



Lake Tahoe West Restoration Partnership: Landscape Restoration Strategy and TRPA Code Update

NOVEMBER 21, 2019



Lake Tahoe West Restoration Partnership

- Formed in 2016
- Multiple agencies and stakeholders
- Seek to increase resilience of forests, watersheds, recreation, and communities on west shore
- Increase pace and scale of restoration

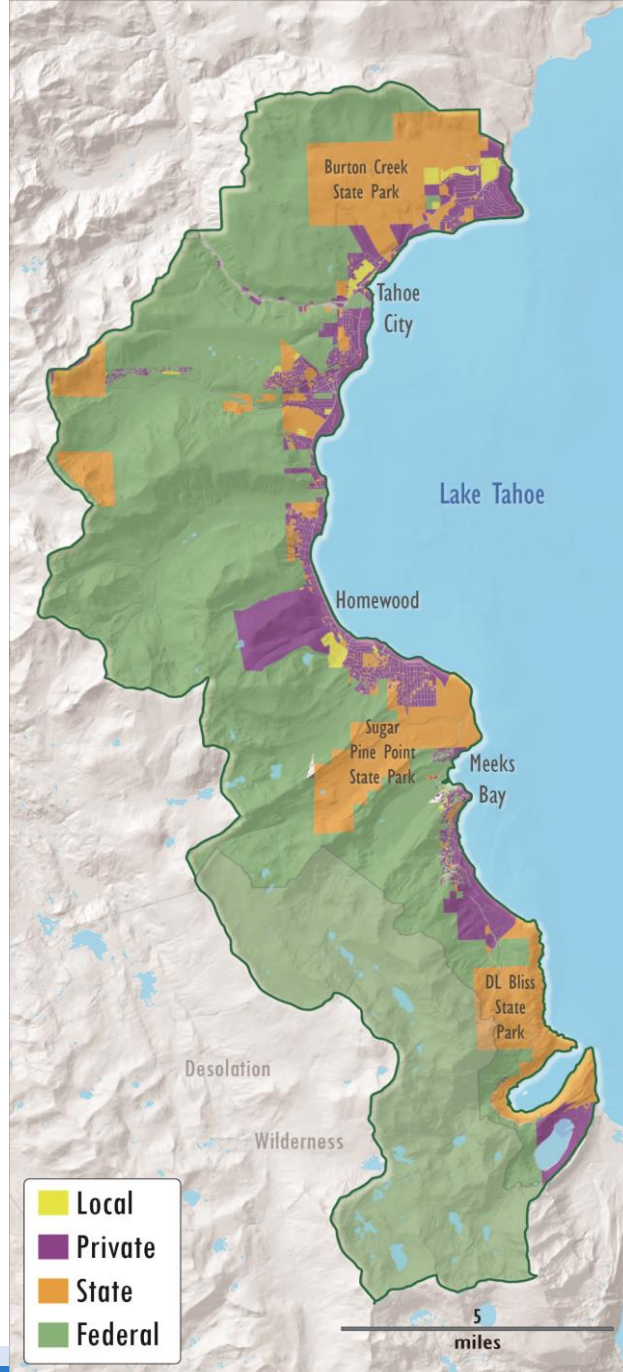


Lake Tahoe West (LTW) Landscape

- Approximately 60,000 acres
- At risk for both high-severity wildfire and tree mortality
- Lake Tahoe West rated as a high hazard area
 - Potential for tree mortality near communities, roads, and powerlines



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Phases of LTW Process

Phase of LTW Collaborative Process	Activity
Phase 1	Landscape Resilience Assessment (LRA)
Phase 2	Landscape Restoration Strategy (LRS)
Phase 3	Project Planning
Phase 4	Permitting
Phase 5	Implementation
Ongoing	Monitoring and Adaptive Management
Ongoing	Community Protection Actions

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Landscape Resilience Assessment

- 2017
- Identified landscape attributes and their current levels of resilience to disturbance
- Concluded west shore forests and watersheds are not currently resilient to fire, drought, and climate change.

