# City of Imperial Beach

# Jurisdictional Runoff Management Program

## June 3, 2015

**Updated October 13, 2015**

**Imperial Beach Department of Public Works**

**825 Imperial Beach Blvd**

**Imperial Beach, CA 91932**

**619-424-4095**

- Cover photo from Wildcoast by Ralph Lee Hopkins (May 27, 2013)

# Table of Contents

## Certification Statement

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage 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."

| Authorized Signatory | Title | Phone No. | Date |
|---|---|---|---|
| H.A. Levien | Public Works Director | (619) 423-8311 | June 8, 2015 |

# Executive Summary

The City operates and maintains a storm water conveyance system that channelizes and conveys storm water during rain events directly into receiving waters of the San Diego Bay, Tijuana Estuary, or Pacific Ocean. As the operator of a storm water conveyance system, the City is subject to the National Pollution Discharge Elimination System (NPDES) Permit issued by the San Diego Regional Water Quality Control Board (RWQCB). The most recent NPDES Permit No. CAS0109266 was adopted by the San Diego RWQCB on May 8, 2013 and requires the City to develop a Jurisdictional Runoff Management Program (JRMP) to reduce the discharges of pollutants associated with storm water runoff. The water quality improvement strategies identified in this JRMP represent the City's efforts to fulfill the requirement under the Clean Water Act to reduce storm water pollution to the maximum extent practical.

This JRMP is a total account of how the City plans to protect and improve receiving water quality through the implementation of best management practices (BMPs). This JRMP was developed concurrently with the watershed-based planning efforts in the Tijuana River and San Diego Bay Water Quality Improvement Plans (WQIPs) and includes the water quality improvement strategies to address the highest priority pollutants for each watershed. This JRMP has been developed both as a work plan for City staff and guide for the public to understand the requirements under the storm water Permit. The JRMP is divided into the following sections:

1. Introduction
2. Legal Authority
3. Fiscal Analysis
4. Illicit Discharge Detection and Elimination
5. Development Planning
6. Construction Management
7. Existing Development
8. Enforcement Response Plan
9. Education and Participation
10. Adaptive Management and Reporting
11. Conclusions and Recommendations

This JRMP further enhances the City's existing storm water management program to reduce the impacts of urban activity on receiving water quality to the maximum extent practicable. The success towards achieving improved water quality from storm water runoff requires commitments from every department in the City and coordination among the agencies in the San Diego region. Ultimately though, success will depend on the acceptance and involvement of residents, businesses, and community leaders who choose to make storm water quality a priority.

# 1 Introduction

The City of Imperial Beach (City) is committed to maintaining and enhancing a "classic Southern California" beach-oriented community with a safe, small town, family atmosphere, rich in natural and cultural resources. Efforts have been and will continue to be made to reduce the impacts of urban activity on receiving water quality within City boundaries to the maximum extent practicable.

## 1.1 Background

The San Diego Regional Water Quality Control Board (RWQCB) is the regulatory agency responsible for ensuring water quality protection of receiving waters from discharges of storm water out of the municipal separate storm sewer system (MS4). The San Diego RWQCB adopted Order R9-2013-0001 (Permit) for the San Diego Copermittees on May 8, 2013. The Permit requires the development of Water Quality Improvement Plans that guide the Copermittees' Jurisdictional Runoff Management Programs towards achieving outcomes of improved water quality in MS4 discharges and ultimately the receiving waters. The City discharges storm water into the receiving waters of the Tijuana Estuary, Pacific Ocean, and the tidally influenced area of the Otay River. These receiving waters fall within the San Diego Bay and Tijuana River watershed management areas and therefore require the City to collaborate on the Water Quality Improvement Plans for both watersheds.

## 1.2 Purpose

The City of Imperial Beach Jurisdictional Runoff Management Program (JRMP) is a comprehensive plan that documents the multiple storm water management programs that the City implements to effectively prohibit non-storm water discharges to the MS4 and reduce the discharge of pollutants to the maximum extent practical. The purpose of the JRMP is to organize and describe the strategies the City will implement to protect water quality. The strategies in the JRMP are informed by an adaptive management process built into the Water Quality Improvement Plans and are intended to be reviewed and updated as necessary to achieve the desired outcomes in water quality.

## 1.3 Geographic Settings, Land Use & Demographics

The City of Imperial Beach has the distinction as the most southwesterly beach community in the continental United States and covers 4.4 square miles. The City is bordered by the City of Tijuana to the south, San Diego Bay and City of Coronado to the north, and City of San Diego to the east. Approximately 40% of the City consists of environmentally protected open space habitat in the Tijuana River watershed. The remaining urban portion of the City is almost entirely built out and includes the U.S. Navy Outlaying Landing Field helicopter training facility. The jurisdictional area for the City covered under the Storm Water Permit covers 2.1 square miles. **Figure 1.1** provides the geographic setting and **Figure 1.2** provides the land uses in the City.

The 2010 Census data reports that the City has a population 26,324 with Hispanics (49%) and whites (36%) comprising the predominant ethnic and racial groups. The City has a median household income of $46,975, which categorizes the City as a disadvantaged community in the State of California. In addition, 19.2% of the City's population is below the poverty income level.

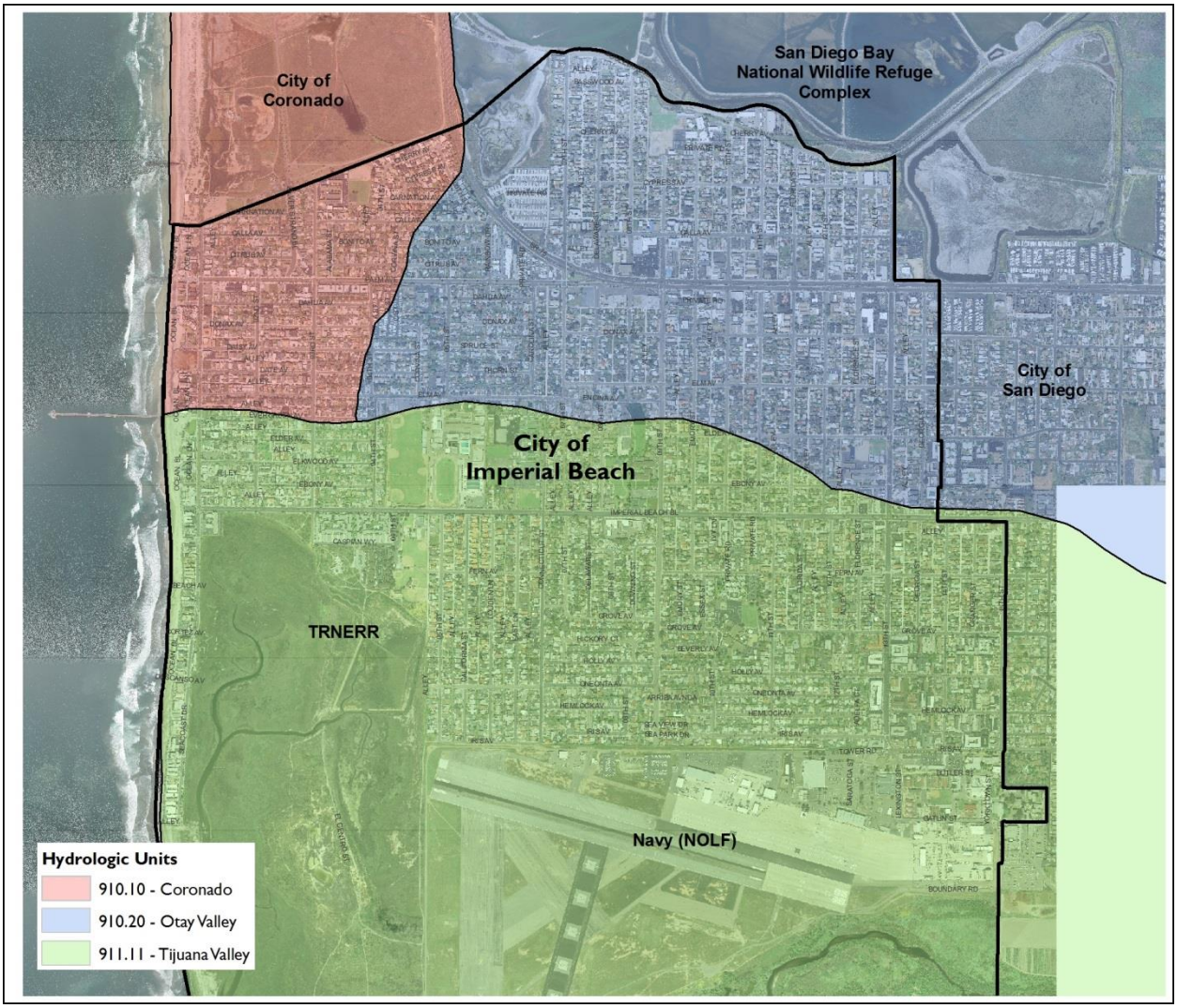



**Figure 1.1** The jurisdictional area covered under the Storm Water Permit in the City covers 2.1 square miles. The receiving waters for the City include the Pacific Ocean shoreline, Tijuana River Estuary, and the tidally influenced area of the Otay River that connects to the San Diego Bay.

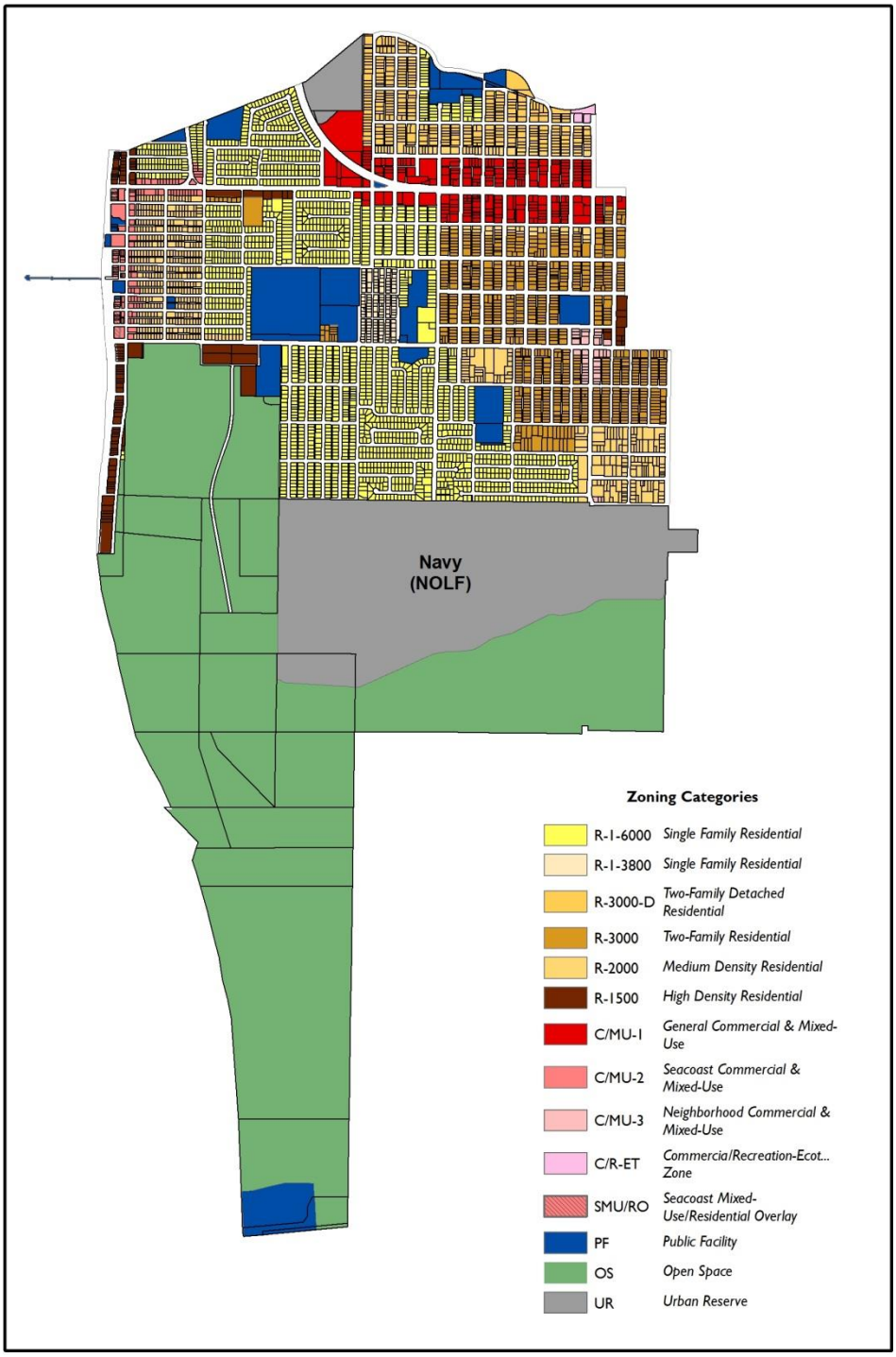



**Figure 1.2** Environmentally protected open space habitat in the Tijuana River watershed is the predominate land use in the City. The remaining urban areas in the City are already built out and include residential areas, small commercial businesses and the U.S. Navy Outlaying Field helicopter training facility. The City does not have any industrial land uses.

## 1.4 Receiving Waters

The City falls within both the San Diego Bay and Tijuana River watershed management areas as identified in **Figure 1.1**. The northern portion of the urbanized area drains to the tidally influenced section of the Otay River in the San Diego Bay watershed management area, which consist of both the Otay Valley (910.2) hydrologic unit and Coronado (910.1) hydrologic unit areas. The southern portion of the urbanized area drains to the Tijuana Estuary within the Tijuana River watershed management area, which is part of the Tijuana Valley (911.1) hydrologic unit area. Within both these watersheds a small portion of the coastal area also drains directly to the Pacific Ocean.

### 1.4.1 Pacific Ocean Shoreline

Imperial Beach boasts 3.5 miles of beach frontage and is a well-known beach destination where visitors can walk along miles of undeveloped shoreline, surf, swim, build sand castles, or just take in the view from the ¼ mile long wooden pier. The beachfront is managed in cooperation with the San Diego Unified Port District (Port).

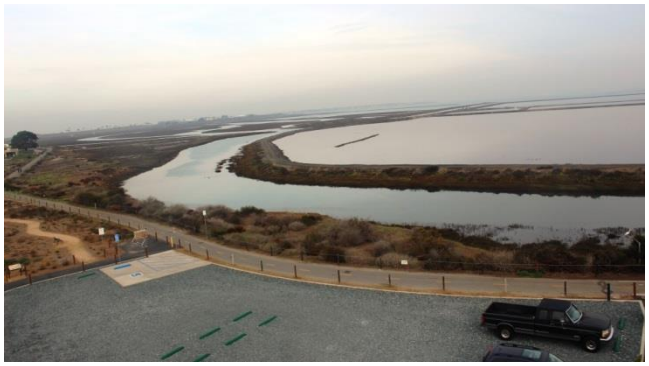
It is widely known that the most significant source of bacteria impacting ocean water quality in Imperial Beach is the periodic input of sewage-contaminated flows from the Tijuana River and surrounding canyons in Mexico. During winter months the shoreline from the international border to Coronado experiences frequent beach closures from elevated bacteria levels when rainfall causes Tijuana River flows to exceed the capacity of the diversion systems that are operated jointly by the U.S. and Mexico governments. Under most dry weather conditions, the diversion systems effectively protects beach water quality by capturing and sending cross border sewage-contaminated flows to either the International Wastewater Treatment Plant (operated by the U.S. International Boundary and Water Commission) or into the City of Tijuana's sewer collection system.

### 1.4.2 Tijuana River Estuary

The lower section of the Tijuana River Watershed encompasses 2,293 acres of the Tijuana River Natural Estuarine Research Reserve (TRNERR) that includes riparian, upland, and tidally flushed wetland habitats. The TRNERR includes the Tijuana Slough National Wildlife Refuge (managed by the U.S. Fish and Wildlife Service), Border Field State Park (managed by the California Department of Parks) and linked with the National Estuarine Research Reserve System (managed by the National Oceanic and Atmospheric Administration). Approximately 928 acres of the TRNERR are located within Imperial Beach city limits that are managed as protected open space by other resource agencies. The

City of San Diego, County of San Diego, U.S. Navy, and U.S Customs and Border Protection also share jurisdictional boundaries with the TRNERR. The City of Imperial Beach participates on TRNERR Advisory Council, which establishes management policies for the whole reserve.

### 1.4.3 San Diego Bay



Imperial Beach is bordered to the north by the South San Diego Bay Unit of the San Diego National Wildlife Refuge (managed by the U.S. Fish and Wildlife Service) and includes the tidally influenced area of the Otay River. The refuge boundary preserves and protects 2,620 acres of important intertidal mudflats, eel grass beds, salt marshes, and submerged tidelands in San Diego Bay. It supports numerous endangered and threatened species of plants and animals and provides vital habitat for tens of thousands of resident and over-wintering waterfowl, seabirds, shorebirds, and an important stop on the Pacific Flyway. Major habitat restoration of the former western salt ponds started in 2010 and is ongoing.

### 1.4.4 Beneficial Uses, 303(d) List, and Environmentally Sensitive Areas

The San Diego Basin Plan identifies the beneficial uses of the receiving waters for the City of Imperial Beach. Pollutants that impair these beneficial uses are identified by the State Water Resources Control Board and placed on the 303(d) list for impaired water quality. Section 303(d) of the 1972 Clean Water Act requires the State to establish priority rankings for water on the lists and develop action plans, known as Total Maximum Daily Loads (TMDL), to improve water quality. The City currently does not have any TMDLs established for polluted water bodies. **Figure 1.3** provides the beneficial uses of the receiving waters in the City and **Figure 1.4** lists the 303(d) listed pollutants. Additional information on 303(d) list impaired water quality segments is provided in the Water Quality Improvement Plans for each watershed.

All of the receiving waters for Imperial Beach are considered Environmentally Sensitive Areas by the Permit because they are identified as having RARE beneficial use status. The RARE beneficial use status applies to habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.

**Figure 1.3 Beneficial Uses of Imperial Beach Receiving Waters**

| Beneficial Uses | Pacific Ocean Shoreline | Tijuana River Estuary | San Diego Bay (Otay River Tidal Prism) |
|---|---|---|---|
| Industrial Service Supply (IND) | ● | | ● |
| Navigation (NAV) | ● | | ● |
| Contact Water Recreation (REC1) | ● | ● | ● |
| Non-contact Water Recreation (REC2) | ● | ● | ● |
| Commercial and Sport Fishing (COMM) | ● | ● | ● |
| Preservation of Biological Habitats of Special Significance (BIOL) | ● | ● | ● |
| Estuarine Habitat (EST) | | ● | ● |
| Wildlife Habitat (WILD) | ● | ● | ● |
| Rare, Threatened, or Endangered Species (RARE) | ● | ● | ● |
| Marine Habitat (MAR) | ● | ● | ● |
| Aquaculture (AQUA) | ● | | |
| Migration of Aquatic Organisms (MIGR) | ● | ● | ● |
| Spawning, Reproduction, and/or Early Development (SPWN) | ● | | |
| Warm Freshwater Habitat (WARM) | | | |
| Shellfish Harvesting (SHELL) | ● | ● | ● |
| Agriculture Supply (AGR) | | | |

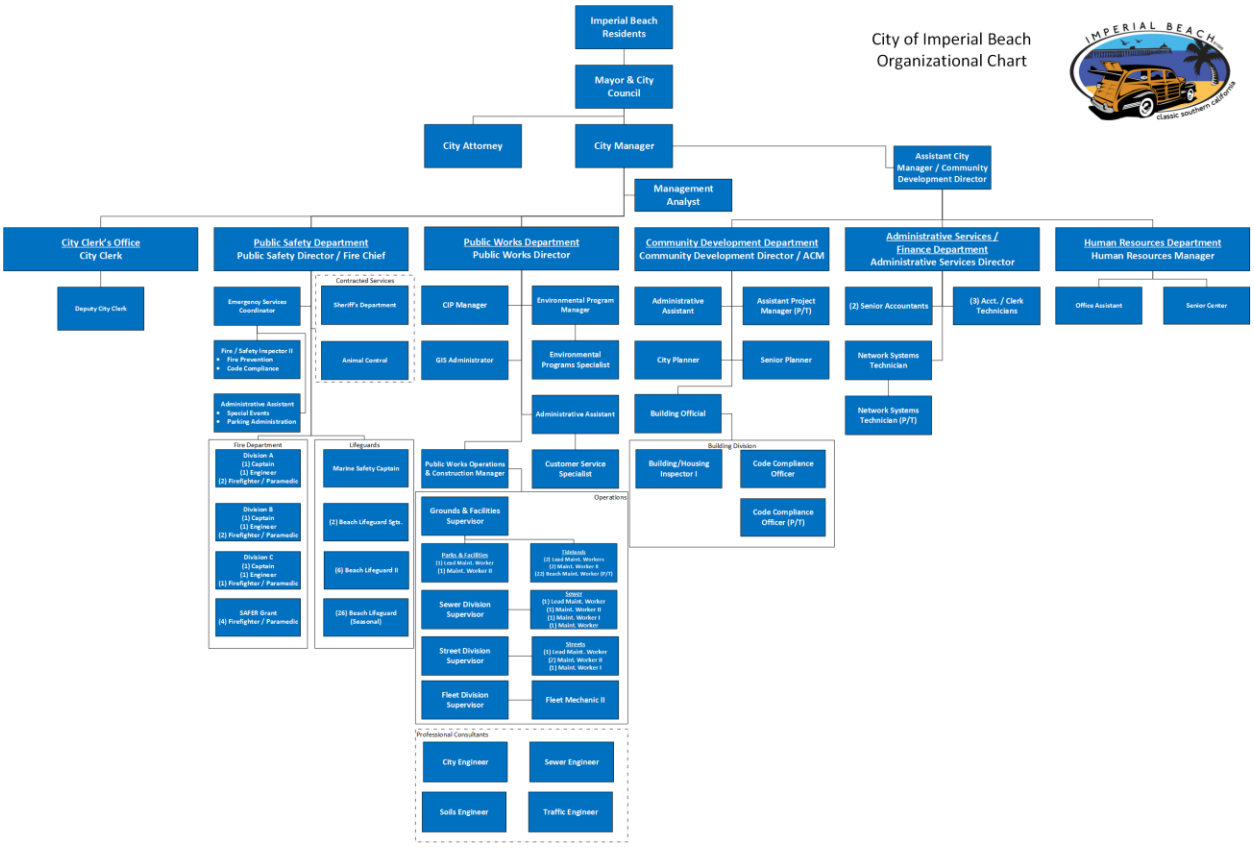
**Figure 1.4 303(d) List of Pollutants for Imperial Beach Receiving Waters 2010**

| Receiving Water | Pollutant |
|---|---|
| Pacific Ocean Shoreline | • Bacteria (Enterococcus, Total, and Fecal)<br>• PCBs |
| San Diego Bay | • PCBs |
| Tijuana River Estuary | • Eutrophic<br>• Indicator Bacteria<br>• Lead<br>• Low Dissolved Oxygen<br>• Nickel<br>• Pesticides<br>• Thallium<br>• Trash<br>• Turbidity |

## 1.5 Department Roles and Responsibilities

The implementation of the City's Storm Water Management Program requires the coordination of efforts across multiple City Departments. The Environmental Programs Division within the Public Works Department is the lead office for the coordination of City efforts to eliminate pollutants in storm water to the MEP. Figure 1.5 provides the organizational chart of the City and the following discussion provides an overview of the roles and responsibilities of each Department towards implementing the requirements in the Permit.

