



A-5.0 MUNICIPAL ACTIVITIES

The municipal activities component of this plan is composed of the following elements:

1. **Section A-5.1**, Program Summary
2. **Section A-5.2**, Model Municipal Activities Program Details
3. **Section A-5.3**, Model Integrated Pest Management, Pesticides and Fertilizer Guidelines
4. **Section A-5.4**, Education and Training

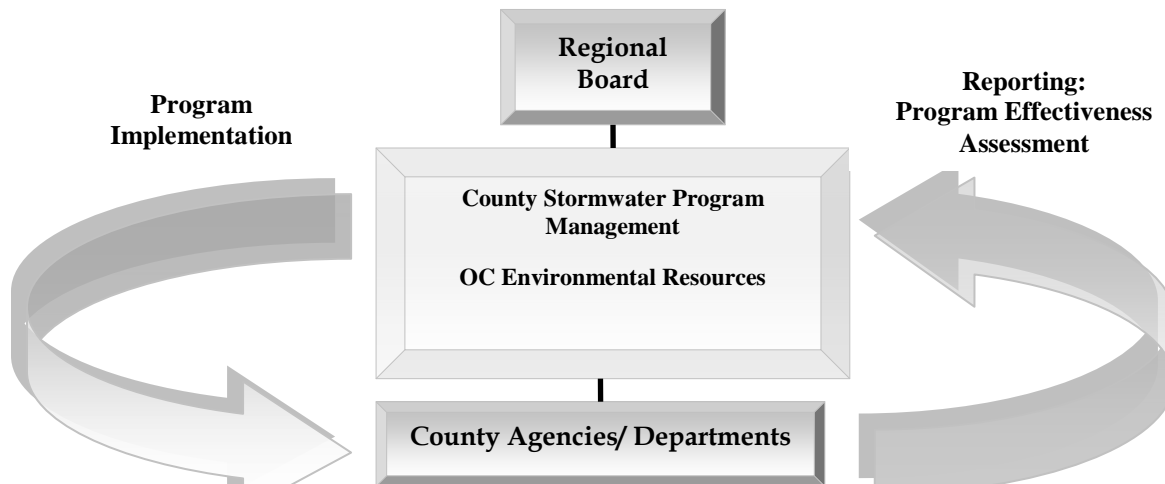
A-5.1 PROGRAM SUMMARY

The County implements a municipal program which meets the requirements of both the Fifth Term San Diego Region MS4 Permit (Order No. R9-2013-0001, NPDES No. CAS0109266, as amended by Order Nos. R9-2015-0001 and R9-2015-0100) and the 4th Term Santa Ana Region MS4 Permit (Order No. R8-2009-0030 as amended by Order No. R8-2010-0062) and, in accordance with the County’s water quality ordinance, prevents illicit discharges into the MS4, reduces municipal discharges of stormwater pollutants from the MS4 to the Maximum Extent Practicable, and seeks to prevent municipal discharges from the MS4 from causing or contributing to a violation of water quality standards. The County has incorporated the Model Municipal Activities Program described in **Section 5** of the **Drainage Area Management Plan (DAMP)** as the basis for this section of its Local Implementation Plan (LIP). Subsequent sections of A-5 describe and outline guidelines, procedures and requirements for the County.

A-5.1.1 Program Overview

The County’s LIP has been developed to assist municipal staff in complying with the Fifth Term San Diego Region MS4 Permit and the Fourth Term Santa Ana Region MS4 Permit. The program management model for overseeing, implementing, and enforcing the municipal activities stormwater program element is identified in **Figure A-5.1**.

**Figure A-5.1
Municipal Activities Program Management**





SECTION A-5, MUNICIPAL ACTIVITIES

The list below provides contact information for and describes the role that each of the various County departments that own, operate, or maintain fixed facilities, implement field programs, and/or manage drainage facilities. For each Department, the contact information for the employee who has the primary responsibility and oversight for ensuring that the program has been implemented has been included.

