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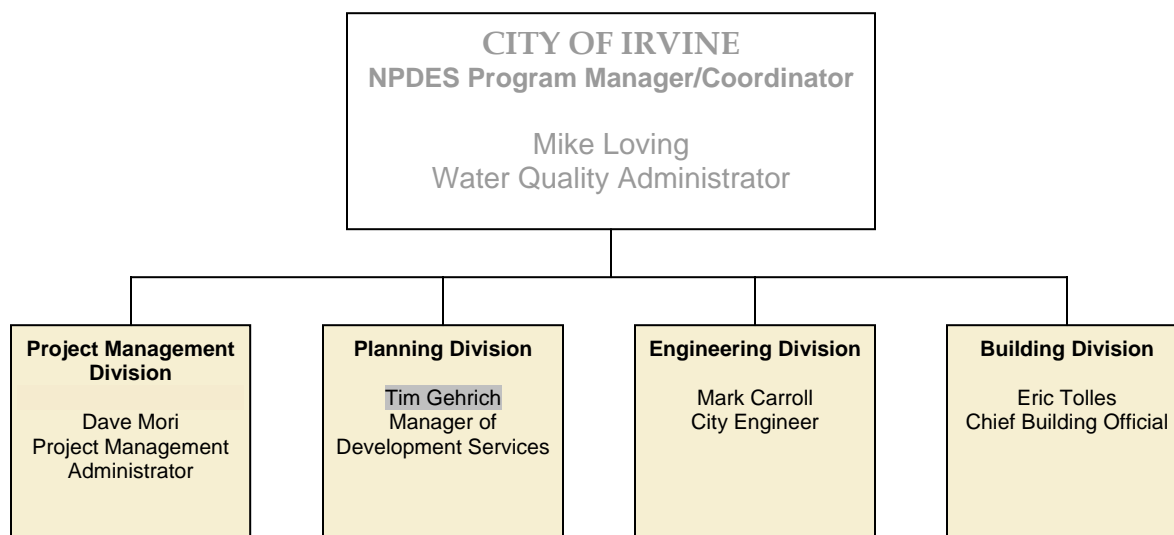
A-8.1 Introduction

The City of Irvine has incorporated the Model Construction Program described in **Section 8.4 of the 2003 DAMP** as the basis for its Local Implementation Plan. This Construction Component presents requirements and guidelines for pollution prevention methods that must be used by construction site owners, developers, contractors, and other responsible parties, in order to protect water quality from discharges from construction site activities. Subsequent sections describe and outline how the City has implemented the program within its jurisdiction.

A-8.1.1 Overall Program Management

The City of Irvine has key staff responsible for overseeing, implementing, and enforcing the program. These staff members are identified below.

Figure A-8.1
Organization Chart



A-8.1.2 Implementation

The following outlines and describes City departments that are involved in issuing building and/or grading permits for private development projects and are responsible for



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inspecting these projects during construction, or that manage public works construction projects that have a potential to impact water quality.

Community Development Department

Development Services Division

Contact Name: **Tim Gehrich**
Title: Manager of Development Services
Telephone: **(949) 724-6363**
Address: P.O. Box 19575, Irvine, CA 92623

Responsible for implementing the policies and objectives of the City set forth in the General Plan and Zoning Ordinance. This division also reviews proposed developments for consistency with the City's standards and policies relating to land use, and preservation of the environment.

Building and Safety Division

Contact Name: Eric Tolles
Title: Chief Building Official
Telephone: (949) 724-6453
Address: P.O. Box 19575, Irvine, CA 92623

Responsible for overseeing that all building construction in the City complies with adopted codes, and that permitting and licensing systems are efficient and serve the needs of the public, as well as the City. Also responsible for inspection of Buildings and developer constructed projects in the public rights-of-way.

