OREGON'S 100-YEAR WATER VISION

Executive Summary: Feedback from Outreach and Engagement

This document contains high level summaries of the feedback heard from 850 people during 8 community conversations, in an online web survey, and during a technical workshop.

Executive Summary

In the fall of 2019, state agencies asked communities across Oregon to share their water challenges, needs, and visions of success as a part of defining Oregon's 100-Year Water Vision.

While each community had unique and specific discussions, common trends arose around the ways people and communities use, interact with, and value water. Below is a summary of the feedback received from seven in-person community conversations, a virtual conversation, a website feedback link, and a technical water data workshop. This executive summary is not intended to be comprehensive. A full summary can be found at www.OregonWaterVision.org.

Feedback by the numbers

- 8 Community conversations
- 1 Website survey
- 1 Technical workshop
- 8 Locations across the state
- 850 Participants engaged
- 4,000 Individual comments

In addition to these avenues, feedback was received from interviews, letters, and meetings with the nine federally recognized tribes in Oregon. Oregon Consensus has provided an independent summary of the interviews as a separate document. It is available, along with more detailed summaries and other feedback received, at www.OregonWaterVision.org. Information received from all sources was used to update the Oregon's 100-Year Water Vision document and develop recommendations for next process steps.

The feedback process - community conversations and web feedback

Seven in-person and one virtual community conversations were organized to A) provide opportunities for Oregonians around the state to identify water challenges and what success looks like, and B) provide feedback for the Vision document. Meetings were held in Gresham, Tillamook, Bend, Ontario, La Grande, Albany, Central Point, and a virtual session. Local water leaders helped get the word out, information was provided at www.OregonWaterVision.org, and through a number of water group listservs. A web feedback option was also provided with similar questions to those asked during the community water conversations. Outreach for both conversations and web feedback was broad, but not complete. Participants in the conversations tended to be those individuals whose paid or volunteer work had a nexus to water infrastructure or ecosystem management, so they were generally more informed about water challenges and opportunities. While translation, childcare, and stipends were available, conversations were held during the day and work week, which limited the ability of people working outside water sectors to participate fully. The feedback received should be viewed in context of the types of participants who self-selected to join these early conversations.

Water & Infrastructure Feedback Summary

Across all Oregon communities and in the web feedback, participants said that they face increasing challenges around water. Whether concerns were water management, availability, clean water, funding, strategic planning, or community capacity, participants noted a growing need for Oregonians to pay attention to, and act to address water needs in their communities.

External forces impact water use and water availability

Communities and web feedback highlighted a suite of external forces that will impact the state's ability to manage water, and increase the need for investments in ecosystems, and built and natural water infrastructure. These forces directly impact both instream needs for fish and wildlife, and needs for agriculture, economic growth, and development. All of this indicates the need for innovative and collaborative solutions – now and in the long term.

1) Climate change has placed immense pressure on the predictability of when water is available by reducing snowpack and shifting rainfall patterns. This results in both increased droughts and flooding, and risk of catastrophic wildfires that threaten habitat and community water supplies. These changes impact community safety, water supply for agriculture and other industries, timing and availability of water instream for fish during key migration periods, among other impacts.
2) Population impacts were identified differently depending on the community. In some places, providing new water infrastructure to accommodate population growth and associated housing needs was a major concern. In areas impacted by seasonal tourism, concerns were raised about how to build sustainable water systems for populations that could change ten-fold between summer and winter. In rural areas, communities with decreasing populations are facing significant replacement costs for aged infrastructure, but with a shrinking ratepayer base.
3) While many funding sources exist for water, current funding is not always coordinated or strategic. And, Oregon's water infrastructure and ecosystems suffer from a lack of investment that dates back fifty or more years. The combination of missing and uncoordinated investment lead to chronic challenges just to keep systems current, with no room to invest strategically for Oregon's water future.

Conserving water, using it efficiently, and reusing it

Communities expressed a need to focus first on conservation and reuse as the top priorities when considering how to manage limited water supplies. Participants talked a lot about water efficiency as a strategy for A) making current water supplies go further, and B) creating additional water in stream, and for agriculture and other business uses.

Oregon's built water infrastructure is aging, and natural infrastructure is under-utilized

Participants identified a suite of built infrastructure challenges in their communities that need investment, ranging from aging dams, drinking water and wastewater pipes, levees, irrigation systems, to tide gates, and septic systems.

At the same time, communities recognized they have not fully realized or invested in the benefits that natural infrastructure provides to keep water clean and available, including wetlands, forests, riparian zones, and floodplains, that can all filter and store water naturally. Modernizing built systems, and restoration of natural systems, are necessary steps forward across Oregon. Finally, communities identified that investments made in the past fifty or one hundred years may have had unintended consequences that impact water quality, quantity, and habitat today. Learning from those lessons will be important for future investments.

