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Abstract

The Oregon Water Futures Project is a collaboration between the University of Oregon, water and environmental justice interests, Indigenous peoples, communities of color, and low-income communities. Through a water justice lens, we aim to impact how the future of water in Oregon is imagined through storytelling, capacity building, relationship building, policymaking, and community-centered advocacy at the state and local level.

In 2020, project partners co-conceptualized and facilitated a series of conversations with Native, Indigenous Latin American, Latinx, Black, Southeast Asian, Pacific Islander, Middle Eastern, Arab, and Somali communities, including webinars on Oregon water systems, phone interviews, and virtual online gatherings. These conversations lifted up

culturally specific ways of interacting with drinking water and bodies of water; concerns around water quality and cost; resiliency in the face of challenges to access water resources essential for physical, emotional, and spiritual health; and a desire for water resource education and to be better equipped to advocate for water resources.

Lead Authors and Coordination Team

Dr. Alaí Reyes-Santos, University of Oregon Cheyenne Holliday, University of Oregon Stacey Dalgaard, Oregon Environmental Council Taren Evans, Coalition of Communities of Color Kristiana Teige Witherill, Willamette Partnership



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Special Thanks to Project Partners and Co-host Organizations

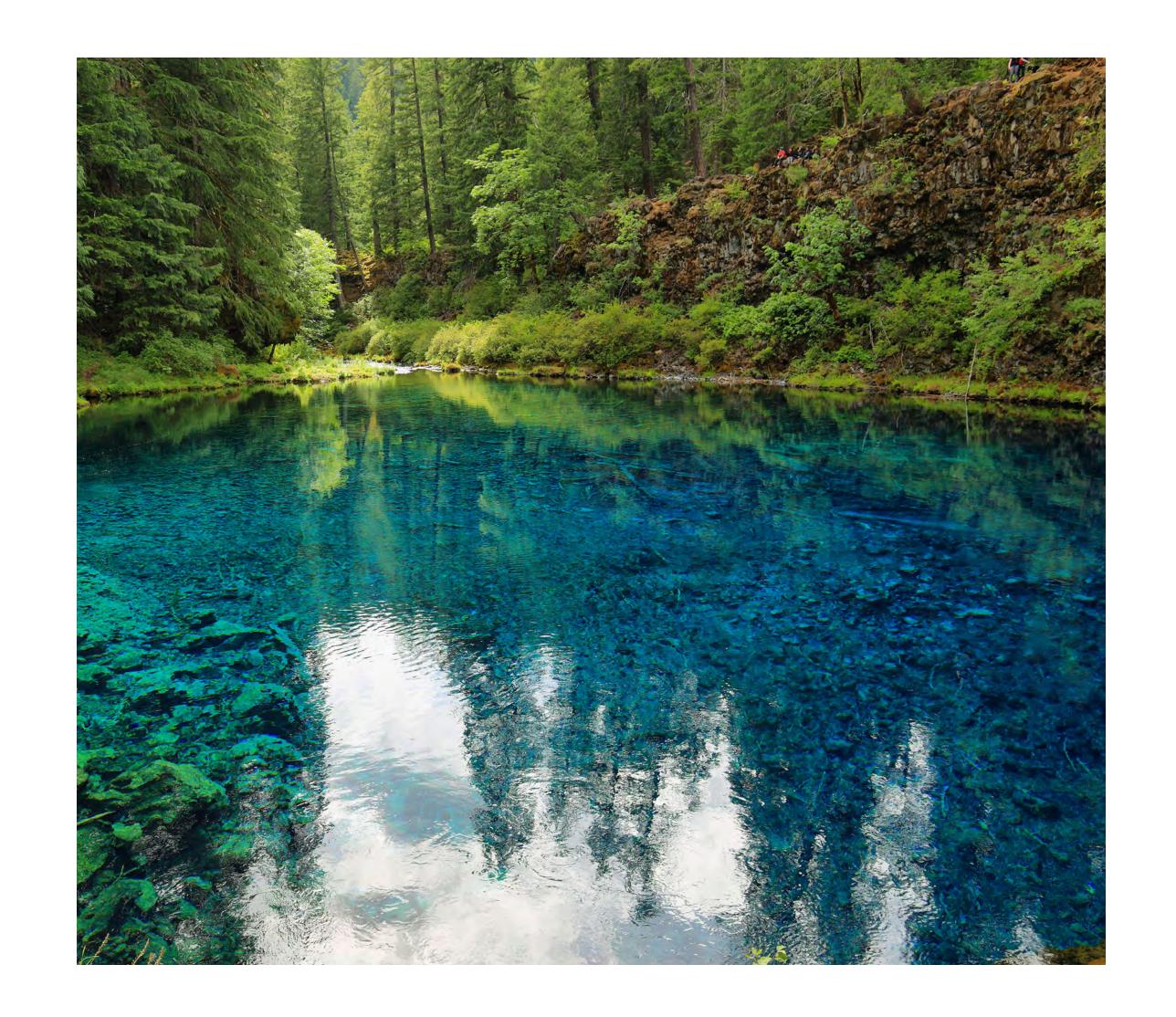
Tomás Bartolo and Reyna López, Pineros y Campesinos Unidos del Noroeste (PCUN) Haley Case-Scott, Ana Molina Trejo, and Aimee Okotie-Oyekan, NAACP Eugene-Springfield Rachel Cushman, Chinook Indian Nation

Tony DeFalco, Verde

Dolores Martínez and Gustavo Morales, Euvalcree Jairaj Singh, Cristina Palacios, and Manjeet Kaur, Unite Oregon

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Land Acknowledgement

The University of Oregon is located on Kalapuya Ilihi, the traditional indigenous homeland of the Kalapuya people. Following treaties between 1851 and 1855, Kalapuya people were dispossessed of their indigenous homeland by the United States government and forcibly removed to the Coast Reservation in Western Oregon. Today, Kalapuya descendants are primarily citizens of the Confederated Tribes of Grand Ronde and the Confederated Tribes of Siletz Indians, and they continue to make important contributions to their communities, to the UO, to Oregon, and to the world.

The physical, cultural, spiritual, and economic health of tribal communities is inextricably linked to the health of water and keystone aquatic species. How water systems are managed today is directly tied to the displacement of Oregon's first people for development and settlement by European immigrants. Any conversation about water must

be accountable to this history, the sacredness of water, and the ancestral stewards of these lands.

We extend our respect to the nine federally recognized Indigenous Nations of Oregon: Burns Paiute Tribe, Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians, Confederated Tribes of the Grand Ronde, Confederated Tribes of Siletz Indians, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of Warm Springs, Coquille Indian Tribe, Cow Creek Band of Umpqua Tribe of Indians, and the Klamath Tribes. We express our respect to the many more tribes who have ancestral connections to this territory, including our project partners at Chinook Indian Nation, as well as to all other displaced Indigenous peoples who call Oregon home.

Hayu masi.

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Letter from the Coordination Team

hen we started planning this project in 2019, the world felt like a very different place. The Governor's office was developing a 100-Year Water Vision for Oregon, a new Water Committee had been formed in the state legislature, and we were organizing in-person community meetings to start in March 2020.

While COVID-19 forced us to pause and adapt, the combined crises of the pandemic, systemic racism, and the economic downturn have shone new light on existing and long-standing disparities in our communities. Today in Oregon, people are experiencing water shortages or living with unsafe water in their homes and at work, missing work because of seasonal flooding, and watching sacred ecosystems disappear.

The Oregon Water Futures Project came together in recognition of the significant disparities that exist in the distribution of water resource

benefits and access to decision making for Native and Indigenous peoples, people of color, migrants, and low-income communities. We set out to create a multilingual and intercultural space to lift up voices from across the state, identify community priorities for water and culturally specific resiliency, build capacity around water advocacy, and foster a statewide water justice movement.

Since Oregon's founding, water resource decisions have created socio-economic disparities—wealth for some and disadvantages for others—starting with broken treaties between the US government and sovereign tribal nations. These power dynamics continue to influence who makes water decisions, reinforcing a policy and funding cycle that is consistently dominated by the same voices. This creates a huge gap between the conversations state and local decision-makers are having and the daily experiences of many Oregonians. These systems also

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ignore the traditional ecological knowledge held by Oregon tribes, Native communities, and Indigenous peoples on how to care for water, as well as the ecological values and practices that communities of color and low income households contribute to the state.

In the midst of the pandemic and the increasing visibility of national clean water initiatives, water justice in Oregon is as important as it has ever been. These are not new problems, and in addressing them, those communities that have benefited least and been harmed most by past decisions should be the focus of our solutions moving forward. We hope this body of interviews opens people's eyes to the daily realities of living with water insecurity in Oregon and contributes to a growing body of work to advance social and environmental justice.

Our sincerest gratitude goes out to our project partners—Chinook Indian Nation, PCUN, Euvalcree, Unite Oregon, Verde, and NAACP Eugene-Springfield—all participants who shared their stories and experiences, and to the many people fighting for water justice in their communities and beyond.

Sincerely,

Oregon Water Futures Project Coordination Team Stacey Dalgaard, Oregon Environmental Council Taren Evans, Coalition of Communities of Color Cheyenne Holiday, University of Oregon Dr. Alaí Reyes-Santos, University of Oregon Kristiana Teige Witherill, Willamette Partnership

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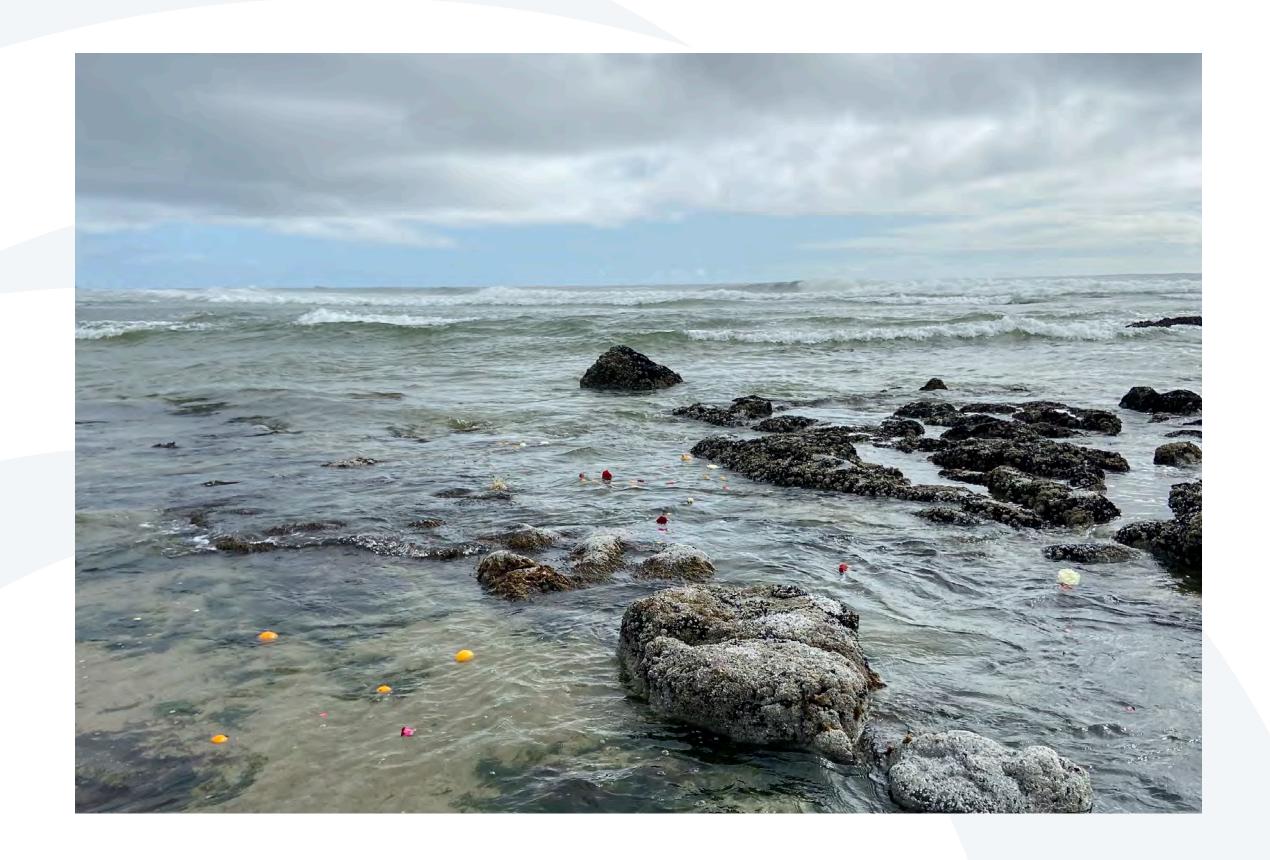
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Project Overview

changing climate, aging infrastructure across the state, and lack of ongoing investment in clean water have left Oregon's water systems stressed, putting our health, safety, economy and environment at risk. Communities of color, particularly those that are rural and lowincome, are often on the front lines of these impacts, facing a wide range of threats, including rising utility rates, disparities in drought and flooding vulnerability, and exposure to nitrates, pesticides, and heavy metals. In some rural counties, Native peoples and communities of color represent 30-40 percent of the population, yet face significant barriers to participating in state policy and infrastructure discussions.¹ In metropolitan areas such as Eugene, Salem, and Portland, low-income communities and communities of color find themselves at high risk for water insecurity and climate-related disasters as documented during wildfires and seasonal flooding events.





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Project Overview

In recognition of these challenges and the increasing vulnerability of our water resources, the Oregon Water Futures Project was formed by Oregon Environmental Council, Willamette Partnership, Coalition of Communities of Color, and the University of Oregon to elevate water priorities from communities currently underrepresented or historically discriminated against in water policy decision-making, particularly Native, people of color, migrant, and low income communities. Through this work, the Oregon Water Futures Project aims to:

- center community voices in public policy around water resources, future water investments, and Oregon's 100-year water vision.
- produce and share research with rural and BIPOC communities.
- help build leadership capacity within BIPOC-led organizations to engage in water advocacy.
- inform a statewide water justice agenda.

In 2020, the Oregon Water Futures Project engaged Native, Latinx, Black, and various migrant communities across the state—including Indigenous Latin American, Caribbean, Southeast Asian, Middle Eastern, Arab, Pacific Islander, and Somali communities—in conversations about the future of Oregon's water resources and culturally specific resiliency in the face of water challenges. Chinook Indian Nation, Pineros y Campesinos Unidos del Noroeste (PCUN), Euvalcree, Unite Oregon, Verde, and the NAACP Eugene-Springfield chapter joined as local co-hosts and project partners to lead outreach to community members and actively collaborate on research design, engagement approach, facilitation, and project findings.

This report summarizes the results of that outreach and learnings about community engagement with culturally specific communities in Oregon. Project partners hope that these conversations will bring new perspectives to how Oregonians experience water resource issues in their

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daily lives and inform future policy and other actions at the state and local level to address community water concerns.

Coronavirus and Wildfire Impact

The COVID-19 pandemic deeply impacted the United States in 2020, closing schools, shutting down businesses, and limiting public gatherings. The original community engagement approach included six in-person gatherings with food and childcare provided in various rural counties and Portland Metro in spring and summer 2020, as well as in-person planning meetings to build relationships with local community-based organizations. The pandemic required a shift to virtual platforms and phone interviews, which enabled the team to add an additional location, but also limited opportunities for community building and shared storytelling in specific communities and among all the co-host partner organizations.



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Partner organizations and people participating in the project were directly impacted by COVID-19 and the resulting economic crisis, extreme wildfires throughout Western Oregon in September, and/or were engaged in Black Lives Matter's community mobilizations. Partner organizations had to address emerging community needs as advocates, frontline workers, community organizers, and service providers. All partners faced new and ever shifting workloads as the pandemic, natural disasters, and the political climate provoked multiple and consistent states of emergency that threatened physical and emotional health, economic survival, as well as sense of safety in the communities consulted. This required intentional flexibility, adaptable expectations and communications, and delaying community outreach and engagement to the fall. Coordinating partners also adjusted budgets to increase honoraria provided to community participants and enable co-host partner organizations to retain more funding for staff capacity.

Impacts of these major regional and global events on community participants' concerns about water resources and drinking water are evident in the project findings.

