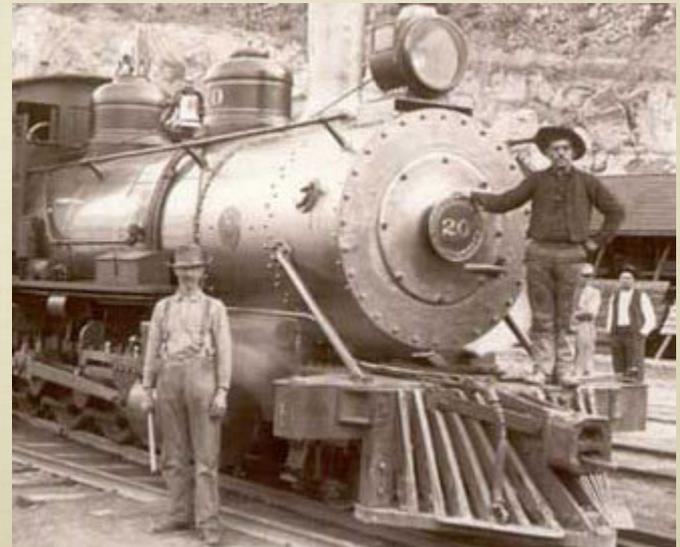


Middle Applegate Pilot Project

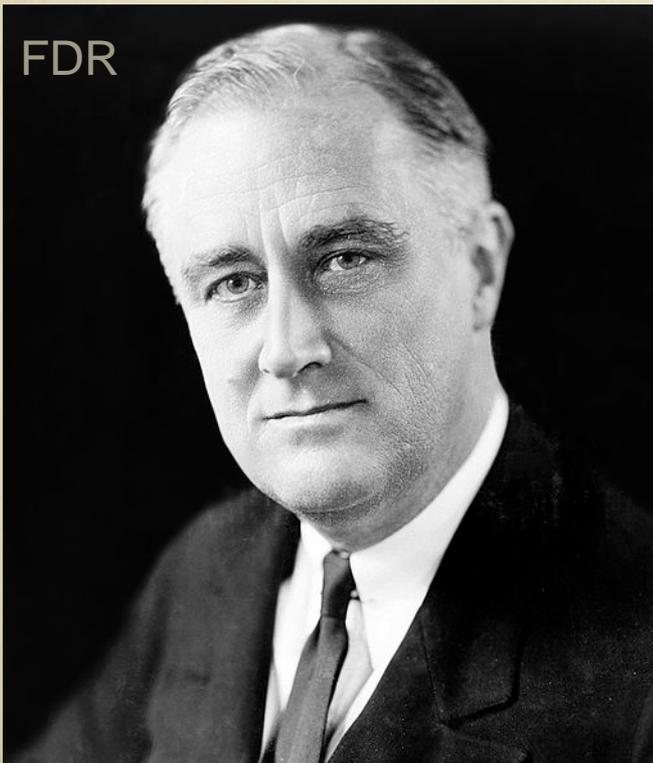
Applegate School
February 22, 2012

How did BLM come to manage
federal lands?

