



Proposed Final Report

# Wildfire Prevention, Preparedness, and Expenditure Review

## LEGISLATIVE AUDITOR'S CONCLUSION:

DNR's long-term approach to wildfire prevention and preparedness is supported by science and best practices. The approach requires coordination with other entities and may reduce fire severity, which can impact costs to suppress fires.

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**JLARC  
direction  
to staff  
(2019)**

Review DNR's wildfire prevention and preparedness activities and related expenditures.

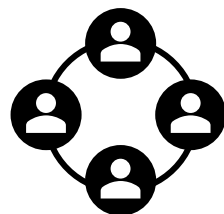
Identify if evidence exists about how effectively these types of activities reduce the impacts and costs of wildfire.

Evaluate DNR's progress in implementing recommendations from the 2018 JLARC report.

# Presentation Overview



Long-term  
approach



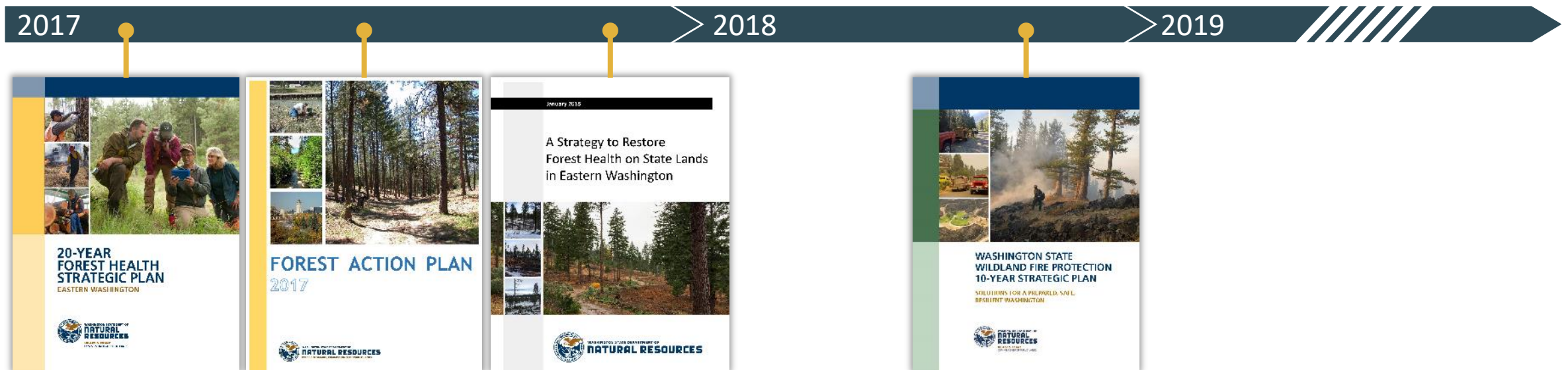
Coordination  
with others



Effect on fire  
severity & cost

# DNR plans have a long-term, strategic approach to prevention & preparedness

- 10- to 20-year implementation timelines



# PREVENTION

Reducing human-caused fires

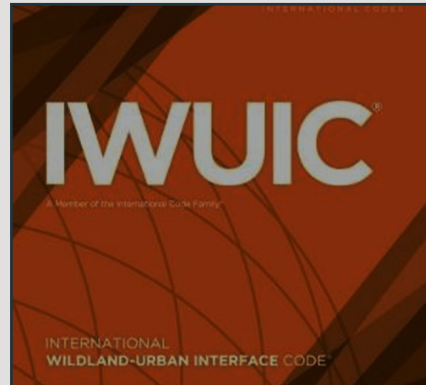


# PREPAREDNESS

Improving landscapes through forest health



Helping communities adapt to wildfire

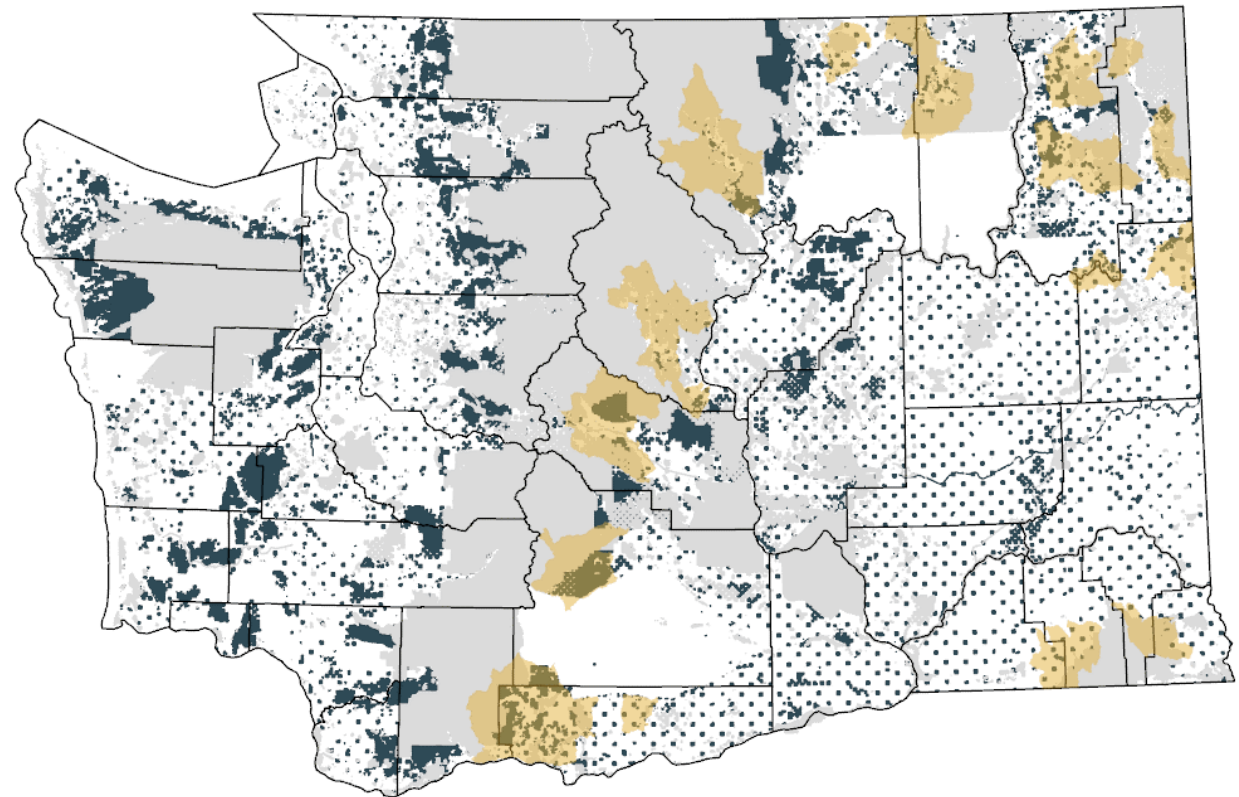




State law requires DNR to assess and treat 1 million acres of forest land by 2033.

# DNR identified **33 priority areas** to focus efforts.

Based on fire risk, wildland urban interface, water, habitat, timber, more...



■ DNR Land    ■ Federal Land    □ Other Ownership

Photo: Ed Suominen

**\$70**million

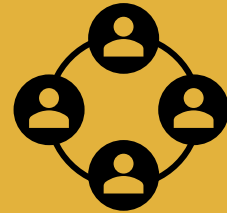
Spent on preparedness & prevention  
FY 2018 through 2020

