

Imperative	Action #	Bundle	Action Description	Short Action Description	Priority Group	Projects?	Entities Implementing Actions	Entities Identified As a Lead or Participant in the Action Plan?	Lead Entities Identified in Action Plan - Not Implementing Action	Lead and Participant Entities Identified in Action Plan - Unknown if Implementing Action
1	1a	1: Water conservation outreach	Promote water conservation at local events, on the Mid-Coast Water Planning Partnership website and the websites of regional partners and entities, in news articles, in water bills, via social media, and through outreach materials to businesses, particularly in the hospitality industry.	Conservation outreach	A	Y	Water providers/MCWCC	Yes		Lincoln County Board of Commissioners; OWRD, universities
1	1b	1: Water conservation outreach	Develop drought declaration and audience-specific (e.g., self-supplied industrial water users) water conservation and curtailment messages.	Drought/curtailment messaging	A	Y	Water providers/MCWCC	Yes		Lincoln County Board of Commissioners; OWRD, universities
1	1c	N/A	Coordinate watershed and water system tours to increase awareness and understanding of regional and local water issues.	Watershed/system tours	C	Y				
1	1d	N/A	Develop a regional initiative/training to improve coordination and provide education to water providers on infrastructure financing and funding.	Infrastructure finance training	C	N				
1	1e	N/A	Provide an internship program, hands-on training, and certification training for water technicians, which includes technician training on updating and implementing water management.	Water technician internship	C	N				
1	1f	1: Water conservation outreach	Identify or develop curriculum and materials/information for students and the public (community education) about their water sources, water management, and water conservation.	Conservation education (school curriculum/community education)	A	Y	Protect Oregon Watersheds (At Oregon Coast Community College), MCWCC, ODFW (STEP), OWRD, DEQ, Lincoln County	Yes - MCWCC and OWRD identified as leads. No - Protect Oregon Watersheds and STEP not identified in Plan at all, ODFW and DEQ not identified under this action.	Oregon Coast Aquarium	
1	1g	2: Water quality outreach	Conduct outreach to encourage implementation of voluntary, incentive-based actions throughout the region, consistent with existing plans, such as the Mid-Coast Agricultural Water Quality Management Area Plan.	Water quality outreach	A	Y	Lincoln SWCD, MCWCC, MCWC, OSU Extension, NRCS (USDA)	Yes	OWRD	
1	1h	2: Water quality outreach	Inform self-supplied and public water users and residents and businesses within public water supply areas about water supplies and water protection measures, including proper well construction and maintenance, septic system maintenance, and proper use of landscape and other chemicals.	Water quality outreach	A	Y	OSU Extension	Yes		
1	1i	2: Water quality outreach	Work with partners and agencies (e.g., Oregon State University Extension Service) to deliver information on safe pesticide application practices and vegetation management practices that reduce or eliminate pesticide use. Provide outreach on water quality impacts of pesticides and fertilizers associated with lawn management near streams and ponds. Share methods that reduce impacts and identify alternatives.	Pesticide outreach	B	N				
1	1j	2: Water quality outreach	Conduct education in source water areas (including to those that may not be customers of the water provider) about drinking water sources, risks, choices, and strategies.	Source water outreach	A	Y	Water providers/MCWCC	Yes	Oregon Coast Aquarium	
1	1k	N/A	Connect private landowners with resources and information about best management practices to improve water quality and quantity.	Best management practice outreach	B	Y				
2	2	10: Water supply planning/development	Support the creation of a feasible 50-year county-wide water supply plan. Incorporate regionally integrated plans that improve water system resiliency and adequately plan for future water supply development in the face of natural and human-caused disasters.	Regional water supply plan	A	Y	Water providers/MCWCC, CTSI, Lincoln County, LCWSA, EPA (participant), OSU, Water Watch	Yes - Lincoln County, LCWSA & water providers are leads. No - CTSI and OSU not identified under this action. Water Watch not identified in Plan at all.	OWRD may be a partner/technical assistance resource but not a lead	(Leads): OHA, Regional Solutions; (Participants): Rural Community Assistance Corporation