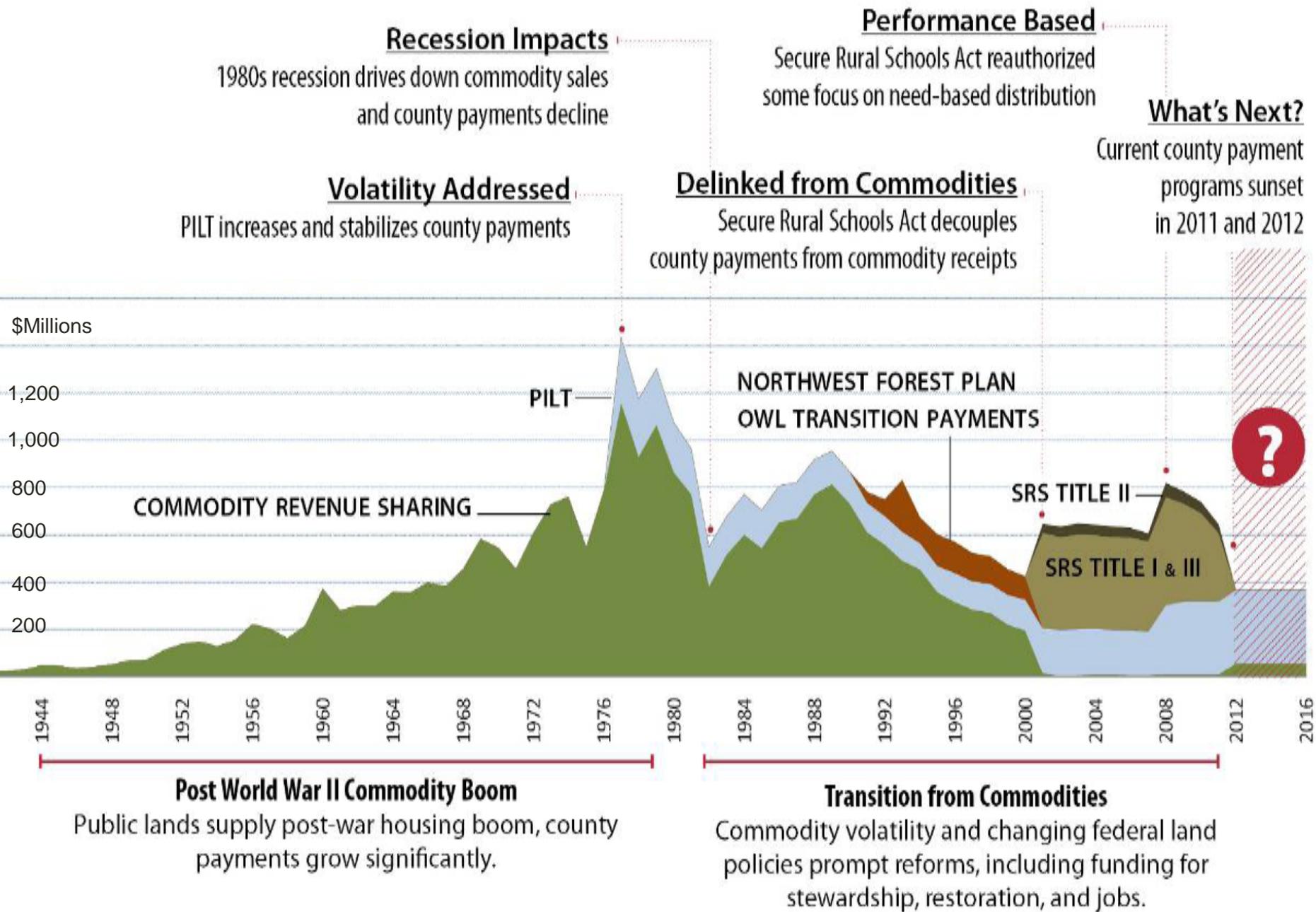
The **Oregon and California** Railroad grant lands were transferred to private ownership in exchange for construction of a railroad line in the late 1800s. The railroad violated the grant terms and the lands reverted back to federal ownership in 1916.



The O&C lands were Congressionally mandated in 1937 to be used for permanent sustained-yield forest production for the benefit of the counties.

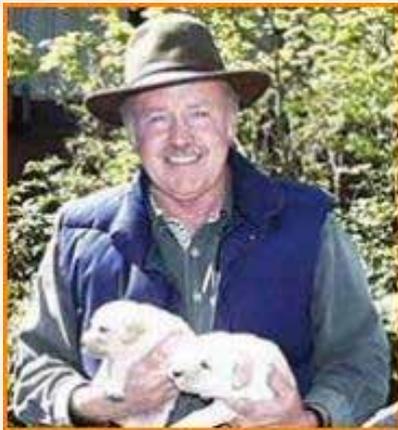


KEY DEVELOPMENTS IN THE HISTORY OF COUNTY PAYMENTS





Restoration of Federal Forest in the Pacific Northwest: Strategies and Management Implications



K. Norman Johnson

Forest planning
Harvest scheduling
Public land forest policy



Jerry Franklin

Forest ecology
Ecosystem processes
Landscape ecology
Succession
Structure

Restoration of Federal Forests in the Pacific Northwest: Strategies and Management Implications

Dr. K. Norman Johnson
Professor of Forest Resources
College of Forestry
Oregon State University