> *"We need to recognize the legacy of previous management and the impacts it has on quality and quantity today." - community conversation participant*

Ecosystems are an important, but under-recognized part of the water conversation

Participants noted that Oregon has also underinvested in ecosystems, which are key to healthy water, fish, and wildlife, and support the state's recreation and fishing industries, and are culturally important to sovereign tribes. By promoting instream flows and modernizing infrastructure like dams and tide gates to be fish-friendly, communities recognized they can preserve cold water habitat for native fish, while also promoting water-based recreational opportunities. Invasive species also pose huge threats to water and habitat quality, and were of high concern for a suite of stakeholders.

> *"Sustainable fisheries and vibrant wildlife habitats set within the context of our communities and economy." – community conversation participant*

Communities recognize safety as an important piece of the water conversation

Natural disaster preparedness and resilience was of concern in virtually every community—especially for significant earthquakes. Oregon needs backup water supplies if a primary source fails, adequate water for fighting wildfires during the fire season, and adequate stores during times of drought. Flood management was also discussed. Development in floodplains and wetlands removes natural infrastructure that would normally store water and prevent flooding, and puts lives and property in harm's way. Ultimately, investments in emergency preparedness and resiliency can help mitigate some of these problems, and make communities safer along the way.

Water is a limited resource. Useful and usable information is needed to begin discussions about balancing interests

Understanding current water availability, use, and quality for all basins across the state was identified as important to ensure interests are balanced for the variety of competing needs. Details are provided in the technical workshop summary that follows. Communities made clear that they need access to the best available information in a useful format to effectively make decisions. An integrative data sharing platform, with accurate state, federal, and local information on water availability, use, quality, climate change projections and impacts, and watershed conditions for every basin was identified as a critical, but missing, tool.

Oregon needs to ramp up investments, not just for projects, but for strategic planning, information, and community capacity

To solve our water problems, Oregonians must be willing to invest. Every community voiced that Oregonians have become disconnected from their water, and do not truly value it.

> *"We need to think about the whole system from beginning to end. You can't do this work by doing one small project at a time."*
> *– community conversation participant*

Because projects require public funds, having a population that supports investments in built and natural infrastructure and ecosystem health is critical. In coordination with local, state and federal partners, and tribes, communities noted that Oregon can do better to educate people about their water, and garner support for public investments.

Communities consistently noted that a lack of funding for strategic planning and community capacity limit successful water planning, particularly for smaller communities. In addition, participants also identified concerns around a lack of funding for infrastructure maintenance, data collection, monitoring, and long-term sustainability.

Process Feedback Summary - A quality, coordinated process is important for Oregon's water future

> *"Success is communities working together using cross-sector integrated approaches to planning, education, and management of water for the future."– community conversation feedback*

Moving forward, a variety of process suggestions were made. Ensuring an inclusive and equitable process was highlighted in all conversations. Balancing interests amongst diverse water users (e.g., municipal, agriculture, environment, industrial, recreation, fish, and human use) was identified as a foundational principle. In every conversation, the importance of connecting the Vision with the Integrated Water Resources Strategy (IWRS) was raised. Participants recognized that extensive

work has gone into both processes, and wanted to ensure that the time and effort they have invested was well spent.

Tribes are sovereign nations, and their role in Oregon's water future is key

Every community highlighted the importance of engaging with tribes and tribal members. As sovereign nations, not only do tribes have unique treaty rights related to water, land, and food, but many also manage systems that provide water to their members. Participants also highlighted the culture connections and uses of water. Continuous formal consultation and informal conversations between individual tribes and the state must continue to be a priority.

All Oregonians need to be actively engaged in water decisions to develop effective, locally based solutions

Participants recognized inclusion looks different in every community. Giving everyone space to be heard will be important moving forward. Historically, rural, low-income communities, communities of color, and others have been disproportionately impacted by water quality and quantity issues. These communities may need specific support to increase their capacity to engage in processes, obtain funding, or implement water projects.

Participants recognized that who gets to influence water decisions matters. There was a lot of interest in making sure water planning, investments, and other types of decisions were inclusive. Inclusion meant engaging A) tribes, B) communities who have historically and in the future might be disproportionally impacted by decisions, and C) current water interests such as agriculture, energy, recreation, environment, tourism, and industrial water users.

Regional approaches and flexibility will be needed to address Oregon's diverse water conditions and needs… and a statewide framework is also necessary

Across the state, participants emphasized the need for regional approaches and flexibility to adapt to different conditions and water uses in each region. There was strong encouragement for systems that allowed regional prioritization of water projects and innovative approaches that reflect regional differences.

> *Without collaboration and regional flexibility for innovative solutions, Oregonians will miss opportunities for cost-effective solutions to meet our future water needs." – web conversation feedback*

At the same time, there was also a recognition that a statewide framework and protections need to exist around water quantity and quality. This included protecting existing water rights, and enforcing existing rules and laws, and non-point source protections. In each conversation, participants identified the need to ensure the Vision was adaptable to changing conditions, lessons learned, new science, and other local or statewide conditions.