2	3	N/A	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.	Prioritize and fund projects	B	Y				
2	4	1: Water conservation outreach	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.	MC Water Conservation Consortium	A	Y	MCWCC, LCWSA	Yes		
2	5	10: Water supply planning/development	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.	GI and LID	A	M	DLCD (has a Green Infrastructure Grant Program, doesn't implement on-the-ground projects)		ODF, ODFW	(Leads): County planners, municipal planning departments; (Participants): USFS, DEQ
2	6	N/A	Develop and update water management and conservation plans for the Mid-Coast regional municipal and self-supplied direct water systems.	WMCPs	C	Y				
2	7	N/A	Coordinate water curtailment plans among water providers.	Coordinate curtailment plans	B	N				
2	8	N/A	Encourage municipalities to update/complete required stormwater management control plans to incorporate GI/LID practices, using statewide LID technical design guide, and update codes and ordinances that are barriers to implementing these practices. Assist smaller communities, that are not currently required, in voluntarily developing similar stormwater management plans and technical design guides.	Stormwater management plans	C	N				
2	9	N/A	Advocate for Emergency Response Plans (required for public water systems) address water system needs and specific vulnerabilities and are interconnected to create a regional network during emergency situations.	Emergency Response Plans	C	Y				

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2	10	10: Water supply planning/development	Collaborate with emergency operations planners to identify highest priority water needs and develop alternative systems and plans. Identify opportunities and access for shared water available for addressing emergency interconnections.	Emergency Response Plans (Updates to Natural Hazard Mitigation Plan)	A	M	Lincoln County, water providers (need more information), DLCD (does natural hazard planning with local jurisdictions)			
2	11	N/A	Support the development of tiered communication trees to address: a) typical support needs b) response to localized emergencies affecting one or multiple Public Water Systems; and c) Cascadia Subduction Zone quake, volcanic eruption, regional wildfire. Provide communication alternatives for inoperable phone/internet (HAM resources; meeting locations and days/times).	Communication trees	C	N				
2	12	3: Source water protection	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.	DWPPs	A	Y	Water providers, DEQ, OHA	Yes		Lincoln County
2	13	3: Source water protection	Create a Source Water Protection Plan, or multiple source-specific plans, to reduce, or minimize contaminants from entering source waters. Advocate for funding to support the development and implementation of these plans.	DWPPs	A	Y	Water providers, DEQ, OHA	Yes		Lincoln County
3	14	N/A	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.	Upgrade meters	B	Y				
3	15	N/A	Recommend installation and use of flow meters to gain a more accurate estimate of water use in the region.	Flow meters on diversions	B	N				
3	16	4: Water quality monitoring	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.	Stream gages & streamflow monitoring	A	Y	Water providers	Yes	OWRD has funding but is not a lead	(Leads): USGS, OWEB, Lincoln County, watershed councils; (Participant): ODFW
3	17	4: Water quality monitoring	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 (HABs). 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.	Water quality monitoring	A	Y	MCWC, Wild Salmon Center, Lincoln SWCD, CTSI, ODFW, OHA, ODA, Water providers/MCWCC, Lincoln County, DEQ, Oregon Coast Aquarium	Yes - all identified as leads. No - Wild Salmon Center, CTSI, & Oregon Coast Aquarium not leads under this action.	OWRD (not water quality), LCWSA	USFS
3	18	4: Water quality monitoring	Conduct comprehensive and ongoing water testing, and use results to guide best management practice implementation, restoration, etc. to address water quality impairments.	Water quality testing	A	Y	Lincoln SWCD, DEQ, OHA			USFS, Lincoln County
3	19	4: Water quality monitoring	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.	Volunteers for monitoring	A	M	Lincoln SWCD		OWRD (not water quality)	(Lead): Lincoln County; (Participants): MCWCC, SWCD, DEQ, ODFW, OWEB, USFS