OC Public Works

1. OC Operations and Maintenance

Contact Name: Kevin Onuma
Title: Administrative Manager III
Telephone: (714) 647-3939
Address: 2301 N. Glassell St., Orange, CA 92865

Responsible for the operation and maintenance of drainage and flood control facilities throughout the County. Activities conducted within the flood control facilities may include the use of pesticides or herbicides, flushing, sediment removal, vegetation and debris removal and a variety of structural repairs.

Responsible for minor repairs on streets, maintenance of medians and rights-of-way adjacent to streets, signage and catch basin stenciling. Maintenance activities include application of pesticides and herbicides to control vegetation.

Street Sweeping:

Responsible for street sweeping on all public streets and parking lots. The County owns and operates two street sweepers; street sweeping is supplemented using contracted sweepers.

2. OC Facilities/Maintenance & CUF

Contact Name: Tim Corbett
Title: Administrative Manager
Telephone: (714) 667-4931
Address: 1143 Fruit Street, Santa Ana, CA 92701

Responsible for operation and maintenance of most County buildings including the County's Central Utility Facility (CUF). Maintenance activities, ranging from on-call emergency repairs to full service, are based on contract agreements with individual agencies and departments. Activities may include landscaping, HVAC, building maintenance and repair, and custodial services.

3. OC Fleet Services

Contact Name: Ron Vienna
Title: Administrative Manager III
Telephone: (714) 834-2117
Address: 445 Civic Center Drive West, Santa Ana, CA 92701

Responsible for the maintenance, repair, cleaning and fueling of all County vehicles except for Sheriff-Harbor Patrol vessels.



OC Community Resources

1. OC Parks

Contact Name: Robin LaMont
Title: Senior Construction Inspector/NPDES Coordinator
Telephone: (949) 585-6441
Address: 13042 Old Myford Road, Irvine CA 92606

Responsible for the operation and maintenance of OC Parks facilities which include regional parks, wilderness parks, as well as beaches and coastal areas.

2. OC Dana Point Harbor

Contact Name: David Rocha
Title: Engineering Manager
Telephone: (949) 923-3794
Address: 24650 Dana Point Harbor Drive, Dana Point, CA 92629

Responsible for engineering and maintenance of Dana Point Harbor. Manages the Dana Point Harbor Revitalization Plan.

3. OC Public Libraries

Contact Name: Kris Beard
Title: Systems & Resource Mgmt. Division Manager
Telephone: 714-480-2837
Address: 1501 East St. Andrew Place, Santa Ana, CA 92705

Responsible for maintenance of County libraries including landscaping.

John Wayne Airport

Contact Name: Melinda McCoy
Title: Airport Professional Environmental Engineer
Telephone: 949-252-5267
Address: 3160 Airway Avenue, Costa Mesa

Responsible for contract services for construction and maintenance activities including landscaping and parking lots.



SECTION A-5, MUNICIPAL ACTIVITIES

OC Waste & Recycling

Contact Name: Emily Jackson

Title: Civil Engineer

Telephone: 714-834-4076

Address: 300 N. Flower St., Suite 400, Santa Ana, CA 92703

Operates landfills and oversees Household Hazardous Waste Collection Sites which are operated by contract.

Orange County Health Care Agency/Facility Operations

Contact Name: Steve Karakash

Title: Manager

Telephone: 714-834-5158

Address: 405 W. 5th St., Santa Ana, CA 92701

Responsible for maintenance of HCA facilities and the used oil program. Manages the Food Facility Inspection Program.

Orange County Probation Department

Contact Name: Linda Barry

Title: Probation Admin. Manager/Contracts

Telephone: 714-569-2300

Address: 909 N. Main St., Santa Ana, CA 92701

Responsible for operation and maintenance of Probation facilities.

Orange County Sheriff-Coroner Department

Contact Name: Jeff McMillan

Title: Administrative Manager I

Telephone: 714-935-6879

Address: 431 The City Drive South, Santa Ana, CA 92703

Research & Development/Facilities Planning

Responsible for construction and remodeling activities.

Research & Development Division/Facilities Operations

Responsible for maintenance of Sheriff-Coroner facilities and contract management.

