

***DRAFT* Deschutes Multiparameter TMDL Implementation Actions**

Entity	Action	Pollutants Addressed	Comments
All Phase II Municipal Stormwater General Permits within this TMDL boundary: City of Olympia City of Tumwater City of Lacey Thurston County Port of Olympia Capitol Campus	-Conduct and track investigations of on-site septic systems (OSS) based on complaints or unsatisfactory maintenance reports. Use results for voluntary compliance or code enforcement -Continue to contact property owner notifications, monitoring, recording, and follow-up -Conduct on-site septic sanitary surveys for marine shoreline, stream, and upland areas. Segment streams with excessive fecal coliform levels. Use results for voluntary compliance or code enforcement	Bacteria Nutrients	This is an ongoing activity conducted by Thurston
	Environmental Complaint Response: Dye trace systems as needed based on sanitary survey results, complaint investigation results, or unsatisfactory maintenance records.	Low Dissolved Oxygen	This is an ongoing activity.. Prioritize work according to department policy for sanitary surveys and complaints.
	Implement a pet waste program that focuses on pet recreation areas and work with other jurisdictions to keep pet waste from stormwater conveyances (municipalities and Thurston County only)		
	Work with adjacent Phase II permittees to implement a comprehensive IDDE program		
	Coordinate with commercial or industrial dischargers to municipal stormwater collection systems to identify pollution sources and BMPs needed to prevent discharge of pollutants to the MS4 or directly to streams, rivers, or lakes within the TMDL boundary.		

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	Stormwater control and management: -Implement Phase 2 Municipal Stormwater Permit requirements to meet their WLA for future growth and development. -Identify locations where stormwater controls are needed using stormwater runoff models, develop a plan to reduce nutrient and bacteria loading with a schedule of prioritized projects that will be added to their stormwater management plan during the first permit cycle. The prioritized projects will need to be implemented during their subsequent permit cycles.	Bacteria Nutrients Low Dissolved Oxygen Toxics*	This is an ongoing activity.
Thurston Conservation District	Provide technical assistance to local landowners to identify and correct manure management and storage problems that do not meet BMP standards that protect water quality	Bacteria Nutrients	
	Identify and work with land owners to restore riparian areas necessary to achieve the effective shade LAs or according to Ecology's Ag BMP Funding Guidelines	Temperature Low Dissolved Oxygen Nutrients pH Fine Sediment	
	Provide assistance to landowners with livestock to exclude their livestock from direct access to streams and rivers in this TMDL boundary	Bacteria Nitrogen Phosphorus Fine Sediment	
	Provide assistance to residential landowners to encourage green lawn care practices that reduce the need for chemical fertilizers in areas outside of Phase II Stormwater permit areas.	Nutrients Low Dissolved Oxygen	

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Olympia, Port of	Identify actions to control and treat all stormwater and add them to the facility's stormwater management plan	Bacteria Nutrients Low Dissolved Oxygen pH Fine Sediment Toxics*	
Swantown Boatworks	No stormwater discharge of pollutants from boatyard activities	Fine Sediment pH Toxics*	
Other Marina's in Budd Inlet?			
Squaxin Island Tribe	Continue collaborating with watershed stakeholders and landowners to implement BMPs to reduce nonpoint pollution for non-permitted land use activities within the TMDL boundary	Bacteria Temperature Low Dissolved Oxygen pH Fine Sediment	This is an ongoing activity.
Washington State Department of Agriculture (WSDA)	Enforce the Dairy Nutrient Management Act (Ch. 90.64 RCW). Respond to dairy complaints in coordination with the Department of Ecology.		This is an ongoing activity.
	Identify BMPs for Mahan Ranch Dairy that will reduce or eliminate their discharge of nutrients to surface and groundwater and provide assistance to the facility to implement the BMPs.		
Washington State Department of Ecology (ECY)	Coordinate with watershed stakeholders and encourage/manage/track implementation of activities identified in this TMDL.		

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	Enforce the Water Pollution Control Act (Ch. 90.48 RCW) to identify and correct nonpoint sources of pollution where land use activities contribute to pollution of rivers, streams, and lakes. Coordinate with local jurisdictions where authorities overlap.	Bacteria Temperature Low Dissolved Oxygen Nutrients pH Fine Sediment	This is an ongoing activity.
	Implement all WLAs in the appropriate NPDES permits identified in this TMDL (see Table XX for list of permittees with WLAs)	Bacteria Low Dissolved Oxygen Nutrients pH Fine Sediment	
	Conduct TMDL effectiveness monitoring according to the implementation plan to ensure state water quality standards are being met.		
	Provide funding opportunities through its competitive water quality grants and loan funding cycle, to projects addressing the objectives and BMPs identified in this TMDL		
Washington State Department of Transportation (WSDOT)	Implement BMPs the Highway Runoff Manual as already required by WSDOT's general stormwater permit		
	Monitor stormwater discharges to the Deschutes River and Capitol Lake to characterize pollutant concentrations and identify BMPs to reduce pollutants for the first permit cycle. Implement the identified BMPs during the subsequent permit cycle.	Bacteria Fine Sediment Toxics*	
Stream Team (Olympia, Lacey, Tumwater, & Thurston County)	Assist in any volunteer monitoring needed to determine fecal coliform sources.		
	Work with watershed partners to provide education & outreach to land owners on BMPs to improve and maintain good water quality.		

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WSU Thurston County Extension	Assist stakeholders to provide information on water quality improvement BMPs such as Low Impact Development, sustainable landscaping, riparian restoration, and stormwater management.		
Capitol Land Trust	Land acquisitions for preservation and riparian restoration in priority areas identified in this TMDL.		
Land Use Category	Action	Pollutants Addressed	Comments
Agricultural Land Uses (including parcels identified as residential but that has some kind of agricultural activity, either livestock or crops, but not gardens for personal consumption)	Livestock Activities:		
	Proper Manure Management		
	Animal exclusion from riparian areas		
	Riparian restoration/conservation along stream corridors		
	Crop Activities:		
	Proper Nutrient Management		
	Filtration Strips where runoff can reach an MS4		
	Riparian restoration/conservation along stream corridors		
Commercial Land Uses	Golf Courses:		
	Large impervious surfaces (parking lots): standards to keep it clean?		
Industrial Land Uses	Those facilities receiving a wasteload allocation will be required to implement BMPs to meet their allocation		
	Stock Yards/Areas: Identify and Implement BMPs to reduce or eliminate discharge of pollutants to stormwater		
Residential Land Uses	Riparian restoration/conservation		
	Lawn/Garden Care and Fertilizer Use		
	OSS Maintenance		

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	Pet Waste		

* Reduction of these pollutants will also likely occur with the implementation actions identified, but no load or wasteload allocation is established for these pollutants.