

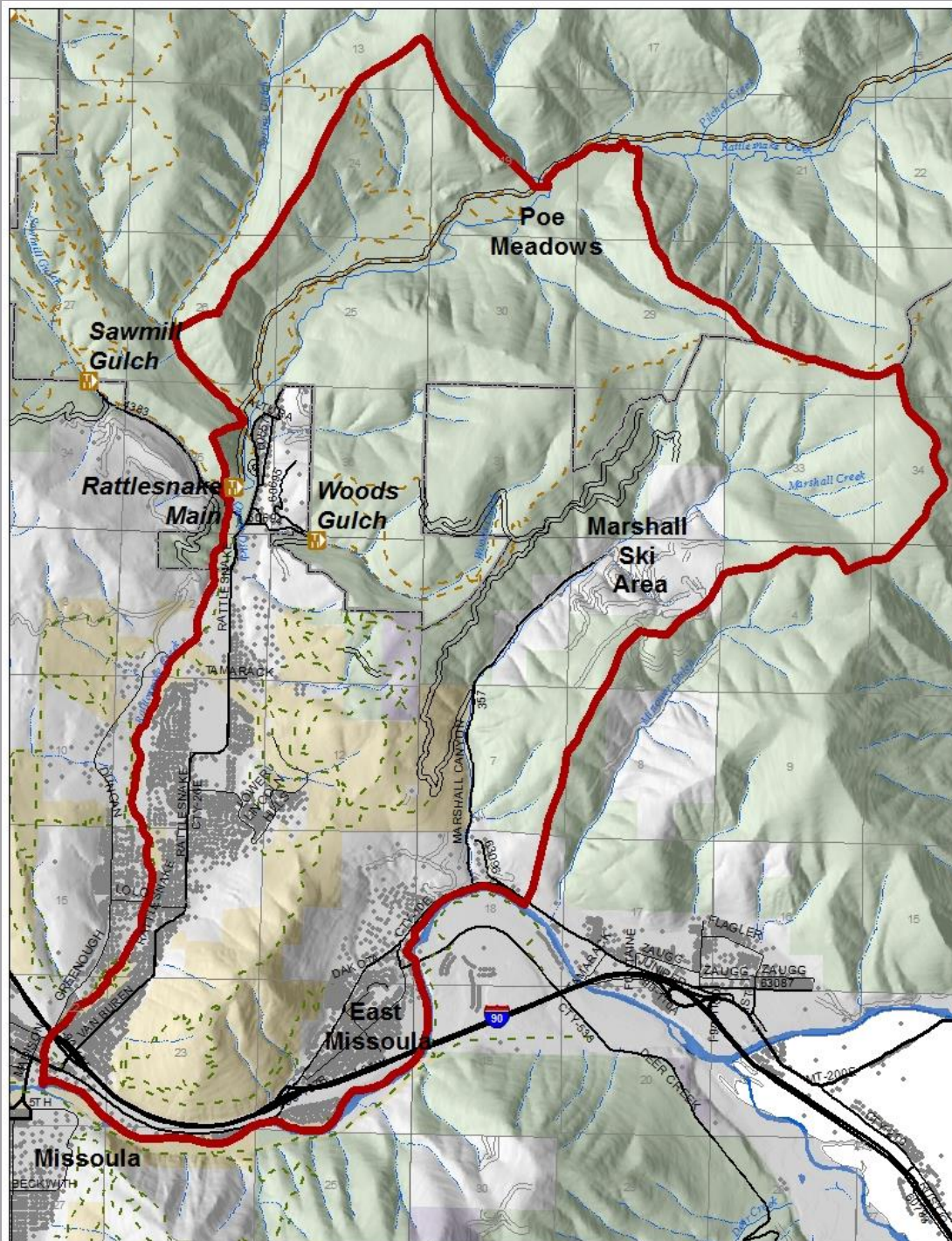
MARSHALL WOODS RESTORATION PROJECT LOLO NF, MISSOULA RD



March 2015



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PROJECT AREA OVERVIEW

- 13,000 acres – 56% National Forest
- 34% Rattlesnake National Recreation Area (NRA) outside Wilderness
- 2nd highest wildfire risk in Missoula County Community Wildfire Protection Plan
- Municipal watershed
- 2 sections acquired industrial timberland
- 3,959 acres treatment proposed
 - 2,305 acres in Rattlesnake NRA
- 31 miles National Forest roads
 - 30 closed year-long
- 20 miles of system trails



WORKING TOGETHER

- 2008: Project area selected by Lolo Restoration Committee (LRC)
- 2009: Forest Service Interdisciplinary Team and LRC field visit
- February 2010: Two jointly-hosted open houses
- August 2010
 - Scoped proposals
 - Two public field trips



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PURPOSE AND NEED

Developed *collaboratively* tied to *restoration* principles:

- Restore functioning ecosystems by enhancing natural ecological processes
- Emulate fire's natural role on the landscape through vegetative treatments including prescribed fire
- Provide education opportunities to build support for *restoration*
- Provide for diverse trail-based recreation opportunities and reduce road density in Section 31



