

## Attachment A - Acronyms and Abbreviations

BMP	Best Management Practice
BMP RAM	BMP Maintenance Rapid Assessment Methodology
CASQA	California Association of Stormwater Quality
CBSM	Community-Based Social Marketing
CCAMP	Central Coast Ambient Monitoring Program
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CWA	Federal Clean Water Act
CWC	California Water Code
CWP	Center for Watershed Protection
GIS	Geographic Information System
IDDE	Illicit Discharge Detection and Elimination
LID	Low Impact Development
O&M	Operation and Maintenance
MEP	Maximum Extent Practicable
MRP	Monitoring and Reporting Program
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System (e.g., Industrial and Construction Stormwater General Permits, Low Threat Discharge Permits)
PRISM	Parameter-elevation Regressions on Independent Slopes Model
QAPP	Quality Assurance Project Plan
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
SIC	Standard Industrial Code
SWAMP	Surface Water Ambient Monitoring Program
SWCP	Stormwater Control Plan
SWDS	Stormwater Development Standards
SWMP	Stormwater Management Plan
SWRCB	State Water Resource Control Board
SWPPP	Stormwater Pollution Prevention Plan
ROWD	Report of Waste Discharge
RTAM	Rapid Trash Assessment Methodology developed by the San Francisco Bay Regional Water Quality Control Board.
TMDL	Total Maximum Daily Load
TGR	Trash Generation Rate
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
WDID	Waste Discharge Identification

## Attachment B - Definitions

**Action Level** – A pollutant concentration, pollutant load, or set of conditions specified by the Order at which the Permittee must take certain required actions defined by the Order. The Order identifies Action Levels for trash and a limited number of pollutants in MS4 stormwater discharges.

**Bank Erosion** – Direct delivery of sediment from stream banks into flowing channels; normally a combination of direct erosion and mass failure of the bank sediment.

**Basin Plan** – Water Quality Control Plan, Central Coast Basin, Region 3, and amendments, adopted by the Central Coast Water Board.

**Beneficial Uses** – The uses of waters of the state protected against quality degradation including, but not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or reserves [CWC Section 13050(f)]. The Basin Plan identifies beneficial uses for Salinas Hydrologic Unit waterbodies.

**Best Management Practices** – Physical structures, activities, prohibitions of practices, maintenance procedures, and other management practices or control measures to prevent or reduce the pollution of receiving waters and hydrologic process and beneficial use impacts to watersheds.

**Biotreatment** – Any structural or non-structural method, technique, or process that relies on biological and biochemical processes in soil media and vegetation to remove pollutants and/or solids from polluted stormwater runoff.

**Catch Basin** - A catch basin (sometimes called a storm drain inlet) is an inlet to the storm drain system that typically includes a grate or curb inlet where stormwater enters the catch basin and an area to capture sediment, debris and associated pollutants. Catch basins can act as pretreatment for other treatment practices by capturing large sediments. The performance of catch basins at removing sediment and other pollutants depends on the design of the catch basin (e.g., the size of the capture area), and routine maintenance to retain the storage available to capture sediment.

**Central Coast Ambient Monitoring Program** – The Central Coast Water Board's regionally scaled water quality monitoring and assessment program ([www.ccamp.org](http://www.ccamp.org)).

**Channel** – An open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two waterbodies.

**Chemical Reactions** – Any chemical alteration of natural or artificial materials on or near the ground surface. Includes very slow processes (e.g., weathering) of normally little regulatory concern and other reactions that can attenuate the biological effects of pollutants over time.

**Clean Water Act Section 303(d)** – A list of impaired waterbodies in which water quality does not meet applicable water quality standards and/or is not expected to meet water quality standards, even after the application of technology based pollution controls required by the CWA. The discharge of runoff to these waterbodies by the Permittee is significant because these discharges can cause or contribute to violations of applicable water quality standards.

**Creep** – The slow downslope movement of the upper soil layer under the influence of gravity; it can incorporate such factors as freeze-thaw, shrink-swell, and animal disturbances that cannot be individually resolved at a hillslope (or larger) scale.

**Daylighting** – Restoring a covered or enclosed waterbody or section of storm drain infrastructure to an open channel, typically a channel in which primary hydrologic processes have also been restored.

**Development Project** – New development or redevelopment of any public or private project with land disturbing activities (e.g., structural development, including construction or installation of a building or structure, the creation of impervious surfaces, public agency projects, or land subdivision).

**Discharger** – The City of Salinas and any other responsible party or site owner or operator within the Permit coverage area whose site or activity discharges stormwater or non-stormwater.

**Dry Season** – From May 1<sup>st</sup> through September 30<sup>th</sup>.

**Effluent Limitation** – Any restriction imposed on quantities, discharge rates, concentrations, and/or mass loadings of pollutants which are discharged from point sources into receiving waters.

**Ephemeral** – A stream that flows only in direct response to precipitation, storm events, or seasonally, but normally lasts no longer than 30 days following the event.

**Erosion** – The diminishing or wearing away of land due to wind, water, or glacial ice. Often the eroded debris (silt or sediment) becomes a pollutant via stormwater runoff. Erosion occurs naturally, but can be intensified by land disturbing and grading activities such as farming, development, road building, and timber harvesting.

**Evapotranspiration** – The return of water to the atmosphere from the soil and soil surface by direct drying and the respiration of plants.

**Floodplain** – Any land area susceptible to being inundated by water from any source.

**Flow Control BMP** – Any structural or non-structural method, technique, or process designed to detain and/or retain stormwater runoff flow.

**Fluvial Transport and Deposition** – The patterns, volumes, and rates of movement and deposition of sediment (including adsorbed pollutants) within a flowing stream or river channel, including its ultimate deposition in a lake, wetland, or marine nearshore.

**Future Growth Areas** – Areas identified, by the Permittee in its General Plan, to plan for and manage future growth, including the areas north and east of the City in the sphere of influence amendment and annexation identified in the November 19, 2007 Final Supplement for the Salinas General Plan Final Program EIR.

**General Construction Permit** – The general NPDES permit adopted by the State Water Resources Control Board (Order No. 2009-0009-DWQ, NPDES Permit No. CAS000002 for

Storm Water Discharges Associated with Construction and Land Disturbance Activities), which authorizes the discharge of storm water from construction activities under certain conditions.

**General Industrial Permit** – The general NPDES permit adopted by the State Water Resources Control Board (Order No. 97-03-DWQ, NPDES Permit No. CAS000001 for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities), which authorizes the discharge of storm water from certain industrial activities under certain conditions.

**General Plan** – A statement of policies, including text and diagrams, setting forth objectives, principles, standards, and plan proposals, for the future physical development of a city.

**Green Infrastructure** – Any of a variety of technologies or practices that use natural systems (such as vegetation or infiltration), or engineered systems (such as bioswales or rain gardens) which mimic natural systems, to manage stormwater.

**Groundwater Recharge** – Vertical movement of water into “deep” (10s to 100s of feet) aquifers to support year-round baseflow to wetlands and surface waters, and for water supply.

**Hydromodification Impacts** – Geomorphic alterations to the bed and/or banks of waterbodies (such as erosion, sedimentation, headcutting, and channel incision) resulting from changes in flow and sediment transport regimes caused by development.

**Illicit Connection** - Pipes, drains, open channels, or other conveyances that have the potential to allow an illicit discharge to enter the MS4.

**Illicit Discharges** - All non-stormwater discharges except those authorized under a separate NPDES permit or Section A (Discharge Prohibitions) of the Order. Any discharge that is prohibited under local, state, or federal statutes, ordinances, codes, regulations, or the Discharge Prohibitions Section of this Order.

**Impervious Surface** – A surface covering or pavement of a developed parcel of land that prevents the land’s natural ability to absorb and infiltrate precipitation/stormwater. Impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots, storage areas, impervious concrete and asphalt, and any other continuous watertight pavement or covering.

**Incidental Runoff** - Unintended small amounts (volume) of runoff from potable and recycled water use areas, such as unintended, minimal over-spray from sprinklers that escapes the area of intended use. Water leaving an intended use area is not considered incidental if it is part of the facility design, if it is due to excessive application, if it is due to intentional overflow or application, or if it is due to negligence.

**Infiltration** – Absorption of water at the ground surface into the soil.

**Interflow** – Vertical movement of water into “shallow” (1 to 10 feet) soil layers to support return flow to wetlands and surface waters.

**Intermittent** – A stream that flows only certain times of the year. Intermittent streams should usually have flow at least 30 days after a storm event or throughout seasonal periods. Intermittent streams should have a defined stream channel and evidence of sediment transport.

**Joint Effort** – The Joint Effort for Hydromodification Control is an effort to 1) create a methodology for developing hydromodification control criteria, 2) derive criteria by applying the methodology, and 3) support implementation of the resulting criteria throughout the Central Coast for new and redevelopment projects. The effort includes oversight by the Central Coast Water Board; a team of subject area experts to execute the scope of work; and participating municipalities. This project is a key step in the Central Coast Water Board's progressive, stepwise process to protect watershed processes affected by urban stormwater runoff, and similarly, the State Board's goals in its Strategic Plan for statewide healthy watersheds.

**Low Impact Development (LID)** – A collection of stormwater management design strategies and BMP techniques used to address new development or redevelopment. The goal of LID is to mimic the pre-development natural hydrologic condition of the site. This means that the stormwater does what it would have done before development; such as infiltrate into the ground and evapotranspire into the air. Additional community and environmental benefits may be achieved with the use of LID.

**Mass Movements** – The downslope movement of rock and soil under the direct influence of gravitational forces.

**Maximum Extent Practicable (MEP)** – The minimum required performance standard for implementation of municipal stormwater management programs to reduce pollutants in stormwater. Clean Water Act 402(p)(3)(B)(iii) requires that municipal stormwater permits “shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.” MEP is the cumulative effect of implementing, evaluating, and making corresponding changes to a variety of technically appropriate and economically feasible BMPs, ensuring that the most appropriate controls are implemented in the most effective manner. This process of implementing, evaluating, revising, or adding new BMPs is commonly referred to as the iterative process.

**Municipal Separate Storm Sewer System (MS4)** – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains), as defined in 40 CFR 122.26(b)(8): (1) Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law ... including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization or a designated and approved management agency under section 208 of the CWA) that discharges into waters of the United States; (2) Designed or used for collecting or conveying stormwater; (3) Which is not a combined sewer; and (4) Which is not part of a Publicly Owned Treatment Works (POTW), as defined in 40 CFR 122.26.

**National Pollutant Discharge Elimination System (NPDES)** – A national program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the CWA.

**Natural** – (1) Conditions on site prior to human-induced land activities; (2) not anthropogenic in origin.

**New Development** – Land disturbing activities (e.g., structural development, including construction or installation of a building or structure, the creation of impervious surfaces, public agency projects, or land subdivision). Projects meeting the definition of redevelopment shall not be considered new development.

**Non-Priority Development Project** – Any new development or redevelopment project meeting the Non-Priority Development applicability criteria per Section J.3 (Parcel-Scale Development: Requirements for Non-Priority Development Projects) of the Order.

**Non-Stormwater Discharge**– All discharges to and from a MS4 that do not originate from precipitation events (i.e., all discharges from a MS4 other than stormwater). Non-stormwater includes illicit discharges, non-prohibited discharges, and NPDES permitted discharges.

**Non-Structural BMP** – BMPs with no associated physical structures that are used to manage flow and reduce pollutants in stormwater.

**Nuisance** –Anything which meets all of the following requirements: 1) Is injurious to health, or is indecent, or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property; 2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal; and 3) Occurs during, or as a result of, the treatment or disposal of wastes.

**Offsite Project** – A project constructed at a different location from the subject development project that mitigates for watershed process and water quality and beneficial use impacts caused by the subject development project.

**Order** – When used without qualification, means Order No. R3-2012-00XX (NPDES Permit No. CAXXXXX).

**Perennial** – A stream that normally continues to flow throughout the year through wet and dry seasons.

**Post-development** – The condition after completion of the proposed project.

**Pre-development** – The native vegetation and soil conditions of a development site that existed prior to modern human influence (e.g., urbanization, agriculture, grazing, timber harvest).

**Pre-project** – The condition of a development site immediately prior to the proposed project. The condition includes, but is not limited to, soil type, vegetation, and amount of impervious surface.

**Priority Development Project** – Any new development or redevelopment project meeting the applicability criteria pursuant to Section J.4 (Parcel-Scale Development: Requirements for Priority Development Projects) of this Order. The April 2010 version of the SWDS refers to these projects as Priority Projects.

**Project Applicant** – A property owner or representative of a property owner (includes both public and private projects) who has filed an application for a City development permit.

**Qualified Personnel** – A person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact stormwater quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of stormwater discharges from the construction activity. Qualified personnel include: California registered professional civil engineers, California registered professional geologists or engineering geologists, California registered landscape architects, professional hydrologists registered through the American Institute of Hydrology, Certified Professionals in Erosion and Sediment Control (CPESC) registered through Enviro Cert International, Certified Professionals Storm Water Quality (CPSWQ) registered through Enviro Cert International, or professionals in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies (NICET).

