



Restoration Reflections

Toby Query, Natural Resource Ecologist,
City of Portland, Watershed
Revegetation Program

Have you used the SST?

TOBY: Yes, I have used it. It was the first practical tool that combined climate change modeling with forestry and restoration applications. Being from Portland and using the tool with an RCP 8.5, it shows the huge changes that are upon us and exposes the failings of our ability to adapt with current structures. Matches for Douglas Fir can show seed lots that are best adapted to conditions in 2071-2100 in Arizona and New Mexico. It also forces the conversation that the future is going to be increasingly different and dynamic and using past frameworks of managing for resilience (local reference sites for example) need to be thrown out

and use scenario planning and other methods to take their place. To create new frameworks for resiliency, we need to build relationships that will help navigate these difficult decisions.

What questions relating to your stewarding of riparian plant communities would you love to have researchers investigate?

I would like to see more transdisciplinary research whereby research questions arise from a process involving diverse subject matter experts as well as representatives of marginalized communities. Having more platforms to bring people together with an

environmental justice lens can help navigate the future as well as start healing past injustices. One translation of research that may arise out of this process could be comparative studies of land management from different perspectives: having indigenous practices compared to organic methods, to western restoration practices, to rewilding practices, and mixes of all of these and others. And then researching outcomes of these approaches not just of the plant community, but of soil, water, and air quality, as well as impacts to animal and human communities. A multitude of perspectives as well as creativity are necessary to navigate the changes that are upon us.



Contractor Partner

R. Franco Restoration is a family owned business based in Aumsville, Oregon, that has been providing planting, site maintenance and wildfire fighting services for over 15 years.

Rosario, what are you and crew members observing in the field relating to climate and woody plant health?

ROSARIO: We know climate change is happening and we see high mortality rates especially in riparian and floodplain areas where it is wet during

the planting season (January-March) and now gets very dry in the early summer. We are planting some of the plants that have wet and dry tolerance, like Scouler's willow (*Salix scouleriana*), swamp rose (*Rosa pisocarpa*) and twinberry (*Lonicera involucrata*) to see how much they can tolerate.

Rosario, what are your priorities for research and extension?

ROSARIO: How to leverage resources to support fire prevention through education and what actions people can take to reduce fire risk.