FOUR ALTERNATIVES

- Alternative A – No Action
- Alternative B – Proposed Action
- Alternative C
- Alternative D

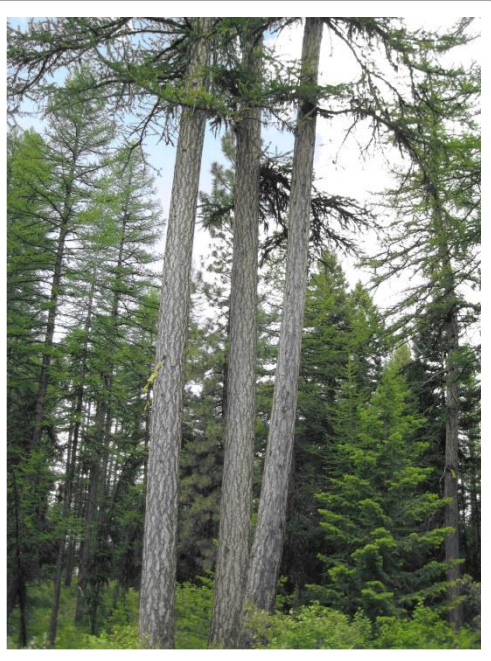


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PROPOSED TREATMENTS

- Forested Vegetation Treatments
- Road and Trail Management
- Watershed Improvements
- Weed Treatments



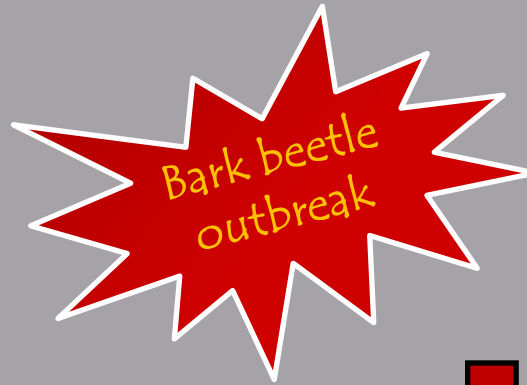
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RESILIENCE

Ability of a forest to **absorb** disturbance and **reorganize** while undergoing **change** BUT *essentially* remain the same...

Resilience to **stressors** – disturbance happens but forest remains intact



stressors: fire, insects, disease, drought, climate change

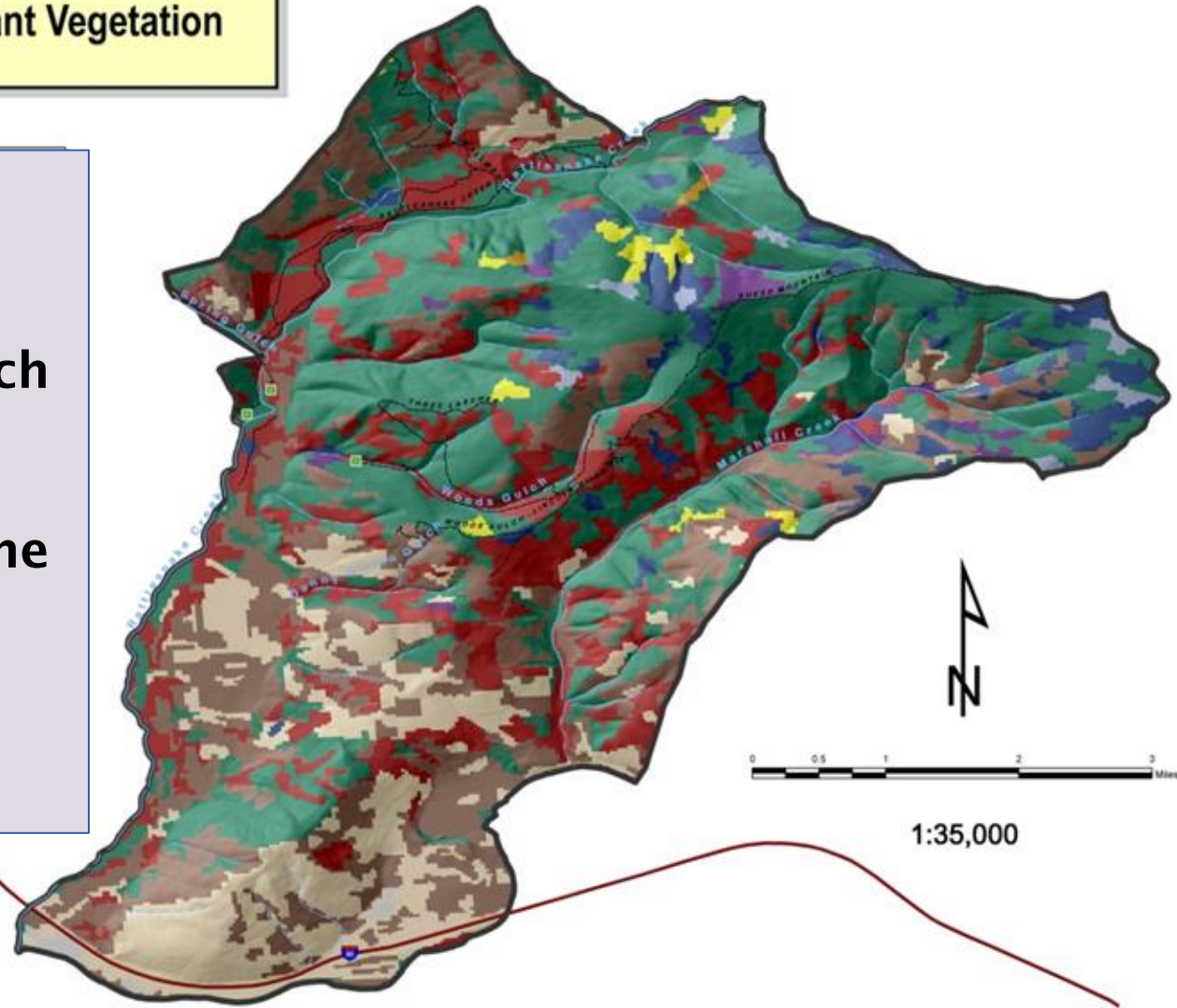
**Marshall Woods
Existing Dominant Vegetation**