Capacity Building

As part of our commitment to increase leadership capacity for the water justice movement and to build momentum toward the community engagement activities, a four-part webinar series was offered for all project partners. The series was a primer for how water systems work in Oregon, which agencies are responsible for water management in the state, what water justice movements look like across the country, and how communities and advocates might work together to build a Water Justice Framework for Oregon.

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Throughout the interviews, we identified significant community interest in learning more about water resource issues as well as a wealth of existing culturally specific knowledge that could be shared with other community members. Water agencies and advocates would benefit from partnering with community-based organizations and active community members to elevate a water conservation narrative that speaks to a broader audience of Oregonians.

Sources of Support

Thank you to the generous foundations and programs that provided funding to make this project possible, including Meyer Memorial Trust, Oregon Community Foundation, Wildhorse Foundation, University of Oregon Center for Latino/a and Latin American Studies, University of Oregon Wayne Morse Center for Law and Politics, Resilience Initiative Seed Funding by the Office of the Vice President for Research and Innovation

Community Engagement Approach

- Focus on communities currently underrepresented or historically discriminated against in water policy decisionmaking, particularly Indigenous peoples and communities of color.
- Adapt to conditions created by the pandemic by creating online gatherings and phone interviews that enabled participants to share their experiences with drinking water and water resources in Oregon.
- Build a base of culturally specific experiences and knowledge about how to best care for water resources in the state.

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at the University of Oregon, University of Oregon Center for Environmental Futures (Mellon Foundation), Spirit Mountain Community Fund, Lazar Foundation, and Wiancko Charitable Foundation. Additional funding provided to Verde from Jubitz Family Foundation, Wiancko Charitable Trust, Oregon Community Foundation, and PolicyLink enabled the project to include interviews from Portland and Eugene metro areas.

This initiative would not have been possible without the collaboration of lead partners Oregon Environmental Council, Willamette Partnership, Coalition of Communities of Color, and the University of Oregon to co-develop, facilitate, and fundraise for these partnerships. Oregon Environmental Council and the University of Oregon convened project partners and shepherded coordination of the project throughout 2019 and 2020. Willamette Partnership contributed expertise in water

infrastructure and actively supported fundraising goals. Coalition of Communities of Color brought expertise in environmental and research justice to the design, and experience engaging in applied research pertinent to public policy with communities of color in Oregon.

Student Intern Involvement

Seven University of Oregon student interns conducted research on water justice concerns impacting the counties where communities were consulted by the Oregon Water Futures Project to support the design of research questions in each region. The Oregon Water Futures Project provided a unique opportunity for students to gain hands-on experience working on a water justice research project and applied learning about water resources. To facilitate student collaboration and foster water justice leadership, the course Ethnic Studies: 410/510 was created

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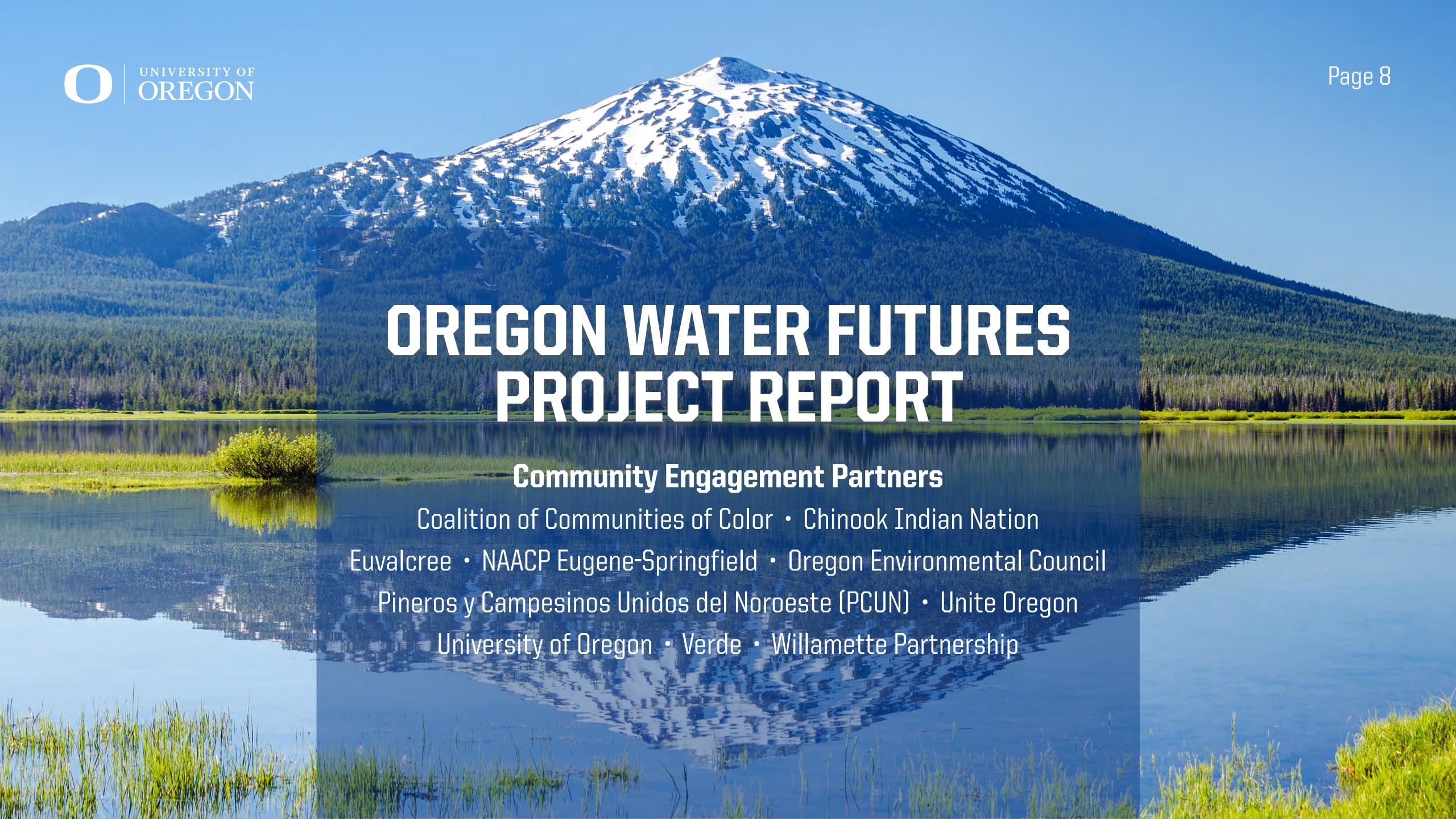
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in winter 2020. Students in the course participated in research activities, received mentorship from project partners, and actively collaborated on the production of various deliverables with community partner feedback. Undergraduate students in the course Ethnic Studies 354: Environmental Racism updated research on specific counties covered by the project during fall 2020. As of February 2021, three former interns had found employment in the environmental justice sector in the state.

1. Curry-Stevens et al. Communities of Color in Multnomah County: An Unsettling Profile.

Portland, OR: Portland State University, 2010; Davis, Kari R. Drinking Water Access Through a Transdisciplinary Lens: Oregon State University, 2020; Natural Resources Defense Council. "Watered Down Justice." 2019. https://www.nrdc.org/sites/default/files/watered-down-justice-report.pdf. Accessed Feb. 2021.





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In 2020, the Oregon Water Futures Project set out to elevate the experiences and concerns of Native, Indigenous Latin American, Latinx, Black, Asian American, Pacific Islander, Middle Eastern, Arab, migrant, and low income communities. Two online gatherings and 75 qualitative phone interviews were conducted in fall 2020. In total, 104 individuals were consulted about water resources in Clackamas, Clatsop, Lane, Malheur, Marion, Multnomah, Polk, and Umatilla counties.





While this represents only a small number of individual experiences, it begins to lift up voices directly from underrepresented communities in the state about their needs and priorities for water. Many of the issues raised or approaches to thinking about water management that came out of these conversations have not historically been part of mainstream water policy discussions at the state or local level, and call for broadening our thinking on integrated water resource management.





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Community Participants Profile

roject partners worked with a Native nation and culturally specific community-based organizations to recruit a culturally and racially diverse set of community members for online gatherings and phone interviews. A comparable number of people were recruited from Clackamas County, Malheur County, Marion/Polk counties, Multnomah/Lane counties, Umatilla County, and the Chinook Indian Nation diaspora. Anecdotally, most participants are lower income or working class. The majority of participants live in rental housing. Other housing types included owned residential, mobile home parks, and employer-provided farmworker housing.

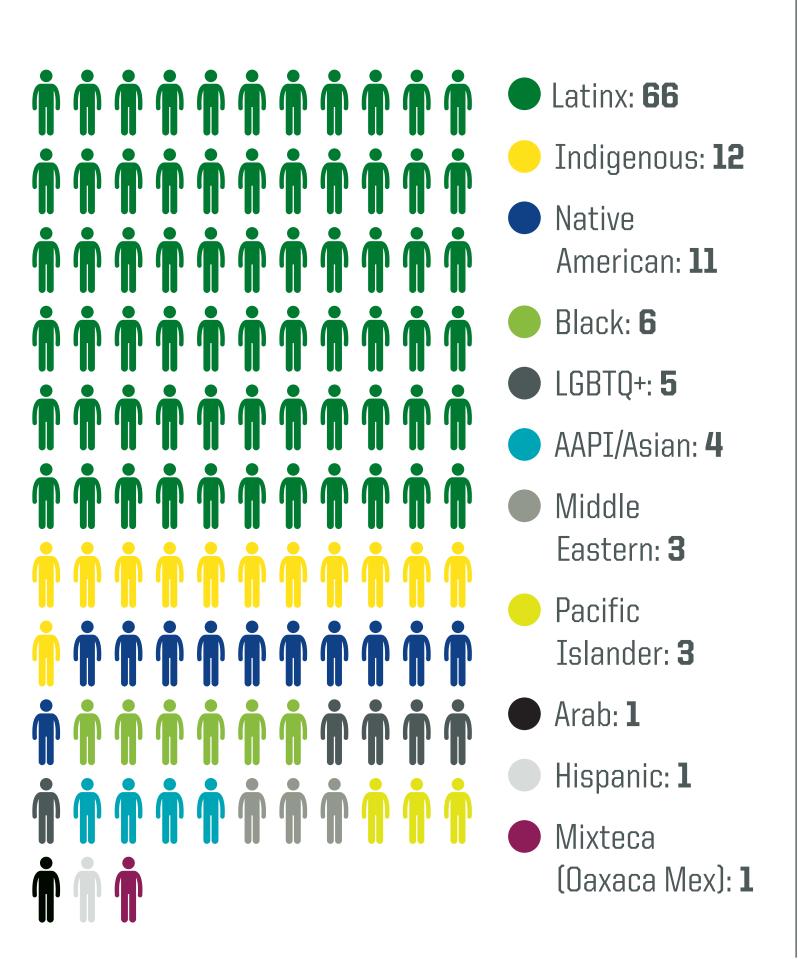
As people signed up to participate, most completed a short demographic survey. Demographic data was collected for 100 out of 104 community participants. Participants self-identified as Native American, Indigenous, Hispanic, Latinx, Black, Pacific Islander, Middle Eastern, Asian or Asian American and Pacific Islander (AAPI), Arab, LGBTQ+, and Mixteca (from

Oaxaca, Mexico). Latinx communities—including Indigenous Latinx individuals—are the largest sample of the project. This can be attributed to the fact that co-hosts PCUN and Euvalcree both work with farmworkers and migrant communities from Latin America and collectively recruited in four counties. Native and Black respondents were the second- and third-largest groups consulted, respectively.

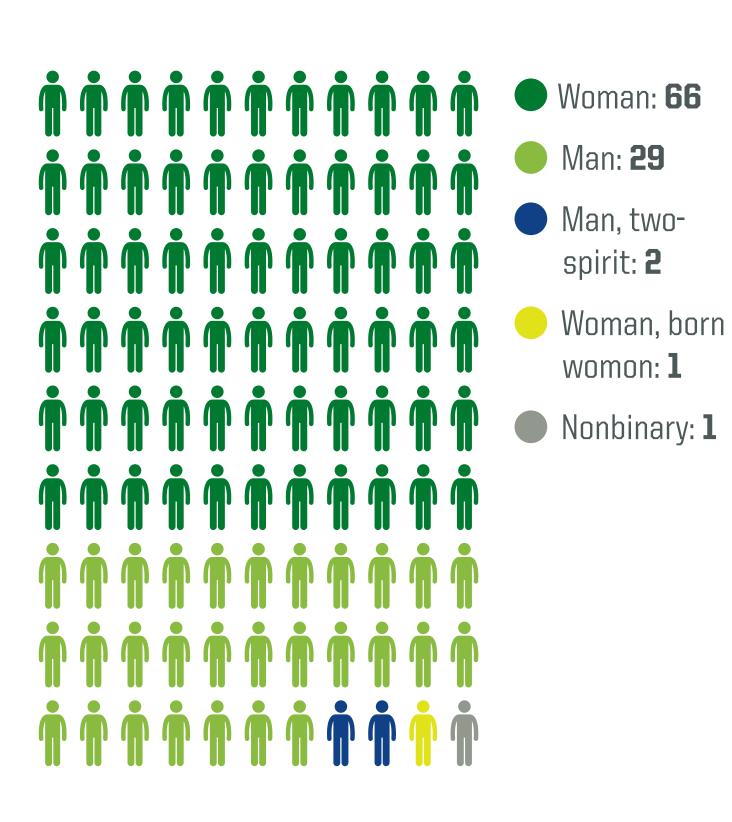
We recognize that there are other disproportionately impacted and underrepresented voices that are key to understanding water insecurity in Oregon that were not specifically targeted in this phase of outreach and engagement for the Oregon Water Futures Project. Particularly of note are houseless communities, disabled Oregonians, youth, and trans community members, whose unique experiences with access to water, access to jobs, discrimination, and safe infrastructure systems should be part of the dialogue about water justice in Oregon.

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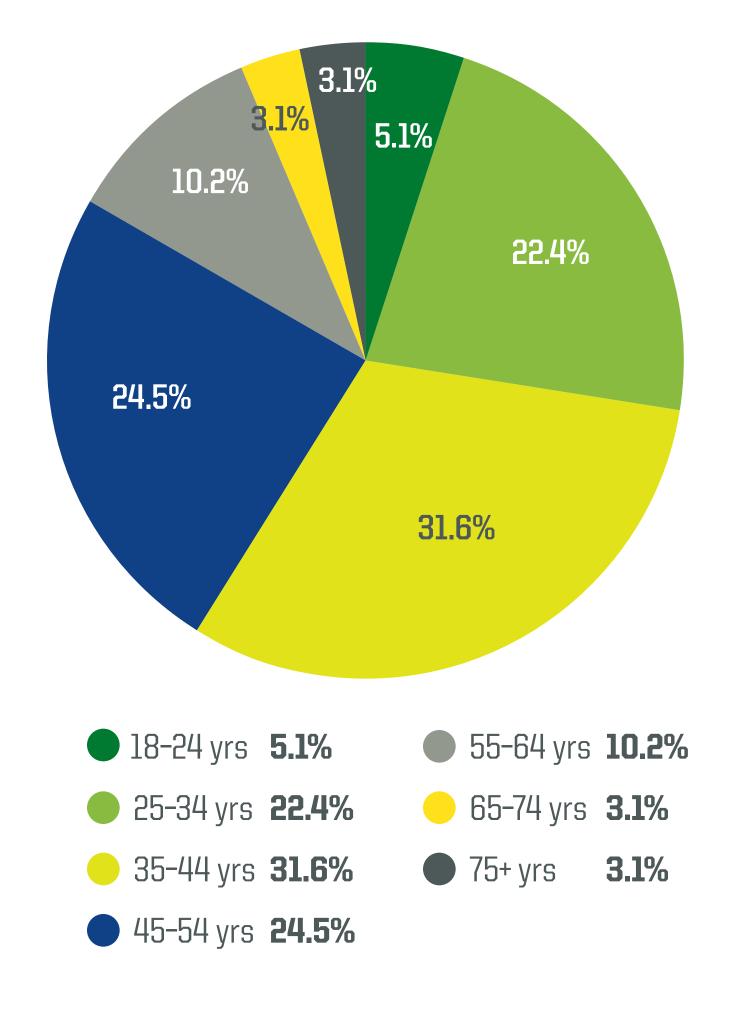
Participants' Social Identifiers



Participants' Gender Identification



Participants' Age



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Statewide Themes and Findings

A cross all of the communities engaged by the Oregon Water Futures Project through interviews and online gatherings in fall 2020, some common themes emerged highlighting areas for deeper exploration and broadening of existing water policy narratives.

