

TMDL Implementation Plan Matrix 2013 to 2017

						Pollutant				
Best Management Practice or Activity	Source	Strategy	Measurable Goal	Performance Measure	Expected Implementation Timeline	Nutrients	Bacteria	Total Suspended Solids	Mercury	Temperature*
Measure No. 1 - Public Education										
PE-1 Stormwater Education	All	Website Education	Provide stormwater information on the city website	Provide links to webpages and post annual reports.	Ongoing	X	X	X	X	X
		Educate citizen groups	Present stormwater information to interested citizen groups or at local venues	Track number of presentations, program messages, and number participating if known	Ongoing	X	X	X	X	X
		Water Quality Report	Provide stormwater education in the annual Water Quality Report	Provide link to report; track article message	June 2014 and annually	X	X	X	X	X
PE-2 Watershed Education		Watershed Education	Provide signage at stream crossings or green infrastructure	Track number of signs and messages	October, 2017	X	X	X	X	X
		Classroom Education	Provide stormwater education in the classroom	Track number of presentations, program messages, and number participating if known	December 2013 and ongoing	X	X	X	X	X
PE-3 Infrastructure Education	Spills and illicit discharges	Mark storm drains in high profile areas	Mark 50 catch basins a year until all are marked; link locations to GIS	Track number of catch basins marked per year. Provide GIS map showing coverage	Ongoing	X	X	X	X	X
Measure No. 2 - Public Involvement										
PI-1 Stormwater Utility Fee	All	Participate in Citizen Rate Review Committee meetings.	Present funding needs to committee	Document meeting attendance, adopted rates, and effective dates of rate changes.	Ongoing	X	X	X	X	X
PI-2 Public Participation in Stormwater Management	Post-Construction Runoff	Provide funds for projects by public groups or citizens that increase water quality or watershed awareness	Provide a minimum of \$2,000 in a grant program to fund citizen projects that fulfill goals of the TMDL Plan.	Track number of funded projects, amount disbursed per project, stream affected, and drainage area affected.	January, 2014 and ongoing	X	X	X	X	X
PI-3 Public Participation in Reporting Stormwater Issues	All	Provide mechanism for public to report stormwater, illicit discharge, and erosion control issues	Provide methods for citizens to report concerns during and after business hours. Notify public on a recurring basis.	Document methods.	Ongoing	X	X	X	X	X
			Respond to public concerns	Document number of flooding complaints reported by citizens. Document number of erosion complaints reported by citizens. Document number of illicit discharge complaints reported by citizens.	July, 2013 and ongoing	X	X	X	X	X
PI-4 Public Participation in Educational Focus	All	Determine focus of educational messages	Conduct survey to revise and refine educational message	Provide copy or link to survey and report results of survey	December, 2015	X	X	X	X	X
Measure No. 3 - Illicit Discharge Detection and Elimination (IDDE)										
ID-1 Develop IDDE Plan	Spills and illicit discharges	Develop plan to detect illicit discharges	Develop procedures to address non-stormwater discharges	Document procedures	December, 2013	X	X	X	X	X
			Develop investigative sampling and monitoring plan	Document plan.	December, 2013	X	X	X	X	X
			Develop worksheets for inspections	Document worksheets.	December, 2013	X	X	X	X	X