**Figure 1.5 Imperial Beach Organizational Chart**




### 1.5.1 Public Works Department

The Public Works Department is responsible for the maintenance of the City's infrastructure that includes the storm drain collection system, solid waste collection, sanitary sewer collection system, streets, parks, public facilities, beachfront, and capital improvement projects. The majority of the City's efforts towards meeting the requirements in the Permit fall on the Public Works Department because the continued operation and maintenance of existing development is critical to implementing an effective Storm Water Management Program that reduces pollutants to the MEP. Each Division within the Department have obligations to implement BMPs, to maintain a public areas free from debris, to report and respond to storm water violations, and to interface with the public. Redevelopment of existing infrastructure in the public right-of-way is managed through the Capital Improvement Projects Division and incudes storm water BMP retrofits into the design of new CIP projects wherever practical.

### 1.5.2. Community Development Department

The Planning Division of the Community Development Department reviews all development proposals for compliance with environmental requirements, design standards, zoning, and City's General Plan. The City's 2.1 square mile urban footprint is already considered fully developed. The primary responsibility of the Community Development Department is to oversee redevelopment type projects. The Building Division manages the construction side of development and also oversees the City's Code Enforcement Officers. The Community Development Department works closely with the Public Works Department in the overall coordination of the JRMP across divisions. This includes the review and approval of development plans, construction management of development projects, and private property code enforcement cases.

### 1.5.3 Administrative Services Department

The Administrative Services Department functions as the City's support network for information technology, risk management, financial services, and business licensing. The Public Works Department works closely with the Administrative Services Department to identify and secure sources of funds for the implementation of various Storm Water Management Programs and supports the storm water BMP education program through the existing business licensing program in the City.

### 1.5.4 Public Safety Department

The Public Safety Department includes Fire, Sheriffs, Lifeguards, and Animal Control. This department primarily serves a supporting role in the implementation of the JRMP through the implementation of firefighting BMPs and the cleanup of biological or hazardous materials from vehicle accidents, crime scenes, or fires. The Public Works Department also works closely with Public Safety on providing storm water BMP conditions for special event applications.

### 1.5.5 General Government Services

General Government Services include the City Manager's Office, City Clerk, Human Resources, City Council, and City Attorney. These offices primarily serve a supporting but important role on implementing the requirements in the Permit to ensure the proper policies, legal authority, personnel resources, and City Council support is provided towards the JRMP.

# 2 Legal Authority

## 2.1 Legal Authority Certification

The City is required to establish, maintain, and enforce adequate legal authority to control pollutant discharges into and from its MS4 through statute, ordinance, permit, contract, order, or similar means. The City will update its Storm Water Runoff Management and Discharge Control Ordinance 8.30 and Grading Permits and Plans Ordinance 15.54 to reflect the new changes in the Permit along with updating the City's Jurisdictional Runoff Management Program. The City continues to maintain adequate legal authority to enforce the storm water management programs identified in this JRMP through general enforcement procedures in IBMC 8.30, administrative citations in IBMC 1.22, and civil and criminal prosecution in IBMC 1.12. The City will submit a statement of legal authority pursuant to Permit Section E.1.b with the first Water Quality Improvement Plan Annual Report.

| **Minimum legal authority in Permit Section E.1.a** |
|---|
| Prohibit and eliminate all illicit discharges and illicit connections to its MS4. |
| Control the contribution of pollutants in discharges of runoff associated with industrial and construction activity to its MS4 and control the quality of runoff from industrial and construction sites, including industrial and construction sites which have coverage under the statewide General Permit for Discharges of Storm Water Associated with Industrial Activities (Industrial General Permit) or General Permit for Discharges of Storm Water Associated with Construction Activities (Construction General Permit), as well as to those sites which do not. |
| Control the discharge of spills, dumping, or disposal of materials other than storm water into its MS4. |
| Control through interagency agreements among Copermittees the contribution of pollutants from one portion of the MS4 to another portion of the MS4. |
| Control, by coordinating and cooperating with other owners of the MS4 such as Caltrans, the U.S. federal government, or sovereign Native American Tribes through interagency agreements, where possible, the contribution of pollutants from their portion of the MS4 to the portion of the MS4 within the Copermittee's jurisdiction. |
| Require compliance with conditions in its statutes, ordinances, permits, contracts, orders, or similar means to hold dischargers to its MS4 accountable for their contributions of pollutants and flows. |
| Require the use of BMPs to prevent or reduce the discharge of pollutants in storm water from its MS4 to the MEP. |
| Require documentation on the effectiveness of BMPs implemented to prevent or reduce the discharge of pollutants in storm water from its MS4 to the MEP. |
| Utilize enforcement mechanisms to require compliance with its statutes, ordinances, permits, contracts, orders, or similar means. |
| Carry out all inspections, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with its statutes, ordinances, permits, contracts, orders, or similar means and with the requirements of this Order, including the prohibition of illicit discharges and connections to its MS4; the Copermittee must also have authority to enter, monitor, inspect, take measurements, review and copy records, and require regular reports from industrial facilities, including construction sites, discharging into its MS4. |

# 3 Fiscal Analysis

The Permit requires jurisdictions to conduct an annual fiscal analysis of its JRMP to ensure that adequate fiscal resources are allocated to effectively prohibit non-storm water discharges to the MS4. The City is required to submit this fiscal analysis as part of the Water Quality Improvement Plan annual reports.

In 2014 Mikhail Ogawa Engineering performed a JRMP Fiscal Analysis Study to analyze the level of service proved by various City departments and identified budget and funding amounts necessary to implement the requirements in the Permit. The Mikhail Fiscal Analysis Study (provided in **Appendix E**) establishes the methodology for reporting annual JRMP costs to the San Diego RWQCB. This study, which assessed the 2014 City Budget, found that storm water program costs were approximately $1,390,000 with the primary funding source being from the General Fund. **Figure 3.1** below provides the 2014 estimated costs for storm water Permit related activities.

**Figure 3.1 Imperial Beach Storm Water Fiscal Analysis Summary**

| City Department/ Category of Expenditures | Storm Water Factor | Total Estimated Cost for Storm Water Related Activities | Source of Funds |
|---|---|---|---|
| **Public Works Department** | | | |
| Public Works Administration | 0.05 | $22,401 | General Fund |
| Streets | 0.24* | $250,071 | General Fund |
| Tidelands | 0.34* | $314,385 | General Fund |
| Parks | 0.14* | $58,293 | General Fund |
| Facilities | 0.02* | $5,177 | General Fund |
| Solid Waste | 0.5* | $41,721 | General Fund |
| Storm Water | 1 | $340,607 | General Fund |
| Wastewater | 0.1* | $134,671 | Sewer Fund and General Fund |
| | **Total** | **$1,167,326** | |
| **General Government Services** | | | |
| Council/Mayor | 0.06 | $10,674 | General Fund |
| City Manager | 0.06 | $27,163 | General Fund |
| City Clerk | 0.06 | $18,753 | General Fund |
| Human Resources | 0.05 | $13,052 | General Fund |
| City Attorney | 0.06 | $12,300 | General Fund |
| | **Total** | **$81,942** | |
| **Community Development** | | | |
| Planning & Building | 0.1 | $86,150 | Developer fees, Permit fees and General Fund |
| Code Enforcement | 0.05 | $8,800 | General Fund |
| City Engineering | 0.4 | $16,200 | Developer fees and General Fund |
| | **Total** | **$111,150** | |
| **Administrative Services Department** | | | |
| Finance | 0.05 | **$29,867** | General Fund |
| **Total Expenditures** | | **$1,390,285** | |

*Storm water factors generated through evaluation of work orders and discussions with Public Works Superintendent, other factors generated through interviews with staff.

# 4 Illicit Discharge Detection and Elimination

The Permit requires jurisdictions to actively detect and eliminate illicit discharges and illegal connections to the MS4 that are not operating under a separate NPDES Permit. The City's Illicit Discharge Detection and Elimination program includes multiple Water Quality Improvement Strategies that were identified through the Water Quality Improvement Plan process. The Water Quality Improvement Strategies for the City's Illicit Discharge Detection and Elimination program are summarized in **Figure 4.1** below.

**Figure 4.1 Water Quality Improvement Strategies for Illicit Discharge Detection and Elimination**

| ID | Strategy | Description | Responsible City Staff |
|---|---|---|---|
| IB-01 | Imperial Beach Illicit Discharge Detection and Elimination Program (Permit Section E.2) | Investigate and eliminate dry weather discharges and illegal connections to the MS4 as reported to the City or identified by staff. Utilize appropriate enforcement actions to achieve compliance. Maintain a continuous investigation database. | Environmental Division |
| IB-02 | Proactive enforcement of storm water violations and WQIP priority pollutants that enhance baseline IDDE Program efforts | This activity involves the proactive identification of storm water violations with an emphasis on WQIP priorities of sediment and trash through targeted monthly neighborhood inspections outlined in IB-21. Perform weekly collection of illegally dumped materials in alleys and public right-of-way in IB-25 and target priority sources from poorly maintained residential and commercial areas. | Environmental Division |
| IB-03 | Storm water GIS database and maps | Maintain the storm water GIS database and generate maps to support the WQIPs for each watershed | GIS Administrator and Environmental Division |
| IB-04 | Dry weather field screening of MS4 outfalls | Perform visual assessment of major MS4 outfalls per Permit Section E.2.C. Visually inspect all MS4 outfalls annually including Navy and Caltrans. | Environmental Division |
| IB-04a | Persistent dry weather flow monitoring | Dry weather field screening will identify major MS4 outfalls with persistent dry weather flow, which will receive monitoring in accordance with Permit provision D.2.b.(2). | Environmental Division |

## 4.1 Non-Storm Water Discharges

The Permit requires the elimination of all non-storm water discharges to and from the MS4 with only a few limited exceptions that are specifically called out in the Permit and Imperial Beach Municipal Code 8.30.060. Non-storm water includes all discharges that reach the street or storm drain system and do not originate from precipitation events. The following exemptions in **Figure 4.2** apply to non-storm water discharges. Any other discharge will be considered illicit.

**Figure 4.2 Non-Storm Water Exemptions**

| |
|---|
| **The discharge is covered under an existing NPDES Permit (CAG919001, CAG919002, or CAG679001) and falls into one of the following categories:** |
| 1. Uncontaminated pumped ground water<br>2. Discharges from foundation drains<br>3. Water from crawl space pumps<br>4. Water from footing drains<br>5. Water line or water main flushing or spills |
| **The following discharges are exempt unless specifically identified by the San Diego RWQCB or City as a source of pollutants to receiving waters:** |
| 1. Diverted stream flows<br>2. Rising ground waters<br>3. Uncontaminated ground water infiltration to MS4s<br>4. Flows from riparian habitats, wetlands and springs<br>5. Discharges from potable water sources<br>6. Discharges from foundation or footing drains designed to be located above groundwater table |
| **The following discharges are exempt if the stated minimum BMPs are implemented:** |
| 1. Air conditioning condensation that is directed to landscaped areas, pervious surfaces, or sanitary sewer, where feasible<br>2. Residential vehicle washing that is directed to landscaped areas or pervious surfaces, where feasible, and minimize the use of water and detergent<br>3. Dechlorinated swimming pool water without algaecide, filter backwash, or other pollutants from swimming pools<br>4. Saline swimming pool water that get directed to the sanitary sewer, landscaped areas, or discharged directly to a naturally saline water body<br>5. Building fire suppression system maintenance water that is directed to the sanitary sewer or receive filtration before discharge<br>6. Non-emergency firefighting discharges from control burn or training practices that implement BMPs to reduce or eliminate pollutants from entering the MS4<br>7. Emergency firefighting discharges without BMPs for the purpose to protect life and property |

## 4.2 Imperial Beach Drainage and MS4 Map

The City's MS4 collects drainage from approximately 1,430 acres including 85 acres from the City of San Diego and conveys discharges to either the Pacific Ocean, San Diego Bay (tidal Otay River), or Tijuana Estuary. The City's jurisdictional urban area under the storm water Permit covers 2.1 square miles. The City's GIS Administrator maintains a citywide GIS database to help inform the storm water management program and other City operations. The City's storm water GIS database includes information as shown on the Storm Water Drainage Basin Map in **Figure 4.3**.

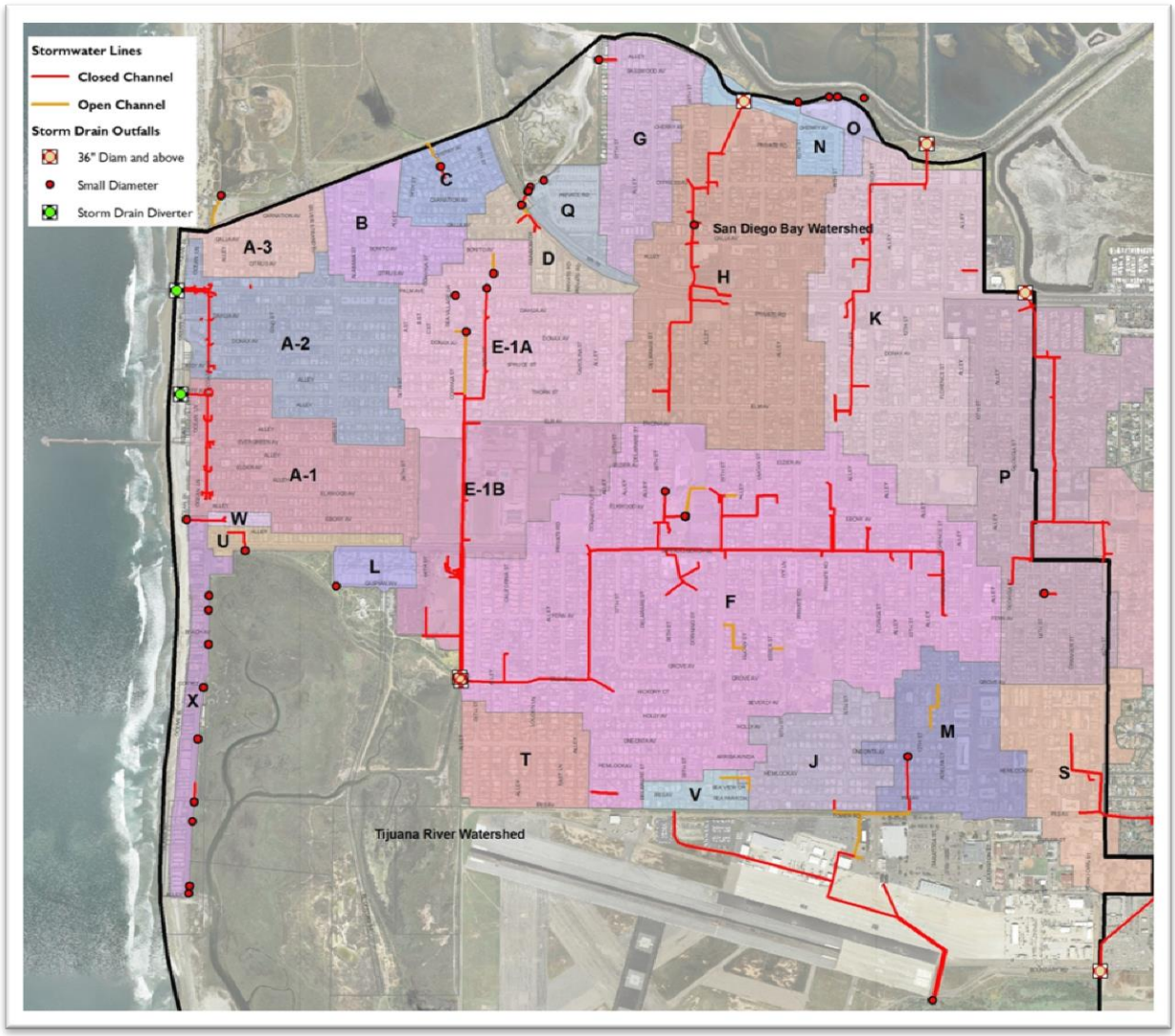



**Figure 4.3** The City maintains a detailed GIS of the storm drainage system that includes drainage basins, storm drain lines, open channels, and storm drain outfalls for the 1345 acres of urban land use with in the City's jurisdictional area. The City also maintains storm drain diverters at palm Ave and Date Ave to capture low flow urban runoff and first flush storm events prior to discharging onto the beach.

## 4.3 Illicit Discharge Detection

The detection of illicit discharges is facilitated by identification and reporting from municipal staff, contractors and general public. Visual field filed assessments of outfalls and water quality monitoring from MS4s also supports the identification of illicit discharges and illegal connection.

### 4.3.1 Reporting

The primary means by which the City identifies illegal discharges or connections to the MS4 is through reporting form municipal staff. Every City employee receives training on the JRMP and know to report dry weather discharges to the Environmental Division. Public reporting of illegal discharges from the general public and City contractors is also strongly encouraged. The reporting of illicit discharges to the Environmental Division is encouraged through the following media:

- City of Imperial Beach storm water hotline: 619-424-4095
- City of Imperial Beach (24 hour Sheriff's Dispatch): 619-585-7232
- City of Imperial Beach online report form: www.imperialbeachca.gov/environment
- City of Imperial Beach, Environmental Specialist email contact: warellano@imperialbeachca.gov
- San Diego Region online report form: www.projectcleanwater.org
- San Diego Region storm water hotline: 888-844-6525

### 4.3.2 Dry Weather Field Screening

The monitoring provisions in the Permit requires the City to perform visual assessments of the major MS4 outfalls 36" or greater during dry weather conditions (twice per year). In addition, the City performs visual assessments of all its outfalls annually in order to provide continued operation and maintenance and to ensure the outfalls are free of trash and the buildup of vegetation or debris. The City also performs annual inspections of the Caltrans outfall along HWY 75 and the U.S. Navy outfalls on the Navy Outlaying Landing Field and Silver Strand Training Complex. The results from these dry weather field screening assessments and analytical monitoring results supports the investigation of illegal discharges to the MS4 and ongoing maintenance efforts.

**Dry Weather Persistent Flow Monitoring**

The dry weather field screening will also identify outfall locations of persistent dry weather flow. Persistent dry weather flow is defined as any major MS4 outfall with 3 consecutive observed non-storm water dry weather discharges. Every major MS4 outfall in Imperial Beach is impacted by tidal water so observations for persistent dry weather flows will need to be observed from the closest upstream manhole location. The City of Imperial Beach currently does not have any persistent dry weather flow from any outfall locations. The Environmental Division will continue to monitor for persistent flow through the annual dry weather field screening. Any major outfall location identified to have persistent dry weather flow in the future will be monitored in accordance to Permit provision D.2.b.(2).

### 4.3.3 Proactive Detection of Storm Water Pollutant Sources

All City employees including Public Works field crew, Public Safety and General Government Services personnel report incidents of dry weather discharges to the Environmental Division for investigation.

The Environmental Division also proactively identifies storm water violations and specifically targets the highest priority pollutants identified in the San Diego Bay and Tijuana River WQIPs. The City proactively targets to eliminate sources of trash and sediment from poorly maintained residential and commercial areas and illegal dumping in alleys and public right-of-way.

## 4.4 Illicit Discharge Investigation and Response

The Permit requires the investigation of any portion of the MS4 that, based on visual observations, dry weather field screening, analytical monitoring, or other appropriate information, indicates a reasonable potential for illicit discharges, illegal connections, or other sources of non-storm water pollution. The Environmental Division responds and investigates all reports of illegal discharges or connections with the intent of identifying the source. Reports of illegal discharges during non-working hours are coordinated through the Sheriffs dispatch who then contacts the emergency Sewer Division cellphone or Fire Department hazardous materials response if the discharge is believed a threat to human health or the environment.

### 4.4.1 Prioritization of Investigations

The Environmental Division consists of two dedicated fulltime storm water employees that under normal conditions are able to respond within an hour to any storm water violation report. The Imperial Beach Public Works facility is centrally located and within a 2 mile drive from any location within the urban portion of the MS4. If prioritization of investigations is necessary then sewage or hazardous material spills get addressed first followed by discharges from construction sites, commercial businesses, multifamily, and then single family residential.