Landscape Resilience Assessment

- Key findings:
 - Fire has been largely excluded
 - Higher Tree Density
 - Higher Fuel Loading
 - High levels of ladder fuels
 - Current forest structure and composition
 - Decreased resilience and habitat quality
 - Two thirds of meadows likely cannot provide refuge with climate change
 - 80% of streams have barriers blocking fish passage



Forest Density: Trees per Acre

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Landscape Modeling and Analysis

- Modeled 4 scenarios:
 - Scenario 1: Suppression only
 - Scenario 2: Thinning in WUI only
 - Scenario 3: Thinning in WUI, General Forest, and Wilderness ★
 - Scenario 4: Thinning in WUI, Rx Fire in all management zones, allow for managed natural ignitions.

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Landscape Restoration Strategy

- Informed by the modeling results
- Combines aspects of Scenarios 3 and 4
- Continue to reduce risk near communities
- Expand forest and watershed restoration in general forest
- Increase forest thinning and Rx fire

Landscape Restoration Strategy: Goals

- **Goal 1.** *Forests recover from fire, drought, and insect and disease outbreaks.*
- **Goal 2.** *Fires burn at primarily low to moderate severities and provide ecological benefits.*
- **Goal 3.** *Terrestrial and aquatic ecosystems support native species.*
- **Goal 4.** *Healthy creeks and floodplains provide clean water, complex habitat, and buffering from floods and droughts.*
- **Goal 5.** *People live safely with fire and enjoy and steward the landscape.*
- **Goal 6.** *Restoration is efficient, collaborative, and supports a strong economy.*

Key Recommendations

- Work collaboratively
- Substantially increase forest thinning and prescribed fire
- Actively manage forested habitat, including Protected Activity Centers.



Key Recommendations

- Restore meadow, riparian, aquatic, and aspen ecosystems to support native species.
- Restore streams and streamside habitat to increase resilience to flooding and drought and protect water quality.
- Prioritize programs to manage and reduce invasive species.



Key Recommendations

- Continue to protect communities from high-severity wildfire.
- Minimize smoke impacts from prescribed and managed wildfire.
- Enhance engagement with the Washoe Tribe.
- Support and build resilience into the local economy and recreation industry.



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Next Steps: Implementation

- Multiple fuels treatments projects are in progress or being planned
- Landscape-wide planning-  October 2019
 - Implementation in 2022
- Funding Strategy
- Monitoring and Adaptive Management Plan



LTW Implementation and TRPA Code

- Approximately 20% of the LTW landscape has slopes 30-50%
- Currently, TRPA code restricts mechanical treatment to slopes less than 30%.
 - Areas with slopes over 30%, treatments are limited to hand thinning or aerial yarding
 - Expensive
 - Inefficient



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Lake Tahoe West and the TRPA Code

- Current TRPA code was created to limit erosion and sediment delivery to waterways
- New innovative technologies and harvest methods for mechanical thinning
 - Low-pressure systems reduce soil impacts
 - Allow treatment of steeper slopes