Policy was broadly discussed, but not necessarily agreed on…

Generally, communities discussed the need for staff and resources to consistently enforce current water quality and quantity regulations. However, while water-related policy challenges were raised in every community and in web feedback, there was not general consensus about which policies needed to stay or change. Policies raised included ground and surface water rights, land use laws and local land use planning, and nonpoint source regulations like the Forest Practices Act and Agriculture Water Quality Management Act.

Participants in every community, and the web survey, highlighted the need for local flexibility in implementing water policies to balance interests with limited water supplies, reuse water, move it to places it is most needed, or to conserve in new and different ways.

Creating a culture of water

All communities highlighted that an informed, supportive, and empowered population is central to any community-based solution, and participants said they did not feel Oregonians generally were concerned about or aware of the state's water challenges. For a community to invest in water, they must first be aware of water issues that they and other communities face. Community specific resources for conservation and efficiency must be available to homeowners, land owners, and irrigators to help them use water more efficiently. Finally, the importance of technical education in community colleges and trade schools to ensure a qualified water workforce was also highlighted.

Technical Workshop Executive Summary

Farmers, municipalities, and other water users need access to real-time information about water availability, and analysis of long-term precipitation trends to plan their water use. Environmental groups need to understand instream needs for fish. Farmers and ranchers need to understand shifting water needs for food and fiber production. Communities, industrial water users, and storm and wastewater treatment plant operators need to know how current and emerging contaminants can be identified, treated, and managed to enhance water quality. These are just a few of the examples provided at the technical workshop regarding data and information needs to more strategically plan for and invest in Oregon's water future.

On November 14th, 2019, over 100 participants from local governments, environmental and agricultural groups, agencies, and others gathered to discuss the current water infrastructure and ecosystem *management questions* they are actively working to solve, and the *data and information* they need to answer those questions. Specific feedback is provided in the technical workshop summary and raw meeting notes available at www.OregonWaterVision.org.

How should information be provided to be useful?

Oregon's water managers are making decisions each day about how to advance health, economy, environment, and safety. Many of those decisions require information that is created

from high quality, current, and usable data. Participants were interested in a better understanding of which data and information is available, and a clear articulation of how reliable that data is. There was also interest in getting higher resolution and more real-time foundational data for things like hydrology, weather patterns, and hydrogeology.

Water managers clearly identified that they want water information to be current, high quality, transparent, accessible, and usable. There is a desire that Oregon have more integrated water data that are accessible at a regional level for the purpose of enabling Oregonians to make smart water decisions that keep our communities thriving for the next 100 years.

Overall, water managers were interested in ways to build a more integrated water information framework to make existing water data more usable as information. Questions around managing water data and information included:

- Are there better ways to provide and present information to support water planning;
- What are some indicators water managers can use, both for their own tracking and also for reporting to a statewide level (e.g., for WA's salmon recovery efforts); and
- Where are there duplications of effort and opportunities to consolidate data collection and sharing across agencies?

Data and information gaps

Participants were asked to discuss what information their community needed to answer community specific management questions. Participants almost unanimously agreed that all data should be in real-time, standardized, and available across all of Oregon's basins. Some of the particular data and information gaps include:

Water availability, quality, and the environment

Water managers expressed the need for a variety of potentially integrated data sets. Understanding the condition of our current water supplies, i.e. surface and groundwater budgets, natural infrastructure storage capacity, snowpack and precipitation levels, current water usage and demand, is critical data for communities.

Water quality data, as well as overall watershed health data is needed for every basin in the state. Communities need to know specific land use activities within a watershed, how those activities impact instream flows and species/habitat needs.

Communities also need to know best management practices for drinking and wastewater treatment, conservation and reuse, and enhancing public support for water investments. Similarly, water managers need regulatory certainty for water quality and environmental standards for long-term planning.

Future trends

Climate and population models were widely discussed, and both have wide sweeping impacts on a suite of other future trends. Climate change will ultimately have an impact on water quality and quantity, as well as community resiliency in the face of natural disasters. It is critical that communities have a holistic understanding of these impacts.

Similar to climate models, accurate population models, are needed to plan for sustainable development and growth. Increasing populations will ultimately require housing, land use, and economic development.

Funding and finance

Ultimately, participants identified four major needs for funding and financing water projects: a full inventory of current resources available, strategies for using funding more equitably and efficiently, expansion of current funding sources for future expenditures, and investment prioritization strategies.

Integrative data platform

Across all of the breakout sessions, there were a number of identified gaps that pointed more toward a need for an integrated data platform for water information in Oregon. This was a specific concern for small and rural communities who often lack the capacity to do their own data collection and analysis. Some of those particular gaps included:

- Decision support tools, compatible with GIS, for predictive water planning;
- Integrative models that combine the seasonality of snowpack, rainfall, instream flows and uses to predict water availability statewide;
- High quality, accessible, public, statewide, real-time, and basin-specific data that has been accumulated, standardized, and aggregated across state agencies in a way that is accurate, accessible, and affordable;
- Agency agreements for coordinated data collections and analysis;
- A tool that harmonizes state, federal, and private sector data to understand climate adaptation and the connectivity between all water users and the ecosystem; and
- Stable funding for the maintenance of a tool like this.