### 4.4.2 Procedures for Investigations

When dry weather flow is identified in the MS4 or when the Environmental Division receives a report of a discharge or connection to the MS4 then the City must attempt to identify the source to determine if the discharge or connection is illicit. Determining the source will follow the process outlined below:

- Confirm incident and attempt to identify the source by looking upstream
- Search the area for any physical or chemical conditions of the report or field incident
- Explore possible scenarios of how the material or disturbance occurred
- Examine the drainage basin area for other possibilities
- Identify potential sources and verify origin
- Inquire to available businesses, residents or witnesses what occurred
- Document investigation with photos and field notes

All urban runoff investigations are pursued until a satisfactory outcome can be attained. Usually, this involves remediation of spilled materials, elimination of illicit connections to the MS4, and/or installment of BMPs to prevent future discharges. Unless the illicit discharge is of immediate danger to public health or the environment, violators are typically given the first opportunity to clean up spilled materials. If unable or unwilling to do so, or if a violator cannot be identified, City staff is enlisted to perform the cleanup at the property owner's expense.

## 4.5 Elimination and Enforcement of Illicit Discharges and Connections

The City is required to take immediate actions to eliminate illicit discharges and connections as soon as possible after detection. The Environmental Division determines the appropriate level of response for each incident and oversees the implementation of any site remediation or enforcement actions to eliminate the illicit discharge or connection.

### 4.5.1 Procedures for Elimination

The City owns and operates dedicated vehicles that are equipped with power washers and vacuum pressure units capable of removing most spills. Elimination includes the discontinuance of the pollutant source, the remediation or removal of the pollutant discharged into the MS4, and the prevention of the event from occurring in the future. The elimination of dry weather discharges and connections will follow the process outlined below:

- Contain the spill and/or stop the discharge from the pollutant source
- Coordinate an immediate cleanup with City staff or agency if the discharge poses a significant threat to human health or environment
- Identify the responsible party and allow an opportunity to clean up discharged materials and/or eliminate the illegal connection
- Issue an appropriate level of enforcement (Enforcement Response Plan JRMP Section 8) and follow up to ensure compliance
- Coordinate cleanup with City staff if the site does not meet compliance or if responsible party is absent
- City staff may recover the cost of the cleanup from the property owner

### 4.5.2 Enforcement

The City is required to enforce its ordinances, orders, or other legal authority to prevent illicit discharges and connections to the MS4, which is further discussed in the Enforcement Response Plan in JRMP Section 8.

## 4.6 Database Tracking and Reporting

The Environmental Division maintains a database of illicit discharges or connections to the MS4. The City tracks each case, the level of response, field notes, and photos. The City performs an annual assessment of illicit discharges as part of the iterative and adaptive management approach to implementing a watershed based storm water management program.

# 5 Development Planning

The City under its land use and planning authority prescribes storm water BMP conditions during the development planning review phase for all new development, redevelopment, and capital improvement projects (CIPs). The City is required to ensure that both standard and Priority Development Projects (PDPs) implement measures to reduce pollutants and runoff through the implementation of storm water BMP strategies that include site design, source control, low impact development, and structural treatment controls. The Water Quality Improvement Strategies for new development, redevelopment, and capital improvement projects are summarized in **Figure 5.1** below.

**Figure 5.1 Water Quality Improvement Strategies for Development Planning**

| ID | Strategy | Description | Responsible City Staff |
|---|---|---|---|
| IB-05 | Provide storm water BMP conditions during the development review phase for non-Priority Development Projects | Administer a program to ensure implementation of source control BMPs to minimize pollutant generation at each project and implement LID BMPs to maintain or restore hydrology of the area, where applicable and feasible. | Community Development and Public Works |
| IB-05a | Provide enhanced storm water BMP conditions for non-PDP (Standard Development Projects) with improvement valuation greater than $50,000 | Standard Development Projects that get assessed with an improvement valuation greater than $50,000 require an additional review by the Public Works Department for public improvement conditions which include specific project conditions for storm water BMPs. | Public Works |
| IB-06 | Provide storm water BMP conditions during the development review phase for Priority Development Projects | Priority Development Projects require BMP certification by City Engineer to meet treatment and retention standards in the Imperial Beach BMP Design Manual. | Community Development, Public Works, and City Engineer |
| IB-07 | City of Imperial Beach BMP Design Manual | Update IBMC and BMP Design Manual procedures to determine nature and extent of storm water requirements applicable to development projects and to identify conditions of concern for selecting, designing, and maintaining appropriate structural BMPs | Environmental Division |
| IB-08 | Long-term Structural BMP Maintenance Agreement | Require legal agreement, covenant, CEQA mitigation requirement, and/or conditional use permit to ensure long-term maintenance of structural BMPs. | Community Development |
| IB-09 | Review and update Long-term Structural BMP Maintenance Agreement | During each new MS4 Permit cycle provide a review and update to the City's BMP long-term maintenance agreement for PDPs. | Environmental Division and City Attorney |
| IB-10 | Structural BMP Maintenance Verification and Inspection | Provide annual inspections of high priority structural BMPs and periodic inspections of remaining BMPs at PDP sites. | Environmental Division |

| | | | |
|---|---|---|---|
| IB-11 | Maintain a watershed database of PDP and BMPs | Create and maintain a watershed database of PDPs, structural BMPs, and long-term maintenance agreements in GIS. | Environmental Division and GIS Administrator |
| IB-12 | Watershed Management Area Analysis (WMAA) and alternative compliance program | Collaborate with regional Copermittees on development of the WMAA and alternative compliance program for PDPs. | Environmental Division |
| IB-13 | Imperial Beach Green Streets program considers retrofit of impervious areas, LIDs, and EPA Green Streets guidance in the design phase for Capital Improvement Projects (CIPs) | The City considers retrofit of impervious areas, LIDs, and EPA Green Streets guidance with the City Engineer in the design phase for all CIPs where practical, feasible, or required by Priority Development status. | Public Works and City Engineer |

## 5.1 Development Project Review Process

The City of Imperial Beach is already fully developed and the requirements of the Storm Water Permit primarily apply to the redevelopment of existing properties in the City. The Community Development Department manages the discretionary permit approval process for private development projects in the City while the Public Works Department is generally responsible for the development and review of capital improvement projects. The definition for priority development project (PDP) is established in the IBMC 8.30, the Imperial Beach BMP Design Manual, and provided in **Appendix A-1**. The **Figure 5.2** outlines the process for reviewing development projects in the City.

**Figure 5.2 Development project review for storm water**

| Development Type | Description of BMPs | Responsible Department |
|---|---|---|
| **Small Standard Development Projects** | Improvement valuation of less than $50,000: requires storm water to be directed to vegetated areas for new or redevelopment activities. | Community Development |
| **Standard Development Projects** | Improvement valuation greater than $50,000: requires minimum BMPs and specific project conditions for storm water public improvement by Public Works. | Community Development and Public Works |
| **Priority Development Projects** | Priority Development Projects require BMP certification by City Engineer to meet treatment and retention standards in the Imperial Beach BMP Design Manual. | Community Development, Public Works, and City Engineer review |
| **Capital Improvement Projects** | The City considers retrofit of impervious areas, LIDs, and EPA Green Streets guidance with the City Engineer in the design phase for all CIPs where practical, feasible, or required by Priority Development status. | Public Works and City Engineer |

## 5.2 Best Management Practices for All Development Projects

The City is required to ensure that new development and redevelopment projects include appropriate storm water treatment design features to reduce the discharge of pollutants to the MEP. The IBMC 8.30 establishes the legal authority for the City to require storm water BMP conditions through the discretionary permit approval process. The City shall prescribe the necessary storm water BMPs for all proposed development projects during the planning process and prior to project approval and issuance of local permits. The Imperial Beach Municipal Code provides legal authority over Standard Development and Priority Development Projects and identifies the Imperial Beach BMP Design Manual, which was developed in collaboration with the San Diego Copermittees and San Diego RWQCB, as the guiding principal document for meeting the storm water MEP standards.

### 5.2.1 Site Design, Source Control, LID, and Structural Treatment Control BMPs

The City prescribes site design BMPs and pollutant source control conditions to minimize the generation of pollutants from new development. Each development project must also implement low impact development (LID) approaches where applicable and feasible. LID is a land use planning and engineering design approach that uses site design BMPs and pollutant source control to mimic the natural hydrology of the site to retain and/or treat pollutants in storm water runoff prior to discharging to the MS4. In addition, depending on the size and or proposed use of the development the City may prescribe structural treatment control BMPs as an engineered solution to provide storm water treatment of runoff. Storm water conditions are applied to each project through the development review phase. Further detail on minimum BMPs is provided in the Imperial Beach BMP Design Manual. The following BMPs are reviewed for applicability for each development project:

**General BMP Requirements**

- BMPs must be located as close to the pollutant generating source as possible and structural BMPs must not be constructed within waters of the U.S.
- BMPs must avoid the creation of nuisance conditions or pollution associated with vectors (mosquitos, rodents, or fires).

**Maximize Infiltration of Storm Water (LID and Site Design BMPs)**

- Minimize streets, sidewalk, and parking lot aisles widths and incorporate landscaped buffers.
- Minimize the impervious footprint of the project.
- Maintain natural areas and encourage landscaping with native or drought tolerant plants.
- Reduce overall lot imperviousness by promoting alternative driveway and walkway surfaces that infiltrate storm water.
- Direct flow from impervious areas to landscaped areas.
- Direct flow from downspouts and other impervious surfaces to landscaped areas.
- Minimize soil compaction of landscaped areas.
- Improve landscape areas with at least 12-inches of loamy soil in order to maximize water absorption during wet weather and minimize irrigation runoff from the property.
- Encourage the harvest and use of precipitation.

**Control Pollutant Sources (Source Control BMPs)**

- Prohibit or eliminate curb cuts that directly connect building roof or landscape water drains to the street.
- Provide storm drain stenciling or signage.
- Material storage and work areas must be protected from rainfall, run-on, runoff, and wind dispersal.
- Properly design and locate trash storage areas so that it is protected from rainfall, run-on, runoff, and wind dispersal.
- Provide efficient irrigation system for landscaped areas.

**Structural Treatment Control BMPs**

- Require Priority Development Projects to meet the design standards in the Imperial Beach BMP Design Manual.
- Structural treatment controls may be required for Standard Development Projects based on site conditions and layout.

Additional minimum BMPs for pollutant source control for the following sources are provided in **Appendix A-3:**

- Onsite storm drain inlets
- Interior floor drains and elevator shaft sump pumps
- Interior parking garages
- Indoor pest control
- Outdoor pest control
- Landscape and outdoor pesticide use
- Pools, spas, ponds, decorative fountains, and other water features
- Food service
- Refuse areas
- Industrial processes
- Outdoor storage of equipment or materials
- Vehicle and equipment cleaning
- Vehicle and equipment repair and maintenance
- Fuel dispensing areas
- Loading docks
- Fire sprinkler test water
- Miscellaneous drain or wash water
- Plazas, sidewalks, and parking lots

## 5.3 Imperial Beach BMP Design Manual

The City of Imperial Beach has worked with the responsible agencies in San Diego County, stakeholders, and regulatory agencies to develop an update to the regional storm water BMP post-construction treatment standards applicable to Standard Development and Priority Development Projects. The Imperial Beach Municipal Code will be updated to recognize the updated regional BMP standards as approved by council resolution in the new Imperial Beach BMP Design Manual. The effective date for the Imperial Beach BMP Design Manual is set by the R9-2013-0001 Permit or as amended by the San Diego Regional Water Quality Control Board. Development Projects that have not submitted an approved drainage plan and received a demolition, building, or grading permit by the effective date of the of the Imperial Beach BMP Design Manual will be required to incorporate the new storm water

treatment requirements in the project. Until the effective date, which is subject to change by the San Diego Regional Water Quality Control Board, the City will continue to implement its current SUSMP in IBMC 8.32.

### 5.3.1 Approval and Verification of Structural Treatment Control BMPs for Priority Development Projects

The City requires Priority Development Projects to receive approval by the City Engineer to ensure that the proposed project meets the design standards in the Imperial Beach BMP Design Manual. The Community Development Department is responsible for coordinating the plan approval and permitting of the project. Once construction begins on a Priority Development Project then the City's Building Official oversees regular inspections to verify that all prescribed design conditions (including structural treatment control BMPs) gets built per approved plans. All development projects must pass a final inspection from the Building Official before receiving an Occupancy Permit.

### 5.3.2 Long-Term Structural Treatment Control BMP Maintenance Agreement for Priority Development Projects

The City requires Priority Development Project applicants to submit proof of a mechanism under which ongoing long-term maintenance of all structural post construction BMPs will be conducted. The Community Development Department requires the long-term post construction BMP maintenance provisions to be identified through a legal agreement, covenant, and/or conditional use permit. Priority Development Projects require a legal structural treatment control BMP maintenance agreement to be certified and recorded by the County of San Diego Assessor's office.

### 5.3.3 Structural Treatment Control BMP Database, Maintenance Verification, and Inspections for Priority Development Projects

The City requires the long-term maintenance of structural treatment control BMPs according to the designated maintenance agreement for each project, which stipulates continued maintenance of BMPs that allow for the removal of pollutants in storm water to the MEP. The City's Environmental Division maintains and updates annually the database of all competed Priority Development Projects. The database includes Priority Development Projects since December 2002 and includes information as required by the San Diego RWQCB in Permit Section E.3.e(2)a.

The City verifies the long-term maintenance of structural treatment control BMPs through an inspection program that is managed and implemented by the Environmental Division. Priority Development Project BMPs that get designated as high priority receive an annual formal inspection. High priority BMP designation is based on Permit Section E.3.e(2)b. Priority Development Project BMPs not designated as high priority receive inspections as needed but no less than once per permit cycle.

The City's inventory of structural treatment control BMPs for Priority Development Projects is provided in **Appendix A-2**.

## 5.4 Alternative Compliance for Priority Development Projects

The City is participating in the regional effort to develop an alternative compliance program for Priority Development Projects that is supported by the Water Quality Improvement Plan for each watershed.

Options for alternative compliance will be included in the WQIPs and Imperial Beach BMP Design Manual as the program evolves.

# 6 Construction Management

The City requires the implementation of storm water BMPs to control and reduce the discharge of pollutants from construction activities to the MEP. Construction management BMPs under this section apply to any private development project applicant that need a demolition, grading, or building permits and all contractors for City capital improvement projects. Construction activity in the City consists primarily of redevelopment of the existing urban land area that covers approximately 2.1 square miles.

Project applicants are required to submit a Storm Water Management Plan (Provided **in Appendix B**) or an equivalent Storm Water Pollution Prevention Plan as required under the Construction General Permit prior to issuance of permits or a notice to proceed from the City. The Community Development Department is responsible for ensuring the proper implementation of construction BMPs for private development projects and the Public Works Department is responsible for ensuring the proper implementation of construction BMPs for capital projects. The City's Building Official and Building Inspector are responsible for construction BMP inspections for private development projects and the Public Works Inspector is responsible for construction BMP inspections for capital improvement projects. The Water Quality Improvement Strategies for construction management are summarized in **Figure 6.1** below.

**Figure 6.1 Water Quality Improvement Strategies for Construction Management**

| ID | Strategy | Description | Responsible City Staff |
|---|---|---|---|
| IB-14 | Approval of a Storm Water Management Plan or equivalent plan for private development projects | Private development project applicants must submit and receive approval of a Storm Water Management Plan (or for Construction General Permit a Storm Water Pollution Prevention Plan) prior to receiving a building, grading, or demolition permit. | Community Development |
| IB-14a | Inspect and verify implementation of construction management BMPs for private development projects | Verify implementation of construction BMPs at private development projects though inspections that include at a minimum one monthly site inspection. Inspection frequencies also include one initial site inspection at the start of grading or construction activities, drive-by inspections of all active construction sites prior to forecast rain events, and verification of site BMPs during any subsequent building inspection at the project site. | Building Official and Building Inspector |
| IB-14b | Maintain a continuous inventory of construction sites and enforcement actions for private development projects | For private development projects maintain a continuous inventory on the City's HTE database system of active construction sites and notes on enforcement actions. | Community Development |

| | | | |
|---|---|---|---|
| IB-15 | Approval of a Storm Water Management Plan or equivalent plan for public capital projects | Contractors for capital projects must submit and receive approval of a Storm Water Management Plan (or for Construction General Permit a Storm Water Pollution Prevention Plan) prior to receiving a notice to proceed. | Public Works |
| IB-15a | Inspect and verify implementation of construction management BMPs for capital projects | Verify implementation of construction BMPs at capital projects though daily inspections. | Public Works Inspector |
| IB-15b | Maintain a continuous inventory of construction sites and enforcement actions for capital projects | For capital projects maintain a continuous inventory active construction projects and enforcement actions in Daily Inspection Reports. | Public Works Inspector |
| IB-16 | Annual update to construction management database | The Environmental Division will annually collate the construction inventory and inspection/enforcement records from both public and private development projects into a comprehensive database. | Environmental Division |

## 6.1 Construction Site BMP Implementation

The City reviewed and updated the municipal code and the plan check process to ensure that construction and grading BMPs are properly addressed prior to the start of construction and remain a priority through the duration of construction. The IBMC 15.54, 8.30, and this JRMP chapter identify the minimum BMPs and permit approval process that applies to grading and construction activities. These measures will help to ensure that pollutant discharges are reduced to the MEP and water quality objectives are not violated during the construction phase.

### 6.1.1 Construction BMP Approval Process

Private Construction Projects:

The Community Development Department manages the private development plan check process, which includes the approval of a project specific Storm Water Management Plan. **Appendix B** provides the City's template for the Storm Water Management Plan; however, the City accepts any equivalent plan template from applicants. Projects that meet the threshold (greater than 1 acre) for a Construction General Permit will require the submittal of a Storm Water Pollution Prevention Plan and authorized WDID number from the State Water Board as part of the City's plan check process.

Public Constriction Projects:

The Public Works Department manages the approval of construction storm water BMPs for capital improvement projects. Each capital project requires construction storm water BMPs through the Contract Bid Specifications and also the submittal of a project specific Storm Water Management Plan. A small subset of capital projects meet the threshold for a Construction General Permit and require the submittal of a Storm Water Pollution Prevention Plan and authorized WDID number, which is done by the City Engineer who is the designated Qualified SWPPP Developer (QSD).

### 6.1.2 Construction Site Inventory

Private Construction Projects:

The City maintains an ongoing inventory of active construction permits through the City's HTE database management system. The City's construction inventory gets maintained continuously and includes enforcement actions administered to the site. The Environmental Division is assigned the responsibility to download the HTE database and collate the Construction Site and Inspection inventory at least annually (or more frequently as needed) for each WQIP.

Public Constriction Projects:

The Public Works Inspector within the Public Works Department maintains a continuous database of capital projects and enforcement actions. The Environmental Division is assigned the responsibility to collate a single Construction Site and Inspection inventory of both public and private projects at least annually (or more frequently as needed) for each WQIP.

### 6.1.1 Construction BMP Categories

The City is required to ensure the implementation of construction BMPs that cover the following categories: project planning, good site management (housekeeping), non-storm water management, erosion control, sediment control, run-on and runoff control, and active or passive treatment systems (when applicable).

**Project Planning BMPs**

Construction projects are required to implement appropriate type and phasing of BMPs given specific site conditions, seasons, likelihood of forecast rain events, and based on construction phase. Minimum project planning BMPs may include but not limited to the following:

- Rain event plans
- Implementation of phased BMPs based on type of construction activity
- Minimize cleared areas to only the portion of the site that is necessary for construction
- Minimize grading during the wet season
- Preserve natural areas and buffers
- Employee training
- Require a Storm Water Management Plan that identifies BMPs for each site

**Housekeeping BMPs**

Construction projects are required to implement good site management (housekeeping) BMPs to prevent the generation of storm water pollution by implementing proper waste management practices and pollution prevention methods. Minimum housekeeping BMPs may include but not limited to the following:

- Designate area for vehicle or equipment storage and maintenance
- Implement proper waste management and disposal

- Maintain a clean and well managed site
- Replace damaged BMPs

**Non-Storm Water Management BMPs**

Construction projects area required to implement non-storm water management BMPs that prevent the discharge of pollutants off the site. Minimum non-storm water management BMPs may include but not limited to the following:

- Contain and properly dispose of wash water
- Designate a concrete washout area
- Prohibit the discharge of non-storm water
- Manage airborne dust

**Erosion Control BMPs**

Construction projects are required to implement erosion control BMPs to prevent the erosion of sediment from the site. Minimum erosion control BMPs may include but not limited to the following:

- Minimize the exposure time of disturbed soils
- Provide erosion control BMPs such as straw waddles and check dams to slow the velocity of storm water on the site
- Protect sediment stockpiles
- Provide slope stabilization
- Require the stabilization or reseeding of disturbed soil areas as rapidly as possible
- Maintain erosion control BMPs until the site is stabilized

**Sediment Control BMPs**

Construction projects are required to implement sediment control BMPs as a supplement to erosion control and never as the single or primary method for controlling storm water pollutants. Minimum sediment control BMPs may include but not limited to the following:

- Prevent vehicle tracking of sediment
- Require street sweeping
- Provide detention areas for storm water
- Reinforce downstream BMPs

**Run-on and Runoff Control BMPs**

Construction projects are required to implement run-on and runoff control BMPs to prevent the discharge of pollutants. The site also needs protection from unintended upstream flows that may impact construction activities. Minimum run-on and runoff control BMPs may include but not limited to the following:

- Maintain perimeter protection with silt fence
- Provide inlet protection

**Active or Passive Sediment Treatment Systems**

Construction projects that are determined by the City to be an exceptional threat to water quality are required to implement advanced treatment for sediment through the use of engineered active or passive sediment treatment systems. Active or passive sediment treatment systems are not common for the typical construction activity in the City.

## 6.2 Construction Site Inspections

The City is required to confirm compliance of prescribed construction storm water BMP conditions and local ordinance through construction site inspections. Every construction project in the City is considered a potential high threat to water quality because the City only discharges to environmentally sensitive areas. Inspection frequency and oversight is therefore maximized in order to protect water quality. Setting the same standard of compliance for all construction activity also eliminates any confusion by contractors or City staff on implementing BMPs and performing inspections for compliance.

