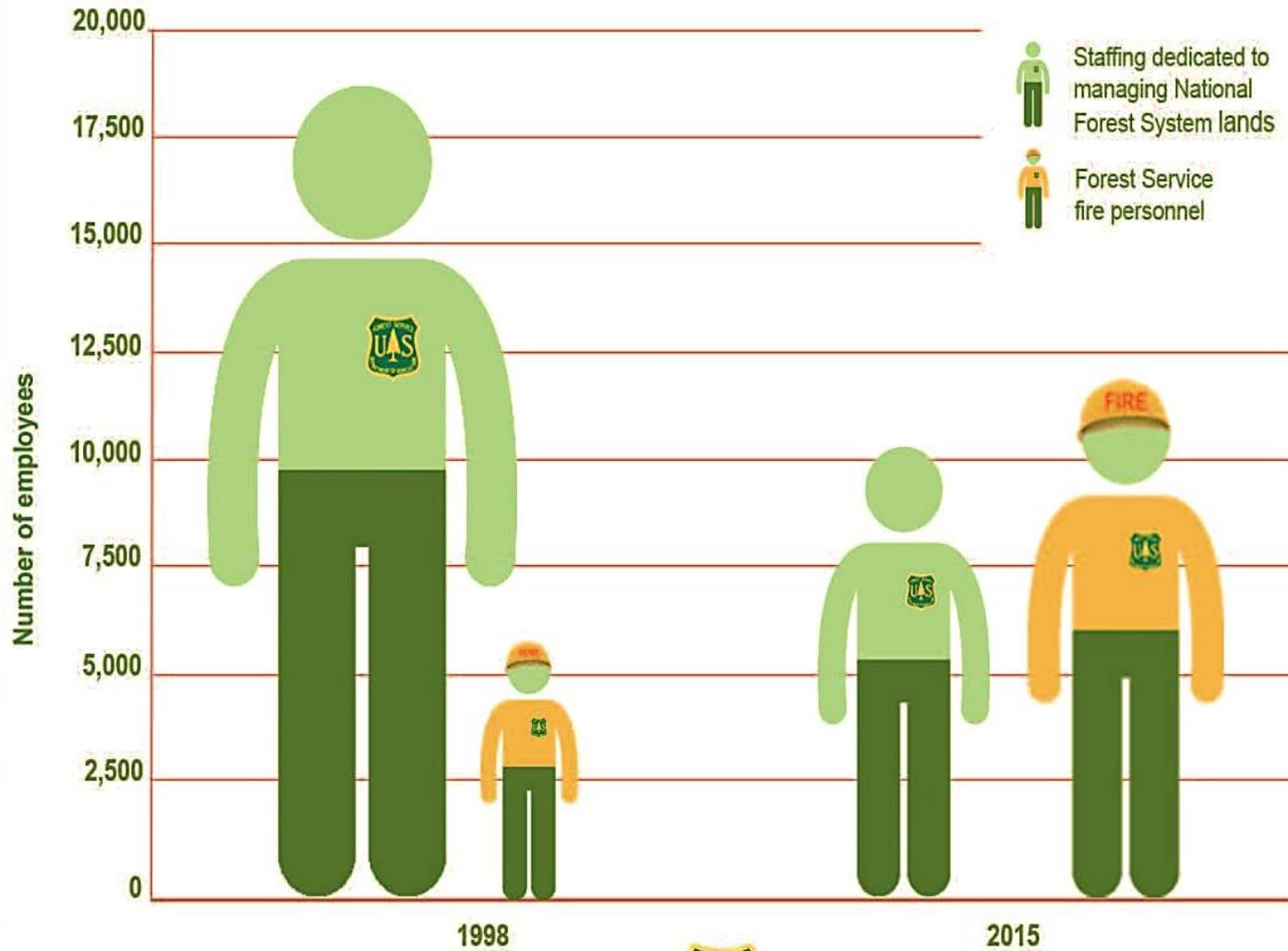
# GOOD NEIGHBOR AUTHORITY



# The Oregon Model



# Shift in Forest Service Staffing Levels 1998-2015



# HB 4118



## Policy Statement:

"It is the policy of the state to pursue projects under the Good Neighbor Authority Agreement that

- Increase timber harvest volume,
- Contribute to job creation,
- Reduce wildfire risks to all lands,
- Improve wildlife habitat and watershed health and
- Stimulate local economies."