Public Works Department

Project Management Division

Contact Name: Dave Mori
Title: Project Management Administrator
Telephone: (949) 724-7553
Address: P.O. Box 19575, Irvine, CA 92623

The Project Management Division develops and builds the City's infrastructure, including streetscapes, open space, parks, athletic fields, bike trails, roadways traffic signals and many miles of traffic signal interconnect cable.



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Development Engineering Division

Contact Name: Mark Carroll

Title: City Engineer

Telephone: (949) 724-6410

Address: P.O. Box 19575, Irvine, CA 92623

Responsible for the plan checking of public improvement projects (that typically result in construction activity). The Development Engineering Division ensures all construction in the public rights-of-way complies with adopted codes and engineering standards.

A-8.2 Inventory of Construction Sites

A watershed-based inventory of all construction sites was developed. These include all sites meeting the definition of a construction project provided in **Section 8.4.1 of the 2003 DAMP**, including those covered by the General Permit¹ with a local Grading Permit or a local Building Permit, and public works construction with similar characteristics.

The City of Irvine's comprehensive watershed-based construction site inventory is included in **Exhibit A-8.1** to this Local Implementation Plan. The inventory will, at a minimum, be updated prior to the start of the next wet season (October 1). During the update process, projects for which building or grading permit(s) have expired or have been closed, and projects that have been completed, will be removed from the inventory. New projects will also be added to the inventory.

¹ State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, Waste Discharge Requirements (WDRs) for Discharges of Stormwater Runoff Associated with Construction Activity



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A-8.3 Prioritization of Construction Sites

After the inventory was compiled, construction sites were prioritized into high, medium, or low categories, based on the threat to water quality and the procedures set forth in **Section 8.4.3 of the 2003 DAMP**. A list of all high, medium and low priority projects for the City of Irvine are included below. Priorities will at a minimum be updated annually with the update of the inventory.

Table A-8.1
Construction Projects by Priority

CONSTRUCTION SITE/PROJECT ID	PRIORITY

A-8.4 BMPs for Construction Projects

All developers of construction projects, regardless of size or priority, are required to implement BMPs to prevent discharges into the storm drain system or watercourses. **Section 8 of the 2003 DAMP** specifies minimum requirements for all projects and specific site management requirements for high and medium priority projects.

All developers of private and public works construction projects are required, at a minimum, to implement an effective combination of erosion and sediment controls and waste and materials management BMPs. The minimum requirements are summarized in **Table 8-6 of the 2003 DAMP** (also shown below). These minimum requirements are conveyed to construction contractors as part of the permit conditions and plan notes.

Table 8-6 from DAMP
Minimum Requirements for All Construction Sites

CATEGORY	MINIMUM REQUIREMENTS
Erosion and Sediment Control	Sediments from areas disturbed by construction shall be retained on site using an effective combination of erosion and sediment controls to the maximum extent practicable, and stockpiles of soil shall be properly contained to minimize sediment transport from the site to streets, drainage facilities or adjacent properties via runoff, vehicle tracking, or wind.
Waste and Materials Management Control	Construction-related materials, wastes, spills or residues shall be retained on site to minimize transport from the site to streets, drainage facilities, or adjoining property by wind or runoff.



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Construction BMPs

The City of Irvine has designated construction-specific BMPs as required by **Section 8.4.4 of the 2003 DAMP**. **Table A-8.2**, below describes the BMPs designated for use with this Local Implementation Plan. Copies of the corresponding BMP fact sheets are included as **Exhibit A-8.2**.