### 6.2.1 Inspection Frequency

Private Construction Projects:

The City considers all construction activity a potential high threat to water quality and requires the verification of storm water BMPs anytime an inspection is made on the site. For private development projects, construction BMP inspections are performed by the City's Building Inspector and overseen by the Building Official. The inspection frequency for private development projects includes at a minimum one monthly site inspection. Inspection frequencies also include one initial site inspection at the start of grading or construction activities, drive-by inspections of all active construction sites prior to forecast rain events, and verification of site BMPs during any subsequent building inspection at the project site. Projects that create a larger construction footprint naturally require a greater number of inspections from the Building Inspector and therefore receive a higher number of storm water inspections. The City's Environmental Division also provides an additional layer of oversight of private construction activity through the neighborhood inspection of existing development where a full time Environmental Specialist and the City's highly trained Public Works field crew are able to provide visual observations of any pollutant generating activity within the 2.1 square miles of the City's urban area.

Public Constriction Projects:

The City's Public Works Inspector performs construction storm water BMP inspections for capital projects and requires daily inspections when the contractor is on site. The Public Works Inspector tracks the progress of each construction project through Daily Inspection Reports, which include implementation of storm water BMPs as a key component. Capital projects that require a Construction General Permit also receive additional storm water inspections from a Qualified SWPPP Practitioner (QSP) who then coordinates inspection results with the City Engineer as the designated QSD.

### 6.2.2 Inspection Content

Storm water construction inspections include at the minimum the following components as required by the Storm Water Permit:

- Verification of coverage under the Construction General Permit if applicable (WDID Number)
- Assessment of compliance with existing Storm Water Management Plan, permits, IBMC 8.30, and implementation and maintenance of applicable BMPs
- Assessment of BMP adequacy and effectiveness
- Visual observations of actual non-storm water discharges
- Visual observations of actual or potential discharges of sediment and/or construction related materials from the site
- Visual observations of actual or potential illicit connections
- Verify the correction of BMP violations and document appropriate actions taken

### 6.2.3 Inspection Tracking and Records

The City is required to track all storm water construction inspections and re-inspections in a database that is to be made available to the RWQCB upon request and used for annual reporting for each WQIP. The City's Environmental Division will tabulate the storm water construction inspection records from the Building Official and Public Works Inspector in a database that includes at the minimum the following categories:

- Site name, address, hydraulic subarea location, and WDID number (if applicable)
- Inspection dates
- Rain event dates and rainfall storm totals
- Description of problems observed with BMPs and indication of need for BMP addition, BMP repair, or BMP replacement
- Verification that BMP deficiencies were resolved within 24 hours or rational for longer compliance time
- Description of enforcement actions

# 7 Existing Development Management

The Permit requires jurisdictions to implement a storm water management program to control and reduce the discharge of pollutants from existing developments within the City to the MEP. Existing developments have the potential to contribute a wide variety of pollutants to the MS4 depending on the type of operation and the specific activity conducted on the site. The City is required to maintain an annual inventory of existing facilities, verify the proper implementation and maintenance of BMPs through inspections, enforce non-compliance of storm water violations, and actively work towards the rehabilitation and retrofit of existing developed areas including stream channel and habitat restoration to reduce the discharge of pollutants. The City's existing development management program requires implementation of storm water BMPs for the following facilities and areas:

- Municipal facilities and areas
- Commercial and industrial facilities (the City does not have any industrial facilities)
- Residential areas

The Water Quality Improvement Strategies for existing development management are summarized in **Figure 7.1** below.

**Figure 7.1 Water Quality Improvement Strategies for Existing Development Management**

| ID | Strategy | Description | Responsible City Staff |
|---|---|---|---|
| IB-17 | Minimum BMPs for municipal areas and activities, commercial facilities, and residential areas | The IBMC 8.30 establishes minimum BMPs and the water quality improvement strategies established in the JRMP requires implementation of BMPs that are specific to the facility, area type, and pollutant generating activity. Minimum BMPs get reviewed and updated at least once per Permit cycle. | Public Works Department |
| IB-18 | Maintain an annual watershed based inventory of municipal, commercial, and residential facilities | At the beginning of each FY update the City's GIS database of existing development inventory of municipal, commercial, and residential facilities. | Environmental Division and GIS Administrator |
| IB-19 | Inspect and verify implementation of BMPs at municipal areas and facilities | The responsibility to implement and maintain various municipal BMPs is a task shared by every employee in the Public Works Department. The Environmental Division will verify implementation of BMPs through an onsite annual inspection. | Environmental Division |
| IB-20 | Inspect and verify implementation of BMPs at commercial businesses | The Environmental Division will perform an onsite inspection of each commercial business at least once per permit cycle with no less than 20% of inventoried sites inspected each year. | Environmental Division |

| | | | |
|---|---|---|---|
| IB-21 | Neighborhood inspection program | The Environmental Division conducts monthly neighborhood specific visual inspections of existing developed areas. These inspections allow for focused and targeted inspections that are informed by WQIP or Jurisdictional priorities. | Environmental Division |
| IB-22 | Maintain inspection tracking records and violation reports for areas of existing development | Inspection records are maintained according to the Permit violations are tracked on the ICID database. | Environmental Division |
| IB-23 | Inspection of U.S. Navy MS4 | Perform annual inspection of NOLF outfall and MS4 channels on Navy property. | Environmental Division |
| IB-24 | Street sweeping program | Weekly: Commercial areas, Ocean Lane, and parking lots<br>Twice per month: Beachfront posted residential areas<br>Monthly: Non-beachfront residential areas and paved alleys | Environmental Division and Contractor |
| IB-25 | Collection of illegally dumped material in alleys and public right-of-way | Illegally dumped materials observed by City staff or reported by the public in City alleys get inventoried and cleaned up weekly every Thursday by EDCO. Illegally dumped material observed or reported in the public right-of-way get collected at the end of the day by Public Works crew. | Environmental Division, Public Works, and Contractor |
| IB-26 | Home front cleanup event | The City in partnership with EDCO host an annual drop off event for the disposal of any item for residents of Imperial Beach. | Environmental Division and Contractor |
| IB-27 | Pet waste bag program | The City maintains 10 pet waste bag dispensers twice per week. | Grounds and Facilities Division |
| IB-28 | Pesticide, herbicide, and fertilizer management | The City implements an IPM program to minimize the application of chemicals. | Grounds and Facilities Division |
| IB-29 | Sewer system management | The operation and maintenance of the sewer collection system is a top priority and managed in accordance with the City's SSMP. | Environmental and Sewer Divisions |
| IB-30 | Special event permits | The City provides storm water BMP conditions on special event permits or conditional use permits. | Public Works and Public Safety Departments |
| IB-31 | Residential household hazardous waste program | The City partners with the City of Chula Vista to offer free disposal of HHW for residents. | Environmental Division |
| IB-32 | Catch basin and MS4 line O&M | The City annually inspects and cleans catch basins and MS4 line. | Environmental and Sewer Divisions |
| IB-33 | Open drainage channels and outfalls O&M | The City annually cleans and maintains open drainage channels and outfall locations. | Environmental, Streets, and Sewer Divisions and Contractor |
| IB-34 | LID BMPs O&M | The City provides scheduled maintenance activities for various LID facilities. | Grounds and Facilities Division and Contractor |

| | | | |
|---|---|---|---|
| IB-34a | Napalitano Property restoration for Tijuana Estuary | The restoration of the Napalitano Trust property was a major project for the City to restore 1.25 acres of former wetland adjacent to the Tijuana Estuary in Imperial Beach. The project was completed in 2002 and turned over to the TRNERR. | TRNERR |
| IB-34b | 10th Street Bikeway Access Project (Storm water bioswale and habitat restoration) | The City completed the Bikeway Access project in February 2014 that converted 2.86 acres storage yard for the Public Works Department to a bikeway access spur and trail staging areas to the Bay Shore Bikeway. The project included a bioswale and over 1 acre of native habitat restoration. The City will continue to maintain this new facility in partnership with the FWS. | Public Works, FWS |
| IB-35 | Storm drain inlet filters O&M | The City maintains through contract multiple inlet filters located on municipal facilities or at high trash generating areas. | Environmental Division and Contractor |
| IB-36 | Vertech interceptor O&M | The City maintains a Vortech separator storm drain CDS unit at 10$^{th}$ and Imperial Beach Blvd. | Sewer Division |
| IB-37 | Storm water diverters O&M | The City maintains 2 major storm water diverts along the beachfront at Palm Ave and Date Ave that diverts urban runoff and first flush rain events into the sanitary sewer. The City also maintains 3 vehicle and equipment washing diverters for Public Works, Fire Station, and Lifeguards. | Sewer Division |
| IB-38 | Integrate LID retrofits where feasible into CIP rehabilitation projects | The City evaluates the implementation of LIDs into the design of CIPs where practical and feasible. See IB-13 for Imperial Beach Green Streets program. | CIP Manager |
| IB-39 | Eliminate residential and commercial curb cuts | The City no longer allows storm water curb cuts for private properties and will eliminate existing curb cuts through redevelopment projects. | Street Division, Contractor, and Property Owners |
| IB-40 | Implement LID retrofits of residential and commercial areas for non-PDP redevelopment projects | During the plan check phase the City evaluates non-PDP redevelopment projects for enhanced public improvement conditions to treat storm water. See IB-05a for enhanced BMPs for non-PDP projects. | Public Works and Community Development Departments |
| IB-41 | Partner with local, state, and federal agencies to retrofit non-jurisdictional areas | The City partners with local, state, and federal agencies to improve water quality and wildlife habitat in areas outside the jurisdictional control of the City. | Environmental Division |

| | | | |
|---|---|---|---|
| IB-62 | EDCO Community Grant Program (incentive program) | The City partners with EDCO to provide $5,000 in local community grants per year to local organizations to help improve the community. Examples of include support for a community led pet waste bag program, support for education and outreach through local NGOs, and programs that encourage community involvement. City Council review grant applications and present the grant awards. | City Council, EDCO |
| IB-64 | Cal American Water Rebate Programs (incentive program) | Cal American provides drinking water to the City and also offers rebate programs for water conservation efforts including turf replacements and LID gardens for residents. The City also partners with Cal American and independently funds local community groups (Boy Scouts Eagle Projects) to install local turf replacement projects on City property. | Public Works, Calam |

## 7.1 Municipal Facilities and Areas

The City maintains and annually updates an inventory of municipal facilities and areas. The City's complete inventory of municipal facilities and areas is provided as **Appendix C**-1 and summarized below.

| Category | Miles | Number | Description |
|---|---|---|---|
| **Streets, Roads, and Highways (130 curb miles paved roads)** | | | |
| Commercial areas | 24 | --- | Sweeping includes open stripped and raised curb medians. Commercial areas are swept weekly, beachfront residential (posed) areas are swept (2) times per month, and the remainder of the City (non-beachfront residential, paved alleys, and parking facilities) are swept monthly. The City or its contractors also maintains the right-of-way traffic islands and street planters along Palm Ave, Hwy 75, Imperial Beach Blvd, and Seacoast Dr. |
| Beachfront residential | 13 | --- | |
| Non-beachfront residential | 80 | --- | |
| Paved alleys | 13 | --- | |
| Municipal parking areas | --- | 11 | |
| Right-of-way traffic islands and street planters | --- | 4 | |
| **Municipal Separate Storm Sewer System (MS4) and Structures** | | | |
| Underground MS4 | 5 | --- | The City annually inspects and maintains the MS4 with the intent to verify operation of structures and to eliminate the contribution of pollutant discharges into the receiving waters. This includes regular maintenance of engineered BMPs and the annual inspection/cleaning of MS4 lines, catch basins, channels, and outfalls. The City also operates pump station 11 during storm events at Palm and Seacoast for flood control purposes. |
| Catch Basins | --- | 92 | |
| Open Grates | --- | 143 | |
| Major Outfalls ≥ 36" | --- | 4 | |
| Palm Ave Pump Station 11 | --- | 1 | |
| Open Drainage Facilities | --- | 7 | |
| Storm Drain Diverters | --- | 2 | |
| Municipal Storm Drain Filters | --- | 10 | |
| Vortex storm drain CDS | --- | 1 | |
| Vehicle washing bays | --- | 3 | |
| Palm Ave LIDs | --- | 1 | |
| Sports Park Crosswalk LIDs | --- | 1 | |

| Category | Miles | Number | Description |
|---|---|---|---|
| Bikeway Access Bioswale | --- | 1 | |
| **City Parks and Municipal Facilities** | | | |
| Veteran's Park | --- | --- | The City or its contractors are responsible for maintaining, preserving, and enhancing over 30 acres of park facilities, beach accesses, and landscapes at various municipal facilities. |
| Reama Park | --- | --- | |
| Sports Park & Rec Center | --- | --- | |
| Teeple Park | --- | --- | |
| Dunes Park | --- | --- | |
| Pier Plaza | --- | --- | |
| Triangle Park | --- | --- | |
| Serenity Gardens | --- | --- | |
| Beach Street Ends | --- | --- | |
| Public Works Yard | | | |
| City Hall and Fire Station | --- | --- | |
| Lifeguard Safety Center | --- | --- | |
| Marina Vista Center | --- | --- | |
| **Sewer Collection System** | | | |
| Gravity sewer mains | 41.2 | --- | The City provides regular maintenance of the sewer collections system and maintains an up-to-date Sewer System Management Plan in accordance with WDR Order No. 2006-0003. |
| Force mains | 4.7 | --- | |
| Sewer Pump Stations | --- | 11 | |
| Sewer lateral connections | --- | 5,446 | |

### 7.1.1 Minimum BMPs for Municipal Activities

The Public Works Department is tasked to maintain and enhance the City's municipal facilities and areas, which include the implementation of BMPs that reduce pollutants to the MEP when performing work related activities. The minimum BMPs established in IBMC Chapter 8.30 apply equally to the City with the expectation that City employees will be setting the example for the public. In addition, the City has created a fact sheet in **Appendix C-2** of Public Works Best Management Practices for Municipal Facilities and Activities that gets reviewed during the annual Public Works storm water employee training each fall. Each Public Works employee has an expectation to be knowledgeable of the City's storm water management program and to implement appropriate measures to prevent storm water pollution when performing his or her duties.

### 7.1.2 Street Sweeping

The City provides street sweeping service through its franchise waste hauler (EDCO). The City sweeps a total of 130 curb miles per month, which provides full coverage of the entire City as follows:

- **Weekly** sweeping of commercial areas that include open striped and raised curb medians (Palm Ave, Hwy 75, 13$^{th}$ St, Imperial Beach Blvd, Seacoast Dr, and Ocean Lane).
- **Twice per Month** sweeping of beachfront areas that include enforcement of posted parking restrictions along the sweeping route.
- **Monthly** sweeping of non-beachfront residential areas, paved alleys, and parking facilities.

The City currently uses a Tymco 600 street sweeper design with regenerative air system and natural gas engine that is provided by CleanStreets. To increase efficiency of the street sweeping program, the City provides the street sweeping schedule in **Appendix C-3** to residents on the City's website and through an annual mailer in the EDCO newsletter. The City also maintains regular communication with EDCO and CleanStreets to discuss sweeping issues and to evaluate the street sweeping program.

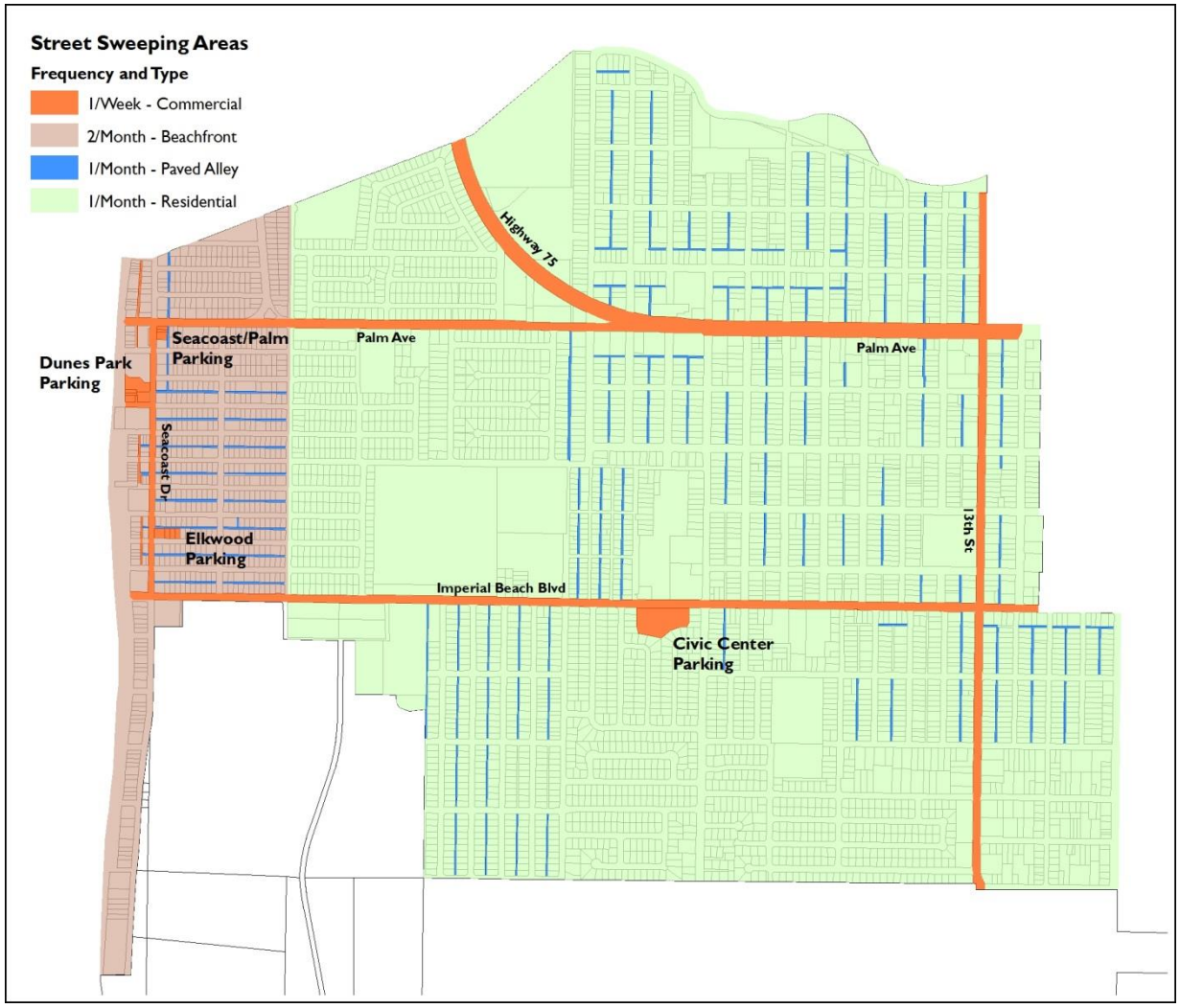



**Figure 7.2** The City provides regular street sweeping service throughout the City.

### 7.1.3 Illegal Dumping

The City is responsible for illegally dumped items disposed in alleys or the public right-of-way. Items illegally dumped in the public right-of-way or items that are dumped in City alleys that pose an immediate hazard get picked up by Public Works crews. Items that are dumped in alleys that do not need immediate attention will get added to a weekly list for alley sweeps that get sent to EDCO at the end of the workday every Wednesday. EDCO then performs a weekly pickup of large bulky items or excessively messy alleys every Thursday. Items that are dumped or stockpiled on private property are required to be addressed through the code enforcement process.

### 7.1.4 Pet Waste Bag

The City maintains a Pet Waste Bag Program that was initially started in 1999 by a local community group that established a non-profit called the Ocean Blue Foundation. Up until January 2013 the Ocean Blue Foundation installed and maintained pet waste bag dispensers throughout the City. The City would like another community group to step up and provide local leadership to continue the grass root support for a Pet Waste Bag Program but until such time the City's Grounds and Facility Division will maintain and provide weekly service for the 10 pet waste bag dispensers at the following locations:

- Reama Park
- Veteran's Park
- Iris & 5th Tijuana Estuary path
- Seacoast Dr & Admiralty Ave
- South Seacoast near Descanso
- Imperial Beach Blvd & 3rd St
- Carnation Ave beach entrance
- 7th St at Bayshore Bikeway
- 13th St at Bayshore Bikeway
- East Lane & Grove Ave

### 7.1.5 MS4 Maintenance

The City provides annual inspection, cleaning and maintenance of the MS4 and related facilities. The City's MS4 and facilities includes underground storm drain lines, catch basins, open drainage facilities, LID facilities, storm drain inlet filters, vortech storm water separator, and storm water diverters.

Underground MS4 Lines and Catch Basins

The sewer division uses the City's vactor truck to annually clean catch basins and jet the accessible sections of the underground MS4 lines before the start of the rainy season (October 1st). The Environmental Division also performs inspections of MS4 facilities and cleaning maintenance as necessary during the rainy season.

Open Drainage Facilities

The City provides annual maintenance and cleaning of 13 open drainage channels within the City. Cleanup activities are performed to collect the accumulation of any trash or debris and to maintain optimum flow conveyance. All the channels listed below receive annual inspections and annually cleaned by the Environmental Division, Sewer Division, Streets Division or contractors depending on level of maintenance. Areas adjacent to Environmentally Sensitive Areas require notification with the Fish and Wildlife Service prior to starting work.

**Open Drainage Channel Inventory**

**Grove Ave to Holly Ave channel**

**Bonito Ave to Palm Ave channel**

**9th St to Grove Ave channel**

**Iris Ave to NOLF (1000 block) channel**

**Cypress Ave to Navy Communication Station channel**

**Alley to 13th St (1363 IB Blvd) channel**

**Hwy 75 and Rainbow Channel (detention basin)**

**700-800 block between Corvina St and 8th St channel**

**Donax Ave to 5th channel**

**G-outfall channel into Pond 10a**

**Spruce St to Carolina St channel**

**H-outfall channel to Bayshore Bikeway**

**South Seacoast Dr outfall channels at Cortez Ave, Descanso Ave, and south end of Seacoast**

Low Impact Development (LID) Facilities

The City or its contractors provide maintenance of municipal areas that get retrofit with LID facilities to treat or infiltrate storm water runoff.