**DNR is developing a tracking system to link forest health activities with maps and financial information.**

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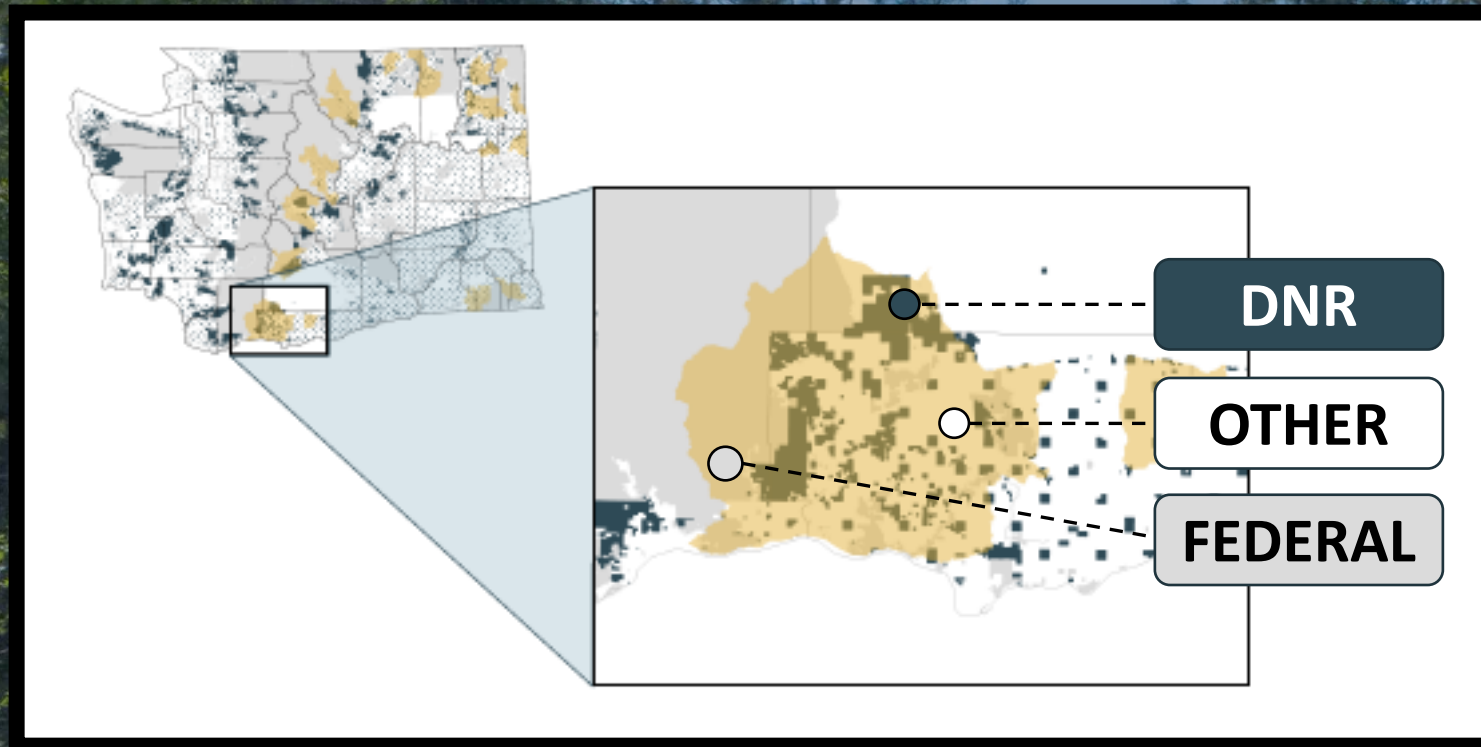




# 22 million acres of forest land

LANDOWNERS INCLUDE: State agencies | Federal agencies | Tribes | Private

# The **priority areas** cross ownership boundaries



DNR owns or manages 500,000 acres in the priority areas. It must work with others to achieve goals.



Photo credit: USFS



Photo credit: USDA Forest Service, Region 6, State and Private Forestry, Forest Health Protection

Landscape preparedness is coordinated through formal agreements, collaboratives, and assistance programs.

**PARTNERS INCLUDE:**

Federal agencies | Private landowners | Local governments | Tribes | Fire agencies | Conservation Districts | Community groups