Social Services Agency

Contact Name: Louis Luu

Title: Senior Project Manager

Telephone: (714) 541-7416

Address: 888 North Main Street, Santa Ana, CA 92701

Real Property/Facilities Operations Planning

Responsible for construction and maintenance of Social Services Agency facilities and contract management.



SECTION A-5, MUNICIPAL ACTIVITIES

A-5.1.2 Program Commitments

The major program commitments and the subsections in which they are described in detail include:

- Maintain/update inventories of Municipal Areas and Activities/Fixed Facilities, Field Programs and Drainage Facilities that exist within the jurisdiction (**A-5.2.1**).
- Prioritize fixed facilities, for the purposes of determining the frequency of inspections (**A-5.2.2**).
- Maintain all Municipal Areas and Activities/Fixed Facilities, Field Programs and Drainage Facilities in accordance with Model Maintenance Procedures and as determined by inspections (**A-5.2.3**).
- Ensuring maintenance requirements through internal procedures and external contract language (**A-5.2.5**).
- Implement an Integrated Pest Management policy (**A-5.5**).
- Educate and train municipal staff (**A-5.6**).

A-5.1.3 Regulatory Requirements

The Model Municipal Activities Program and the Model Integrated Pest Management, Pesticide and Fertilizer Guidelines were developed in order to fulfill the municipal activity commitments and requirements of both the Fifth Term San Diego Region MS4 Permit and the 4th Term Santa Ana Region MS4 Permit.

A-5.2 MODEL MUNICIPAL ACTIVITY PROGRAM DETAILS

A-5.2.1 Municipal Inventories

An inventory of all municipal fixed facilities and drainage facilities sites has been compiled and is updated prior to the start of each wet season (October 1). These include all sites meeting the definition of a fixed facility or drainage facility, as described in **DAMP Section 5.2.1**. Based on this inventory and inspection records, the County annually evaluates the maintenance frequency for cleaning of drainage facilities, including catch basins.

The County's comprehensive municipal program inventories are included in **Exhibit A-5.I** to this LIP.

A-5.2.2 Prioritization

For areas within the San Diego Region of the County's jurisdiction, municipal separate storm sewer system (MS4) facilities are prioritized as high based on threat to water quality. Other municipal areas and activities are prioritized in accordance with the Fifth Term San Diego Region MS4 Permit.



SECTION A-5, MUNICIPAL ACTIVITIES

For areas within the Santa Ana Region of the County's jurisdiction, fixed facility sites are prioritized into *high*, *medium*, or *low* categories, based on the threat to water quality and the procedures set forth in **DAMP Section 5.2.2**. Drainage facility and field program sites are prioritized *high* based on the threat to water quality. A list of the prioritized fixed facility, field program, and drainage facility sites for the County is included in **LIP Exhibit A-5.II**.

A-5.2.3 Model Maintenance Procedures

For areas within the San Diego Region of the County's jurisdiction, staff perform operations at municipal areas and perform municipal activities according to the pollution prevention methods in its municipal program. These methods include designation and implementation of minimum BMPs for all municipal areas and activities and are area/activity-specific. For those municipal areas or activities tributary to a Clean Water Act 303(d) impaired water body segment in which the area or activity generates pollutants for which the water body segment is impaired, enhanced measures will be designated. Similarly, additional controls will be designated for municipal areas and activities within or directly adjacent to or discharging directly to coastal lagoons, the ocean, or other receiving waters within environmentally sensitive areas.

For areas within the Santa Ana Region of the County's jurisdiction, staff perform operations at fixed facilities, within field programs, and at drainage facilities according to the baseline procedures and Best Management Practices (BMPs) as described within the model maintenance procedures. Optional enhanced BMPs described within the model maintenance procedures have been implemented at high priority fixed facilities, field programs, and drainage facilities if operational history, inspection findings, or other special situations warrant implementation.

The County implements procedures to assess potential water quality impacts to receiving water bodies and ensure that flood management processes and projects do not contribute pollutants to receiving waters to the maximum extent practicable.

Model maintenance procedures relevant to the County's municipal facilities and field programs are included in **LIP Exhibit A-5.III** and are listed below in **Table A-5.2**.



