



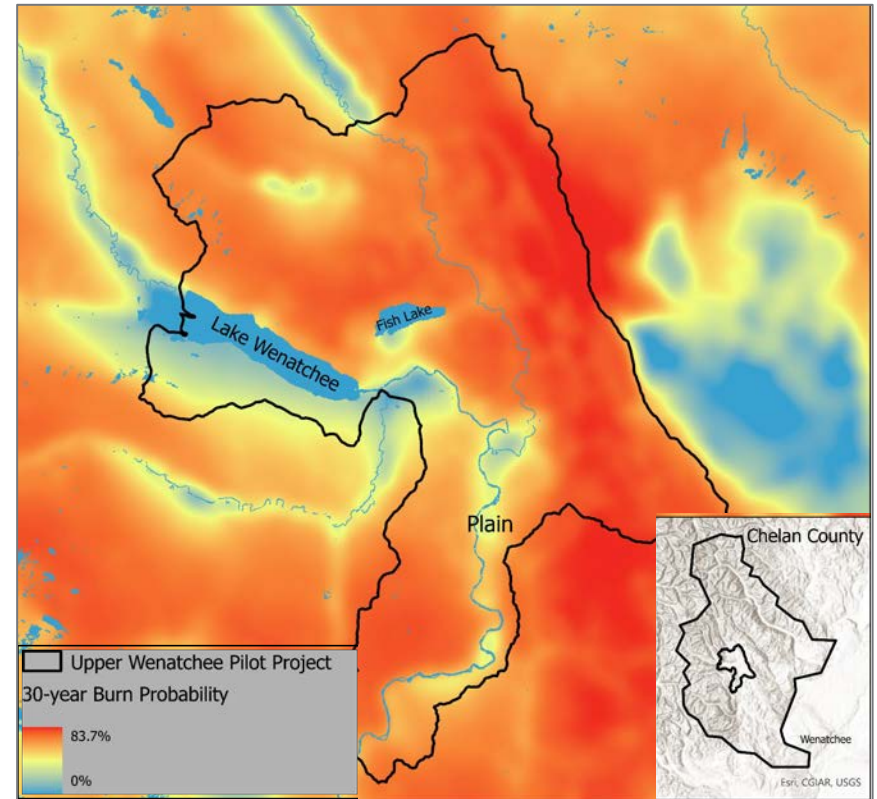
COUNTY OF  
CHELAN

BLUE  FOREST

# **Wildfire Mitigation:** *Communities of Lake Wenatchee and Plain*

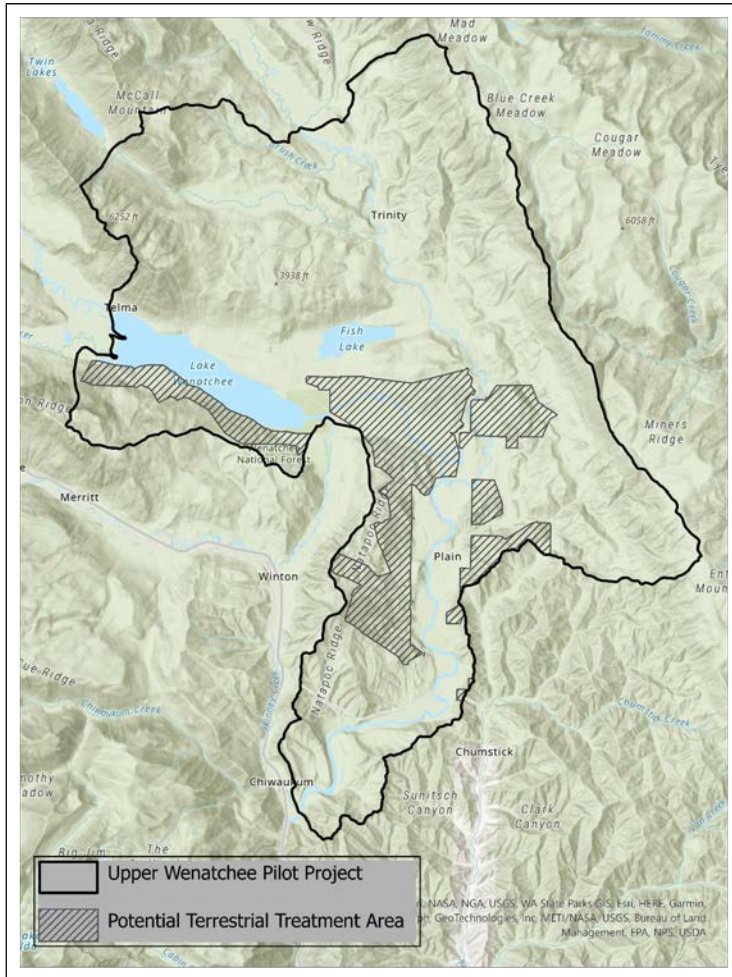
# Why are we here today?

- Over 80% of Chelan County is forested land and is home to some of the highest-risk communities and infrastructure in the Western U.S.
- The communities of Lake Wenatchee and Plain are calling for accelerated forest management
- This is a moment where local, regional, state, and federal support can catalyze long-term partnerships to reduce wildfire risk at scale