August 15, 2009

Dr. Jerry F. Franklin
Professor of Ecosystem Science
School of Forest Resources
University of Washington

(with the assistance of Debora Johnson, Institute for Applied Ecology (Corvallis, Oregon) in map development, analysis, and report layout)



Franklin and Johnson

Restoration of Federal Forest in the Pacific Northwest: Strategies and Management Implications

August 15, 2009

New policies are needed that focus on:

- Implementing management approaches that truly integrate ecological, economic, and cultural objectives on federal forest lands
- Restoring more functional and sustainable conditions in both Dry and Moist Forest landscapes, while recognizing the distinctively different approaches that are required
- Conserving old-growth forests and trees
- Providing habitat for threatened species, such as the Northern Spotted Owl
- Sustaining local communities and maintaining skilled workforces and milling infrastructure
- Landscape-level planning at multiple scales to achieve multiple integrated objectives

Landscape Level Approach on Dry Forests

- Increase resistance/resilience of and reduce risks to forest stands and landscape to wildfire, drought, insects, and climatic fluctuations
- Retain approximately 1/3 of landscape in denser forest patches for spotted owl and other species,
- Actively manage much of remaining landscape to reduce threats and increase survivability of the dense forest patches, such as by stand-level treatments as described below

Purpose of the Pilots



Purpose of the Pilots

- **1) Demonstrate the application of ecosystem restoration principles**
- move current conditions toward desired conditions
- maintenance of older trees,
- restoration of characteristic structure and composition, and increased heterogeneity

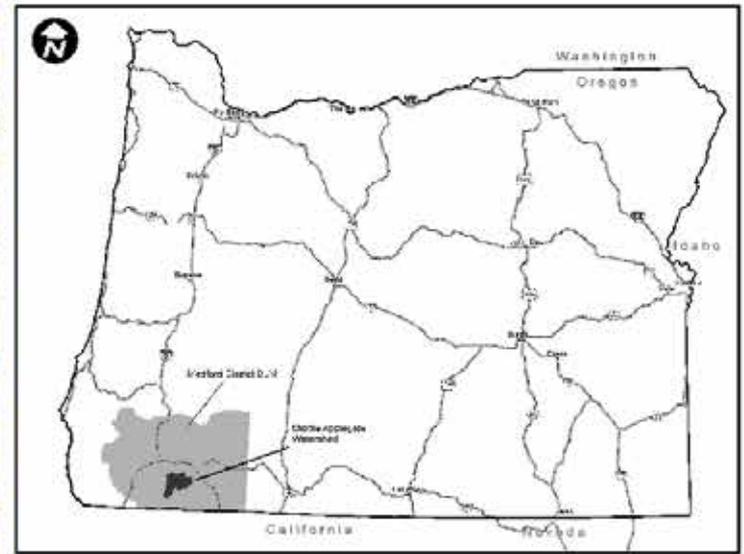
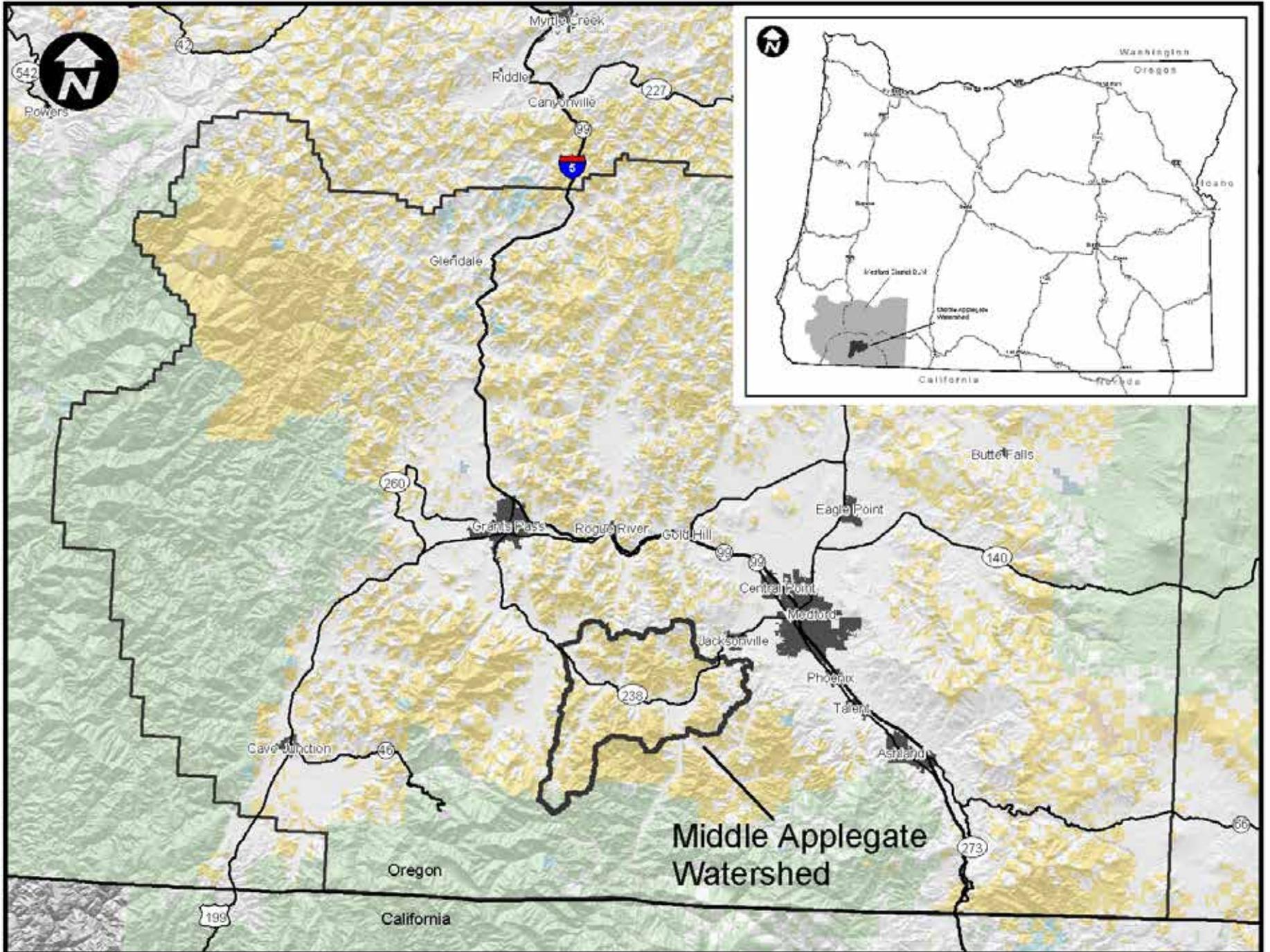
Purpose of the Pilots