# Forest Service Priorities



1. Uplift and empower employees
2. Be good neighbors and excel at customer service
3. Promote shared stewardship by increasing partnerships and volunteerism
4. Improve the condition of forests and grasslands
5. Enhance recreation opportunities, improve access, and sustain infrastructure



# GNA in Oregon



- Forest-wide SPAs on
  - 4 National Forests, 1 BLM Unit
- Service SPAs totaling \$1.1M
  - Noncommercial thinning
  - Timber sale layout
- Program Income SPA
  - Paddock Butte Timber Sale
  - Sale Date: May 14<sup>th</sup>
- HB 4118: pilot to contract small acreage NEPA





# Research is a Foundation to Science-Based Natural Resource Management

The the PNW Research Station is a leader in the scientific study of natural resources.

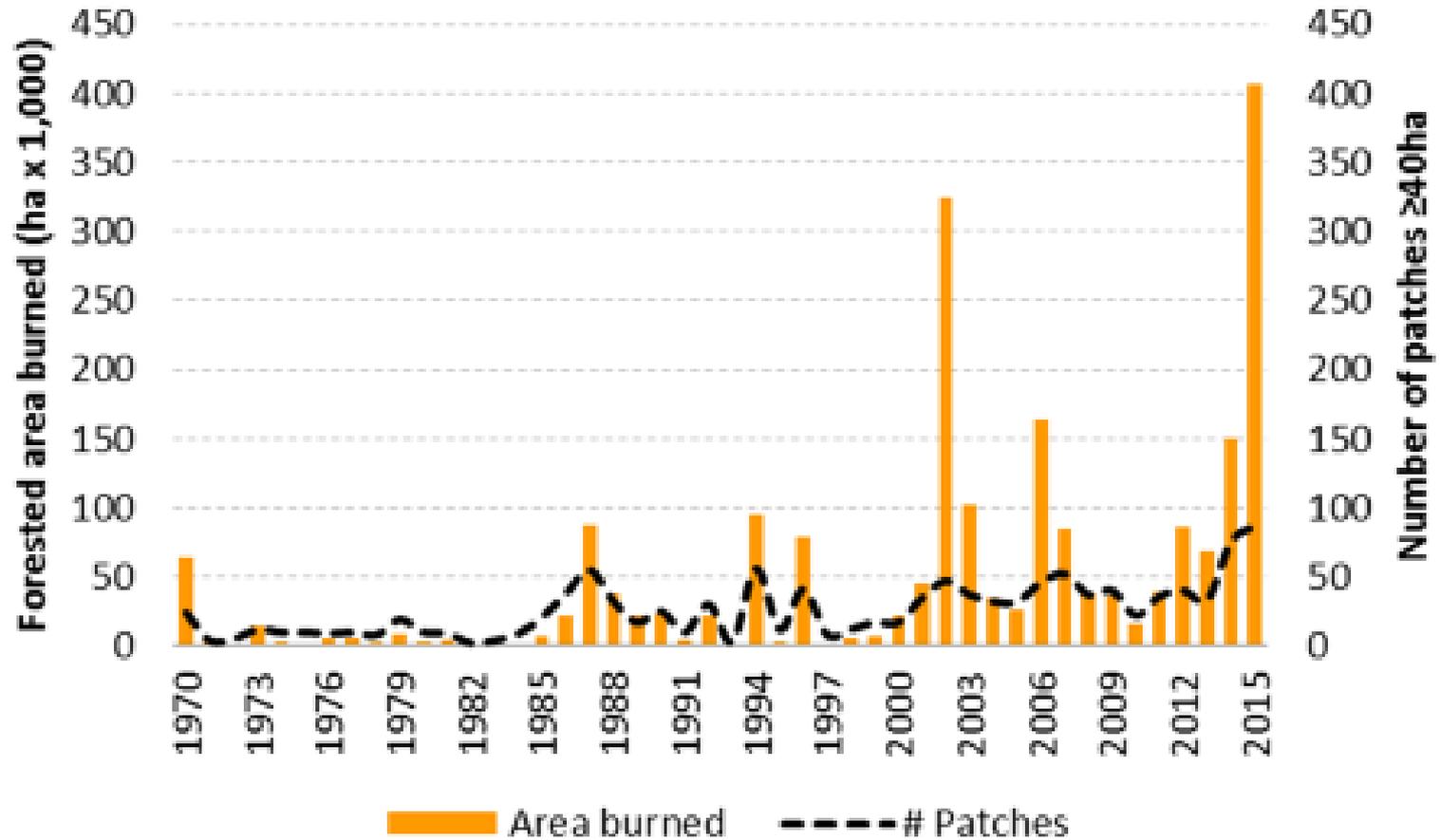
We generate and communicate impartial knowledge to help people understand and make informed choices about natural resource management and sustainability.



