

CITY OF HARRISBURG

TMDL Tracking Matrix 2019-2024

Receiving Water Body : **WILLAMETTE River**

Pollutant	Source of Pollutant	Strategy to Reduce Pollutant	Action to Implement Strategy	Benchmark Indicators of Progress	Timeline	Measure of Successful Strategy	Status
TEMPERATURE	I. Solar Radiation	a. Protect and enhance riparian areas along waterways on city owned property	i. Preserve and plant native plants and removal of invasive species.	Project locations are identified and City determines needed resources for projects	Year 1: Identify locations for riparian plantings and invasive species removal; determine city resources available to implement 2 projects between Year 2-5 Years 2-5: Implement at least two riparian improvement projects.	Develop list of riparian project locations; determine budget for at least two projects. At least two planting projects implemented	
			ii. Continue to enforce riparian protection overlay protection requirements per HMC 18.60 and 18.55	Number of documented violations decrease overtime	Years 1-5: ordinance enforcement ongoing; annual review	Track and document violations and follow-up actions; track and document variances to HMC 18.60 and 18.55.	
		b. Work with local property owners to initiate riparian restoration projects	i. Conduct outreach and education to private property owners that have riparian areas on their property	Develop a list of priority properties for focused outreach	Year1: Develop list of priority properties for targeted outreach; develop recommendations for riparian improvements for priority properties. Year 2: Develop outreach and communication plan; contact property owners per communication plan. and schedule site visit with willing landowners.	Document outreach, site visits completed and results of outreach and site visits.	

			ii. Partner with local watershed council to provide support for riparian projects.	Be involved with and provide support for at least two projects between 2018-2023.	Year 1: Contact local watershed council or other watershed partners and develop list of potential projects that the city could support; determine city's resource availability to provide support for 2-3 of the projects identified. Years 2-5: Provide support for at least 2 projects.	Document outreach to local watershed partners and watershed council; develop list of potential projects and city's resource availability to support at least two projects between 2018-2023. Track and document implementation of projects and City's support (in-kind and financial).	
	II. Wastewater treatment plant discharge	a. Maintain low effluent temperatures	Maintain compliance with <i>NPDES</i> permit requirements. Draw effluent from lower area of lagoons where temperature is lower. Run effluent through submerged rock filter.	Provide documentation showing compliance with <i>NPDES</i> permit. Mixing zone study completed 2017	In progress and on-going; annual review	Monitor effluent and river temperatures.	
		b. No discharge to river during summer months.	Use wastewater effluent for irrigation of poplar trees.	Provide summary report on the amount of treated effluent diverted. (Annual Effluent Reuse Report)	In progress and on-going; annual review	Monitor effluent and river temperatures.	
BACTERIA	I. Pet and animal waste	a. Reduce the amount of pet waste that is not properly disposed of.	i. Install pet waste stations including bags, educational signs, and other information.	Determine locations and prepare news release to inform residents about new stations.	On-going installation and maintenance as needed; annual review	Pet waste stations installed.	
			ii. Enforce existing pet waste pick-up ordinance	Ordinance in place and enforced	Ongoing; annual review	Track the number of citations issued and follow-up	

						actions; document cost of maintaining pet waste stations and cost of providing pet waste bags.	
	II. Erosion and Sedimentation	a. Decrease sedimentation and erosion from new construction, including development on small developments < one acre.	i. Develop erosion and sediment ordinance and guidelines	Develop and provide erosion control fact and BMP sheets to developers and property owners.	<p>Year 1: Review examples of erosion and sediment control development standards; develop draft ordinance and development code language to address erosion and sediment from new and re-development.</p> <p>Year 2: Develop internal guidance for implementing new requirements; develop fact sheet or other outreach materials for developers to include in permit application packet.</p> <p>Years 2-3: Adopt ordinance and code language</p> <p>Years 3-5: Enforce revised sediment and erosion requirements.</p>	<p>Track and document inspections of developments for proper use of erosion and sediment control BMP's; document violations, follow-up and enforcement actions.</p> <p>Adoption of ordinance that requires erosion and sediment controls on developments less than one acre.</p>	
			ii. Adopt ordinance to require storm water detention and treatment for new developments.	Draft storm water article and include information about draft ordinance.	<p>Year 1: Draft ordinance language; develop outreach materials</p> <p>Year 2: Ordinance adoption to take place by end of 2020.</p> <p>Years 3-5: Enforce</p>	Ordinance for new developments to comply with storm water detention and treatment requirements.	