GREEN =
Douglas-fir

YELLOW = larch

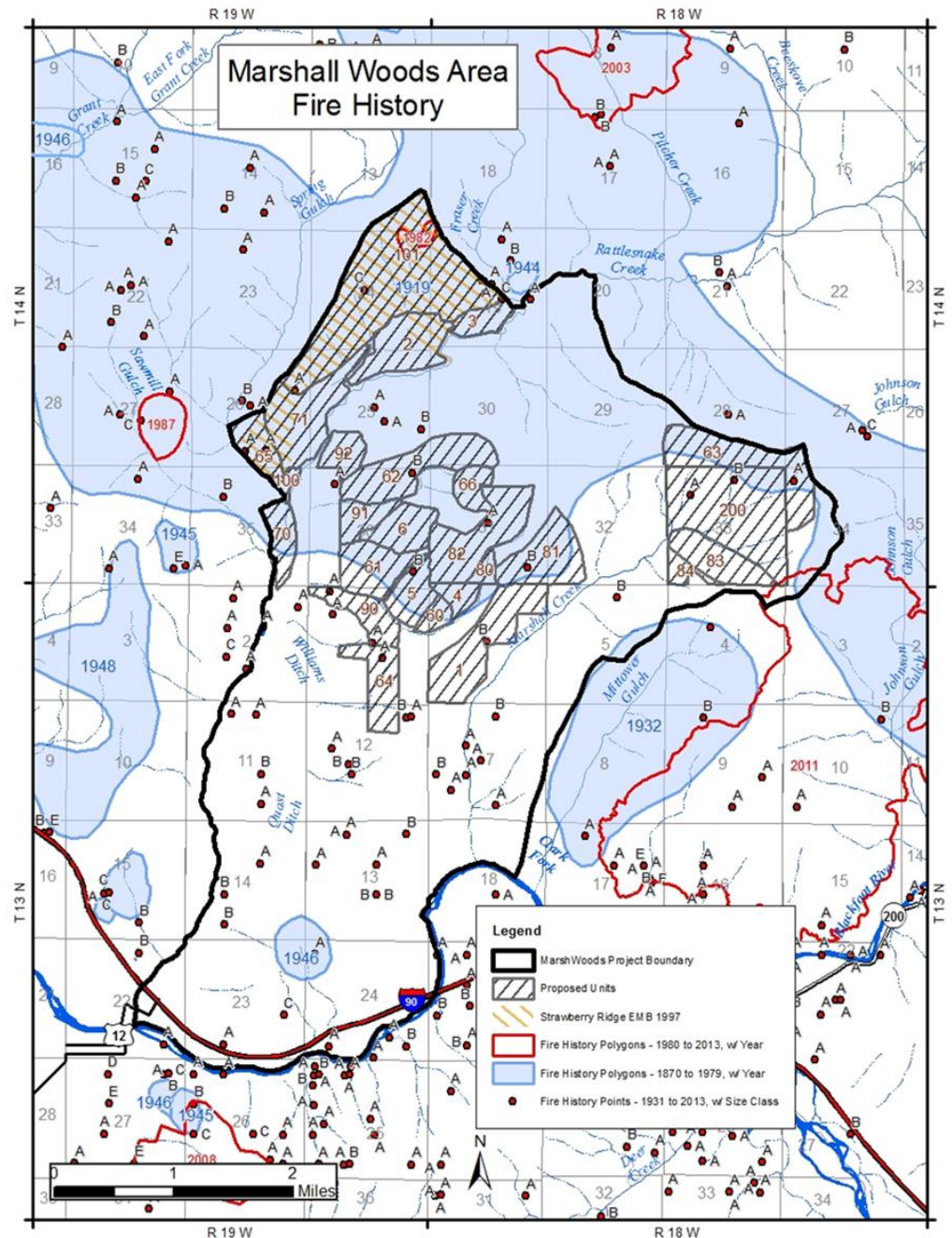
RED =
ponderosa pine

TAN =
shrub/grass/
developed



WILDFIRE HISTORY

- 54 starts since late 1800's
- Largest wildfire 1919: 20,000 acres
- 2011: West Riverside Fire 3800 acres majority National Forest