**Rainy Season** – From October 1 to April 31<sup>st</sup>. Same as Wet Season.

**Receiving Waters** – Waters of the United States

**Redevelopment** – Land-disturbing activity that results in the creation, addition, or replacement of exterior impervious surface area on an already developed site. Redevelopment includes, but is not limited to: the expansion of a building footprint; addition or replacement of a structure; replacement of impervious and/or turf surface area that is not part of a routine maintenance activity; and land disturbing activities related to structural, impervious, or turf surfaces. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility, nor does it include emergency construction activities required to immediately protect public health and safety.

**Restore** – Return to a natural condition, or to a state approaching a natural condition.

**Retain** – To keep or hold runoff in a particular place, condition, or position without discharging to surface waters.

**Retrofit** – Modification of existing development with the purpose of restoring watershed processes degraded by alteration of urban stormwater discharges.

**Rilling and Gullying** – Concentrated surface erosion of hillslopes by running water, giving rise to features that can (rills) or cannot (gullies) be readily crossed by vehicles or animals.

**Riparian Area** – The vegetated area adjacent to a watercourse or other body of water.

**Run-on** – Stormwater or non-stormwater that drains to the subject area.

**Runoff** – All flows that consist of stormwater or non-stormwater that drain from the subject area (includes run-on leaving the area).

**Section** – When used without qualification, refers to the entire section of Permit Provisions contained in this Order. For example, “this Section” used in the Municipal Maintenance section refers to the entire Municipal Maintenance section (Section E).

**Sheetwash** – Downslope soil movement by the unchanneled flow of water over the ground surface.

**Source Control BMP** – Land use or site planning practices, or structural or nonstructural measures that aim to prevent runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and precipitation and runoff.

**Specific Plan** – A plan addressing land use disturbance, open space availability, infrastructure, and infrastructure financing for a portion of the community. Specific plans put the provisions of the local general plan into action.

**Sphere of Influence** – The probable physical boundaries and service area of a local government agency. The following factors must be considered when developing the sphere: 1) The present and planned uses in the area, including agricultural and open-space lands; 2) The present and probable need for public facilities and services in the area; 3) The present capacity of public facilities and the adequacy of public services which the agency provides or is authorized to provide; and 4) The existence of any social or economic communities of interest in the area if the Commission determines that they are relevant to the agency.

**Stormwater** – Runoff generated during and following precipitation and snowmelt events, including surface runoff, drainage, and interflow.

**Stormwater Control Plan** – A plan, developed by Priority Development Project applicant, detailing how the project will achieve the applicable post-construction stormwater management requirements (for both onsite and offsite systems).

**Stormwater Development Standards** – A written document containing the Permittee's stormwater management requirements and guidance for development and redevelopment projects pursuant to requirements in this Order.

**Stormwater Discharge Action Level** – A specified concentration of an identified pollutant in stormwater discharges from the MS4 which, if exceeded according to the provisions of the Order, require the Permittee to take required actions.

**Stressor, Water Quality Stressor** – Any factor impacting water quality, beneficial uses, or watershed processes. Water quality stressors include, at a minimum, pollutants, elevated runoff rates and volumes resulting from development, and development or maintenance practices that reduce riparian habitat quantity or quality.

**Structural BMP** – Physical structures used to manage flow and reduce pollutants in stormwater.

**Subwatershed** – A subsection of a watershed as delineated per Section Q.2 (Watershed Characterization: Watershed Delineation) of the Order.

**Surface Runoff** – Flow over the ground surface, characterized by volume, rate, and duration.

**Surface Water Ambient Monitoring Program (SWAMP)** – The State Water Board's program to monitor surface water quality; coordinate consistent scientific methods; and design strategies for improving water quality monitoring, assessment, and reporting.

**Time of Concentration** – The time needed for water to flow from the most remote point in a catchment to the catchment outlet

**Top of Streambank** – The break in slope at the top of a streambank, where the streambank meets the floodplain. The streambanks are the slopes of the active channel, between which streamflow is normally confined.

**Total Maximum Daily Loads** – The maximum amounts of a pollutant that can be discharged into a waterbody from all sources (point and nonpoint) and still maintain water quality standards. Under CWA Section 303(d), TMDLs must be developed for all waterbodies that do not meet water quality standards even after application of technology-based controls, more stringent effluent limitations required by a state or local authority, and other pollution control requirements such as BMPs.

**Toxicity** – Adverse responses of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies. The water quality objectives for toxicity provided in the Basin Plan, state in part that “all waters shall be maintained free of toxic substances in concentrations that are toxic to, or which produce detrimental physiological responses in human, plant, animal, or aquatic life.....Survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality factors shall not be less than that for the same waterbody in areas unaffected by the waste discharge.”

**Toxicity Identification Evaluation (TIE)** – A series of laboratory procedures used to identify the chemical(s) responsible for toxicity to aquatic life. These procedures are designed to decrease, increase, or transform the bioavailable fractions of contaminants to assess their contributions to sample toxicity. TIEs are conducted separately on water column and sediment samples.

**Trash** – Trash consists of litter and particles of litter. California Government Code Section 68055.1 (g) defines litter as all improperly discarded waste material, including, but not limited to, convenience food, beverage, and other product packages or containers constructed of steel, aluminum, glass, paper, plastic, and other natural and synthetic materials, thrown or deposited on the lands and waters of the state, but not including the properly discarded waste of the primary processing of agriculture, mining, logging, sawmilling, or manufacturing.

**Trash Action Level** – A numeric action level for trash. The trash action level is established by the Order as a trash assessment score of 79 points. The Order requires the Permittee to take required actions when trash assessment scores fall below the Trash Action Level.

**Trash Assessment** – A rapid measurement of trash at a trash assessment site according to the methodology specified in the Order.

**Trash Assessment Score** – The numeric score associated with the amount of trash detected at a trash assessment site during a trash assessment.

**Trash Assessment Site** – A reach of a water body designated for conducting trash assessments.

**Treatment BMP** – Any structural or non-structural method, technique, or process designed to remove pollutants and/or solids from polluted stormwater runoff. Structural systems designed to remove pollutants and/or solids from polluted stormwater runoff may use settling, filtration, biological degradation, plant uptake, media absorption/adsorption or other physical, biological,

or chemical process. This includes landscape-based systems such as grassy swales and bioretention units as well as proprietary systems.

**Urban Catchment** – A sub-drainage area within an Urban Subwatershed in which stormwater drains through the MS4 to a single discharge point.

**Urban Subwatershed** – A watershed delineated per Attachment F that includes existing and future urbanized areas, defined by both natural topographic divides and anthropogenic features such as constructed portions of the MS4.

**Wasteload Allocations** – The portion of a receiving water's TMDL that is allocated to one of its existing or future point sources of pollution.

**Water Quality Objectives** – The limits or levels of water quality elements or biological characteristics established to reasonably protect the beneficial uses of water or to prevent pollution problems within a specific area. Water quality objectives may be numeric or narrative.

**Water Quality Standards** – State-adopted and USEPA-approved water quality standards for waterbodies. The standards prescribe the use of the water body and establish the water quality criteria that must be met to protect designated uses. Water quality standards also include the federal and state anti-degradation policy.

**Waters of the State** – Any water, surface or underground, including saline waters within the boundaries of the State [CWC section 13050 (e)]. The definition of the Waters of the State is broader than that for the Waters of the United States in that all water in the State is considered to be a Waters of the State regardless of circumstances or condition. Under this definition, a MS4 is always considered to be a Waters of the State.

**Waters of the United States** – As defined in the 40 CFR 122.2, the Waters of the United States are defined as: “(a) All waters, which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) All interstate waters, including interstate “wetlands;” (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, “wetlands,” sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) Which are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters otherwise defined as waters of the United States under this definition; (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition; (f) The territorial seas; and (g) “Wetlands” adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area’s status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.”

**Watershed** – All the land area that contributes runoff to a particular point along a waterway. Watersheds typically consist of numerous catchments defined by either natural or manmade topographic divides. Undeveloped watersheds are typically defined by natural topographic divides, such as mountain and/or hill ridgelines. All of the rainfall and runoff that occurs within

the boundaries of a watershed is eventually conveyed to a discharge location, such as a river system that discharges into the ocean.

**Watershed Processes** – For the purposes of this Order, watershed processes are those affected by: stormwater, actions to manage stormwater, and/or land uses that alter stormwater runoff patterns. Watershed processes must be protected to attain water quality standards.

Watershed processes include the following:

- (1) Surface Runoff – Runoff volume, rate, duration, and surface storage;
- (2) Groundwater Recharge and Discharge – Infiltration to support baseflow and interflow to wetlands and surface waters, and deep vertical infiltration to groundwater;
- (3) Sediment Processes – Hillslope (rilling, gullying, sheetwash, creep, and other mass movements); riparian (bank erosion); and channel (fluvial transport and deposition) processes;
- (4) Chemical Processes – Chemical attenuation through sequestration, degradation, and rate of chemical delivery to receiving waters; and
- (5) Evapotranspiration – The return of water to the atmosphere from the soil and soil surface by direct drying and the respiration of plants.

**Wetland** – An area is wetland if, under normal circumstances, it (1) is saturated by groundwater or inundated by shallow surface water for a duration sufficient to cause anaerobic conditions within the upper substrate; (2) exhibits hydric substrate conditions indicative of such hydrology; and (3) either lacks vegetation or the vegetation is dominated by hydrophytes.

**Year 1** – February X, 2011 through February X, 2012

**Year 2** – February X, 2012 through February X, 2013

**Year 3** – February X, 2013 through February X, 2014

**Year 4** – February X, 2014 through February X, 2015

**Year 5** – February X, 2015 through February X, 2016

## Attachment C - Trash Generation Rates (TGRs) by Land Use

Land Use	Drainage Area (acres) <sup>1</sup>			Litter (pounds) <sup>1</sup>				TGR <sup>2</sup> (lbs/acre / year)	
	LA River	Ballona Creek	Total	LA River		Ballona Creek			Total
				2002-03	2003-04	2002-03	2003-04		
Commercial	136.77	108.86	245.63	1924.96	582.26	1138.24	504.50	4149.96	16.90
High Density Single Family Residential	113.99	165.24	279.23	480.20	186.49	658.47	345.07	1670.23	5.98
Industrial	119.89	216.82	336.71	2586.60	984.18	674.10	283.15	4528.03	13.45
Low Density Single Family Residential	164.38	179.97	344.35	124.08	84.97	728.82	273.03	1210.90	3.52
Open Space/Parks	141.78	143.47	285.25	549.79	221.13	514.90	216.95	1502.77	5.27
<b>Total</b>	<b>676.81</b>	<b>814.36</b>	<b>1491.17</b>	<b>5665.63</b>	<b>2059.03</b>	<b>3714.53</b>	<b>1622.70</b>	<b>13061.89</b>	<b>8.76</b>

<sup>1</sup> Data derived from Trash Baseline Monitoring Results for the Los Angeles River and Ballona Creek Watersheds (Supplemental Report), County of Los Angeles Department of Public Works Watershed Management Division, May 2004.

<sup>2</sup> The Trash Generation Rate (TGR) is the weight of trash generated per acre of a particular land use.

## Attachment D - Monitoring and Reporting Program

- 1) General Provisions
  - a) All sampling shall be conducted by a qualified professional. All laboratory analyses shall be conducted according to USEPA approved methods unless otherwise noted, and at a State certified laboratory or at a laboratory approved by the Central Coast Water Board Executive Officer. State certified laboratories can be found at <http://www.cdph.ca.gov/certlic/labs/Documents/ELAPLablist.xls>.
  - b) The Permittee shall comply with the monitoring and Quality Assurance requirements in this Attachment. The Permittee may choose to comply with any requirement of this Attachment through a collaborative effort with other entities. If the Permittee elects to comply with monitoring requirements of this Order through a collaborative effort, the Permittee shall provide documentation to the Central Coast Water Board, such as a written agreement, letter, or similar document that confirms the collaborative arrangement. Regardless of any collaborative efforts, the Permittee is solely responsible for complying with this Attachment and this overall Order.
  
- 2) Quality Assurance Plan Development
  - a) Within 3 months of adoption of this Order, the Permittee shall develop and submit a Quality Assurance Project Plan (QAPP) for approval by the Central Coast Water Board Executive Officer. The QAPP will also serve as the sampling plan for this Monitoring and Reporting Program (MRP).
  - b) The QAPP shall include receiving water and site-specific information, project organization and responsibilities, and quality assurance components of the MRP. The QAPP shall also include the laboratory and field requirements to be used for analyses and data evaluation. Specifically, the QAPP must include all site locations (including map and Geographic Information System [GIS] locations) for sites proposed to fulfill MRP requirements. The QAPP must propose specific catchment monitoring site locations, describe catchment trend monitoring instrumentation, and other details necessary to best assess water quality conditions. The QAPP must contain adequate detail for Permittee and Central Coast Water Board staff to identify and assess the technical and quality objectives, measurement and data acquisition methods, and limitations of the data generated under the monitoring program. All sampling and laboratory methodologies and QAPP content must be consistent with USEPA methods, State Water Board's Surface Water Ambient Monitoring Program (SWAMP) protocols, and CCAMP. The QAPP shall include the following minimum required components, in accordance with USEPA guidelines<sup>1</sup> and SWAMP templates.<sup>2</sup>
    - i) Project Management – The Project Management component must address basic project management, including the project history and objectives, roles and responsibilities of the participants, and other aspects.
    - ii) Data Generation and Acquisition – The Data Generation and Acquisition component must address all aspects of project design and implementation. The component must include maps and specific GIS coordinates of proposed monitoring locations to fulfill MRP requirements, and describe methods for sampling, measurement and analysis, instrumentation, data collection or generation, and data handling. The

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<sup>1</sup> EPA Requirements for Quality Assurance Project Plans; EPA QA/R-5. Washington, D.C.; Office of Environmental Information; USEPA, March 2001. Web. 17 August 2011 <<http://www.epa.gov/quality/qs-docs/r5-final.pdf>>.