Water Values and Education

Community members care deeply about water and have extensive knowledge and experience to contribute to achieving Oregon's water resource goals. The ecological values and practices that Native communities, communities of color, migrant communities, and low-income communities contribute to our state often go unseen or undervalued in our current water management system. Participants from Latin America, the Caribbean, the Middle East, East Africa, the Pacific Islands, and Asia shared strong cultural and spiritual values around water protection and stewardship of waterways. These community members have valuable



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Statewide Themes and Findings

knowledge and conservation experience to share with the broader community. There are opportunities to mobilize people's existing values toward statewide water goals rather than defining issues through a US-based lens.

Participants are motivated to learn more about water. From the faucet in their homes, to treatment and management systems, to the rivers and lakes they play in, participants showed a great deal of curiosity and concern for water in Oregon. Several participants have the interest to become water leaders, mobilizing their communities to advocate for water in local and statewide water planning processes. Supporting the growth of community leadership in water resource issues is key to elevating and addressing the challenges identified by participants.

Capacity and Information Access

Water resource challenges are tied to community capacity needs.

Issues like federal recognition of Indian tribes, youth education, and social cohesion are not typically part of water resource conversations, but these and other community capacity needs stood out as a strong theme impacting water justice across the state. Until these needs are met, accessing water policymaking conversations and building capacity for water advocacy can be out of reach for many organizations and communities who otherwise are eager to participate and know more about their water resources. Policymakers and traditional water stakeholders can no longer shy away from these issues as adjacent to water management in planning for the future of Oregon's water resources.

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Statewide Themes and Findings

Lack of trust driven by significant information and communication gap. Interviews revealed significant and widespread distrust of drinking water among migrant communities across the state due to unknown water quality. This lack of trust is exacerbated by poor communication during drinking water emergencies like the 2018 Salem algae crisis and recent wildfires, or lack of any information from water providers for renters. Agencies and utilities need to close the information gap for these community members and support the important work that under-resourced community-based organizations (CBOs) do currently to meet community needs. This goes beyond just translating resources into multiple languages. CBOs want to help facilitate peer learning and culturally specific education that creates space for technical learning and sustaining traditional practices.



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Statewide Themes and Findings

Housing type impacts water resources and access to information.

Whether participants rent or own their home, live in a mobile home park or employer-provided farmworker housing, and/or are dependent on a private well or septic system, each scenario presents unique concerns and challenges for water. Renting or living in employer-provided housing creates some of the biggest barriers to accessing information about water. Most participants who rent do not pay a water bill directly to any water company, provider, or agency; therefore, they could not comment on the cost of the water bill. For participants who rent, many do not receive drinking water quality reports or have any connection point to public water providers. And there are no regulations or requirements for landlords to provide drinking water quality information to tenants about domestic wells. Because of these factors, renters are uniquely vulnerable to challenges of water quality and affordability.



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Statewide Themes and Findings

Drinking Water

Participants are experiencing serious water quality and availability challenges. In every region, interviewees shared stories of unpleasant smells, tastes or appearance of their drinking water at home or at work. In Ontario, one participant reported getting sick when drinking tap water; in Portland, a mother worries that her children shower with foul smelling, yellowish water; in Nyssa, a father moved when his daughter suffered lead poisoning; farmworkers at times drink from wells with questionable water quality and do not have enough water in restrooms to wash their hands; for various renters in mobile home parks, well water was not a safe water source.

Water affordability and water quality are linked. People distrust their tap water for many reasons: documented water violations, illness, past water quality issues, or because it tastes/looks different from what they

are used to (e.g., unfamiliarity with chlorinated water supplies that may taste different but are not harmful). Questions about water safety led many participants to spend money each month on bottled or purified water from the store. Some participants ration their drinking water intake to be able to afford the added expense of bottled water, others purchase expensive home water filters but are still unsure about water quality, and several expressed concerns about not being able to afford their water bills. In urban areas, there is less fear of drinking tap water, and utility bill assistance programs help fill the gap for community members in financial need. For Chinook Indian Nation members, not being able to afford water in their own ancestral territory is an added insult to a history of colonialism and water resource abuse that continues to threaten key ecosystems.

Well water concerns tied to past experience, poor regulation, and lack of protections for renters. In several regions, participants raised

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concerns about domestic wells, noting that there is not enough routine testing or regulation. Some said they would not drink water because they knew it came from a well and didn't trust the source or knew that pesticides were sprayed in that area. Partner organizations expressed the importance of renters' rights education around well water resources.

Emergency Preparedness

Feelings of being unprepared tied to money, resources, and lack of information. There was a broad feeling among interviewees of being unprepared for emergencies and natural disasters, which were top of mind following the 2020 wildfires. Participants noted concerns about a lack of information, particularly in languages other than English, and a lack of money, transportation, or a place to go if they needed to evacuate from their homes. During the 2018 Salem algae crisis, communities experienced shortages of and price gouging on bottled water at stores,

and a lack of public health information or misinformation, creating fear and economic hardship.

Community and intergovernmental partnerships can help prepare for future emergencies. Community-based organizations are responding in the moment to community needs during emergencies like the 2020 wildfires and 2018 algae crisis, but are often not equipped to manage technical questions about water safety and need more capacity to communicate with community members about water conditions and emergency preparation. Chinook Indian Nation is part of intergovernmental emergency response networks in the State of Washington, but similar partnerships do not exist in Oregon or do not involve Chinook Indian Nation. By engaging tribal governments, CBOs, and community advisory committees in emergency planning, agencies and utilities can better serve all Oregonians.

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Infrastructure Needs

Flooding impacts livelihoods and public health. In Independence and the Umatilla Basin, participants are experiencing seasonal flooding that has prevented them from getting to work, damaged infrastructure and farm equipment, and caused loss of livestock. Some participants expressed concern about having to wade through or children playing in stormwater that is unsanitary during flood events.

Investments in natural infrastructure needed to restore cultural resources. Impacts from dams, habitat loss, over-harvesting, pollution, and invasive species threaten the fish and shellfish species that many Chinook Indian Nation tribal members rely on for their livelihood and subsistence. Revitalization of marshes, wetlands, streams, and riverbeds at the mouth of the Columbia River is key to maintaining our balance with these ecosystems, and participants are eager to participate in the kind of

stewardship practices that can restore the natural functions of waterways across their territory.

Support is needed to address domestic well and septic challenges.

Many rural homes, businesses, and community spaces depend on domestic wells for drinking water and septic systems for waste disposal. On the North Coast, high water tables and high tides affect the ability of septic systems to perform as designed, and participants are concerned about the impact of increased local development on groundwater supplies. Some noted significant concern about lack of resources to prepare for groundwater loss and the expense of digging a deeper well if an existing well goes dry.

Improving river water quality is an opportunity to connect more people to positive water experiences. While many participants visit local rivers

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Statewide Themes and Findings

and lakes, most shared concerns about water quality due to algae, trash, arsenic, industrial residue, or other pollutants in the water, and many do not get in the water. For those who do, some noted that they take care to ensure they and their children do not swallow water. Participants from Eastern Oregon were much more likely to fish with friends and family and eat what they catch than participants from the Willamette Valley.

Small water systems and employer-provided housing have inconsistent water access. Some mobile home park residents reported receiving repeated notices that the water in the park system is not potable, essentially leaving them without access to safe drinking water.

Interviewees living in mobile home parks were largely Latinx migrants and Black participants. Participants also reported water scarcity challenges in farmworker housing, sharing that water is delivered infrequently in winter which requires community rationing while they wait for more.

Community Engagement Best Practices

- Co-create outreach and engagement approaches that center community voices. Pursuing collaborative partnerships with community-based organizations is an opportunity to identify shared goals and support community capacity building.
- **Be flexible and adaptable.** Evolving the scope of the project, approach and timing based on current events, partner needs, and community realities demonstrates an equity mindset and commitment to longer-term relationship building.
- Create as much access as possible. Whether in person or virtual, prioritizing approaches that make it accessible for as many people as possible to participate is key to centering equity. That meant investing in technology for simultaneous translation in four languages at one virtual event and switching to one-on-one phone interviews to bridge the digital divide for those who don't have internet access.

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Statewide Themes and Findings

- Tap into people's existing values and language. Framing the conversation in an approachable way that allows people to talk about water in their own terms is critical for engaging people in advocacy. Many people have deep ecological knowledge and conservation experience to share, but government programs and public engagement processes can be opaque and inaccessible to average community members.
- Ensure adequate funding. Partnerships with community-based organizations are important to move beyond transactional community outreach, and staff must be resourced for their role collaborating on project approach, co-facilitating, and leading outreach. Funding is also needed to increase accessibility by providing childcare and food at in-person events, translation and transcription, and honoraria for participants.





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Community Engagement

While the tendency is often to look for commonalities across communities and pursue sweeping policy that aims to address the "most significant" statewide problems, we are reminded that local priorities, challenges, and barriers to clean water can also be unique to individual communities—geographically, historically, economically, and culturally—and warrant particular attention at the community scale. Watershed solutions are particularly regionalized by their geography and geology, and the principle of targeted universalism² reminds us that impactful policy should prioritize targeted approaches to achieve universal goals.

With each community co-host organization, project partners and student interns researched current and historic water quality and quantity challenges regionally, talked to staff to understand existing community

priorities and issue awareness, co-developed an interview script or facilitation plan for online gatherings, and reviewed findings together to provide deeper context and brainstorm opportunities for further research and advocacy.

Following are findings relevant to each community engagement process. The narratives and themes identified are a reflection of what was heard; however, the specific issues raised have not been further researched by this team. They are presented here as insights into community values and issues of concern, not as a prioritized list of actions.

^{2.} Powel, et al. *Targeted Universalism: Policy & Practice—A Primer*. Othering & Belonging Institute, University of California, Berkeley, 2019. https://belonging.berkeley.edu/targeteduniversalism. Accessed Feb. 2021.

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"It is important to note that the map for Indian tribes is not stagnant. It has changed, and it will continue to change."

- Rachel Cushman, Chinook Indian Nation Tribal Council member and Oregon Water Futures Project co-host

Cathlamet of present-day Oregon, and the Lower Chinook, Wahkiakum, and Willapa of what is now known as Washington. The people of the Chinook Indian Nation have a deep connection to water and natural resources. Their ancestors have lived near and along the mouth of the Columbia River since time immemorial, and members describe themselves as "greater docents of Mother Earth."

As part of the Oregon Water Futures Project, a community gathering was held via Zoom on August 23, 2020, with tribal members living throughout



INOOK INDIAN NATIOI

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Oregon and Washington, the majority residing in Chinook homelands around Astoria, Oregon. Thirteen people attended the online gathering, and it was conducted in English. Many participants serve on the tribe's natural resources committee, and occupations or other community involvement included forestry, commercial fishing and clamming, the Department of Fish and Wildlife, studying marine biology, or participating and volunteering with Affiliated Tribes of Northwest Indians' Changing Currents Tribal Youth Water Summit.

CHINOOK INDIAN NATION KEY FINDINGS

Federal recognition restores status as stewards and unlocks partnerships and resources: Securing federal recognition is the top priority of Chinook Indian Nation. Many participants emphasized that when Chinook Indian Nation is federally recognized, they will have more resources, access, and the federal rights to adequately care for and

improve the natural resources that have been under their stewardship since time immemorial.

Partnerships are vital to achieving water resource goals: Developing partnerships at the local, state, and federal level is a core value and priority for Chinook Indian Nation. There is a strong desire to advocate around water issues within their territory yet limited staff capacity. Participants noted that the tribe is seen as a valued partner by local governments and NGOs, and aims to build capacity in natural resources and land management.

Cultural practices and youth engagement are key to community vitality: As Chinook Indian Nation builds governmental capacity and works to restore cultural sites like Tansy Point, community and youth education are central goals of the tribe that are interrelated with water stewardship. There is a strong sense of importance and opportunity for intergenerational healing placed on youth engagement. The tribe

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has sponsored college scholarships, participates in Canoe Journey, and welcomes people to Tansy Point for events and ceremonies.

Support is needed to address domestic well and septic challenges: Rural homes, businesses, and community spaces depend on domestic wells for drinking water and septic systems for waste disposal. Many participants noted a lack of routine testing and regulation for private wells. Some also pointed out that high water tables and high tides affect the ability of septic systems to perform as designed.

Development pressures on groundwater resources are growing: As development in the Clatsop Plains area continues to expand, more wells are being drilled, bringing into question the sustainability of groundwater supplies in the region. Several participants noted concerns about groundwater contamination from development, saltwater intrusion, or fear of existing wells going dry. Drilling deeper wells to reach the aquifer will be costly and is an expense that many people are not prepared for.

Revitalization of marshes, wetlands, streams, and riverbeds is key to **subsistence:** The mouth of the Columbia River faces significant natural resource challenges. Impacts from dams, habitat loss, over-harvesting, pollution, and invasive species threaten the fish and shellfish species many tribal members rely on for their sustenance and their livelihood. Many participants are eager to participate in the kind of stewardship practices that can restore the natural functions of waterways across their territory. But without the resources and co-management authority associated with federal recognition, Chinook Indian Nation has limited capacity to engage in significant land management activities. **COVID-19 exacerbated existing affordability challenges:** In a community already struggling with access to healthy and traditional foods, hunger, and poverty, water costs are also a concern. During the COVID-19 pandemic, Chinook Indian Nation was able to use CARES Act funds to provide water and energy utility assistance for tribal members facing

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economic challenges at home. But this is just a band-aid. Project partners expressed frustration at having to purchase water in their own ancestral territory, noting that "lack of water just makes an already impoverished community more impoverished."

Intergovernmental partnerships are a needed step toward emergency preparedness in Oregon: Chinook Indian Nation is working on a new emergency plan and is engaged in intergovernmental emergency response networks in the State of Washington. Project partners noted that similar emergency management partnerships do not exist in Oregon or do not involve Chinook Indian Nation, and a stronger statewide communications system is needed to alert Oregonians about emergencies and natural disasters.



INOOK INDIAN NATIO

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CULTURALLY SPECIFIC RESILIENCY

Participants emphasized that they have been and will continue to fight for natural resources and federal recognition to "ensure the vitality" of their community. Leslie noted that "the Chinook and other Indigenous people were relegated to less important status," and "they forgot all of the ways that we had stewarded resources, land, water, and so forth. And now we're suffering the consequences of that." Sam shared that it's very important that the Chinook become a federally recognized tribe so that they "can be a bigger partner in taking care of things." Once that happens, they will be "pushing hard like other tribes with capacity and infrastructure to do more," added Rachel.

Jane clearly articulated values around water protection: "A very smart woman once told me that water is the new gold. And tribes and local people need to work like hell to protect it from corporations." Don shared

that they want to establish cold, clean water that native animals and fish depend on to restore their cultural heritage and "to be stewards of our land." Rachel emphasized the importance of indigenizing research and legitimizing indigenous research. She shared, "We are experts in our own territory and culture," and the "reality is we've been here for thousands of years. We know what the needs are."

One display of culturally specific resiliency for the Chinook Indian Nation is the annual Canoe Journey. The event brings tribes from throughout the Northwest together for a week of sharing ceremony, food, singing, dancing, and teachings. During Canoe Journey, water and water quality are discussed, among other topics. The event offers participants a physically and spiritually challenging journey toward "healing and recovery of culture, traditional knowledge, and spirituality."

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"As I travel in canoe today, I do see that some of these waters are suffering. And in their suffering, I see that the wildlife and the resources are suffering as well."

-Sam, Chinook Indian Nation tribal member

Another display of culturally specific resiliency for the Chinook Indian Nation is the importance of historical education and an emphasis on youth. Participants suggested that more education is needed not only on natural resources, but also the Chinook peoples' historical relationship with water.

"We always think about our youth and our culture . . . We're trying to undo a trauma. So, you have to start with your youth and work your way up. It's going to be generational before it's healed."

-Brian, Chinook Indian Nation tribal member



ACY DAI GAA

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WATER AT HOME

Chinookan people have a deep connection to water. Many grew up and continue to live near bodies of water including the Willapa River, Columbia River, Deschutes River, and Metolius River.