# Large Forest Wildfires

## Pacific Northwest Region (Oregon and Washington)

Trend in numbers of large forest wildfire and total area burned (1970-2015)



# Landscape fire modeling – the role of past fire suppression on 21st century mega-fires



Landscape fire model (FS Pro)

Historical weather streams

Historical ignition points

Custom state-and-transition models

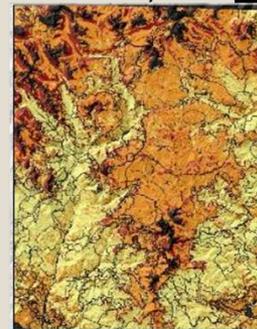
Spin-up historical landscape (500 yr)

Number of burns



Simulate fires (1940-201x)

Fire severity



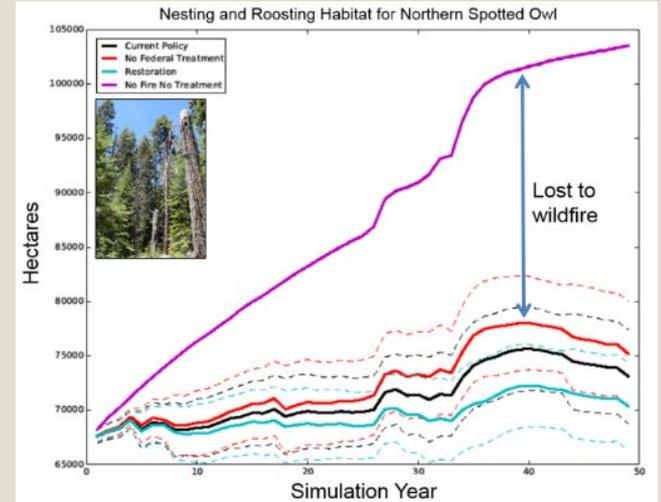
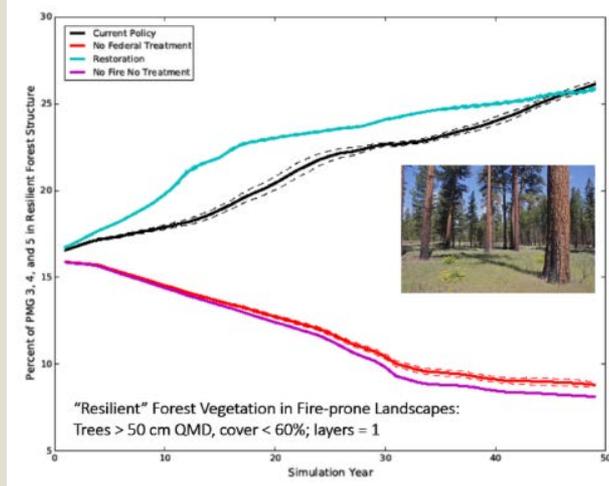
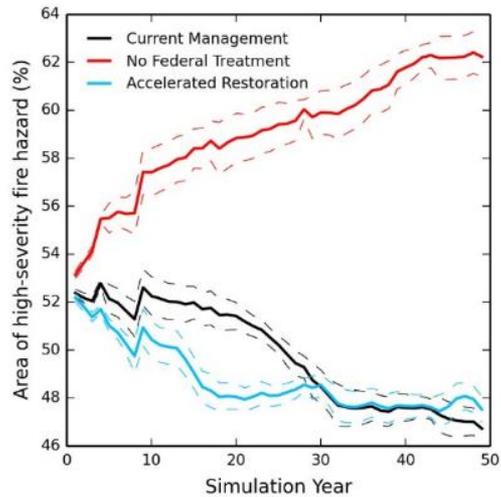
• Evaluate 201x

