

Managing for wildlife habitat diversity in young forests: Chehalem Ridge Case Study



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Metro

the directly elected regional government that serves 1.4 million people who live in the 25 cities and 3 counties of the Portland metropolitan area

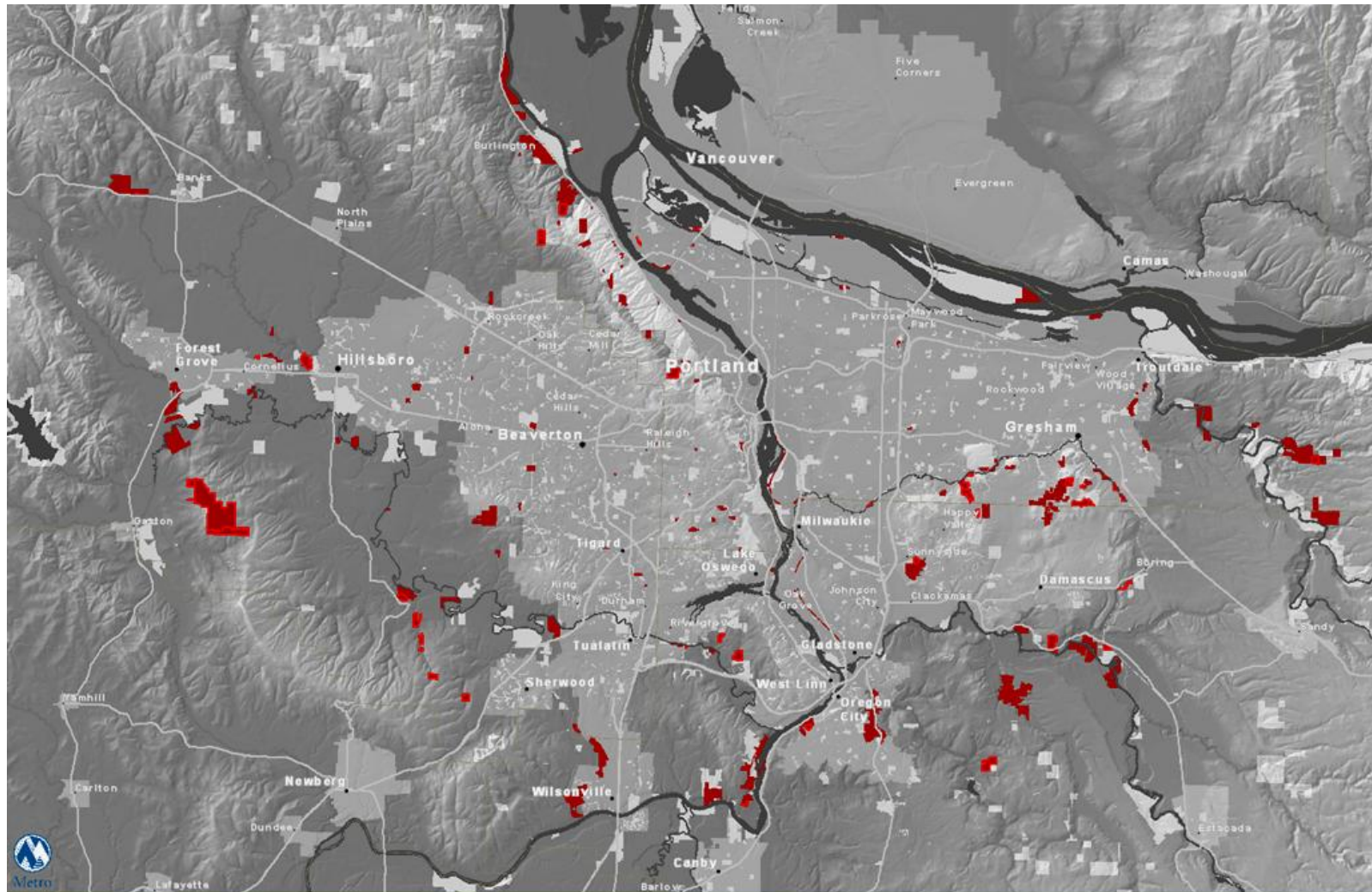


2006 Natural Areas bond measure – \$227.4 million

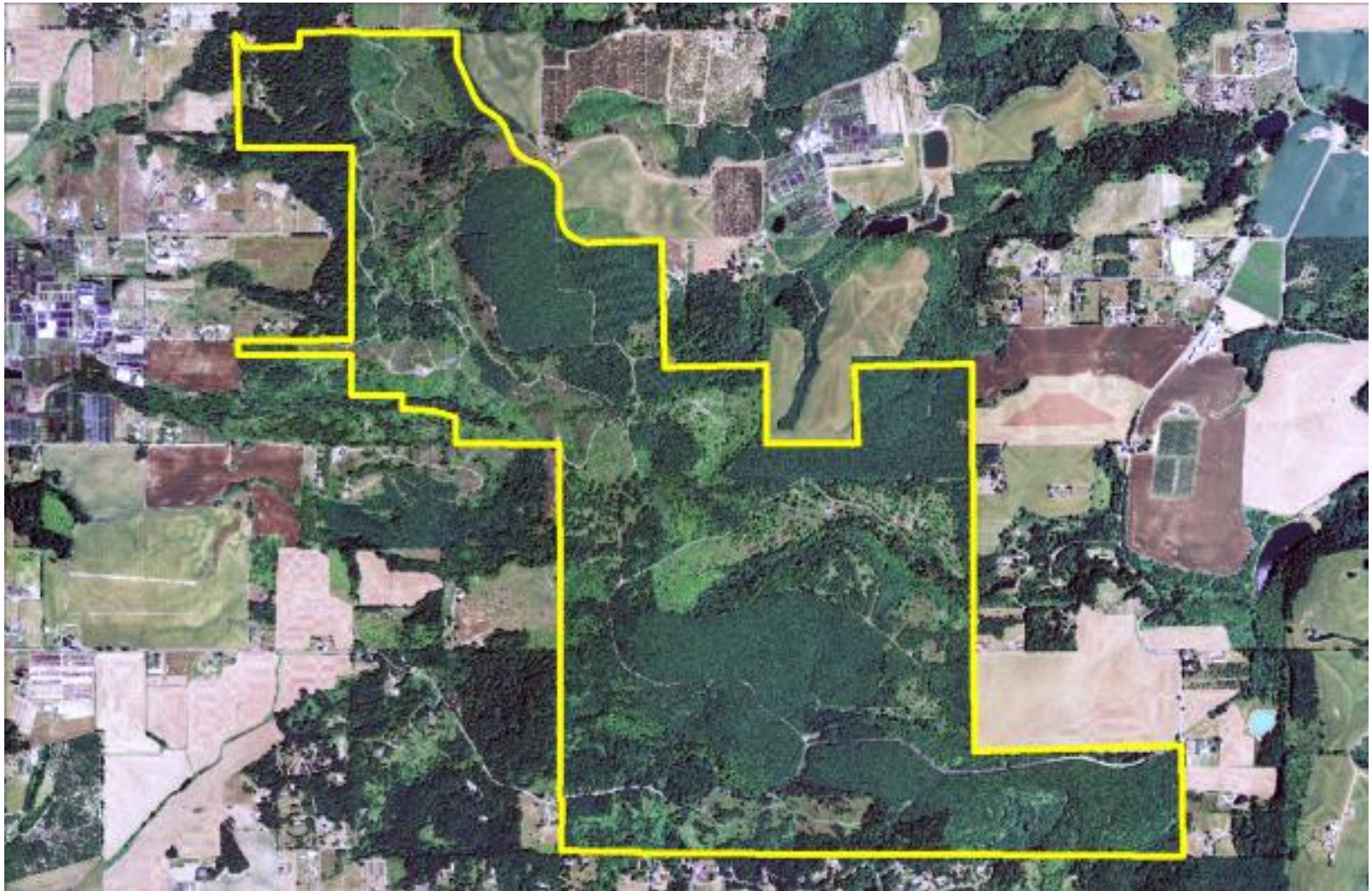


- 168.4 million for regional natural areas, trails and greenway acquisition
- Priority acquisitions:
 - Floodplains and riparian areas
 - Rare and significant wildlife habitats
 - Access to nature