On Oregon's North Coast, many members of Chinook Indian Nation rely on wells for access to water where they live and work, and have concerns about water quality and the impacts of tides and development on groundwater tables. Participants expressed concern regarding pollution of well water, which has been an issue for community members in the past. Participants noted that there is not enough routine testing or regulation for domestic wells. Rachel explained that, "there are times of the day in some areas when you cannot flush the toilet because the tides bring the water up."

Increased development in certain areas has put additional pressure on groundwater supplies. Don described the Clatsop Plains as "becoming a suburbia." He shared that the groundwater table in the area is very low, and they do not have a great aquifer in the sand dune. Brian mentioned that there is a real concern about lack of resources to prepare for groundwater loss—that if wells go out, they will have to drill a new one, which is "really expensive and time consuming."

Participants shared that they are discussing whether there will be enough water in the future from the Lewis and Clark River to sustain existing communities and planned population growth in Warrenton and the Clatsop Plains. Low water levels in the river impact plant and fish life in the watershed, and some members have also been impacted by harmful algae blooms and invasive species in impaired local waters.

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Water costs are also a concern in a community already struggling with hunger and poverty. Rachel discussed accessibility to and affordability of water: "We see water as a given. It should be a human right. Having to purchase water in our territory is ridiculous . . . Lack of water just makes an already impoverished community more impoverished." During the COVID-19 pandemic, Chinook Indian Nation was able to use CARES Act funds to provide water and energy utility assistance for members facing hunger and economic challenges at home.

Our project partner reported that, after the gathering, participants discussed rainwater as a potential source of drinking water and legal barriers to rainwater collection. With aquifers reduced, pollutants in the water table, and, in some places, well water no longer drinkable, there is a need for new water sources, potentially including rainwater.

WATER AT WORK

Many Chinook Indian Nation members work in natural resource jobs, including commercial fisheries and clam beds, crabbing, canneries, and in the timber industry.

Chinook Indian Nation members who work in clam and oyster beds are concerned with red tides, algae blooms, nuclear contamination coming from Japan, and pollution washing up on shore.

Other Chinook Indian Nation members who work on commercial fishing boats shared concerns around the shipping industry and other boats improperly disposing of sewage into rivers and bays. These professions need better access to porta-potties and resources for managing waste to prevent harm to fish and people who may be recreating or harvesting in waterways.

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OUTDOOR LIFE AND ECOSYSTEMS

Fisheries, clams, and coastal foods are very important to the Chinook Indian Nation. Over time, salmon, clams, oysters, and other fish have become scarce due to the impacts of dams, over-exploitation, habitat endangerment, overheated waters, and invasive species.

"If you lose the salmon, you lose the whole circle of life. The salmon goes upstream, spawns. It's a fertilizer. It makes plants grow. It feeds all the other little creatures."

-Brian, Chinook Indian Nation tribal member

Participants explained that certain creeks had historically provided runs of coho and chum salmon that fed the community at Tansy Point, a long-standing tribal cultural site and location of the signing of the 1851 Lower Chinook Treaty (Tansy Point Treaty). Adjacent to the Tansy Slough, the dam

on the Skipanon River now prevents anadromous fish from reaching the Cullaby Lake area, which was a traditional fishing ground for the Clatsop Plains people. Chinookan peoples also harvested species of oysters that are now only found in the Coos Bay area. Oyster middens were known to exist at Tansy Point, but they were buried by the US Army Corps of Engineers when they built the railroad.

Invasive species arriving on commercial ships, including crabs, grasses, and parasites, have had a negative impact on native fish populations as well as the overall health of the lower Columbia River. Don shared that Spartina is an invasive plant found in the Clatsop area that impacts all of marine biology. He shared that the issue has been forgotten by commissioners and decision makers in Youngs Bay. He said, "I keep hoping that whoever's in charge of eradicating this problem should get going. Because it definitely prohibits the food chain from accomplishing its duty to save the ultimate, and that is the salmonids or salmon species."

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Another significant area of concern for participants is the impacts to aquatic systems of improper disposal of pharmaceuticals and other waste. Bethany, Sam, and Brian shared that education in schools and with youth around how water systems work, and how they are impacted by pharmaceuticals and waste, is a way to mitigate water pollution. Participants also suggested that permanent disposal drop-off boxes for pharmaceuticals in key locations would be a productive way to address the inappropriate disposal of products that are damaging ecosystems. Participants residing outside of Chinook Indian Nation traditional homelands also strive to care for water wherever they find themselves in diaspora. Marie shared that for decades they have "been trying to restore the native fish runs that were disrupted by the dams that were installed back in the early 60s at the lower end of the Metolius River." Some of those efforts have led to a return of salmon to the Metolius River.



OOK INDIAN NATION

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EMERGENCY PREPAREDNESS

Some emergencies that may impact the Chinook Indian Nation include water loss in the water table, tsunamis, flooding in the Clatsop area, and beach erosion. There are a lot of sacred cultural sites in erosion zones, which are changing due to how sea walls built by the US Army Corps of Engineers impact the natural movement of sand spits and beaches over time.

Our project partner shared with the coordination team that Chinook Indian Nation is currently working on a new emergency plan. In its first phase, planning is focused on human survival, how to preserve tribal records, and keeping elders safe. Chinook Indian Nation is engaged in established emergency response networks with government entities in the State of Washington. However, similar intergovernmental emergency response

networks are not well established in Oregon and stronger relationships are needed between state and tribal government agencies.

Some barriers to disseminating emergency information quickly to Chinook Indian Nation members include a lack of cell phone and radio service in areas of the North Coast and that some members do not have cell phones. A discussion also emerged about the absence of a statewide communications system to alert Oregonians about emergencies and natural disasters.

Participants emphasized their openness to continue building community, friendship, and partnerships with people who are not members of the tribe to together address issues impacting the Chinook and other peoples in Oregon.

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DOCUMENTATION

The online gathering was recorded and will be kept private under a password and not used for any other purposes outside of the project. The video recording will be shared with Chinook Indian Nation for history-keeping purposes for the tribe, along with a transcript of the conversation. Notes were taken during the online gathering for the purposes of accurate documentation.

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Pineros y Campesinos Unidos del Noroeste (PCUN)

PCUN is Oregon's farmworker union and advocates for low-wage workers and Latinx families. Its mission is to empower farmworkers and working Latinx families in Oregon by building community, increasing Latinx representation in elections, and policy advocacy on both the national and state levels. According to the US Census Bureau, 13.4 percent of Oregon's population identifies as Hispanic or Latino³, and a 2016 report by The Oregon Community Foundation says that Oregon's Latino population is growing faster than the national rate. Yet disparities exist. With this in mind, the diverse perspectives and experiences of Latinx Oregonians are key to understanding water insecurity and water justice in the state.

For the Oregon Water Futures Project, 21 PCUN community members in Polk and Marion counties were interviewed in Spanish between October 12 and 15, 2020. Interviews were arranged in advance and conducted one-on-



- 3. United States Census Bureau. *United States Census: Quick Facts, Oregon*. 2010-2019. https://www. census.gov/quickfacts/fact/table/OR,US/PST045219. Accessed Feb. 2021.
- 4. Oregon Community Foundation. Latinos in Oregon: Trends and Opportunities in a Changing State. 2016. https://oregoncf.org/Templates/media/files/reports/latinos_in_oregon_report_2016.pdf. Accessed Feb. 2021.

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Pineros y Campesinos Unidos del Noroeste (PCUN)

one with Dr. Alaí Reyes-Santos by phone. An online group gathering was not possible due to lack of broad access to computers and internet.

In preparation for the interviews, PCUN staff shared that some water challenges impacting their community were harmful algae blooms (many were directly impacted by a harmful algae bloom that contaminated drinking water in 2018), high levels of herbicides in drinking water in Polk County, and farmworker exposure to pesticides and herbicides. Their primary goal for the project was to build capacity around environmental and water justice issues, particularly exposure to pesticides, herbicides, and other toxics in the workplace and at home, as well as access to clean water, especially during the pandemic.

The majority of participants were first-generation migrants, ranging in age from 18 to over 75 with the majority of participants between 25 and 54. Participants live in Salem (6), Independence (5), Monmouth (1), and Woodburn (9). Sixteen people interviewed live in apartment complexes. Participants identify as being a part of the Latinx (21), LGBTQ+ (1), and Mixteca communities (1).

PCUN KEY FINDINGS

Latinx immigrants have deep-rooted values around water **conservation:** Participants from Indigenous Mexican and Guatemalan communities have strong cultural values around water protection. Many people who also have lived experience of water scarcity carry strong beliefs around water conservation and have developed water conservation practices that could be shared with other community members. Water agencies and advocates would benefit from partnering with these community members to elevate a water conservation narrative that speaks to a broader audience of Oregonians.

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Trust in drinking water is extremely low: Most participants cited some kind of unpleasant smell, taste or look in their tap water at home or water provided at work. Community members were generally not sure where drinking water comes from and if it is safe to consume, leaving people to rely on traditional practices for water purification at home or buying bottled or purified water at the store at an extra expense. People were knowledgeable about water systems in their home countries, including where their drinking water came from and how to ensure it was potable. However, water management in Oregon is obscured by layers of infrastructure and government, language barriers, and whether one pays utilities directly or not (renters and those living in employer-provided housing often do not).

The 2018 algae crisis created significant fear and further eroded trust in water systems: In 2018, a toxic algae bloom in Detroit Reservoir contaminated drinking water in Salem, Woodburn, and other nearby

communities with cyanotoxins, triggering a "Do Not Drink" tap water advisory for vulnerable populations. During the emergency, communities experienced shortages of bottled water at stores, price gouging on water, and a lack of public health information or misinformation, creating fear and economic hardship. Harmful algae blooms are expected to increase with climate change and wildfires, and improved emergency resources in Spanish and Indigenous Mexican and Guatemalan languages are needed to prepare migrant and non-English speaking communities for future water crises.

Community-based organizations (CBOs) and mutual aid efforts fill the information gap for some community members: Whether they are trying to assess how to best respond to natural disasters, or receive and understand notices from the water bureau, some community members benefit from formal and informal networks. CBOs are responding in the moment to community needs during emergencies like the 2020 wildfires,

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Pineros y Campesinos Unidos del Noroeste (PCUN)

but are often not equipped to manage technical questions about water safety and need more staff capacity to communicate with community members about water conditions and emergency preparation. Agencies and utilities need to work harder to close the information gap for these community members and support the important work that underresourced CBOs do currently to meet community needs.

Renters are uniquely vulnerable to challenges of water quality and affordability: Many renters do not pay a water bill directly to any water company, provider, or agency, and therefore do not receive drinking water quality reports-including lead-related information-or have a clear picture of water costs that may be rolled into their monthly rent. In homes with domestic wells as the water source, there are no testing requirements, and renters are often unaware that their water comes from a well. Renters' rights education is desired.



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Overall, participants are eager to know more about the water they use:

Many participants want to know more about the water in their homes and at work sites, the source and safety of drinking water, about wells and other water systems, and where to find resources about rivers in Oregon. PCUN sees this interest as an opportunity to create culturally specific spaces to talk about environmental issues impacting the way people within their community live.

Seasonal flooding impacts people's ability to get to work: Participants in Independence mentioned that sometimes roads are closed or their building entrance is blocked by seasonal flooding. This can affect community members' ability to get to work and is a public health risk for residents who have to wade through likely unsanitary flood waters.

CULTURALLY SPECIFIC RESILIENCY

Many participants moved to Oregon from communities in Mexico and Guatemala where water scarcity and access to clean water were daily challenges. Almost every participant discussed ways that they conserve water; 11 participants said "save water" and 14 participants said "take care of water" at least once during their interviews. Participants emphasized the importance of sharing water conservation practices that they learned while living in Mexico and Guatemala. They carry these values with them today, sharing stories with their children about how they did not have access to water growing up like they do now. Some remind their children that others still do not have access to water like they do. Some participants tell their children often to "save water," "don't let the faucet run," and to turn off the water in the shower when washing their hair. These conservation practices are fueled by lived experience of water scarcity, culturally specific environmental values, and current economic constraints.

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Participants were also very concerned about water quality and take steps to make sure it is safe for them, their family, and their guests to consume. To ensure safety when using water for cooking, many participants boil their water first or use other traditional techniques and culturally specific practices to purify water, as they learned to do from their families growing up. These are usually effective. The continuation of traditional practices is important and may also help open broader community conversations about specific challenges and best practices when cleaning water in Oregon. In some cases, boiling water will not make it safe to drink, for example water that is contaminated by cyanotoxins (harmful algae) or lead. This may be an area for culturally responsive community awareness building.

Sharing and community mutual aid were also major themes in the interviews. Participants mentioned that they bring extra bottled water to work for their coworkers. Angelica lets other community members into her home to use her water because she knows that it is clean; this was particularly important during the 2018 algae crisis and 2020 wildfires. She also noted that her neighbors translate city announcements and various information resources to share with them and other neighbors.

Many participants are from Indigenous Latin American communities. There is a desire to develop relationships around water values and needs with Native communities in Oregon in solidarity as Indigenous peoples. PCUN identified a need to collect and disseminate culturally specific knowledge from their community members to help facilitate community education around Oregon water resources.

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Pineros y Campesinos Unidos del Noroeste (PCUN)

WATER AT HOME

Most participants do not know where their water comes from, but they were interested in learning about domestic wells and other water systems. This is often in contrast to people's experience in their home countries, where they could name and often visit the source of their water.

Participants do not trust that the water coming out of their home faucets is safe to use. Most do not drink water directly from the tap; instead, they either boil their water or buy it from the store. Some participants mentioned that the water in their homes looked dirty and "tasted weird." Most said it tasted like chlorine or it was "just different." Others said that their water smells rotten (one interviewee in Woodburn) or like chemicals. Participants stated that they only use the tap water for washing dishes and clothes, showering, cooking food that will require boiling, or watering plants. They "use fire" or boil the water "just in case" to kill bacteria.

Interviewees in Independence described an intense taste of chlorine; they seemed to live in the same building or group of buildings. It is unclear whether the strong chlorine taste reported by participants in this area is a localized infrastructure problem or reflects a culturally specific experience related to taste preference. PCUN staff have seen reports of the drinking water in Independence testing high for herbicides and wonder if the taste issue could be related.

"They say the water is good, but I'm not so sure because when Iuse it to cook, it looks as if it were dirty."

-Christina

Sixteen participants buy bottled water or fill five-gallon containers of water for themselves, their families, and their guests at the store. They

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mentioned that they never give guests in their home tap water, only bottled water. Buying water is an additional cost for participants and some already pay a water bill with their rent. Participants spend between \$15 and \$90 each month on bottled water. Some people also question the quality and safety of bottled water, or wonder if tap water may be just as good, but feel that bottled water at least claims to be filtered.

Only four participants had gardens. Some participants have indoor plants, and on average they only had three to four pots. When asked why they only had a few plants, two main reasons arose: the landlord would not allow them to have more and/or they did not want the water bill to go up because of watering. All of the participants who have plants or a garden grow food staples and water them with tap water. One participant mentioned that they also recycle rainwater to water their plants inside



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the home. Around three-fourths of participants expressed desire to have a garden with edible and medicinal plants.

"Not a garden because it's one of the first recommendations the manager makes. He sends a letter saying that we shouldn't abuse the water usage. We're careful not to wash the cars, not to water the yard with water or anything like that."

-Javier

Most participants rent and do not pay a water bill directly to any water company, provider, or agency. Therefore, they could not comment on the cost of the water bill. Oregon residential landlord and tenant law requires landlords to clearly identify utility costs separate from rent and does not allow for additional service charges to be billed to tenants for water

utilities.⁵ However, it is unclear how utility costs are communicated to these community members and whether they are translated into languages other than English.

"The problem we have here is that the water is not drinkable. I mean, sometimes my wife struggles with water even to wash things because the water comes out very-smells very bad, it stinks like rotten, something like that. It smells really bad, and the people don't even think about drinking it. Even when you want to brush your teeth, we don't want to do it with that water."

-Javier

5. "ORS 90.315 Utility or service payments." 2020 Oregon Revised Statuses. Vol. 3: Chap. 90, Section 90.315. https://www.oregonlaws.org/ors/90.315. Accessed Feb.2021.

