



Experimental Network for Assisted Migration and Establishment Silviculture (ENAMES)

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Climate Adaptation and Reforestation

- Reforestation offers a tremendous opportunity to implement climate adaptation strategies
- Assisted population migration is the movement of seed sources to cooler locations within a species range (moving up in latitude or elevation)
- Information is needed to determine appropriate climate matching and the practices needed for successful establishment

ENAMES Objectives

1. Testing seed sources adapted to future climate conditions (Assisted population migration)

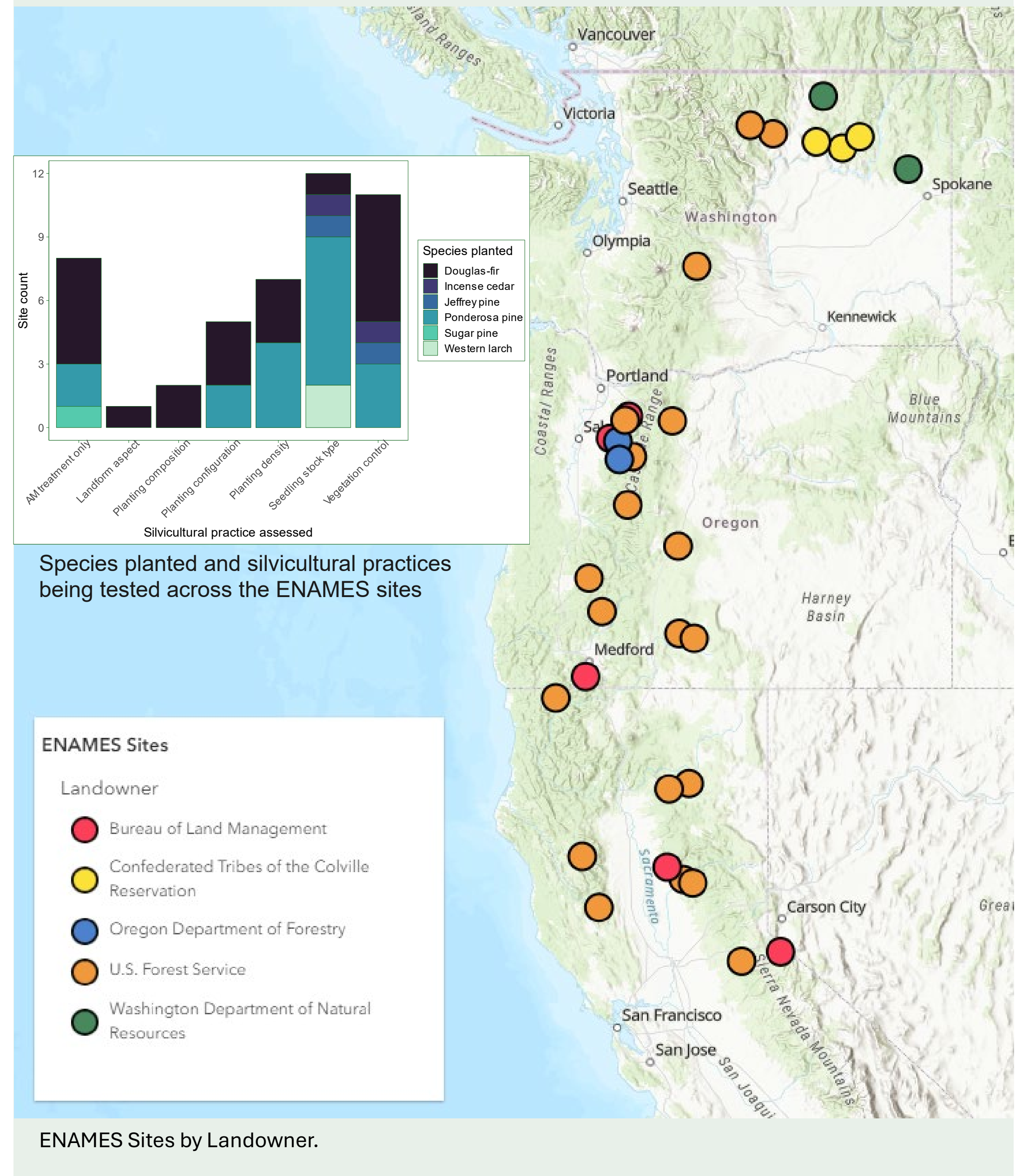
- Historical (Local)
- Early-century (+1 °C)
- Mid-century (+2 °C)
- Late-century (+4 °C)

2. Testing silviculture practices that may be needed for establishment success

- Stock type
- Competition control
- Planting density
- Slash management
- Planting configurations