Natural Area Acquisitions



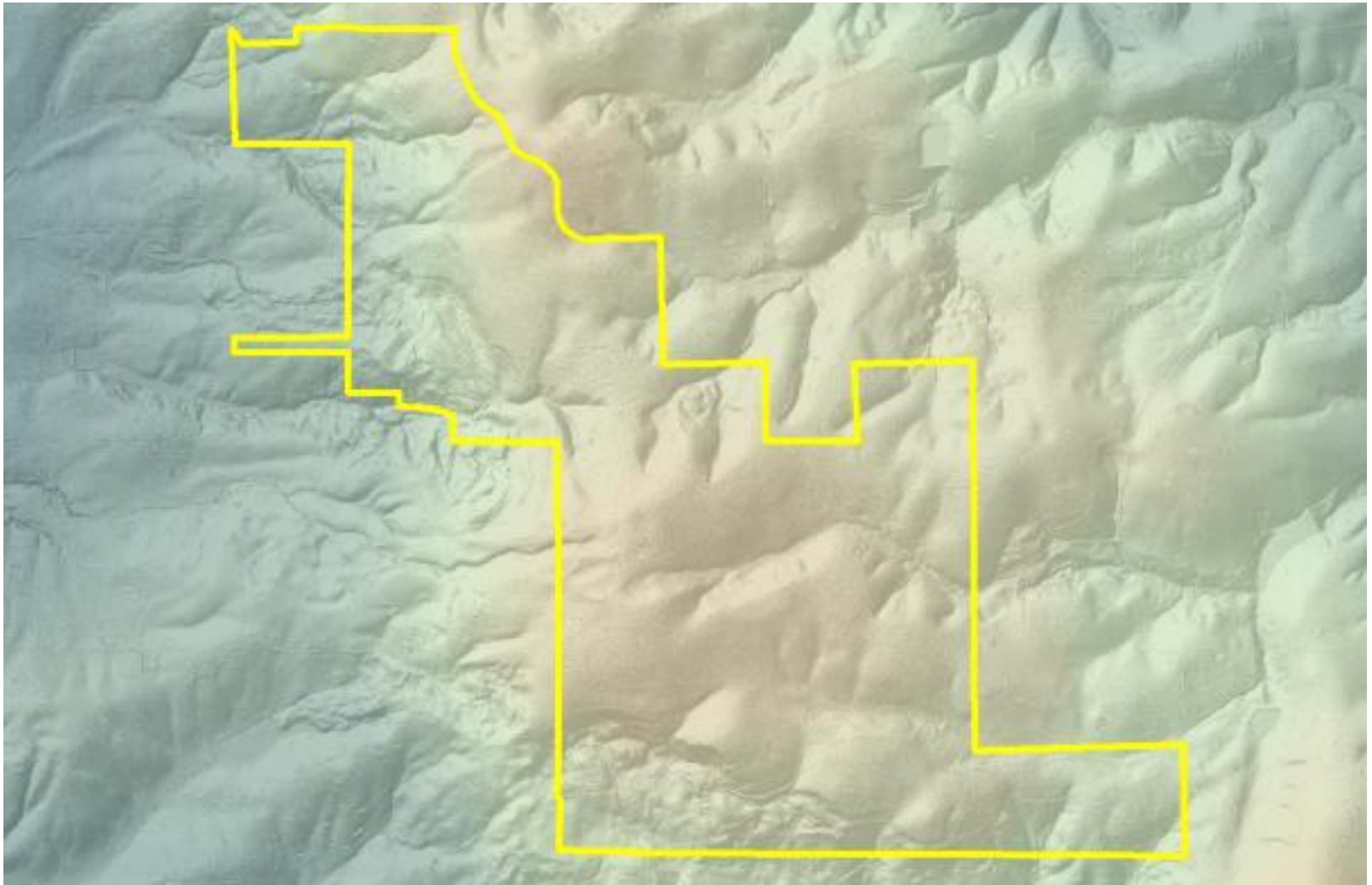
Chehalem Ridge Natural Area



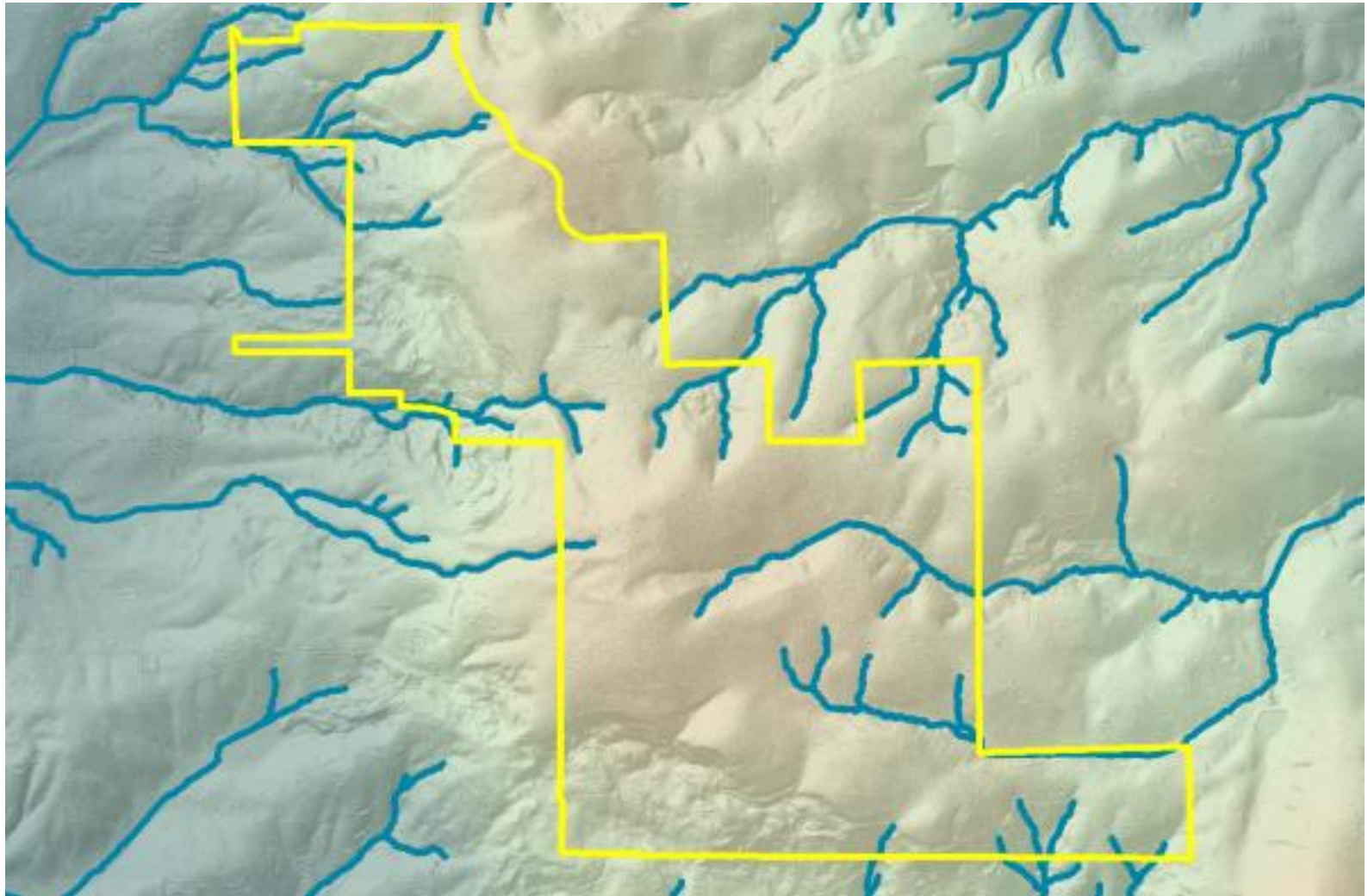
Natural Resources Management

- Determine current conditions
 - Survey, inventory, map
- Identify desired future conditions
- Identify initial treatment priorities
- Develop prescriptions
- Implement prescriptions

