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.
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
DNR's plans and activities are consistent with national guidance

National Cohesive Strategy Goals

- Restore and maintain landscapes
- Fire adapted communities
- Wildfire response

DNR Wildfire Strategy Goals

- Resilient landscapes
- Fire adapted communities
- Safe, effective response
- Capable, integrated, sustainable systems
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
Spent on preparedness & prevention
FY 2018 through 2020

Accounting codes provide details such as activity type, project, region

$70 million

Spent on preparedness & prevention
FY 2018 through 2020
Currently, DNR cannot systematically show how much it has spent on forest health in specific priority areas.
DNR has proposed data standards to link financial and spatial data

**UNIQUE ID**

123

**FINANCIAL DATA**
- Fund source
- Project name & code
- Amount spent

**SPATIAL DATA**
- Property location
- Treatment type(s)
- Acres treated
Presentation Overview

- Long-term approach
- Coordination with others
- Effect on fire severity & cost
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.
DNR and federal agencies use formal agreements to coordinate

**Good Neighbor Authority**

USFS and BLM reimburse DNR for forest health treatments done on federal land.
Forest health collaboratives facilitate non-binding agreements about federal forest land management

- Federal and state agencies, Tribes, conservation groups, and others.
DNR offers financial and technical assistance to small forest landowners
DNR is developing a forest health tracking system. It will include data from multiple state, federal, and private partners.
Wildland Urban Interface (WUI)

Area where homes are built near or among lands prone to wildland fire.
Responsibility in the WUI is shared

**PREVENTION**
- DNR
- FIRE AGENCIES
- PUBLIC

**HOME PREPARATION**
- DNR
- FIRE AGENCIES
- RESIDENTS
- CONSERVATION DISTRICTS

**PLANNING**
- DNR
- FIRE AGENCIES
- RESIDENTS
- CONSERVATION DISTRICTS
- LOCAL GOVERNMENT
- OTHERS

**REGULATION**
- LOCAL GOVERNMENTS

**SHARING INFORMATION**
- FIRE ADAPTED COMMUNITY LEARNING NETWORK
  
  *all stakeholders*
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 2015
Lime Belt Fire

Not treated with prescribed fire before 2015
Lime Belt Fire

Source: Photograph taken by Justin Haug, Washington Department of Fish and Wildlife (WDFW)
Models predict that preparedness activities may reduce suppression costs for individual fires

Fuel reduction may affect fire growth, behavior, and size.

Fire behavior and size may affect suppression response and costs.
Relationship between preparedness, prevention, and suppression spending is complex.

Many factors affect suppression costs:
- Fire size and behavior
- Climate and weather
- Wildland urban interface
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.