Lake Wenatchee & Plain | 30-year Burn Probability

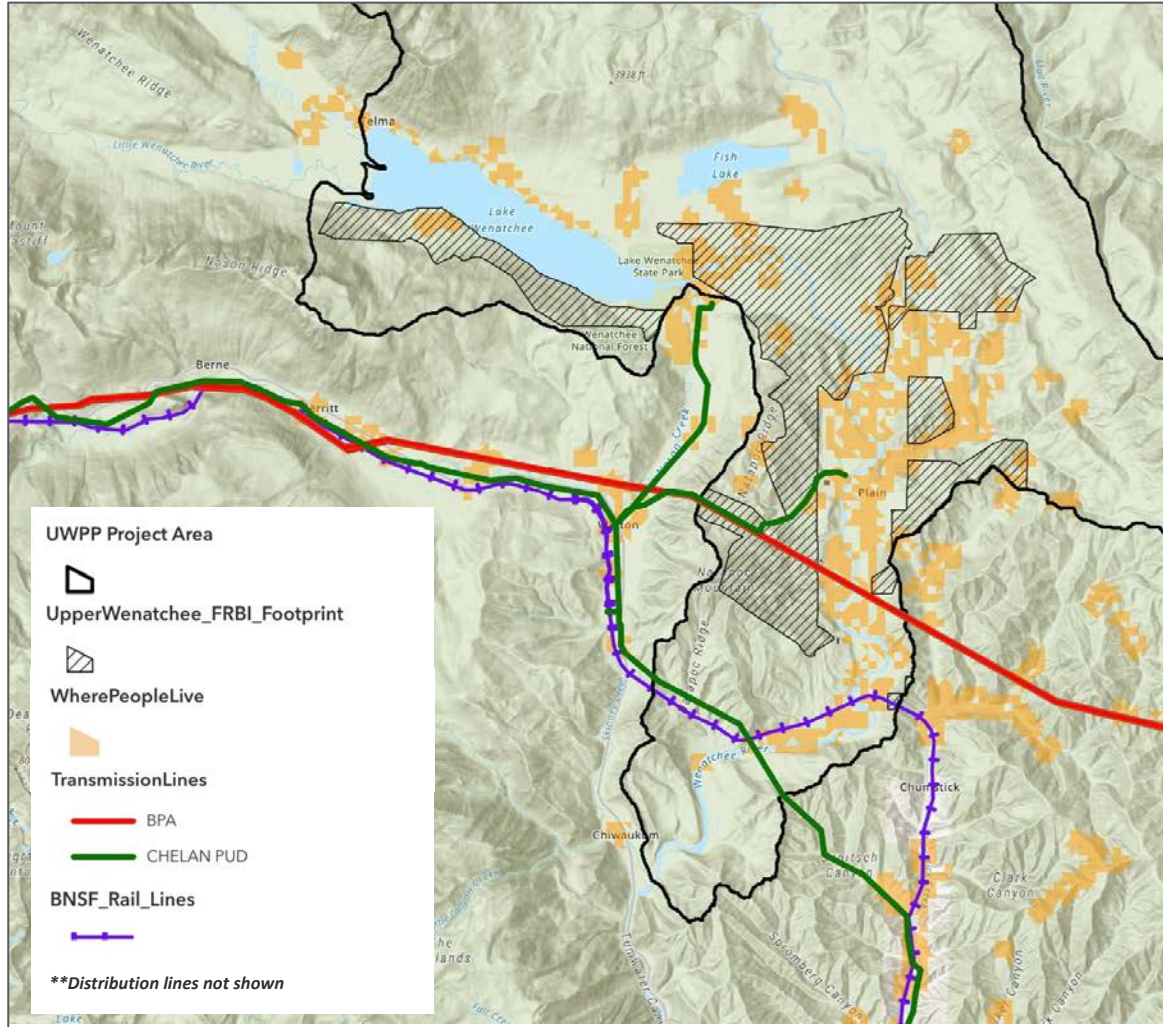
# Lake Wenatchee and Plain: Community protection project



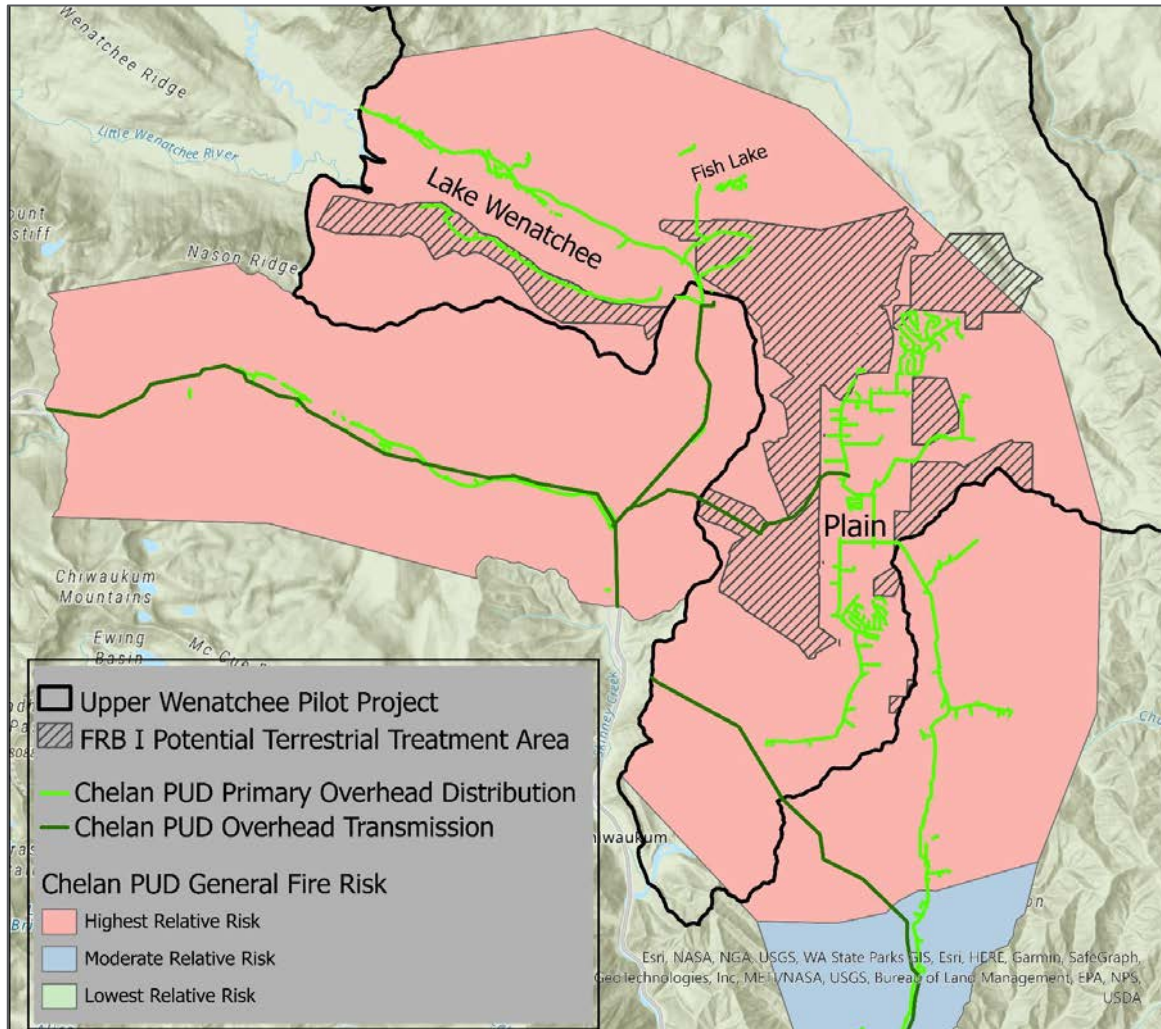
Chelan County is leading implementation and project management of 5,000 acres of fuels reduction and accompanying aquatic restoration across a 15,000 acre footprint in the WUI to reduce wildfire risk and protect the communities of Lake Wenatchee and Plain



# Communities, infrastructure & project area



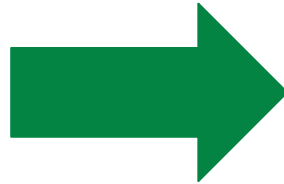
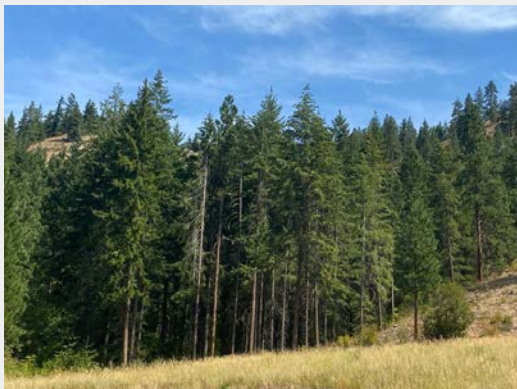
# PUD infrastructure & treatment units



# Goal of forest health treatments

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**Overstocked Forest**



**Healthy Forest**



# Proposed forest management treatments

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## Forest Management



- **Non commercial thinning, commercial thinning, and prescribed fire:** Reduce the density of small diameter trees and removing fuels from the landscape
- **Fuel breaks:** Opportunities for fire suppression and containment
- **Aquatics:** Watershed restoration to improve habitat, reconnect hydrology, and create natural fuel breaks

# Collaborative approach & blueprint for success

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## Status Quo

## Upper Wenatchee FRB

Implementation Strategy ?