<sup>2</sup> SWAMP resources for developing QAPPs, including QAPP templates, can be found at [http://www.waterboards.ca.gov/water\\_issues/programs/swamp/tools.shtml#qa](http://www.waterboards.ca.gov/water_issues/programs/swamp/tools.shtml#qa) (Quality Assurance).

- QAPP must ensure that quality control activities are employed and properly documented. Quality control requirements are applicable to all the constituents sampled as part of the MRP, as described in the relevant method.
- iii) Assessment and Oversight – The Assessment and Oversight component must describe activities for assessing the effectiveness of the implementation of the MRP and associated QA and QC activities. The purpose of the assessment is to provide project oversight that will ensure that the QAPP is implemented as prescribed.
  - iv) Data Validation and Usability – The Data Validation and Usability component must address the quality assurance activities that occur after the data collection, laboratory analysis and data generation phases are complete. Implementation of these elements ensures that the data conform to the specified criteria, thus achieving MRP objectives.
- c) The Central Coast Water Board may conduct an audit of the Permittee's contracted laboratories at any time in order to evaluate compliance with the QAPP.
- 3) Urban Catchment Action Level Pilot Projects Monitoring
- a) Beginning in Year 2, the Permittee shall initiate Urban Catchment Action Level Pilot Projects Monitoring of stormwater discharges from identified urban catchments, in accordance with the QAPP/Sampling Plan approved by the Central Coast Water Board Executive Officer. The Urban Catchment Action Level Pilot Projects Monitoring program shall be designed to assess attainment of Stormwater Discharge Action Levels identified in Section P (Monitoring, Effectiveness Assessment, and Program Improvement).
  - b) The Permittee shall select one urban catchment from each of the four urban catchment categories identified in Table Attachment D.1. The selected urban catchments shall be representative of the associated primary land use in each category and of urban catchments within the Permit coverage area with the same primary land use.
  - c) The Permittee shall conduct stormwater discharge sampling for each selected urban catchment at the point where the urban catchment discharges to the associated receiving water. Where there are concerns for human health and safety or sampling is not feasible due to conditions in the receiving water, the Permittee may conduct sampling at the lowest manhole in the urban catchment in which stormwater discharge water is not mixed with backflow from the receiving water. The Permittee shall indicate sampling site identifiers and locations in the QAPP/Sampling Plan and on the watershed map developed according to Section Q.2 (Watershed Characterization: Watershed Delineation). The QAPP shall include maps delineating the upstream drainages and primary urban land uses of each urban catchment selected for sampling.
  - d) The Permittee shall conduct Urban Catchment Action Level Pilot Projects Monitoring during two rain events each rainy season, including the first significant rain event of the season. For the purposes of this Attachment, a significant rain event shall be defined as an event predicted to exceed ½ inch of rainfall within a 24 hour period, or resulting in significant runoff from the urban catchment. The Permittee shall collect samples within the first three hours of flow of increased flow.
  - e) Urban Catchment Action Level Pilot Projects Monitoring shall include the monitoring parameters and requirements identified in Table Attachment D.2.
- 4) Stormwater Discharge Trend Monitoring
- a) Within 12 months of adoption of this Order, the Permittee shall initiate Stormwater Discharge Trend Monitoring of a single urban catchment for long-term loading trends, in accordance with the QAPP/Sampling Plan approved by the Central Coast Water Board Executive Officer. The purpose of Stormwater Discharge Trend Monitoring is to characterize storm loading of pollutants with sufficient frequency that changes in event

mean average pollutant concentrations and loads can be detected over time. The Permittee shall conduct Stormwater Discharge Trend Monitoring at the stormwater pump station to the Salinas River unless otherwise approved by the Central Coast Water Board Executive Officer. The Permittee shall identify a specific sampling location at the pump station, and include a description of the sampling location in the QAPP.

- b) The Permittee shall conduct Stormwater Discharge Trend Monitoring during at least three significant rain events each rainy season, including the first significant storm event of the season. For the purposes of this Attachment, a significant rain event shall be defined as an event predicted to exceed ½ inch of rainfall within a 24 hour period, or resulting in significant runoff to the pump station.
  - c) The sampling site shall be instrumented with an automated water sampling device (such as manufactured by Teledyne Isco, or equivalent) that is configured with a depth/flow sensor that enables flow integrated sampling of discharge. Samples shall be flow-weighted composites, collected into a single 2-gallon (or larger) glass bottle for analysis. The sampling device shall be programmed prior to each sampling event to collect samples at flow-proportioned intervals throughout the storm event once water depth in the storm drain begins to rise. Each composite shall consist of a minimum of 5 discrete samples collected throughout the event, with more samples preferable, and sufficient total volume must be collected to provide adequate water volume for analytical purposes. The sample shall be homogenized and in suspension when subsampled for analytical purposes. Flow volume shall be estimated for the entire period of each sampled storm rain event and average concentrations and total loads of measured pollutants must be reported for each sampled rain event.
  - d) Stormwater Discharge Trend Monitoring shall include the monitoring parameters and requirements identified in detail in Table Attachment D.3.
- 5) Receiving Water Monitoring
- a) Within 12 months of adoption of this Order, the Permittee shall initiate Receiving Water Monitoring in accordance with the QAPP/Sampling Plan approved by the Central Coast Water Board Executive Officer. The purpose of Receiving Water Monitoring is to track status and long-term trends (five years or more) in receiving water quality and beneficial uses.
  - b) The Permittee shall conduct Receiving Water Monitoring for the Salinas Reclamation Ditch. The Permittee shall identify a monitoring site in a location downstream of urban influences. In identifying monitoring sites, the Permittee shall assess the applicability of existing monitoring sites included in past monitoring by the Permittee or by related monitoring programs (e.g., CCAMP and the Cooperative Monitoring Program for Agriculture) and sampling consistency with past data collection for purposes of trend evaluation. Where doing so would comply with the requirements of this Attachment, the Permittee shall maintain monitoring continuity by using existing monitoring sites, such as CCAMP sampling station 309ALD, for Receiving Water Monitoring.
  - c) The Permittee shall include a sampling schedule in the QAPP/Sampling Plan. At a minimum, Receiving Water Monitoring shall include the sampling frequencies, parameter lists, and other requirements described in Table Attachment D.4, unless approved by the Central Coast Water Board Executive Officer.
    - i) The Receiving Water Monitoring water column sampling schedule shall consist of monthly sampling, at a minimum, including two significant storm events each rainy season. Storm event sampling shall include the first rain event of the season that results in significant increase in stream flow. For the purposes of this Attachment, a significant rain event shall be defined as an event predicted to exceed ½ inch of

- rainfall within a 24 hour period, or resulting in significant runoff to the sampled receiving water.
- ii) Storm event sampling shall be conducted within 18 hours of each sampled storm event.
  - d) Receiving Water Monitoring shall include the following types of monitoring, evaluation parameters, and other requirements listed below and described in detail in Table Attachment D.4:
    - i) Flow Monitoring;
    - ii) Water Quality (physical parameters, metals, nutrients, pesticides);
    - iii) Toxicity (water and sediment); and
    - iv) Assessment of Benthic Invertebrates.
  - e) Water column toxicity analyses shall be conducted on 100 percent (undiluted) sample. If the source of toxicity is unresolved, the Central Coast Water Board Executive Officer may require a Toxicity Identification Evaluation to identify the cause of the toxicity.

#### 6) Reporting

- a) Within three months of adoption of this Order, the Permittee shall submit the QAPP.
- b) Within three months following the collection of the first quarter of monitoring data, and quarterly thereafter (i.e., by January 1, April 1, July 1, and October 1), the Permittee shall submit all water quality monitoring data collected in accordance with this Order to the Central Coast Water Board. Data shall include all stormwater discharge and receiving water monitoring data, and shall be submitted electronically through the California Data Upload and Checking System (CalDUCS) (available at <http://www.ccamp.info/ceden/index.html>). Data shall be submitted in a format that successfully passes the CalDUCS checking requirements, and shall include proper documentation of site locations, quality assurance data, methods, equipment identifications, and other information specified by CalDUCS templates.
- c) In each Annual Report, the Permittee shall include:
  - i) Monitoring objectives and design;
  - ii) Urban catchments selected for Urban Catchment Action Level Pilot Project monitoring;
  - iii) Sampling site descriptions and rainfall records for the time period covered;
  - iv) Location of sampling sites and map(s);
  - v) Sampling and analytical methods used;
  - vi) Identification of the method used to obtain flow at each monitoring site during each monitoring event, as required;
  - vii) Identification of the location of any discharges observed discharging directly to surface receiving water;
  - viii) Event mean average concentrations and total loads of measured pollutants must be reported for each sampled rain event, as required;
  - ix) Copies of chain-of-custody forms;
  - x) Field data sheets, signed laboratory reports, and laboratory raw data;
  - xi) Associated laboratory and field quality control samples results;
  - xii) A summary of Quality Assurance Evaluation results;
  - xiii) Electronic or hard copies of photos obtained from all monitoring sites, clearly labeled with site ID and date;
  - xiv) A summary of water quality data for any sites monitored as part of related monitoring programs that have also been used to evaluate receiving water as described;
  - xv) A discussion of the data which clearly illustrates compliance with this Order and all applicable water quality standards;

- xvi) Results of all analyses arranged in tabular form so that the required information is readily discernible;
  - xvii) An evaluation of pesticide and toxicity analyses results;
  - xviii) An evaluation of bioassessment results;
  - xix) A description of each method used to evaluate and analyze all monitoring results; and
  - xx) Identification and prioritization of potential water quality and beneficial use issues based on analysis of all monitoring results.
- d) The Permittee shall submit the following items with the Report of Waste Discharge:
- i) An analysis of event mean average concentrations and loads generated through Stormwater Discharge Trend Monitoring to evaluate stormwater discharge water quality trends, using nonparametric approaches such as the Mann-Kendall test, multiple regression models including exogenous variables (e.g., precipitation, flow), or other applicable statistical approaches;
  - ii) An evaluation and discussion of stormwater discharge water quality loads, concentrations, and trends generated through Urban Catchment Action Level Pilot Projects Monitoring and Stormwater Discharge Trend Monitoring, relative to upstream land uses, population, sources, and stormwater management activities, using tools such as multiple linear regression, correlation analysis, and/or other applicable univariate and multivariate statistical approaches;
  - iii) An analysis of Receiving Water Monitoring results over the term of this Order, including identification and discussion of short-term patterns and long-term trends in receiving water quality and beneficial use protection;
  - iv) An evaluation of all pesticide and toxicity analyses results;
  - v) An evaluation of all bioassessment results;
  - vi) Results of all analyses arranged in tabular form so that the required information is readily discernible; and
  - vii) Conclusions.

Table Attachment D.1. Urban Catchment Action Level Pilot Project Locations<sup>1</sup>

Urban Catchment Category	Urban Catchment Number <sup>2</sup>
Residential	RD-0800
	GC-1000
	NC-4000
	CL-3000
Industrial	RD-6000
	RD-6400
	RD-7600
	RD-9600
Retail Center	MS-1000
	MS-2000
	MS-3000
	RD-2400
Mixed Use	RD-1200
	RD-2000
	RD-3200
	RD-5600

<sup>1</sup> At a minimum, one site must be selected from each urban catchment category on this list for Urban Catchment Action Level Pilot Project Monitoring.

<sup>2</sup> Urban catchment numbers correspond to MS4 subsystems identified on the City of Salinas Modeled Storm Drainage System Map, April 2004.

Table Attachment D.2. Urban Catchment Action Level Pilot Project Monitoring Parameters

Parameter	Analytical Method <sup>1</sup>	RL	Units <sup>3</sup>	Min Sampling Frequency
Temperature (water)	Field Measure	0.1	° Celsius	Grab sample taken during two storm events including the first flushing storm of the season
pH	Field Measure	0.1	pH units	
Electrical Conductivity	EPA 120.1	100	µS/cm	
Turbidity	EPA 180.1	1	NTUs	
Nitrate + Nitrite (as N)	EPA 300.0, EPA 353.2	0.1	mg/L	
Fecal coliform	MPN/100 ml	25-tube dilution to allow max. detection of 160,000 MPN/100 ml	MPN/100 ml	
Zinc	EPA 200.8	1.0	ug/L	
Copper	EPA 200.8	0.05	ug/L	
<b>Pyrethroid Pesticides</b>				
Gamma-cyhalothrin	See Note <sup>4</sup>	0.002	ug/L	
Lambda-cyhalothrin	"	0.002	ug/L	
Bifenthrin	"	0.002	ug/L	
Cyfluthrin	"	0.004	ug/L	
Cypermethrin	"	0.004	ug/L	

<sup>1</sup> In-field water testing instruments/equipment as a substitute for laboratory analysis if the method is approved by EPA, meets RL/PQL specifications in the MRP, and appropriate sampling methodology and quality assurance checks can be applied to ensure that QAPP standards are met to ensure accuracy of the test.