Table A-5.1
Model Maintenance Procedures for the County of Orange

Fact Sheet	Model Maintenance Procedure
Fixed Facilities	
FF-1	Bay/Harbor Activities
FF-2	Building Maintenance and Repair
FF-3	Equipment Maintenance and Repair
FF-4	Fueling
FF-5	Landscape Maintenance
FF-6	Material Loading and Unloading
FF-7	Material Storage, Handling, and Disposal
FF-8	Minor Construction
FF-9	Parking Lot Maintenance
FF-10	Spill Prevention and Control
FF-11	Vehicle and Equipment Cleaning
FF-12	Vehicle and Equipment Storage
FF-13	Waste Handling and Disposal
Field Programs	
FP-1	Lake Management
FP-2	Landscape Maintenance
FP-3	Roads, Streets, and Highways Operation and Maintenance
FP-4	Sidewalk, Plaza, and Fountain Maintenance and Cleaning
FP-5	Solid Waste Handling
FP-6	Water and Sewer Utility Operation and Maintenance
FP-7	Fire Department Activities
Drainage Facilities	
DF-1	Drainage Facility Operation and Maintenance

A-5.2.4 Municipal Inspection and Requirements

Inspections of municipal fixed facilities, field programs, and drainage facilities are performed to verify that the maintenance procedures are being implemented, are appropriate for that municipal fixed facility, field program or drainage facilities and are protective of water quality.

Inspections are based upon the priority of the fixed facility or field program, and their threat to water quality as indicated in the site priority list included in **Exhibit A-5.II**. All drainage facilities are considered high priority. Inspection frequency is consistent, whether a facility or program is operated and maintained by municipal staff, contracted staff, or lessors.



SECTION A-5, MUNICIPAL ACTIVITIES

A-5.2.4.1 Inspection Frequencies

The frequency of municipal fixed facility and field program inspections within the San Diego Region of the County’s jurisdiction is shown in **Table A-5.2** below:

**Table A-5.2
San Diego Region Municipal Fixed Facility/Field Program Inspection Frequencies**

Fixed Facility/Field Program - High Priority	Inspection Frequency
Roads, Streets, Highways and Parking Facilities	Annually
Flood Management Projects and Flood Control Devices	Annually
Areas/activities tributary to a 303(d) impaired water body segments or where an activity generates pollutants for which the water body segment is impaired	Annually
Areas and activities within or adjacent to or discharging directly to coastal lagoons, the ocean or other receiving waters within environmentally sensitive areas	Annually
Municipal Airfields	Annually
Parks and Recreation Facilities	Annually
Special event venues following special events	Annually
Power washing activities	Annually
Other municipal areas and activities that the City determines may contribute a significant pollutant load to the MS4	Annually
Active or closed municipal landfills	Annually
Publicly owned treatment works (including water and wastewater treatment plants) and sanitary sewage collection systems	Annually
Solid waste transfer facilities	Annually
Land application sites	Annually
Corporate yards including maintenance and storage yards for materials, waste, equipment and vehicles	Annually
Household hazardous waste collection facilities	Annually
MS4/Drainage Facilities	Annually before the wet season, with additional inspections as needed during the wet season (see specific indications below)

Within the San Diego Region, subsequent to two full years of inspections, any facility determined to require an inspection frequency less than annually will be inspected as needed, at



SECTION A-5, MUNICIPAL ACTIVITIES

least every other year. Other municipal activities will be inspected as needed and in response to water quality data, valid complaints and findings from municipal or contract staff.

The frequency of municipal fixed facility and field program inspections within the Santa Ana Region of the County’s jurisdiction is shown in **Table A-5.3** below:

**Table A-5.3
Santa Ana Region Municipal Fixed Facility/Field Program Inspection Frequencies**

Facility/Program	Inspection Frequency
Fixed Facilities	
Municipal Corporation Yards	Annually
High Priority Fixed Facility	Annually
Medium Priority Fixed Facility	Biannually During First Year of Program Implementation
Low Priority Fixed Facility	Once During First Year of Program Implementation
Field Programs	
High Priority Field Programs	Annually
Drainage Facilities	
Drainage Facilities	Annually (see specific indications below)

Within the Santa Ana Region, municipal corporation yards will be inspected annually. For drainage facilities located in the Santa Ana Region, at least 80 percent of drainage facilities are inspected, cleaned, and maintained on an annual basis, with 100 percent of the facilities included in a two-year period. Fixed Facilities and Field Programs will be inspected as indicated above, however in the event of an observed problem, such as ineffective maintenance procedures or detected non-stormwater discharges, the inspection frequency will be increased as appropriate to facilitate correction of the problem.