Permitting complete and 5-yr implementation plan

Forest Service Capacity ?



Chelan County is the project manager

\$\$\$ ?



Cost sharing and financing

WUI work ?



WUI work implemented now

***This approach will accelerate the pace and scale of action, starting work in summer 2024***



# Cost sharing and financing

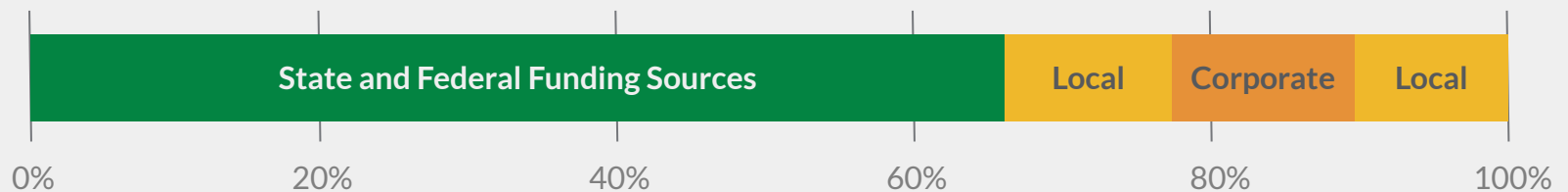
## A coalition of funders is needed to implement the Upper Wenatchee FRB

Washington State and US Forest Service have committed funds. Project is engaging Chelan County, infrastructure owners, corporates and other partners

Support for the project will:

- Answer the community's call to action
- Reduce risk to communities, local infrastructure, and the environment
- Support Chelan County-led project implementation

Total project cost of approximately \$18M



# Potential project benefits

The project may deliver the following benefits to **infrastructure owners** and to **local communities, the environment, and economy**

Avoided infrastructure repair  
& replacement costs



Community protection  
& power reliability

Deferred costs of  
infrastructure upgrades



Supporting a local  
restoration economy

Avoided shut-off & restart costs  
or losses in power revenue



Biomass and forest products  
infrastructure

Enhanced effectiveness of  
vegetation management



Habitat improvement  
& watershed health

Insurance benefits



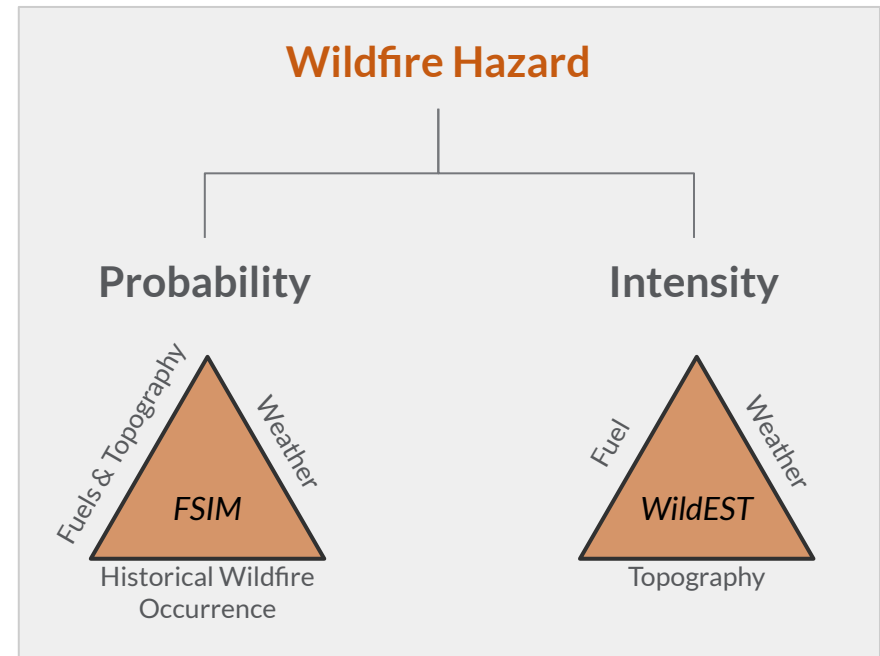
Protected recreation  
opportunities

# Wildfire risk modeling



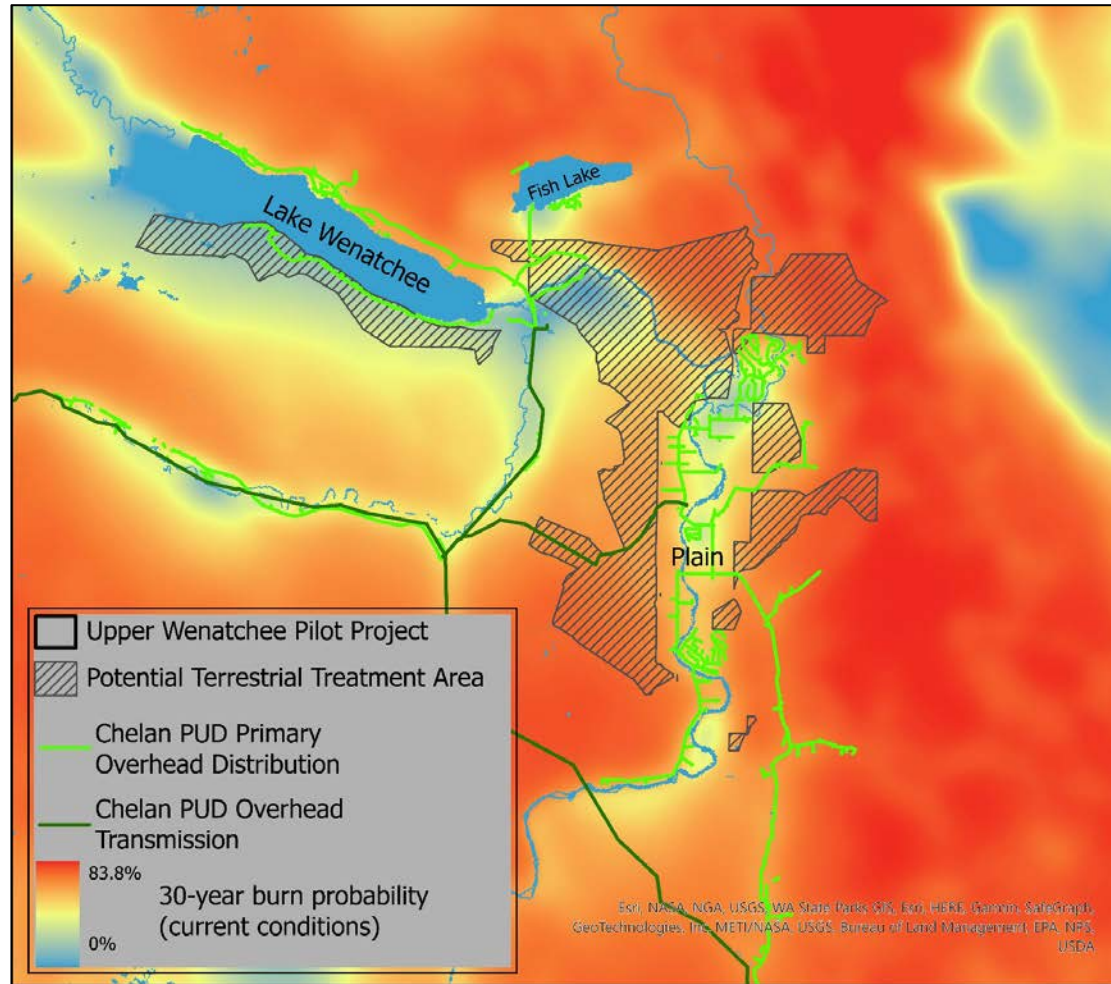
We contracted Pyrologix to model existing and post-treatment landscape conditions, using the best available science to quantify wildfire hazard and risk

