



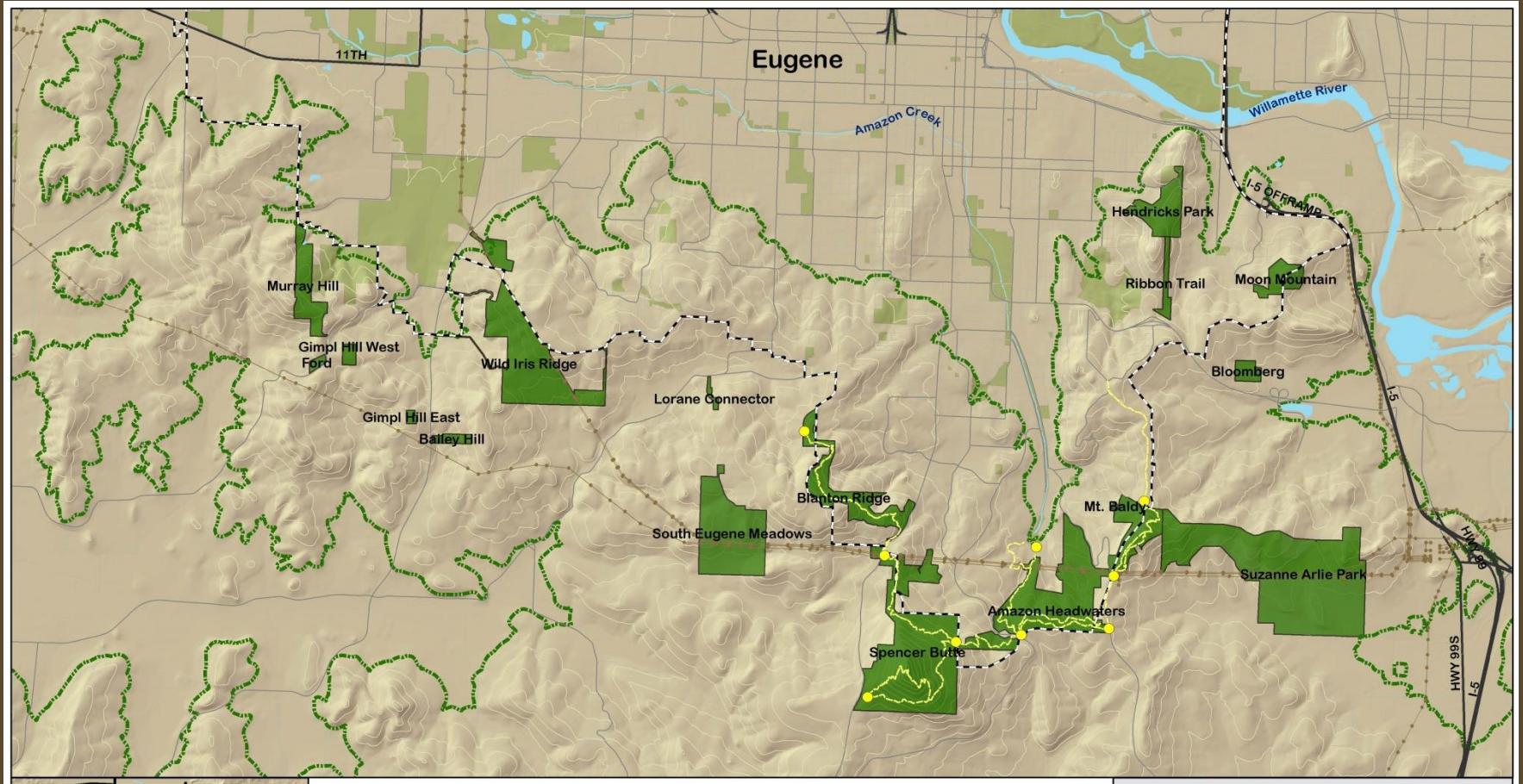
OAK HABITAT RESTORATION PROJECTS IN EUGENE, OR

OBJECTIVES, IMPLEMENTATION, AND LESSONS LEARNED

Emily Steel
Natural Areas and Urban Forestry Section
Parks and Open Space Division