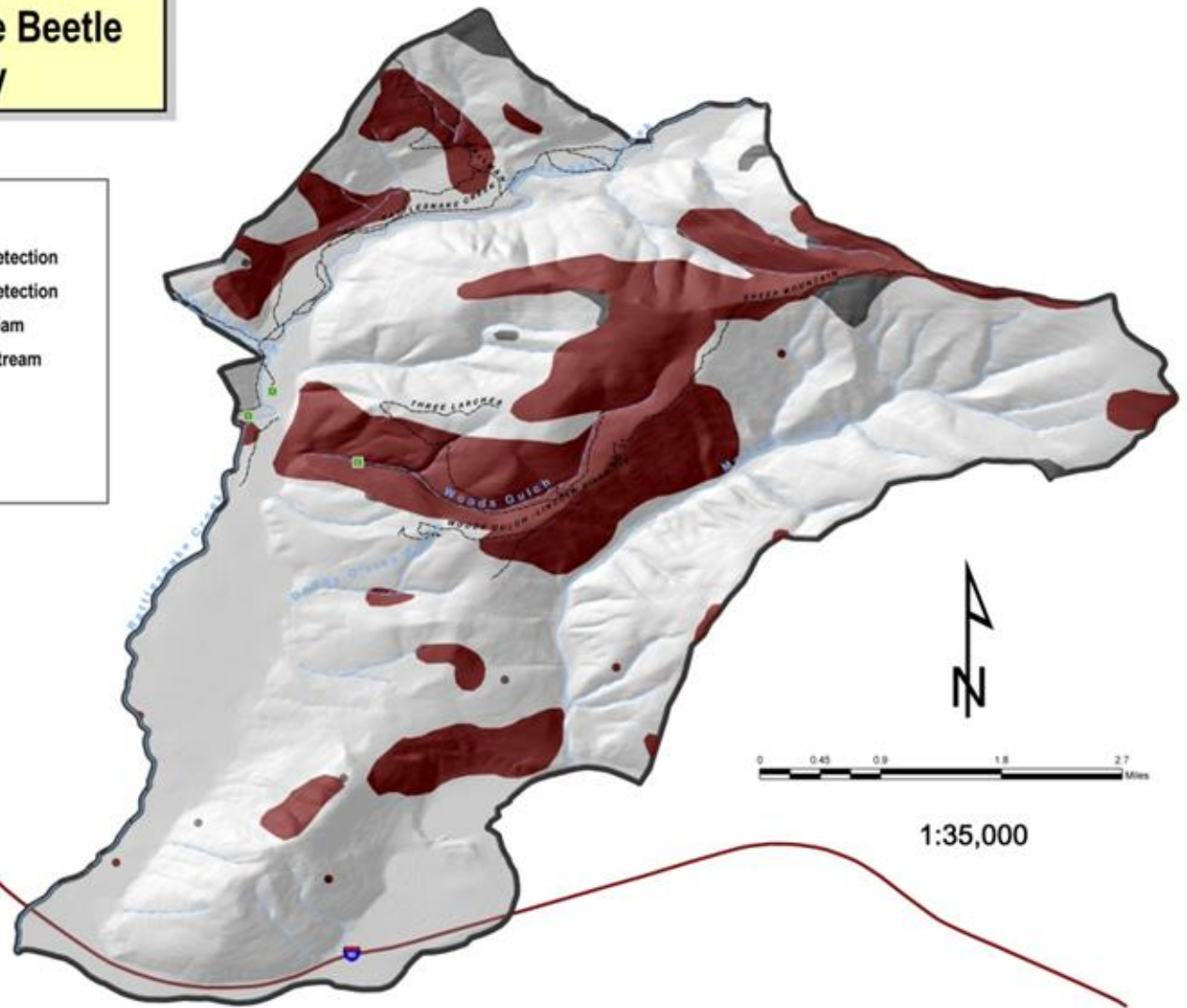
WEST RIVERSIDE FIRE AREA



Marshall Woods Mountain Pine Beetle Activity

Legend

- 2009 Aerial Detection
- 2008 Aerial Detection
- perennial stream
- intermittent stream
- interstate
- trail
- trailhead