3	20	N/A	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.	Self-supplied water database	C	N				
3	21	N/A	Develop a water monitoring database for data entry and access by multiple entities.	Water monitoring database	C	N				
4	22	9: 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.	Water reuse	A	Y	OWRD, DEQ, Lincoln County	Yes - OWRD, DEQ, Lincoln County all leads.		(Leads): OHA, water providers; (Participants): Homeowners & businesses, ODFW & other state agencies
4	23	N/A	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.	Water reuse outreach	B	N				
4	24	N/A	a) Incentivize commercial and industrial facilities to conduct water audits, identifying water loss and implementing conservation, recycling, and re-use strategies and technologies. b) Evaluate and potentially revise water pricing strategies commensurate with actual delivery costs as well as other strategies to stimulate water conservation and re-use while raising revenue for water conservation investments (e.g., improved efficiency at commercial facilities).	Comm/industrial water audits Conservation rate study	B	N				
4	25	N/A	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.	NRCS Conservation Impl Strategy	C	N				
4	26	N/A	Identify and develop voluntary incentives for water conservation.	Conservation incentives	B	Y				

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4	27/43	N/A	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.	Economic Assessment Model	C	Y	LCWSA			
5	28	8:Meters	Support upgrading and maintaining water metering system infrastructure, where possible. Note: Automated read systems (not SMART) can be installed at reduced cost.	Upgrade meters	A	Y	Water providers/MCWCC	Yes		
5	29	N/A	Use the latest technologies (e.g., In system monitoring and controls, pumping efficiency, automating, and controlling potential zone isolations) available when retrofitting, or replacing, water infrastructure.	Latest technology in infrastructure	C	Y				
5	30	N/A	Address distribution system failures by installing earthquake valves in water tanks to retain water even if distribution system fails.	Earthquake valves	C	N				
5	31	10: Water supply planning/development	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.	Storage feasibility studies	A	M	Water providers	No - water providers not a lead under this action.	MCWC	Participants): USGS, state & federal agencies
5	32	N/A	Support the expansion of the state-supported revolving fund (including developing a new fund for self-suppliers) to accelerate water infrastructure improvements. Improve access to funding by enhancing coordination and collaboration with communities).	Support infrastructure funding	C	N				
5	33	N/A	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.	Identify infrastructure funding	B	N				
5	34	N/A	Establish a community revolving loan program for infrastructure improvements for septic systems.	Septic systems	C	N				
6	35	3: Source water protection	Identify, fund, and implement high-priority regional source water protection activities.	Identify/implement source protection	A	M	NRCS (need more info), DLCD (has funding programs)	No - NRCS not a lead under this action.	DEQ may have funding, depending on the project	Water providers
6	36	N/A	Support the reduction of nutrient, turbidity, and bacteria inputs and emerging contaminants of concern (e.g., PFAS, PFOA, PFOS, pharmaceuticals, etc.) to source water from all sectors using the latest technology.	Source contamination prevention	B	N				
6	37	N/A	Enhance contamination prevention measures for reservoirs, surface water intakes, springs, and/or wellheads.	Source contamination prevention	C	N				
6	38	N/A	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).	Harmful algal blooms	B	N				
6	39	N/A	Advocate for integrated pest management (e.g., minimize aerial spraying in watersheds adjacent to source water; promote hand clearing in riparian zones (versus hand spraying); support notification of all water treatment facilities when and where spraying will occur), as well as notification of downstream water users who are not on municipal water systems and rely on source water for domestic use.	Pesticide reduction	B	Y				
6	40	3: Source water protection	Furthering a working lands concept, advocate for incentives, and other strategies, that promote silvicultural practices that support restoration of watershed ecological function and protect drinking water source areas.	Silvicultural practices that support source water area protection	A	Y	BLM, ODF			USFS