- fire extent,
- severity, and
- post-fire patterns

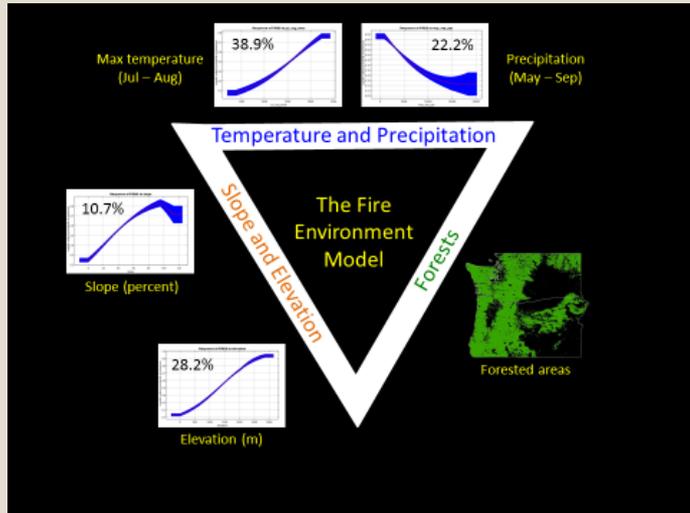




# Improved Forest and Landscape Condition



# Large Wildfire Modeling



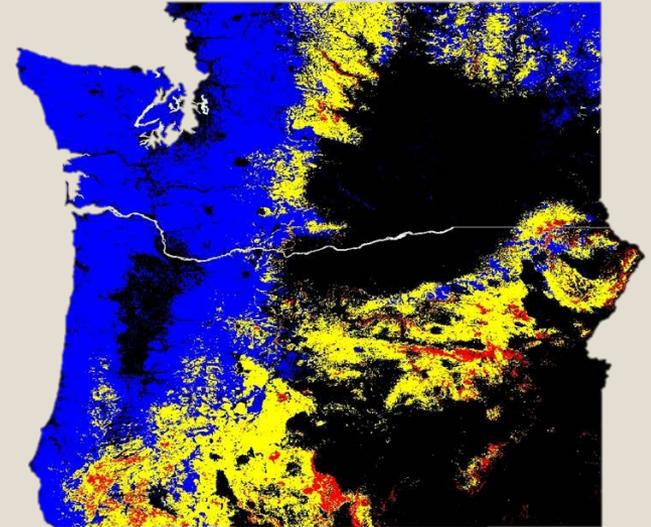
Maxent  
Modeling



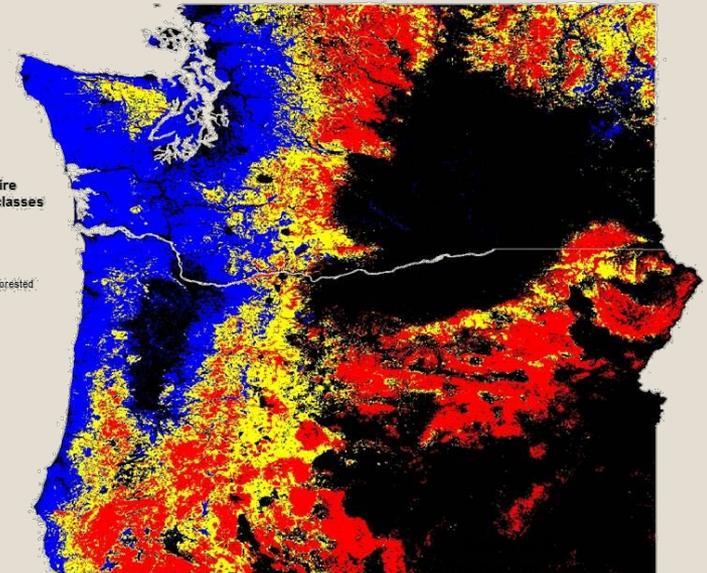
RCP 8.5  
Climate variables  
2071-2100



Baseline Model (1971-2000)



Future Normal (2071-2100)