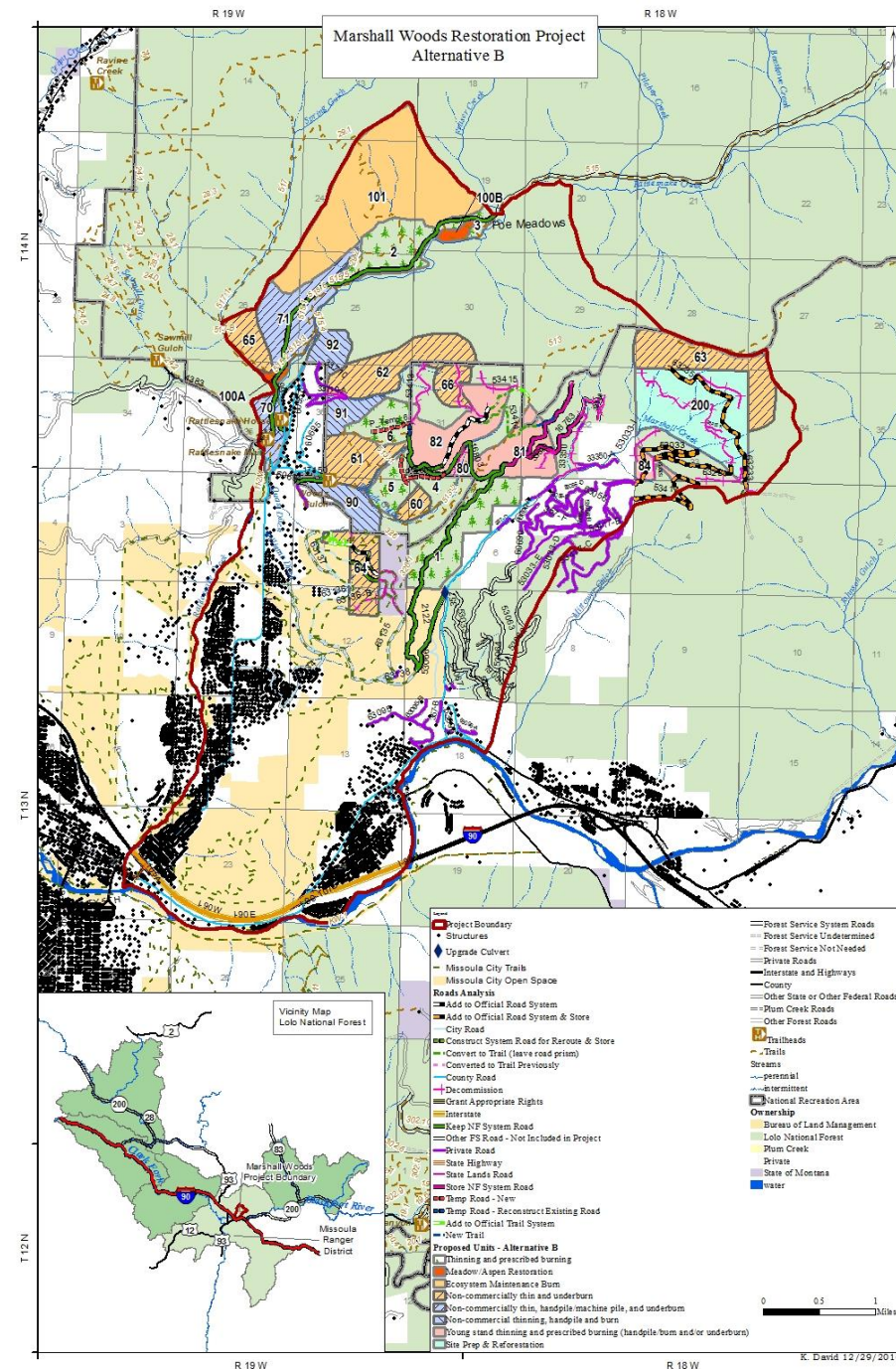
VEGETATION TREATMENTS DESIGNED TO:

- Reduce crown fire potential
- Restore fire in low intensity, high frequency & mixed severity fire regimes
- Maintain or increase ponderosa pine, larch, and aspen
- Improve stand resilience (fire, insects, disease)
- Create stand conditions that could provide large trees in the future



ALT. B VEGETATION TREATMENTS

- Thinning & burning (740 acres)
- Young stand thinning & burning (477 acres)
- Ecosystem maintenance burning (729 acres)
- Ecosystem maintenance burning & small tree thinning/slashing (1,275 acres)
- Non-commercial thinning & hand piling & burning (248 acres)
- Meadow & aspen restoration (40 acres)
- Site preparation & reforestation (450 acres)



VEGETATION TREATMENTS ALTERNATIVE C

(3,959 ACRES)

- **No commercial harvest or mechanized vegetation treatments in the main Rattlesnake corridor**

ALTERNATIVE D

(3,959 ACRES)

