

AGENDA

Mid-Coast Water Planning Partnership Strategy Development

Session #1: Water Conservation and Efficient Use
January 6, 2021 11:30am–1:00pm

Please join my meeting from your computer, tablet or smartphone.
<https://global.gotomeeting.com/join/756758117>

Objective: Develop draft strategies that address the [key issues](https://www.midcoastwaterpartners.com/key-water-issues) associated with Water Conservation and Efficient Use in the Mid-Coast region of Oregon.

Definition: Water conservation is the beneficial reduction in water loss, waste or use, and results in people changing behavior and thus using less water. Water efficiency minimizes the amount of water used to accomplish a function, task, or result, and relies on well-engineering products and fixtures (Source: Water Footprint Calculator: <https://www.watercalculator.org/>).

Water Conservation

* The Mid-Coast needs a coordinated water conservation initiative/strategy that focuses on reducing water use, educating stakeholders, promoting incentives, and effectively using limited water supplies, especially in times of water shortage.
* Rural residents and businesses need improved access to information, incentives, funding, and resources to help them implement water conservation measures.

11:30am–11:40am Welcome, introductions, and process overview

11:40am–11:45am Review of key objectives, definition, and key issues from Step 3 of the Planning Process

11:45am–12:45pm Review/affirm/edit draft strategies/actions discussed by partners to date, and consider other potential actions.

 11:45am–12:00pm Objective 1

 12:00pm–12:15pm Objective 2

 12:15pm–12:30pm Objective 3

 12:30pm–12:45pm Objective 4

12:45pm–12:55pm Consider additional objectives and strategies to address Water Conservation and Efficient Use goals.

12:55pm–1:00pm Summarize, discuss goals for next week, and adjourn

Categorize strategies:

ALL USERS (A) – 4 existing; 11 proposed

INDUSTRIAL (I) – 3 existing; 6 proposed

WATER PROVIDERS (WP) – 0 existing; 8 proposed

AGRICULTURAL USERS/IRRIGATORS (A/I) – 2 existing; 1 proposed

RURAL RESIDENTS (RR) – 5 existing; 8 proposed

BUSINESSES (B) – 7 existing; 11 proposed

URBAN RESIDENTS (U) – 7 existing;11 proposed

  ALL USERS (A); INDUSTRIAL (I); WATER PROVIDERS (WP); AGRICULTURAL USERS/IRRIGATORS (A/I), RURAL RESIDENTS (RR); BUSINESSES (B); AND URBAN RESIDENTS (U)

| **T**able 1. States, objectives, and actions to address key water issues in the Mid-Coast region of Oregon.  |
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| **States**  | **Objectives**  | **Actions Discussed by Partnership To Date** | **Potential Actions to Consider/Incorporate** |
| Inadequate promotion of information and comprehensive outreach on water conservation. Lack of adequate use and implementation of available information. | 1. Promote tools and information for water conservation.
2. Develop a culture of water conservation.
 | 1. Create a culture of water conservation by promoting water conservation opportunities and need, water rights and their management, the water cycle in the coastal region, how water moves through Mid-Coast watersheds, and how water is used, at local events, incorporating water conservation messaging in the MCWPP website and the websites of regional partners and entities, in news articles, in water bills, and via social media (A)
2. Develop a water-wise landscaping guide for the Mid-Coast (RR, B, U).
3. Inform property owners about self-assessment tools and information to monitor water use and reduce water usage (OHA/OWRD/DEQ/OSU/EnergyStar/ OWEB/SWCDs/watershed councils) (A/I, RR, B, U).
4. Develop drought declaration and audience-specific water conservation and curtailment messages (A).
 | 1. School education programs (K-12) (RR, B, U).  2. Conservation kit give-aways (RR, B, U). 3. Seminars, trainings, classes, and demonstrations in coordination with Oregon Coast Community College Community Education and Small Business Development Center (A). 4. Develop a Water Conservation Public Awareness Program, or social marketing campaign, aimed at changing behaviors of highest priority water users (A). 5. Work with NRCS to develop a Conservation Implementation Strategy to cost-share with agricultural irrigators on irrigation system improvements, pursuing incentives and support for irrigators that want to increase efficiencies (I).6. Promote the United Nations 17 Sustainable Development Goals as a means to educate and inform people of the interdependence of economy, ecology and society as it relates to water use (https://sdgs.un.org/goals).7. Require hospitality sector to meet sustainable development targets In water use and conservation. |
| Insufficient planning for water conservation and curtailment.  | 1. Expand water conservation planning programs and initiatives.
 | 1. Develop and update water conservation plans for Mid-Coast regional industrial direct water systems (I).
2. Coordinate water curtailment plans for Mid-Coast water providers (A).
3. Develop water conservation programs for businesses, rental management companies, the lodging industry, and other businesses throughout the region (B, U).
 | 1. Support existing Water Conservation Consortium by helping municipalities update and implement actions identified in their Water Conservation and Management Plans (A). 2. Conduct annual, and if possible, monthly water audits (e.g., a “report card” on bills showing account’s use relative to average use, outliers [positive and neutral messages only]) to assess input-output efficiency of municipal systems (WP). 3. Implement advanced metering infrastructure, and expand real-time streamflow monitoring to accurately assess supply source water and enable faster identification of leaks and shortages(A). 4. Create training opportunities and support for water managers (i.e., water workforce development) (WP).5. Evaluate rate structure for water consumption (A). 6. Encourage municipalities to become a partner of the WaterSense® program to promote water conservation and leverage resources (A). 7.Through local ordinance or rule making, require municipalities and small system water providers to meet industry standards for unaccountable water loss (e.g <10%), then reduce that percentage year after year (e.g., <5%), demonstrating leadership in Oregon.8. Fund through 5-year levy, water rates or similar means, a water efficiency program at 1 X to 3X the capital and operations cost of what large infrastructure improvements for increased supply might cost (e.g., if a dam or desalination plant cost $100 million, then invest $100 to $300 million in replacing toilets, shower heads, other means of reducing the need). |