- Bikeway Access Bioswale (February 2014)
- Palm Ave Eco Bikeway LIDs (December 2013)
- Sports Park Crosswalk LID (August 2014)
- Skate Park Boiswale and Infiltration Trench (January 2011)
- Alley Retention System (800 block between 10th and 11th) (May 2007)
- Beachfront Sidewalk and Street End Permeable Pavers (Multiple)
- Emory St and Essex St Retention System (September 2006)
- Baseball Field Permeable Concrete (2003)

Storm Drain Inlet Filters

The City maintains storm drain inlet filters at municipal locations and high trash areas listed below. The filters receive quarterly maintenance by the contract company Downstream Services to ensure proper functioning of the filter systems.

- SDF1: Northeast PW yard
- SDF2: Northwest PW yard parking area
- SDF3: Seacoast/Palm City Parking lot
- SDF4: Southwest parking lot Sports Park
- SDF5: City hall parking lot
- SDF6: Fire Station Parking area
- SDF10: Curb inlet SW corner 9th and Palm
- SDF11: 839 10th St in alley between Elm and Donax
- SDF12: Alley N side of Donax between 11th and Florida
- SDF13: 1459 Hemlock Ave

Vortech Storm Water Interceptor

The City installed a CDS Vortech interceptor at 10th and Imperial Beach Blvd in December 2002 to capture trash, sediment, and hydrocarbons. The CDS Vortech interceptor provides treatment for the commercial areas on Imperial Beach Blvd and 13th St as well as the surrounding residential areas. The Sewer Division performs quarterly inspections of the interceptor and removes accumulated debris with the vactor truck as necessary to ensure proper functioning of the system.

Storm Water Diverters

The City maintains 2 major storm water diverters along the beachfront at Palm Ave (installed January 2009) and Date Ave (installed 2004 and refurbished October 2014) that captures and diverters 137.2 acres of low flow urban runoff and first flush rain events into the sanitary sewer. The only coastal outfall in Imperial Beach not on a diverter system is at Ebony St end, which consists of a 12 inch outfall and drains a residential area of 2.2 acres. The City also maintains 3 vehicle and equipment washing areas (Public Works, Fire Station, and Lifeguards) that are connected to the sanitary sewer.

Nopalitano Restoration Project

The restoration of the Napalitano Trust property was a major project for the City to restore 1.25 acres of former wetland filled adjacent to the Tijuana Estuary. Construction was initiated in December 1998 and was completed in February 1999. The project received final sing-off from the permitting agencies in 2002 and turned over to the Tijuana River National Estuarine Research Reserve (TRNERR).

### 7.1.6 Parks, Tidelands, and Facilities Maintenance

The City's Grounds and Facility Division and its subcontractors are responsible for maintaining, preserving, and enhancing 5 community parks, various civic greenways, and beach tidelands seven days a week throughout the City. Duties include landscaping, facility maintenance, trash collection, and upkeep of public areas. The beach tideland maintenance is specifically funded by the Port of San Diego, whose mission is to keep the beachfront area clean and free of trash and other debris. Tideland employees provide daily pick up of trash, sand, and seaweed from the beach, along Seacoast Dr, and the pier. This is in addition to a contract with Partners With Industry, which employs disabled adults to pick up trash in the tidelands area.

Pesticides, Herbicides, and Fertilizers

The Grounds and Facilities Division and its subcontractors where applicable, are responsible for maintaining landscaped areas, which include the season application of fertilizers and periodic use of weed control and pest control sprays. The City maintains a Unified Program Facility Permit through the County to properly store chemicals and a Pesticide Operator License through the County to apply weed control and pest control sprays in designated areas. City contractors are required to have the same level of certification to work in the City. The City also implements an Integrated Pest Management Program in accordance to City Council Policy 611 to minimize the use of chemical treatment. The City takes an integrated pest management approach to control the management of plant and animal pests and have designated minimum BMPs in **Appendix C-4**.

### 7.1.7 Sewer Collection System

The maintenance and operation of the sewer collection system is the top priority for the Public Works Department. The City maintains a Sewer System Management Plan in accordance with WDR Order No. 2006-0003. The Sewer Division conducts routine maintenance on the sewer system to prevent spills and discharges into the MS4. Most gravity sewer lines are cleaned at least annually through jetting with the City's vactor truck and known problem areas are cleaned more frequently throughout the year. The Sewer Division also performs daily inspections of 11 sewer pump stations. In the event of a sewer spill, from either a public mainline or private lateral, City staff follows procedures laid out in its Sanitary Sewer Overflow Response Plan. The City will continue to be proactive in identifying potential sewer maintenance problems and take corrective actions before an overflow occurs.

### 7.1.8 Navy MS4 Infrastructure

The City of Imperial Beach is bordered to the northwest by the Silver Strand Training Complex (formerly known as the Naval Radio Receiving Facility) and to the southeast by Naval Outlaying Landing Field Imperial Beach. Both facilities receive storm water runoff from areas of the City that are extremely flat and subject to flooding. Due to security concerns all storm water channels and outfalls are grated, which

result in the accumulation of debris that can exacerbate flooding during storm events. The City therefor schedules an annual inspection before the start of the rainy season with the Naval Base Coronado Facilities Manager to ensure that the MS4 infrastructure is free from trash and debris and that outfall channels are clear. One of the City's five major MS4 outfalls is located on the NOLF facility and discharges into the Tijuana Estuary. Storm water that discharges to the Silver Strand Training Complex drains to a detention basin on Navy property within the City of Coronado.

### 7.1.9 Municipal Inspections and Tracking Records

The inspection of municipal facilities and activities helps ensure the proper implementation of storm water pollution measures and continued maintenance of existing BMPs. The responsibility to implement and maintain various municipal BMPs is a task shared by every employee in the Public Works Department. However, the oversight for the implementation of BMPs and management of records falls on the Environmental Division. At a minimum the Environmental Division will perform an annual onsite inspection of the City's municipal facilities that ensures the proper implementation and maintenance of BMPs. Records will be maintained in a manner consistent with the storm water Permit.

## 7.2 Commercial and Industrial Facilities

Commercial and industrial facilities have the potential to contribute a wide variety of pollutants to the MS4 depending on the type of operation and the specific activities conducted on the site. There are no industrial facilities operating within the City's jurisdiction. The commercial business activity in Imperial Beach is primarily concentrated in four areas: 1) Palm Ave (Hwy 75) corridor, 2) Lower Palm Ave to Seacoast Dr, 3) Seacoast Dr between Palm and Imperial Beach Blvd, and 4) Imperial Beach Blvd and 13$^{th}$ Street. The most common business types are small eating and drinking establishments, food markets, automotive repair shops, and gas stations. **Figure 1.2** in Section 1 provides a map of land uses which includes the commercial areas in the City.

The City maintains an inventory of commercial facilities that gets updated by the Environmental Division at the beginning of each fiscal year. The 2015 commercial business inventory is provided in **Appendix D-1** and summarized below:

| Commercial Businesses in Inventory | |
|---|---|
| **Auto Repair & Maintenance** | 7 |
| **Auto Sales** | 3 |
| **Carwash** | 4 |
| **Retail Fueling** | 4 |
| **Eating/ Drinking** | 44 |
| **Food Market** | 7 |
| **Mobile Home** | 3 |
| **Mobile Businesses** | 0 |

### 7.2.1 Minimum BMPs for Commercial Facilities

The City requires all commercial site/sources to implement and maintain designated BMPs and other measures so that storm water pollutants will be reduced to the MEP and not cause or contribute to a

violation of water quality standards. The City's Urban Runoff Management and Discharge Control Ordinance 8.30 mandates implementation of BMPs for existing developments including commercial and industrial activities.

Specific minimum BMP requirements for commercial facilities, including non-dry weather flows and pollution prevention practices, are listed in **Appendix D-2**. Minimum BMPs for commercial facilities are reviewed and updated as necessary.

### 7.2.2 Implementation of BMPs for Commercial Facilities

A combination of the following methods will be utilized to ensure the implementation of designated minimum BMPs at commercial facilities.

Site Inspections

The Environmental Division has performed commercial BMP site inspections in the City since the implementation of the 2001 Storm Water Permit. Site inspections provide an opportunity to educate business owners to ensure the proper knowledge, awareness, and implementation of storm water BMPs. The Environmental Division performs at a minimum one onsite inspection of each commercial business at least once per permit cycle with no less than 20% of inventoried sites inspected each year. These commercial inspections are in addition to the targeted neighborhood inspection program (IB-21).

Business License

New businesses in the City receive storm water BMP information from the Finance Department as part of the new business license application. The City will also mail out storm water BMP information with the business license renewal application at least once per Permit cycle.

IDDE Reports

The City responds to every illegal discharge detection and elimination report and prioritizes any reports that identify illegal discharges from commercial areas. The City encourages the general public or any 3rd party group to report illegal discharges or BMP violations to the City's Storm Water Hotline. Any storm water BMP deficiency or illegal discharge receives adequate follow up to resolve each issue. Storm water violations from commercial businesses get noted on the commercial business inventory so that the Environmental Division can follow up to ensure continued compliance from the site.

### 7.2.3 Regulation of Mobile Businesses

The City prohibits the operation of mobile businesses through IBMC 19.72.030 and requires commercial businesses to operate on private property and be completely enclosed by a fence or building. Mobile businesses are conditionally allowed during special events and require a special event permit, which receive storm water BMP conditions from Public Works through the application process.

### 7.2.4 Special Events

Any event in the City larger than 50 people is required to receive a special event permit. Most special events in the City occur along Seacoast Dr or the adjacent beachfront. Each special event permit

includes specific conditions for storm water BMP implementation that require the applicant to contain potential pollutant sources, clean up after the event, and prevent the illegal discharge of any liquids onto hardscapes. Reoccurring special events like the Imperial Beach Farmers Market also require a Conditional Use Permit that includes specific storm water BMP conditions from the Imperial Beach Planning Commission. The City enforces minimum BMPs at special events through visual observations from staff and with the help of illegal discharge reports from the public.

### 7.2.5 Commercial Database Management and Tracking Records

The Environmental Division makes annual updates to the commercial business inventory at the beginning of each fiscal year. Inspections and violations get noted on the commercial business inventory to help focus the annual commercial inspection program. Detailed violation report records are maintained on the City's ICID database.

## 7.3 Residential Areas

The City of Imperial Beach has a significant residential population that characterizes the majority of the urban land use. Residential areas as identified in the land use map in **Figure 1.2** include the following:

- Single-family residential (346 acres)
- Multi-family residential (1,310 acres)
- Mixed use residential (3.7 acres)

The residential areas within the City are divided into 6 residential neighborhoods as shown in **Figure 7.3** shown below. The designation of neighborhoods helps organize annual operation, maintenance, and inspection activities for Public Works. The City's street sweeping program, trash and recycling service, neighborhood inspection program, and annual street maintenance schedule also follows these neighborhood boundaries.

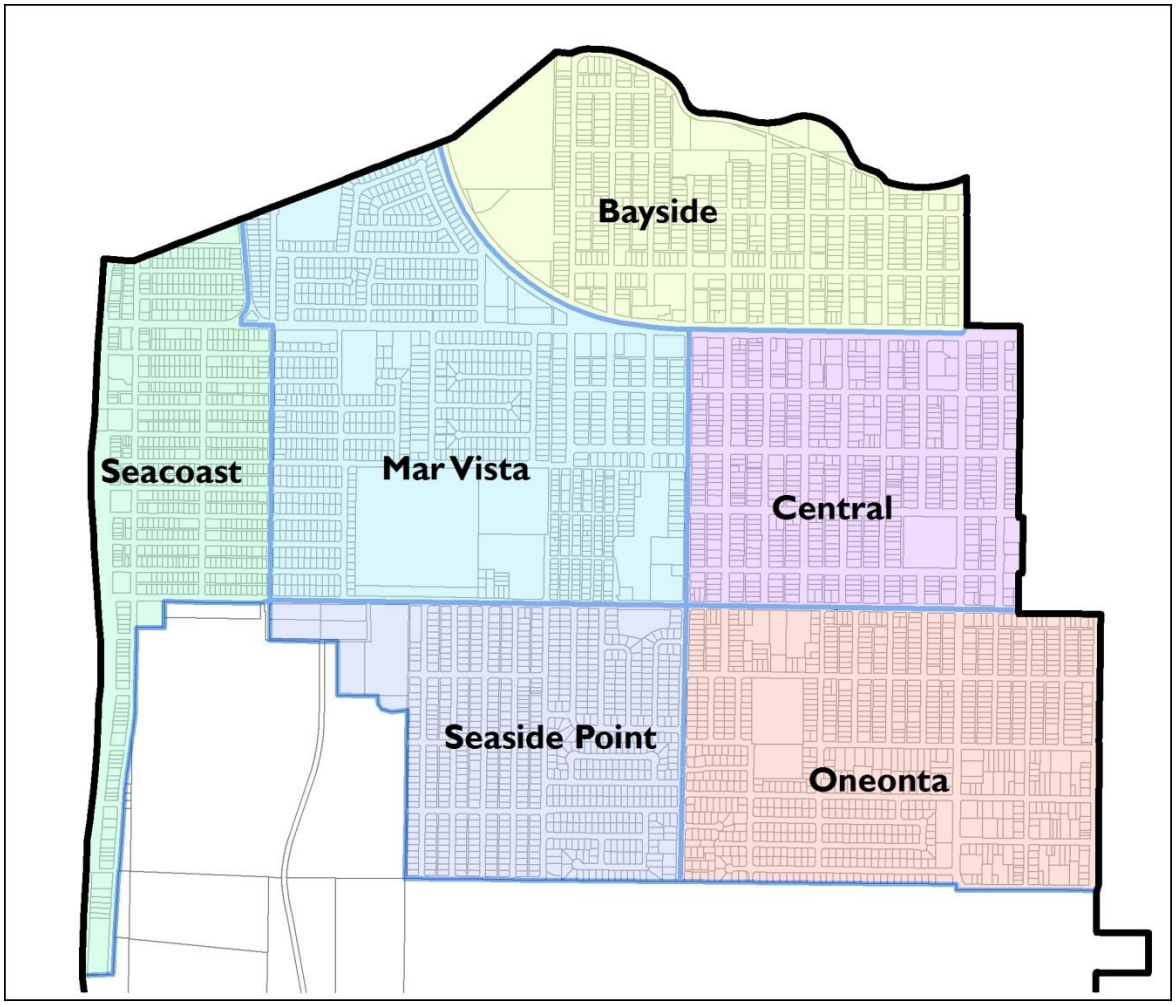



**Figure 7.3** Imperial Beach residential neighborhoods help organize annual operation, maintenance, and inspection activities for Public Work.

### 7.3.1 Minimum BMPs for Residential Areas

The City requires residential areas to implement and maintain designated BMPs and other measures so that storm water pollutants will be reduced to the MEP and not cause or contribute to a violation of water quality standards. The City's Urban Runoff Management and Discharge Control Ordinance 8.30 mandate implementation of BMPs for existing developments including residential areas.

Specific minimum BMP requirements for residential areas, including non-dry weather flows and pollution prevention practices, are listed in **Appendix D-2**. Minimum BMPs for commercial areas are reviewed and updated as necessary.

### 7.3.2 Implementation of BMPs for Residential Areas

A combination of the following methods will be utilized to ensure the implementation of designated minimum BMPs at commercial facilities.

**Neighborhood Inspections**

The City considers all the residential neighborhoods a priority for maintaining public services including the implementation of storm water BMPs to the MEP. The City responds to storm water issues throughout the year over the entire City that are reported by the public and identified by City staff. In addition, the Environmental Division conducts neighborhood specific visual inspections for the existing developed areas for the implementation, operation, and maintenance of storm water BMPs. These inspections allow for focused and targeted inspections that are informed by WQIP or Jurisdictional priorities. The neighborhood inspection program is outlined below in **Figure 7.4**.

**Figure 7.4 Neighborhood Inspection Program**

| IB Neighborhood | Scheduled Inspections (Months) | WQIP and Jurisdictional Inspection Priorities |
|---|---|---|
| **Bayside** | January; July | Dry weather flow, Commercial facilities, Trash |
| **Seacoast** | February; August | Dry weather flow, Commercial facilities, Trash, Sediment |
| **Mar Vista** | March; September | Dry weather flow, Commercial facilities, Trash, Sediment |
| **Central** | April; October | Dry weather flow, Commercial facilities, Trash, Sediment |
| **Seaside Point** | May; November | Dry weather flow, Sediment |
| **Oneonta** | June; December | Dry weather flow, Commercial facilities, Sediment |

**Household Hazardous Waste**

The City's residential household hazardous waste (HHW) program is managed by the Environmental Division. The City partners with other jurisdictions in the South Bay to offer convenient disposal options for residents. Imperial Beach residents are encouraged to dispose hazardous materials for free at the City of Chula Vista's Hazardous Collection Facility at 1800 Maxwell Rd. The facility is open to the public on Wednesdays and Saturdays 9 a.m. to 1 p.m. Disabled or special needs residents can scheduled a curbside pickup of hazardous materials by calling the South Bay HHW Hotline at 619-691-5122.

**Recycling and Waste Management**

The City's franchise waste hauler, EDCO Disposal, provides weekly trash and recycling service for residents. They also provide waste management services that support the following City programs:

- Annual Home Front Cleanup event for residents at Mar Vista high school (first Saturday in May)
- Annual Christmas Tree Recycling program (last week December through 3rd week January)
- Weekly collection of illegally dumped items in City alleys
- Recycling dumpsters available for residents located at City Hall and Public Works
- Battery recycling drop off containers at City Hall and Public Works
- Sharps and universal waste collection at EDCO facilities and HHW Facility in Chula Vista

**Pesticides, Herbicides, and Fertilizers**

Residents are encouraged through local and regional education programs to be aware of the storm water pollution potential when using pesticides, herbicides, and fertilizers on landscaped areas. Residents are encouraged to implement integrated pest management practices.

## 7.4 Retrofitting and Rehabilitating Areas of Existing Development

Imperial Beach is committed to reducing the impact of storm water pollution from areas of existing development as demonstrated by the City's existing efforts to implement targeted BMPs throughout the City and the incorporation of LIDs into the design and construction of capital projects. The City intends to continue the same incremental approach to improving water quality over this next Permit cycle that considers the retrofit and rehabilitation of existing development by incorporating the following water quality improvement strategies summarized below.

**Integrate LID retrofits where feasible into CIP rehabilitation projects**

Successful projects like the Eco Bikeway LIDs along Palm Ave, the Bayshore Bikeway Access Bio Swale at 10th Street, and the Sports Park Crosswalk Infiltration Area have demonstrated the multiple benefits to addressing storm water issues along with the rehabilitation of aging infrastructure. The LID facilities are considered successful by many in the community by enhancing the urban atmosphere while also allowing for an opportunity to capture pollutants and infiltrate urban runoff before reaching the receiving waters. Integrating LIDs and green areas in the community is also consistent with the City's mission statement to "maintain and enhance Imperial Beach as a Classic Southern California beach oriented community with a safe, small town, family atmosphere, rich in natural and cultural resources".

The City intends to continue integrating LID facilities into the design of future CIPs where practical and feasible. Major CIP projects in the City that are currently considering the incorporation of LID facilities include the retrofit of 1 mile of City Alley Improvements and the Palm Ave Master Plan along Highway 75.

**Eliminate residential and commercial curb cuts**

The City no longer allows storm water curb cuts from residential or commercial properties, which is considered a direct connection to the City's MS4. Curb cuts also result in additional maintenance needs for cracked or damaged sidewalks. The City requires storm water to infiltrate to the MEP on private properties before being allowed to runoff into the street. Curb cuts will be systematically eliminated as either the street is rehabilitated through CIPs or the private property is redeveloped.

**Encourage LID retrofits of residential and commercial areas for non-PDP redevelopment projects**

The integration of storm water infiltration areas is a shared responsibility for the entire community including residential and commercial areas. During the development plan review phase the Public Works Department provides enhanced storm water conditions for public improvements on private redevelopment projects that have a valuation improvement greater than $50,000. Projects are required to maximize infiltration of storm water on site and not allow any direct connections to impervious

surfaces. Applicants are encouraged to install permeable surfaces for hardscape and infiltration areas for storm water.

**Partner with local, state, and federal agencies to retrofit non-jurisdictional areas**

The City has a strong working relationship with the U.S. Fish and Wildlife Service, Naval Base Coronado, Tijuana River National Estuarine Research Reserve, California State Parks, Caltrans, Port of San Diego, County of San Diego, Airport Authority, and South Bay Union and Sweetwater School Districts, all of which who share jurisdictional authority within the Imperial Beach City limits. Successful partnerships among these agencies have resulted in major wetlands restoration projects for the San Diego Bay salt ponds and the Tijuana Estuary and also minor projects such as storm water drainage and LID infiltration improvements for Mar Vista High School and the Tijuana Estuary. The City will continue to partner with these local, state, and federal agencies (including local universities) to leverage resources that improve water quality and wildlife habitat.

**Retrofit of jurisdictional areas through incentive programs**

The City partners with local community groups with the support from EDCO and California American Water to implement community projects that retrofit existing developed areas. This effort is led by the Public Works Department who supports community led projects, such as Boy Scout Eagle Scout Projects, to retrofit existing municipal areas with drought tolerant plants or create impervious surfaces to infiltrate storm water. Recent projects include:

- City Hall xeriscape (2010)
- Marina Vista Center xeriscape (2010)
- Sewer Pump Station 8 xeriscape (2011)
- Elm Ave Planters (2013)
- Safety Center Planters (2013)
- Public Works xeriscape (2015)
- Sports Park planters (2015)
- Sheriff's Station City Hall xeriscape (2015)
- Triangle Park turf replacement (2015- under design)

# 8 Enforcement Response Plan

The City is required to develop and implement an Enforcement Response Plan (ERP) as a part of the JRMP. Section 2 in this JRMP discusses the City's legal authority to enforce the ERP and the roles and responsibilities for each City Department. The goal of this section is to establish enforcement procedures to effectively prohibit non-storm water discharges to the MS4 and reduce the discharge of pollutants in storm water from the MS4. The ERP outlines the actions that are taken by the City when responding or enforcing storm water violations. For the purpose of investigations and enforcement actions, storm water violations are divided into the following enforcement categories:

- Illicit Discharge Detection and Elimination
- Development Planning
- Construction Management
- Existing Development

The Water Quality Improvement Strategies for the Enforcement Response Plan are summarized in **Figure 8.1** below.