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WATER AT WORK

A majority of participants work outside the home, mostly in farms and food processing plants. Many stated that their work provides water, but they do not drink it. Some mentioned that the water at work comes from wells, and others did not know where it came from. Participants did not drink the water at work because it tasted weird, looked dirty, smelled bad, and/or they simply did not know where it was coming from. Other participants were hesitant to drink the water at work because herbicides and pesticides were sprayed near the wells. Two people described in detail being offered water at farm worksites that looked visibly dirty.

"I'm thirsty, but a little tree will grow in my belly with this dirt. What they were giving us isn't good, it can be harmful."

Many participants bring their own water to work to last them throughout the day. A few mentioned that they freeze water bottles overnight in order to have cold water during the day. Multiple participants bring extra water to work for their coworkers to drink.

Although many participants did not drink the water provided at work, others did use it and said that they did not have any issues with it.

Most participants reported having clean bathrooms and access to places to wash their hands and sanitize throughout the workday. Three participants noted that bathroom conditions had noticeably improved during the pandemic.

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Pineros y Campesinos Unidos del Noroeste (PCUN)

OUTDOOR LIFE AND ECOSYSTEMS

Each participant talked about their childhood experiences with water. Participants reminisced about growing up in Mexico, swimming in the rivers, and playing in the rain and streams. Although these participants enjoyed swimming and going to rivers, many expressed that they do not feel comfortable going to or swimming in Oregon waters. Many participants mentioned that Oregon rivers are too cold, they are polluted, and that they are unsafe. One participant (Norma) shared that her son played in a local river in Independence and developed an itchy rash that lasted for three weeks.

"I was once at a park and I ran out of water while we were playing and riding bicycles and I drank water from [a drinking fountain]—you know they have water at the parks, I had water, not too much, but it made me sick."

-Josefina

Out of 21 phone conversations, only four participants mentioned that they fish and only three fish in Oregon. The majority of these participants fish with their friends and family, but they do not fish often, and the fish tend to be very small. Only one participant takes the fish home to eat, one mentioned the fish are too small, and another mentioned that they did not trust eating it.

EMERGENCY PREPAREDNESS

Some participants do not feel currently prepared for an emergency nor do they feel confident preparing for future events. The feeling of being unprepared was tied to money, resources, language barriers, and lack of information. Participants mentioned that sometimes the emergency information they receive is not in Spanish or a language they can understand. People also mentioned not having somewhere to go if they had to evacuate.

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Some participants were directly impacted by the 2018 harmful algae bloom in Detroit Reservoir that affected Salem and Woodburn drinking water. These participants could not drink their water or even use it to shower. Due to the increase in demand for safe drinking water during the crisis, participants shared that bottled water became hard to find at stores like Walmart and Safeway, and prices went up at local markets. Two participants saw people buying water in bulk and then reselling the packages at a higher price. Participants who experienced the bottled water shortage shared that it not only had a large financial impact but also created lots of fear. Many participants mentioned that they were unsure if their water was safe, so they boiled it constantly. (Note that boiling water contaminated by cyanotoxins from harmful algae does not make it safe to drink, but this emergency information did not reach these community members.) One participant shared that they had safe water and would have friends over to shower and fill up buckets with water.

Another participant mentioned being able to pick up water from water trucks that provided it free during the emergency; they heard about these resources from a neighbor. In our initial meetings, PCUN staff noted that they heard reports of people not receiving health alerts in a timely manner, and many non-English speaking community members ended up drinking tap water after the "Do Not Drink" advisory was issued and ended up feeling unwell as a result.

A few of the participants also have to worry about seasonal flooding in their area. In Independence, when the water rises, participants mentioned that sometimes the highways have to close and other times the water will make its way up to their apartment building entrance. They have to walk through the water sometimes to be able to go to work, or wait for the water to subside in order to leave. This is another emergency that people feel they are unprepared for.

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Participants emphasized that they need more access to information and resources about their water and emergencies in general. They emphasized that the information needs to be in languages that everybody can understand, including Spanish and Indigenous languages from Mexico and Guatemala. They suggested that information could be shared through text messages, phone calls, alerts, social media, the news, and over the radio. A few people living in a Colonia near Salem mentioned receiving information provided by building management.

DOCUMENTATION

Interviews were recorded for all 21 participants, and transcripts were translated into English. No interviewees required aliases; however, only first names are used to protect participants who shared about workplace-related issues and other potential vulnerabilities. Audio files and transcripts in English and Spanish will be provided to PCUN for its archives. The Oregon Water Futures coordinating team agrees to use content of transcripts for reports, media, educational, and advocacy efforts, and to consult with PCUN before using transcripts as a whole for any other purpose.

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Unite Oregon

ed by people of color, immigrants and refugees, rural communities, and people experiencing poverty, Unite Oregon works across Oregon to build a unified intercultural movement for social justice, built on a belief in a multi-racial, multicultural democracy inclusive of all. In the midst of COVID-19 and the Clackamas County Complex Fires, Unite Oregon officially established the Clackamas County chapter in the summer of 2020. Unite Oregon is also expanding its work in environmental justice and recently hired a senior environmental justice manager whose focus initially is Clackamas County.

On the evening of November 10, 2020, 15 people from suburban-rural Clackamas County participated in an online gathering via Zoom as part of the Oregon Water Futures Project. The gathering was co-facilitated in English by Jairaj Singh, Unite Oregon senior environmental justice manager



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and Clackamas County organizer, and Dr. Alaí Reyes-Santos. Simultaneous interpretation was offered in Spanish, Nepali, and Burmese.

Participants identified as Black, Latinx, Hispanic, Middle Eastern, Arabic, and Asian. They speak a variety of languages including English, Spanish, Burmese, Nepali, and Arabic. The age of participants ranged from 18 to over 75 with the majority of participants between 35 and 44 years old.

UNITE OREGON KEY FINDINGS

Water values are deeply connected to cultural background and religious beliefs: With the widest diversity of cultural backgrounds represented in the project, the Clackamas County group highlighted how central water is to physical and spiritual health around the world. Some participants also immigrated from water scarce countries, have strong culturally specific, spiritual and/or religious values about water

conservation, and shared strong perspectives on not wasting water. These participants have valuable knowledge and conservation experience to share with the broader community.

Participants utilize and steward Oregon rivers and beaches: About half of participants talked about water-related recreation, and several were very vocal about taking care of nature. It was evident that people care about the health of rivers and quality of drinking water. They see themselves as part of a bigger ecosystem. People are already taking personal responsibility for helping to maintain clean waters by picking up trash. They want to see more community-wide action.

Confusion about drinking water quality erodes confidence: While participants in Clackamas County did not have as clearly defined distrust of their drinking water as other communities, there was a sense of low confidence and unease about whether they should drink tap water. Some people are confused by things they have heard about water quality and

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water sources, how COVID-19 may affect their water, or how to interpret water bills. This presents an opportunity to partner with water providers on culturally appropriate education resources to increase community capacity regarding their water.

Water utility bills can be a struggle: Water affordability is a concern for communities statewide, and for some participants in Clackamas County, water rates are too expensive for their household or for the quality of water they feel they are receiving. People are looking for resources to reduce water costs, including learning more about rainwater harvesting to offset costs.

Participants are hungry for localized water education: Many participants want to know more about the safety of their water, how it is treated, and where to find resources about water in their homes. Additional areas of interest include how to lower and interpret water bills, and rainwater harvesting. Others are interested in how we can all be better

stewards of our rivers and oceans. Unite Oregon sees opportunities for future workshops on water management and infrastructure systems. Partnerships with local watershed restoration efforts may also be of interest to community members.

Multicultural spaces build community capacity and social cohesion:

Community members from different cultures identified commonalities in their experiences and were intrigued to hear from each other. This is a core principle of Unite Oregon's organizing work, and its value to building community capacity was evident during this gathering. Social cohesion is also a strong indicator of community resilience and recovery after natural disasters.

CULTURALLY SPECIFIC RESILIENCY

Participants in the Clackamas County community gathering shared deep connections to water in relation to their religious beliefs or cultural

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practices and values: "In my religion, Muslim, growing up in my family, there in the Bible book, it's very important for the water. No water, no life" (Sajjad, Middle Eastern). Chris (Black, African American) shared that he grew up in a Muslim family where he was taught that water is a part of their religion.

"We should not waste anything, especially water, and we should preserve it because we're blessed, as we know some places have water and some places aren't as lucky."

-Chris (Black, African American, Muslim)

"During our New Year, my parents used to go to the river to collect water at the beginning of the year. That has continued: now we just kind of collect the first water from the tap in the new year. That water has a really important place in our culture."

Seven participants shared their experiences with water while living in different countries, such as Iraq, Iran, Mexico, and Nepal. Participants who grew up in Mexico shared their experiences and observations of water scarcity. Roman shared that in Mexico, "there are people who share the water, some people go get water and others don't, and there could be dry periods of weeks. Therefore, it's really really important to take care of it." Noemi (Latinx) shared that she "grew up thinking that it is essential, it's important to don't waste water." She shared that in Mexico, "we just have three-four days of water in the week," so she grew up using only what she needed. Araceli shared that, while she lived in Mexico, "we got to know that there's not an overabundance of water, and we should be thankful for the water we have."

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"It's important to take care of [water] because there's a lot of people who don't get enough water. There's countries that there is not enough water for everyone."

-Roman (Latinx)

Kayla (Middle Eastern) shared how her family conserves and reuses water: "Growing up I learned to conserve the amount of water that we use, and possibly reuse the water or recycle. For example, we would reuse the water we'd get from rinsing the rice to water the plants, that way the plants get reused water and it would even have some [nutrients] in it from the rinsing."

WATER AT HOME

About half (seven out of 15) of the community participants drink tap water in their homes, and the other half buy bottled water for themselves and

for their children. The reasons for buying bottled water included that their water "doesn't look very clean," "bottled water is safer," and it is "more convenient." Another participant shared that they do not know how to "guarantee that clean water reaches the house," and that is why they prefer bottled water (Roman, Latinx). One participant shared that he spends \$20 per month on bottled water for his daughter (William, AAPI, Asian). Another participant shared that she buys two to three gallons of water and a case of water bottles per week for her family (Noemi, Latinx).

"I am not sure about the quality of water in Clackamas County."

-Kayla (Middle Eastern)

Six of the participants shared that they do not know where their water comes from or if it is safe to drink. One participant shared that she has heard conflicting comments about their water, including that it is

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"the dirty water that is coming from sewage" and that there is "way too much chlorine" in the water (Araceli, Latinx). These stories and bits of information create confusion and reduce confidence in drinking water.

The COVID-19 pandemic has also changed how people source drinking water. One participant said: "I used to buy water from the store, but since the pandemic, I cannot go readily to the store to buy, so we started drinking tap water" (Noemi, Latinx). Another participant shared that normally his household of six people drank tap water and had no issues, but now they are "concerned about the COVID-19 pandemic" and are "trying to get water from the store" (Sajjad, Middle Eastern).

Eight participants pay a water utility bill directly (as opposed to it being included in rent like some other project participants), and six of them disclosed that their water bill is expensive. One participant shared that



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it is difficult to pay their water bill with unemployment benefits. One participant shared that they pay \$120 per month on their water bill, while another shared that they pay \$300 or more per month. Roman shared that his water bill "is expensive but it is a fundamental service." One participant shared that they spend "way too much" on bottled water, so they decided to invest in a water filter at home to reduce bottled water consumption and overall water expenses. They shared that the filter "worked a little better," but they do not know for sure if the water is being filtered well or not. Another participant shared that his water bill is "confusing in Clackamas" (Steve, AAPI, Asian).

Two participants were interested in the legality of collecting rainwater and if collecting rainwater would lower their water bill.

WATER AT WORK

Participants did not have a detailed discussion about water in their workplaces during this community conversation. One participant shared that he drinks filtered water at work (Khin, Burmese). Another participant shared that she is currently working from home (Kayla, Middle Eastern).

OUTDOOR LIFE AND ECOSYSTEMS

Eight participants shared that they spend time going to rivers and beaches, including the Clackamas River, Trillium Lake, Cannon Beach, and Broughton Beach. One participant shared that he likes rivers, but "there is very little access to parking" (Roman, Latinx). Four participants shared that the rivers and beaches they visit are not clean and that they have seen trash, bottles, and debris in them. They also talked about the water smelling bad sometimes.

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"I enjoy the water of the rivers and the beaches. Only that in my experience, I found many glass bottles, which made me uncomfortable."

-Noemi (Latinx)

Araceli shared that she "likes going to different beaches, and it's almost every occasion we find some trash." She said that they "never throw trash near the water or in the water."

"I'm trying to create a conscience in my daughters that we need to keep things clean and pristine, because as a matter of fact, water is life, it's our life. It is a fundamental part of our lives, and it's a fundamental part of living in general."

-Araceli (Latinx)

One participant shared that they "feel comfortable swimming and spending time in the rivers and beaches in Oregon" and that they "feel like the beaches are clean compared to other states."

Two participants mentioned fishing. William (AAPI, Asian) shared that he has "no idea how to fish," but he would like to learn. Sajjad (Middle Eastern) shared that he has a fishing license but has not been fishing yet.

EMERGENCY PREPAREDNESS

Four participants shared that they do not feel prepared for an emergency or that they "don't have an emergency plan."

Two participants shared that they are concerned about flooding in Clackamas County. One participant shared that the "Clackamas River could flood," so "we should be prepared" (William, AAPI, Asian). A 2011 flood on

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the Sandy River devastated parts of Clackamas County, costing around \$4 million in infrastructure repairs.⁶ Two other participants shared that they are not worried about flooding in their area.

Araceli (Latinx) shared her experience during the 2020 Oregon wildfires. "During the fires, it was my first time. It's an experience I've never lived before, ever. And it was something really strong for me. I actually was panicked. I was not ready at all, and I didn't even know how to prepare." She then shared, "I think I learned something from it, so that I can be better prepared for a situation like this."

DOCUMENTATION

Written notes were taken during the online gathering, but the event was not recorded as requested by community members. Only first names are used to protect participants' identities. All documentation materials will be provided to Unite Oregon for its archives.

6. Clackamas County. *Flooding Preparedness*. https://www.clackamas.us/dm/flooding.html. Accessed Feb.2021.

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Umatilla counties to develop the social capital and leadership capacity of community members. Established in 2014 to address the needs of the region's Latino community, Euvalcree has developed a strong networking and community infrastructure for grassroots engagement and action. According to US Census data, 34.6 percent of people residing in Malheur County and 27.6 percent of people in Umatilla County identify as Hispanic or Latino.⁷

In partnership with Euvalcree, 35 phone interviews were conducted with community members from Malheur and Umatilla counties between October 19 and 29, 2020. Interviews were arranged in advance by Euvalcree community organizing staff. Dr. Alaí Reyes-Santos conducted 25 interviews, and Dolores Martínez, Euvalcree community engagement director, completed nine interviews to help accommodate challenges reaching people at planned times due to weak cell phone signals and unexpected



7. United States Census Bureau. *Quick Facts: Umatilla County, Oregon; Malheur County, Oregon*. 2010-2019. https://www.census.gov/quickfacts/fact/table/umatillacountyoregon,malheurcountyoregon/PST045219. Accessed Feb. 2021.

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work/personal circumstances arising for interviewees. The majority of interviews were conducted in Spanish; one interview was in English with a bilingual Somali speaker.

Of those who shared where they live, eight were from Ontario, three from Nyssa, one from Vale, one from Adrian, twelve from Hermiston, and one from Boardman. Fifteen participants shared that they rent, 11 own a home or are in the process of buying a home, three live in a mobile home park, and three live in housing provided by their employer. Participants identified as being a part of Latinx communities (29), Indigenous communities from Mexico and Guatemala (4, specifically Mam and Qʻanjobʻal), and Middle Eastern/Somali communities (1). The age of participants ranged from 35 to over 75 with the majority of participants between 35 and 44.

EUVALCREE KEY FINDINGS

Experience of severe water scarcity in Mexico and Guatemala shapes water perspectives today: The majority of participants immigrated to the United States from Mexico or Guatemala, and many did not have potable running water in their country of origin. They learned how to source and clean water before using it to drink or cook, and some people still use these practices at home in Oregon because of lack of trust in drinking water resources.