Table A-8.2
Designated Construction BMPs

CATEGORY	BMP #	BMP NAME
Erosion Control BMPs	EC-1	Scheduling
	EC-2	Preservation of Existing Vegetation
	EC-3	Hydraulic Mulch
	EC-4	Hydroseeding
	EC-5	Soil Binders
	EC-6	Straw Mulch
	EC-7	Geotextiles, Plastic Covers & Erosion Control Blankets/ Mats
	EC-8	Wood Mulching
	EC-9	Earth Dikes/ Drainage Swales & Lined Ditches
	EC-9	Earth Dikes/ Drainage Swales & Lined Ditches
	EC-10	Outlet Protection/ Velocity Dissipation Devices
Sediment Control BMPs	EC-11	Slope Drains
	SE-1	Silt Fence
	SE-2	Desilting Basin
	SE-3	Sediment Trap
	SE-4	Check Dam
	SE-5	Fiber Rolls
	SE-6	Gravel Bag Berm
	SE-7	Street Sweeping and Vacuuming
	SE-8	Sandbag Barrier
	SE-9	Straw Bale Barrier
SE-10	Storm Drain Inlet Protection	
Wind Erosion Control BMPs	WE-1	Wind Erosion Control
Tracking Control BMPs	TC-1	Stabilized Construction Entrance/ Exit
	TC-2	Stabilized Construction Roadway
	TC-3	Entrance/Outlet Tire Wash
Non-Stormwater Control BMPs	NS-1	Water Conservation Practices
	NS-2	Dewatering Operations
	NS-3	Paving and Grinding Operations
	NS-4	Temporary Stream Crossing
	NS-5	Clear Water Diversion
	NS-6	Illicit Connection/Illegal Discharge Detection and Reporting
	NS-7	Potable Water/Irrigation
	NS-8	Vehicle and Equipment Cleaning
	NS-9	Vehicle and Equipment Fueling
	NS-10	Vehicle and Equipment Maintenance
	NS-11	Pile Driving Operations
	NS-12	Concrete Curing
	NS-13	Concrete Finishing
	NS-14	Material and Equipment Use Over Water
NS-15	Structure Demolition/Removal Over or Adjacent to Water	
NS-16	Temporary Batch Plants	
NS-17	Stream Bank Stabilization	



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CATEGORY	BMP #	BMP NAME
Waste Management & Materials Pollution Control BMPs	WM-1	Material Delivery and Storage
	WM-2	Material Use
	WM-3	Stockpile Management
	WM-4	Spill Prevention and Control
	WM-5	Solid Waste Management
	WM-6	Hazardous Waste Management
	WM-7	Contaminated Soil Management
	WM-8	Concrete Waste Management
	WM-9	Sanitary/ Septic Waste Management
	WM-10	Liquid Waste Management

BMP Standard Plans

Accepted standard plans for construction BMPs are found in the Orange County Environmental Management Agency Standard Plans, 1996 Edition. The following BMPs standard plans are included in **Exhibit A-8.3**:

- Sandbag Velocity Reducer (No. 1328)
- Street Desilting Basin – Vehicle Access Ramp (No. 1329)
- Temporary Drainage Inlet (No. 1330)

A-8.5 Documentation Requirements

The City of Irvine has adopted the documentation requirements provided in **Section 8.4.5 of the 2003 DAMP**. These requirements apply equally to private development and public works projects.

Requirements for General Permit Sites

Developers of construction sites that are subject to the General Permit are required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) meeting the requirements of the General Permit. A Model SWPPP Template has been included as **Exhibit A-8.4** as a guide for the information that should be included in a SWPPP.

Private Construction Projects Covered by the General Permit

The following bullets describe the process that is followed by a developer of a private construction project:

- For private projects, the project owner, developer or contractor is responsible for preparing the Notice of Intent (NOI) and submitting it to the State Water Resources Control Board (SWRCB).