<sup>2</sup> Unionized ammonia must be calculated from field temperature, field pH, and Total Ammonia.

<sup>3</sup> NTU – Nephelometric turbidity unit; RL – Reporting Limit; NA – Not applicable; uS/cm – microSiemens per centimeter; ug/L – micrograms per liter; MPN/100 ml – Most Probable Number per 100 milliliters.

<sup>4</sup> Extraction by Separatory Funnel Extraction, EPA 3510C; analysis by EPA 8081 Modified.

Table Attachment D.3. Stormwater Discharge Trend Monitoring Parameters<sup>1</sup>

Parameter	Analytical Method <sup>2</sup>	Sampling Method	RL	Units	Min Sampling Frequency
Temperature (water)	Grab	Grab	0.1	° Celsius	During three storm events including the first major storm event of the season. Flow weighted composite samples to be collected throughout storm using automated water sampling device (Isco or other) on half hour intervals and composited for the entire storm.
pH	Field Measure and lab measure	Grab (for unionized ammonia calculations) and Composite	0.1	pH units	
Electrical Conductivity	EPA 120.1	“	100	µS/cm	
Turbidity	EPA 180.1	“	1	NTUs	
Nitrate + Nitrite (as N)	EPA 300.0, EPA 353.2	“	0.1	mg/L	
Ammonia, Total	EPA 350.1	“	0.1	mg/L	
Ammonia, Unionized <sup>3</sup>	Calculated	“		mg/L	
Fecal and Total Coliform	25-tube dilution to allow max. detection of 160,000 MPN/100 ml	“		MPN/100 ml	
Ortho-phosphate	EPA 365.1	“	0.01	mg/L	
Zinc	EPA 200.8	“	0.1	ug/L	
Copper	EPA 200.8	“	0.05	ug/L	
<b>Pyrethroid Pesticides</b>					
Gamma-cyhalothrin	See Note <sup>5</sup>	“	0.001	ug/L	
Lambda-cyhalothrin	”	“	0.001	ug/L	
Bifenthrin	”	“	0.002	ug/L	
Beta-cyfluthrin	”	“	0.004	ug/L	
Cyfluthrin	”	“	0.004	ug/L	
Esfenvalerate	”	“	0.002	ug/L	
Permethrin	”	“	0.005	ug/L	

Cypermethrin	”	“	0.004	ug/L	
Fenvalerate	”	“	0.002	ug/L	
Discharge	30-minute interval (or greater) throughout storm	Depth and velocity sensors	NA	CFS and total flow volume	Three significant storms (> 0.5”); total volume of storm to be calculated
Precipitation	Total for storm		NA	Tenths of inches	Three significant storms (> 0.5”)

<sup>1</sup> Stormwater Discharge Trend Monitoring occurs at the stormwater pump station to the Salinas River only.

<sup>2</sup> In-field water testing instruments/equipment as a substitute for laboratory analysis if the method is approved by EPA, meets RL/PQL specifications in the MRP, and appropriate sampling methodology and quality assurance checks can be applied to ensure that QAPP standards are met to ensure accuracy of the test.

<sup>3</sup> Unionized ammonia must be calculated from field temperature, field pH, and Total Ammonia.

<sup>4</sup> CFS – Cubic feet per second; NTU – Nephelometric turbidity unit; RL - Reporting Limit; uS/cm – microSiemens per centimeter; ug/L – micrograms per liter; MPN/100 ml – Most Probable Number per 100 milliliters.

<sup>5</sup> Extraction by Separatory Funnel Extraction, EPA 3510C; analysis by EPA 8081 Modified.

Table Attachment D.4. Receiving Water Monitoring Parameters<sup>1</sup>

Parameters and Tests <sup>6</sup>	Analytical Method	RL <sup>3</sup>	Monitoring Frequency <sup>2</sup>
<b>Photo Monitoring</b>			
Upstream and downstream photographs at monitoring location			With every monitoring event
<b>WATER COLUMN SAMPLING</b>			
<b>Physical Parameters and General Chemistry</b>			
Flow (CFS) <sup>4</sup>	Field Measure	0.25	Monthly, including 2 stormwater events
pH	Field Measure	0.1	
Electrical Conductivity (uS/cm)	EPA 120.1	2.5	
Dissolved Oxygen (mg/L)	Field Measure	0.1	
Temperature (°C)	Field Measure	0.1	
Turbidity (NTU)	EPA 180.1	0.5	Monthly grab sample, including 2 stormwater events
Total Dissolved Solids (mg/L)	EPA 160.1	10	
Total Suspended Solids (mg/L)	EPA 160.2	0.5	
<b>Nutrients</b>			
Total Nitrogen (mg/L)	Calculation	0.5	Monthly grab sample, including 2 stormwater events
Nitrate + Nitrite (as N) (mg/L)	EPA 300.0, EPA 353.2	0.1	
Total Ammonia (mg/L)	EPA 350.1	0.1	
Unionized Ammonia, (mg/L)	Calculation	NA	
Total Phosphorus (as P) (mg/L)	EPA 365.4	0.06	
Soluble Orthophosphate (mg/L)	EPA 365.1	0.01	
Zinc (ug/L)	EPA 200.8	1.0	
Copper (ug/L)	EPA 200.8	0.05	
Fecal and Total Coliform (MPN/100 ml)	25-tube dilution to allow max. detection of 160,000 MPN/100 ml		
Algae cover, Floating Mats, Percent coverage <sup>8</sup>	see note <sup>8</sup>	-	Monthly, including 2 stormwater events
Algae cover, Attached, Percent coverage <sup>9</sup>	see note <sup>9</sup>	-	
<b>Water Column Toxicity Test</b>			
Algae - <i>Selenastrum capricornutum</i> , 4 day	EPA 1003.0	SWAMP SOP	Once in dry season, once in rainy season, from grab samples
Water Flea – <i>Ceriodaphnia dubia</i> (7-day chronic)	EPA 1002.0		
Fathead Minnow - <i>Pimephales promelas</i> (7-day chronic)	EPA 1000.0		
Toxicity Identification Evaluation	N/A		As directed by Central Coast Water Board Executive Officer
<b>Pesticides and Herbicides (ug/L)</b>			
Diuron	EPA 632	0.05	Once in dry season, once in rainy season, from grab samples,
Glyphosate	EPA 547	2.0	
Simazine	EPA 536; 619	0.05	

Parameters and Tests <sup>6</sup>	Analytical Method	RL <sup>3</sup>	Monitoring Frequency <sup>2</sup>
Carbaryl	EPA 531; 632	0.05	concurrent with water toxicity monitoring
Malathion	EPA 8141; 614	0.04	
2,4-D	EPA 8270D SIM or 8151	0.1	
Triclopyr	EPA 8270D SIM or 8151	0.1	
Dicamba	EPA 8151A	0.1	
<b>Metals (ug/L)</b>			
Arsenic (total)	EPA 200.8	0.3	Once in dry season, once in rainy season, from grab samples, concurrent with water toxicity monitoring
Cadmium (total)	EPA 200.8	0.01	
Copper (total)	EPA 200.8	0.01	
Lead (total)	EPA 200.8	0.01	
Nickel (total)	EPA 200.8	0.02	
Zinc (total and dissolved)	EPA 200.8	0.10	
<b>Other (ug/L)</b>			
Total Phenolic Compounds	EPA 8270	10	Once in dry season, once in rainy season, from grab samples,
<b>SEDIMENT SAMPLING</b>			
Benthic Invertebrate Assessment and Associated Physical Habitat Assessment <sup>5</sup>	SWAMP SOP	SWAMP SOP	Annually, during May - July
Sediment Toxicity - <i>Hyalella azteca</i> 10-day	EPA 100.1	Survival; Growth	Annually, concurrent with bioassessment
<b>Pyrethroid Pesticides in Sediment</b>			
Gamma-cyhalothrin (ug/kg)	See Note <sup>7</sup>	2	Annually, concurrent with bioassessment
Lambda-cyhalothrin (ug/kg)	"	2	
Bifenthrin (ug/kg)	"	2	
Beta-cyfluthrin (ug/kg)	"	2	
Cyfluthrin (ug/kg)	"	2	
Esfenvalerate (ug/kg)	"	2	
Permethrin (ug/kg)	"	2	
Cypermethrin (ug/kg)	"	2	
Danitol (ug/kg)	"	2	
Fenvalerate (ug/kg)	"	2	
Fluvalinate (ug/kg)	"	2	
<b>Other Parameters in Sediment</b>			
Sediment Grain Size Analysis	% clay, silt, sand, gravel	1%	Annually, concurrent with bioassessment
Total Organic Carbon	EPA 415.1	0.01%	

<sup>1</sup> At a minimum, Receiving Water Monitoring shall occur downstream of urban influences in the Salinas Reclamation Ditch (monitoring location 309ALD).

<sup>2</sup> Monitoring is ongoing through all five years of the Order, unless otherwise specified.

<sup>3</sup> Reporting Limit, taken from SWAMP where applicable. Any EPA method may be used that achieves this limit.

<sup>4</sup> See SWAMP field measures SOP, p. 17

<sup>5</sup> Ode, P.R. 2007. Standard Operating Procedures for Collecting Benthic Macroinvertebrate Samples and Associated Physical and Chemical Data for Ambient Bioassessments in California, State Water Board Surface Water Ambient Monitoring Program (SWAMP), as subsequently revised (<http://swamp.mpsl.miml.calstate.edu/resources-and-downloads/standard-operating-procedures> ). The Permittee may petition the Central Coast Water Board Executive Officer to modify their sampling procedures if these referenced procedures change during the term of this Order.

Biological assessments shall include benthic macroinvertebrates and algae. Bioassessment sampling method shall be multihabitat reach-wide. Macroinvertebrates shall be identified according to the Standard Taxonomic Effort Level II of the Southwestern Association of Freshwater Invertebrate Taxonomists, using the most current SWAMP approved method. Current guidelines are documented in (1) SWAMP Standard Operating Procedure (SOP) and Interim Guidance on Quality Assurance for SWAMP Bioassessments, Memorandum to SWAMP Roundtable from Beverly H. van Buuren and Peter R. Ode, 5-21-07, and (2) Amendment to SWAMP Interim Guidance on Quality Assurance for SWAMP Bioassessments, Memorandum to SWAMP Roundtable from Beverly H. van Buuren and Peter R. Ode, 9-17-08. For algae, include mass (ash-free dry weight), chlorophyll a, diatom and soft algae taxonomy, and reachwide algal percent cover. Physical Habitat (PHab) Assessment shall include the SWAMP basic method plus 1) depth and pebble count + CPOM, 2) cobble embeddedness, 3) discharge measurements, and 4) in-stream habitat. The Permittee may petition the Central Coast Water Board Executive Officer to modify these sampling procedures if SWAMP procedures change during the term of this Order.

<sup>6</sup> mg/L – milligrams per liter; ug/L – micrograms per liter; ug/kg – micrograms per kilogram; NTU – Nephelometric Turbidity Units; CFS – cubic feet per second

<sup>7</sup> Extraction by Pressurized Fluid Extraction, EPA 3545A with optional Cleanups 3620 Florisil, 3640 Gel Permeation; analysis by EPA 8720 Modified.

<sup>8</sup> An estimate of the percent of the flowing water surface upstream from the sample location that is occupied by floating mats of filamentous algae.

<sup>9</sup> An estimate of the percent of substrate in the wetted channel upstream from the sample location that is covered in periphyton. Periphyton is defined here as the living community attached to the substrate, including algae, aquatic mosses, fungi, diatoms, and sessile invertebrates.