Significant community distrust of drinking water is tied to personal experience and documented problems: Participants noted that their water has bad odors, stains sinks and tubs, "smells like mud," and makes them sick. Some mobile home park residents have received repeated notices that the water in the park system is not potable, and some

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farmworkers do not trust water from agricultural wells. Malheur County has water quality challenges with nitrates and arsenic in groundwater. Both Malheur and Umatilla counties have high rates of drinking water violations. Interviewees expressed a strong desire to know more about the safety of water in their homes, and Euvalcree is interested in identifying systemic issues with water quality and engaging in local infrastructure conversations.

Bottled water is a necessity at home and at work: Because of the issues noted above, many participants rely on bottled water for drinking at home and at work. The expense of buying water costs these participants \$20-100 per month.

Concerns exist about water affordability and lack of access to information: Several participants noted that they struggle to pay their water bills, and one person explained that they ration how much water they drink because they cannot afford more bottled water, even when

they feel like they are not drinking enough. For many people, water utilities are included in their rent payments and they do not receive a water bill directly. Often these renters do not know the actual utility costs for their residence and do not receive annual drinking water quality reports from local water providers. Euvalcree staff wonder how needed water infrastructure improvements may impact housing costs throughout the region, where housing access and cost is already a concern among the community.

Localized water scarcity issues cause community rationing:

Participants reported water scarcity challenges in homes and farmworker housing in Oregon. One person reported on a neighborhood in Ontario where wells frequently run dry. Another person shared that in the farmworker housing where they live water is delivered infrequently in winter and everyone has to adjust their water usage while they wait for more.

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Discomfort around water recreation based on sense of water safety:

Interviewees regularly spend time around local rivers and lakes to socialize with friends and family. However, many participants, particularly first-generation migrants, are uncomfortable around or fearful of entering Oregon water bodies. The reasons given range from perception that the water is too cold, cloudy, dirty, or dangerous, to local water advisories for arsenic and seasonal algae. Participants would like information about water quality and more signs around rivers and lagoons in Spanish.

Concerns about pesticide, herbicides, and other chemicals driven by personal health and ecosystems values: Among farm laborers there is a strong awareness of and sense of responsibility around pesticide impacts on local rivers, ecosystems, and livestock. People noted concern for bees in multiple instances. One person recounted getting sick after working in an area that had been recently sprayed. Multiple people noted the importance of signage and alerts when using herbicides, pesticides, and other chemicals.



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Fishing is a community gathering experience: Participants from Malheur and Umatilla counties reported the highest rates of fishing among interviewees across all communities surveyed in this project. Fishing is a social activity done with friends and family, and all of these participants eat what they catch. The resources handed out with fishing licenses may be an effective communications channel to share water resource information with more people throughout the community.

Water quality and access raise questions about sanitation: Interviews with community participants and Euvaloree staff elevated concerns about water staining bathroom fixtures at home. This causes people to wonder about their water and worry about the impact of the harsh chemical cleaners they use at home to deal with water stains that can look like calcium build up, mold, or have a pink or yellow hue. Others who experience localized water shortages raised concerns about having enough water to

shower, and some people bring their own hand sanitizer to work because of limited handwashing stations or unclean bathroom facilities.

CULTURALLY SPECIFIC RESILIENCY

"Water is one of the main elements in life, and we have to be careful to drink it and to use it right, not to waste."

-Lázaro

The majority of participants immigrated to the United States from Mexico, and four were Indigenous to Guatemala (Q´anjob´al and Mam). Many did not have potable running water in Mexico or Guatemala, and they shared how their families collected and cleaned the water they used. For some participants, water was scarce where they lived, and they had limited access to water to drink, shower, and clean with. Some participants

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shared that trucks would sell water to their neighborhoods, and they had to make that water last until the truck returned. They would wait in long lines to pick it up. In two Mexican towns, family size predetermined the amount of water they could purchase. Some people walked miles and up hills to collect water.

Rosario noted that as a young child she learned to "economize water" from her parents. Her father built a water tank to collect rainwater. This experience led her to teach her children to be aware of water usage. Many participants shared how their family cleaned water before using it. Martin explained that the water he collected from a nearby river "had garbage and dirt in it." He used a cloth strainer and then boiled it. Another participant shared that he filtered water with stones from the river. Many participants shared that they boiled water before they drank it.

Participants shared memories and stories of their parents teaching them about water. They teach their own children to turn off the faucet when washing their hands, brushing their teeth, and soaping their body during showers to save water, save money, and to teach their children community accountability since other people do not have access to water like they do.

"I remember my mom saying there were many people who didn't have water, right? And we have to save water... Not to leave the water running because there are people who don't have water and we have to save it. He [my son] also knows that water is expensive, he has to save it."

-Isela

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"I shared with them [my children] what I went through in my childhood, and I've taught them to be aware of water usage and that they shouldn't play with it."

-Rosario

"I teach them [my children] about being careful whenever they drink water because I lived in an apartment, and sometimes they'd give maintenance to the pipes and the water would come out very dirty, and I had to make sure they didn't drink water like that."

-Marta

Marissa and Deborah from Hermiston shared a saying: "drop by drop, the water gets scarce." This is a slogan from a state-sponsored water campaign in Mexico: "gota a gota el agua se agota." Participants pass down these memories and sayings to their children.

WATER AT HOME

When asked about water at home, Isela said: "My understanding is that the water isn't good to drink," reiterating how many other participants feel. Most people interviewed spend money buying bottled or purified water to drink and, at times, to cook with. Some shared that they only give their children bottled water because they perceived it to be cleaner. Two of the participants shared that they have young babies and they only give them bottled water. Many participants boil their tap water before using it to cook or drink.

Participants buy water instead of drinking tap water because they do not trust it. A majority of participants shared that their tap water smells and tastes like chlorine, iron, and/or rotten mud. Anastasia does not use the tap water at her house because "the water from where we live smells bad. It's from a well, and it tastes like iron and it makes your skin dry. The

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faucets get a lot of tartar around it, and it stains the toilet as well as the tub yellow." Five participants mentioned that their tap water stains their sink, toilets, and bathtubs, as well as windows from yard irrigation. These stains can look like calcium build up, mold, or have a pink or yellow hue. Dolores is concerned about the use of chemicals to keep her bathtub clean: "there are a lot of expenses on cleaning products, and I worry about the impact those products have on my daughters' health."

In Ontario, Ekram (Middle Eastern/Somali) stopped drinking tap water because it made her sick: "I stopped, no more water. I started getting cramps in my stomach, diarrhea, nausea. I couldn't eat. It's almost like when you drink a soap, or the end of the tub when you clean it with chlorine, and then it just have a little taste left, that's how the water taste. I just got so much crap and diarrhea." Ekram also shared that her water sometimes comes out of the faucet brown.



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Interviewees living in mobile home parks have mixed experiences with drinking water quality. Water systems at mobile home parks are often managed privately by mobile home park owners, and are regulated as Community Water Systems under the Safe Drinking Water Act if they have 15 or more connections or serve 25 or more residents year-round.8 Some participants noted that their water has been tested and is clean, or that they are connected to city water providers. Others living in mobile home parks do not know where their water comes from. Two participants have visibly questionable water quality or intermittently receive notices after testing that the water is not potable at their mobile home park. The water smells so bad at times that one participant questions his decision to use it to brush his teeth. He never uses it to cook or drink.

Some participants are aware of the risks associated with lead pipes in their home but do not know how or where to get lead testing done. Three participants have had their pipes tested for lead, and one participant gets

their water tested annually. Gildardo moved from a rental in Nyssa because his child was affected by lead poisoning. People living in mobile home parks were unaware of the possibility of lead poisoning in their homes.

Almost all interviewees in Malheur and Umatilla counties buy bottled or purified water in addition to paying water utilities (directly or as part of their rent). On average, people buy between one to six packages of 24 or 32 small water bottles and refill two to 10 large water jugs (three to five gallons each) at local stores each month. The expense of buying water from Costco, Walmart, or local stores costs these participants \$20–100 per month. Ekram has at times made the choice to consume less water to be able to afford bottled water.

8. Oregon Health Authority. "Community Water." https://www.oregon.gov/oha/PH/
HEALTHYENVIRONMENTS/TRACKINGASSESSMENT/ENVIRONMENTALPUBLICHEALTHTRACKING/Pages/EPHT-Indicator-Community-Water.aspx. Accessed Feb. 2021.

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"The water, it's not good. Because sometimes you don't have money, you run really short. So you just try to do your best not to spend over your budget. One time I went really short and I'm like, I'm not going to buy water. I'm just going to buy this filter and try to use it. It did not work, so I just ended up drinking the [tap] water. I ended up getting sick. So, oh, my, screw this one. I cannot do it. It's just too bad. I'm not going to bother with my hopes for the water. I just go buy water, and then I end up not drinking enough water because I'm worried I'm going to spend more money."

-Ekram (Middle Eastern/Somali)

Some participants do not pay a water utility bill directly because it is included in their rent. Other renters pay the owner of the rental a monthly amount without seeing the utility bill. And some, mostly homeowners, pay

utility bills directly to a water provider; these participants pay \$50-120 each billing cycle for water utilities depending on the season—paying more in the summer. A few participants said that their bill is "too expensive" and they struggle to pay it.

Participants who do not pay utility bills directly to a water provider often do not know where their water comes from or have any information about water quality. None of the 34 participants were aware of drinking water violations or groundwater restricted areas where they live or work. In a 2019 report published by the Natural Resources Defense Council, the Environmental Justice Health Alliance for Chemical Policy Reform, and Coming Clean, Malheur and Umatilla counties were listed among 16 counties in the Northwest with the highest rates of drinking water violations and the highest racial, ethnic, and language vulnerability. Malheur and Umatilla counties each also have Critical Groundwater Areas designated by the Oregon Water Resources Department.

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Joe shared that in a neighborhood in Ontario, "wells don't get enough (water)." A family living there "almost never has enough water;" they often do not have water to finish showering.

Ana who lives in employer-provided housing shared that they normally have three containers of water and "feel safe" with that, but during the winter, the water supplier contracted by their employer does not come as often. When this happens, "they limit us a little bit so everybody can have some." Everybody then adjusts their water usage while they wait.

A few participants keep gardens and plant vegetables in their backyard. They grow tomatoes, tomatillos, peppers, cucumbers, melons, and more. These participants use tap water, water from the hose, or recycled rain water to water their plants. A few people interviewed use herbicides and fertilizer in their garden to prevent weeds and promote plant health. For some, watering their garden and lawn can be an added cost to their

water bill. Lupita shared that she can only water her lawn for a short time because her landlord does not want her to "waste water," as she said: "I don't want to get scolded." Landlord concerns about water use limit how people grow food or not at their homes.

Overall, participants are interested in the quality of water in their home and if it is healthy or safe to drink. Five participants want more information about their drinking water generally, and two participants are specifically interested in learning about the health impacts of drinking polluted water. One participant would like to know more about the possibility of lead in household pipes and another wants to know how to care for water.

- 9. Natural Resources Defense Council. "Watered Down Justice." 2019. https://www.nrdc.org/sites/ default/files/watered-down-justice-report.pdf. Accessed Feb. 2021.
- 10. Oregon Water Resources Department. "Groundwater Restricted Areas." Feb. 13, 2018. https://www.oregon.gov/OWRD/programs/GWWL/GW/Documents/GWAdminAreasMap.pdf. Accessed Feb. 2021.

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WATER AT WORK

The majority of participants interviewed work in agriculture. A few work in restaurants, offices, or childcare at home or educational facilities.

Some participants who work in agriculture bring their own water to work. Most of these participants do not feel safe drinking the water provided because they can tell that it is not clean or "it's not natural water" (Alberto). These participants shared that the water "has a different flavor" (Marisa) and that "it's not good to drink" (María). Some noted that the well water where they work is "not good to drink" and "has a strong chlorine flavor" (Marta). Other participants bring bottled water to work because it is easier.

Some farm labor subcontractors provide bottled water or water in large jugs with ice. A participant shared that he feels safe drinking the water in

this case because he knows that it comes from a machine that purifies the water. Another participant shared that the water jugs provided at work are filled with tap water, so he does not drink from them.

Participants who work in restaurants or offices feel safe drinking water at work because it either comes from a filtered water jug or the soda machine.

Many participants noted that clean bathrooms and places to wash their hands are provided at work, and that facilities are "good enough." Others shared that the bathrooms at work are dirty, and they are sometimes missing toilet paper, water, or soap. Some interviewees shared that employers bring bathrooms and water to the field, but "sometimes there isn't enough water to wash hands." Martin brings his own sanitizer just in

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case. Others shared that too many people use the same bathroom, and they are not always cleaned on time. A few participants noted that since the COVID-19 pandemic, bathrooms at work had improved.

An area of concern at work for some participants is the use of pesticides, herbicides, and other chemicals, both for their personal health and for rivers and ecosystems. Martin works in an area where pesticides are used, and after they were sprayed, he became sick; he had a headache and began vomiting. Lázaro, who is licensed to apply chemicals in Oregon, Idaho, and Washington, noted that it is a big responsibility. He emphasized that the person who applies the chemicals is responsible for posting signs to prevent people from getting close to the spraying area. A few other participants discussed the importance of signage and alerts when using herbicides, pesticides, and other chemicals.

"Insecticides are poison, and bees can especially die. It's something you have to be very careful of. Sheep, horses, cows, everything that is an animal, you have to make sure that there's no deviation to them."

-Lázaro

OUTDOOR LIFE AND ECOSYSTEMS

Many participants visit nearby lakes and rivers to socialize, relax, and grill with their friends and family. Participants mentioned going to the Columbia River, Umatilla River, Lake Owyhee State Park, Bully Creek Reservoir, Black Canyon Park, and other rivers and reservoirs in Oregon and Idaho.

Although many people mentioned going to rivers and reservoirs, many first-generation migrants do not feel comfortable getting in the water or swimming. The reasons included: "the water is cloudy," "rivers are not

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clean," "the water is too cold," "the rivers are dangerous here," and fear of getting sick. Some participants do not swim in waters in Oregon and Washington because they have heard of people drowning in them every year. Two participants were fearful of dangerous animals in or around the rivers. However, many of these same people take their children to swim in local waters; their children are accustomed to the temperature and local conditions.

Marisela noted that the reservoir she likes to visit becomes unsafe for swimmers for a couple of months each year when it "catches bacteria" and turns "yellow with mold" (presumably seasonal algae blooms). By August, she is usually told not to swim there anymore. She finds information about water issues and advisories through posted signs, news outlets, Facebook, and websites.

A few participants have noticed warning signs about water quality in places that they visit. One participant shared that she would like information about water quality and more signs around rivers and lagoons in Spanish.

Kammy expressed concerns about arsenic levels in recreational waters, especially in small lagoons. She explained that although lagoons and parks were open last year, the water was closed and kids were banned from swimming or wading because of high levels of arsenic in the water. She shared that "last year arsenic levels were very high and this could be dangerous for children or for people who'd get in to swim, and they placed signs that it was forbidden to get into the water."

Other participants were concerned about the cleanliness of local waters. They noted that rivers are "very dirty" and "cloudy," and sometimes the water smells.

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"Humans are polluting the water . . . seen that the water is not clean, the water has a lot of garbage. We've even seen that factories have residues."

-Alberto

Eleven out of 34 participants go fishing in Oregon and Idaho for crappies, trout, bass, catfish, salmon, and tilapia. Marisela shared that they mostly fish for crappies "because there is no limit and you can fry them." Sometimes, she even has to tell her husband to stop fishing because they have enough. All of the participants who fish eat what they catch. Fishing is a social activity done with friends and family. A few participants shared that they take their sons fishing. Others go with their whole family and eat the fish together. People get information about when and where to fish while obtaining their fishing license.

EMERGENCY PREPAREDNESS

Most participants do not feel prepared for an emergency. Some do not know where to get information about emergencies, while others shared that they have not received emergency information in the past. One participant shared that they did not receive emergency or evacuation alerts during wildfires in 2020, even though his family may have been impacted.

Some participants shared that flooding is a concern: "especially in March when the snow melts on the mountains and a lot of water runs down because of the snow melting" (Lázaro). Lupita remembered the recent Umatilla River floods; animals died, machinery was ruined, and the freeways were affected. Another interviewee shared that stormwater flooding is an issue in Hermiston and at times a public health hazard because children play in the water accumulated at storm drains.