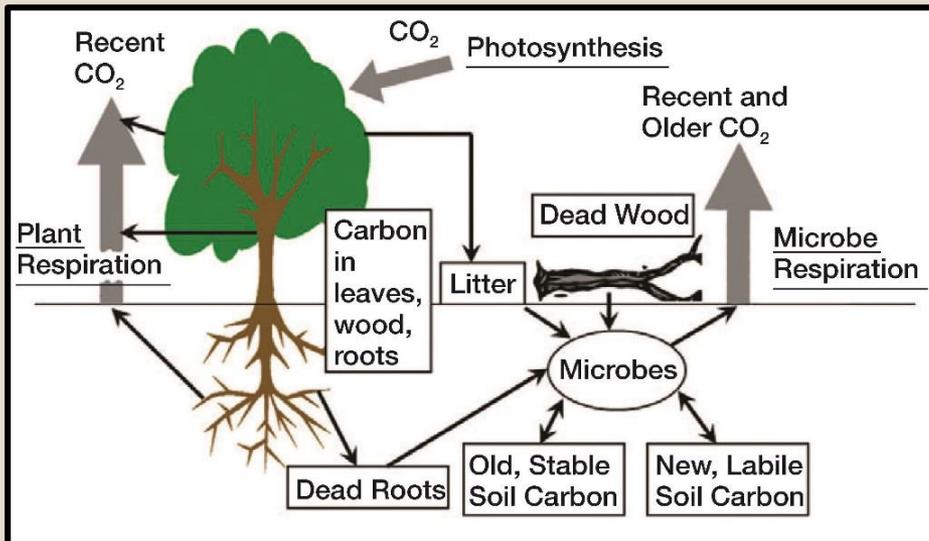
## SB 1070: Clean Energy Jobs Bill (formerly SB 557 & HB 2135)

### Summary

A cap and invest program (CIP) with trading is a **flexible, market-based mechanism** that **reduces pollution at low cost**. Regulated businesses must hold permits to pollute (allowances). Allowances are auctioned, **raising proceeds**, and may be traded between regulated entities. This **creates value for reducing climate pollution** by allowing business that can reduce pollution the quickest and fastest to sell (aka, trade) allowances to other businesses that need them. Proceeds can be **reinvested** to further reduce climate pollution, assist industry, create benefits for disproportionately impacted communities, retrain workers, and advance clean economic development.

### Bill language:

<https://olis.leg.state.or.us/liz/2017R1/Downloads/MeasureDocument/SB1070/Introduced>



## AB 1504 California Forest Ecosystem and Harvested Wood Product Carbon Inventory: 2006 – 2015

### FINAL REPORT

Glenn A. Christensen, Andrew N. Gray & Olaf Kuegler  
U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station

Nadia A. Tase & Mark Rosenberg  
California Department of Forestry and Fire Protection, Fire and Resources Assessment Program

Prepared for:

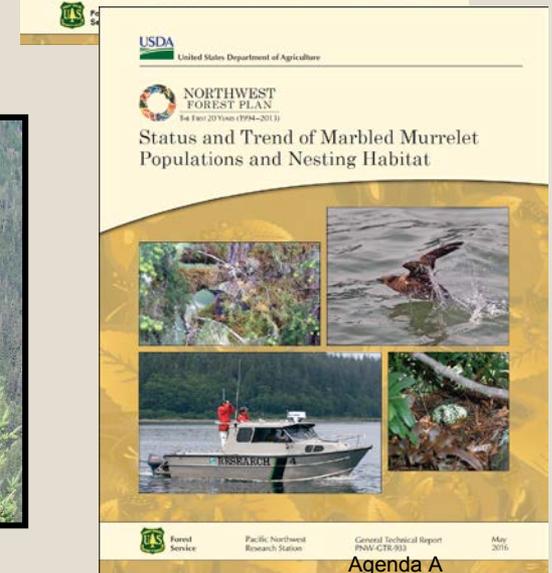
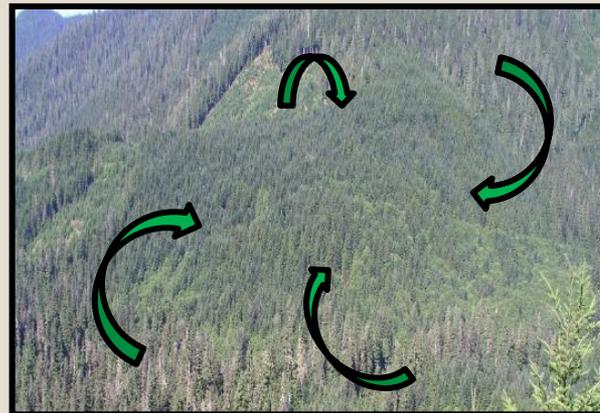
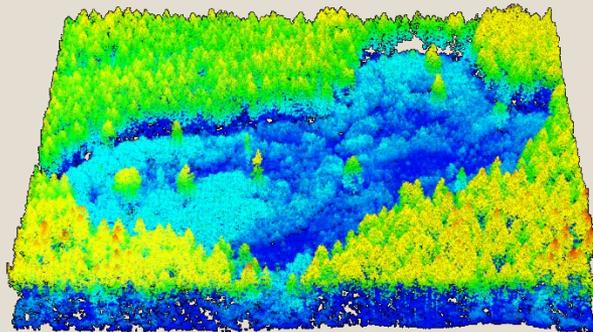
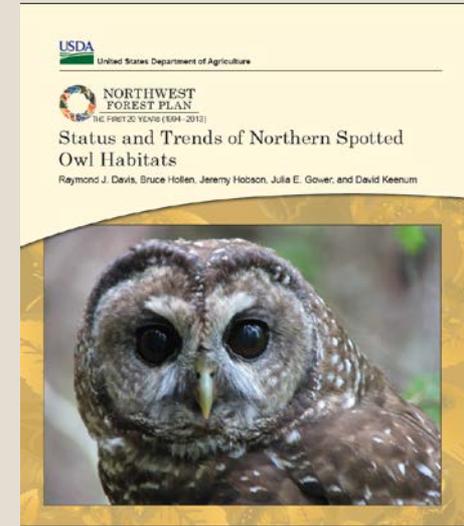
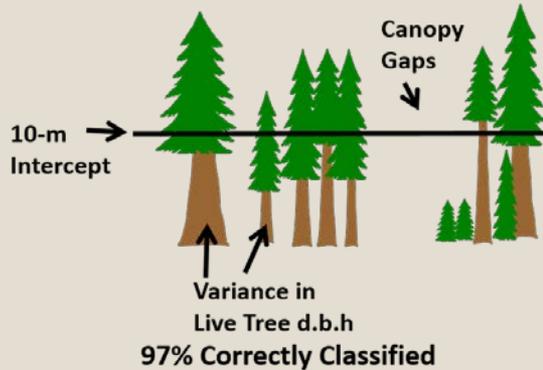