**Figure 8.1 Water Quality Improvement Strategies for Enforcement Response Plan**

| ID | Strategy | Description | Responsible City Staff |
|---|---|---|---|
| IB-42 | Storm water code enforcement | Implement escalating enforcement responses to compel compliance with statutes, ordinances, permits, contracts, orders, and other requirements for IDDE, development planning, construction management, and existing development in the Enforcement Response Plan. | Environmental Division and Code Enforcement |

## 8.1 Enforcement Response Approach

The City implements a three level approach for escalating enforcement of storm water violations. The specific enforcement steps will vary for each code case and therefore requires a flexible response approach in order to achieve compliance in the most professional manner.

**Level 1: Verbal or Written Warnings**

The first level of enforcement for the Environmental or Code Enforcement Divisions is the issuance of a verbal or written warning when there is proof of a storm water violation and an identified responsible party. The intent of the first level of enforcement is to allow an opportunity to use education and allow the responsible party to abate the violation by a specific date/time before escalating to the next level of enforcement. The first level of enforcement offers the greatest number of tools available to the code enforcement officer to achieve compliance. These tools may include a verbal warnings, educational letters, Stop Work Notices (construction projects), Notice of Violations (required in order to escalate enforcement) and/or Public Nuisance Abatements. Spills that require an immediate response will be

cleaned up by Public Works or referred to the proper agency, which may result in the issuance of a cost recovery to the responsible party.

**Level 2: Administrative Citation**

The next level of enforcement after the expiration date of a written warning by the City and the responsible party is non-responsive towards correcting the violation is to issue an administrative citation. The IBMC 1.22.030 allows the issuance of administrative citations in the amount of $100 for the first citation, $200 for the second citation, $500 for the third citation, and $1,000 for any additional citation that occur within an 18 month period from the date of the first violation.

**Level 3: Civil or Criminal Prosecution**

As a final resort, the City may use civil or criminal court actions under IBMC 1.12 the Porter-Cologne Water Quality Control Act or the Federal Clean Water Act, which may result in significant fines levied upon the noncompliant responsible party. Any escalation to this level is referred to the City attorney.

## 8.2 Illicit Discharge Detection and Elimination Enforcement

The City's Illicit Discharge Detection and Elimination component is described in Section 4 of the JRMP. The Environmental Division responds and investigates storm water violations reported by the public or identified by City employees. Violations may include an illegal discharge, an illegal connection, or insufficient BMPs. Upon receiving a report, the Environmental Division will initiate a storm water violation investigation as soon as possible but within 24 hours to identify and confirm the violation. Reports of illegal discharges during non-working hours are coordinated through the Sheriffs dispatch who then contacts the emergency Sewer Division cellphone or Fire Department hazardous materials for response. Reports of sewer system overflows or hazardous material discharges are considered high threat to water quality and responded to immediately by Public Works.

The following enforcement steps will be implemented for typical Illicit Discharge Detection and Elimination cases:

1. Verify the violation and determine if immediate cleanup efforts are needed by the City
2. Implement procedures to investigate, contain, and eliminate ICIDs (JRMP Section 4)
3. Identify the responsibly party and property owner if different from the violator
4. Provide Level 1 enforcement with the goal to educate both the responsible party and property owner
5. If the violation is not immediately resolved then issue a correction date/time for the violation though a written warning or a Notice of Violation and then schedule a follow up investigation to verify compliance
6. Document with photos and record investigation records in the ICID database
7. Escalate enforcement steps as necessary

## 8.3 Development Planning Enforcement

The Development Planning component is described in Section 5 of the JRMP and includes the installation and long term maintenance of treatment control BMPs for development projects. The City

under its land use and planning authority prescribes storm water BMPs as conditions of approval for new development and redevelopment projects prior to the issuance of permits. Each project then receives inspections from the City's Building Official during construction to ensure that the project gets built per the approved plans. The following enforcement procedures will be implemented to ensure that the prescribed BMPs get built into the project:

1. Building Official and/or Inspector will perform inspections to verify construction of BMP
2. Building official and/or Inspector will issue a Stop Work Notice if necessary
3. The Building Official and/or Inspector and Public Works staff perform final walkthrough on the site to verify installation of BMPs
4. The Planning Division receives verification of installed BMPs and completes the long-term Treatment Control BMP maintenance agreement that is signed by the property owner, City Manager, and then recoded at the County Assessor's Office
5. The Planning Division issues a Certificate of Occupancy for the project once the City is satisfied that all issues are resolved

The Environmental Division performs inspection and verification of long term maintenance of treatment control BMPs. The following enforcement procedures will be implemented to ensure that BMPs with long term maintenance agreements are maintained:

1. The Environmental Division verifies through inspections the continued maintenance of BMPs per the certified long term BMP maintenance agreement
2. If enforcement is necessary then the property owner is issued a letter and a Notice of Violation that specifies a correction date/time
3. The Environmental Division will offer to meet onsite with the property owner to review the long BMP maintenance agreement
4. The Environmental Division will escalate enforcement and issue the first Administrative Citation
5. Administrative Citations will continue to escalate until issue is resolved

## 8.4 Construction Management

The City's implementation and verification of the Construction Management component is discussed in Section 6 of the JRMP. Construction sites in the City are required to develop and maintain a Storm Water Management Plan and ensure that storm water BMPs are installed and maintained on the site. The following enforcement procedures will be implemented to ensure that construction sites maintain adequate storm water BMP protection:

1. The City Public Works Inspector will perform BMP inspections for public construction projects and the Building Official and/or Inspector will perform BMP inspections for private construction projects
2. Verbal warnings and education will be used to judge the responsiveness of each contractor for installing and maintaining sediment and erosion control BMPs on site
3. The City will issue a Notice of Violation for any BMP deficiencies not being addressed and follow up within 24 hours to verify the implementation of assigned BMPs

4. The inspector will issue a Stop Work Notice until BMPs are restored on site
5. The tracking of materials into the public right-of-way will need to be cleaned immediately by the contractor or Public Works crews will perform the cleanup and charge a cost recovery to the contractor
6. Any illegal discharge from the site that makes it to the storm drain conveyance will result in the issuance of the first Administrative Citation of $100
7. Administrative Citations will continue to escalate for each subsequent discharge from the site

## 8.5 Existing Development Management Enforcement

The City's Existing Development Management program requires the implementation and verification of storm water BMPs for 1) municipal facilities and areas, 2) commercial and industrial facilities, and 3) residential areas. The enforcement for each of these categories is cover below and discussed in Section 7 of the JRMP.

**Municipal Facilities and Areas (JRMP Section 7.1)**

The JRMP Section 7.1 establishes the City policy for minimum BMPs and maintenance frequencies for municipal facilities and areas. The Environmental Division performs annual inspections and oversight of BMP implementation at municipal facilities and any deficiencies are reported to the Public Works Director.

**Commercial and Industrial Facilities (JRMP Section 7.2)**

The Environmental Division performs BMP inspection and verification at commercial businesses. The City currently does not have any industrial facilities. The following enforcement procedures will be implemented at commercial facilities:

1. The Environmental Division will perform visual and site inspections to identify deficient BMPs or illegal discharges from the site
2. Minor BMP corrections (general housekeeping BMPs) identified during site inspections will be discussed with the manager on site and written up in an inspection letter that gets sent to the business owner
3. Major BMP corrections or illegal discharges identified during site inspections result in the issuance of a Notice of Violation to the business and property owner and require a follow up investigation
4. Additional violations within 18 months will result in the issuance of the first $100 Administrative Citation to the property owner
5. Administrative Citations will continue to escalate for each subsequent violation

**Residential Areas (JRMP Section 7.3)**

The Environmental Division performs BMP verification and inspection of 6 residential areas in the City. The City's residential neighborhood inspection program includes visual inspections of the commercial, municipal, and active construction sites within each neighborhood and is considered an enhancement to the City's Illicit Discharge Detection and Elimination program. The enforcement steps for residential areas are the same as the Illicit Discharge Detection and Elimination cases, which includes the following:

1. Verify the violation and determine if immediate cleanup efforts are needed by the City
2. Implement procedures to investigate, contain, and eliminate ICIDs (JRMP Section 4)
3. Identify the responsibly party and property owner if different from the violator
4. Provide Level 1 enforcement with the goal to educate both the responsible party and property owner
5. If the violation is not immediately resolved then issue a correction date/time for the violation though a written warning or a Notice of Violation
6. Schedule a follow up investigation to verify compliance
7. Document with photos and record investigation records in the ICID database
8. Escalate enforcement steps as necessary

## 8.6 Non-Compliance Reporting

The City will provide non-compliance incident reporting to the San Diego Regional Water Quality Control Board by phone within 24 hours and by writing within 5 days of issuing escalating enforcement to a construction site that poses a significant threat to water quality as a result of storm water discharge violations. The City will also notify the San Diego Regional Water Quality Control Board of any non-compliance with statewide Industrial or General Construction permits through email at Nonfilers_R9@waterboards.ca.gov.

# 9 Education and Participation

Education and public participation is necessary to achieve the water quality improvement goals for receiving waters and helps provide greater public support for the implementation of water quality improvement strategies that reduce storm water pollution. The City implements targeted education and public participation for each of the components of the JRMP and through the development and implementation of the WQIP for each watershed. The City's public education includes outreach to specific target groups and the general public as well as opportunities for members of the public to participate in program development and implementation. The City participates in targeted education and public participation programs at multiple levels in order to maximize the effectiveness of storm water management programs. These include regional storm water Copermittees education programs, local watershed WQIPs education programs, and individual jurisdictional education programs. The Water Quality Improvement Strategies for education and participation are summarized in **Figure 9.1** below.

**Figure 9.1 Water Quality Improvement Strategies for Education and Participation**

| ID | Strategy | Description | Responsible City Staff |
|---|---|---|---|
| IB-43 | Storm water management education program | Manage the implementation of a public education and participation program to promote and encourage development of programs, management practices, and behaviors that reduce the discharge of pollutants in storm water prioritized by high-risk behaviors, pollutants of concern, and target audiences. | Environmental Division |
| IB-44 | Provide education opportunities to development community | Contractors and developers are trained through face-to-face meetings with the Community Development Department and the Publics Works Department during the permitting process, through inspections, and through investigations of illegal discharges. Educational brochures are used as part of the permitting process and web resources are available. | Public Works and Community Development |
| IB-45 | Provide education to municipal departments and personnel | Multiple training opportunities are provided to municipal staff. Annual training is provided to PW department. Monthly code enforcement working group, weekly Community Development department, and weekly staff meetings provide opportunities to discuss storm water issues. | Environmental Division |
| IB-46 | Provide education opportunities to commercial businesses | Education to businesses provided through storm water brochure provided during business license application and renewal. Education is also provided through inspections and enforcement actions. | Environmental Division |

| | | | |
|---|---|---|---|
| IB-47 | Provide education to residents, general public, and school children | The general public receives educational information in the City's website, quarterly EDCO newsletter, printed materials at offices, through community presentations, ILACSD school presentations, community events, regional events, and various other methods. | Environmental Division |
| IB-48 | Provide education to underserved community. | Education materials are provided in both English and Spanish. The environmental division incorporates the underserved community in most education activities, which is particularly important to IB due to the large Spanish speaking community. | Environmental Division |
| IB-49 | Review printed storm water educational materials | Review printed materials such as brochures at least once per permit cycle. | Environmental Division |
| IB-50 | Update electronic website information | Annually update storm water information on the City's website. | Environmental Division |
| IB-51 | Encourage public participation in community events | The City provides or supports multiple community clean up and awareness events throughout the year. Examples include: Creek to Bay, Tijuana River Action Month, Home Front Cleanup, Citywide Garage Sale, Fiesta del Rio, Sun and Sea Festival | Environmental Division |
| IB-52 | Collaborate with regional education and outreach efforts | Collaborate with regional Copermittee education and outreach programs. | Environmental Division |

## 9.1 Education

The City provides targeted education on storm water management to improve attitudes toward storm water pollution prevention and to encourage behaviors that reduce storm water pollution. Where possible, the City will leverage existing programs within the community or within the City's JRMP in order to maximize effectiveness. Public education on storm water includes the outreach to specific target groups as discussed below.

### 9.1.1 Development and Construction Education

The Community Development Department takes the lead to educate private developers and contractors on minimum storm water BMPs that are required for the permitting and approval of any private development project in the City. The Community Development Department disseminates storm water education materials and meets face-to-face with project applicants to discuss project specific BMPs. The Public Works Department provides education to contractors and consultants for capital improvement projects. The following education opportunities are provided to developers and contractors:

- Community Development counter hours (7:30-9:00AM and 3:30-5:00PM)
- Dissemination of various storm water education materials
- Storm Water Management Plans submittal and review for private and public projects
- Preconstruction meetings for all CIP projects
- Regional education programs for BMP Design Manual

### 9.1.2 Municipal Education

The City relies on its municipal department personnel to implement appropriate storm water BMPs while performing work related duties. Municipal staffs also educate the public on BMP implementation and report storm water violations to the Environmental Division while in the field. The following education opportunities are provided to municipal staff in the City:

- Annual Public Works storm water training
- Participation of Environmental Division on quarterly, monthly, or weekly interdepartmental meetings
- Regular updates to City Council on storm water program
- Workshops and training events as necessary for each JRMP component

### 9.1.3 Commercial Education

Commercial and industrial facilities are identified to be potential contributors to storm water pollution and the City conducts targeted education and outreach to local business owners and managers to ensure that storm water pollution is reduced to the MEP through the implementation of BMPs. The following education opportunities are provided to commercial businesses in the City:

- Dissemination of various education materials (brochures, EDCO quarterly newsletter, website)
- Onsite commercial inspections
- Mailings with business license renewals
- Partnerships with the Chamber of Commerce
- Targeted education through regional Copermittee education program

### 9.1.4 Residents, General Public, School Children and Underserved Community Education

The City provides multiple opportunities to provide targeted education for residents and general public throughout the year. The City also provides bilingual education materials in Spanish and targets outreach to the low income community including local school children. The following education opportunities are provided to residents, general public, school children, and underserved community in the City:

- Community workshops on various topics
- Continue successful partnerships with Chula Vista and other south bay cities to provide a convenient and free disposal of household hazardous wastes
- Continue countywide integrated pest management program to reduce the use of pesticides, herbicides, and fertilizers
- Dissemination of various education materials at community events, workshops, presentations, newsletters, and while performing inspections and enforcement activities
- Continue to support the efforts of local community groups such as I.B. Beautiful, Wildcoast, Boys and Girls Club, Coastkeeper, ILACSD, Tijuana Estuary, and FWS Habitat Heroes that raise awareness of storm water pollution and BMPs
- Targeted residential media campaign through regional Copermittee education program

## 9.2 Public Participation

The City encourages public participation in the development and implementation of its storm water management program, which creates opportunities for public engagement that is critical for the success of the City's storm water management program. Public engagement also allows the City to gain a better understanding of public perception and attitudes toward the problem of storm water pollution. The City offers the following opportunities for public participation for the development and implementation of the JRMP:

- Implementation and update of the San Diego Bay and Tijuana River WQIPs through the public participation process identified in the Permit.
- Hold a City Council public meeting to solicit public comments prior to the adoption of the JRMP.
- Provide annual updates to City Council on the implementation of the JRMP and WQIP.
- Encourage City Council to issue proclamations that raise awareness on critical issues such as Tijuana River Action Month and Environmental Awareness Month.
- Offer a storm water hotline and online reporting for the public to report or inquire on storm water issues.
- Participate in annual cleanup and public awareness campaigns such as Costal Cleanup Day, Tijuana River Action Month, Citywide Garage Sale, and Annual Home Front Cleanup Event.
- Encourage environmental groups, civic organizations, and other interested local groups to conduct litter cleanups or storm drain stenciling activities.

# 10 Adaptive Management and Reporting

The storm water Permit embraces the concept of adaptive management of the Water Quality Improvement Plans and jurisdictional water quality improvement strategies to achieve compliance with receiving water limitations and water quality benchmarks in the Basin Plan. Adaptive management is a strategic planning process of monitoring and assessment that allows for modification of program activities based on the successes, failures, and lessons learned over time. The City's storm water management program aims to control multiple pollutant sources over the entire City through the implementation of the water quality improvement strategies identified in this JRMP. These water quality improvement strategies are intended to change and be updated over time as new information becomes available and priorities change at a jurisdictional and regional level.

## 10.1 Program Assessment

The City's JRMP is intended to be updated and changed over time in response to the monitoring and assessment programs identified in the Water Quality Improvement Plans for the Tijuana River and San Diego Bay. The City is committed to proving an annual assessment of the jurisdictional water quality improvement strategies identified in the JRMP in context to each Water Quality Improvement Plan. The JRMP implementation as a whole and the effectiveness of each activity/BMP will receive an annual evaluation at a programmatic level and updates will be made as necessary to improve the efficiency and effectiveness of the City's storm water management program. Any substantial update to the JRMP will be made available on the City's website and on the Regional Clearinghouse.

## 10.2 Annual Reporting

The storm water Permit requires the City to provide annual reports on the implementation of storm water management activities. For fiscal year 2015, the JRMP annual report is due by October 31, 2015 to the San Diego RWQCB. Starting the following fiscal year, the City will submit the annual JRMP report as an attachment to the Water Quality Improvement Plan annual reports, which are due by January 31, 2017. Subsequent annual reports will be submitted by January 31 each year through the duration of the storm water Permit. The Water Quality Improvement Plan annual reports will be made available on the Regional Clearinghouse (www.projectcleanwater.org).

# 11 Conclusion and Recommendations

The City has taken significant measures to protect and improve water quality in Imperial Beach since the first term storm water Permit was issued in 1990. The Mayor and City Council remain committed to improving storm water quality in the City and have updated, enhanced, or developed new water quality improvement strategies in this JRMP to meet new the requirements and intent of the 2013 storm water Permit. The City also remains committed to work in partnership with the other Copermittees to address shared water quality problems throughout the region. This includes identifying and addressing the highest priority water quality conditions in the Tijuana and San Diego Bay watersheds through the Water Quality Improvement Plan process.

The water quality improvement strategies proposed in this JRMP represents a comprehensive effort to eliminate storm water pollution. However, the City recognizes the inherent challenge to completely eliminate storm water pollution because of the complex nature to control every possible pollutant generating source throughout the City. The 2013 storm water Permit recognizes a process of adaptive management that will result in assessing and refining these water quality improvement strategies as storm water management programs evolve and get implemented to the maximum extent practicable.

Ultimately through, success in achieving the goal to protect and improve receiving water quality will depend on the acceptance and involvement of the entire community in the program. The Imperial Beach City Staff and City Council are committed to this goal and the citizens and residents of this community are called to provide the political and social will to maintain this commitment.

# Appendix A-1 Definition for Priority Development Project

Appendix A-1 Definition for Priority Development Projects

The Imperial Beach municipal code defines priority development projects. The Imperial Beach BMP Design Manual will become effective December 1, 2015 and will update the definition for Priority Development Projects as currently defined in the City's SUSMP Ordinance 8.32 under Permit Order R9-2007-0001. The definition for Priority Development Projects under IBMC 8.32.040 reads as follows:

A. Projects on previously undeveloped land are priority development projects if they are in one or more of the categories listed in Table 1.

**Table 1. Priority Development Projects**

| |
|---|
| **Housing subdivisions of 10 or more dwelling units.** Examples: single-family homes, multifamily homes, condominiums, and apartments. |
| **Commercial—greater than one acre.** Any development other than heavy industry or residential. Examples: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; airfields; and other light industrial facilities. |
| **Heavy industry—greater than one acre.** Examples: manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.). |
| **Automotive repair shops.** A facility categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, or 7536-7539. |
| **Restaurants.** Any facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirements and hydromodification requirements. |
| **Hillside development greater than 5,000 square feet.** Any development that creates 5,000 square feet of impervious surface and is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is 25% or greater. |
| **Environmentally sensitive areas (ESAs).** All development located within or directly adjacent to or discharging directly to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition. "Directly adjacent" means situated within 200 feet of the ESA. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands. |
| **Parking lots 5,000 square feet or more** or with 15 or more parking spaces and potentially exposed to urban runoff. |
| **Streets, roads, highways, and freeways.** Any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles. |
| **Retail gasoline outlets (RGOs)** that are: (a) 5,000 square feet or more or (b) a projected average daily traffic (ADT) of 100 or more vehicles per day. |

B. Redevelopment projects as defined in Section 8.30.030 are priority development projects if they create, add, or replace five thousand square feet or more of impervious surface and are also in one of the categories listed in Table 1.