Eugene's Ridgeline Park System



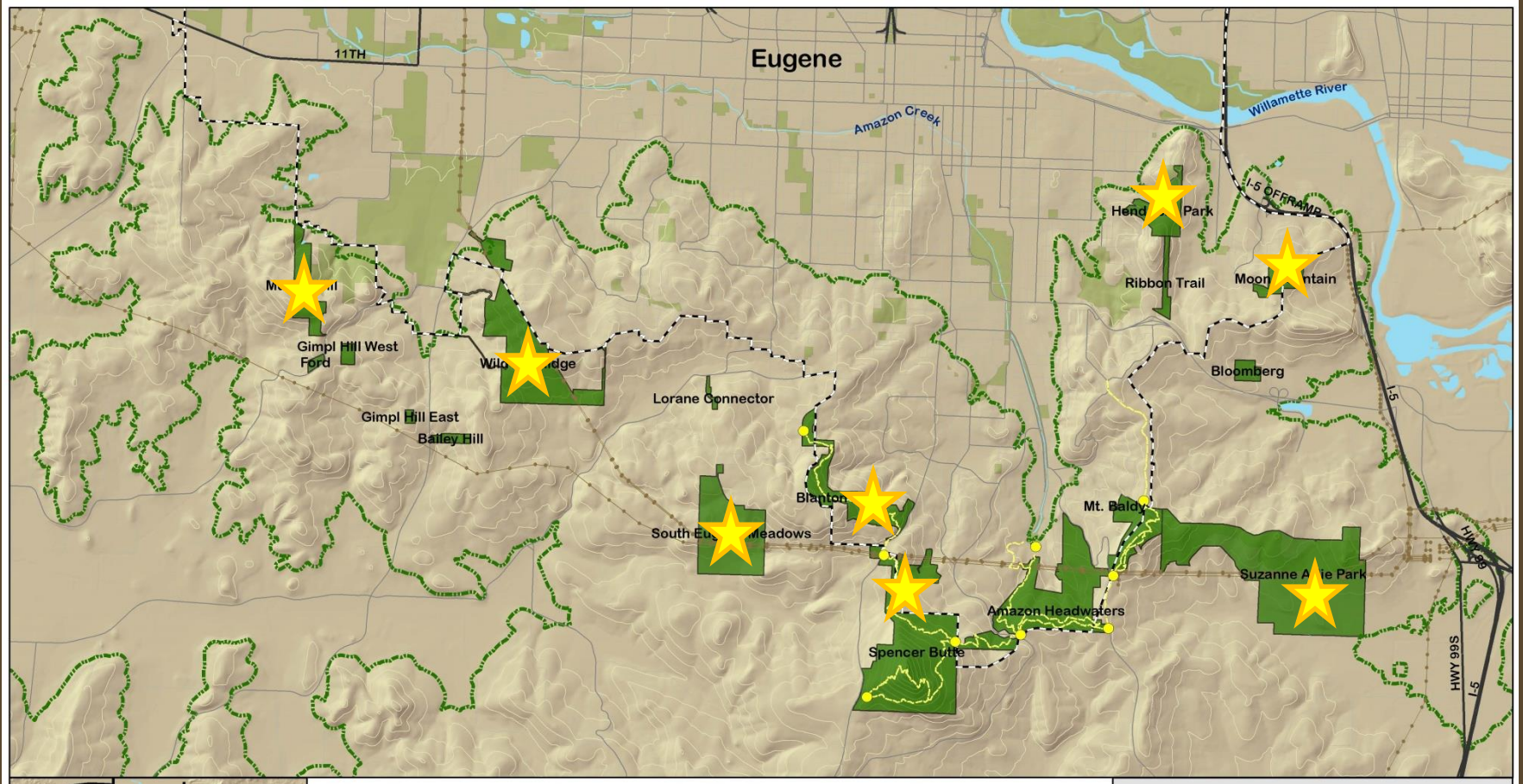
Encroachment



Logging Legacy



Oak Restoration Projects

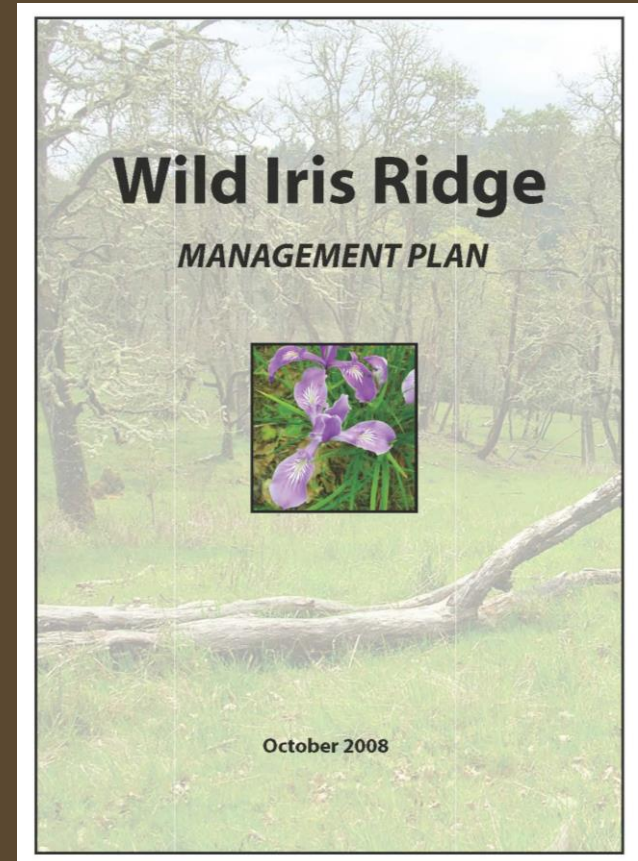


Key Restoration Project Phases



Know Your Desired Outcomes

- Management Plans
 - Ecological baseline
 - Restoration targets
 - Goals, objectives
 - Prioritization



Restoration Goals – Oak Woodland



- Total canopy cover 40-50%
- Oregon white oak dominant
- Subdominants <25% relative cover
- Release and retain all large-diameter oaks and madrone
- Min. 2 age-classes of oaks
- Invasive trees removed
- Invasive shrubs <5% cover

Restoration Goals - Wildlife



- Retain canopy connectivity with Douglas-fir
- Total shrub cover 10-40%
- All existing snags and trees with cavities are retained
- Add 4 snags (range 2-7) per acre

Project Planning – 6 to 12 months



- Stand Assessment
 - Merchantable timber vs. "biomass"
 - Project layout
 - Mark trees
- Project budget and scope
- Forestry consultant

Wood Products Revenue

- Necessary for larger-scale projects
- Timber markets fluctuate significantly
- Understand mill pricing
- Lower-value wood
- Transparency
- Sizeable contingency



Conservation Project Design

- Short-term site disturbance vs. long-term ecological goals
- Minimizing damage to retain trees
- Avoid sensitive areas
- Project footprint
- Project timing
 - Soils
 - Nesting birds