California Department of Forestry and Fire Protection agreement no. JCA02025

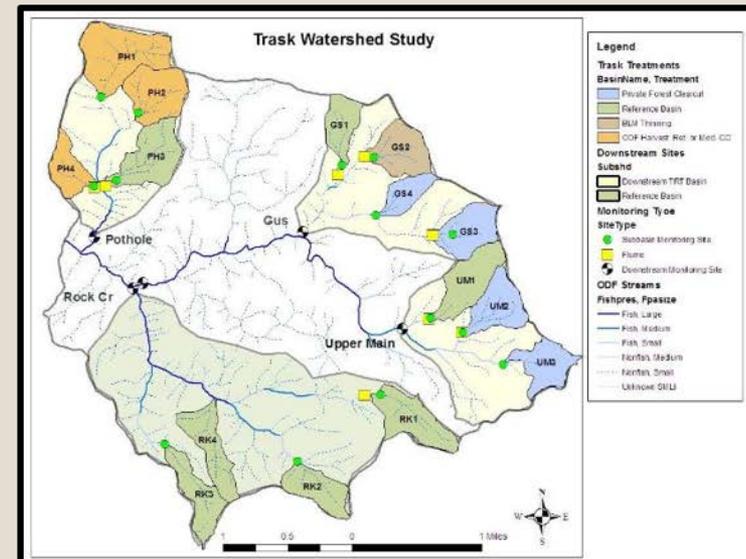
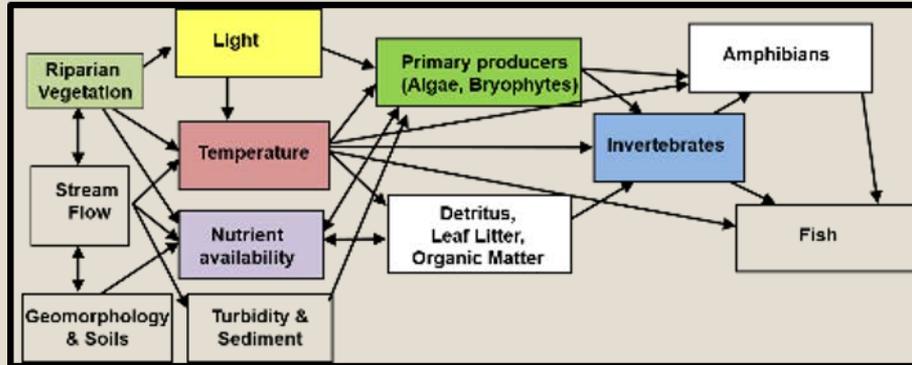
Agenda A