- Framework to measure hazard
  - Probability (FSIM)
  - Intensity (WildEST)
- Calculations are conservative
  - Do not show the benefits of improved response and fire suppression capabilities



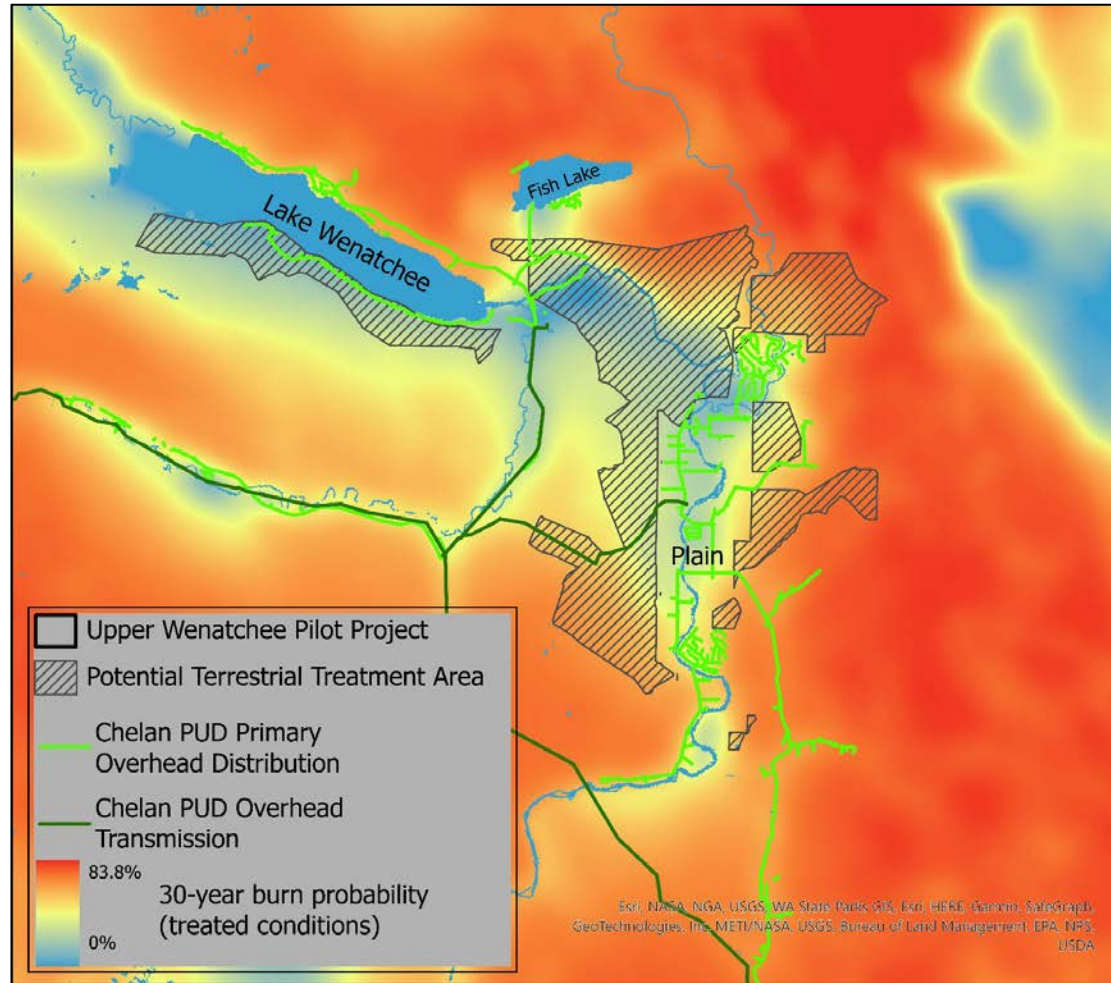
# Burn Probability | 30-year burn probability

## Current Conditions



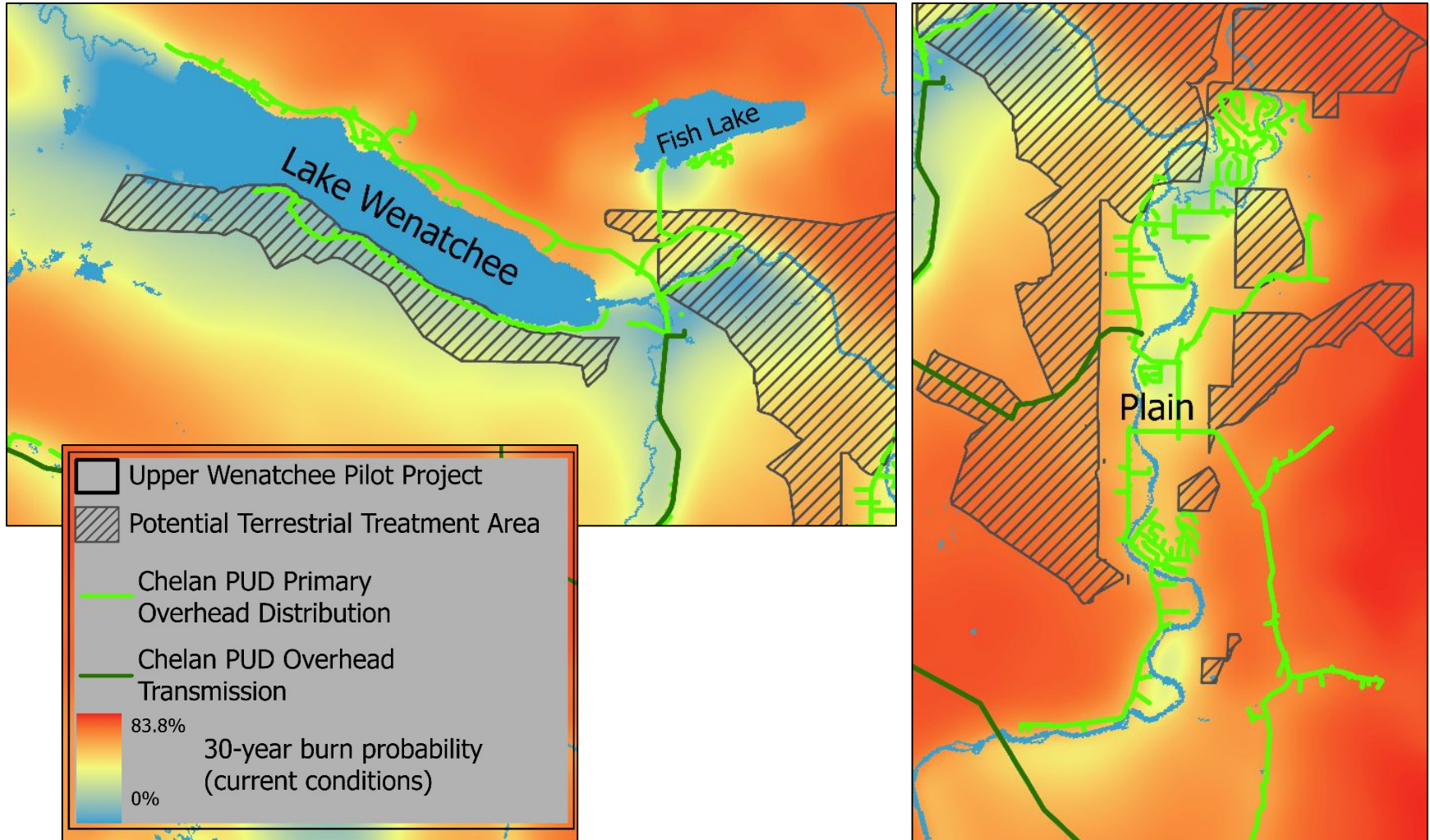
# Burn Probability | 30-year burn probability