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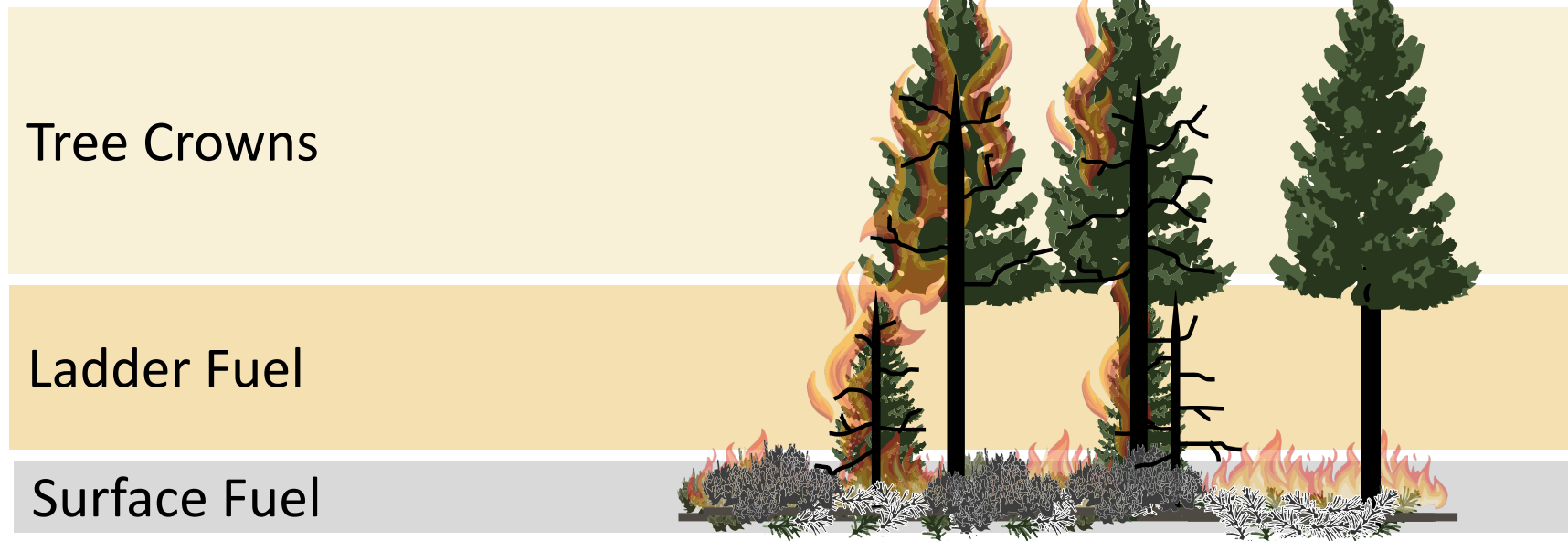
Research suggests removing fuels from the landscape has reduced the intensity and severity of individual fires.

Source: Review of 300+ research documents.

# BEFORE FUEL REDUCTION

**HIGHER INTENSITY:** Fire spreads from forest surface through ladder fuels to tree crowns.

**HIGHER SEVERITY:** Fire spreads through canopy and forest is more damaged by fire.



Research suggests removing fuels from the landscape has reduced the intensity and severity of individual fires.

Source: Review of 300+ research documents.