Lake Tahoe West and the TRPA Code

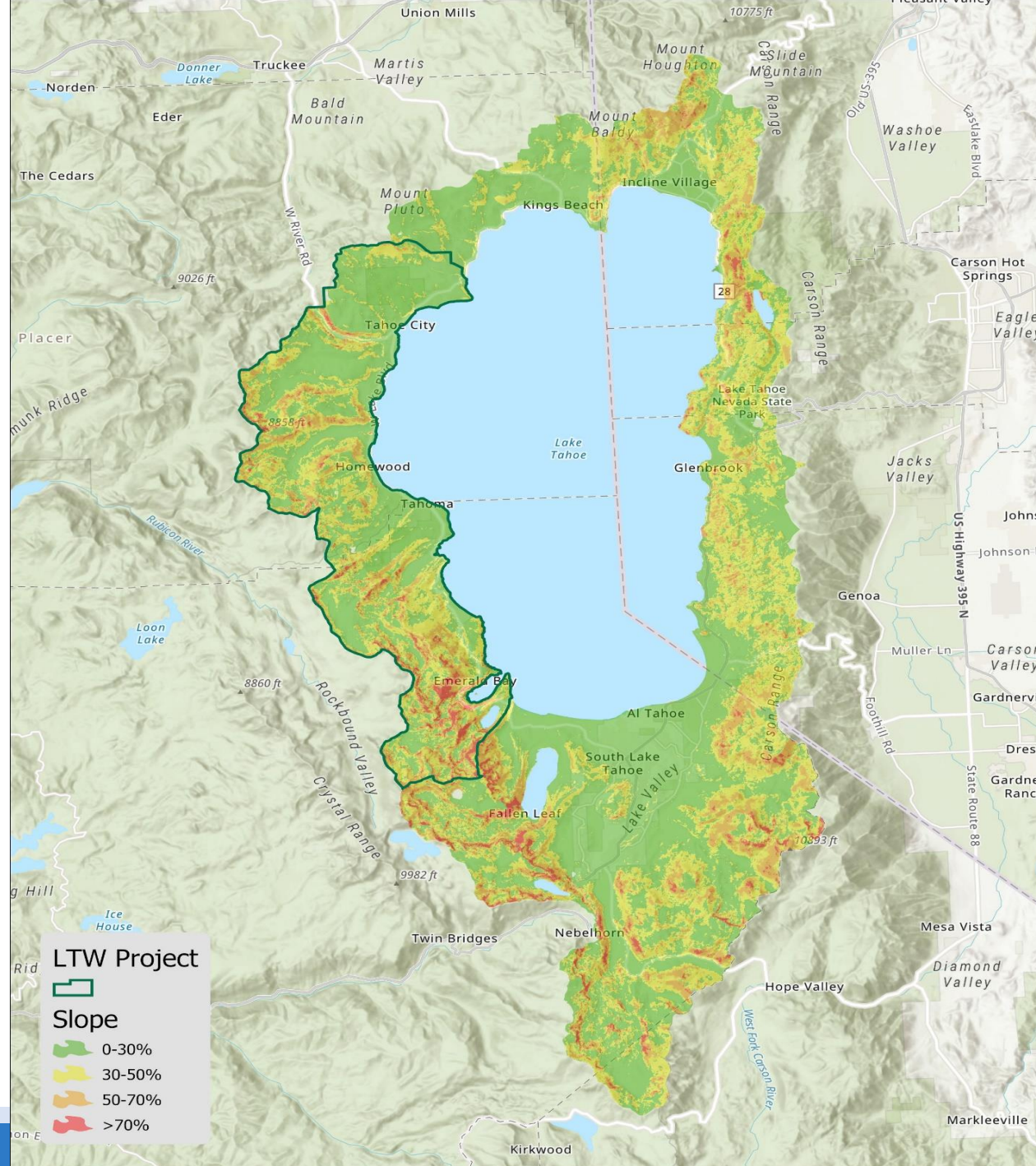
- Updating the TRPA code to allow mechanical treatments on 30%-50% slopes would:
 - Reduce acres treated by hand and number of burn piles on landscape
 - Reduce the risk of a pile burning backlog
 - Reduce smoke emissions from pile burning
- Without updating code, treatments on 30%-50% slopes would be a limiting factor in achieving the goals outlined in the LRS.

Lake Tahoe West and the TRPA Code

- Basin-wide benefits
 - Outside LTW, 43,427 acres on slopes between 30%-50%
 - About 30% of total basin acreage (excluding LTW)
- Increase ecosystem resilience, decrease fire risk across basin
- Increase pace and scale of restoration
 - Mechanical treatments often less costly than hand and aerial thinning
 - Allow for more acres to be treated at lower cost



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Lake Tahoe West and the TRPA Code

- With these benefits in mind and with support from our agency partners:
 - Intend to analyze the impacts of allowing mechanical thinning on slopes between 30%-50% within the LTW environmental analysis.
 - Working with the PSW Research Station to identify data gaps and needs to ensure a basin-wide approach to potential impacts.

Questions or Comments?