## Treated Conditions



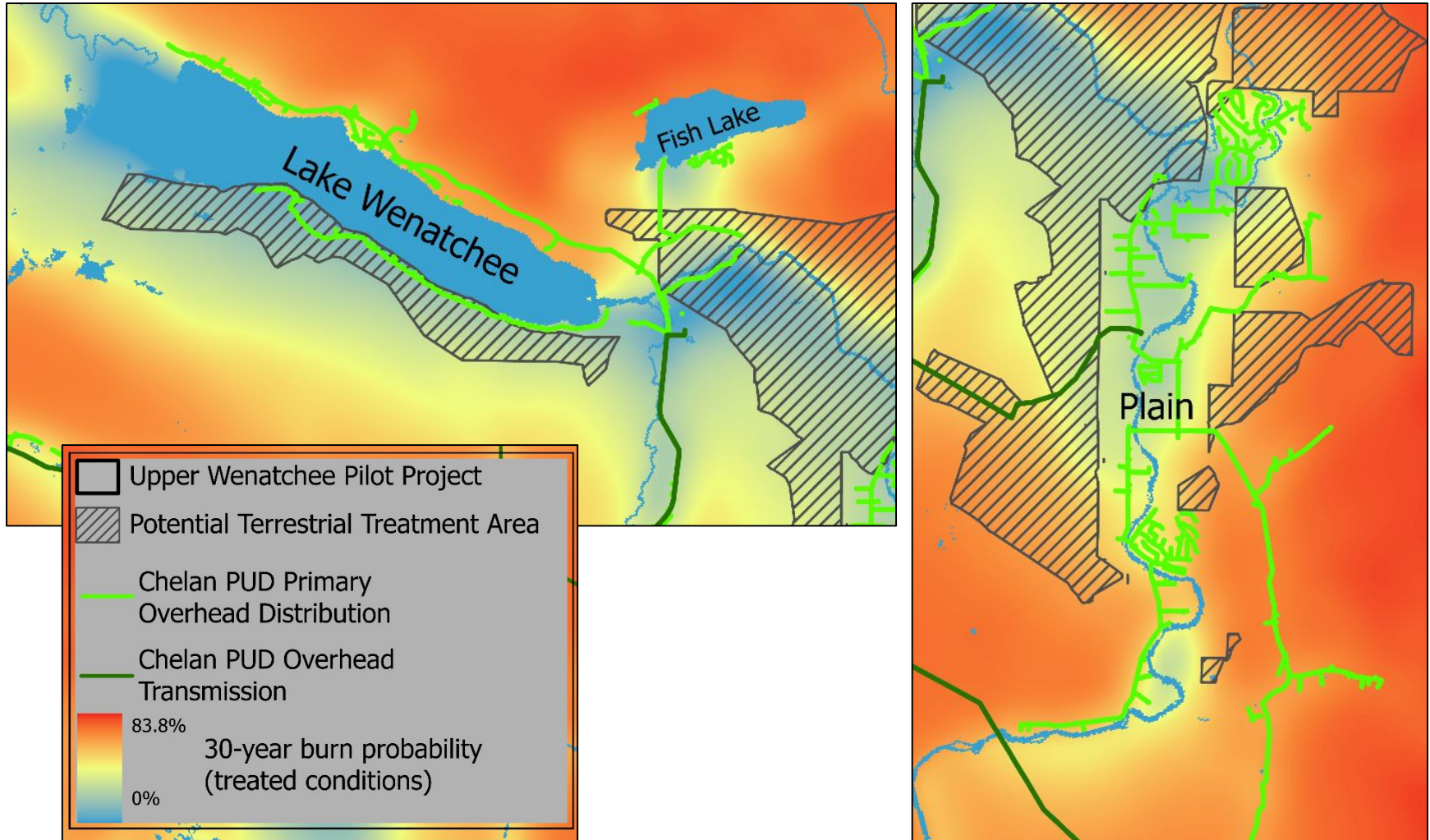
# Burn Probability | 30-year burn probability