C. Redevelopment projects that create or replace more than five thousand square feet of impervious area are subject to the treatment control numeric sizing criteria (Sections 8.32.340—8.32.350) on the entire site, if the project results in an increase of, or replacement of, fifty percent or more of the previously existing impervious surface, and the existing development was not previously subject to SUSMP requirements. If less than fifty percent of the previously developed area is to be affected, then only that portion must be included in the treatment measure design. (Ord. 2010-1112 §

**Note: The definition for Priority Development Projects will change December 1, 2015 and reflect the updated requirements of the San Diego Regional Water Quality Control Board. The IBMC 8.30.030 Definitions will be updated to reflect any changes.**

# Appendix A-2 Treatment Control BMP Inventory for PDP

Appendix A-2
Imperial Beach Structural Treatment Control BMP Invnetory for PDPs

| oid | BMP_ID | BMP_Type | BMP_Description | BMP_Location | Watershed | Address | APN | Agreement_No | Project_Num | Dev_Type | Prioirty_Dev | Project_Nam | Prioritization | Date_Installed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MF783-1 | Vegetated Swale | Drainage swales and landscape planters between parking stalls | Driveway area along Calla Ave | 910.2 | 615 9th Street | 6264812001 | 2005-6211 | MF 783 | Condos | Priority | South Coronado Shores | Low | 12/20/2007 |
| 2 | MF783-2 | Retention Basin | Retention basin adjacent to 9th St and alley | Southwest corner adjacent to 9th Street and alley | 910.2 | 615 9th Street | 6264812001 | 2005-6211 | MF 783 | Condos | Priority | South Coronado Shores | Low | 12/20/2007 |
| 3 | MF881-1 | Inlet Filter | Two KriStar Catch Basin filters | North driveway and planter area | 910.2 | 1101 Palm Ave | 6263013300 | 2003-5782 | MF 881 | Commercial | Priority | North Island Credit Union | Low | 9/1/2008 |
| 4 | MF881-2 | Downspout Filter | KriStar, Flowguard Downspout Filter Fg-DS4 | Southern area downspout | 910.2 | 1101 Palm Ave | 6263013300 | 2003-5782 | MF 881 | Commercial | Priority | North Island Credit Union | Low | 9/1/2008 |
| 5 | MF1003-1 | Vegetated Swale | Vegetated swales captures flow from west and east parking areas | Western property boundary | 910.2 | 853 Emory Street | 6263222700 | 2011-7018 | MF 1003 | Church | Priority | Kingdom Hall | Low | 11/1/2012 |
| 6 | MF1003-2 | Biofiltration | Raised planter biofiltration captures roof runoff | Nothern propoerty area | 910.2 | 853 Emory Street | 6263222700 | 2011-7018 | MF 1003 | Church | Priority | Kingdom Hall | Low | 11/1/2012 |
| 7 | MF1072-1 | Vegetated Swale | Vegetated swales along perimeter | Northern and Eastern property boundary | 910.2 | 1252 Palm Ave | 6262422400 | | MF 1072 | Condos | Priority | American Legion | Low | 7/1/2013 |
| 8 | MF1072-2 | Biofiltration | Multiple flow through planter boxes | Five different flow through planters on project site | 910.2 | 1252 Palm Ave | 6262422400 | | MF 1072 | Condos | Priority | American Legion | Low | 7/1/2013 |
| 9 | MF507-1 | Inlet Filter | Six inlet filters on site | Multiple locations. See file | 910.2 | 836 Palm Ave | 6262110700 | | MF 507 | Commercial | **Non-Priority** | Imperial Beach Promenade | Low | 5/1/2002 |
| 10 | MF661-1 | Vegetated Swale | Vegetated swales along perimeter | Multiple locations. See file | 910.1 | 800 Seacoast Dr | 6252620200 | | MF 661 | Hotel | Priority | Seacoast Inn | Low | 1/1/2014 |
| 11 | MF661-2 | Inlet Filter | Downspout filter | southwest corner | 910.1 | 800 Seacoast Dr | 6252620200 | | MF 661 | Hotel | Priority | Seacoast Inn | Low | 1/1/2014 |

# Appendix A-3 Minimum Source Control BMPs

Appendix A-3 Minimum BMPs for Pollution Source Control for Development Projects

| Potential Pollutant Source | Minimum Source Control BMPs | | |
|---|---|---|---|
| 1<br>**Potential Sources of Runoff Pollutants** | 2<br>**Permanent Controls—Show on Drawings** | 3<br>**Permanent Controls—List in Table and Narrative** | 4<br>**Operational BMPs—Include in Table and Narrative** |
| ❑ **A.** Onsite storm drain inlets<br><br>❑ Not Applicable | ❑ Locations of inlets. | ❑ Mark all inlets with the words "No Dumping! Flows to Bay" or similar. | ❑ Maintain and periodically repaint or replace inlet markings.<br>❑ Provide storm water pollution prevention information to new site owners, lessees, or operators.<br>❑ See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com.<br>❑ Include the following in lease agreements: "Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains." |

Appendix A-3 Minimum BMPs for Pollution Source Control for Development Projects

| Potential Pollutant Source | Minimum Source Control BMPs | | |
|---|---|---|---|
| 1<br>**Potential Sources of Runoff Pollutants** | 2<br>**Permanent Controls—Show on Drawings** | 3<br>**Permanent Controls—List in Table and Narrative** | 4<br>**Operational BMPs—Include in Table and Narrative** |
| ❑ **B.** Interior floor drains and elevator shaft sump pumps<br>❑ Not Applicable | | ❑ State that interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer. | ❑ Inspect and maintain drains to prevent blockages and overflow. |
| ❑ **C.** Interior parking garages<br>❑ Not Applicable | | ❑ State that parking garage floor drains will be plumbed to the sanitary sewer. | ❑ Inspect and maintain drains to prevent blockages and overflow. |
| ❑ **D1.** Need for future indoor & structural pest control<br>❑ Not Applicable | | ❑ Note building design features that discourage entry of pests. | ❑ Provide Integrated Pest Management information to owners, lessees, and operators. |

| Potential Pollutant Source | Minimum Source Control BMPs | | |
|---|---|---|---|
| **1**<br>**Potential Sources of Runoff Pollutants** | **2**<br>**Permanent Controls—Show on Drawings** | **3**<br>**Permanent Controls—List in Table and Narrative** | **4**<br>**Operational BMPs—Include in Table and Narrative** |
| ❑ **D2.** Landscape/ Outdoor Pesticide Use<br>❑ Not Applicable | ❑ Show locations of existing trees or areas of shrubs and ground cover to be undisturbed and retained.<br>❑ Show self-retaining landscape areas, if any.<br>❑ Show storm water treatment facilities. | State that final landscape plans will accomplish all of the following.<br>❑ Preserve existing drought tolerant trees, shrubs, and ground cover to the maximum extent possible.<br>❑ Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to storm water pollution.<br>❑ Where landscaped areas are used to retain or detain storm water, specify plants that are tolerant of periodic saturated soil conditions.<br>❑ Consider using pest-resistant plants, especially adjacent to hardscape.<br>❑ To ensure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions. | ❑ Maintain landscaping using minimum or no pesticides.<br>❑ See applicable operational BMPs in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com.<br>❑ Provide IPM information to new owners, lessees and operators. |

| Potential Pollutant Source | Minimum Source Control BMPs | | |
|---|---|---|---|
| **1**<br>**Potential Sources of Runoff Pollutants** | **2**<br>**Permanent Controls—Show on Drawings** | **3**<br>**Permanent Controls—List in Table and Narrative** | **4**<br>**Operational BMPs—Include in Table and Narrative** |
| ❑ **E.** Pools, spas, ponds, decorative fountains, and other water features.<br>❑ Not Applicable | ❑ Show location of water feature and a sanitary sewer cleanout in an accessible area within 10 feet. | ❑ If the local municipality requires pools to be plumbed to the sanitary sewer, place a note on the plans and state in the narrative that this connection will be made according to local requirements. | ❑ See applicable operational BMPs in Fact Sheet SC-72, "Fountain and Pool Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com. |
| ❑ **F.** Food service<br>❑ Not Applicable | ❑ For restaurants, grocery stores, and other food service operations, show location (indoors or in a covered area outdoors) of a floor sink or other area for cleaning floor mats, containers, and equipment.<br>❑ On the drawing, show a note that this drain will be connected to a grease interceptor before discharging to the sanitary sewer. | ❑ Describe the location and features of the designated cleaning area.<br>❑ Describe the items to be cleaned in this facility and how it has been sized to ensure that the largest items can be accommodated. | |

| Potential Pollutant Source | Minimum Source Control BMPs | | |
|---|---|---|---|
| **1**<br>**Potential Sources of Runoff Pollutants** | **2**<br>**Permanent Controls—Show on Drawings** | **3**<br>**Permanent Controls—List in Table and Narrative** | **4**<br>**Operational BMPs—Include in Table and Narrative** |
| ❑ **G.** Refuse areas<br>❑ Not Applicable | ❑ Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas.<br>❑ If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run- on and show locations of berms to prevent runoff from the area. Also show how the designated area will be protected from wind dispersal.<br>❑ Any drains from dumpsters, compactors, and tallow bin areas shall be connected to a grease removal device before discharge to sanitary sewer. | ❑ State how site refuse will be handled and provide supporting detail to what is shown on plans.<br>❑ State that signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar. | ❑ State how the following will be implemented:<br>Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com. |

| Potential Pollutant Source | Minimum Source Control BMPs | | |
|---|---|---|---|
| 1<br>**Potential Sources of Runoff Pollutants** | 2<br>**Permanent Controls—Show on Drawings** | 3<br>**Permanent Controls—List in Table and Narrative** | 4<br>**Operational BMPs—Include in Table and Narrative Table and Narrative** |
| ❑ **H.** Industrial processes.<br>❑ Not Applicable | ❑ Show process area. | ❑ If industrial processes are to be located onsite, state: "All process activities to be performed indoors. No processes to drain to exterior or to storm drain system." | ❑ See Fact Sheet SC-10, "Non-Stormwater Discharges" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com. |
| ❑ **I.** Outdoor storage of equipment or materials. (See rows J and K for source control measures for vehicle cleaning, repair, and maintenance.)<br>❑ Not Applicable | ❑ Show any outdoor storage areas, including how materials will be covered. Show how areas will be graded and bermed to prevent run-on or runoff from area and protected from wind dispersal.<br>❑ Storage of non-hazardous liquids shall be covered by a roof and/or drain to the sanitary sewer system, and be contained by berms, dikes, liners, or vaults.<br>❑ Storage of hazardous materials and wastes must be in compliance with the local hazardous materials ordinance and a Hazardous Materials Management Plan for the site. | ❑ Include a detailed description of materials to be stored, storage areas, and structural features to prevent pollutants from entering storm drains.<br>Where appropriate, reference documentation of compliance with the requirements of local Hazardous Materials Programs for:<br>▪ Hazardous Waste Generation<br>▪ Hazardous Materials Release Response and Inventory<br>▪ California Accidental Release Prevention Program<br>▪ Aboveground Storage Tank<br>▪ Uniform Fire Code Article 80 Section 103(b) & (c) 1991<br>▪ Underground Storage Tank | ❑ See the Fact Sheets SC-31, "Outdoor Liquid Container Storage" and SC-33, "Outdoor Storage of Raw Materials" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com. |

| Potential Pollutant Source | Minimum Source Control BMPs | | |
|---|---|---|---|
| **1**<br>**Potential Sources of Runoff Pollutants** | **2**<br>**Permanent Controls—Show on Drawings** | **3**<br>**Permanent Controls—List in Table and Narrative** | **4**<br>**Operational BMPs—Include in Table and Narrative** |
| ❑ **J.** Vehicle and Equipment Cleaning<br>❑ Not Applicable | ❑ Show on drawings as appropriate:<br><br>(1) Commercial/industrial facilities having vehicle /equipment cleaning needs shall either provide a covered, bermed area for washing activities or discourage vehicle/equipment washing by removing hose bibs and installing signs prohibiting such uses.<br><br>(2) Multi-dwelling complexes shall have a paved, bermed, and covered car wash area (unless car washing is prohibited onsite and hoses are provided with an automatic shut-off to discourage such use).<br><br>(3) Washing areas for cars, vehicles, and equipment shall be paved, designed to prevent run-on to or runoff from the area, and plumbed to drain to the sanitary sewer.<br><br>(4) Commercial car wash facilities shall be designed such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer, or a wastewater reclamation system shall be installed. | ❑ If a car wash area is not provided, describe measures taken to discourage onsite car washing and explain how these will be enforced. | Describe operational measures to implement the following (if applicable):<br><br>❑ Washwater from vehicle and equipment washing operations shall not be discharged to the storm drain system.<br>❑ Car dealerships and similar may rinse cars with water only.<br>❑ See Fact Sheet SC-21, "Vehicle and Equipment Cleaning," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com |

| Potential Pollutant Source | Minimum Source Control BMPs | | |
|---|---|---|---|
| **1**<br>**Potential Sources of Runoff Pollutants** | **2**<br>**Permanent Controls—Show on Drawings** | **3**<br>**Permanent Controls—List in Table and Narrative** | **4**<br>**Operational BMPs—Include in Table and Narrative** |
| ❑ **K.** Vehicle/Equipment Repair and Maintenance<br>❑ Not Applicable | ❑ Accommodate all vehicle equipment repair and maintenance indoors. Or designate an outdoor work area and design the area to protect from rainfall, run-on runoff, and wind dispersal.<br>❑ Show secondary containment for exterior work areas where motor oil, brake fluid, gasoline, diesel fuel, radiator fluid, acid-containing batteries or other hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas.<br>❑ Add a note on the plans that states either (1) there are no floor drains, or (2) floor drains are connected to wastewater pretreatment systems prior to discharge to the sanitary sewer and an industrial waste discharge permit will be obtained. | ❑ State that no vehicle repair or maintenance will be done outdoors, or else describe the required features of the outdoor work area.<br>❑ State that there are no floor drains or if there are floor drains, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.<br>❑ State that there are no tanks, containers or sinks to be used for parts cleaning or rinsing or, if there are, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements. | In the report, note that all of the following restrictions apply to use the site:<br>❑ No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinsewater from parts cleaning into storm drains.<br>❑ No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately.<br>❑ No person shall leave unattended drip parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment. |

| Potential Pollutant Source | Minimum Source Control BMPs | | |
|---|---|---|---|
| 1<br>**Potential Sources of Runoff Pollutants** | 2<br>**Permanent Controls—Show on Drawings** | 3<br>**Permanent Controls—List in Table and Narrative** | 4<br>**Operational BMPs—Include in Table and Narrative** |
| ❑ **L.** Fuel Dispensing Areas<br>❑ Not Applicable | ❑ Fueling areas[1] shall have impermeable floors (i.e., portland cement concrete or equivalent smooth impervious surface) that are (1) graded at the minimum slope necessary to prevent ponding; and (2) separated from the rest of the site by a grade break that prevents run-on of storm water to the MEP.<br>❑ Fueling areas shall be covered by a canopy that extends a minimum of ten feet in each direction from each pump. [Alternative: The fueling area must be covered and the cover's minimum dimensions must be equal to or greater than the area within the grade break or fuel dispensing area1.] The canopy [or cover] shall not drain onto the fueling area. | | ❑ The property owner shall dry sweep the fueling area routinely.<br>❑ See the Business Guide Sheet, "Automotive Service—Service Stations" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com. |

1. The fueling area shall be defined as the area extending a minimum of 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus a minimum of one foot, whichever is greater.

| Potential Pollutant Source | Minimum Source Control BMPs | | |
|---|---|---|---|
| 1<br>**Potential Sources of Runoff Pollutants** | 2<br>**Permanent Controls—Show on Drawings** | 3<br>**Permanent Controls—List in Table and Narrative** | 4<br>**Operational BMPs—Include in Table and Narrative** |
| **M.** Loading Docks<br>❑ Not Applicable | ❑ Show a preliminary design for the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct storm water away from the loading area. Water from loading dock areas should be drained to the sanitary sewer where feasible. Direct connections to storm drains from depressed loading docks are prohibited.<br>❑ Loading dock areas draining directly to the sanitary sewer shall be equipped with a spill control valve or equivalent device, which shall be kept closed during periods of operation.<br>❑ Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer. | | ❑ Move loaded and unloaded items indoors as soon as possible.<br>❑ See Fact Sheet SC-30, "Outdoor Loading and Unloading," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com. |

| Potential Pollutant Source | Minimum Source Control BMPs | | |
|---|---|---|---|
| **1**<br>**Potential Sources of Runoff Pollutants** | **2**<br>**Permanent Controls—Show on Drawings** | **3**<br>**Permanent Controls—List in Table and Narrative** | **4**<br>**Operational BMPs—Include in Table and Narrative** |
| ❑ **N.** Fire Sprinkler Test Water<br>❑ Not Applicable | | ❑ Provide a means to drain fire sprinkler test water to the sanitary sewer. | ❑ See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com. |
| **O.** Miscellaneous Drain or Wash Water<br>❑ Boiler drain lines<br>❑ Condensate drain lines<br>❑ Rooftop equipment<br>❑ Drainage sumps<br>❑ Roofing, gutters, and trim<br>❑ Not Applicable | | ❑ Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system.<br>❑ Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system.<br>❑ Rooftop mounted equipment with potential to produce pollutants shall be roofed and/or have secondary containment.<br>❑ Any drainage sumps onsite shall feature a sediment sump to reduce the quantity of sediment in pumped water.<br>❑ Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff. | |

Appendix A-3 Minimum BMPs for Pollution Source Control for Development Projects

| Potential Pollutant Source | Minimum Source Control BMPs | | |
|---|---|---|---|
| 1<br>**Potential Sources of Runoff Pollutants** | 2<br>**Permanent Controls—Show on Drawings** | 3<br>**Permanent Controls—List in Table and Narrative** | 4<br>**Operational BMPs—Include in Table and Narrative** |
| ❑ **P.** Plazas, sidewalks, and parking lots.<br>❑ Not Applicable | | | ❑ Plazas, sidewalks, and parking lots shall be swept regularly to prevent the accumulation of litter and debris.<br><br>Debris from pressure washing shall be collected to prevent entry into the storm drain system. Washwater containing any cleaning agent or degreaser shall be collected and discharged to the sanitary sewer and not discharged to a storm drain. |

# Appendix B Construction Storm Water Management Plan

# City of Imperial Beach
# Storm Water Management Plan

## Required Informaion

| Location/Address of Proposed Project | | Permit Type (Demolition, Grading, or Building) | |
|---|---|---|---|
| | | | |
| | | **Property Owner Name** | **Phone Number** |
| | | | |
| **Projected Start Date:** | **Projected End Date:** | **Contractor** | **Phone Number** |
| | | | |

**Overview of Storm Water Pollution Prevention requirements**

The City reviews all proposed development projects, including Public Works Capital Improvement Projects, to ensure that construction activities are in compliance with the federal Clean Water Act, the State Water Code, and local storm water ordinances. Proposed projects must complete a Storm Water Management Plan prior to issuance of any Demolition, Grading, or Building Permit.

The purpose of the Storm Water Management Plan is to document the construction Best Management Practices (BMPs) that will be implemented to prevent the discharge of sediment and other pollutants from leaving the project site and entering the storm water conveyance system. It also certifies that the project proponent will maintain and modify if necessary the appropriate construction site BMPs. Upon City approval, the Storm Water Management Plan becomes an important part of the Demolition, Building, or Grading Permit, and is subject to enforcement by City of Imperial Beach building and storm water inspectors.

*Estimate construction project area:_____acre(s) or square feet*

*Identify (circle) watershed location of project:* ***Tijuana Estuary****;* ***San Diego Bay****;* ***Pacific Ocean***
*(Storm Drain Map available online)*

**Plan Sheet Checklist**

*The following information must be shown on plan sheets for Grading permits or if requested by the City:*

- ☐ The project boundaries
- ☐ The footprint of any existing structures and facilities
- ☐ The footprint of all structures and facilities to be constructed
- ☐ The limits of grading
- ☐ The existing and proposed grades of the site
- ☐ Storm water drainage
- ☐ Location of proposed storm water BMPs

# Appendix C-1 Municipal Inventory

# Appendix C-1
# Inventory of Municipal Facilities and Activities

| | Name | Address | Type1 | Type2 | Type3 | Watershed | Receiving Water | 303(d) Tributary Status | ESA Status |
|---|---|---|---|---|---|---|---|---|---|
| M-1 | Public Works Yard | 495 10th Street | Office Building | Corporate Yard | Parking Lot | 910.20 | San Diego Bay | No | Yes |
| M-2 | Dempsey Holder Safety Center | 950 Ocean Lane | Office Building | Corporate Yard | | 911.11 | Pacific Ocean | Yes | Yes |
| M-3 | Fire Station | 865 Imperial Beach Boulevard | Office Building | Fire Station | | 911.11 | Tijuana Estuary | Yes | Yes |
| M-4 | City Hall | 825 Imperial Beach Boulevard | Office Building | Parking Lot | | 911.11 | Tijuana Estuary | Yes | Yes |
| M-5 | Marina Vista Center | 1075 8th Street | Office Building | Parking Lot | | 911.11 | Tijuana Estuary | Yes | Yes |
| M-6 | I.B. Boys & Girls Club | 847 Encina Avenue | Office Building | Parking Lot | | 911.11 | Tijuana Estuary | Yes | Yes |
| M-7 | Veteran's Park | 9th Street / Imperial Beach Boulevard | Park | Parking Lot | | 911.11 | Tijuana Estuary | Yes | Yes |
| M-8 | Reama Park | Elder Avenue / Elkwood Avenue | Park | Parking Lot | | 911.11 | Pacific Ocean | Yes | Yes |
| M-9 | Sports Park & Recreation Center | 425 Imperial Beach Avenue | Park | Office Building | Parking Lot | 911.11 | Tijuana Estuary | Yes | Yes |
| M-10 | Teeple Park | Calla Avenue / Florida Street | Park | | | 910.20 | San Diego Bay | No | Yes |
| M-11 | Triangle Park | 7th Street / Palm Avenue | Park | | | 910.20 | San Diego Bay | No | Yes |
| M-12 | Dunes Park | 700 Seacoast Drive | Park | Parking Lot | | 910.10 | Pacific Ocean | Yes | Yes |
| M-13 | Pier Plaza | Evergreen Street / Seacoast Drive | Park | | | 911.11 | Pacific Ocean | Yes | Yes |
| M-14 | Imperial Beach Pier | Evergreen Street / Seacoast Drive | Miscellaneous | | | N/A | Pacific Ocean | Yes | Yes |
| M-15 | Beachfront | Mexican Border to YMCA Camp Surf | Miscellaneous | | | N/A | Pacific Ocean | Yes | Yes |
| M-16 | Seacoast & Palm Parking Lot | Seacoast Drive & Palm Avenue | Parking Lot | | | 910.10 | Pacific Ocean | Yes | Yes |
| M-17 | Elkwood Parking Lot | Seacoast Drive & Elkwood Avenue | Parking Lot | | | 911.11 | Pacific Ocean | Yes | Yes |
| M-18 | Beach Street Ends | Multiple | Miscellaneous | Parking Lot | | All | Pacific Ocean | Yes | Yes |
| M-19 | MS4 | Citywide | MS4 | | | All | All | Yes | Yes |

# Appendix C-2 BMPs for Municipal Facilities and Activities

**Appendix C-2**
**BMPs for Municipal Facilities and Activities**

# Imperial Beach Public Works Best Management Practices for Municipal Facilities and Activities

In accordance with the Municipal Storm Water Permit, the City of Imperial Beach has developed an inventory of municipal activities and facilities, and associated best management practices (BMPs) that reduce pollutants to the maximum extent practical. The following document is a guide for Public Works employees on how to implement activity-specific BMPs to adequately manage urban runoff and the potential release of pollutants from municipal facilities and day-to-day operations. For clarification or additional information not covered in this fact sheet please contact the Environmental Division or the most recent Jurisdictional Runoff Management Program (JRMP).