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- Prior to the issuance of a grading permit or building permit for applicable projects, proof that General Permit coverage has been obtained by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the permit number issued by the State.
- Prior to the issuance of a grading permit, an erosion/sediment control plan is required to be submitted and approved by the Building and Safety Division.
- Prior to the start of construction, the SWPPP must be prepared by the owner, developer or contractor, and must be implemented year-round throughout the duration of the project's construction. It is important to note that the City of Irvine and its staff are not responsible for reviewing, approving or enforcing the SWPPP; these are responsibilities of the Santa Ana Regional Water Quality Control Board. Inspector(s) may choose to use the SWPPP as a tool for on-site inspections.
- The City of Irvine will inspect and enforce local permit(s) and ordinances, and will notify the Santa Ana Regional Water Quality Control Board of non-compliance when the non-compliance meets the criteria of posing a threat to human or environmental health as discussed in **Section 8.4.6 of the 2003 DAMP**.
- Once project construction is completed and the site fully complies with the final stabilization requirements of the General Permit, the owner/developer will submit a Notice of Termination (NOT) to the SWRCB.

Public Works Construction Projects Covered by the General Permit

The following bullets describe the process that is followed by the City when developing a public works construction project:

- The City of Irvine will prepare the NOI and submit it to the SWRCB.
- The City of Irvine will notify the Santa Ana Regional Water Quality Control Board via an informal Notification of Construction Activity.
- The SWPPP will be prepared by the City of Irvine or its contractor, before the contractor is allowed to start construction activities. It is important to note that City staff is not responsible for enforcing the SWPPP, these are responsibilities of the Santa Ana Regional Water Quality Control Board; but inspectors are required to become familiar with the SWPPP as it is part of the contract documents.
- During construction, the City of Irvine will inspect and enforce the contract documents and will notify the appropriate Santa Ana Regional Water Quality Control Board when non-compliance meets the criteria of posing a threat to human or environmental health as discussed in **Section 8.4.6 of the 2003 DAMP**.



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Use the following bullet point for public works projects within the jurisdiction of the Santa Ana RWQCB. Delete the bullet point line if not needed.

- Once the project is completed, the City of Irvine will inform the SARWQCB of the project completion.

Requirements for Other Sites

Private Construction Projects Not Covered by the General Permit

Developers of private construction projects not covered by the General Permit, but covered under a grading permit, are required to submit for approval to Building and Safety, Erosion and Sediment Control Plans (ESCPs). These ESCPs must show proposed locations of the erosion and sediment control BMPs that will be implemented during the construction project to comply with the minimum requirements listed in **Table 8-6 of the 2003 DAMP**.

Public Works Construction Projects Not Covered by the General Permit

Administrators of public works construction projects not covered by the General Permit are required by **Section 8.4 of the 2003 DAMP** to comply with appropriate pollution prevention control practices in accordance with the current edition of the “Green Book” Standard Specifications for Public Works Construction and the provisions of this Section, and shall develop and implement ESCPs. Low priority construction sites shall meet the minimum requirements listed in **Table 8-6 of Section 8.4.4 of the 2003 DAMP**.

A-8.6 Municipal Inspection Requirements of Construction Sites and Reporting Requirements

Inspection Responsibilities

The City of Irvine will perform inspections of construction sites to verify that the requirements in **Section 8.4.6 of the 2003 DAMP** are being implemented and maintained, that they appropriately comply with local permits and ordinances and the General Permit (for public works projects covered by the General Permit), and that they continue to protect water quality. Construction sites are inspected, according to the established priority, until construction activity is complete.



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Inspection Frequencies

The City of Irvine will inspect construction sites based upon the priority of the project. The frequency of construction site inspections is shown in **Table A-8.3** below:

Table A-8.3
Construction Site Inspection Frequency

CONSTRUCTION SITE PRIORITY	RAINY SEASON (OCTOBER 1 - APRIL 30)	DRY SEASON (MAY 1 - SEPTEMBER 30)
HIGH	Once per month	As needed
MEDIUM	Twice during the season	As needed
LOW	Once during the season	As needed

Inspection Documentation Procedures

The City of Irvine's construction site inspection checklist is included in **Exhibit A-8.5**. Records of all inspections and non-compliance reporting will be retained for a period of at least three years.