## Current Conditions (zoomed)



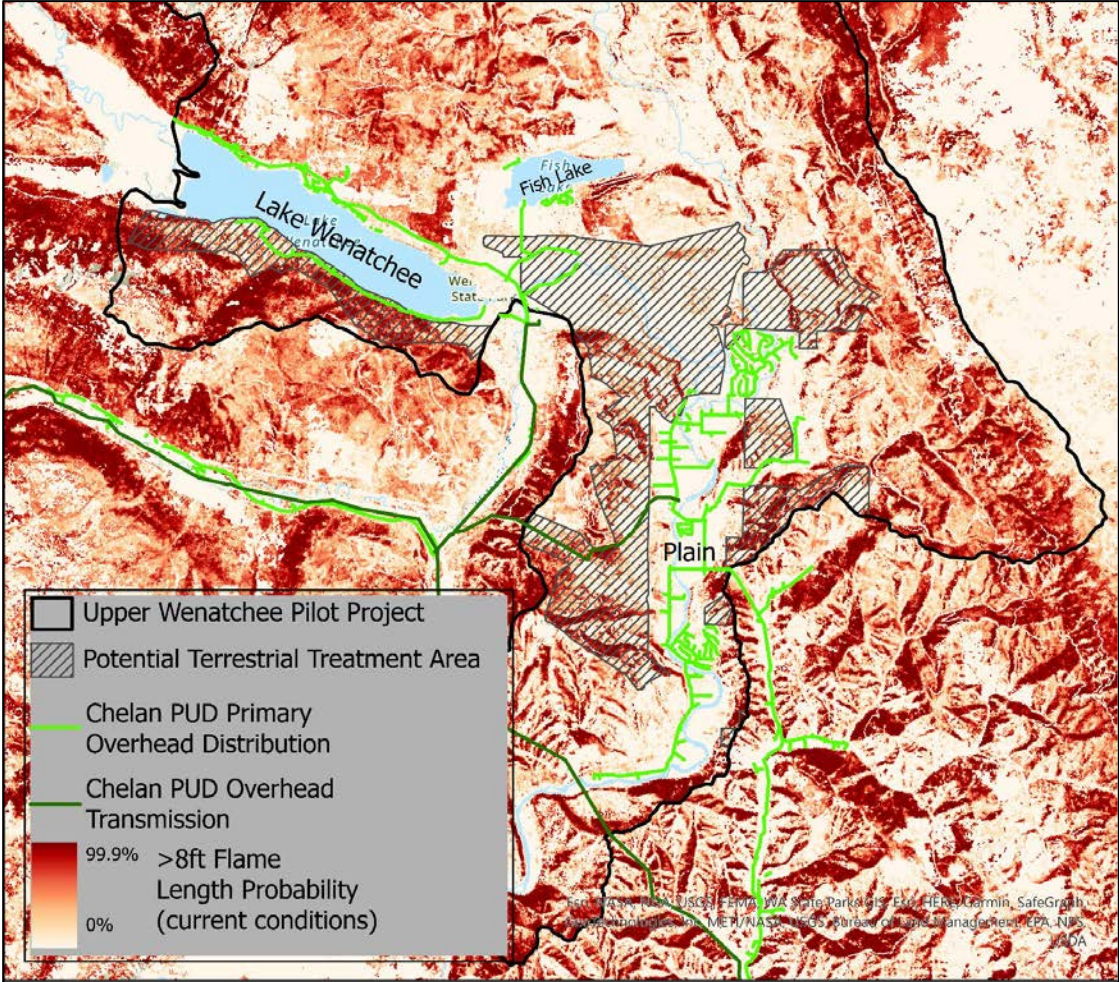
# Burn Probability | 30-year burn probability

## Treated Conditions (zoomed)



# Flame Length | >8-ft flame length exceedance

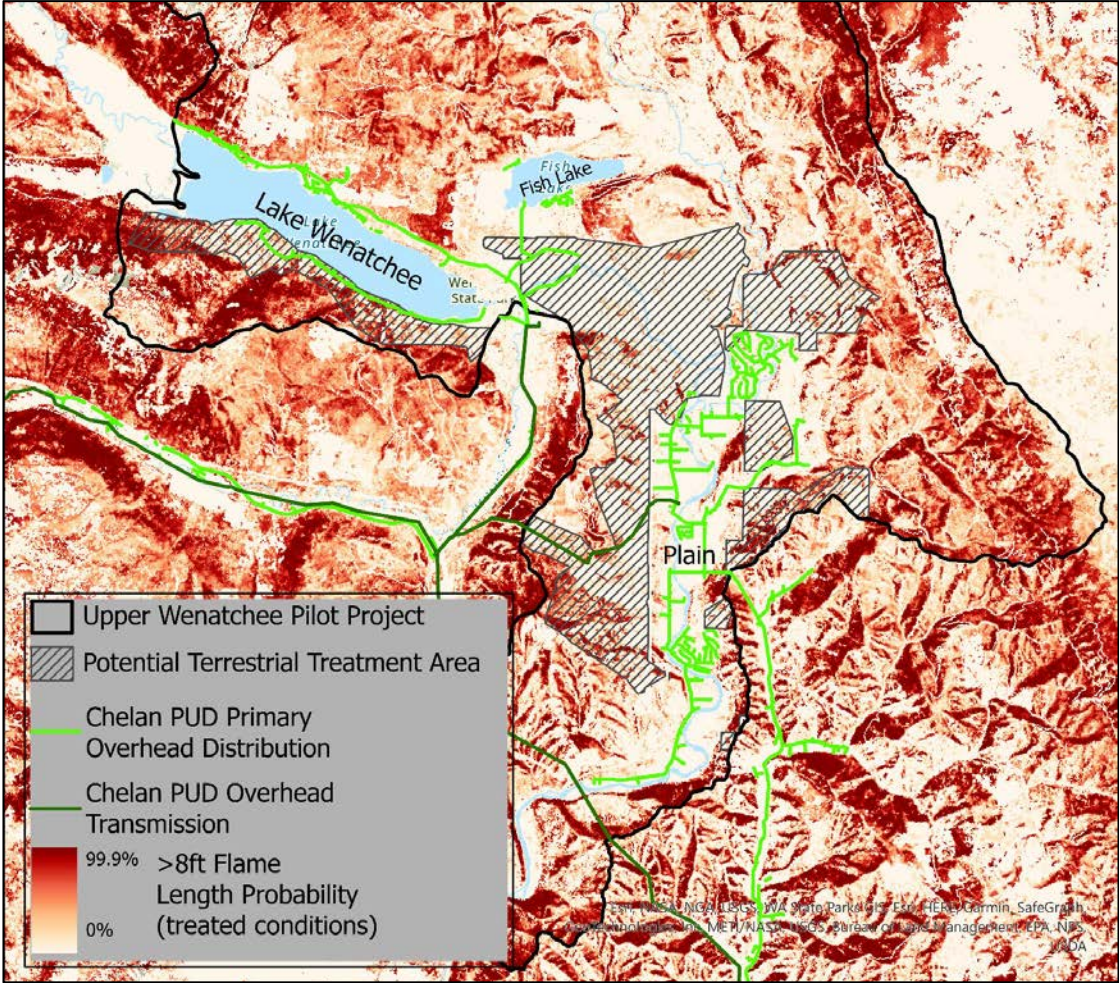
Current conditions: Annual expected flame length probability