6	41	5: Protect critical lands	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.	Protect critical lands	A	Y	Water providers, McKenzie River Trust, Wetlands Conservancy	Yes - McKenzie River Trust a lead & water providers a participant under this action.	MCWC	(Leads): The Nature Conservancy
7	42	10: Water supply planning/development	Seek additional and alternative sources of water for development in the region.	Identify new water sources	A	Y	Water providers/MCWCC, CTSI, Lincoln County, LCWSA, OSU, Water Watch	Yes - Lincoln County & LCWSA leads, MCWCC a participant. No - CTSI and OSU not identified under this action. Water Watch not identified in Plan at all.	DLCD, OWRD (may provide technical assistance but not a lead)	
7	27/43	N/A	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.	Economic Assessment Model	C	Y	LCWSA			

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8	44	6: Ecological restoration	Support restoration projects that involve diverse landowners and land management goals in locations that will achieve the greatest ecological returns on investment (e.g., cooler streams and improved summertime flows for sensitive species and to address water quality impairments).	Ecological restoration	A	Y	Lincoln SWCD, MCWC, DEQ, ODFW, BLM, CTSI, USFS, landowners, ODF, LCWSA, OHA, The Nature Conservancy, Wild Salmon Center, Water providers/MCWCC, USFWS	Yes - MCWC, USFS, BLM leads under this action. ODFW, DEQ, CTSI (Tribal nations), landowners are participants. Yes - ODF identified as a lead, but acts more in a participant role with a focus on rule compliance. No - LCWSA, OHA, The Nature Conservancy, Wild Salmon Center, Water providers not identified under this action. USFWS not identified in plan at all.		Participants): Salmon Safe, volunteers, Lincoln County Dept. Community Development, NOAA Fisheries, USGS, OWEB
8	45	N/A	Use established methods (e.g., field assessment, remote sensing, and physical models, such as Heat Source) and local knowledge to prioritize stream reaches for riparian buffer restoration projects. Increase wooded buffer zones on priority streams.	Riparian buffers	B	Y				
8	46	6: Ecological restoration	Advocate for the restoration and conservation of native riparian vegetation to facilitate large natural wood recruitment, maintain water quality, ensure ecological function, and produce habitat for aquatic species, including beavers.	Riparian restoration	A	Y	MCWC, ODFW, USFS, BLM, Lincoln SWCD, landowners, ODA, ODF, USFWS, The Nature Conservancy	Yes - MCWC listed as a lead, ODFW, USFS, Lincoln SWCD, landowners listed as participants. Yes - ODF and ODA identified as leads, but both act more in a participant role with a focus on rule compliance. No - The Nature Conservancy not listed under this action, USFWS not identified in Plan at all.		(Lead): DEQ; (Participants): USFS, Lincoln County, Tribal nations
8	47	N/A	Implement more erosion control practices.	Erosion control	B	N				
8	48	N/A	Evaluate anthropogenic sources of fine sediment from all land uses, including mass wasting and unsurfaced roads. Seek funding opportunities to reduce shallow landslide risk and other sediment delivery hazards (e.g., undersized culverts, outdated road maintenance, legacy roads) and perform road upgrades, repair, and decommissioning.	Erosion control	B	N				
8	49	6: Ecological restoration	Protect beaver populations and encourage beaver pond creation, especially in critical areas with low summer flows.	Beavers	A	Y	MCWC, ODFW, USFS, BLM, landowners, ODF, ODA, Lincoln SWCD, NOAA, Pacific States Marine Fisheries, USFWS, The Nature Conservancy	Yes - MCWC, ODFW, USFS, BLM are leads. ODA is a participant. Yes - ODF and ODA identified as participants, but both act more in a participant role with a focus on rule compliance. No - these are not listed under this action. USFWS and Pacific States Marine Fisheries are not in plan at all.		(Participant): Lincoln County
8	50	6: Ecological restoration	Design and implement restoration projects with partners to directly address impairments and improve conditions (e.g., erosion prevention and control, riparian and wetland buffers, urban tree protection).	Ecological restoration	A	Y	ODFW, MCWC, USFS, BLM, Lincoln SWCD, ODF, ODA, CTSI, landowners, The Nature Conservancy, Wild Salmon Center	Yes - MCWC, USFS, BLM, Lincoln SWCD listed as leads. Yes - ODF and ODA identified as participants, but both act more in a participant role with a focus on rule compliance. No - CTSI, landowners, The Nature Conservancy, Wild Salmon Center not listed under this action.		(Participants): DEQ, OSU Extension, OWEB, water providers