- **2) provide commercially-viable timber sales that provide jobs**

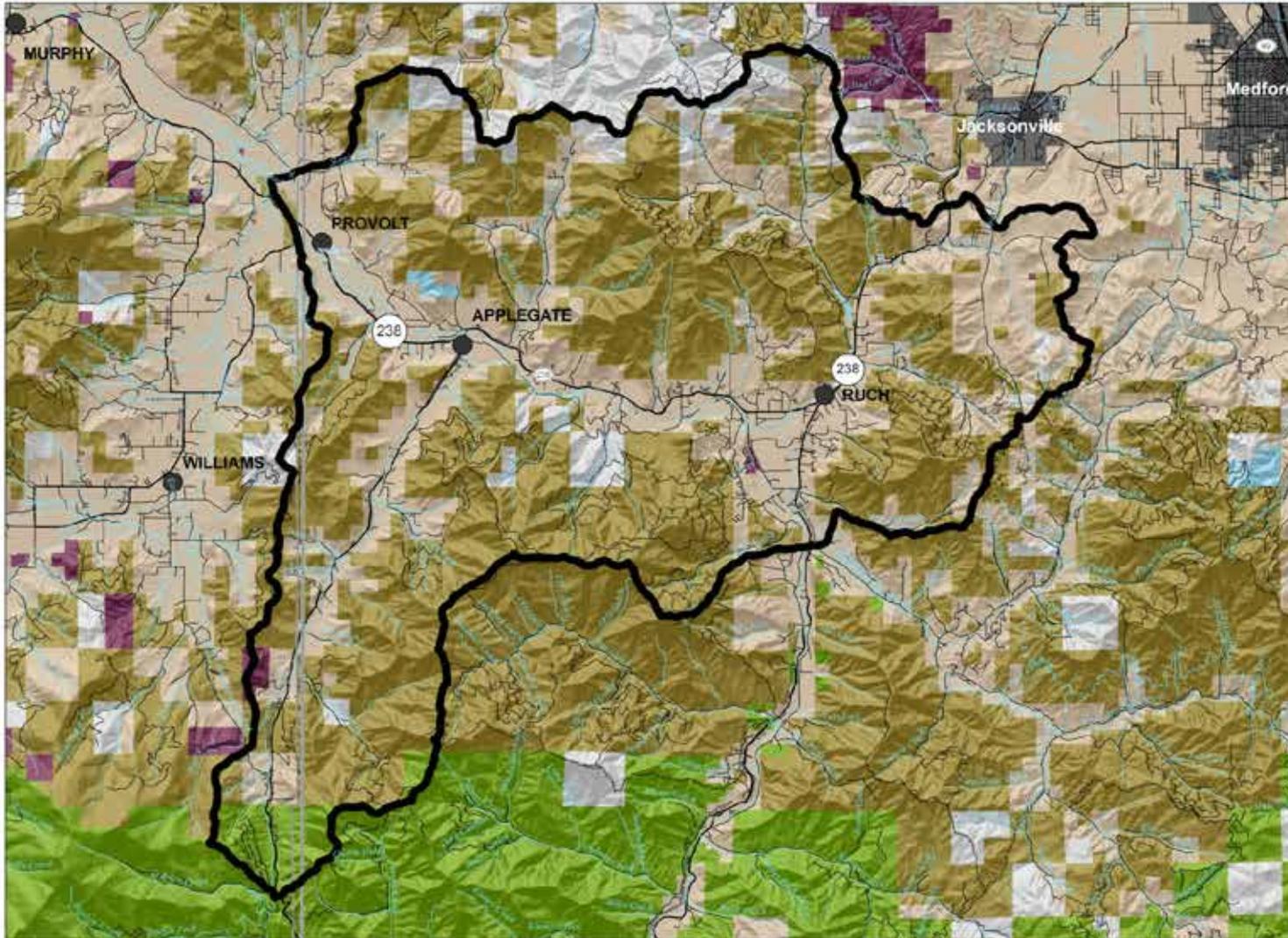
Purpose of the Pilots

- 3) Gauge the degree to which active forest management, with a **focus on ecosystem restoration**, has a broader base of social acceptance than traditional management practices





Middle Applegate Dry Forest Landscape Restoration Pilot



Legend

- Watershed Boundary
- BLM
- Local Government
- Private Industry
- Private Non-Industry
- STATE
- USFS