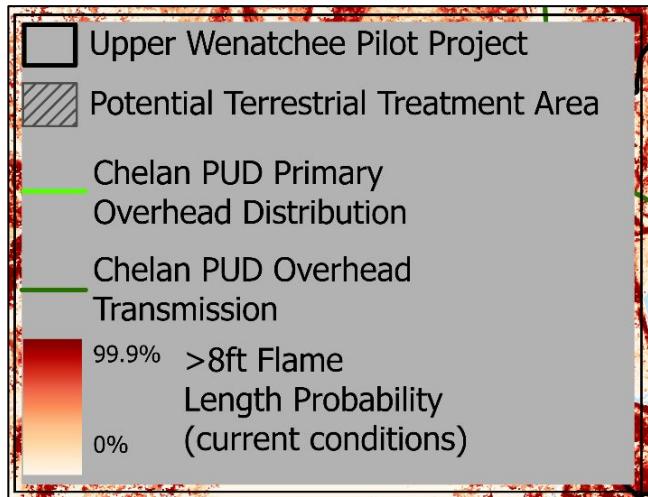
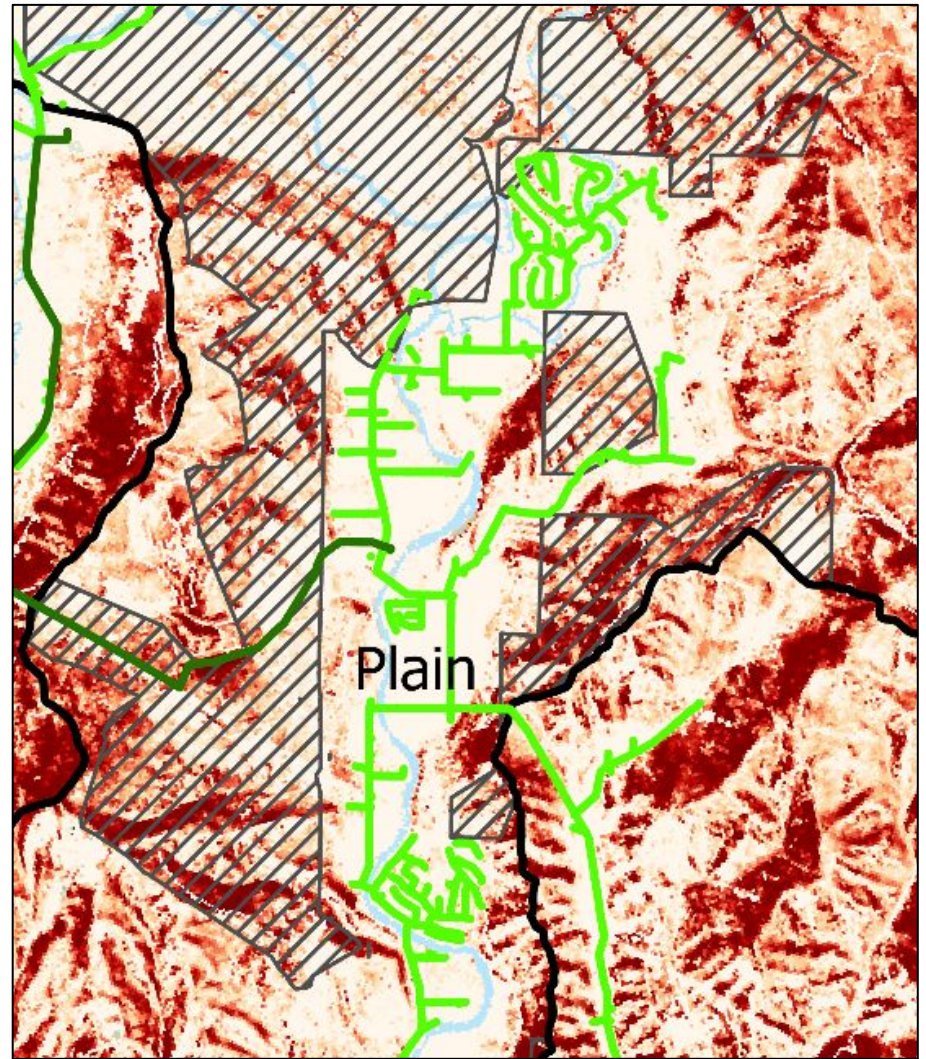
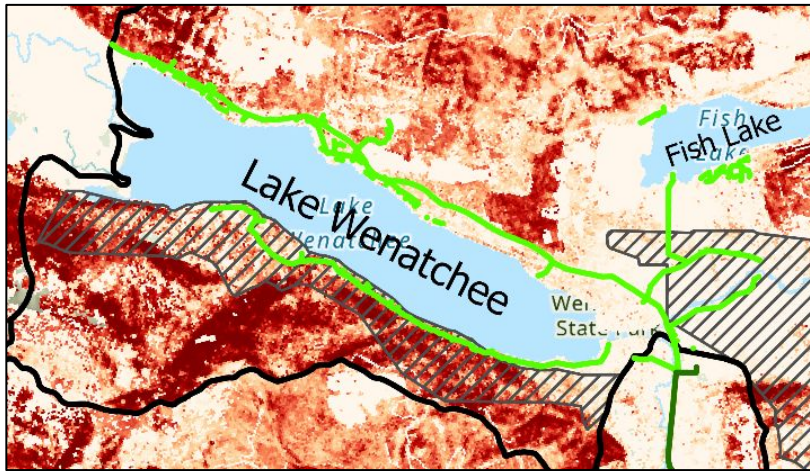
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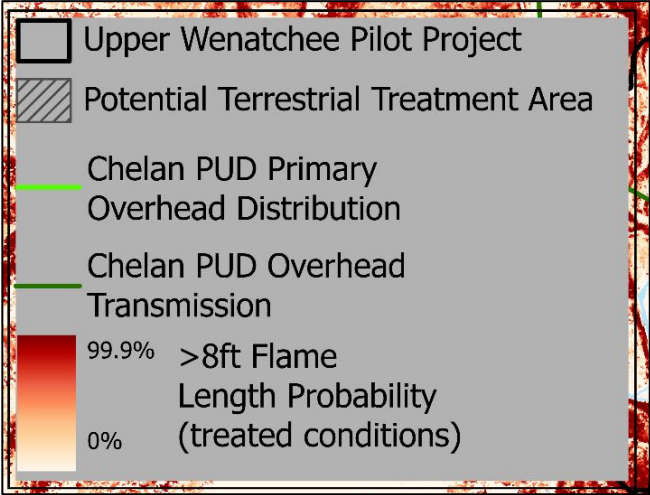
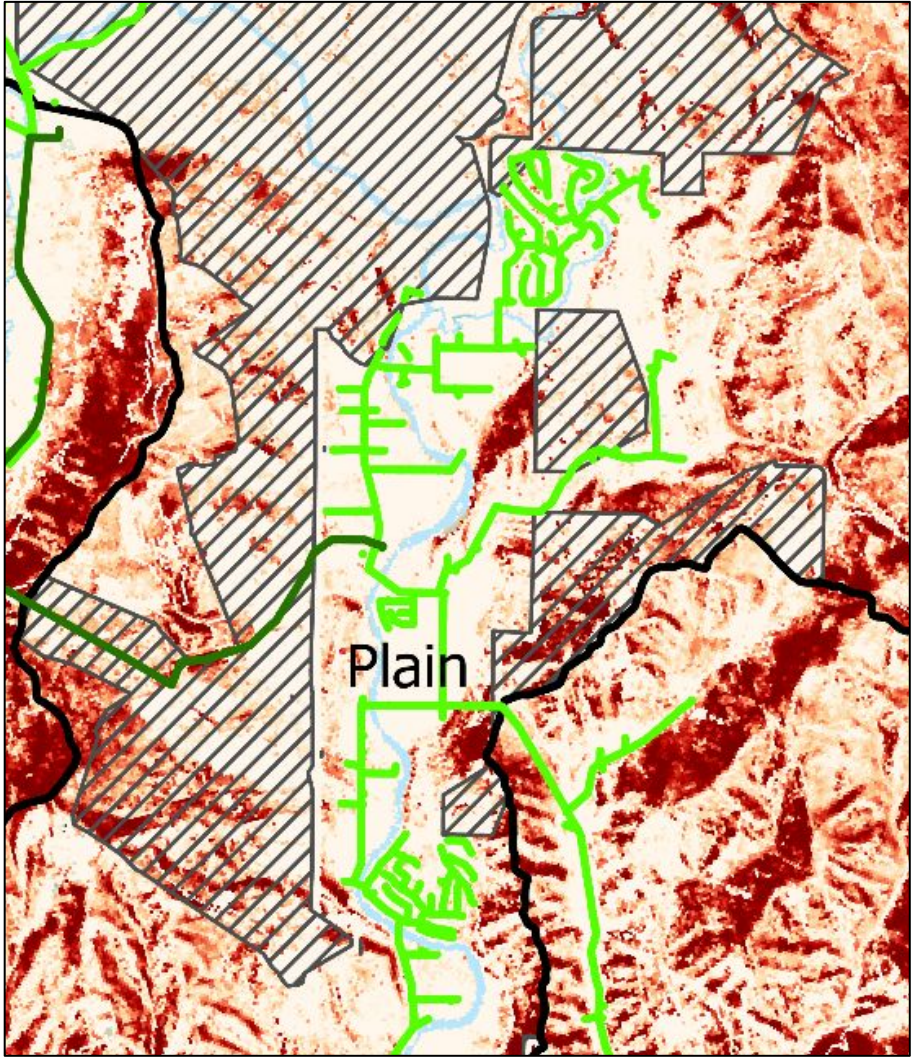
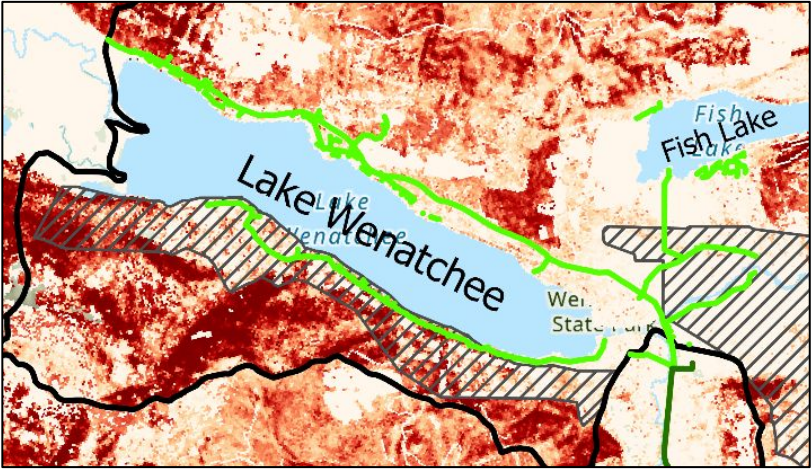
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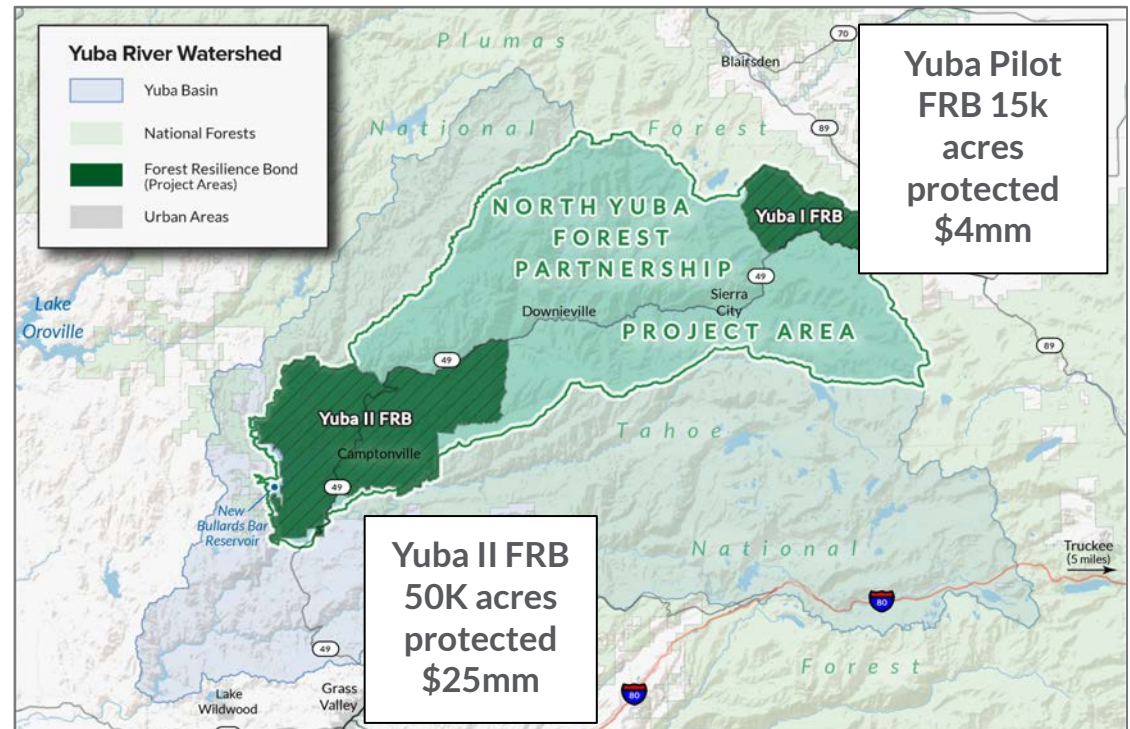
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Treated conditions: Annual expected flame length probability



