

Linn County Environmental Health

Pollutant: Bacteria							
Source	Management Strategy	Implementation Measures	Implementation Resources	Progress Measures	Timeline	Milestone	Status
Failing septic systems	Ensure repair of failing systems.	Respond to reports of failing systems; Work with homeowner to set a timeline for repair; Use existing enforcement methods to gain compliance	Currently funded in budget	Track #s using complaint and permit databases	Ongoing	N/A	
	-Low cost loan program for septic system and household repairs implemented by DevNW -Additional loan program for septic system repairs operated by Craft3 in partnership with DEQ	Provide information to homeowners about the programs	Currently funded via grant funds through DevNW and Craft3	Obtain data from DevNW and Craft3 to track the number of systems repaired using this program	Ongoing	N/A	
	Educate homeowners about system maintenance and how to detect failures.	Provide written material with CSC	Printing costs	Track #s mailed	Ongoing, updating materials as needed	N/A	
		Provide information on septic system maintenance on our website	Staff time to create materials and update website	Track website view metrics			
	Ensure that selected residential and commercial systems are properly maintained.	Provide annual inspection or certification review for holding tanks, ATTs, sand and gravel filters, and low pressure distribution systems.	Currently funded in budget	Track inspections, certification reviews and compliance actions in database	Ongoing	N/A	
Identify legacy septic systems (those which predate permit records) within urban grown boundaries and rural community centers. Work with Cities on those systems which will require connection to City services	As reports of failing systems are received, work with the City to determine the location of services and the ability to connect.	Currently funded in budget	Track number of systems connected to City services each year	Ongoing	N/A		
Unidentified non-point sources	Participate in collaborative efforts with DEQ, ODA, cities, and allied agencies to respond to complaints, including unidentified non-point sources of bacterial contaminants	Respond to citizen complaints. Contact agencies with shared jurisdiction and coordinate response.	Not currently funded in budget; larger projects may require grant funding	Track complaints received, follow-up actions and enforcement	Ongoing as complaints are received	N/A	

Pollutant: Mercury							
Source	Management Strategy	Implementation Measures	Implementation Resources	Progress Measures	Timeline	Milestone	Status
Household Hazardous Waste (HHW) and Conditionally Exempt Small Quantity Generations (CESQGs)	HHW collection events provided by Solid Waste franchises in accordance with their franchise application and agreement.	Continue to work with solid waste franchise to provide HHW collection events.	DEQ solid waste grants, current budget, and rate base	Review amounts of material recovered as provided by the Oregon Material Recovery Survey	Ongoing	Franchise agreements are reviewed on an annual basis to determine compliance	

Linn County Parks and Recreation

Pollutant: Bacteria							
Source	Management Strategy	Implementation Measures	Implementation Resources	Progress Measures	Timeline	Milestone	Status
Public Parks	· Monitor on-site waste water system in all public facilities	· Annual inspection & reporting of system status	· Existing budget	· Compliance with allowable waste strength limits through annual testing	Ongoing	Current, annual reporting to DEQ under WPCF permits. Confirm completion of annual requirements.	We are adding additional tankage to the River Bend system in the 2020. We will add additional tankage at Sunnyside by 2025.
	Limit and control pet waste	· In parks with high visitation we have constructed pet-off leash areas where pet waste can be easily cleaned up. · Educate public through signage about cleaning up after pets.	Existing budget	Staff will monitor and confirm the refill pet waste bags weekly or as needed. Confirm annually that pet waste signs are still in place.	Ongoing- Staff will confirm the ongoing cleanup of pet waste.	Staff confirmation that pet waste is not a significant sanitary issue in the Parks.	
	Reduce human waste entering water ways	Provide floating restrooms on water ways and pump out stations at boat ramps	We receive annual funding from the Oregon State Marine Board	Confirm maintenance of floating restrooms in high use areas. Use door counter to confirm the amount of public use.	Ongoing; annual use is reported to the Oregon State Marine Board	Ongoing. This information is reported annually to the Oregon State Marine Board. Confirm report to OSMB.	
	Decrease angling waste entering waterways	Empty Fishing line recycling tubes, replace as necessary	Existing budget and grants, volunteers and agency partnering	Replace and maintain cleaning stations, and receptacles for recycling fish line. add 5 new fishing line tubes in the next 5 years	Ongoing; annual review. Add 5 stations between 2020 and 2025	Sign in all park facilities. Add 5 stations between 2020 and 2025	
	Maintain Public Restrooms in Park Areas	Maintain rest areas with restrooms	Existing Budget	Track and document that restrooms are adequately maintained	Ongoing; annual review	Ongoing	
	Provide Porta-potties in parks that do not have permanent restrooms	Rent porta-potty from local company for parks that do not have Restrooms	Existing Budget	Confirm porta potties are located at necessary facilities.	Ongoing; annual review	Have year round sanitary facilities at all Linn County parks.	
	Provide Porta potties in parks during special events	Require Parks Special Use Permits for private parties holding special events to provide porta potties	Existing Budget	Require port a potties (1/50 participants) The 1/50 is a new standard for implementation	Add language requiring 1 potty per 50 people to all special use permits in 2020.	Confirm Special event porta potty policy has been implemented	

