PBP Pilot: Examples of Implementation Actions and Strategies

Below is a collection of examples of Implementation Actions and Strategies developed by the Place Based Planning Pilot Groups. For full a full explanation of each group's implementation strategies, please see individual plans.

Data Collection, Monitoring, and Feasibility
Prioritize and fund monitoring and data collection for data gaps identified in step 2 and 3 reports
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.
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.
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.
Develop a water monitoring database for data entry and access by multiple entities.
Analyze existing groundwater data and conduct a groundwater study in the Lower Basin
Conduct a process-based hydrologic study including how stream and groundwater flows change with land use and future climate change
Support collection of additional Lidar data
Agricultural Land Management
CREP or CRP program feasibility preliminary evaluation
Identify and develop voluntary incentives for water conservation.
Precision agriculture needs preliminary assessment
Increase irrigation efficiency
Work with the NRCS to develop a Conservation Implementation Strategy to provide incentives and technical support to agricultural irrigators interested in making improvements, such as increased efficiencies to minimize evaporation losses.
Education and Outreach
Support educational events promoting conservation farming practices
Develop outreach materials related to improving municipal water conservation and use efficiencies
Inform the public about best practices for lawn care (i.e., inform the public about the risks of over-application of lawn care products and fertilizers flow to the creeks).
Develop and implement a public awareness and engagement campaign aimed at supporting the imperatives and actions in the Mid-Coast Water Action Plan, including raising awareness and understanding of regional water issues
Encourage improved irrigation efficiency projects and use of the Conserved Water Act (to reduce out-of-stream demand through efficiency improvements and to protect a portion of water saved instream)
Support and advocate for increased communication for water conservation in public/municipal water systems and infrastructure needs.
System
Evaluate a water market/management framework
Support and advocate for planning and development that minimizes impacts to floodplains and riparian areas, promoting Green Infrastructure (GI) methods and Low Impact Development (LID) practices.
Using the Water Management Economic Assessment Model, develop a suite of adaptation measures (e.g., storage investments, conservation rebate programs, and new pricing models) to address existing and predicted water shortages in the region.
Flooding
Study potential actions to increase flow through the Grande Ronde Valley and reduce flooding while protecting water quality and summer through late fall baseflows.
Irrigation ditches to reduce flooding
Flood mitigation measure study
Assess and evaluate harmful algal bloom events that affect source water to identify potential contributing sources, and educate and support the reduction of nutrient inputs to source water from all sectors to prevent algal blooms (e.g., promote agricultural nutrient management plans, grants to reduce inputs, well water nitrate screening, well water and septic system education, low-input gardening).

Restoration and Source Water Protection
Support Restoration Projects that will improve water quality and quantity
Support Vegetation Management Projects to improve water quality and quantity available
Protect critical lands within drinking water source areas through acquisition, conservation easements, or other tools that prevent degradation and/or impacts to source water quality
Use established methods and local knowledge to prioritize stream reaches for riparian buffer restoration projects. Increase wooded buffer zones on priority streams.
Reconnect floodplains (beaver dam analogs, beaver restoration, floodplain restoration, etc.).
Use established voluntary programs, or other tools, to convert existing water rights (e.g., irrigation, commercial use, other out-of-stream uses) to instream uses that protect critical flows needed to support fish and wildlife, water quality, recreation, and scenic attraction.
Identify priority invasive species in each watershed and seek funding to support control and management of invasives in streams and along stream corridors while encouraging establishment of native vegetation.
Protect riparian areas from livestock using fencing and off-stream stock watering systems
Storage
Aboveground Storage Feasibility Study
Aquifer Capacity Analysis
Storage design, permitting, construction
Evaluate alternatives for both natural and built (human made) water storage with the planning area. For built systems, identify and perform feasibility studies needed to assess whether projects are viable using established and agreed-upon criteria (economic, environmental, regulatory, etc.). For natural storage "systems", identify feasibility studies needed to assess project viability using established and agreed-upon criteria. For those that appear viable, developed estimates of seasonal water storage and release.
Complete a feasibility study to assess potential off-channel water storage projects, including (a) potential locations for storage projects and (b) water availability, including consideration of all categories of instream flow needs (as recognized in the Step 3 Report)

Coordination and Collaboration
Coordinate with municipalities to determine how Partnership could best assist in providing support to multiple municipal systems and land to improve water quality and quantity.
Strengthen/support the Mid-Coast Water Conservation Consortium to enhance water conservation, increase resiliency during shortages and emergencies, and pool resources of multiple water providers. Support enhanced coordination with state and federal entities outside of the Mid-Coast.
Support the development of organizational procedures for the Mid-Coast Water Conservation Consortium (MCWCC) and the Lincoln County Water Systems Alliance (LCWSA) that will facilitate the prioritization and funding of projects throughout the region
Coordinate water curtailment plans among water providers.
Develop regionally integrated Drinking Water Protection Plans to ensure that strategies and implementation plans are in place to minimize threats to water supply sources throughout the Mid-Coast. Advocate for funding to support the development and plan implementation
Assist cities in creating and/or improving Water System Management Plans and/or Water Management and Conservation Plans that identify necessary system improvements. Assess whether these plans cover all needed improvements.
Water Reuse
Improve understanding of Oregon's existing water reuse regulations, and the opportunities and barriers (e.g., health issues) to using recycled and gray water for all allowed uses. Encourage development of comprehensive water reuse programs at appropriate scales.
Investigate and share information on methods of reusing treated sewage plant water and water at water treatment plants (e.g., backwash) and regional industries for potable, agricultural, and industrial uses.
Funding
Identify funding programs to support infrastructure enhancements that advance sustainable and secure water solutions for the region. Study how other cities and counties have funded their infrastructure improvements through time and manage water infrastructure assets.
Establish a community revolving loan program for infrastructure improvements for septic systems
Assist entities with public water and wastewater systems in funding and implementing infrastructure improvement projects.