- **No mechanized treatment, commercial harvest or temporary road building**





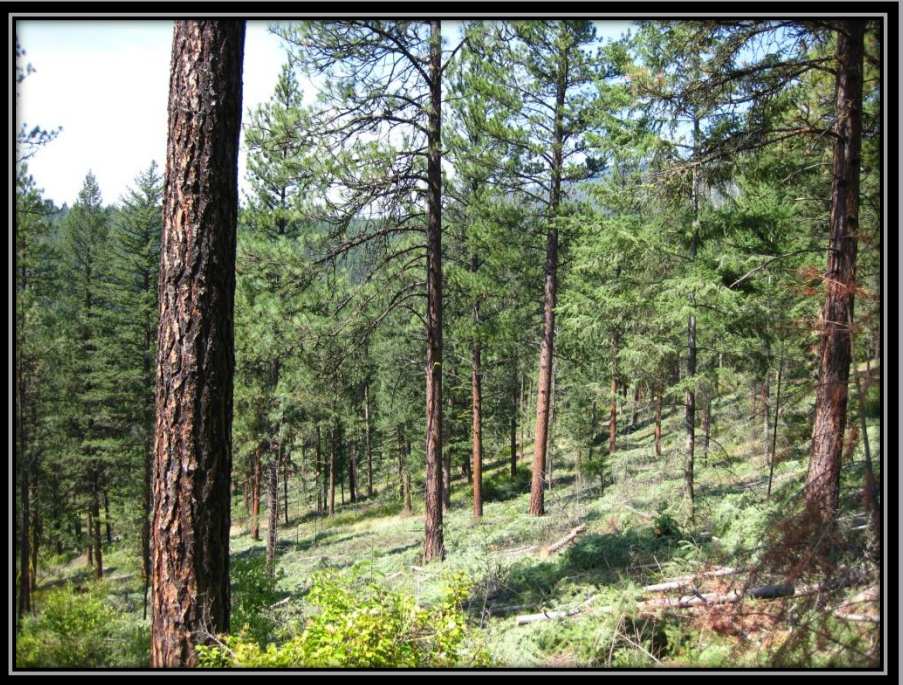
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THINNING SMALL DIAMETER TREES

BEFORE TREATMENT



AFTER TREATMENT



Similar project designed to favor ponderosa pine, reduce competition, enhance growth and vigor, and modify stand conditions to lessen the risk of potential insect caused mortality and the risk of a stand-replacing fire.

MAIN RATTLESNAKE

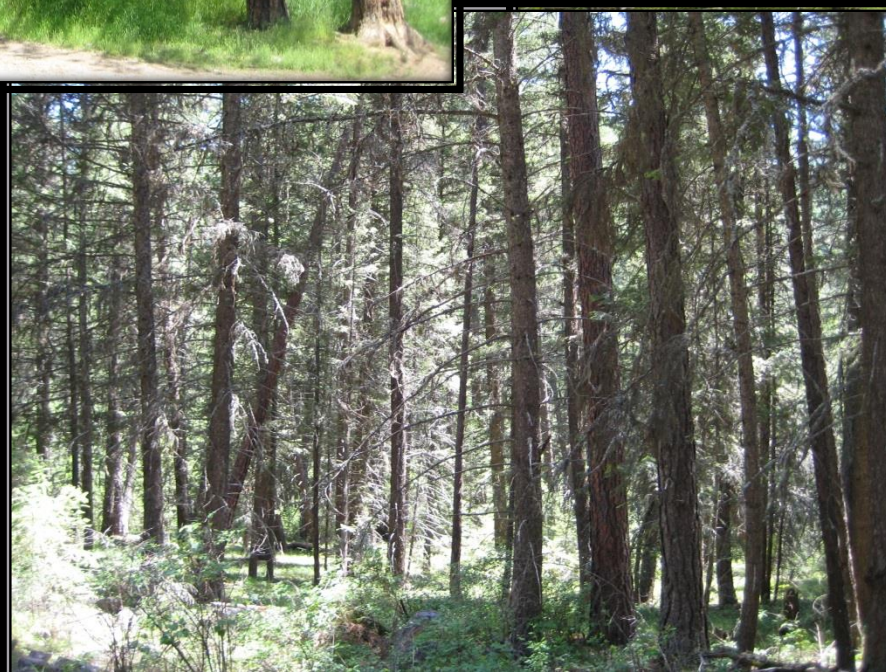


Unit 70



Unit 71

Unit 3



Unit 1



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Similar Treatment After Harvest