**Attachment E - Steps for a Successful LID Design**  
**Developed by the Low Impact Development Initiative, UC Davis Extension**  
**Low Impact Development (LID) for Stormwater Control:**  
**New and Redevelopment Project Design Guidance**

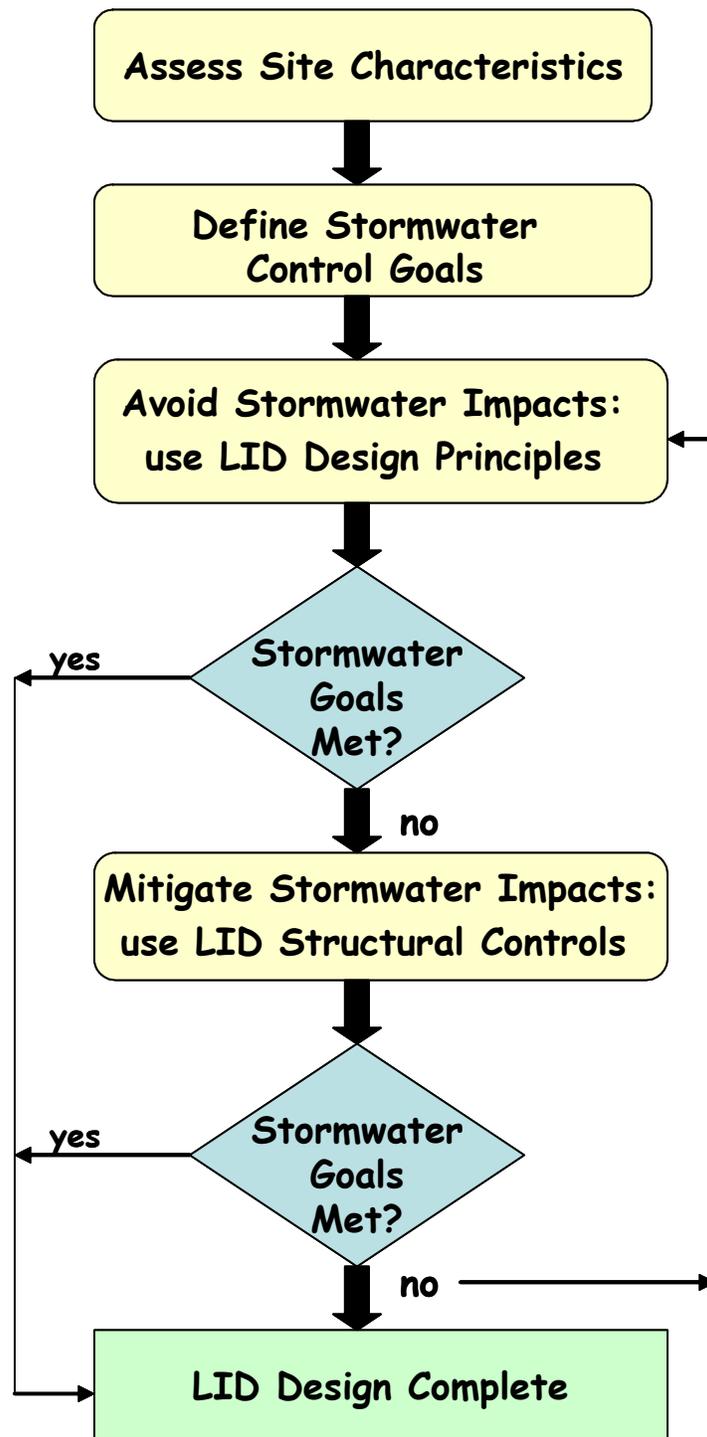
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The purpose of this document is assist project applicants and reviewers (e.g. city, county, state) understand the basic steps involved to successfully integrate LID into a project design as part of their stormwater management for new and redevelopment.

There is a general understanding that LID is a type of site design that strives to protect the natural hydrology once the site is developed. However, there is a common misconception that LID is only about the use of structural practices such as rain gardens, pervious pavements, and bioswales. In fact, a good LID design incorporates both site planning principles and structural practices to achieve site performance objectives. Neglecting to incorporate LID design principles throughout the site planning and design process often results in the designer attempting to fit LID structural practices to the site after all other site design has been defined. This can result in higher costs as well as a reduced ability to meet stormwater management objectives.

Lastly, LID design is often an iterative process that includes evaluating the stormwater benefits (e.g., reduced surface runoff, improved water quality) during the design and going back to the design to revise and then recalculate benefits. The applicant will need to understand any specific stormwater management requirements. By following and documenting the steps outlined in this guidance, the applicant will have conducted their due diligence in creating the best LID design possible for the project.

# The LID Site Design Process



## Step 1 Assess Site Characteristics

A significant part of conducting Low Impact Development is integrating the site characteristics with the project design in ways that help minimize environmental impacts. Site features that provide opportunities to reduce stormwater runoff include: protected areas, setbacks, easements, riparian areas, soil types, and topographic features.

### Design Tips:

- Avoid excessive grading and disturbance of vegetation and soils,
- Concentrate development on portions of the site with less permeable soils, and preserve areas that can promote infiltration.
- Where possible, conform the site layout along natural landforms, and replicate the site's natural drainage patterns.

## Step 2 Define Stormwater Control Goals and the LID Evaluation Approach

An understanding of the project site drainage/hydrology provides the initial information from which further analysis can be conducted. The applicant will need to compare baseline stormwater runoff characteristics (i.e., flow and/or water quality) to various LID design alternatives to determine the level of stormwater management that can be achieved. The hydrologic condition baseline will be defined by the local government agency reviewing and approving the project and may be defined as either: 1) pre-development<sup>1</sup>, 2) pre-project<sup>2</sup>, or 3) some condition in between pre-development and pre-project. The local government agency may require the applicant to use different baselines for different stormwater runoff characteristics (e.g., pre-development for flow characteristics and pre-project for water quality characteristics).

Step 2a: The applicant should clarify with the project permitting agency the acceptable manner in how the storm and runoff scenarios will be calculated and modeled. This may include defining:

- The storm events to be evaluated (e.g., 2-, 5-, 10-yr, 24-hour storms)
- The runoff parameters to be estimated (e.g., runoff volumes, peak, duration, time of concentration, water quality)
- The approach to evaluating the interaction between precipitation and land response (e.g., single event or continuous simulations)

<sup>1</sup> Pre-development: The native vegetation and soil conditions that existed prior to human influence (e.g., urbanization, agriculture, grazing, timber harvest).

<sup>2</sup> Pre-project: The condition immediately prior to the proposed project. The condition includes, but is not limited to, soil type, vegetation, and amount of impervious surface.

- The calculations and models to be used to describe stormwater runoff and or water quality scenarios (e.g., Rational Method, TR-55, HSPF, SWMM)

Step 2b: For each subdrainage area as well as the total project area, conduct baseline stormwater runoff calculations using methods and parameters determined appropriate by the review/approval agency.

#### **Step 4 Avoid Stormwater Impacts: use LID design principles**

Impervious surfaces such as buildings, roads, and parking lots are big offenders in changing how rainwater acts on the land. An increase in impervious area impedes rainwater from naturally infiltrating into the ground and causes high volumes and rates of stormwater runoff, which can cause flooding and environmental damage. During the project design, techniques to reduce the amount of impervious surfaces will help greatly in managing stormwater.

##### Design Tips:

- Reduce the number of parking spaces
- Narrow the road width
- Reduce sidewalks to one side of the street
- Design residential driveways to be shared, narrow
- Evaluate an alternative roadway layout

For necessary impervious surfaces, techniques can be used to reduce their impact.

##### Design Tips:

- Disconnect roof drains and direct flows to vegetated areas
- Direct flows from paved areas to stabilized vegetated areas
- Break up flow direction from large paved surfaces

#### **Step 5 Evaluate Design to Determine if Stormwater Goals have been Achieved**

Once the project site has been delineated, analysis tools defined, and the site layout established, a hydrologic analysis can be conducted to compare the stormwater runoff characteristics of the specified hydrologic condition baseline (Step 2) with the initial site layout (Step 3). This hydrologic analysis will quantify the level of control that has been provided through the site planning process and will provide information as to the additional level of control, if any, required to meet stormwater control objectives for the project.

Step 4a: Calculate the runoff parameters (e.g., volume, rate, peak, duration, water quality) for the initial site layout. Use the same type of calculations and modeling methods as defined in Step 2a in order to compare the results with the baseline conditions.

## Step 6 Mitigate Stormwater Impacts: use LID Structural Controls

After completing Steps 1 and 2, additional structural stormwater controls may be required to meet the LID site design objectives. Examples of LID BMPs include bioretention systems (e.g. swales, rain gardens), pervious pavements and pavers, and green roofs. There are several technical BMP manuals that provide design specifications. The permitting agency for your project can guide you to an appropriate manual.

### Design Tips:

- To more easily manage the stormwater from the entire site, conduct decentralized management: divide the site into discrete drainage areas within the project site (e.g. roof runoff) and design the BMP(s) as necessary to control that runoff.
- Use simple, small scale practices, such as rain gardens, which mimic nature and manage stormwater at the source.
- Make landscape and infrastructure multifunctional to leverage space and reduce costs. For example, use pervious pavement for a parking lot and direct any runoff to vegetated planting strips designed to provide stormwater benefits.

## Step 7 Evaluate Design to Determine if Stormwater Goals have been Achieved

Repeat Step 5 to determine if stormwater goals have been met. If not, reassess Step 4 and 7. An iterative approach to the design may be required to meet or establish maximum extent feasible.

## Attachment F - Salinas Existing Urban Subwatersheds

- 1) Natividad Creek Existing Urban Subwatershed – Existing urban catchments and other developed areas draining to Natividad Creek
  - a) NC-6000<sup>1</sup>
  - b) NC-3000
  - c) NC-1500
  - d) NC-5000
  - e) NC-4000
  - f) NC-2000
  - g) NC-1000
  - h) Other existing urban areas draining to Natividad Creek
  
- 2) Chavez Park Detention Basin Existing Urban Subwatershed – Existing urban catchments and other developed areas draining to Chavez Park Detention Basin
  - a) CL-3000
  - b) CL-2000
  - c) CL-1000
  - d) Other existing urban areas draining to Chavez Park Detention Basin
  
- 3) East Reclamation Ditch Existing Urban Subwatershed – Existing urban catchments and other developed areas draining to the Reclamation Ditch east of Carr Lake
  - a) RD-4000
  - b) RD-4800
  - c) RD-6800
  - d) RD-7200
  - e) RD-8000
  - f) RD-8400
  - g) RD-9000
  - h) RD-9200
  - i) RD-9600
  - j) RD-7600
  - k) RD-6400
  - l) RD-6000
  - m) RD-5600
  - n) RD-5200
  - o) RD-4400
  - p) Other existing urban areas draining to the Reclamation Ditch east of Carr Lake
  
- 4) Gabilan Creek Existing Urban Subwatershed – Existing urban catchments and other developed areas draining to Gabilan Creek
  - a) GC-6000
  - b) GC-5000
  - c) GC-4000
  - d) GC-3000
  - e) GC-2000
  - f) GC-0500
  - g) Other existing urban areas draining to Gabilan Creek

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<sup>1</sup> Urban catchments are derived from “Modeled Existing Storm Drainage Subareas,” City of Salinas Stormwater Master Plan, April 2004.

- 5) Carr Lake Existing Urban Subwatershed – Existing urban catchments and other developed areas draining to Carr Lake
  - a) GC-1000
  - b) RD-3800
  - c) Other existing urban areas draining to Carr Lake
  
- 6) Santa Rita Creek Existing Urban Subwatershed – Existing urban catchments and other developed areas draining to Santa Rita Creek
  - a) SRC-1000
  - b) SRC-2000
  - c) SRC-3000
  - d) SRC-4000
  - e) SRC-5000
  - f) Other existing urban areas draining to Santa Rita Creek
  
- 7) Markeley Swamp Existing Urban Subwatershed – Existing urban catchments and other developed areas draining to Markeley Swamp
  - a) MS-1000
  - b) MS-2000
  - c) MS-3000
  - d) Other existing urban areas draining to Markeley Swamp
  
- 8) West Reclamation Ditch Existing Urban Subwatershed – Existing urban catchments and other developed areas draining to the Reclamation Ditch west of Carr Lake
  - a) RD-0800
  - b) RD-1600
  - c) RD-2400
  - d) RD-2800
  - e) RD-3600
  - f) RD-3200
  - g) RD-2600
  - h) RD-2000
  - i) RD-1200
  - j) RD-0400
  - k) Other existing urban areas draining to the Reclamation Ditch west of Carr Lake
  
- 9) Salinas River Existing Urban Subwatershed – Existing urban catchments and other developed areas draining to the stormwater pump station to the Salinas River
  - a) SR-0500
  - b) Other existing urban areas draining to the Salinas River

## Attachment G – Inspection Ratings

- 1) The Permittee shall determine Inspection Ratings during inspections of High Priority Municipal Facilities, Operations, and Events; Commercial and Industrial Facilities and Operations; and High Priority Construction Sites (collectively, “Sites”) as required according to Sections E.8.c (Municipal Maintenance: Quarterly Inspections for High Priority Municipal Facilities, Maintenance Operations, and Events), F.4 (Commercial and Industrial: Inspection of Facilities and Operations), and K.6.d (Construction Site Management: High Priority Construction Sites). The Permittee shall determine the Inspection Rating for each inspected Site using the following procedure, or an equivalent method approved by the Central Coast Water Board Executive Officer.
- a) The Permittee shall determine the Inspection Rating for each inspected Site, according to the Site’s level of compliance with the provisions of this Order and the Permittee’s BMP implementation requirements, and the level of risk of pollutant discharge from the Site, using the matrix contained in Table Attachment G.1.

