Katy (she/her) and Gary (he/him) getting ready to head out into the marsh. Katy was wrapping up more than 135 hours of amphibian pond breeding surveying that she and volunteer community scientists started at the end of January.

The surveys measure breeding habitat indicators for frogs and salamanders that live on the 278- acre Metro natural area near the North Tualatin Mountains. Metro purchased the property in 1997.

Here Gary and Katy spot northern red-legged frog egg masses, a state protected species, in an area they had never been recorded before – a clear indicator of the habitat's vitality.

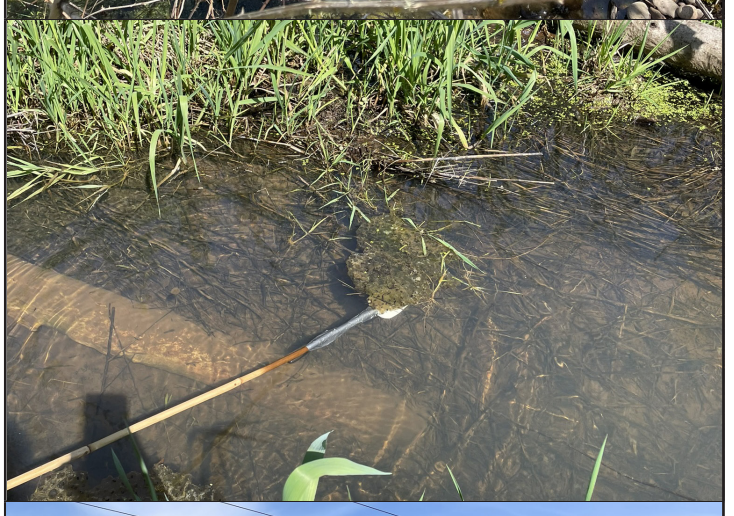
Metro's wetland restoration is key in combatting climate change because wetlands clean up polluted water, slow and store floodwaters and snow melt, recharge groundwater, and support habitat for many different native plant and animal species.

You can't see it, but there's a culvert between Gary and Katy that tunnels under the railroad tracks and Highway 30 to the right.

In the coming years, Gary will work with the railroad company and the Oregon Department of Transportation to secure easements so that safe crossings for wildlife like fish, deer, frogs and salamanders can be constructed.

It kind of looks like algae and bubbles, but those are egg masses surrounding Katy and Gary.

The downed logs and nearby trees provide shade that cools the water for amphibians to lay their eggs.



Here's a red-legged frog egg mass that was laid (aka "oviposited") the week of March 14, somewhat late in the season. By late June they will become adult frogs.

"Seeing this here is good news because it's an indicator that this part of the habitat is used by frogs and salamanders," Katy said. "If the water quality were poor, we wouldn't be seeing this."

The amphibians that breed in the North Multnomah Channel Marsh live the rest of the year in the mountains and forest in the background.

Healthy forests and sound forestry practices are critical for wildlife. Streams leaving the mountains and entering the wetlands must be healthy in order to support quality habitat.

Here Gary watches Clean Water Services (CWS) intern, Ocean (he/him), process water samples to find traces of eDNA. All organisms leave evidence of their presence in the environment called eDNA (as seen in many crime shows). Scientists can use it to determine what organisms are present in a specific location.

Metro partners with the University of California Santa Cruz and CWS to collect eDNA samples to build out a database of the many different species inhabiting the Pacific Northwest.

That mound of sticks Gary's pointing to is a huge beaver lodge. Gary said the pile at the left is the "longest beaver damn I've ever seen!"

"It's encouraging to see beaver, nature's engineers extraordinaire, do what they do best," Katy said. "Beavers 'dam up' streams so they can create larger pools of water which make it much easier for them to use their webbed feet to 'swim' for their food. By creating pools and channels to reach these pools, they're helping return the site's hydrology to its natural state."