Attachment 3  
Page 24 of 29

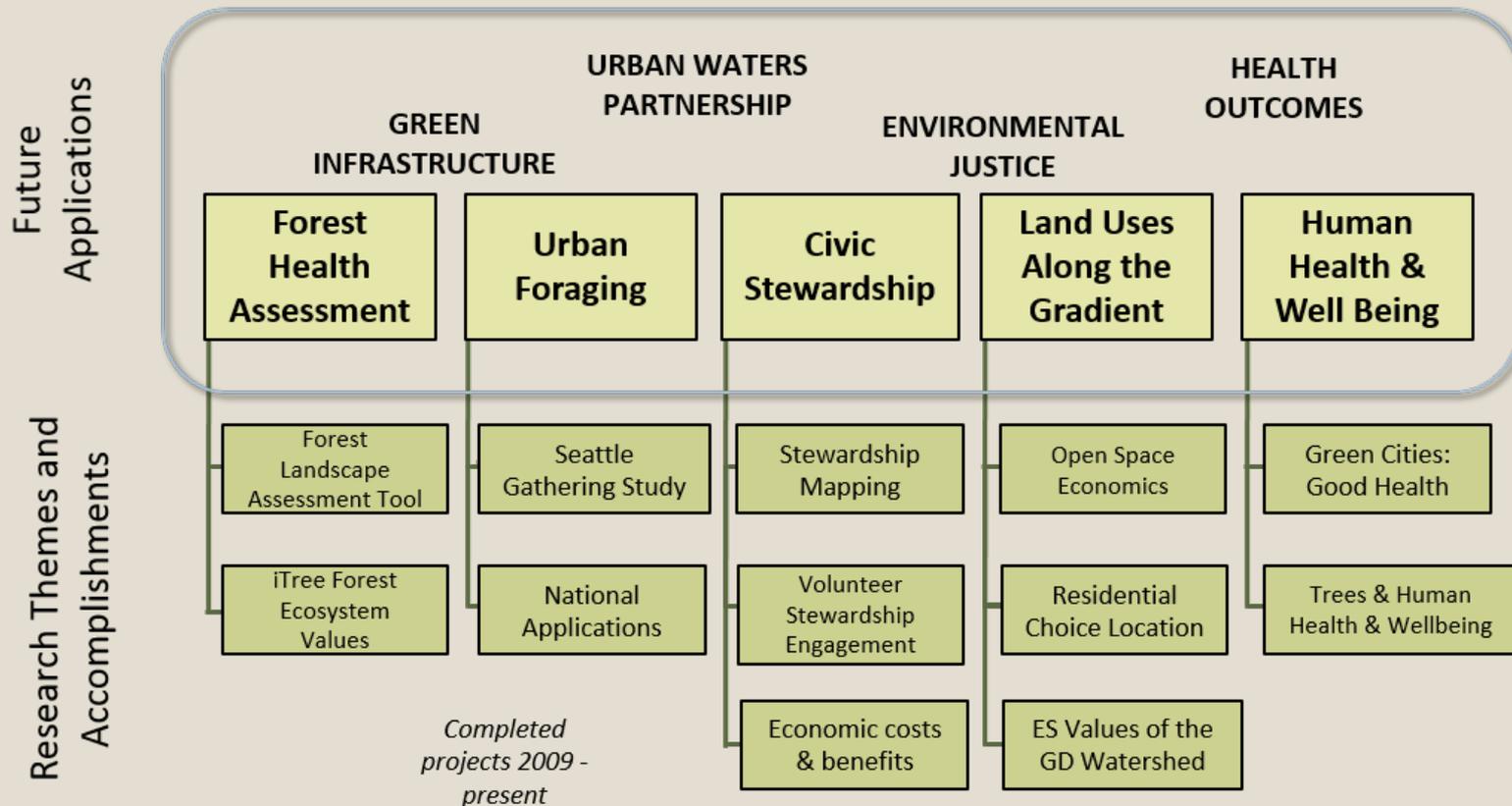
# Wildlife: Species, Habitats and Food Webs