Table Attachment G.1 – Inspection Rating

Compliance Level	Pollutant Discharge Risk Level			
	None	Low	Moderate	High
In Compliance	A	B	C	--
Minor Non-Compliance	B	C	D	F
Significant Non-Compliance	E	E	F	F

- b) Pollutant Discharge Risk Level – The Permittee shall determine the Pollutant Discharge Risk Level for each Site using Tables Attachment G.2, G.3, and G.4.
- i) High Priority Municipal Facilities, Operations, and Events; and Commercial and Industrial Facilities and Operations

Table Attachment G.2 – Pollutant Discharge Risk Level Definitions

Risk Level	Definition
None	No pollutant exposure to stormwater, and no reasonable possibility of pollutant discharge in runoff resulting from a ½-inch rain event
Low	Minor pollutant exposure to stormwater, and little or no reasonable expectation of pollutant discharge in runoff resulting from a ½-inch rain event
Moderate	Minor pollutant exposure to stormwater, and potential for minor pollutant discharge in runoff resulting from a ½-inch rain event
High	More than minor pollutant exposure to stormwater, and potential for more than minor pollutant discharge in runoff resulting from a ½-inch rain event

- ii) Fast Food Restaurants and Commercial Retail Centers

Table Attachment G.3 – Pollutant Discharge Risk Level Definitions

Risk Level	Meaning
None	On first glance, no trash visible
Low	On first glance, little or no trash visible; after close inspection, small levels of trash are evident

Moderate	Trash is evident on first glance in parking, loading, and/or garbage areas
High	Trash distracts the eye on first glance; substantial levels of trash are present

iii) High Priority Construction Sites

Table Attachment G.4 – Pollutant Discharge Risk Level Definitions

<b>Risk Level</b>	<b>Meaning</b>
None	No risk of sediment mobilization or discharge in runoff resulting from a ½-inch rain event
Low	Little or no reasonable expectation of sediment mobilization or discharge in runoff resulting from a ½-inch rain event
Moderate	Potential for minor sediment mobilization or discharge in runoff resulting from a ½-inch rain event
High	Potential for more than minor sediment mobilization or discharge in runoff resulting from a ½-inch rain event

c) Compliance Level – The Permittee shall determine the Compliance Level for each Site using Tables Attachment G.5, G.6, G.7, and G.8.

i) High Priority Municipal Facilities, Operations, and Events – The Permittee shall determine the Compliance Level of each High Priority Municipal Facility, Operation, and Event in relation to the specific inspection checklist developed for each facility, operation, and event in accordance with Section E.4 (Municipal Maintenance: High Priority Municipal Facilities, Maintenance Operations, and Events).

Table Attachment G.5 – Compliance Level Definitions

<b>Compliance Level</b>	<b>Definition</b>
In Compliance	All BMPs identified in the Site-specific inspection checklist are properly implemented, installed, and maintained
Minor Non-Compliance	The Site contains only a small number of minor deviations from BMP implementation, installation, and maintenance requirements detailed in the Site-specific inspection checklist
Significant Non-Compliance	The Site contains significant deviations, or more than a few minor deviations, from BMP implementation, installation, and maintenance requirements detailed in the Site-specific inspection checklist

ii) Commercial and Industrial Facilities and Operations – The Permittee shall determine the Compliance Level of each Commercial and Industrial Facility and Operation in relation to minimum BMPs designated by the Permittee in accordance with Section F.2 (Commercial and Industrial: Minimum BMPs) (for the type of Site under inspection) and guidance contained in the CASQA BMP Handbook for Industrial and Commercial,<sup>1</sup> or equivalent manual, that is appropriate for the type of Site.

<sup>1</sup> California Stormwater Quality Association (CASQA). *Stormwater Best Management Practices Handbook for Industrial and Commercial*. CASQA, 2003.

Table Attachment G.6 – Compliance Level Definitions

<b>Compliance Level</b>	<b>Definition</b>
In Compliance	All BMP selection, implementation, installation, and maintenance is in accordance with minimum BMPs and with CASQA guidance, or equivalent
Minor Non-Compliance	The Site contains only a small number of minor deviations from minimum BMPs or from CASQA guidance, or equivalent
Significant Non-Compliance	The Site contains significant deviations, or more than a few minor deviations, from minimum BMPs or from CASQA guidance, or equivalent

- iii) Fast Food Restaurants and Commercial Retail Centers – The Permittee shall determine the Compliance Level of each Fast Food Restaurant and Commercial Retail Center in relation to minimum trash and litter source control and clean-up BMPs designated by the Permittee in accordance with Section F.2 (Commercial and Industrial: Minimum BMPs), and in relation to selection, implementation, installation, and maintenance guidance for trash and litter source control and clean-up BMPs contained in the CASQA BMP Handbook for Industrial and Commercial, or equivalent manual.

Table Attachment G.7 – Compliance Level Definitions

<b>Compliance Level</b>	<b>Definition</b>
In Compliance	All trash and litter source control and clean-up BMPs are selected, implemented, installed, and maintained in accordance with minimum BMPs and with CASQA guidance, or equivalent
Minor Non-Compliance	The Site contains only a small number of minor deviations from minimum trash and litter source control and clean-up BMPs or from CASQA guidance, or equivalent, for trash and litter source control and clean-up BMPs
Significant Non-Compliance	The Site contains significant deviations, or more than a few minor deviations, from minimum trash and litter source control and clean-up BMPs or from CASQA guidance, or equivalent, for trash and litter source control and clean-up BMPs

- iv) High Priority Construction Sites – The Permittee shall determine the Compliance Level of each High Priority Construction Site in relation to minimum requirements for erosion and sediment control designated by the Permittee in accordance with Sections K.3 (Construction Site Management: Minimum Construction BMPs for All Construction Sites) and K.4 (Construction Site Management: Minimum Requirements for High Priority Construction Sites), and in relation to selection, implementation, installation, and maintenance guidance for erosion and sediment control BMPs contained in the CASQA BMP Handbook for Construction,<sup>2</sup> or equivalent manual.

<sup>2</sup> California Stormwater Quality Association (CASQA). *Stormwater Best Management Practices Handbook for Construction*. CASQA, 2003.

Table Attachment G.8 – Compliance Level Definitions

Compliance Level	Definition
In Compliance	All erosion and sediment control BMPs are selected, implemented, installed, and maintained in accordance with minimum BMPs and with CASQA guidance, or equivalent
Minor Non-Compliance	The Site contains only a small number of minor deviations from minimum BMPs or from CASQA guidance, or equivalent, for erosion and sediment control BMPs
Significant Non-Compliance	The Site contains significant deviations, or more than a few minor deviations, from minimum BMPs or from CASQA guidance, or equivalent, for erosion and sediment control BMPs

- 2) The procedure for determining Inspection Ratings contained in this Attachment results in two Inspection Ratings for fast food restaurants, one related to general requirements for commercial and industrial facilities and operations and the other related to requirements for trash and litter control. The Permittee shall document and track both Inspection Ratings determined for each inspection of a fast food restaurant.
- 3) For the purpose of calculating average Inspection Rating or average increase in Inspection Rating, as required in this Order, the Permittee shall assign numeric point values to Inspection Ratings as follows: A = 5 points, B = 4 points, C = 3 points, D = 2 points, E = 1 point, and F = 0 points.
- a) The Permittee shall determine the average Inspection Rating by computing the average of the point values assigned to Inspection Ratings, and then rounding down to the nearest whole number. The Inspection Rating corresponding to the resulting whole number shall be the average Inspection Rating.

Example: For five Sites with Inspection Ratings of "A," "A," "B," "D," and "F," respectively, the average Inspection Rating is found by dividing the sum of corresponding point values (i.e.,  $5 + 5 + 4 + 2 + 0 = 16$ ) by the number of Inspection Ratings ( $16 / 5 = 3.2$ ) and rounding down to the nearest whole number. The resulting average Inspection Rating for these sites is therefore "C."

- b) The Permittee shall determine the average increase in Inspection Rating by computing the average of increases over time in the point values assigned to the Inspection Ratings. The average increase in Inspection Rating is expressed as a numeric value.

Example: For five Sites with Inspection Ratings of "E," "E," "F," "E" and "F," respectively at one inspection, and Inspection Ratings of "D," "E," "E," "C," and "C," respectively at a subsequent inspection, the average increase in Inspection Rating is computed as shown in the table below. The average increase in Inspection Rating for these sites is therefore 1.4.

Site	Inspection 1		Inspection 2		Increase in Points
	Rating	Points	Rating	Points	
1	E	1	D	2	1
2	E	1	E	1	0
3	F	0	E	1	1
4	E	1	C	3	2
5	F	0	C	3	3
<b>Average Increase in Inspection Rating</b>					<b>1.4</b>

## Attachment H - Qualifying Retrofit Projects

Table Attachment H.1. Qualifying Retrofit Projects

<b>Project Type</b>	<b>Performance Goal(s)</b>
Retrofits to existing retention or detention basins that reduce the volume	20 percent reduction in volume of discharge generated by the 10-year 24-hour storm
Retrofits to existing retention or detention basins that reduce pollutant discharge	50 percent reduction in discharge, generated by the 10-year 24-hour storm, of particular POC
Retrofits to existing storm drain infrastructure that reduce pollutants in discharges from a minimum of one Urban Subwatershed	50 percent reduction in discharge, generated by the 10-year 24-hour storm, of particular POC
Retrofits to existing storm drain infrastructure that reduce trash in discharges from a minimum of one Urban Subwatershed	Installation of a trash capture device (or combination of devices) that screens 100 percent of the discharge, generated by the 10-year 24-hour storm, through a 2" screen
Retrofits to existing storm drain infrastructure that reduce the volume of stormwater discharges from a minimum of one Urban Subwatershed	20 percent reduction in volume of discharge generated by the 10-year 24-hour storm
Retrofits to existing streets that reduce volume of discharges to the MS4	20 percent reduction in volume of discharge, generated by the 10-year 24-hour storm, from at least 10,000 ft <sup>2</sup> existing impervious of surface
Retrofits to existing streets that reduce pollutants in discharges to the MS4	50 percent reduction in discharge, generated by the 10-year 24-hour storm, of particular POC from at least 10,000 ft <sup>2</sup> of existing impervious surface
Retrofits incorporated into road projects, provided that the retrofit treats the stormwater runoff from existing or replaced impervious surface (not new or additional impervious surface)	20 percent reduction in volume of discharge, generated by the 10-year 24-hour storm, or 50 percent reduction in discharge, generated by the 10-year 24-hour storm, of particular POC from at least 10,000 ft <sup>2</sup> of existing impervious surface
Replace existing underground storm drain infrastructure with above-ground swales	0.25 miles of underground storm drain infrastructure replaced with above-ground swales (with natural bottom), designed to provide

	stormwater volume reduction and pollutant attenuation
Floodplain acquisition	Acquisition of 5 acres of floodplain, currently zoned for development, and rezone to prohibit future development
Replacement of existing culvert	Reduce erosion, improve fish passage, and restore natural stream geomorphology of one culvert
Aquatic and riparian habitat enhancement projects	Restore the degraded watershed processes, within 100 feet from both sides of a stream (measured from top of the bank), for 100 linear feet of stream

## Attachment I – Standard Provisions

- 1) Duty to Comply [40 CFR 122.41(a)] and [40 CFR 122.41 (f)]
  - a) The Permittee shall comply with all of the provisions, terms, requirements and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act and the California Water Code and is grounds for enforcement action, Order termination, Order revocation and reissuance, Order modification, denial of renewal application, or a combination thereof. [40 CFR 122.41(a), California Water Code § 13261, 13263, 13265, 13268, 13300, 13301, 13304, 13340, 13350].
  - b) Any discharge of wastes other than specifically described in this Order is prohibited, and constitutes a violation of this Order.
  - c) The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement.
  - d) The filing of a request by the Permittee for an Order modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. [40 CFR 122.41(f)]
- 2) Duty to Mitigate [40 CFR 122.41(d)] - The Permittee shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.
- 3) Inspection and Entry [40 CFR 122.41(i)] - The Permittee shall allow the Central Coast Water Board, State Water Resources Control Board, USEPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon presentation of credentials and other documents as may be required by law, to:
  - a) Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
  - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;
  - c) Inspect and photograph or videotape, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order or that are related to or may impact any stormwater or non-stormwater discharge; and
  - d) Sample or monitor, at reasonable times, for the purpose of assuring Order compliance or as otherwise authorized by the Clean Water Act or the California Water Code, any substances or parameters at any location.
- 4) Property Rights [40 CFR 122.41(g)] - This Order does not convey any property rights of any sort, or any exclusive privilege. This Order does not authorize any injury to person or property or invasion of other private rights, or any infringement of federal, State, or local law or regulations.
- 5) Signatory Requirements [40 CFR 122.22(b)], [40 CFR Section 122.22(c)], and [40 CFR 122.22(d)]
  - a) All applications, reports, or other information that are submitted to the Central Coast Water Board or USEPA shall be signed by a principal executive officer, ranking elected official of the Permittee, or by a duly authorized representative of that person and shall contain the following certification:  
 "I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that

qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. “

- b) A person is a duly authorized representative only if:
    - i) The authorization is made in writing by the principal executive officer or ranking elected official of the Permittee;
    - ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and,
    - iii) The written authorization is submitted to the Central Coast Water Board.
  - c) Changes to authorization - If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements above must be submitted to the Central Coast Water Board prior to or together with any reports or information, to be signed by an authorized representative.
- 6) False Reporting [40 CFR 122.41(k)(2)] - Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment of not more than six months per violation, or by both.
- 7) Duty to Provide Information [40 CFR 122.41(h)] - The Permittee shall furnish the Central Coast Water Board or USEPA, during normal business hours, any requested information to determine compliance with this General Permit. The Permittee shall also furnish, upon request, copies of records required to be kept by this Order.
- 8) Proper Operation and Maintenance [40 CFR 122.41(e)] - The Permittee shall at all times properly operate and maintain any facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Order and with the requirements of the stormwater program. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance may require the operation of backup or auxiliary facilities or similar systems installed by the Permittee when necessary to achieve compliance with the conditions of this Order.
- 9) Provisions of this Order are severable. If any provision of this Order or the application of any provision of this Order to any circumstance is found invalid, the application of such provision to other circumstances and the remainder of this Order shall not be affected.
- 10) Upset [40 CFR 122.41(n)]<sup>1</sup>

<sup>1</sup> This provision applies to incidents where effluent limitations (numerical or narrative) as provided in this Order are exceeded, and which endanger public health or the environment.