					new detention and treatment requirements.		
	III. Stormwater Discharge	a. Raise awareness of actions that individuals can take to minimize storm water impacts.	Publish educational materials in newspaper, City publications, City's website. Stencil storm drains	Review, update and select materials annually Provide storm drain stenciling.	Year 1: Review existing information and tailor it for city's outreach efforts. Years 1-5: Publish outreach material at least annually	Confirm information provided at front counter and on website. Track number of storm drains stenciled.	
		b. Update Storm Master Plan and include water quality protection considerations and priorities.	Seek funding to update Storm water Master Plan.	Secure funding, develop work program and draft plan.	Year 1: Determine cost of updating Stormwater Master Plan; determine funding needs. Year 2: Identify potential resources to support updating plan, and develop timeline for implementing update. Year 3-5: Secure funding and begin drafting updates to Stormwater Master Plan.	Develop budget and timeline for updating Plan; secure funding needed to complete Plan; draft and adopt updated Storm water Master Plan that includes water quality protection mechanisms.	
		c. Secure funding for stormwater system upgrades.	Collect stormwater system development charges.	Track amount of SDC's collected annually.	In progress and on-going; annual review	Review and update stormwater SDC schedule.	
		d. encourage best management practices in new developments.	Research incentives that encourage developers to go beyond compliance and install advanced stormwater features.	Draft incentive program. Provide low impact development options.	Years 1-5: Research incentive programs and LID options.	Decision on whether to move forward with adoption of incentives after research of options is completed.	

	IV. Wastewater Treatment Plant	a. Maintain low effluent bacteria levels	Maintain compliance with NPDES permit requirements.	Monitor, and provide documentation showing NPDES permit compliance.	In progress and on-going; annual review.	Monitor effluent as a condition of DEQ/NPDES discharge permit.	
MERCURY	I. Natural background in soil and rock	a. Decrease soil disturbance in areas sensitive to erosion.	Enforce development and design standards	Review development applications for compliance.	In progress and on-going; annual review	Track and document reviews of development application and permit; track approved variances.	
	II. Erosion and Sedimentation/ Air deposition	See Bacteria II. above	See Bacteria II. above	See Bacteria II. above	See Bacteria II. above	See Bacteria II. above	
	I. Watershed	b. Provide training to city staff	Incorporate existing and available training materials to augment existing public works training programs. Training topics will include but is not limited to material relevant to sediment and erosion control, illicit discharge and elimination, conducting city operation and maintenance activities in a way that protects water quality.	Annually identify training opportunities and materials to be attended/ provided annual.	Years 1-5: Identify training opportunities and materials to be attended/ provided on annual basis. Years 1-5: All public works employees are provided training at least one time a year on topics including sediment and erosion control, illicit discharge and elimination, conducting city operation and maintenance activities in a way that protects water quality.	Track and document that all public works employees receive training on stormwater management BMP's and other water quality related topics annually	
		c. Public outreach and education about ways to protect water quality	Add interpretive signage associated with restoration projects.	Design signs and sites determined.	Signs installed by 2022	At least 3 interpretive signs installed in the City of Harrisburg. By 2022.	

		d. Provide method for community to report issues/ concerns about dumping, illicit discharges and other nuisance complaints.	Provide information on City website that identifies what number community members should call to report complaints related to water quality and other nuisance issues.	Contact information is provided on website	Ongoing; annual review	City tracks complaints received, follow-up or enforcement actions	
		e. Reduce the amount of hazardous waste that is not properly handled or disposed of.	Hold annual hazardous waste event and incorporate disposal education into this event and other activities.	Local waste disposal provider contacted.	Years 1-5: Work with disposal company to provide annual hazardous waste event.	Track and document annual collection event and amount of waste collected or number of participants.	
		f. Pursue opportunities to partner with other local governments and organizations to implement mutual strategies.	As implementation of the strategies begins, contact other entities about coordinating efforts. Continue to be involved in regional water resource planning efforts.	Two meetings attended annually. At least one cooperative project implemented by the end of 2023.	Years 1-5 Attend at least two TMDL or water quality related meetings a year. Years 1-5: Identify at least one regional opportunity to partner on a watershed project.	Track and document meetings attended. Document city support for at least one region-wide water quality related project by 2023.	