A-5.2.4.2 Inspection Documentation Procedures

The inspection forms used by the County during inspections consist of the following:

- **General Inspection Forms** – This primary form provides for a general characterization of the fixed facility, field program, or drainage facility being inspected, including the type facility or program, the reason for inspection, and activities that may take place. A general cover sheet inspection form is required for all inspections.
- **Activity Specific Inspection Forms** – These secondary forms provide a series of questions about specific activities taking place at a fixed facility, field program, or drainage facility, as well as a list of suggested corrective action plans that can be implemented should a problem be found.



SECTION A-5, MUNICIPAL ACTIVITIES

Inspection forms for each fixed facility, field program, and drainage facility in the County are included in **Exhibit A-5.IV**.

A-5.2.4.3 Enforcement Procedures

To ensure compliance, the County will implement enforcement procedures as described in **DAMP Section 5.2.4.3**.

A-5.2.4.4 Municipal Retrofitting

The County examines opportunities to retrofit existing MS4 conveyance systems, parks and other recreational areas, where feasible. Countywide analysis of retrofitting opportunities is described in **DAMP Section 5.2.4.4**.

The County will evaluate existing flood control devices, identify devices causing or contributing to a condition of pollution, identify measures to reduce or eliminate the structure's effect on pollution, and evaluate the feasibility of retrofitting the structural flood control device.

A-5.3 IMPLEMENTING AN INTEGRATED PEST MANAGEMENT POLICY

The County has implemented an Integrated Pest Management (IPM) Policy which is included as **Exhibit A-5.V**. The Orange County Stormwater Program developed this IPM policy with the assistance of the University of California Cooperative Extension. Each County agency/department that performs landscaping management and pest control activities has adopted a version of this policy for their use.

The County will implement BMPs in accordance with the aforementioned IPM policy and that encourage the use of native vegetation, set schedules for irrigation and chemical application and for the collection and proper disposal of unused pesticides, herbicides and fertilizers. The County will also conduct annual IPM self-audits in accordance with the adopted IPM policy.

A-5.4 EDUCATION AND TRAINING

To assist the responsible municipal staff of the County in understanding the Municipal Activities Maintenance Procedures, training sessions are conducted. In addition to Permittee sponsored training, the County provides the means for staff to attend training seminars or workshops related to stormwater management and water quality conducted by other organizations, as needed. Required training for municipal employees is included in **Table A-3.2** of this LIP. Records of both Permittee and Non-Permittee sponsored training provided to County staff are maintained.

Model Municipal Program Training Modules

To support implementation of the Municipal Activities Program element, five municipal activities training modules were developed during the Third Term Permits as described in **DAMP Appendix B, Section B-5**. The five modules include: *Municipal Activities Program*



SECTION A-5, MUNICIPAL ACTIVITIES

Management, Fixed Facilities Maintenance Procedures, Field Program Maintenance Procedures, Program Management – IPM, Pesticide and Fertilizer Guidelines and Integrated Pest Management Approaches. The modules will be substantially updated to reflect the requirements of the Fifth Term MS4 Permits.

Exhibit A-5.I

- Municipal Fixed Facility Inventory
- Municipal Field Program Inventory
- Catchbasin Inventory
- Drainage Facility Maintenance Inventory
- Road Inventory



Exhibit A-5.II

- Municipal Fixed Facility Prioritization



Exhibit A-5.III

- Model Maintenance Procedures
 - Fixed Facility (FF)
 - Field Program (FP)
 - Drainage Facility (DF)



Exhibit A-5.IV

- Municipal Activities Program Inspection Forms



Exhibit A-5.V

- Integrated Pest Management (IPM) Policy