- a) Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
  - b) A Permittee that wishes to establish the affirmative defense of an upset in an action brought for non compliance shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
    - i) An upset occurred and that the Permittee can identify the cause(s) of the upset;
    - ii) The permitted facility was being properly operated by the time of the upset;
    - iii) The Permittee submitted notice of the upset as required; and,
    - iv) The Permittee complied with any remedial measures required.
  - c) No determination made before an action for noncompliance, such as during administrative review of claims that non-compliance was caused by an upset, is final administrative action subject to judicial review.
  - d) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.
- 11) Modification, Reissuance or Termination [40 CFR 122.41(f)] - This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for an Order modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
- 12) Public Review - All documents submitted to the Central Coast Water Board in compliance with the terms and conditions of this Order shall be made available to members of the public pursuant to the Freedom of Information Act (5 U.S.C. § 552), as amended, and the Public Records Act (California Government Code § 6250 et seq.). This Order, the SWDS, and the SWMP shall be made available for public review as well as by Permittee employees.
- 13) Noncompliance Reporting [40 CFR 122.41(l)(6)] –The Permittee shall report to the Central Coast Water Board any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the time schedule and corrective measures taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The time schedule and corrective measures are subject to modification by the Central Coast Water Board Executive Officer.
- 14) Other Noncompliance [40 CFR 122.41(l)(7)] - The Permittee shall report to the Central Coast Water Board within 30 days when they cannot certify compliance and/or when they have had other instances of noncompliance. The report shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the time schedule and corrective measures taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The time schedule and corrective measures are subject to modification by the Central Coast Water Board Executive Officer.

- 15) Anticipated Noncompliance [40 CFR 122.41(l)(7)] - The Permittee shall give advance notice to the Central Coast Water Board of any planned changes in the regulated MS4 activity that may result in noncompliance with Order requirements.
- 16) Other Information [40 CFR 122.41(l)(8)] - Where the Permittee becomes aware that it failed to submit any relevant facts in an order application, or submitted incorrect information in an order application or in any report (including documents and other submitted information) to the Central Coast Water Board, it shall promptly submit such facts or information.
- 17) Duty to Reapply [40 CFR 122.41(b)] - If the Permittee wishes to continue an activity regulated by this Order after the expiration date of this Order, the Permittee must apply for and obtain a new order.
- 18) Need to Halt or Reduce Activity Not a Defense [40 CFR 122.41(c)] - It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order.
- 19) Enforcement
  - a) The Central Coast Water Board is authorized to enforce the terms of this Order under several provisions of the California Water Code, including but not limited to, Sections 13385, 13386, and 13387.
  - b) The enforcement provisions contained in this Order shall not act as a limitation on the statutory or regulatory authority of the State Water Board or the Central Coast Water Board.
  - c) Nothing in this Order shall be construed to protect the Permittee from its liabilities under federal, State or local laws.
  - d) Except as provided for in 40 CFR 122.41(m) and (n), nothing in this Order shall be construed to relieve the Permittee from civil or criminal penalties for noncompliance.
  - e) Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject to under Section 311 of the Clean Water Act.
  - f) Nothing in this Order shall be construed to preclude institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act.
  - g) Any violation of this Order constitutes violation of the California Water Code and regulations adopted hereunder and the provisions of the Clean Water Act, and is the basis for enforcement, Order termination, Order revocation and reissuance, denial of an application for Order reissuance; or a combination thereof.
  - h) SWRCB and the Central Coast Water Board may impose administrative civil liability, may refer a discharger to the State Attorney General to seek civil monetary penalties, may seek injunctive relief or take other appropriate enforcement action as provided in the California Water Code or federal law for violation of Board orders.
  - i) Significant penalties may be imposed for violation of this Order, pursuant to California Water Code section 13385 and other State and federal statutes. Court-imposed liability may exceed \$25,000 per day, and the Central Coast Water Board may impose administrative fines exceeding \$10,000 per day. [40 CFR 122.41(a)(2)&(3)].
  - j) The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this Order shall, upon conviction, be punished by a fine of not more than \$10,000, or by

imprisonment for not more than two years, or both. Higher penalties may be imposed for repeat offenders. [40 CFR 122.41(j)(5)].

- k) Part 309 of the Clean Water Act provides significant penalties for any person who violates an Order condition implementing Parts 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act or any condition or limitation implementing any such section in an order issued under Part 402. Any person who violates any condition of this Order is subject to a civil penalty not to exceed \$27,500 per calendar day of such violation, as well as any other appropriate sanction provided by Part 309 of the Clean Water Act.
- l) The California Water Code also provides for administrative, civil, and criminal penalties, which in some cases are greater than those under the Clean Water Act.
- m) Any person failing to file a Report of Waste Discharge or other report or other document as required by this Order shall be subject to a civil penalty not to exceed \$5,000 per day.

## 20) Monitoring

- a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. [40 CFR Section 122.41(j)(1)].
- b) Monitoring results must be conducted according to test procedures under 40 CFR Part 136, or in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503 unless other test procedures have been specified in this Order [40 CFR Section 122.41(j)(4)][40 CFR Section 122.44(i)(1)(iv)].
- c) Except for records of monitoring information required by this Order related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all monitoring reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 5 years from the date of the sample, measurement, report or application. This period may be extended by request of the Central Coast Water Board Executive Officer at any time.
- d) Records of monitoring information shall include:
  - i) The date, exact place, and time of sampling or measurements;
  - ii) The individual(s) who performed the sampling or measurements;
  - iii) The date(s) analyses were performed;
  - iv) The individual(s) who performed the analyses;
  - v) The analytical techniques or methods used; and
  - vi) The results of such analyses.

## 21) Reporting [40 CFR 122.42(c)] – The Permittee shall submit an Annual Report by April 2<sup>nd</sup> of each year. The Annual Report shall be compiled into one document. Each Annual Report shall include:

- a) A detailed table of contents that specifies each section, subsection and attachment;
- b) The specific permit requirement each piece information is supporting;
- c) The status of implementing the components of the storm water management program that are established as permit conditions;
- d) Proposed changes to the storm water management programs that are established as permit conditions. Such proposed changes shall be consistent with 40 CFR 122.26(d)(2)(iii);
- e) Revisions, if necessary, to the assessment of controls and the fiscal analysis reported in the permit application under 40 CFR 122.26(d)(2)(iv) and 40 CFR 122.26(d)(2)(v);
- f) A summary and analysis of data, including monitoring data, that is accumulated throughout the reporting year;

- g) Annual expenditures and budget for year following each annual report;
  - h) A summary describing the number and nature of enforcement actions, inspections, and public education programs;
  - i) Identification of water quality improvements or degradation; and
  - j) Information satisfying all reporting requirements specified in this Order.
- 22) Transfers - This Order is not transferable. The Permittee shall submit written notification to the Central Coast Water Board to terminate coverage of this Order.
- 23) Duty to Minimize or Correct Adverse Impacts - The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
- 24) Interim Effluent Limitations - The Permittee shall comply with any interim effluent limitations as established by addendum, enforcement action, or revised waste discharge requirements which have been, or may be, adopted by this Regional Board.
- 25) Minor Modifications of Order [40 CFR 122.63] – The Central Coast Water Board Executive Officer may modify this order to make the corrections or allowances for changes in the permitted activity following the procedures of 40 CFR 122.63 if processed as a minor modification. Minor modifications correct typographical errors or require more frequent monitoring or reporting by the Permittee.
- 26) Discharge is a Privilege [CWC section 13263(g)] - No discharge of waste into the waters of the State, whether or not such discharge is made pursuant to waste discharge requirements, shall create a vested right to continue such discharge. All discharges of waste into waters of the State are privileges, not rights.

## Attachment J - Modifications to Stormwater Development Standards: Initial Flow Control Criteria

**1.5.3 Numeric Criteria for Stormwater Management**

3. The project applicant shall prepare an exhibit showing the entire site divided into discrete drainage areas and demonstrate in submitted site stormwater control plans (SWCPs) that for each discrete drainage area the following numeric criteria are met:
  - A. Volume Reduction Requirements: Runoff from impervious areas produced by the 24-hour 85<sup>th</sup> percentile storm (currently 0.6 inches of rainfall for the City of Salinas) is ~~either (1) retained. If the project cannot retain the entire volume of runoff produced by the first 0.6 inches of rainfall on the impervious areas of the project in each drainage area, the project may detain the remaining portion of water. Detained runoff shall , or (2) detained and allowed to infiltrate and/or seep away slowly, as occurs in a bioretention facility, with biotreatment features, designed with a minimum of 18 inches of soil, a design surface loading rate not exceeding 5 inches/hour, and a total volume (including surface detention, soil interstices, and subsurface storage) equal to the volume of runoff produced by the first 0.6 inches of rainfall on the drainage area tributary to the impervious areas of the project in each drainage area facility. The detention BMP(s) shall be unlined and designed to allow infiltration. If a project utilizes detention for meeting the volume reduction requirements, the project applicant shall demonstrate why full retention of the volume of runoff produced by the first 0.6 inches of rainfall on the impervious areas of the project in each drainage area is not practicable.~~

## Attachment K - Summary of Milestones and Deadlines

Provision Section	Submittal Date	Continuous Task	Task
<b>3 Months</b>			
J.2	2 months	X	Revise SWDS to separate the document into SWDS Requirements and SWDS Guidance
J.4	2 months		Revise SWDS to include Priority Development Project interim applicability thresholds
J.4	2 months		Revise SWDS to include requirement for Priority Development Project applicants to submit a Stormwater Control Plan
J.4	2 months		Revise SWDS to include requirement for Priority Development Project applicants to adhere to site layout requirements
J.4	2 months		Revise SWDS to include requirement for Priority Development Project applicants to implement source control measures
J.4	2 months		Revise SWDS to include requirement for Priority Development Projects to use decentralized controls
J.4	2 months		Revise SWDS to include Priority Development Project interim flow control criteria
J.5	AR	X	Develop and maintain an information management system
L.1	AR	X	Require Specific Plans or other master planning documents to meet requirements specified in Order
S.2	AR	X	Enforcement information management system that tracks instances of violations
S.2	AR	X	Identify chronic violators
Attach. D.2	3 months		Submit QAPP
<b>6 Months</b>			
H.3	6 months		Submit alternative to minimum of 20 percent of Permit coverage area designated as High Priority IDDE areas (optional task)
K.10	AR	X	Develop and maintain information management system for construction sites
<b>Year 1</b>			
E.1	AR	X	Municipal maintenance inventory
E.2	AR	X	Municipal facilities, maintenance operations, and events assessment
E.3	AR	X	Develop and implement minimum BMPs for municipal facilities, maintenance operations, and events
E.4	AR	X	Develop, update, and implement a stormwater pollution prevention plan for High Priority Municipal Facilities and Events
E.4	AR	X	Develop, update, and implement standard operating procedures for High Priority Maintenance Operations
E.5	AR		Inspect all catch basins
E.6	AR		Prioritize routes for sweeping
E.6	AR	X	Develop and keep current sweeping map

## Attachment K - Summary of Milestones and Deadlines

Provision Section	Submittal Date	Continuous Task	Task
<b>Year 1 - Continued</b>			
E.6	AR	X	Sweep streets and parking lots
E.6	AR	X	Develop and implement procedure to dispose of street sweeper waste material
E.6	AR	X	Develop and implement BMPs to reduce the tracking of dirt and other debris onto streets.
E.6	AR	X	Develop and utilize legal authority for tracking of dirt and other debris onto streets
E.7	AR	X	Verification of the maintenance of structural BMPs
E.8	AR		Develop inspections of Municipal Facilities, Maintenance Operations, and Events
E.9	AR	X	Develop and implement assessment and reduction of water quality impacts in new flood management projects
E.10	AR	X	Develop and maintain information management system
E.12	AR		Develop plan for Salinas River Outfall
E.13	AR	X	Staff training and assessment
F.1	AR	X	Commercial and industrial inventory
F.2	AR	X	Designate and require implementation of minimum BMPs
F.3	AR	X	Notify commercial and industrial owners and operators of stormwater requirements
F.4	AR		Develop inspection procedures including Inspection Ratings
F.5	AR	X	Obtain, track and analyze monitoring data collected by enrollees in the General Industrial Permit
F.6	AR	X	Develop and maintain information management system
F.9	AR	X	Staff training and assessment
G.1	AR	X	Prioritize residential areas and activities
G.3	AR	X	Staff training and assessment
G.5	AR		Identify and prioritize existing private development
G.5	AR		Establish criteria for new private residential development
H.2	AR	X	Update MS4 System Map
H.3	AR	X	High Priority IDDE areas: develop and implement procedures, identify and map.
H.4	AR	X	Develop, implement, promote and publicize illicit discharge reporting system.
H.4	AR	X	Develop information management system to track reports of illicit discharges
H.4	AR	X	Develop and maintain written response procedure
H.4	AR	X	Develop mechanism for sewage spill notification
H.4	AR	X	Test reporting system
H.4	AR	X	Include illicit discharge reporting procedure in fleet vehicles
H.5	AR	X	Develop and implement procedures for illicit discharge identification
H.5	AR	X	Conduct drive-by inspections