~60%+ overstory removed

Skyline, whole tree yarding

Understory slashed 2+ years prior to burn

Photo 2 years later







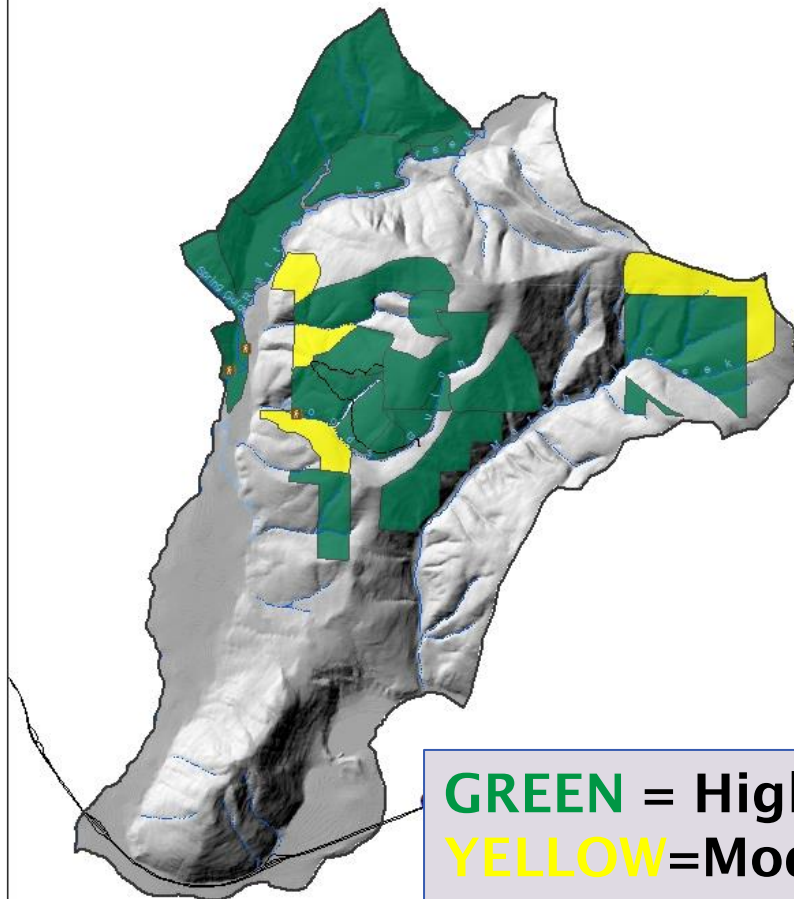




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R E S I L I E N C E

Alternative B



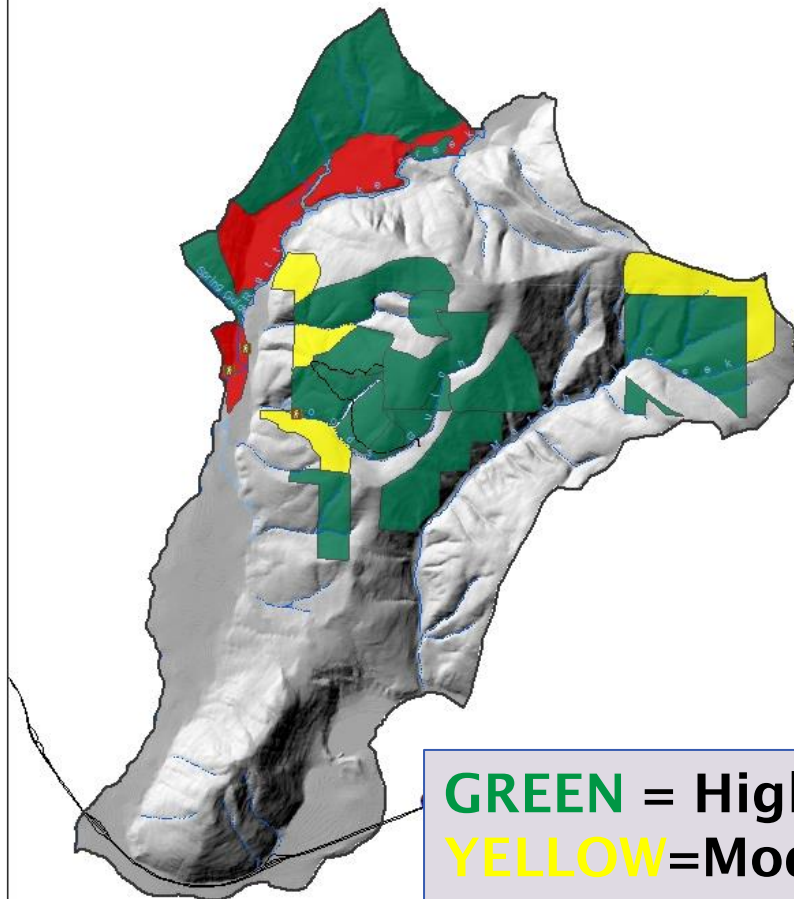
GREEN = High
YELLOW = Moderate
RED = Low