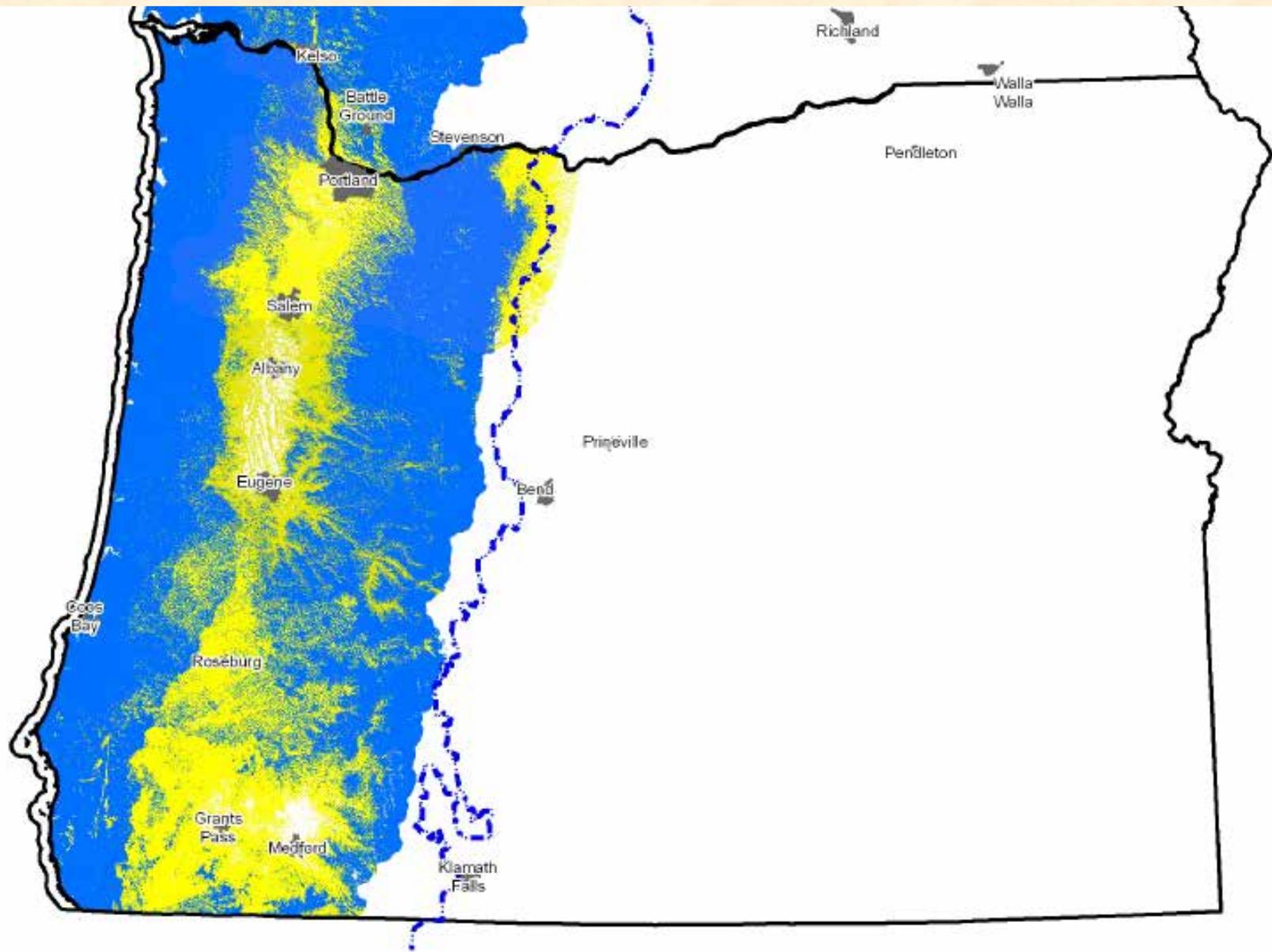
0 1 2 4 Miles



Strategies for Moist and Dry Forests

Moist Forest contain Hemlock

Dry Forests include sites that are characterized by the Ponderosa Pine, Douglas-Fir, Oregon White Oak, and Jeffrey Pine Series as well as the dry plant associations belonging to the Grand Fir and White Fir Series.



Portions of Dry Forest landscapes need to be retained in denser forest states to provide for a diversity of forest structural conditions, including habitat required by specific species, such as the Northern Spotted Owl and its prey species.



Stand-level ecological restoration including:

1) Retention of older (>150-year-old) trees and other ecologically important features, such as large hardwood trees, and eliminating competing younger trees and ground and ladder fuels from their vicinity;

Stand-level ecological restoration including:

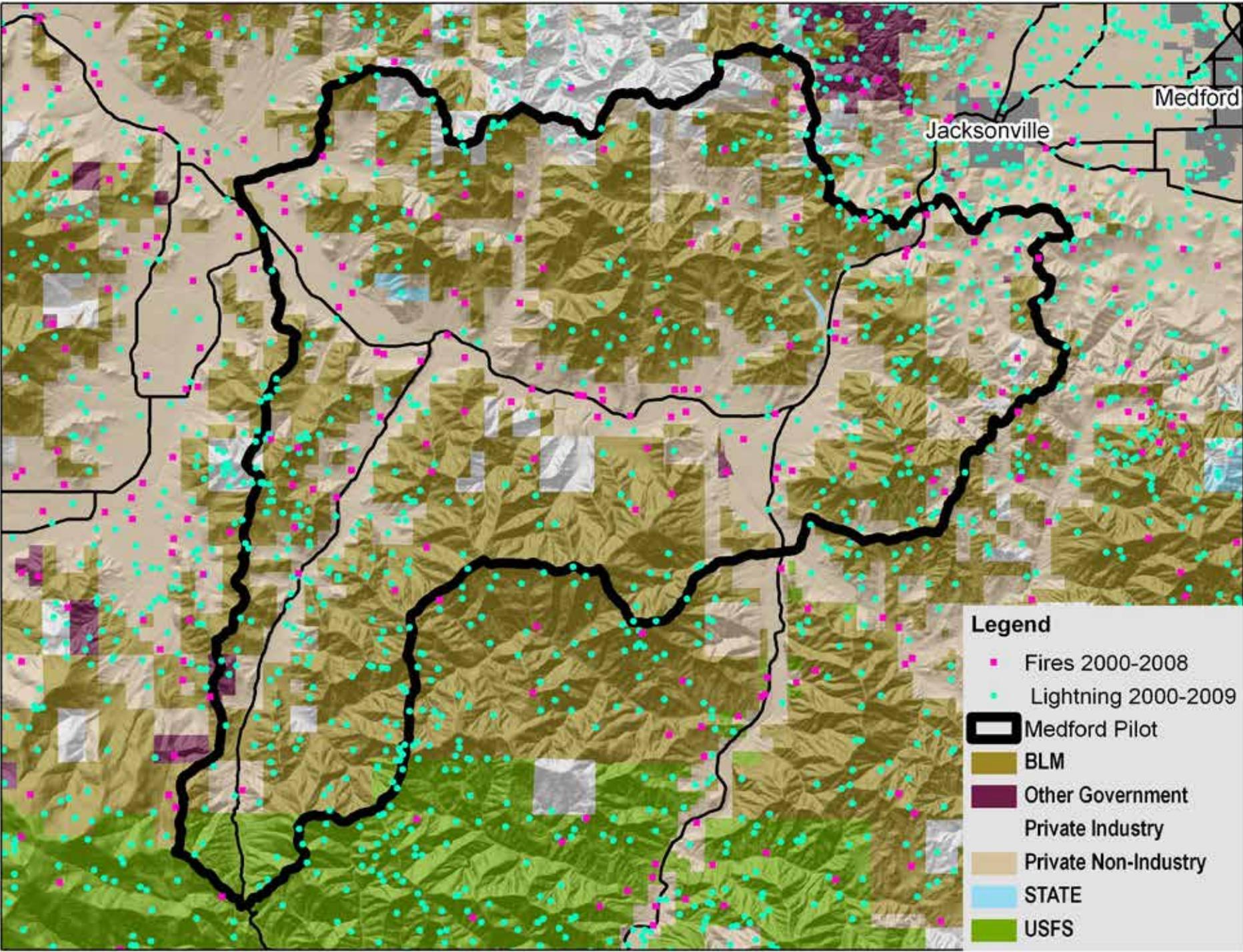
2) Provision of “skips” where no thinning is done so as to protect important features (e.g., riparian habitats) and provide hiding cover and heavily shaded habitat niches;

Stand-level ecological restoration including:

3) Thinning the remaining stand to a) reduce overall stand densities to a more sustainable level, b) shift stand composition toward greater diversity, including a greater proportion of more fire- and drought-tolerant species, and c) increase average stand diameter;

Stand-level ecological restoration including:

4) Creating “gaps” of small to moderate size (e.g., $\frac{1}{4}$ to 2 acres) to provide opportunities for regeneration of sun-loving trees, such as ponderosa pine and Jeffrey pine.