# Example of success: Yuba Forest Resilience Bonds

- Activities include thinning, prescribed burning, meadow restoration, etc.
- Implementation partner is National Forest Foundation
- Beneficiaries include Yuba Water Agency, State of California, and – for Yuba II – private corporations
- Catalyzed the North Yuba Forest Partnership
- Has enabled biomass processing and workforce development



North Yuba River Watershed, Tahoe NF, California

Demonstrates pilot-to-scale model: Yuba Water's \$1.5M contribution leveraged 2x in FRB I and \$6M contribution leveraged 3x in FRB II

# A path forward

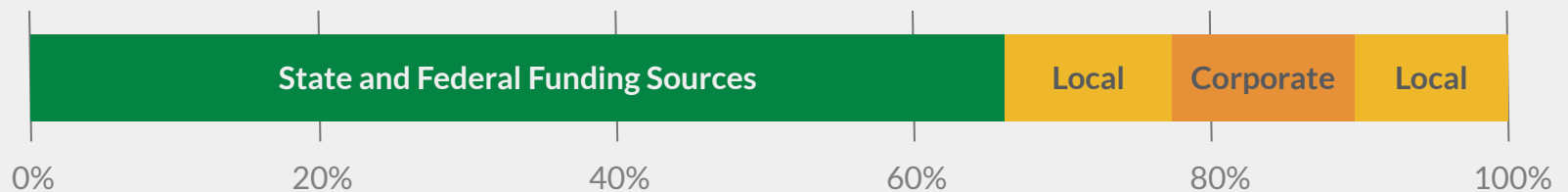
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# COUNTY OF CHELAN



## BLUE FOREST CONSERVATION

Financial Innovation for Sustainable Solutions



## WORLD RESOURCES INSTITUTE

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