3. Testing a wide range of site conditions across the western US

ENAMES Sites



Science to inform operational practice

Practitioner-driven design for management relevance

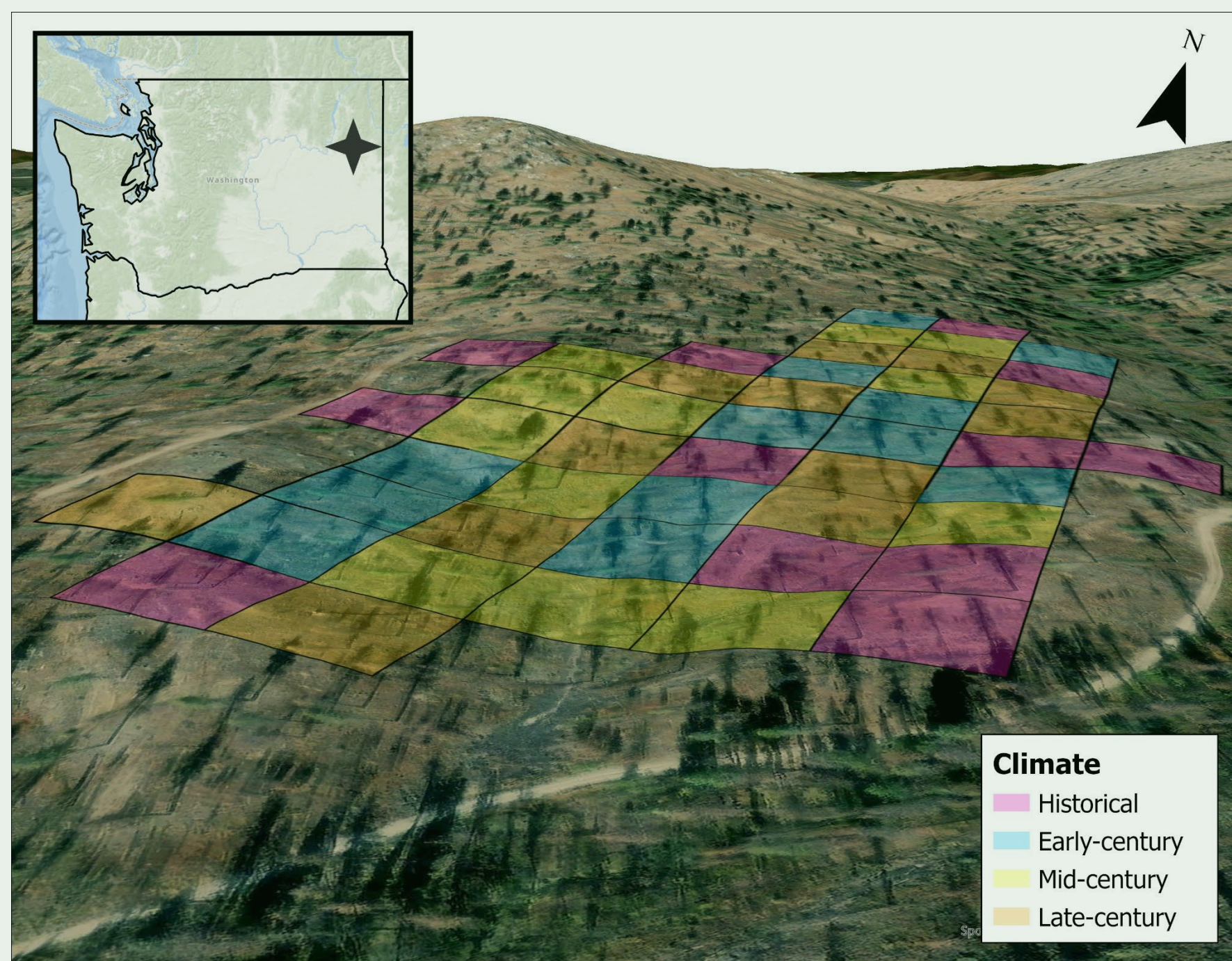
- Site conditions to assess
- Choice of tree species
- Selection of silvicultural practices to test

Facilitating operational application

- Large plots relevant to stand-level management
- Operational planting that reflects typical conditions
- Replication within site to evaluate site-specific factors



Three containerized stock types being tested at the Hidden Road Site. Photo by Rob Slesak



Hidden Road site 3D map showing experimental plots color-coded by the climate scenario each seed source is adapted to.



Seedling planted at Hillockburn Springs site. Photo by Rob Slesak



Seedlings are measured year 1 and year 5 to assess survival and growth. Photo by Allison Phillips

Outcomes

- Guidance on how far to move seed in climate space
- ID of establishment practices needed for short-term and long-term reforestation success
- Demonstration sites for assisted population migration
- Web-based interface for public data sharing and easily interpreted summaries

Project Partners

