Imperative 3. Monitoring and Data Sharing

Objectives

- Improve our baseline understanding of water conditions in the region. Improve the coordination and effectiveness of water quality, quantity, and habitat monitoring programs throughout the region.
- Assess the levels and presence/absence of contaminants in Mid-Coast waters and describe negative effects to human health or aquatic life.
- Sample throughout the Mid-Coast to accurately identify the quantity and type of toxics entering source waters to assess potential risks to both drinking water quality and aquatic life.
- Provide self-supplied water users with adequate and timely data to determine regional, local, or site-specific water quality contamination issues that may pose a health risk.

Action Details

Action		Desired Outcomes	Potential Lead & Participants	Timeline	Budget	Potential Funding Sources
14	**Implement more efficient advanced metering infrastructure to enable faster identification of leaks and shortages, and support best practices for water providers to meet industry standards for documenting water loss.**	Real-time information on water use and water loss is documented to better manage water and engage everyone in water conservation.	**Lead:** Water providers, Mid-Coast Water Conservation Consortium Participants: Oregon Water Resources Department	PHASES 1-3	$3,000,000	▪ USDA Rural Development Water and Waste Disposal Loan and Grant Program.
15	**Recommend installation and use of flow meters to gain a more accurate estimate of water use in the region.**	Installation of flow meters on withdrawals is prioritized using an established set of criteria.	**Lead:** Local Soil and Water Conservation District (with resources), Oregon Water Resources Department		$100,000	▪ OWEB Monitoring Grant.[25] ▪ OWRD Water Measurement Cost Share Program
16	**Fully fund, install, and monitor real-time stream gauging stations throughout region in priority locations and times of year when they are needed most to accurately assess source water and enable innovative demand-reduction actions during periods of critical ecological need.**	Identify sites for highest priority gages. Funding and staff secured to maintain monitoring network. An updated basin study that addresses water uncertainties in the Mid-Coast region (improved granularity of measurements). Exploration of newer AI technologies is supported by the partnership. Real-time river monitoring/gauging is conducted in priority locations.	**Lead:** US Geological Survey, Oregon Water Resources Department, private landowners, Oregon Watershed Enhancement Board, watershed councils, organizations, water providers, municipalities, Lincoln County **Participants:** Oregon Department of Fish and Wildlife	PHASE 1	$200,000	▪ OWEB Monitoring Grant.[26] ▪ USGS National Streamflow Information Program (NSIP). ▪ OWRD (General Funds: Water Measurement Cost Share Program)
17	**Develop and implement a coordinated long-term water quality monitoring program throughout the region (e.g., source water, streams, estuaries) to improve understanding of current conditions and event-caused conditions (i.e., storm, low-flow) for nutrients, bacteria, temperature, dissolved oxygen, pH, turbidity and other specific contaminants identified by DEQ, including those that contribute to harmful algal blooms (HAB)s. Collect water samples to identify pollutant sources (location, source, practices influencing input, transport and fate of pollutants). Advocate for additional sampling in headwaters (where herbicides and pesticides are applied) and at municipality intakes.**	A coordinated long-term water quality monitoring program is developed for the region that meets the objectives described. Real time data sharing occurs among municipalities, and there is frequent testing of source waters. Samples are taken in headwaters and public drinking water intakes at the frequency needed to track source water quality status. Outreach and incentive programs reach landowners who then modify practices and implement best management practices.	**Lead:** Oregon Department of Environmental Quality, Oregon Health Authority, US Forest Service, Oregon Water Resources Department, Counties, cities, Mid-Coast Water Conservation Consortium, Lincoln County Water Systems Alliance, state and private forestry sector (Oregon Department of Forestry), Agricultural sector (Oregon Department of Agriculture lead), Oregon Department of Fish and Wildlife, Mid-Coast Watershed Council	PHASES 1-2	$1,000,000	▪ Oregon Health Authority Drinking Water Source Protection Grants & Loans.[27] ▪ ODEQ Supplemental Environmental Projects (SEP) Program. ▪ ODA water quality funds provided to SWCD. ▪ OWEB Monitoring Grant. U.S. Economic Development Administration (EDA). ▪ Oregon Watershed Enhancement Board

[25] Must be tied to existing or potential future project.