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A few participants mentioned that information about emergency preparedness would be very helpful, particularly resources on what people need to have during an emergency. Sending emergency alerts and information through telephones, texts, news outlets, social media, and mail enables participants to be informed in whatever format best suits their needs, communication practices, and access to different technologies. Participants noted that it would be helpful to have emergency information in Spanish as well.

DOCUMENTATION

Interviews were recorded for 25 participants out of 34, and transcripts of Spanish interviews were completed in English. Aliases were created for those who requested them; however, only first names are used to protect participants who shared about workplace-related issues and other potential vulnerabilities. Audio interviews in English and Spanish and transcripts in English will be provided to Euvalcree for its archives. The Oregon Water Futures coordinating team agrees to use content of transcripts for reports, media, educational, and advocacy efforts, and to consult with Euvalcree before using transcripts as a whole for any other purpose.

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Verde, Coalition of Communities of Color, Eugene-Springfield NAACP

erde, the Coalition of Communities of Color (CCC), and the Eugene-Springfield NAACP (NAACP) serve a diverse set of partners and communities in Oregon's two largest metropolitan areas: Portland and Eugene. Verde works to build environmental wealth through social enterprise, outreach, and advocacy, ensuring that low-income people and people of color directly benefit from community investments. Coalition of Communities of Color represents culturally specific member organizations in collective action to address socioeconomic disparities, institutional racism, and inequity of services. CCC has four core focus areas: advocacy, leadership development and training, research justice, and environmental justice. NAACP supports community leadership and institutional collaborations to increase cultural inclusion and eliminate race-based discrimination. All of these organizations are specifically working to advance environmental justice for their communities and through statewide advocacy.



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Verde, Coalition of Communities of Color, Eugene-Springfield NAACP

For the Oregon Water Futures Project, 20 participants from Portland and Eugene were interviewed by phone in English and Spanish between October 26 and 31, 2020. Interviewees were recruited through CCC member organizations, Verde, and the Eugene-Springfield NAACP. Interviews were arranged in advance and conducted one-on-one with Dr. Alaí Reyes-Santos (17), and Stacey Dalgaard (3), Oregon Environmental Council water outreach director.

In preparation for the interviews, partners shared that some water issues of interest to their communities were: lead in homes and schools, affordability and water shutoffs, polychlorinated biphenyls (PCBs) in fish and the risk to human health, industrial runoff, domestic wells and nitrates risk, and issues with flooding, mildew, and mold in yards and basements.

Participants reside in Eugene and Portland; one lived in Portland previously and now commutes to Portland from Salem. Of the participants who provided housing information, nine live in rental apartments, one in a rental house, one in a mobile home rental, one in an RV park, two in independent living senior facilities, and three own their homes. Participants identify as being Latinx (6), LGBTQ+ (3), Black (7), Indigenous (1), and Native American (4–Cherokee from Eastern Oklahoma, Santee Sioux, Oglala Sioux, Klamath, Navajo, Turtle Mountain Chippewa). The age of participants from Portland and Eugene ranges from 18 to over 75 with the majority of participants 35–44 and 55–64.

VERDE, CCC AND NAACP KEY FINDINGS

Participants shared strong personal, cultural, and spiritual values around water: Across diverse backgrounds and upbringings, community

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Verde, Coalition of Communities of Color, Eugene-Springfield NAACP

members demonstrated a deep connection to and respect for water, what it provides us, how it connects us, and how it gives us life. Water's central role in multiple spiritual practices or faiths came through as a central theme in these interviews, and many participants are proactively teaching their children about water conservation and ecosystems protection. Trust in drinking water is higher than other regions, but serious concerns exist: Compared to interviews in other parts of the state, more people in Eugene and Portland seemed to trust the safety of their water and knew its source. One participant noted that they feel "spoiled" by how good the water is in Oregon. However, there were also a number of people who reported not feeling well when they drink tap water, irritated skin from showering, and unpleasant smells, tastes and appearance of their water at home. This has been a consistent trend throughout the interviews statewide.

Affordability fears drive water rationing and financial insecurity:

Whether buying bottled water or using tap water, several interviewees noted that they worry about being able to pay their water utility bills. Some have missed payments in the past, and some have accessed financial assistance through their water provider. One person described their family making economic choices between food and bathing when they were growing up, and another is no longer able to maintain a garden due to water costs. The cost of water can have a significant impact on a community's feeling of financial security and safety. It also informs community members' capacity to maintain community gardens and other efforts to address food insecurity in culturally specific ways, especially as increasing drought conditions and wildfires change how people relate to growing food and surrounding ecosystems.

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People travel to enjoy bodies of water, but many question the quality of local bodies of water: Participants have explored many lakes, rivers, and beaches across Oregon to swim, fish, canoe, pray, relax, and enjoy nature. Community members have strong connections to water and natural areas, but many are also very aware of pollution in the Columbia, Willamette, and other local rivers and lakes because they see notices for safety or harmful algae blooms, observe trash in the rivers, or are concerned about historical impacts like the Hanford Nuclear Site.¹¹

Participants are eager to better understand water resource management: Interviewees are interested in learning about water rights and water usage, land use impacts, water contaminants, and drinking water sources. Several participants also emphasized the importance of

^{11.} United States Department of Energy. "Hanford History." April 19th, 2020. https://www.hanford.gov/page.cfm/HanfordHistory. Accessed Feb. 2021.



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educating their community and youth about water conservation, water quality issues and contamination in rivers, and water systems overall. As we've seen in other parts of the state, water resource management is an opaque field for most communities, and accessibility of information is a challenge.

Water reuse and rainwater catchment increase water access and affordability: People wish to learn how to best reuse water at home and collect rainwater, especially people currently keeping home or community food gardens.

Level of concern varies regarding emergency preparedness: Fear of natural disasters and water emergencies was not as pronounced as in other parts of the state. When asked, participants expressed concerns about having money or a reliable vehicle to evacuate if needed, lack of information, and food and water stores. One interviewee noted having a strong sense of community as key to resilience.

CULTURALLY SPECIFIC RESILIENCY

"Water is a precious resource that we have to preserve."

-Paulina (Latinx)

Participants have very diverse backgrounds and upbringings. Some were born and raised in Oregon, others are from states across the country. Several are Native American, and three participants immigrated from Mexico. One Black interviewee was interested in learning about tribal water rights and how to support them, and many participants shared stories and experiences they had with their families that taught them about water.

"Growing up, both of my parents have always been very vocal and very firm in the belief that we need water for everything in our lives. And I think my father has really told me that water that flows in these streams, in these

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rivers, in these lakes is the same as the blood that flows in our body" (Ashia, Klamath, Eugene).

Tabitha (Latinx, Eugene) shared, "my mom was always very much like, 'don't leave it running,' to make sure that we were not wasting it, but I think that was more because of the bill." Amanda (Native American, Portland) reflected on the impact of drought and chemicals on water: "What I've learned from my family about water is like: we're in a drought, some water's good depending on which one you drink, some water's bad, some has chemicals in it."

Michelle (Black, Jamaican, Eugene) shared stories of her family in Jamaica. They were fishermen, and her cousins would be gone fishing for days at a time. She shared, "I learned to appreciate the sea as a resource that would bring [food] ... and we have to respect it." In Oregon she goes to beaches to pray and "recomponerse" (recharge).

Polet (Xicana, Latinx, Eugene) shared that "growing up, I was always taught that water, unfortunately, was very much a luxury. It wasn't really that accessible to us in the sense we never had running water, in the sense it wasn't drinkable or sometimes we didn't have water." While growing up, she remembered having to make decisions "on whether we eat or whether someone gets to take a bath."

Four participants commented on their child rearing practices regarding water Paulina (Mexican, Eugene) explained, "I tried to pass on this idea that water shouldn't be wasted, and I think he's [my son's] more aware than more of the kids that have grown here without Latino parents. I think he's very conscious about how he uses water, and also he went to Mexico frequently, so he was able to see that part." Tabitha (Latinx, Eugene) tells her son "not to leave the water running." Sarah (Latinx, Eugene) plays in the water with her daughter. They "talk about access to water" and how to

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properly dispose of trash: "making sure that the fish and the animals don't get stuck and don't get sick."

Donella (Black, African American, Eugene) shared her spiritual values around water. Her relationship to water is different from her mother's, who could not swim in a time when swimming pools were segregated, and grew up in a historically Black neighborhood on the East Coast that regularly flooded.

"Water is incorporated in my spiritual practices. Water has a name. There are deities and rituals associated with water."

-Donella (Black, African American, Eugene)

Indigenous and Native American participants discussed traditional connections to water and cultural practices.

"Water is very important, not only for survival, but my Navajo culture uses water in a lot of our prayers. So, it's a huge part of our way of life . . . I think in my Navajo way, we view it as that's where we come from. You know, there's a large part of our bodies that is made from water. When we're born, we sit in water. When we pray and to sweat, water is a part of that steam that makes the heat."

-Lorne (Navajo, Portland)

Dan (Oglala Sioux, Portland) emphasized that "water is life. If we don't have water, how are we going to sustain living?"

Jill (Santee Sioux, Portland) participates in a traditional canoe family in Oregon: "We practice the canoeing in the different areas of the Columbia and the Willamette, but we sing a prayer song to the water as part of our

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ceremony with the canoe family. So yes, we do spend a lot of time at the water."

Ashia (Klamath, Eugene) told a story about going to the river with an elder to pray: "She asked me, 'Will you go pray at the water with me?' And so I was like, 'Yes,' because she has been a really important figure in my life, and we went and she taught me how to pray. I think since she's taught me that, I've really had a different relationship with water."

"I think that that experience with that elder from the Ponca tribe has really taught me what it means to pray with water and to cleanse myself with water."

-Ashia (Klamath, Eugene)

Kim (Cherokee Nation of Eastern Oklahoma, Salem-Portland) shared what she learned about caring for water during the Sun Dance: "As a Sun Dancer, already I'd been learning very exquisitely to discern between wants. It's fun to stand in that shower until the water runs out, . . . [but] sometimes you need to not do that, and you don't get to claim resilience and self-care. Because if there's no water, there'll be no resilience or self-care."

Lawrence's (Turtle Mountain Chippewa, Portland) community approaches water as a living being: "We honor water and think of water as—what do you call it—an organism, you might say. It's got its own spirit. A lot of the tribes think that way." He also shared, "we have songs we sing to the water thanking the water for providing us with necessary ingredients that it gives us. It gives us life."

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"[Water] was my friend. It was the place. It was just a family member for me."

-Kim (Cherokee Nation of Eastern Oklahoma, Salem-Portland)

WATER AT HOME

Nine participants drink tap water from the faucet in their home. Alexis (Latinx, Portland) feels "spoiled" when it comes to water in Oregon. When she visits other places like California and Washington, the water "doesn't taste the same." Damien (African American, Eugene) said: "I drink it [bottled water]. I don't believe in buying bottled water. I will on occasion, but yeah, I drink tap water every day. You know, I think it's fine. It does the job."

Three participants who drink tap water use a filter before they drink it. Polet (Xicana, Latinx, Eugene) shared: "I have a filter because I'm still

paranoid." She has an uncle from Iran who tells her she needs to boil her water first, and her family buys bottled water, so she filters her tap water when she is in Oregon.

Some participants shared concerns about the water in their homes. Paulina (Latinx, Eugene) shared that during the September 2020 wildfires in Oregon, she wondered if the water in her home was making her family sick "because everyone in the house was just feeling really like, we're having a lot of stomach problems. We change our diet and go back, try different things, but then I started noticing that the water for a minute had almost like, a bleach smell."

Wendi (Latinx, Indigenous, Portland) feels that her water is dirty, and sometimes when her children shower, their "skin would get irritated, and the water from the shower is kind of yellow."

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Tonya (African American, Portland) shared that water at the RV park they live in smells like bleach. They boil their water and then let it sit in a container to cool before they drink it, but there is a "nasty" aftertaste and "you can see the impurities floating to the bottom of the glass." They also shared that when they shower, "it makes my skin rust, it smells bad, it stinks. No matter how much body wash you use, it still stinks, don't smell fresh," and it makes them "feel uncomfortable about how I smell."

A few days before our interview, Damien (African American, Eugene) had a conversation with Black women friends on the impact of water quality on hair: "They were talking about their hair and water and all this stuff, and having skin or hair care products to kind of balance the quality of the water." After being deployed in the military in Afghanistan where he was amazed at how people managed to conserve scarce water resources, Damien expressed that having access to water to wash his hair is a

privilege: "Man, I can't wait 'til I can wash my hair [after growing new dreadlocks], and just what a privilege it is for me to be able to wash it."

Ashia (Klamath, Eugene) spends time in Eugene and in Chiloquin, Oregon. In Eugene, they do not drink tap water, but they do in Chiloquin: "I think that I never realized the difference in the water, like, how different it tastes. But here I live right by the park in Chiloquin and I drink the water. It comes straight out of our well system here. And some wells have an iron taste, but ours doesn't. But in Eugene it just tastes so bad, and so I didn't realize how good our water is here."

Ashia (Klamath, Eugene) explained restrictions on water use during droughts in Chiloquin, where the Klamath Tribes are based: "We are not allowed to water our lawns." Each side of Chiloquin has "different watering days" and "it's really restricted."

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Amanda (Native American, Portland) commented on serious health concerns regarding water and her cancer diagnosis: "When I looked at the website for the Environmental Working Group after my cancer diagnosis, I discovered that in 2013 Oregon had raised the thresholds for certain severe toxins and other less severe toxins, but it told me my body knows when the water's not okay. My body knows that I shouldn't be drinking hexavalent [chromium], and I shouldn't be drinking raised levels of uranium waste."

Six participants regularly buy bottled water for drinking. Participants buy one to four cases and spend \$15-40 on bottled water each month. Tabitha (Latinx, Eugene) shared that she buys bottled water because the water in her home "smells like bleach" and it gives her "stomach problems."

"I buy water still. I've tried the water out here, and it makes my stomach hurt. When I used to live in my trailer when I had no bottled water, sometimes I drank out of the faucet and didn't feel well."

-Tonya (African American, Portland)

Ten participants pay their water utility bill directly (as opposed to it being included in their housing costs). These households pay \$30-\$200 for water utilities per billing cycle, depending on the time of year. Three participants shared that they worry about these expenses and sometimes cannot pay their monthly water bill. A few participants have used water assistance programs to pay their water bills. Five participants sometimes limit their water usage to ensure the bill does not go too high.

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Seven participants keep a garden or have house plants. Some limit how much they water their plants due to their water bill. Kim (Cherokee Nation of Eastern Oklahoma, Salem-Portland) used to have a big garden to share food with neighbors and community members, but now: "I can't afford to water. I couldn't have a garden last year, and I had to be very, very careful to get my trees watered . . . But what's happened now is I can barely afford to water what I have. I don't have a huge, extraordinary yard, but I did."

Of those with gardens, only a few use pesticides and herbicides. A few also noted changes in seasons and rainfall over the past few years in the Willamette Valley, describing it as "unpredictable."

During a debrief with NAACP's Environmental and Climate Justice Committee, committee members expressed a desire to learn about water reuse and rainwater catchment systems at home. For NAACP,



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such systems would help reduce costs and improve the success of their recently founded Annie Mims Community Garden. The garden provides food for community members and resources to support food gardens at home. Having adequate access to information about water reuse and rainwater catchment systems in multiple languages would also potentially lower water bills and have a positive environmental impact in the community.

WATER AT WORK

Six participants work outside of their home and four work inside their home. Andre (Black, African American, Eugene) and Alexis (Latinx, Portland) feel comfortable drinking the water provided at their work because it is filtered. Damien (Black, African American, Eugene) and Paulina (Latinx, Eugene) bring their own water to work. The tap water where Dan (Oglala Sioux, Portland) works is "gross," so their employer provides filtered water stations.

OUTDOOR LIFE AND ECOSYSTEMS

Participants have explored many lakes, rivers, and beaches across Oregon to swim, pray, canoe, relax, walk around, fish, and play in water, including Crater Lake, Dorena Lake, Fern Ridge Reservoir, Blue Pool on the McKenzie River, Rogue River, Umpqua River, Willamette River, Bagby Hot Springs, Mount Pisgah, Dorena Lake, Seaside, Columbia River, Wood River, Sprague River, Nehalem River, Lost Lake, Frog Lake, Barton Park on the Clackamas River, and Dougan Falls in Washington.