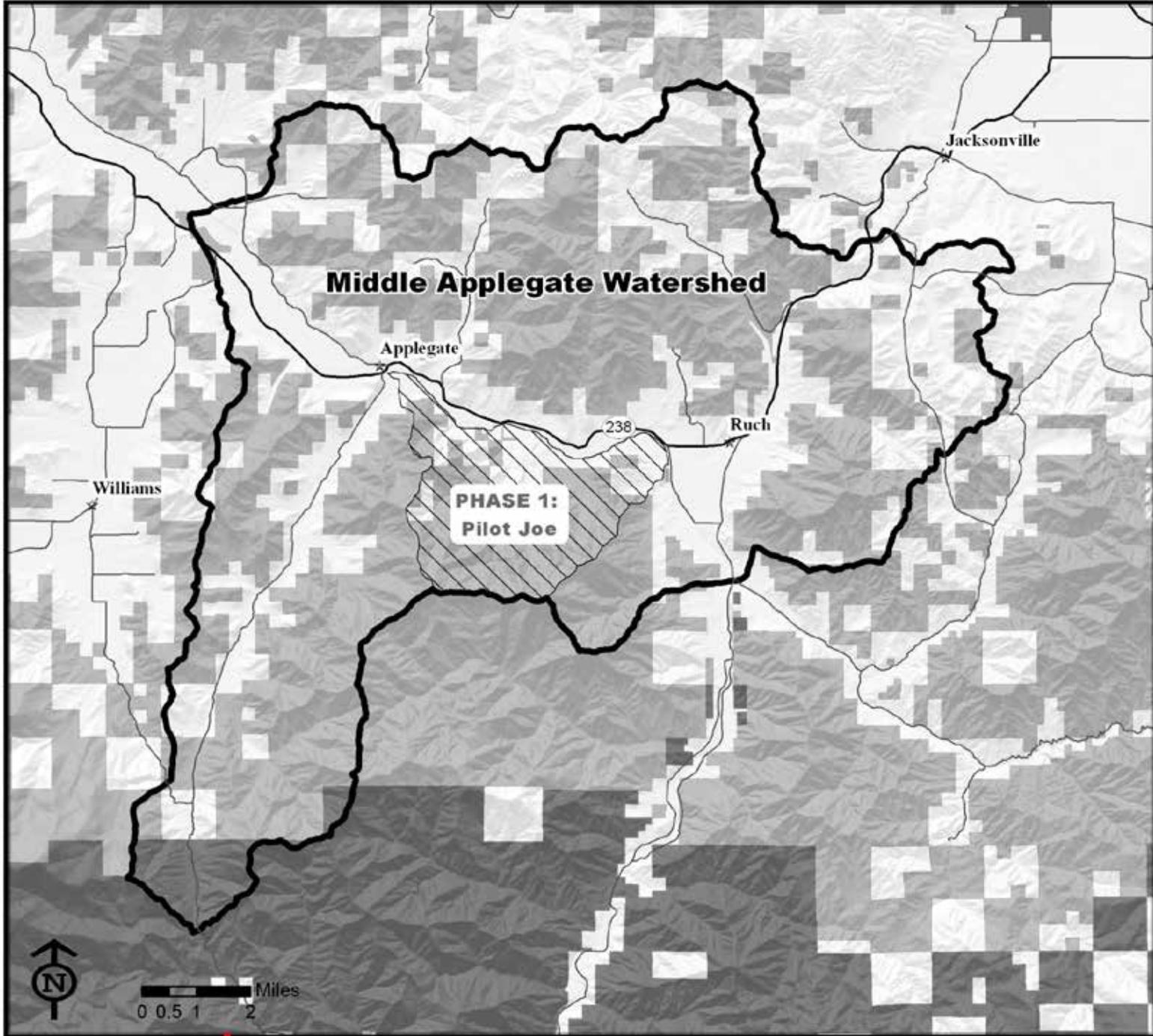
Large, older
hardwoods dying due
to competition from
conifers











Middle Applegate Watershed

Jacksonville

Applegate

238

Ruch

Williams

**PHASE 1:
Pilot Joe**



0 0.5 1 2 Miles



Criteria gathered at public meetings included:

These had strong majority support

- Units should be viewable & accessible to the public.
- Units should be representative of as many vegetative conditions as possible for a good cross section to learn from.
- Prioritize stands uncharacteristically susceptible to fire, insects, or disease.
- Prioritize stands with existing road access

Criteria gathered at public meetings included:

Identified as important but no clear preference of priority

- Ability to maintain treatments over time.
- Young stands (generally ages 0-60).
- Restoration adjacent to the Urban Interface (the value of life and property) as identified in local and regional fire plans.
- Restoration adjacent to highly suitable owl habitat.
- Restoration adjacent to riparian areas.
- Produce timber volume.
- Provide for a mix of resulting contracts (timber sale, stewardship, service).