Implementation



Implementation



Project Sequencing



Project Duration and Footprint



Biomass



Biomass



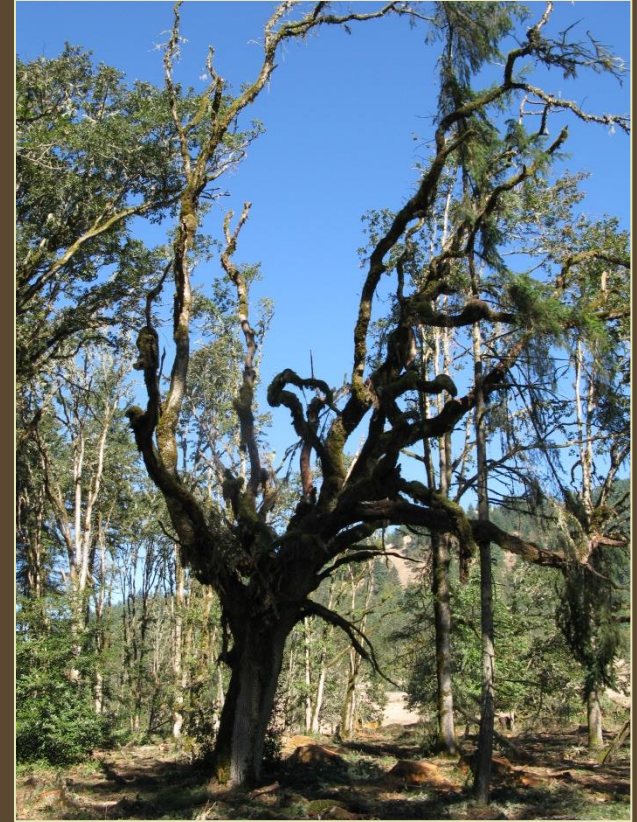
Canopy Release



Canopy Release



Multiple Phases



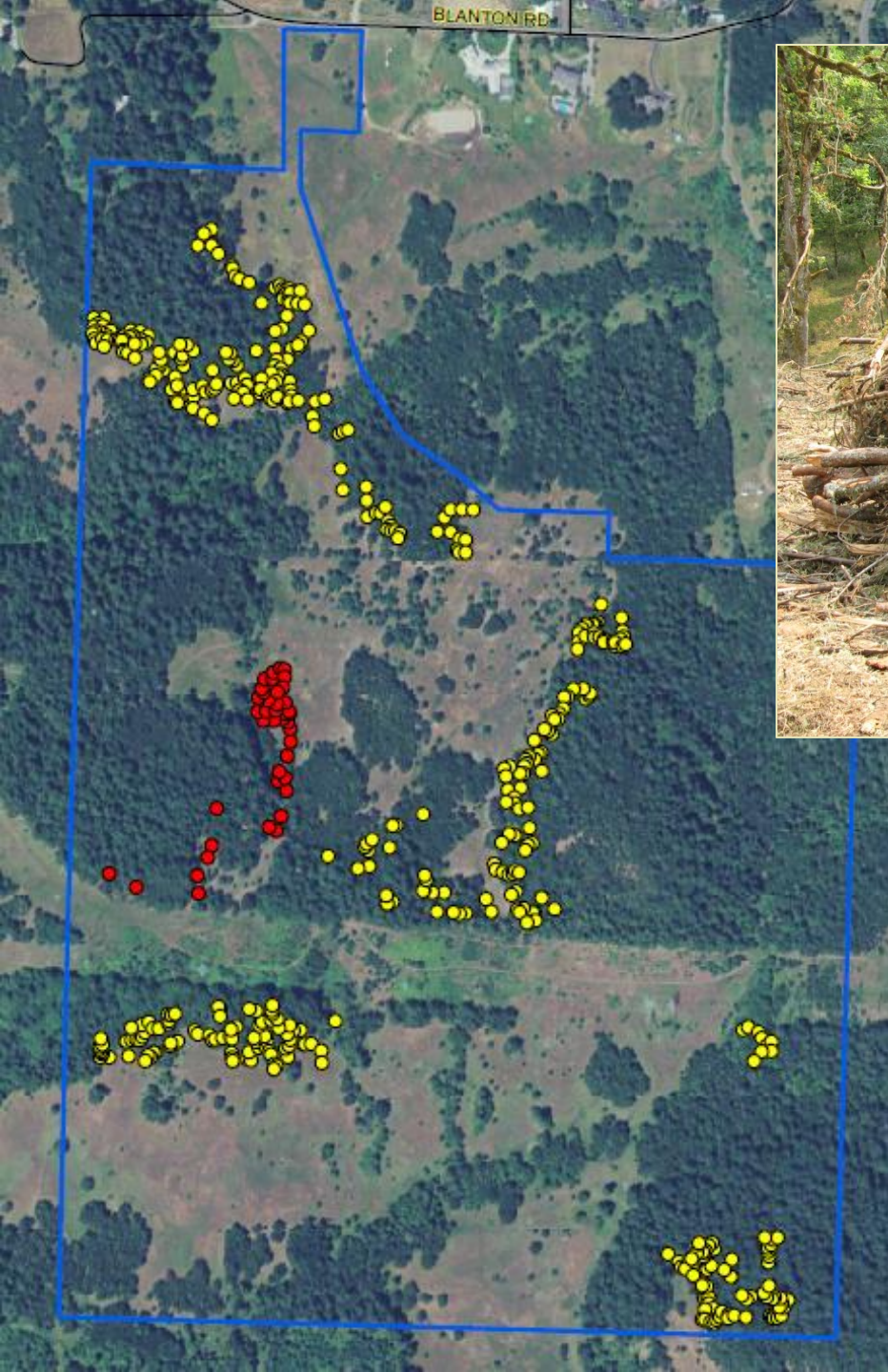
Multiple Phases



Post-project Stewardship

- 1-5 years of intensive follow up
- Seeding/planting
- Invasives control
- Stumps





Down the (haul) road...



