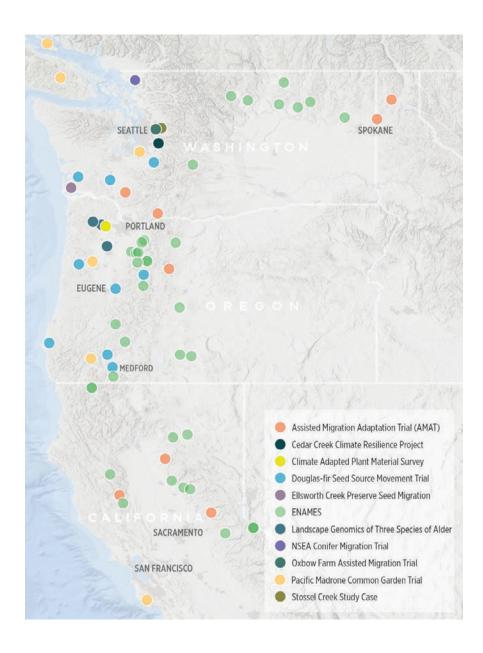
## Past, Ongoing and Planned Assisted Migration Trials

The map below shows planting locations for assisted migration trials that have been implemented or are planned across the Pacific Northwest. These include trials examining assisted population migration, range expansion, and assisted species migration.



#### For more details on the trials shared click here.

# Assisted Migration: Climate Adaptation on a Spectrum



#### **Seed Migration**

Seed sources moved climatically or geographically within their current ranges



#### **Range Expansion**

Seed sources or plant materials are moved to suitable areas just outside of ranges



### **Species Migration**

Species moved outside current ranges to prevent extinction or to be a surrogate for another species in decline

Williams & Dumroese (2014)

The trials shown on the map on the left are information gathering endeavors that tackle a range of potential climate adaptation actions for tree species that fall under the broad category of assisted migration. Seed migration may be referred to as the most conservative option in this framing, and is the focus of the majority of trials. Some trials seek to better understand how particular species will fare just outside of their current identified range, known as range expansion, which is an action with some additional risk compared to seed migration. The third category, assisted species migration, is only being addressed in a handful of the trials depicted. While discussions of assisted migration often jump to this third option, it tends to carry greater risk of unintended consequences, and many of the trials addressing this are small in scale and include species migration in addition to seed migration and/or range expansion.



"We need to facilitate the adaptation of forest trees to a changing climate, even in the face of incomplete information. **Restoration practitioners and** foresters interested in assisted migration certainly need to use the best existing science to guide assisted migration (AM) efforts, but the unavoidable uncertainties about the future and gaps in our ecological knowledge mean that we also that we need to build systems to share observations and learn from our collective results as we go. To facilitate this, Oxbow **Farm & Conservation Center and** the Forest Adaptation Network are working to build a database of shared monitoring results from small AM projects in the **Pacific Northwest.**"

- Matt Distler, Oxbow Farm & Conservation Center Conservation Program Manager

Did we miss a trial that you worked on or have heard about? If so, please reach out to Kayla Seaforth at kseaforth@b-e-f.org.

TREE SPECIES*	NUMBER OF STUDIES SPECIES INCLUDED IN
Shore Pine	•••
Western White Pine	••
Garry Oak	•••
Douglas Fir	••••••••••
Western Red Cedar	••••
Incense Cedar	•••
Sugar Pine	•••
Ponderosa Pine	••••••
Western larch	•••
Jeffrey Pine	••

\*Species included in just one study are not depicted, but include the following: giant sequoia, coast redwood, Alaskan yellow cedar, Western hemlock, bigleaf maple, grand fir, white alder, red alder, gray alder, and Pacific madrone.

TRIAL INITIAL PLANTING DATE	COUNT
2008	•
2009	•
2011	••
2020	•
2021	••
2022	•••
2023	•••••
2024*	••••••
2025*	•••••
2026*	••

\*Planned.

LEAD ORGANIZATION	COUNT
Tribal	•••
University/Extension	••
Non-Profit	••••
Federal	••••••
Public Utilities	•
State/Provincial	•••••