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Source	Management Strategy	Implementation Measures	Implementation Resources	Progress Measures	Timeline	Milestone	Status
Public Facility Construction	Use BMP's to limit runoff contaminates	Where appropriate use silt fences, hay bales, and other silt containment devices.	Existing budget	Confirm proper implementation of BMPs; monitor storm water and runoff during construction for turbidity	Ongoing	Ongoing	
		Provide training to county staff on proper BMP implementation		Track and document that staff are trained on implementation of BMPs		Annual Training	
Cars/Mass Transportation	Promote carpooling, public transportation as a strategy to reduce mercury	Collect extra vehicle fees at all campgrounds	Funded from fees collected	Limit the amount of extra vehicles in campgrounds. Confirm staff is limiting the extra vehicle parking	Ongoing; annual review	Ongoing.	

Linn County Parks and Recreation

Pollutant: Temperature							
Source	Management Strategy	Implementation Measures	Implementation Resources	Progress Measures	Timeline	Milestone	Status
Public Facility Design	Design Facilities to limit impacts on water ways	<ul style="list-style-type: none"> · Provide adequate buffer areas to water ways. · Slope facilities to avoid direct unfiltered runoff. · Utilize available technologies such porous asphalt and concrete. 	Grants	Covered under requirements by State and Planning and building requirements.	Ongoing/New construction and renovations	Meet or exceed permit requirements.	
Fertilizer and pesticides	Reduce dependency on fertilizers and pesticides in landscape areas	<ul style="list-style-type: none"> · Limit application of fertilizers and pesticides. · Use alternative forms of weed control such as mechanical removal. 	Existing budget and grants	Decrease the amount of fertilizer and pesticides applied annually	Ongoing Annual monitoring of purchases and applications.	Confirm documentation of the amount of pesticides used. Eliminate or decreased use of pesticides	

Linn County Planning and Building

Pollutant: Bacteria							
Source	Management Strategy	Implementation Measures	Implementation Resources	Progress Measures	Timeline	Milestone	Status
Stormwater from Residential, Commercial, and Industrial Development	Collect and treat stormwater with infiltration, filtration, and detention on-site	Require 1200C Permits for development disturbing one acre or more.	Existing budgets and development permit review.	For qualifying projects, verify a 1200C permit is obtained prior to the issuance of development permits.	Ongoing	N/A	
		Require Geotechnical Engineering Report identifying site stabilization measures for development within geohazard areas.	Existing budgets and development permit review.	Review geotechnical engineering reports as required; Include site stabilization measure in building permit requirements.	Ongoing	N/A	
		Limit development and ensure compliance with development standards within the Willamette River Greenway and Aggregate Resource Overlays.	Existing budgets and development permit review.	Review land use and building permit applications for Code compliance; Include permit conditions as needed.	Ongoing	N/A	
	Collect and treat stormwater with infiltration, filtration, and detention on-site continued	Provide erosion control and stormwater BMP training to County building inspection staff.	Existing training budget.	Obtain and provide EPA and DEQ BMP publications. Conduct field training.	Ongoing	N/A	
		Provide erosion control and stormwater BMP education to contractors and the public.	Existing personnel and materials and services budgets	Develop handouts and provide erosion control and stormwater BMP informational materials to contractors and the public.	Ongoing	Educational materials provided during permitting process and online	
		Publish erosion control and stormwater BMP information on County website.	Existing personnel and materials and services budgets	Development and publication of educational material; Development of erosion control and prevention web page.	Years 1-2: Develop and publish educational material; provide educational handouts with development permits and to the public; post the Current TMDL Plan, educational material, and related external links on County web site. Years 1-5: Review handouts and web page annually to ensure educational material and links are up-to-date.	Publication of development material; Development and maintenance of County erosion control and prevention web page.	
	Ensure Comprehensive Plan and Land Development Codes are consistent with State and Federal stormwater regulations.	Amend Plan and Land Development Codes as needed.	Not funded	Monitor adoption of new State stormwater regulations.	Ongoing	County adopted Title V requiring compliance with state and federal regulations; Road Department BMP's included in Land Development Code Chapter 935.	
	Ensure that all permitted development is properly connected to an approved method of sewage disposal as needed.	Coordinate development permit sign-off with EHP/DEQ agent; withhold certificate of occupancy until verification of EHP/DEQ compliance.	Existing budgets and development permit review.	Plumbing permits issued	Ongoing; annual review	N/A	