Ineffective at
reducing
vulnerability to one
or more stressors



R E S I L I E N C E

Alternative C

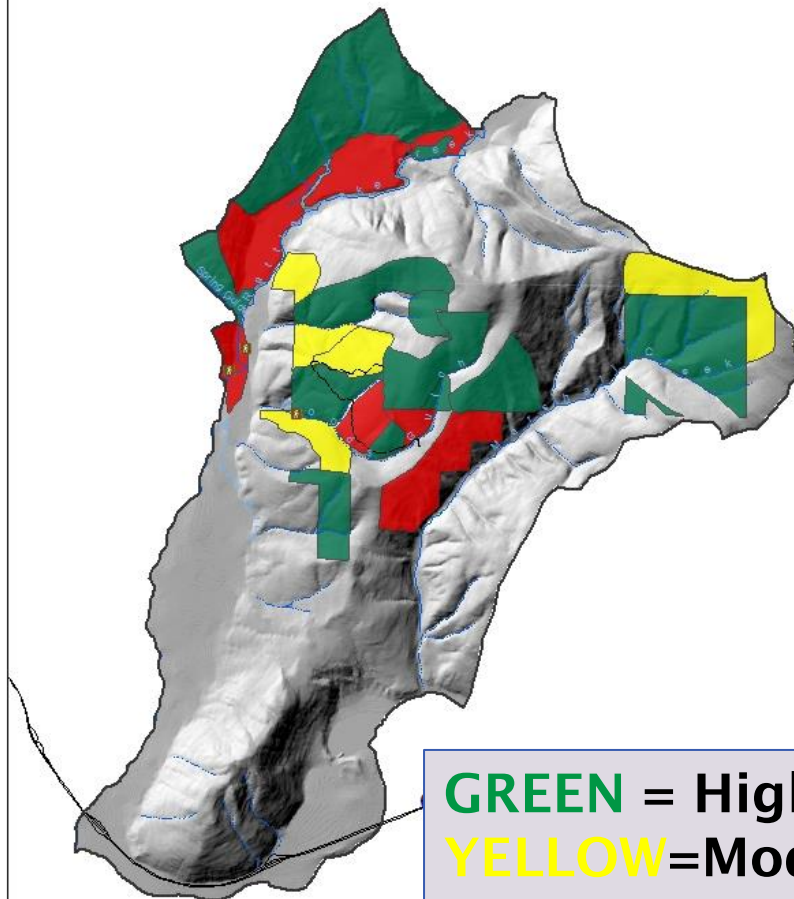


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R E S I L I E N C E

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Road and Trail Management

Proposed Activity	Miles
■ Decommission roads	7.4
■ Store roads	6.7
■ Re-align and store roads	0.1
■ Convert road to trail	1.4
■ Connect Rd. 53414 to Rd. 2122 via new trail to create a loop trail	0.2
■ Reconstruct non-system road for temporary road (Alts. B and C)	0.1
■ Construct temp road (Alts. B and C)	1.0

Road work would occur along Rattlesnake corridor in all alternatives (Best Management Practices)

ALTERNATIVES B, C, AND D WATERSHED IMPROVEMENTS

- Upgrade the culvert on Rd. 2122 just past the junction with the Marshall Canyon Road (Rd. 357)
- Improve drainage on Rd. 17150 near Woods Gulch Trailhead (about 0.25 mile)



Marshall Woods Restoration Project



PROJECT COMPLEXITY

Recreation Protection Measures

- Brief safety closures
 - Temporary trail closures/reroutes
- Trails & trail intersections
 - Slash treated & flush cut stumps ~100' of trails
 - Vegetation treatments designed to maintain appropriate cover to prevent trail cutting at intersections
- Visuals
 - Character trees (e.g. 3 larches) retained and featured
 - Boundaries marked with removable flagging
 - Cut tree marking



PROJECT COMPLEXITY

Recreation Protection Measures

- **Log hauling**
 - No hauling from 3 pm Friday to midnight Sunday or on holidays
 - Will not occur from 6 am to 8 am in the main Rattlesnake corridor or from 5-6 pm Monday through Thursday
- **Phased implementation**
 - If mechanical treatments are ongoing in the main Rattlesnake corridor, Sawmill, Woods Gulch and Marshall Canyon would remain open
 - ~30 days intermittent impact in the Rattlesnake corridor
- **Public notice**



PROJECT COMPLEXITY

Wildlife Protection Measures

- Elk/Deer
 - Phased implementation for refugia for elk/mule deer depending on the season and unit location
- Flammulated owls
 - No disturbance May 1 to Aug. 1
 - Known and potential nest trees would be identified and avoided
 - Roosting habitat protected
- Downed wood standards
- Snag retention



PROJECT COMPLEXITY

Weeds

- Weeds treated along haul routes, decommissioned roads, landings, and other disturbed areas
- Avoidance of known leafy spurge infestations
- Burn piles seeded to avoid weed infestations
- Equipment inspection and washing prior to operations





PROJECT COMPLEXITY

Prescribed Burning

- **Comply with Federal, State, and County Air Quality Standards (Airshed 3A Impact Zone M)**
- **Public Notice**
- **Approved Rx burn plans establish:**
 - **Dispersion and ventilation requirements**
 - **Temp/RH/max winds/fuel moisture**
 - **Predicted fire behavior (flame length, spotting, etc.)**
 - **Organizational minimums**
 - **Contingency plan**
 - **Safety plan**

EDUCATIONAL OPPORTUNITIES



- Self-guided brochure
- Educational field trips
- Partnerships with groups like the Montana Natural History Association
- Interpret cultural sites - Upper Rattlesnake Historic District
- Internet postings
- Other social media-twitter/facebook
- Presentations & special events



TIMELINE

- Comment period – March 6 - April 6
- Spring 2015 - Respond to comments on EA
- Summer 2015 - Issue DRAFT Decision Notice and start objection process
- Fall 2015 – Issue final Decision Notice and begin implementation
 - <http://www.fs.usda.gov/goto/marshallwoods>
 - FAQs, Reader's Guide for EA available online