## Attachment K - Summary of Milestones and Deadlines

Provision Section	Submittal Date	Continuous Task	Task
<b>Year 1 - Continued</b>			
H.5	AR	X	Develop and maintain information management system for drive-by inspections
H.5	AR	X	Review results of drive-by inspections
H.6	AR	X	Develop dry weather screening procedures, parameters, stations, and Information management system
H.7	AR	X	Develop and implement illicit discharge source investigation
H.8	AR	X	Facilitate disposal of household hazardous waste
H.9	AR		Identify storm drains to be labeled and dumping signs to be installed
H.10	AR	X	Prohibit excessive water application
H.11	AR	X	Enforcement of illicit discharges
H.12	AR	X	Staff training and assessment
J.3	11 months		Revise SWDS to include Non-Priority Development Project requirements
J.3	AR		Establish legal authority to implement Non-Priority Development Project requirements
J.3	AR	X	Develop guidance for long-term BMP maintenance and provide to Non-Priority Development Project owners
J.4	11 months		Revise SWDS to include Priority Development Project final flow control criteria (includes: applicability criteria, numeric flow control criteria, modeling requirements)
J.4	11 months		Revise SWDS to include Priority Development Project final treatment criteria (includes: applicability criteria, pollutant identification and reduction criteria, numeric treatment criteria)
J.4	AR		Model biotreatment soil media specifications report
J.4	11 months		Revise SWDS to include Priority Development Project requirements for operation and maintenance plans
J.6	AR	X	Staff training
K.2	AR		Establish criteria for High Priority Construction Sites
K.3	AR	X	Require minimum BMPs for all construction sites
K.4	AR	X	Implement minimum requirements for High Priority Construction Sites
K.5	AR	X	Review construction plans
K.6	AR	X	Develop and implement inspections of construction sites and information management system to track inspections
K.7	AR	X	Inspect structural BMP installation
K.9	AR	X	Enforcement of construction site management
K.11	AR	X	Staff training and assessment

## Attachment K - Summary of Milestones and Deadlines

Provision Section	Submittal Date	Continuous Task	Task
<b>Year 1 - Continued</b>			
L.1	AR		Revise planning and building requirements related to new development and redevelopment projects subject to parcel-scale development requirements
L.1	AR	X	Modify and implement riparian setback requirements
L.1	AR		CEQA process updates
L.3	AR	X	Participate in the Salinas Valley Integrated Regional Water Management process
L.3	AR	X	Upon next revision of General Plan Housing Element, identify areas to address stormwater in flood management decisions
M.3	AR		Identify highest Priority Stormwater Issues
M.4	AR		Identify target audiences for each identified Priority Stormwater Issue
M.8	AR	X	Implement education for new development and redevelopment projects
M.9	AR	X	Implement public advisory group
M.10	AR	X	Keep website up-to-date
N.2.a	AR	X	Identify and implement trash control BMPs
N.2.b	AR	X	Inspect surface drainage structures
P.1.b	AR	X	Ensure all catch basins found to be 60% full have been moved to higher priority tier
P.1.b	AR	X	Track and analyze street sweeping solids data
P.1.b	AR	X	Track pesticide, herbicide, and fertilizer usage data
P.1.b	AR	X	Record and track all exceptions, exemptions, and variances from Riparian Protection Policies and Requirements
P.1.b	AR	X	Determine the total amount of riparian encroachment and mitigation/creation
P.2.a	AR		Quantify annual Urban Subwatershed pollutant loads
P.2.c	AR		Quantify Pre-developed, Developed, and 24-Hour 85th Percentile Storm Event runoff volume
P.4.c	AR	X	Conduct Stormwater Discharge Trend Monitoring
P.5	AR	X	Conduct Receiving Water Monitoring
Q.2	AR	X	Delineate existing and future urban subwatersheds
Q.2	AR	X	Create and maintain a MS4 system map
Q.3	AR	X	Identify and map all ephemeral, intermittent, and perennial water bodies
Q.4	AR		Submit the dominant watershed processes for each urban subwatershed
R.2	AR	X	Annual Budget Summary for the current reporting year
R.2	AR	X	Annual Fiscal Analysis for the upcoming reporting year

## Attachment K - Summary of Milestones and Deadlines

Provision Section	Submittal Date	Continuous Task	Task
<b>Year 1 - Continued</b>			
S.1	AR	X	Review and revise the existing municipal codes, ordinances, statutes, standards, specifications, permits, contracts, and other regulations in order to implement and enforce all of the requirements of this Order
S.2	AR		Enforcement Response Plan
S.3	AR		Statement certified by the Permittee's chief legal council
S.4	AR	X	Staff training
<b>Year 2</b>			
E.5	AR	X	Develop and implement a tiered catch basin inspection schedule
E.8	AR	X	Implement inspections of Municipal Facilities, Maintenance Operations, and Events
E.11	AR	X	Coordinate with Monterey County Water Resources Agency
F.4	AR	X	Implement inspections of commercial and industrial facilities or operations
G.2	AR	X	Designate and require implementation of minimum BMPs
G.5	AR	X	Keep list of residential areas where stormwater conveyance system components are not owned or operated by the Permittee updated and designation of which areas are High Priority Private Development updated.
G.5	AR	X	Implement or require implementation of minimum BMPs for High Priority Private Development
H.6	AR	X	Conduct dry weather screening
H.9	AR	X	Label storm drains
H.9	AR		Post signs discouraging illegal dumping
L.2	AR	X	Derive a list of a minimum of 5 candidate retrofit projects
L.3	AR	X	Identify stormwater management opportunities consistent with the Integrated Regional Water Management Functionally Equivalent Plan Update
L.3	AR	X	Participate in development of salt and nutrient management plan(s) for all applicable groundwater basins per State Water Board Recycled Water Policy (State Water Board Resolution No. 2009-0011)
M.7	AR	X	Pilot projects implemented for Priority Stormwater Issues
N.2.c	AR		Identify sources of trash; evaluate and modify trash control BMPs
N.3	AR	X	Prioritize areas for trash reduction
N.3	AR	X	Develop and implement Trash Reduction Plan
P.1.a	AR		Develop plan for assessing effectiveness of public education and municipal staff training BMPs
P.1.b	AR	X	Evaluate effectiveness of BMPs at achieving target Inspection Ratings during inspections of High Priority Municipal Facilities and Operations, Commercial and Industrial Facilities and Operations, and High Priority Construction Sites

## Attachment K - Summary of Milestones and Deadlines

Provision Section	Submittal Date	Continuous Task	Task
<b>Year 2 - Continued</b>			
P.1.b	AR	X	Evaluate effectiveness of follow-up efforts at increasing Inspection Ratings through reinspections of low-performing High Priority Municipal Facilities and Operations and Commercial and Industrial Facilities and Operations
P.1.b	AR	X	Evaluate and modify structural BMP maintenance efforts
P.1.b	AR	X	Identify and implement modifications to the street sweeping program each year that increase the average volume of solids removed per road-mile swept for each sweeping route priority designation over time
P.1.b	AR		Compare pesticide, herbicide, and fertilizer usage over time; evaluate and modify BMPs to reduce usage prior to rain events
P.1.b	AR		Analyze industrial stormwater data submitted under the General Industrial Permit; identify Target Pollutant
P.4.b	AR	X	Conduct Urban Catchment Action Level Pilot Projects Monitoring
P.3.b	AR	X	Conduct Trash Assessments
Q.2	AR	X	Map existing connections
Q.3	AR	X	Identify and map zones that infiltrate stormwater
Q.4	AR	X	Conduct a rapid assessment for Gabilan and Natividad Creeks
Q.4	AR	X	Identify and map riparian vegetation and habitat for Gabilan and Natividad Creeks
Q.4	AR	X	Acquire and map impervious cover data
Q.5	AR	X	Maintain meteorological data
<b>Year 3</b>			
L.1	AR	X	Urban subwatershed-scale planning for specified land use actions
M.7	AR	X	Pilot projects expanded throughout the Permit coverage area.
N.2.c	AR		Implement modifications to trash and litter control BMPs
N.2.d	AR	X	Adopt and implement Trash Reduction Ordinance
P.1.a	AR		Assess effectiveness of public education and municipal staff training BMPs; modify BMPs to increase effectiveness
P.1.b	AR	X	Evaluate effectiveness of BMPs and modify to achieve increasing Inspection Ratings at High Priority Municipal Facilities and Operations, Commercial and Industrial Facilities and Operations, and High Priority Construction Sites

## Attachment K - Summary of Milestones and Deadlines

Provision Section	Submittal Date	Continuous Task	Task
<b>Year 3 - Continued</b>			
P.1.b	AR	X	Evaluate effectiveness of BMPs and modify to achieve an increasing trend in Inspection Rating improvement achieved through reinspection of low-performing High Priority Municipal Facilities and Operations and Commercial and Industrial Facilities and Operations
P.1.b	AR	X	Evaluate effectiveness of BMPs and modify to increase percentage of High Priority Construction Sites ready for rain events
P.1.b	AR		Evaluate effectiveness of BMPs and modify to reduce discharges of the Target Pollutant
P.3.a	AR	X	Implement actions in response to Stormwater Discharge Action Level exceedances, as required
P.3.b	AR	X	Implement actions in response to Trash Assessment Scores, as required
Q.4	AR	X	Conduct a rapid assessment (except for Gabilan and Natividad Creeks)
Q.4	AR	X	Identify and map riparian vegetation and habitat (except for Gabilan and Natividad Creeks)
<b>Year 4</b>			
E.6	AR		Prioritize routes for sweeping
L.1	AR	X	Review and update riparian protection policies and requirements based on existing riparian vegetation and habitat and growth potential
L.3	AR		Submit language from salt and nutrient management plan(s) identifying stormwater recharge/use goals and objectives
M.6	AR		Assessments of knowledge increase in target audiences for each Priority Stormwater Issue
N.4	AR	X	Develop and implement Trash Reduction Tracking Methodology
P.1.b	AR		Identify two Urban Subwatersheds for sediment source analysis
P.2.b	AR		Determine Baseline Trash Load and annual Trash Load Reduction
<b>Year 5</b>			
E.6	AR		Integrate sweeping routes into the watershed characterization map
L.2	AR		Submit long-term retrofit plan
L.2	AR		Complete 60% design of at least one qualifying retrofit project
P.1.a	ROWD		Re-assess effectiveness of public education and municipal staff training BMPs
P.1.b	ROWD		Analyze and identify sources of sediment to identified Urban Subwatersheds; evaluate and modify sediment control BMPs
P.1.b	ROWD		Identify routes that are significant sources of sediment and other debris to the MS4
P.1.b	ROWD		Evaluate effectiveness of modifications made to reduce discharges of the Target Pollutant
P.1.b	ROWD		Evaluate exceptions, exemptions, and variances permitted; inspect each riparian area created, enhanced, or restored; evaluate the effectiveness of its development planning and review process at protecting riparian areas

## Attachment K - Summary of Milestones and Deadlines

Provision Section	Submittal Date	Continuous Task	Task
<b>Year 5 - Continued</b>			
P.2.a	ROWD		Re-quantify annual Urban Subwatershed pollutant loads
P.2.b	ROWD		Evaluate and modify Trash Load Reduction Program
P.2.c	ROWD		Re-quantify Pre-developed, Developed, and 24-Hour 85th Percentile Storm Event runoff volume
P.4.c	ROWD		Analyze Stormwater Discharge Trend Monitoring data for stormwater discharge quality trends
P.5	ROWD		Analyze Receiving Water Monitoring data for receiving water quality trends
P.6	ROWD		Determine Urban Subwatershed Program Effectiveness Ratings
P.7	ROWD		Identify Urban Subwatershed Stormwater Management Program improvements needed
V.1	ROWD		Report of Waste Discharge application for renewal of waste discharge requirements.
<b>To Be Determined</b>			
O.2	TBD		Within one year of TMDL approval by the Office of Administrative Law, submit a plan for meeting the Permittee's wasteload allocation for every TMDL where the Permittee is listed as a responsible party
O.2	AR	X	Within 60 days of submitting a Wasteload Allocation Attainment Plan start implementing the plan. Submit a summary of Wasteload Allocation Attainment Plan implementation.
<p><b>Notes:</b>  AR = Due with the Permittee's Annual Report  ROWD = Due with the Report of Waste Discharge on August 6, 2016  In the Submittal Date column, dates that are listed in terms of months (e.g., 3 months) are due the specified months after the adoption of this Order  Items with an "X" in the Continuous Task column, have additional submittal dates and/or implementation requirements in subsequent years.  This table contains a brief summary of requirements contained in the Provisions. If a conflicting date is found in the Provisions, the Provisions shall prevail. If the Provisions include a requirement not included in this table, the Permittee shall implement that requirement.</p>			