Paulina (Latinx, Eugene) goes to rivers, lakes and waterfalls at least 15–20 times per year. Tabitha (Latinx, Eugene) goes outdoors "as much as possible to just enjoy the scenery, but also to play in it or, you know, have fun." However, she (Latinx, Eugene) only feels comfortable going to rivers and not lakes: "The lakes are really, they're really dirty. Usually there's

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signs posted saying there's algae and like, you could get sick. There's sometimes warnings that you can't go to the lake because there's a certain blue algae or whatever. I think it is that they'll even restrict it for a while so you can't go in there."

"I mean, I feel comfortable enough to let my daughter play in it [the Willamette River], but I just always make sure she's not, you know, taking it in her mouth."

-Alexis (Latinx, Portland)

Jill (Santee Sioux, Portland) shared that she has heard "talk about the effect of Hanford [Nuclear Site] and all of those chemicals, you know, wartime chemicals being stored in that area are affecting the quality of the water that comes down the river, the coal train."

Three participants feel uncomfortable going to the Willamette River: "Sometimes I feel a little uncomfortable at the Willamette River because I know it has more contaminants in it" (Paulina, Latinx, Eugene). Dolores (Latinx, Eugene) has seen signs at the Willamette River that say "Be careful in the water." Wendi (Latinx, Indigenous, Portland) commented on pollution in the Willamette River: "[It] got very polluted because there's a lot of garbage over there that people throw" into it. Wendi (Latinx, Indigenous, Portland) has seen diapers and water bottles floating in local rivers. Four participants mentioned that they have seen warning signs about contaminated water when they visit other lakes and rivers.

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"I walk near Klamath Lake, but never swim in it . . . I don't know, I just know it's dirty. I think that all the agriculture out in that area, because it comes out from Sprague River obviously, and that's a really prime ag community, and so I think that there's a lot of runoff, like, sediment runoff that harms the river, and then also just human pollution because a lot of people feel like it's acceptable to dump a lot of garbage or to just pollute the river because they can out there, because there's no regulations, really."

-Ashia (Klamath, Eugene)

Lorne (Navajo, Portland) shared that Whitaker Pond behind the Native American Youth and Family Center (NAYA) was formerly used as a junkyard and is an environmental cleanup site designated by the Oregon Department of Environmental Quality for contamination with metals and PCBs.¹² The Columbia River Inter-Tribal Fish Commission, community partners, and a group of students cleaned up the site to make it "more viable for the city to purchase the land."

"[Whitaker Pond] is utilized a lot [by] the NAYA Family Center, high school, and education . . . [It] is a really good example of reclaiming something that was thought to be hazardous, and our Native culture in partnership with other entities were able to reclaim that site."

-Lorne (Navajo, Portland)

Seven participants shared that they and/or their families enjoy fishing, and they learn about when, what, where, and how to fish through their families

12. Department of Environmental Quality, Oregon. "Environmental Cleanup Site Information Database Site Report." Feb. 2021. https://www.deq.state.or.us/lq/ecsi/ecsidetail.asp?seqnbr=5455. Accessed Feb. 2021.

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and at sporting goods stores when they get their licenses. They catch catfish, salmon, trout, sturgeon, and crabs. Four participants eat what they catch when they go fishing. Alexis (Latinx, Portland) shared that her dad fishes in Nehalem. She eats that fish, but not anything caught around Portland. Dawnyetta (Black, African American, Portland) does not eat anything out of the Columbia River "because our rivers are so polluted."

Participants also noted fish populations declining over the years. Ashia (Klamath, Eugene) highlighted that "right now, we currently have two endangered suckerfish," which are inextricably linked to the cultural, spiritual, and economic health of the Klamath Tribes. She explained that it was way easier to catch certain fish 20 to 30 years ago, but now they are "unlikely to catch." Alexis (Latinx, Portland) commented that "the sturgeon has gone way down in population, and they set limits to how many you can catch. And it was closed off for years, five or six years, you could not catch one. And they just opened it back up again, but you can't catch very many."

EMERGENCY PREPAREDNESS

Only one participant shared that she feels prepared for an emergency. After the 2020 fires, Dolores (Latinx, Eugene) became more prepared: "the fire led us to having a go-bag and to be aware of where all of our documents are and updating our emergency stock in the garage." Several participants discussed what they would need to feel prepared for an emergency: "I think that food, definitely having food and reliable cars so that I could leave" (Ashia, Klamath, Eugene). "I've seen so many people, preppers, they have everything. We have nothing. I would need containers for water, I would need meals, cans, I don't even know. I don't know" (Alexis, Latinx, Portland). Amanda (Native American, Portland) noted that to feel prepared, she needed information. For Andre, (Black, African American, Eugene) "a better sense of community"—one that includes all, including low income and unhoused people—would better enable community resiliency.

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"[During the 2020 wildfires] For my little family that I have, me and my son, we don't have like, money to just go away from the area . . . And some people didn't have phones, so reaching certain family was really difficult."

-Tabitha (Latinx, Eugene).

DOCUMENTATION

Interviews were recorded for 17 participants out of 20, and transcripts were completed in English. Aliases were created for those who requested them; however, only first names are used to protect participants who shared about workplace-related issues and other potential vulnerabilities. Audio interviews in English and Spanish, and transcripts in English, will be provided to Verde, CCC, and NAACP for their archives. The Oregon Water Futures coordinating team agrees to use content of transcripts for reports, media, educational, and advocacy efforts, and to consult with Verde, CCC, and NAACP before using transcripts as a whole for any other purpose.

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Oregon Water Futures Team

Alaí Reyes-Santos



Reyes-Santos is a professor of ethnic studies and conflict resolution at University of Oregon. She is also a consultant that facilitates individual and organizational transformations in the non-

profit sector, government, higher education, and social and environmental justice organizations. She offers an approach to social and environmental justice and conflict resolution grounded in ancestral healing practices that serve the individual and the collective. She served as lead interviewer, facilitator, and report author for the Oregon Water Futures community engagement effort in 2020.

Cheyenne Holliday



Holliday grew up on a horse farm in rural Oregon where she helped rescue and rehabilitate animals with her family. She completed her master's degree in conflict and dispute resolution at

the University of Oregon, she also holds a bachelor's degree from the UO in psychology as well as a minor in computer informational technology. She specializes in environmental conflict and project management.

She worked as the UO project manager of the Oregon Water Futures Project.

Stacey Dalgaard



Dalgaard is the water
outreach director for Oregon
Environmental Council. She
works with partners across
the state to raise the profile
of water in Oregon and engage
sovereigns and stakeholders in

advancing solutions to our water challenges. Her work focuses on elevating underrepresented voices in state policy, building movement capacity, policy analysis, and communications. Oregon Environmental Council brings Oregonians together to protect our water, air, and land with healthy solutions that work for today and for future generations.

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Oregon Water Futures Team

Kristiana Teige Witherill



Using her skills in collaborative process design, research, communications, and project management, Kristiana serves as coordinator and facilitator for several crosssector collaboratives working

on improving water quality and restoring watershed health through the use of natural infrastructure. She has helped guide these collaboratives through the development of their foundational governance structures as well as annual operations. Drawing on her experience at a water and wastewater utility, Kristiana has felt firsthand the challenges faced by the utility sector and works to find solutions that benefit both people and the environment.

Taren Evans



Evans is the Coalition of
Communities of Color's
environmental justice director.
Before CCC, Taren worked at
Habitat for Humanity Portland/
Metro East where she worked
along with Living Cully partner

organizations, Verde, Hacienda CDC, and the Native American Youth and Family Center (NAYA) on antidisplacement efforts in the Cully neighborhood. She holds a bachelor's degree in government and politics from the University of Maryland, College Park, and a master's degree in urban planning from Portland State University.

Ava Ocon



Ocon is a student at the University of Oregon's School of Journalism and Communications. In pursuit of a major in public relations and a minor in indigenous, race and

ethnic studies, Ava focuses on bringing diversity and inclusivity to communications.

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Oregon Water Futures Team

Megan Johnson Guthrie



I graduated with a bachelor of science degree as an environmental geoscience major at the University of Oregon in 2019. During my time as a student, I focused on courses relating to environmental racism

offered at the UO and had the amazing opportunity to meet/learn from Professor Reyes-Santos. From there I joined the Oregon Water Futures Project by providing a timeline of Oregon's environmental justices and injustices. I'm now currently working as an environmental technician with Intertek PSI in Oakland, California, and as an urban planning enrichment teacher with The Nueva School in Hillsborough, California.

Grace Brahler



Brahler earned her JD with a concentration in environmental and natural resources from the University of Oregon after earning a BS in environmental science from Texas A&M University—Corpus Christi. As

a law student, Grace worked as a water law research fellow for the Environmental and Natural Resources Law Center under the direction of Professor Adell Amos, as a research intern for Oregon Water Futures with Professor Alaí Reyes-Santos, and as a legal intern for Lincoln County and the Oregon Clean Water Action Project. She also held various leadership roles in the environmental law society Land Air Water, including codirecting the 2019 Public Interest Environmental Law Conference.

Evelyn Easton Koehler



Koehler graduated from the University of Oregon with a degree in environmental studies. As someone who grew up Oregon she has been seen some of the ways in which marginalized and

disadvantaged communities experience greater challenges in relation to water and food justice, even more so as the impacts of climate change are felt more strongly everywhere. Evelyn became involved in the project because of its intersection between her educational and personal interests and was inspired by the collaborative approach the project had in addressing water challenges within Oregon communities.

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Oregon Water Futures Team

Cally Hutson



My name is Cally Hutson and I graduated from the University of Oregon with a BA in ethnic studies and international studies and a minor in Spanish. I am a queer, first generation Sri Lankan American and

second generation Indian American woman, and I currently reside on stolen Kalapuya land. I firmly believe that dismantling capitalism, racism, patriarchy, and other systems of oppression are fundamental to water justice. Organizing and engaging with working class BIPOC and rural communities will bring a better water future for all!

Katie Moreland



Moreland is a native Oregonian who grew up in the Portland metro area. She is a concurrent JD and Conflict and Dispute Resolution (CRES) master's student at the University of Oregon School of Law. She

is pursuing studies in law and conflict in order to advocate for those in underrepresented communities, specifically around topics of environmental justice. Katie was drawn to this project because of its focus on the water interests and challenges of rural Indigenous peoples and communities of color. Moreover, she loves that the work of the project will be distributed to our community partners in accessible methods.

Ida Shibiru

Shibiru is a fourth-year student in human physiology on the pre-medical track with an ethnic studies minor at the University of Oregon. She is Ethiopian-American and was raised in Oakland, California. Environmental studies and justice have always been a part of her life due to family in Ethiopia with lack of access to resources in addition to having lived through California's most recent serious drought. Ida had previous work in environmental studies beginning in high school with experience in an environmental academy including three latter internships geared to environmental study and justice. Learning about environmental racism in college in connection to her background led her to gladly join the Oregon Water Futures project.

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Participating Organizations' Representatives



Tomás Bartolo



Bartolo is a proud first generation immigrant from Oaxaca,
Mexico. He grew up in a family of Indigenous (Mixteco)
farmworkers and lived in Baja California for 15 years before
immigrating to Oregon. He has lived in the Marion County
community for more than 17 years. He graduated from
Woodburn High School and attended Chemeketa Community
College. Tomás has worked in the nonprofit sector for over

a decade. He specializes in community radio, Latinxs community organizing, and leadership development with youth and adults.

Currently, Tomás is the environmental worker justice organizer for PCUN, where he will help organize farmworkers and Latinx families by increasing their understanding of the problem, and showing them how to take action against climate change, and to move toward a just transition.



Haley Case-Scott



Haley Case-Scott is a member of the Confederated Tribes of Siletz Indians, and a descendant of the Klamath Tribes, Yurok Tribe, and the Sakoagan Band of Chippewa Indians. She was born and raised in the Klamath Basin, and moved to Eugene in 2014 to attend the University of Oregon. Four years later, Haley received her bachelor of arts degree in political science with a minor in Native American studies. Prior to

working as the climate justice grassroots organizer, Haley served as a research assistant with the Pacific Northwest Tribal Climate Change Project and the United States Forest Service. She is dedicated to ensuring that diverse perspectives are considered and respected in the development of climate policy.

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Participating Organizations' Representatives



Rachel Cushman



Cushman is a direct descendant of Clatsop Chief Wasilta, a primary negotiator and signer of the 1851 Tansy Point treaties. She is the secretary/treasurer of Chinook Indian Nation Tribal Council. The focus of her tenure is restorative justice—advocating for the US government to clarify Chinook's status and to count them amongst the other federally recognized tribes. Rachel is committed, regardless of federal

acknowledgment, to ensuring that Chinook exercises sovereignty, practices selfdetermination, and has autonomous control over their narrative.

Not only is Rachel a leader of Chinook Indian Nation's tribal government, but she also is a committed leader of the Chinook Canoe Family. Cushman has many roles in the canoe family. For years, she has served as a lead puller. She is one of Chinook's lead women singers and dancers. In 2019, during Paddle Lummi, Rachel took on the role of skipper.



Tony DeFalco



DeFalco joined Latino Network as the executive director in February 2021, where he and his team work to positively transform the lives of Latinx youth and families in education, leadership, and civic engagement in Oregon. He brings decades of experience in nonprofit management, fundraising, advocacy, and coalition building across diverse sectors in the region and state, coupled with a deep understanding of the

issues facing Latinx and communities of color. His past experiences include working with Native American tribes across the country to reacquire culturally significant lands and working with a broad coalition of environmental groups, commercial and recreational fishing groups, and scientists to protect ocean health. Prior to his role at Latino Network, Tony worked for Verde for 10 years, partnering with the community to innovate anti-displacement, environmental protection, and economic development efforts.

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Participating Organizations' Representatives



Dolores Martinez



Prior to being involved with Euvalcree, I was a head housekeeper. I oversaw housekeeping staff and ensured rooms were clean and correctly managed. I feel extremely blessed to be working with Euvalcree. I get to support and provide information to community members to assist them with resources and trainings to support and help the community through Euvalcree.

I am proud to be involved because Euvalcree is the organization that genuinely cares for the community, meets and address its needs, and was created to demonstrate that things can be done to unite the community.

The greatest success we have experienced was the Soy Sano/I'm Healthy Program and the community events. The events have been a major success for the community and engage them regardless of culture, color, or race. I am certified in first aid and CPR, am a certified application assister, and completed my GED.



Ana Molina

Ana Molina is a first generation Latinx environmental justice organizer and advocate. She has a deep love for both the environment and community because both are resilient and strong. She believes our most impacted and vulnerable communities have the imagination to come up with and lead the solutions our communities need to address environmental and climate justice.

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Participating Organizations' Representatives



Aimee Okotie-Oyeka



Aimee Okotie-Oyekan is a concurrent master's student in the environmental studies and community and regional planning programs at the University of Oregon; she obtained a BS in biology with a minor in ecology from the University of Georgia. She spent two years contributing to research on marine microbial ecology for the University of Georgia Department of Marine Sciences and a summer as a prairie plant community

ecology intern for the University of Oregon Summer Program for Undergraduate Research. Though having a strong background in the natural sciences, Aimee is a self-proclaimed interdisciplinary environmentalist; her current master's thesis investigates "green gentrification" in West Atlanta to reveal how issues of racism and other social inequalities are intertwined with environmental injustices. She was recently hired as the environmental and climate justice coordinator for the NAACP Eugene/Springfield Unit.



Cristina Palacios



Palacios started organizing at the age of 14. She loves serving all people, especially people of color, immigrants, refugees and the Latino Community.

She is driven by a passion for housing and social justice and the belief that everyone—regardless, their income, disability, race or immigration status—deserves a safe healthy place to call home. Cristina comes with 10 years of senior

organizer experience; some of her strong skills are doing leadership development, community organizing, and community engagement.

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Participating Organizations' Representatives



Jairaj Singh



Singh, CNU-A, MURP, is the senior environmental justice manager at Unite Oregon, focusing on establishing the organization's fourth regional chapter and base-building within Clackamas County, Oregon. As an environmental justice scholar and practitioner, with a BA in environmental studies from Emory University and a master's in urban and regional planning (MURP) from Portland State University, Jairaj has

been organizing and building collective power in communities of color for several years in the Portland region. He is striving to cultivate strong communities through innovative engagement and planning practices.