Linn County Planning and Building

Pollutant: Mercury							
Source	Management Strategy	Implementation Measures	Implementation Resources	Progress Measures	Timeline	Milestone	Status
Erosion from residential, commercial and industrial development	Limit erosion and mitigate the impacts of land disturbance on water quality.	Limit land disturbance activities; implement the Linn County Fill and Excavation Code; monitor 1200C permitting; use BMPs for fill and excavation activities.	Existing budgets and development permit review.	Require fill and excavation permits pursuant to Linn County Code; report numbers of fill and excavation permits issued; refer developments disturbing one acre or more to DEQ to ensure compliance with 1200C requirements.	Ongoing; annual review	N/A	

Pollutant: Temperature							
Source	Management Strategy	Implementation Measures	Implementation Resources	Progress Measures	Timeline	Milestone	Status
Solar radiation input due to loss of riparian shading	Protect riparian and wetland areas and buffers from vegetation loss.	Implement Comprehensive Plan and Land Development Code provisions for riparian and wetland protection.	Existing budgets and development permit review.	Review land use and building permits for compliance with riparian and habitat protection requirements.	Ongoing	N/A	
		Support watershed councils on waterway improvement projects.	Existing budgets and development permit review.	Review proposed watershed improvement projects for compliance with the Comprehensive Plan and Land Development Code; Recommend measures and processes to achieve compliance as needed.	Ongoing	Review and issue Land Use Compatibility Permits and other County permits.	
Unidentified non-point sources	Protect natural drainage systems and limit surface water runoff.	Implement Comprehensive Plan, Floodplain Management Code, and Building Code provisions relating to drainage and surface water.	Existing budgets and development permit review.	Review land use and building permits to ensure compliance with the Floodplain Management Code; Building Codes relating to drainage course maintenance; grading permits; and fill and excavation permits.	Ongoing	Enforcement of Floodplain Management and Drainage Code requirements; Review and Issue Floodplain Permits and Grading Permits as Required.	

Linn County Roads

Pollutant: Bacteria							
Source	Management Strategy	Implementation Measures	Implementation Resources	Progress Measures	Timeline	Milestone	Status
Ditches and Storm Water Facilities	Water Complaints are directed to the Linn County Environmental Health Department	Linn County Health Department to respond and provide corrective action as necessary.	Linn County Environmental Health, Oregon Department of Agriculture, USDA, or ODEQ to be contacted if outside of Linn County Road Department Jurisdiction	Track and document Complaints received with follow up as required of condition.	Ongoing	Not Applicable	
Ditches and Storm Water Facilities Continued	Sources of bacteria from residential and domestic activities are under the jurisdiction of Linn County Environmental Health Department	Any sources of domestic waste contaminants along the roadside seen during road maintenance activities are reported to Linn County Environmental Health	Sources of Animal Waster Contaminates are reported to Oregon department of Agriculture	Progress followed by Linn County Environmental Health of Oregon Department of Agriculture	Ongoing	Not applicable	
Roadside Camping	Eliminate Roadside Camping in Quartzville Corridor	Addition of 3 roadside parking areas with Restrooms	Completion of project and implementation of Roadside Camping Ban in 2017	Roadside Camping Ban is enforced by Linn County Sheriff	Ongoing	Not applicable	
Illicit Discharges	Implement and enforce existing County Regulations through Environmental Health and Oregon Department of Agriculture since Bacteria are not associated with Roads Operations	County Employees educated through BMP and other resources.	Reporting and response procedure through Linn County Environmental Health, Sheriffs Department and other State Agencies	Ongoing	Ongoing	Ongoing	

Pollutant: Mercury							
Source	Management Strategy	Implementation Measures	Implementation Resources	Progress Measures	Timeline	Milestone	Status
Linn County Access and Driveway Permit Program	Driveway Access and Review Program Permit Applications are reviewed for sediment and erosion control	Following Established BMP Manual adopted by Road Department. BMPs are integrated into driveway and access permits issued by Road Department	Access and Driveway Permit Program Covered under Road Department Budget. Any disturbance of one area of more requires a DEQ 1200 C permit.	Project is inspected during construction and after completion of project to verify compliance with BMPs. Owner needs a 1200 C permit before obtaining Linn County Permit.	Ongoing since 2005	Ongoing	Ongoing
Completion of Road and Bridge Improvement Projects with Stormwater Collection and Treatment	Design and Construct Bridge and Road Improvements to provide Stormwater Collection and Treatment	Follow BMP Manual and ODEQ requirements for new construction. Linn County follows its DEQ 1200CA Permit.	Covered under Road Maintenance Budget and Capital Improvement Plan Budget. Linn County Road Department has a 1200CA permit	Erosion and Sediment Control Plans and Monitoring Reports are prepared and followed for bridge and road maintenance and improvement projects. Plans and reports are kept on file by Road Department.	Ongoing	Ongoing	Ongoing
Soils and Other Unknown	Determine sources of Mercury so as determine actual if any environmental and health concern	Obtain copy of monitoring and sampling of Linn County rivers from ODEQ. Obtain additional data by collection of samples for sediment and soils for road and bridge improvement projects to determine presence.	See Status for implementation method	Review of DEQ monitoring data and sampling of soils and sediments during the past two years indicate that Linn County is not a source of mercury for the Willamette River. Mercury sources are located south of Linn County.	Status Report to be provided by 2021.	Ongoing	Capital projects for road and bridge improvement projects provide a method to obtain background data on the presence or absence of mercury in soils and sediments during the past few years. This will continue with projects to be designed in 2020 to 2025. An interim report will be provided in 2021 as well as 2025 as to the actual presence of mercury in Linn County and impact if any on the Willamette River.