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[27] Eligible projects include but are not limited to outreach/education, monitoring efforts (outside of what is required by the state), restoration design and implementation, groundwater risk assessments. Publicly and privately-owned community and nonprofit non-community water systems are eligible to apply for DWSPF funding.

Action		Desired Outcomes	Potential Lead & Participants	Timeline	Budget	Potential Funding Sources
18	**Conduct comprehensive and ongoing water testing, and use results to guide best management practice implementation, restoration, etc. to address water quality impairments.**	Ongoing and comprehensive water testing is conducted, and the results are used to guide land and resource management activities. Education and outreach and testing are conducted on private wells on a regular basis.	**Lead:** Oregon Department of Environmental Quality, Oregon Health Authority, US Forest Service, Lincoln Soil and Water Conservation District, Lincoln County	PHASES 1-3	$100,000	▪ ODA water quality funds provided to SWCD. ▪ ODEQ Supplemental Environmental Projects (SEP) Program. ▪ U.S. Economic Development Administration (EDA).
19	**Develop a coordinated network of people conducting stream flow monitoring and water quality monitoring to share resources and data. Explore cost-effective ways to incorporate volunteers in data collection to complement gauging network.**	A robust coordinated network of volunteers is conducting stream flow and water quality monitoring and sharing that information via a Mid-Coast network.	**Lead:** Lincoln County **Participants:** Mid-Coast Water Conservation Consortium, Soil and Water Conservation District, Oregon Water Resources Department, Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife, Oregon Watershed Enhancement Board, Salmon-Drift Creek Watershed Council, US Forest Service	PHASE 2	$100,000	▪ ODA funding to SWCD. ▪ OWEB Monitoring Grant. ▪ U.S. Economic Development Administration (EDA).
20	**Support the aggregation and update of current self-supplied water system databases, including system description, system status, and system needs. Determine what exists from current databases. Track wells going dry via self-reporting. NOTE: Oregon Explorer database group will be discussing.**	There is comprehensive regional knowledge of self-supplied water system information in the Mid-Coast Region.	**Lead:** Lincoln County **Participants:** Private well drillers, private septic companies, Oregon Water Resources Department well log database	PHASE 1	$125,000	▪ Oregon Health Authority Domestic Well Safety Program (DWSP)
21	**Develop a water monitoring database for data entry and access by multiple entities.**	A water monitoring tool that consolidates water data for the public and water managers to access and use. The Mid-Coast serves as a pilot to demonstrate water quality and quantity database sharing.	**Lead:** Inter-agency Stream Team **Participants:** Local, State, and Federal agencies, and private citizens	PHASE 1	$100,000	▪ OWEB Monitoring Grant. ▪ U.S. Economic Development Administration (EDA).
			TOTAL		**$4.725M**	

Performance Metrics

- 75% of municipal connections in the Mid-Coast region have meters/associated infrastructure (apps, online platform) within 5 years.
- Water providers are reporting unaccountable water loss on an annual basis as well as progress made.
- By 2030, all water providers in the Mid-Coast region demonstrate systems have 10% or less unaccountable water loss.

Metric Methodology

- Percent of connections in the region that have meters. Five years later, the percent of connections is reassessed.
- Baseline data is collected to ensure water providers are documenting unaccountable water loss. Ten years later, an assessment is conducted to ensure all water providers in the region has 10% or less unaccountable water loss.
- Baseline data is created by conducting a social survey to assess awareness and understanding of water information by the public. A follow-up survey is conducted 3-5 years later to monitor changes in awareness and understanding.