Enforcement Actions

Enforcement of construction projects will be undertaken by the City of Irvine's inspectors and/or other staff who possess internal enforcement authority through established policies and procedures. Threat to water quality will be assessed by inspectors for construction site runoff that will not be reasonably controlled by the BMPs in place or if a failure of the implemented BMPs is resulting in the release of sediments or other pollutants. Violations observed will be documented by the inspectors.

If a significant and/or immediate threat to water quality is observed by an inspector, action will be taken to require the developer/contractor to immediately cease the discharge or implement necessary preventative measures. **Table A-8.4** outlines the City of Irvine's enforcement steps that will be taken by inspectors for private construction projects and for public works construction projects.



Table A-8.4
Enforcement Actions for Construction Projects

PRIVATE CONSTRUCTION PROJECTS	PUBLIC WORKS CONSTRUCTION PROJECTS
Verbal Warning	Verbal Warning
Written Warning <ul style="list-style-type: none"> ▪ Notice of Non-Compliance ▪ Administrative Compliance Order ▪ Administrative Citations or Fines ▪ Cease and Desist Order 	Written Warning <ul style="list-style-type: none"> ▪ Notice of Non-Compliance
Stop Work Order	Enforcement of Contract
Revocation of Permit(s) and/or Denial of Future Permits	<ul style="list-style-type: none"> ▪ Withholding of Payment ▪ Bond ▪ Fines ▪ Stop Work Order ▪ Revocation of Contract
Civil and Criminal Court Actions	Civil and Criminal Court Actions

City of Irvine approved enforcement forms used by inspection staff are provided in **Exhibit A-8.6**.

Non-Compliance Reporting

The City of Irvine will consider a site non-compliant when one or more violations of local ordinances, permits, or plans exist on the site. If a non-compliant private construction project meets the criteria of posing a threat to human or environmental health as discussed in **Section 8.4.6 of the 2003 DAMP**, then the Santa Ana Regional Water Quality Control Board will be notified as required.

Oral notification to the Santa Ana Regional Water Quality Control Board of non-compliant private construction sites that are determined to pose a threat to human or environmental health will be provided within 24-hours of the discovery of non-compliance. Such oral notification shall be followed by a written report and submitted to the Santa Ana Regional Water Quality Control Board within 5 days of the incidence of non-compliance. Written notification(s) will identify the type(s) of non-compliance,



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describe the actions necessary to achieve compliance, and include a time schedule, subject to the modifications by the Santa Ana Regional Water Quality Control Board, indicating when compliance will be achieved.

A form for evaluating the potential impacts to human or environmental health is provided in **Exhibit A-8.7**.

A-8.7 Education and Training

City of Irvine staff responsible for understanding and implementing **Section 8.4 of the 2003 DAMP** will attend annual training sessions. In addition to training sponsored by the Permittees, staff may also attend training seminars or workshops related to general water quality and stormwater management during construction, conducted by other organizations.

Training Modules

Two training modules are available that cover different aspects of the Model Construction Program. Presentation materials for these training modules are provided in **Appendix B-8**.

Record Keeping

The following tables show the name(s), title(s) and department for the City of Irvine staff that was trained on the Model Construction Program before October 15, 2002.

Table A-8.5
General Program Management Overview Training

DATE	NAME OF ATTENDEE(S)	TITLE	DEPARTMENT	TELEPHONE



Table A-8.6
Construction BMPs Inspection Training

DATE	NAME OF ATTENDEE(S)	TITLE	DEPARTMENT	TELEPHONE

A-8.8 Program Assessment

The City of Irvine will submit an Annual Progress Report each year to the Principal Permittee. This report will provide the basis for evaluating the City’s efforts towards the reduction of water pollution from construction sites. The annual report demonstrates commitment to pollution prevention and source reduction by providing an iterative evaluation process. The annual program assessment and a report will include:

- The total number of sites inventoried and prioritized (report will include the latest inventory spreadsheet);
- The total number of high, medium and low priority sites that were inspected;
- The number of enforcement actions that were taken; and
- The training that municipal staff received.