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| The Need for Water Conservation and Re-use[[1]](#footnote-1), [[2]](#footnote-2) | 1. Effectively use limited water supplies, especially during times of water shortage.
2. Reduce water use.
 | 1. Develop voluntary incentives for water conservation (A).
 | 1. Consider [water pricing strategies](https://www.epa.gov/sustainable-water-infrastructure/pricing-and-affordability-water-services) to stimulate conservation and raise revenue (I, WP). 2. Fund a water efficiency program (A). |
| Minimal re-use of gray water | 1. Reuse light gray water (from bathroom sinks, showers, tubs, and clothes washing machines) using tier one or two systems and dark gray water (from non-laundry utility sinks, kitchen sinks, and dishwashers) using safe and approved treatments (RR, B, U).
 | 3. Use recycled and gray water to irrigate landscapes (RR, B, U).  |
| Minimal rainwater harvesting | 1. Employ methods of harvesting and storing rainwater by capturing surface runoff and rooftop runoff (RR, B, U, A/I).
 | 4. Explore the regulatory mechanisms associated with drainage through land use and building codes to facilitate use of rain and gray water for property owners (RR, B, U). |
| Minimal conservation of water in-home/out-of-home  | 1. Locate grant sources for low-flow toilets, landscaping, and other strategies landowners can use to conserve water at the home (RR, B, U).
 | 5. Reduce water use in landscapes by installing xeriscapes and smart landscape irrigation (Mid-Coast Smartscapes) (RR, B, U).  6. Adopt a recycled water use ordinance (A). 7. Coordinate with NRCS to create a fund and initiate water conservation incentives – offering rebates for cisterns and rain gutter improvements, toilet replacements, smart controllers, xeric landscaping, more efficient sprinkler systems (See “[It Pays to Save](https://utahwatersavers.com/).”) (A). 8. Pass a Water Efficient Landscaping Ordinance (RR, B, U).  |
| Minimal conservation of water in commercial and municipal facilities and hospitality industry | 1. Obtain commitments from the hospitality industry in the Mid-Coast to not serve water at restaurants unless people ask, and to give lodging guests the option to not supply fresh linens daily (B, U).
2. Explore water savings opportunities at commercial facilities by implementing shut-offs for water hoses when they are not in use (I).
3. Conduct water audits of commercial users (I).
 | 9. Install water efficient devices in municipal buildings (WP, B, U). 10. Reduce water use in landscapes by installing xeriscapes and smart landscape irrigation (Mid-Coast Smartscapes) (RR, B, U).  11. Install dual plumbing in new facilities (WP, B, U). 12. Irrigate during off-peak times (e.g., night) to minimize evaporation losses (A/I, RR, B, U). 13. Explore innovative techniques and/or research to recycle and reuse water for processing (e.g., seafood, wood products, etc.) by piloting this approach with a county user, seeking funding and technical assistance to implement at a reduced scale initially (A).14. Contact WaterReuse|Promoting Sustainable Water Sources (<https://watereuse.org/>) and Clean Water Services in Tualatin/Tigard (<https://www.cleanwaterservices.org/>) for developed methods of reusing treated sewage plant water for potable and industrial uses (I, WP, B, U). 15. Pursue incentives/cost-share/education opportunities that address multiple challenges facing highest water users while increasing water conservation, such as 1) upgrading pumps to improve energy and water use efficiency, and 2) upgrading technology or modifying processing practices to use less water (A, I, WP). 16. Develop water security/conservation audit/assessments for industrial users (I).17. Consider [water pricing strategies](https://www.epa.gov/sustainable-water-infrastructure/pricing-and-affordability-water-services) to stimulate conservation and raise revenue (I, WP).  |

**Concepts that will move to other discussions:**

* Promote restoration actions that increase natural storage (moved to ecosystem protection) (A).
* Consider opportunities to desalinate water in the Mid-Coast region to supplement existing water supplies and provide for emergency water sources (A).
* Use OSU Engineering and Research on desalinization and wave energy to seek alternative water source-conserving streams with anadromous fish runs (A).
* Seek federal research funding for desalinization for region (A).
* Support increased real-time streamflow monitoring/gauging to enable innovative demand-reduction actions during periods of critical ecological need.
1. Note: Water runoff capture under certain methods and times of year will require permitting through OWRD. Gray water permits are through DEQ. [↑](#footnote-ref-1)
2. <https://www.oregon.gov/deq/wq/programs/Pages/Water-Reuse.aspx> [↑](#footnote-ref-2)