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ID-2 Train Staff to Implement IDDE	Spills and illicit discharges	Train employees in illicit discharge investigation and spill response.	Train staff who are new to illicit discharge investigation and spill response. Provide training in some aspect of illicit discharge investigation and spill response every 5 years for all applicable staff.	Track type of training (webcast, class, certification, etc.), number of employees trained, and the training subject (maintenance, response, investigation, sampling, etc).	Ongoing	X	X	X	X	X
ID-3 Implement IDDE plan	Spills and illicit discharges	Conduct illicit discharge inspections	Fieldscreen outfalls	Inventory type, size, and location of public and private outfalls. Link to GIS.	November, 2015	X	X	X	X	X
			Investigate outfalls for illicit discharges	Document location, number of samples taken, test results, and resolution	November, 2015	X	X	X	X	X
		Respond to illegal dumps	Clean up illegal dumps	Track number of citations issued and resolution.	Ongoing	X	X	X	X	X
		Respond to spills	Fire Department Spill Response	Track location of spills that occur and the substance that was spilled. Document whether the spill reached the stormwater system or a stream. Document response resolution.	Ongoing	X	X	X	X	X
			Public Works Spill Response	Track location of spills that occur and the substance that was spilled. Document whether the spill reached the stormwater system or a stream. Document response resolution.	July 2013 and Ongoing	X	X	X	X	X
			Provide spill response cards and spill response kits on municipal trucks and sweepers.	Track number of munipal trucks and sweepers with spill response cards and spill kits. Document the number of spill kits used in response to spills.	December 2014 and Ongoing	X	X	X	X	X
ID-4 Hazardous Waste Collection	Illicit discharges	Provide opportunity for residents to dispose of hazardous waste	Offer free hazardous waste collection service twice per year to city residents.	Track volume of waste received during collection events.	Ongoing	X	X	X	X	
Measure No. 4 - Construction site stormwater runoff control										
CS-1 Develop Erosion and Sediment Control Program	Construction Site Runoff	Develop ESC Manual	Develop and approve an ESC Manual. Post on website.	Provide link to ESC Manual.	June, 2013	X	X	X	X	X
CS-2 Train Staff in Erosion and Sediment Control	Construction Site Runoff	Train staff in plan review, inspection, and enforcement of ESC program	Train staff whose responsibilities change to include erosion and sediment control plan review, inspections, and enforcement. Provide refresher training to all staff involved in ESC inspections every 3 years. Provide refresher training to all staff involved in ESC plan review and enforcement every 5 years.	Track type of training (webcast, class, certification, etc.), number of employees trained, and the training subject (plan review, inspection, enforcement, etc.)	Ongoing	X	X	X	X	X
CS-3 Implement Erosion and Sediment Control Program	Construction Site Runoff	Implement ESC program	Conduct plan review	Document location and size of all construction projects. Document which projects were required to have a 1200-C permit.	Ongoing	X	X	X	X	X

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			Conduct site inspections at least once during active construction by trained or experienced staff.	Provide link or copy of ESC inspection report. Document location and size of construction project.	Ongoing	X	X	X	X	X
			Enforce ordinance	Report number of non-compliance citations, project location, and resolution.	Ongoing	X	X	X	X	X
Measure No. 5 - Post-Construction Stormwater Runoff Control										
DS-1 Develop Stormwater Management Program	Development and Redevelopment	Update Development Manuals and Plans	Update design standards manual and notify development community of new requirements.	Provide summary of changes and link to new design standards when complete.	May, 2013	X	X	X	X	X
DS-2 Train Staff in Stormwater Management	Development, Infrastructure, Redevelopment, and Watershed Management	Train staff with stormwater runoff responsibilities in watershed and stormwater management	Provide training opportunities for staff	Track type of training (webcast, class, certification, etc.), number of employees trained, and the training subject (plan review, inspection, enforcement, etc.)	Ongoing	X	X	X	X	X
			Train staff who are new to stormwater facility inspections. Provide refresher training for all staff every 3 years.	Track type of training (webcast, class, certification, etc.), number of employees trained, and the training subject (plan review, inspection, enforcement, etc.)	June, 2014 and ongoing	X	X	X	X	X
DS-3 Implement Stormwater Management Program	Development, Redevelopment, and Watershed Management	Require Stormwater Management for Development and Redevelopment	Require plan submittals, conduct plan reviews	Document number of plan submittals, plan reviews, project type (commercial, institutional,residential, etc), size, and location.	Ongoing	X	X	X	X	X
			Require stormwater management for development	Document number and type (detention basin, flow dissipater, raingarden, filtration swale, etc.) of stormwater facilities required for projects.	Ongoing	X	X	X	X	X
			Conduct pre-construction conference	Document number of pre-construction conferences, project type (commercial, institutional, residential, etc), size, and location.	Ongoing	X	X	X	X	X
		Improve Watershed Management	Evaluate Retrofit Opportunities	Summarize hierarchy used for screening. Document location and number of sites reviewed, drainage area, and result of evaluation.	May, 2014 and ongoing	X	X	X	X	X
			Implement Retrofit Program	Document number of projects including location, size, type (GI, traditional, etc), and drainage area.	May, 2014 and ongoing	X	X	X	X	X
		Optimize Water Quality	Inspect stormwater facilities	Document number of inspections, type of facility (detention basin, raingarden, porous pavement, swale, etc.) and whether facilities were categorized as excellent, fair, or poor condition.	July, 2014 and ongoing	X	X	X	X	X
			Implement monitoring program	Document sampling locations, dates, parameters, and results	January, 2016 and ongoing	X	X	X	X	X
Measure No. 6 - Pollution prevention in Municipal Operations										