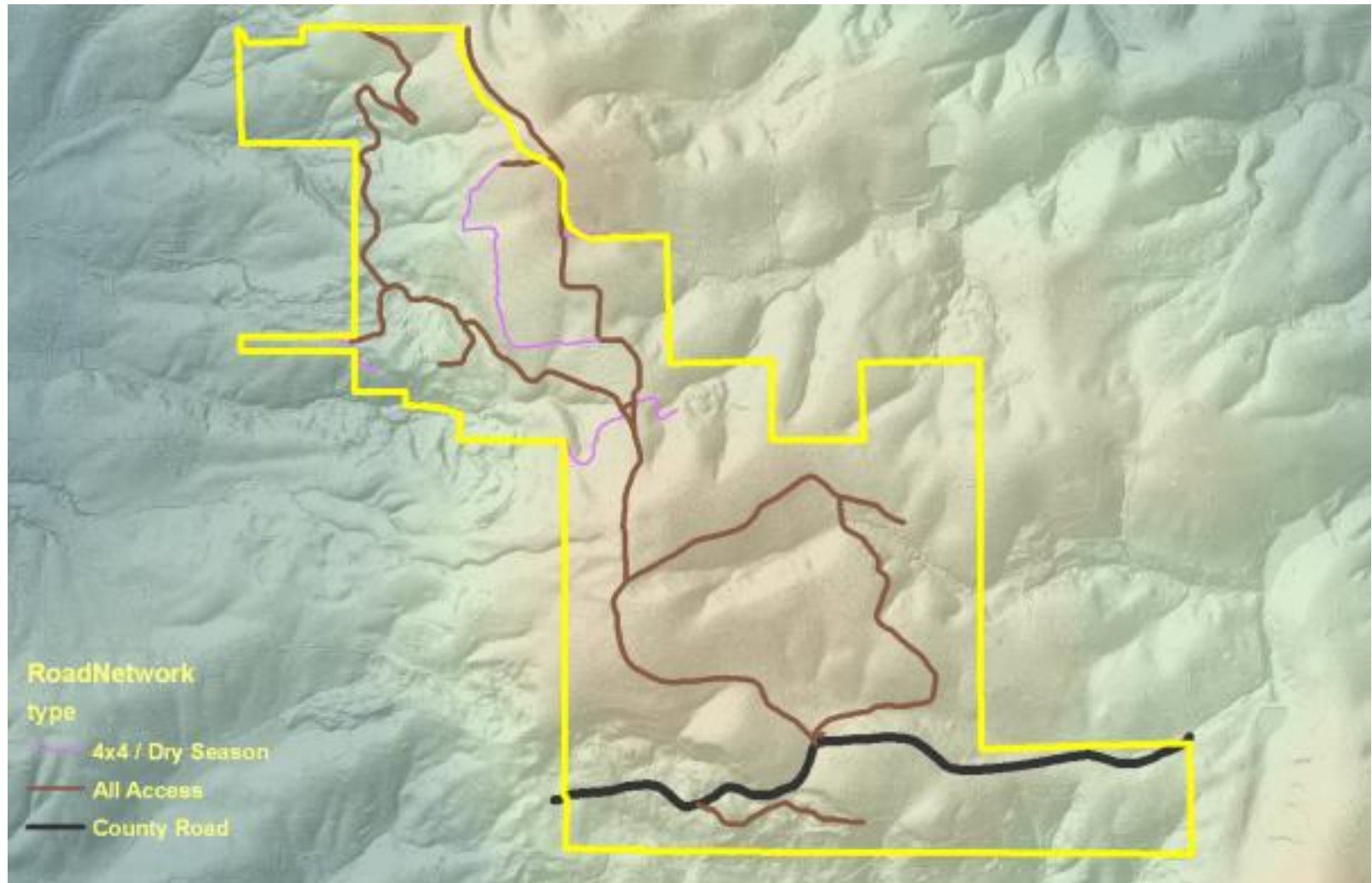
Topography



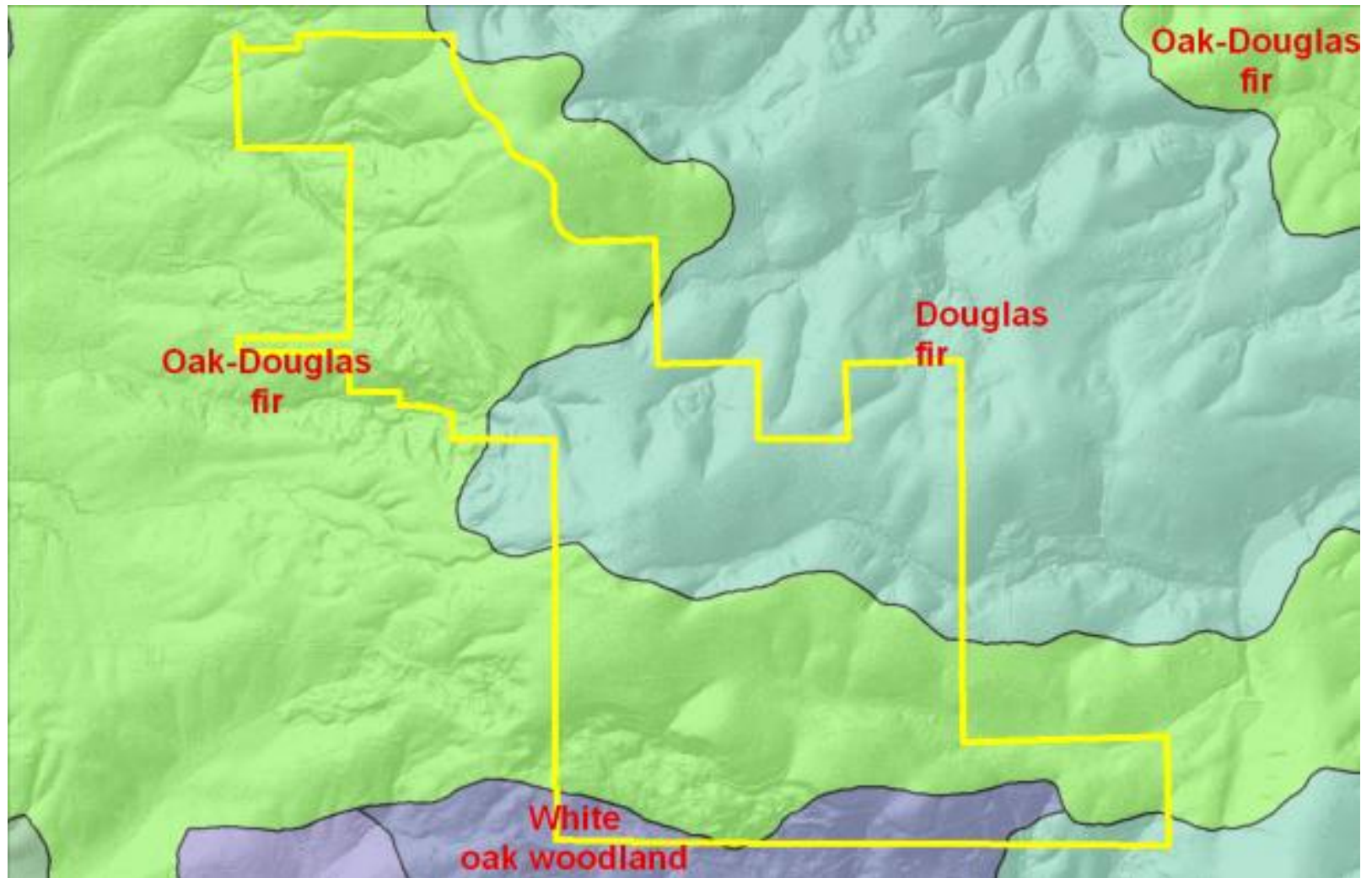
Drainages



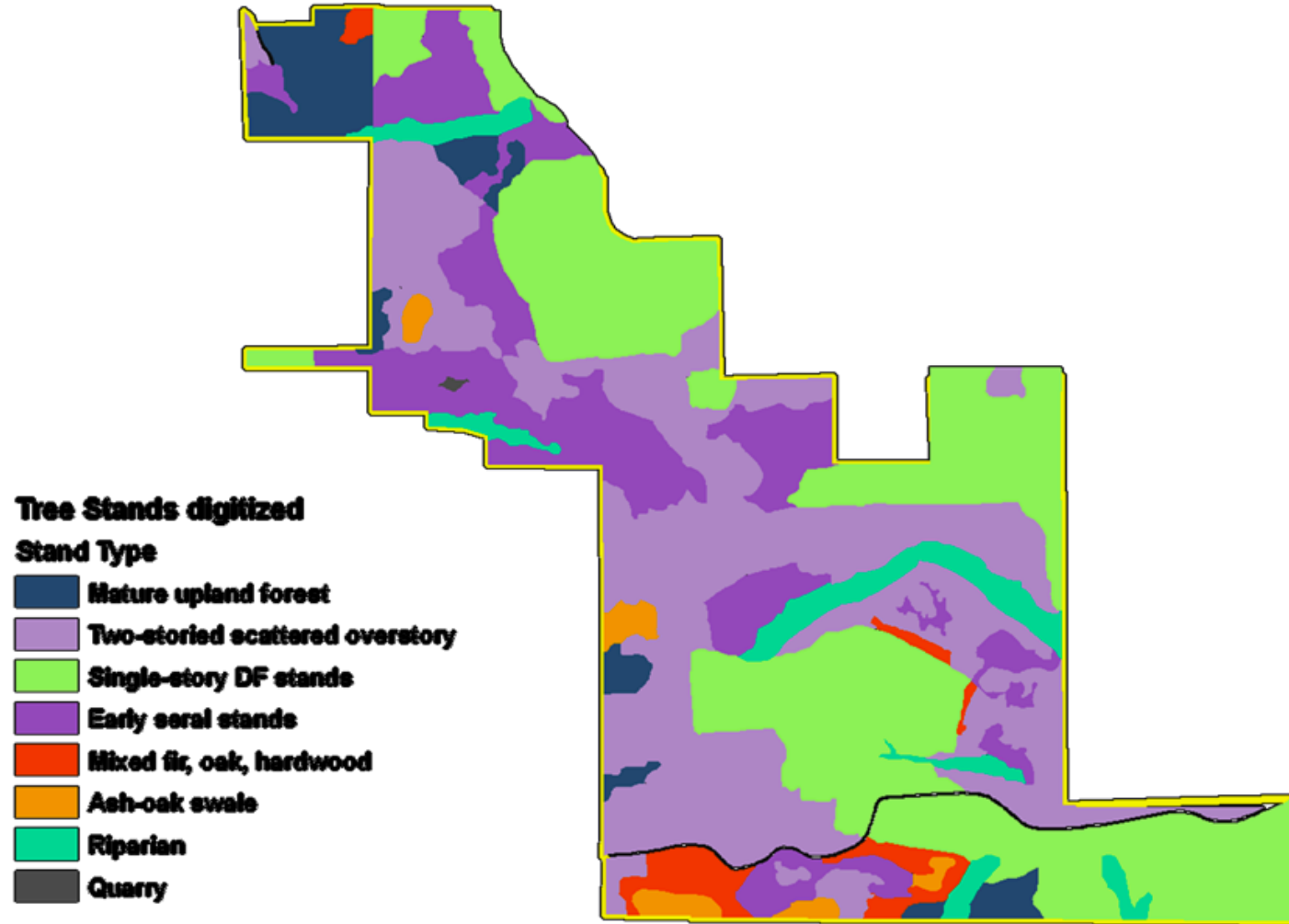
Road system

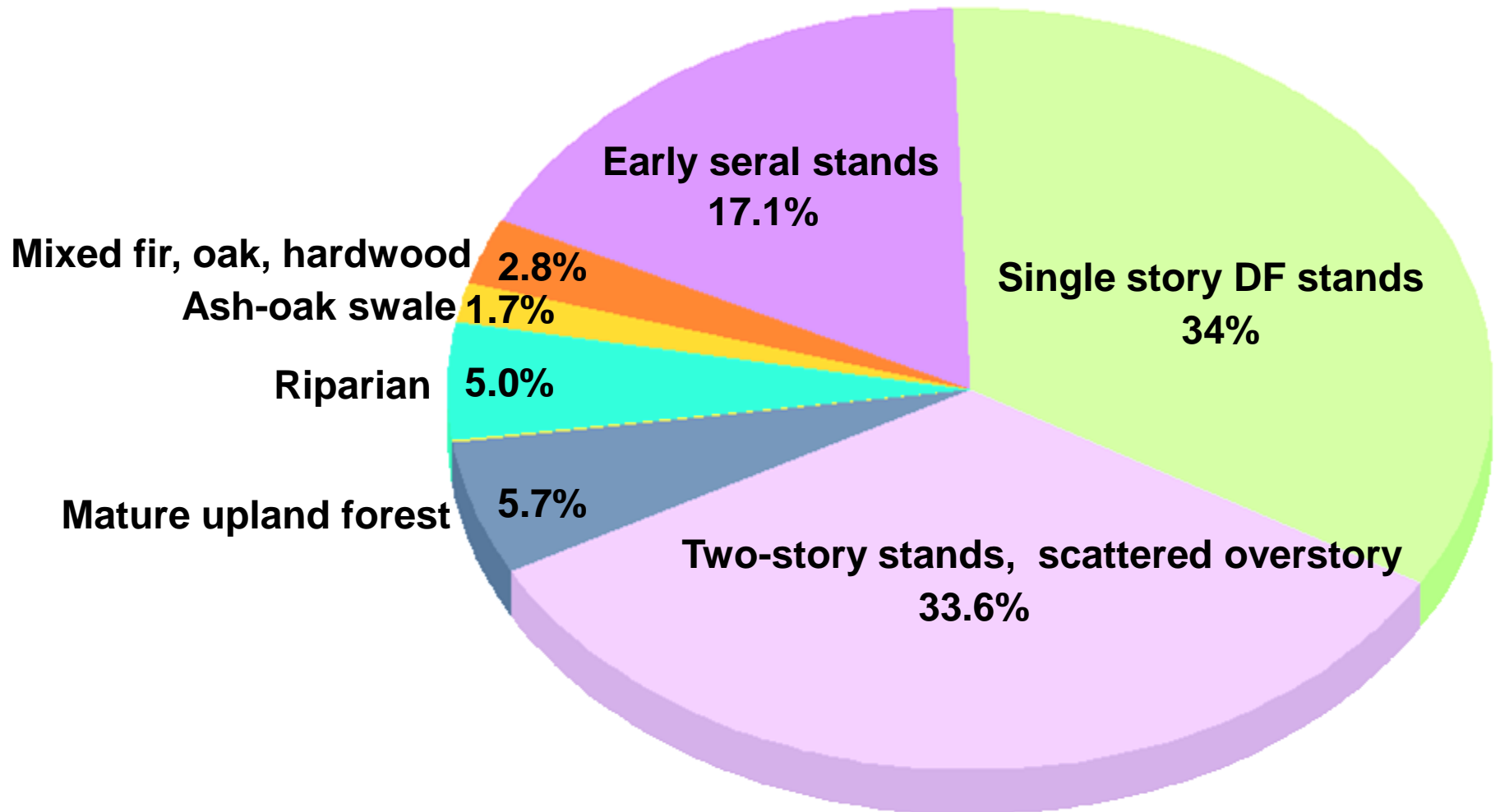


Historic vegetation



Stand/structural diversity





Actively managing for habitat diversity



- Single story Douglas-fir plantations

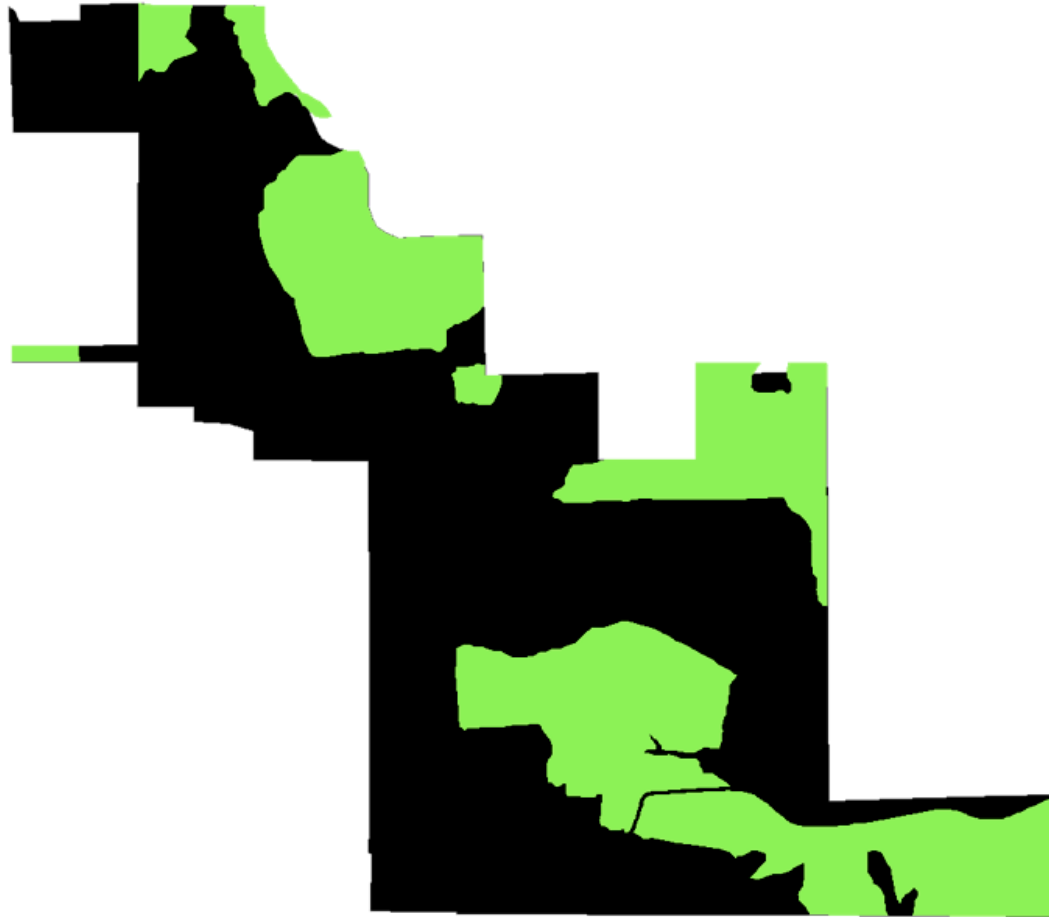


- Two-story with scattered overstory



- Oak habitats

Single-story Douglas-fir stands



Single-story Douglas-fir stands

Management objectives

- Accelerate development of late successional forest characteristics
- Maintain and increase species diversity
- Minimize fire hazards
- Initial treatment costs $<$ or $=$ to revenues



Single-story Douglas-fir stands

Initial actions

- Commercial thin, create gaps
- Treat fuels
- Evaluate underplanting needs



- Initial treatment costs $<$ or $=$ to revenues

Two-story stands, scattered overstory



Two-story stands, scattered overstory

Management objectives

- Accelerate development of late successional forest characteristics
- Maintain and increase species diversity, with *focus on shrub diversity*
- Minimize fire hazards
- Minimize initial entry costs



Two-story stands, scattered overstory

Actions

- Weed control
- Pre-commercial thin to maintain shrub diversity
- Minimize initial entry costs



Oak Habitats

Management objectives/initial actions

- Objective
 - Restore and expand habitats based on site and feasibility of management
- Actions
 - Map stands
 - Weed control
 - Reduce fir competition



Natural resources management: only pragmatic optimists need apply.



Special thanks for Metro GIS Wizard Tommy Albo