Linn County Roads

Pollutant: Temperature							
Source	Management Strategy	Implementation Measures	Implementation Resources	Progress Measures	Timeline	Milestone	Status
Streams Adjacent to County Roads -- <i>Note: Sources of Temperature are primarily from Agricultural Activities (irrigation and flow and stream side habitat) under the jurisdiction of the USDA and Oregon Department of Agriculture.</i>	Maintain vegetation and trees near streams and rivers when possible regarding road and bridge maintenance and improvement projects.	BMPs have been developed and integrated into Road Department operations and are ongoing which require compliance with local, state and federal regulations	Maintenance and Capital Improvement Plan Budget. Capital improvement projects with design under approval of Linn County Engineer. Development of roads and driveways on Private Lands under review and approval of County Engineer by a Permit Program since prior to 2005	BMPs have been developed and adopted and are ongoing. The Linn County BMP Plan is presently being updated in coordination with ODOTs BMP and also will include USDA BMP on gravel roads to be completed by 5/1/2202	Ongoing	Ongoing	Ongoing - See project completion status below
Riparian Preservation and Enhancement	Develop, design, fund and construct restorations	Partnerships with Watershed Councils, Soil and Water Conservation District, and Linn County Improvement Projects	Covered under County Engineering Program and Road Maintenance Budget and Capital Improvement Plan Budget	Actual Projects Completed. ~ 6 projects completed in 2010 to 2015. ~13 projects completed in 2016 to 2019	Complete funded projects in 2020 to 2025 period. Develop and obtain additional funding for improvements for 2022+	Ongoing	~ 10 projects are funded for construction in 2020 to 2025 that have a component related to riparian preservation and enhancement and stormwater management.
Riparian Preservation and Enhancement	Stormwater Conveyance Systems Map	Linn County GIS Ella Maps, one foot contour topography maps have been developed based on 2009 LIDAR, Aerial Maps and Google Maps.	Completed by Linn County GIS Department	Work is Complete	Work is complete	Ongoing program	N/A - *Explanation - The Current GIS Map can be used to show all drainage systems (ditches) roads and bridges and developments. A one foot contour map from LIDAR data is also used for design and evaluation of areas within Linn County on a case by case basis.
Riparian Preservation and Enhancement	Riparian Vegetation Inventory	Linn County GIS Ella Maps, Aerial Maps and Google Maps.	Completed by Linn County GIS Department	Work is Complete	Work is Complete	Ongoing program	N/A - *Explanation - Linn County GIS Department provides periodic aerial photography to provide ongoing status of Riparian Areas and other features of Linn County in an active data base that is used by County Staff and the public. This provides a present and historical inventory of Linn County.
Riparian Preservation and Enhancement	Post Construction Ordinance and Plan for meeting predevelopment hydrology, and riparian vegetation	Linn County Drainage and Flood Code and Development Code. Enforced through LCRD Access, Driveway, and Development permit program. (Linn County Code 935)	LCRD Engineering staff and Operations Supervisors for inspection	Ongoing*	Ongoing*	Implemented prior to 2015	N/A - *Explanation - Access and driveway permit applications for new developments are reviewed by Linn County Engineer and staff for compliance with federal, state and local environmental requirements. Permits are issued only after the development demonstrates compliance with those requirements. Work is inspected and only accepted when completed property prior to owner getting an occupancy permit.
Riparian Preservation and Enhancement	Educational Outreach	In partnership with Watershed Councils and Soil and Water Conservation District and South Santiam Area Management program as well as for separate Linn County projects and through the Linn County permit program.	Ongoing*	Ongoing*	Ongoing*	Implemented prior to 2015	N/A - Explanation - Linn County includes three large watershed districts and councils (North Santiam, South Santiam, and Calapooia) and the Linn County Soil and Water Conservation District who provide educational outreach for this rural and agricultural county. Linn County provides representation when requested on developing watershed plans and goals. North Santiam Watershed District has recently updated their plan with the support of the Linn County Engineer/road Department