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OM-1 Operations and Maintenance Manual	Public Operations and Maintenance Practices	Update Policies	Review existing operation and maintenance practices	Document current procedures	July, 2013	X	X	X	X	X
			Update O&M manual to optimize water quality	Document modifications to manual.	April, 2014	X	X	X	X	X
		Update Infrastructure Procedures	Update catch basin cleaning program	Document current procedures and modifications to optimize water quality.	December, 2014	X	X	X	X	X
			Implement revised catch basin cleaning program	Track progress.	June, 2015	X	X	X	X	X
		Update Street Sweeping Procedures	Evaluate street sweeping program and revise as necessary to optimize water quality	Document current procedures and modifications to optimize water quality.	March, 2016	X	X	X	X	X
			Implement revised street sweeping program	Track progress.	July, 2016	X	X	X	X	X
Om-2 Operations and Maintenance Training	Public Operations and Maintenance Practices	Train staff in infrastructure and street sweeping procedures that optimize water quality	Train staff new to stormwater maintenance duties in O&M procedures.	Track type of training (webcast, class, certification, etc.), number of employees trained, and the training subject (inspections, maintenance, repair, construction, etc.)	Ongoing	X	X	X	X	X
			Train all staff in revised O&M procedures	Track type of training (webcast, class, certification, etc.), number of employees trained, and the training subject (inspections, maintenance, repair, construction, etc.)	July, 2014	X	X	X	X	X
			Train staff in maintenance procedures that maximize water quality.	Track training events.	Ongoing	X	X	X	X	X
OM-3 Stormwater Infrastructure Maintenance	Development and Redevelopment	Catch Basin Cleaning	Clean catch Basins	Track number of unique * catch basins cleaned per year.	Ongoing	X	X	X	X	X
		Inlets	Place trash racks over major inlets	Track number and percentage of major inlets installed with trash racks.	Ongoing	X	X	X	X	X
		Stormline	Inspect, clean, repair, replace, and install stormline	Track length of stormline inspected. Document length of stormline cleaned. Document length and location of stormline repaired or replaced. Track length, diameter, and location of stormline installed	Ongoing	X	X	X	X	X
		Culverts	Inspect, repair, and replaceculverts	Document location of repaired and replaced culverts and reason for repair or replacement. For newly installed culverts, document new culvert size, material, and elevation from culvert bottom to stream bottom.	Ongoing	X	X	X	X	X
	Street Debris	Remove debris from streets	Sweep streets every 4 to 6 weeks	Track curb miles swept per year. Document disposal method.	Ongoing	X	X	X	X	X
Temperature										
T-1 Maintain Existing Stream Vegetation	Development, Redevelopment, and Watershed Management	Use enforcement and other measures to maintain stream vegetation	Determine city code that can affect stream health	Track number of ordinances that affect stream vegetation	December, 2015	X	X	X	X	X

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				Update Stream Corridor Overlay map and code based on wetland inventory	December, 2017	X	X	X	X	X
T-2 Increase Effective Shade	Development, Redevelopment, and Watershed Management	Increase Shade along city streams	Provide incentives for citizens to plant trees	Document location and number of trees planted per year	Ongoing	X	X	X	X	X
T-3 Stream Assessment	Development, Redevelopment, and Watershed Management	Assess stream health and canopy coverage to focus restoration efforts.	Assess at least 2 stream miles annually for vegetative cover, stream channel configuration, and canopy coverage.	Document results of assessment	November, 2013 and ongoing	X	X	X	X	X
			Complete a wetland inventory that encompasses the Urban Reserve areas	Track Progress. Provide link to wetland inventory and map.	December, 2016 and ongoing.	X	X	X	X	X