8	51	6: Ecological restoration	Evaluate the mechanisms and conditions for restoring hyporheic flows (the transport of surface water through sediments in flow paths that return to surface water) in the Mid-Coast using a suite of strategies (articulated in the Oregon Plan and other plans).	Restore hyporheic flows	A	Y	MCWC, ODFW, BLM, Wild Salmon Center	Yes - MCWC and BLM are leads, ODFW is a participant. No - Wild Salmon Center not listed under this action.		(Leads): USFS; (Participants): DEQ, USGS, Tribal nations
8	52	N/A	Recommend limits on further appropriation of water on high priority streams where water is not available for meeting aquatic life needs.	Water appropriation limits	B	Y				
8	53	6: Ecological restoration	Support projects that result in increased water retention capacity in channels, floodplains, and adjacent uplands and wetlands using a variety of strategies.	Water retention capacity	A	Y	MCWC, BLM, ODA (funding), DSL (participates on permitting side), Lincoln SWCD	Yes - both are leads		(Leads): USFS, local planners; (Participants): ODFW, DEQ, ODF, OWRD, USGS, Tribal nations
8	54	7: Instream flow restoration	Determine ecological flows (seasonally varying flow targets and temperature-based flow targets), and identify basin-wide in-stream demands. Support development of additional instream water rights. Implement flow restoration efforts in high priority areas as determined by Instream Water Right Monitoring and other means (e.g., ODFW's Aquatic Habitat Prioritization).	Instream demand, ISWRs, flow restoration, habitat prioritization	A	Y	ODFW, MCWC, Wild Salmon Center (applying for project funding)	Yes - ODFW a lead, MCWC a participant. No - Wild Salmon Center not listed under this action.	DSL, Salmon-Drift Creek Watershed Council (merged with MCWC)	(Leads): DEQ, OWRD, OPRD; (Participants): local planners
8	55	7: Instream flow restoration	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.	Instream transfers/leases	A	M	MCWC (is interested), Wild Salmon Center (doing policy work related to instream water rights) Action needs more support	Yes - ODFW & MCWC identified as participants. No - Wild Salmon Center not listed under this action.	DSL, ODFW (doesn't convert existing water rights to instream, only applies for instream water rights), OWRD (processes applications but is not a lead)	(Leads): DEQ, OPRD, water providers; (Participants): OWRD, OWEB

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8	56	N/A	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.	Invasive species	B	Y				
8	57	N/A	Advocate for implementation of the Lincoln County Multi-Jurisdictional Natural Hazard Mitigation Plan, especially as it relates to wildfire mitigation in the Mid-Coast.	Wildfire mitigation	C	N				
8	58	5: Protect critical lands	Acquire land, or obtain conservation easements, to protect critical land areas managed for water quality protection.	Protect critical lands	A	Y	Water providers, McKenzie River Trust, Wetlands Conservancy	Yes - McKenzie River Trust a lead & water providers a participant under this action.	BLM, MCWC	(Leads): Lincoln County, USFS, watershed councils, NGOs, NRSC, corporations; (Participants): landowners, OWEB
8	59	N/A	Support and advocate for the compilation of a hierarchy of necessary spatial analyses and modeling to determine which conservation strategies, and locations on the landscape, will result in the greatest environmental returns on investment (ROI) (e.g., ecological function) and achieve the highest priorities in existing species recovery plans (e.g., improving winter and summer rearing habitats). Advocate for implementation of strategies in federal Coho recovery plan and Oregon coast Coho Conservation Plan (OWEB FIP Framework).	Spatial analysis prioritize restoration	A	N	Organizations are interested in participating in action but not leading it: EPA, MCWC, OWRD, ODFW, Wild Salmon Center (applying for project funding)	Yes - MCWC a lead, ODFW & EPA listed as participants No - Wild Salmon Center not listed under this action		(Leads): OWEB, DEQ, USFS, Lincoln County; (Participants): USGS, Tribal Nations, NGOs, OWEB