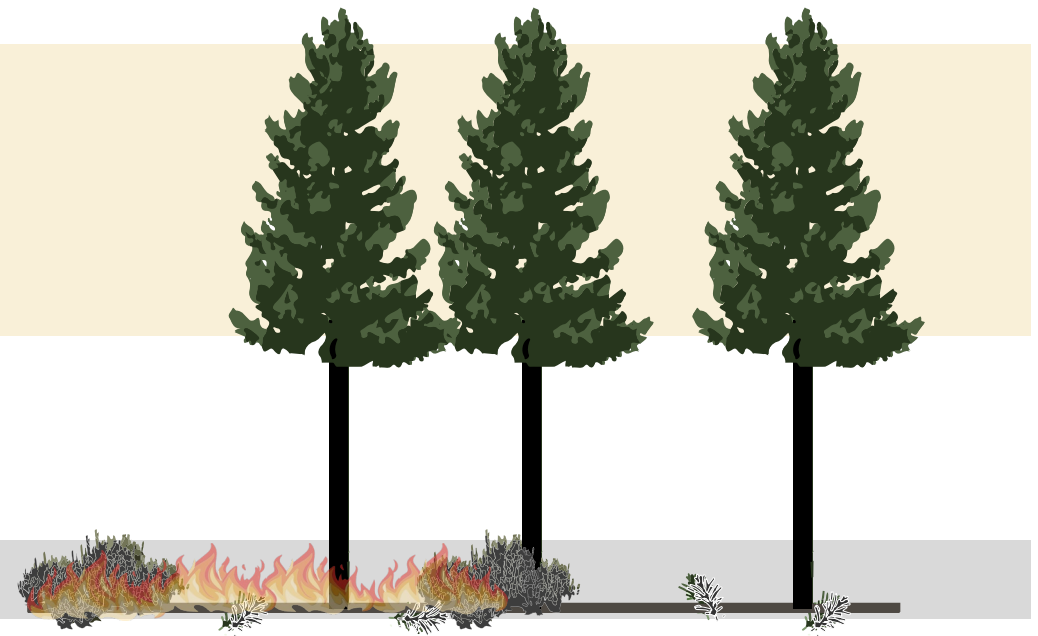
## AFTER FUEL REDUCTION

**LOWER INTENSITY:** Fire less likely to rise to tree crowns.

**LOWER SEVERITY:** Forest is less damaged.

Tree Crowns

Surface Fuel



# Thinning + Prescribed Fire is a best practice for removing surface fuels



**Treated with  
prescribed fire  
before wildfire**

**Not treated with  
prescribed fire  
before wildfire**

Source: Photograph taken by Justin Haug,  
Washington Department of Fish and Wildlife (WDFW).

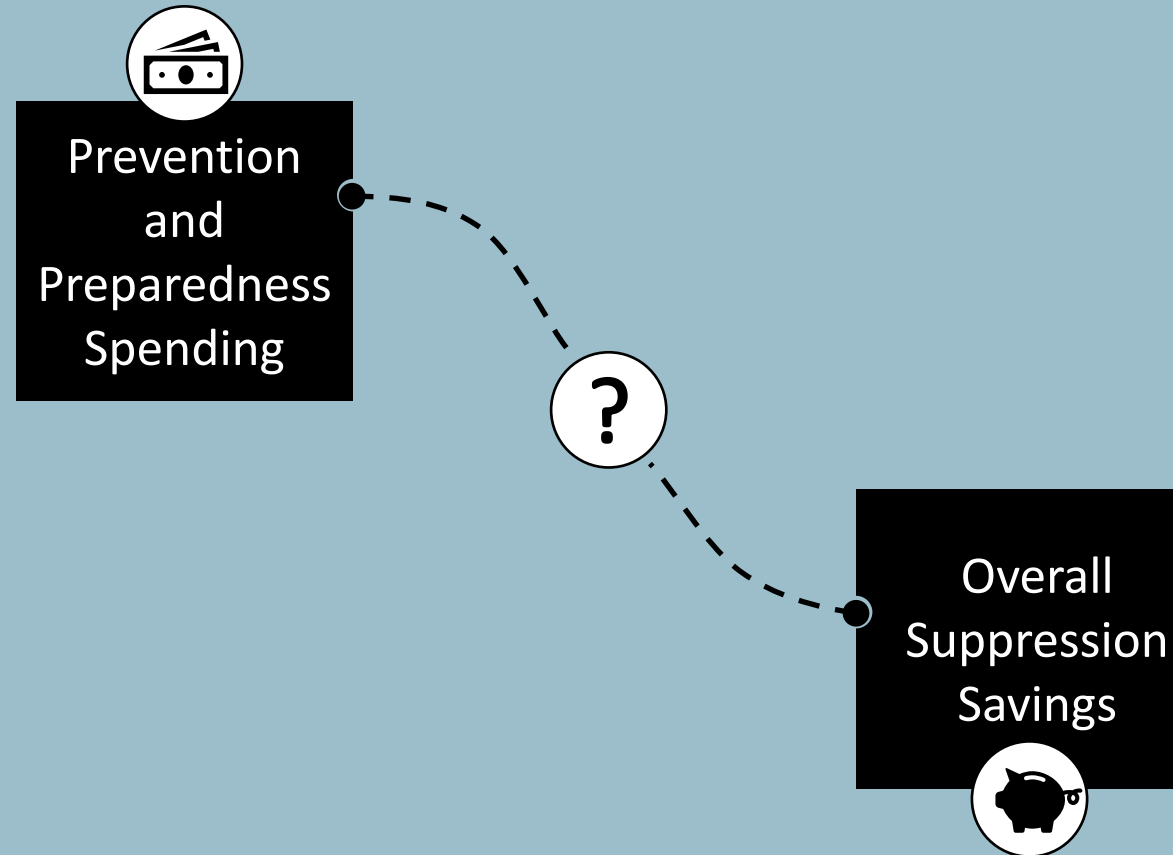


Source: Photograph taken by Justin Haug, Washington Department of Fish and Wildlife (WDFW).

# Relationship between preparedness, prevention, and suppression spending is complex.



**Models predict preparedness activities may reduce suppression costs for individual fires.**



## Many factors affect suppression costs

- Fire size and behavior
- Climate and weather
- Wildland urban interface





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# Contact Us

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