# Aquatic, Riparian and Watershed Resources



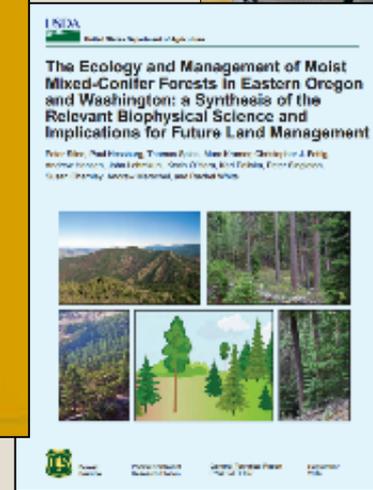
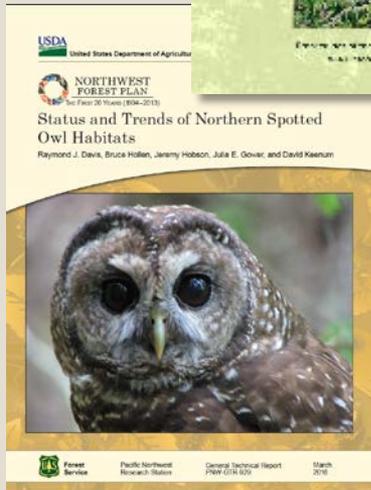
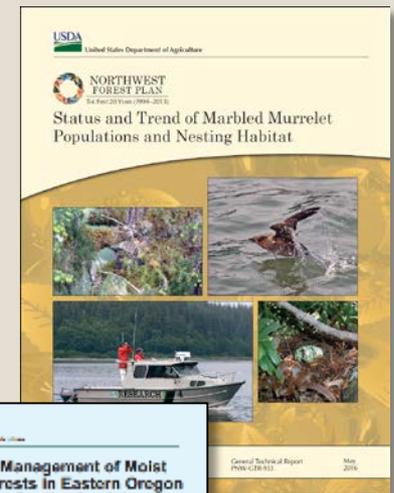
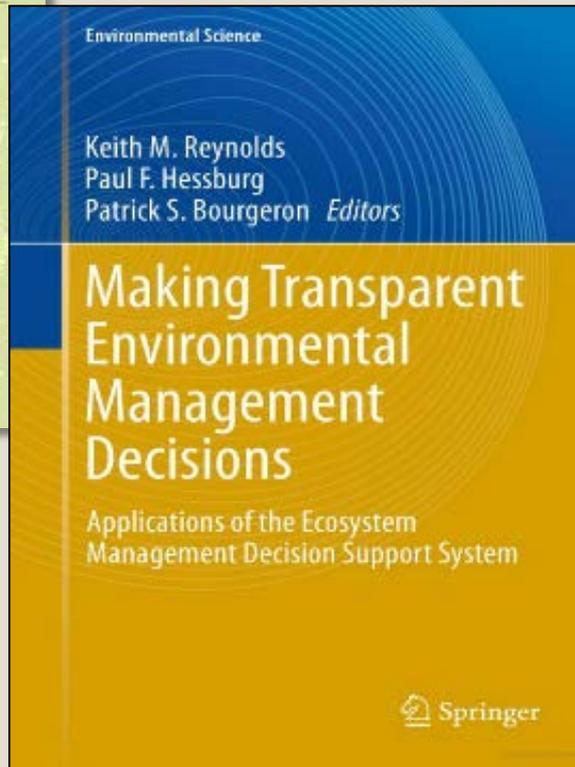
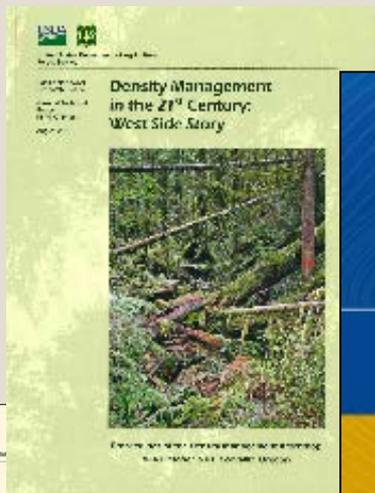
# Social License: Caring for the Land and Serving People



Socio-Ecological Systems & Landscape Gradient

Wolf, 2013

# Producing Knowledge and Tools to inform Natural Resources Management and Policy Decisions



# Developing Habitat Management Guidelines at Stand and Landscape Scales