Municipal facilities and activities in Imperial Beach include the following:

1. Roads, Streets, and Alley and Maintenance;
2. Municipal Separate Storm Sewer System (MS4) and Sewer Maintenance;
3. Parking Facilities;
4. Public Works Yard, Storage of Materials and Equipment, Solid Waste Management, and Vehicle and Equipment Maintenance;
5. Parks and Other Landscape and Recreation Facilities and Maintenance;
6. Public Buildings and Maintenance;
7. Other (Graffiti, Pier, and Waterfront Maintenance)

The Best Management Practices (BMPs) described in this guide provide a summary of the required pollution prevention methods for all Public Works employees for municipal areas and work related activities. The BMPs are organized under the following general topics:

- General Information on Best Management Practices (BMPs)
- Parks and Landscaping BMPs
- Materials Handling BMPs
- Construction, Maintenance, and Repair BMPs

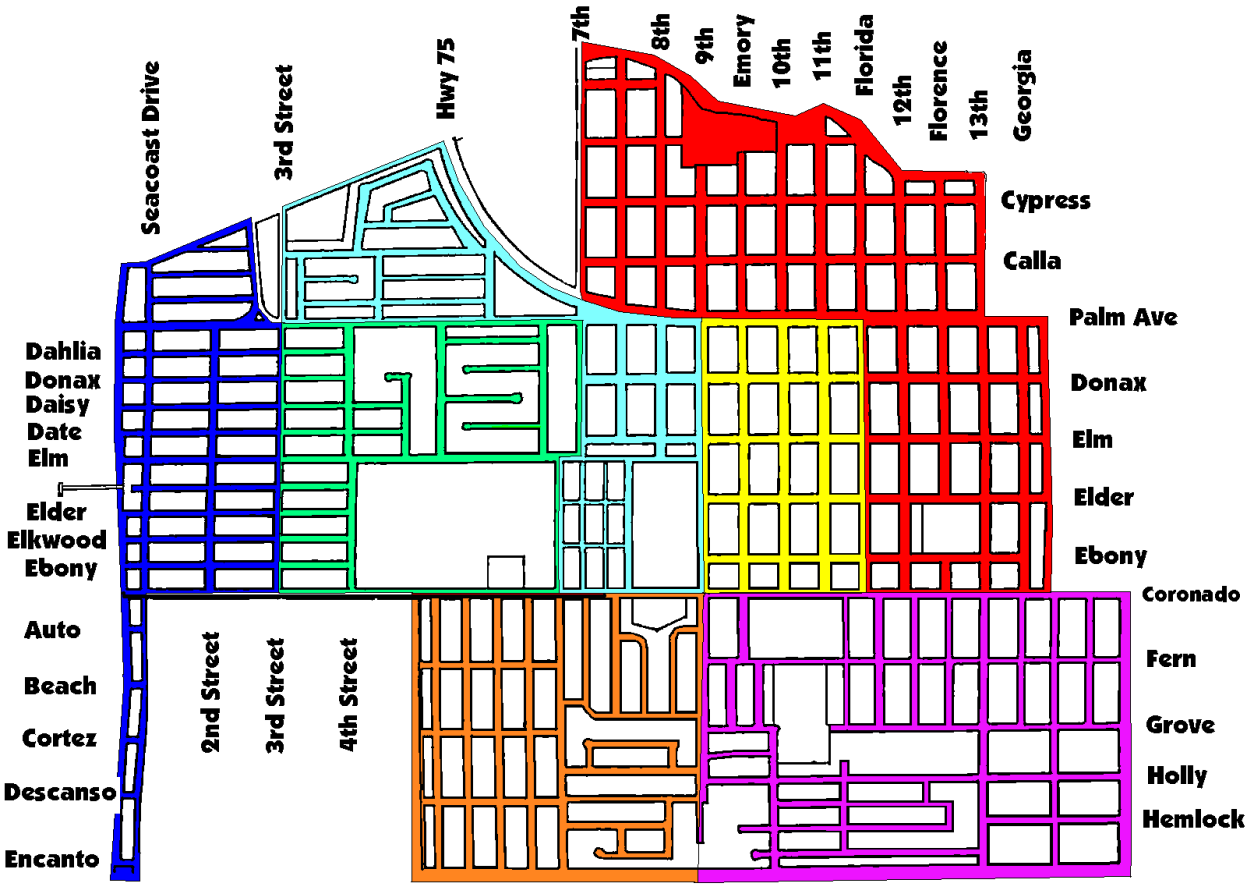
# Appendix C-3 Street Sweeping Information

**Appendix C-3**

# Street Sweeping in Imperial Beach

This is just a friendly reminder that street sweeping in this neighborhood takes place on the **first Friday of every month**. Unfortunately, cars parked on the street during sweeping hours can obstruct the path of the street sweeper. If at all possible, the City of Imperial Beach asks you to refrain from parking your vehicle on the street between 7 a.m. and 1 p.m. on days scheduled for sweeping. Please see the map below for a detailed schedule.

The importance of street sweeping cannot be overstated. It keeps our community looking clean and prevents dirt, trash, and other debris from washing through a storm drain and into a river, estuary, or the ocean. The only areas posted with no parking signs in Imperial Beach are from Seacoast Drive to 3rd St. In all other areas of the City, we ask for your voluntary cooperation in keeping the street sweeper's path unobstructed. Please see the back of this flyer for more information. Questions and concerns about the street sweeping program can be directed to EDCO Disposal at (619) 287-5696 ext. 4213. Or you can call Public Works directly at (619) 423-8311. Thank you for your help in keeping IB clean!




- Alternate Postings: 1st & 3rd Monday / 2nd & 4th Monday
- 2nd Monday of the month
- 1st Friday of the month
- 2nd Friday of the month
- 1st Monday of the month
- 3rd Monday of the month
- 4th Monday of the month

# Appendix C-4 Municipal BMPs for IPM

# Appendix C-4
# Municipal Best Management Practices for IPM

| Municipal Best Management Practices (BMPs) for Management of Pesticides, Herbicides, and Fertilizers | | |
|---|---|---|
| **Municipal Area** | **BMPs currently implemented for handling, applying, storing, and disposing of pesticides, herbicides, and fertilizers** | **BMPs to be considered to reduce or minimize pesticides, herbicides, and fertilizers from entering the storm drain system** |
| Parks<br>Recreation Areas<br>Medians/Open Spaces<br>Greenways/Open Spaces<br>Civic Areas<br>Athletic Fields<br>Beach Access<br>Trees<br>Landscaping | Apply pesticides and herbicides in accordance with the California Department of Pesticides requirements as applicable, and the City IPMP. | Irrigation Time Check. |
| | Irrigation System Check for overflows into storm drain and from treated areas into storm drain via streets and gutters (see Caltrans Municipal, E3b - Appendix C). | Use of nonsynthetic fertilizers (Alternative Safer Products). |
| | Purchase pesticides in small (less than 5-gallon) amounts. | Replace with native vegetation when practical. |
| | Use manufacturer's label requirements. | Use insecticidal soaps or horticultural oils if possible. |
| | Dispose of organic materials in designated containers as solid waste. | |
| | Mix the right amount of chemical at the right strength to use all of the solution. | |
| | Dedicate application equipment to minimize the rinsing of containers. | |
| | Manually remove diseased and dying plants, branches, and leaves. | |
| | Store fertilizers separate from pesticides and herbicides. Fertilizers are oxidizers that could react with other chemicals. | |
| | Apply chemicals when public exposure is minimized. | |
| | Train Municipal, Public Works, and Procurement staff on storm water issues. | |

# Appendix D-1 Commercial Business Inventory FY 2015

| TYPE | Business Name | Business Address | City, State | Zip code | Classification | Watershed | Receiving Water HU | SIC Code | Heavy Metals | Organics | Oil and Grease | Sediment | Pesticides | Nutrients | Gross Pollutants | Bacteria | 303 D Status | ESA Status | Inspection Priority | ACTIVE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FIXED | TITO AUTO SERVICE | 1335 PALM AVE | Imperial Beach, CA | 91932 | Auto Repair/ Maintenace | Otay | 910.2 | 5012 | x | x | x | x | | | x | | No | No | High | x |
| FIXED | PRECISION FOREIGN CAR SERVICE | 1240 PALM AVE | Imperial Beach, CA | 91932 | Auto Repair/ Maintenace | Otay | 910.2 | 7299 | x | x | x | x | | | x | | No | No | High | x |
| FIXED | IMPERIAL BEACH AUTO | 989 PALM AVE | Imperial Beach, CA | 91932 | Auto Repair/ Maintenace | Otay | 910.2 | 7299 | x | x | x | x | | | x | | No | No | High | x |
| FIXED | SOPHISTICATED AUTO | 987 PALM AVE | Imperial Beach, CA | 91932 | Auto Repair/ Maintenace | Otay | 910.2 | 7299 | x | x | x | x | | | x | | No | No | High | x |
| FIXED | MASON'S ALIGNMENT-BRAKE-MUFFLE | 975 PALM AVE | Imperial Beach, CA | 91932 | Auto Repair/ Maintenace | Otay | 910.2 | 7299 | x | x | x | x | | | x | | No | No | High | x |
| FIXED | L & M TIRE CO./ EXPRESS TIRE | 950 PALM AVE | Imperial Beach, CA | 91932 | Auto Repair/ Maintenace | Otay | 910.2 | 7299 | | x | x | x | | | x | | No | No | High | x |
| FIXED | ECONO LUBE N' TUBE | 772 13TH ST | Imperial Beach, CA | 91932 | Auto Repair/ Maintenace | Otay | 910.2 | 7299 | x | x | x | x | | | x | | No | No | High | x |
| FIXED | DEPENDABLE CARBURETOR EXCHANGE | 660 EMORY ST | Imperial Beach, CA | 91932 | Auto Repair/ Maintenace | Otay | 910.2 | 7299 | x | x | x | x | | | x | | No | No | High | x |
| FIXED | ANCHOR MOTORS | 740 PALM AVE | Imperial Beach, CA | 91932 | Auto Sales | Otay | 910.2 | 5012 | x | | x | x | | | x | | No | No | High | x |
| FIXED | THE FINE AUTO STORE | 942 PALM AVE | Imperial Beach, CA | 91932 | Auto Sales | Otay | 910.2 | 5012 | x | | x | x | | | x | | No | No | High | x |
| FIXED | CRYSTAL CLEAN CAR WASH - IB, I | 1158 PALM AVE | Imperial Beach, CA | 91932 | Car Wash | Otay | 910.2 | 7299 | x | x | x | x | | | x | | No | No | High | x |
| FIXED | MIKE'S CAR WASH | 1117 PALM AVE | Imperial Beach, CA | 91932 | Car Wash | Otay | 910.2 | 7299 | x | x | x | x | | | x | | No | No | High | x |
| FIXED | R J CAR WASH | 730 10TH ST | Imperial Beach, CA | 91932 | Car Wash | Otay | 910.2 | 7299 | x | x | x | x | | | x | | No | No | High | x |
| FIXED | THE SCOREBOARD | 951 PALM AVE. | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.2 | 7299 | x | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | FRED'S SUBS | 1231 PALM AVE | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.2 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | ALBETO'S TACO SHOP | 1183 13TH ST | Imperial Beach, CA | 91932 | Eating/ Drinking | Tijuana | 911.1 | 5812 | | x | x | x | x | x | x | x | Yes | No | High | x |
| FIXED | EL AMIGO MEXICAN AND SEAFOOD | 1004 PALM AVE | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.2 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | LITTLE BONANZA | 940 PALM AVE | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.2 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | SEACOAST PIZZA | 1217 GROVE AVE UNIT A | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.2 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | KATY'S CAFE | 704 A SEACOAST DR | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.1 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | EL TAPATIO CATERING | 260 PALM AVE | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.1 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | MICKIE'S BAR & GRILL | 220 PALM AVE | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.1 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | SANTANA MEXICAN FOOD | 1337 PALM AVE | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.2 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | DOMINOS PIZZA #7712/SO CAL DOM | 1307 IMPERIAL BEACH BLVD | Imperial Beach, CA | 91932 | Eating/ Drinking | Tijuana | 911.1 | 5812 | | x | x | x | x | x | x | x | Yes | No | High | x |
| FIXED | K-C'S CHINESE FOOD | 1299 IMPERIAL BEACH BLVD | Imperial Beach, CA | 91932 | Eating/ Drinking | Tijuana | 911.1 | 5812 | | x | x | x | x | x | x | x | Yes | No | High | x |
| FIXED | MARISCOS SHOP EL KIKI | 1293 IMPERIAL BEACH BLVD | Imperial Beach, CA | 91932 | Eating/ Drinking | Tijuana | 911.1 | 5812 | | x | x | x | x | x | x | x | Yes | No | High | x |
| FIXED | WIENERSCHNITZEL #358 | 1253 PALM AVE | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.2 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | MARCO'S & RED HAWK | 1205 PALM AVE | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.2 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | BURGER KING #3930 | 1180 PALM AVE | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.2 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | MCDONALDS/SCAROB INC. | 1135 PALM AVE | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.2 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | IB FORUM | 1079 SEACOAST DR | Imperial Beach, CA | 91932 | Eating/ Drinking | Tijuana | 911.1 | 5812 | | x | x | x | x | x | x | x | Yes | No | High | x |
| FIXED | C.H. DONUTS | 1070 13TH ST A | Imperial Beach, CA | 91932 | Eating/ Drinking | Tijuana | 911.1 | 5812 | | x | x | x | x | x | x | x | Yes | No | High | x |
| FIXED | GIANT PIZZA KING #4 | 1070 13TH ST B | Imperial Beach, CA | 91932 | Eating/ Drinking | Tijuana | 911.1 | 5812 | | x | x | x | x | x | x | x | Yes | No | High | x |
| FIXED | KFC/MARBLE USA INC | 1056 13TH ST | Imperial Beach, CA | 91932 | Eating/ Drinking | Tijuana | 911.1 | 5812 | | x | x | x | x | x | x | x | Yes | No | High | x |
| FIXED | FRUTI-LOCO | 1051 13TH ST D | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.2 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | THE TIN FISH RESTAURANT | 910 SEACOAST DR | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.1 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | NFAROOQI ENT. LLC/JACK IN BOX | 890 PALM AVE | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.2 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | SUBWAY 20578 | 876 SEACOAST DR | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.1 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | THE BRIDGE | 874 SEACOAST DR | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.1 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | FONDA BARRON | 874 SEACOAST DR | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.1 | 5812 | | x | x | x | x | x | x | x | No | No | Non-High | x |
| FIXED | THE WAVE CAFE | 809 SEACOAST DR | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.1 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | SEASIDE GYROS | 805 SEACOAST DR | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.1 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | SEA 180 | 800 SEACOAST DR | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.1 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |
| FIXED | K-PASTA | 775 13TH ST | Imperial Beach, CA | 91932 | Eating/ Drinking | Otay | 910.2 | 5812 | | x | x | x | x | x | x | x | No | No | High | x |

# Appendix D-2 Minimum Storm Water BMPs for Commercial Facilities and Residential Areas

# Minimum Storm Water BMPs for Residential Areas and Commercial Facilities

| Storm Water BMP & Description | Residential BMP Implementation | Commercial BMP Implementation |
|---|---|---|
| **Eliminate Illegal Discharges** Non-storm water discharges (water other than rain) shall not be discharged to the storm water conveyance system. IBMC 8.30.050.A | Non-storm water discharges (any solid or liquid material) other than rain water must be prevented from leaving residential private property and entering the street gutter or any other part of the City's storm drain conveyance system (limited exemptions apply IBMC 8.30.060). Any illegal discharges should be reported to the City's storm water hotline 619-424-4095 or reported online. | Commercial businesses must properly dispose of all solids or liquids and prevent the discharge of non-storm water from leaving the commercial property and entering the street gutter or any other part of the City's storm drain conveyance system. No exemptions apply. Any illegal discharges should be reported to the City's storm water hotline 619-424-4095 or reported online. |
| **Eliminate Illegal Connections** The establishment of illegal connections to the storm water conveyance system is prohibited even if the connection was established pursuant to a valid city permit. IBMC 8.30.050.B | Illegal connections to the storm water conveyance system are man-made connections from a pipe or channel that convey discharges that are not composed entirely of storm water. Examples include grey water (i.e. laundry rinse water), waste water, sump pumps, curb-cuts, or any other non-NPDES permitted storm water connection. Suspected illegal connections should be reported to the City's storm water hotline 619-424-4095 or reported online. | Illegal connections to the storm water conveyance system from commercial facilities shall be eliminated. Examples include any pipe or channel that conveys non-storm water discharges directly to the street gutter or any other part of the City's storm drain system from a commercial property. Suspected illegal connections should be reported to the City's storm water hotline 619-424-4095 or reported online. |
| **Prevent Illegal Discharges** Spilling, leaking, or stockpiling any materials or performing any maintenance activities that may result or contribute to the discharge of pollutants is prohibited unless written authorization is provided by the City. IBMC 8.30.050.C | The spilling, leaking, or stockpiling of any material or performing any pollutant generating activity is prohibited unless written authority through an Encroachment Permit is provided by the City. Residential areas (private property) must also be maintained in a manner that prevents the discharge of sediment, trash, green waste, automotive fluids, or other storm water pollutants from leaving the property. | Many commercial businesses have the potential to discharge storm water pollutants through normal business activities and therefore have the obligation to implement BMPs to prevent storm water pollution. Businesses need maintain good housekeeping practices to prevent the release of any material through wind or rain. Any materials discarded by customers or illegally dumped on the commercial property is the responsibility of the business. |

# Appendix E Fiscal Analysis


# City of Imperial Beach
# Fiscal Analysis for Storm Water Management Program

Prepared by

MOE

October 2014

Intentionally blank for printing purposes

# Contents

Intentionally blank for printing purposes

# 1 Introduction

Mikhail Ogawa Engineering (MOE) conducted a Jurisdictional Runoff Management Program (JRMP) Fiscal Analysis Study for the City of Imperial Beach (City). MOE analyzed the level of service provided by various City departments and identified budget and funding amounts necessary to implement the City's JRMP in compliance with the recently updated Order No. R9-2013-0001.

# 2 Municipal Permit Requirements

The City of Imperial Beach (City) is one of twenty-one Copermittees in San Diego County subject to the California Regional Water Quality Control Board San Diego Region (RWQCB) Order No. R9-2013-0001 (Municipal Permit). The Municipal Permit is implemented under the authority of the Federal Clean Water Act and the National Pollutant Discharge Elimination System (NPDES) permit program which prescribes requirements for discharges from municipal separate storm sewer systems (MS4s).

The Municipal Permit requires all Copermittees to implement a program to control the contribution of pollutants to, and the discharges from, the MS4 within its jurisdiction. The goal of the jurisdictional runoff management programs (JRMP[1]) is to implement strategies that effectively prohibit non-storm water discharges to the MS4 and reduce the discharge of the pollutants to the maximum extent practical (MEP). The Permit requires jurisdictions to conduct an annual fiscal analysis of its JRMP to ensure that adequate fiscal resources are allocated to effectively prohibit non-storm water discharges to the MS4. The City must provide the documentation used to develop the summary upon request by the RWQCB.

Provision E.8 of the Municipal Permit requires the fiscal analysis to include:

(1) Identification of the various categories of expenditures necessary to implement the requirements of the Order No. R9-2013-0001, including a description of the specific capital, operation and maintenance (O&M), and other expenditure items to be accounted for in each category of expenditures (see Section 3.1 of this report).
(2) The staff resources needed and allocated to meet requirements of Order No. R9-2013-0001, including development, implementation, and enforcement activities required (see Section 3.1 and 3.2 of this report).
(3) Estimated expenditures for (1) and (2) above for the current fiscal year (see Section 3.3 of this report).
(4) The source(s) of funds that are proposed to meet the necessary expenditures for (1) and (2) above, including legal restrictions on the use of such funds, for the current fiscal year and next fiscal year (see Section 4 of this report).

The Municipal Permit's requirements drive the City's programmatic staffing and resource allocation needs for JRMP management and implementation. The goals of the Fiscal Analysis Study were to evaluate the current JRMP and develop a framework for the City to use in subsequent annual fiscal analyses. This report captures and quantifies the direct and indirect roles and activities related to storm

[1] The City developed a Jurisdictional Urban Runoff Management Program (JURMP) in 2002 to meet the requirements of San Diego RWQCB Order No. 2001-01. In response to San Diego RWQCB Order R9-2007-0001, the City modified the JURMP in 2008 to meet the new permit's requirements. As a result of San Diego RWQCB Order R9-2013-0001, adopted on May 8th, 2013, the City is required to update its JURMP (and rename it to Jurisdictional Runoff Management Program or JRMP) over the course of an approximate two-year period. The updated JRMP is required to be submitted June 27th, 2015 concurrent with the submittal of the Water Quality Improvement Plans (WQIPs).

water management in order to estimate the total JRMP expenditures and account for the sources of funding.

# 3 Data Collection and Analysis

MOE's data collection effort included the review of City budget reports, City's 2008 JURMP, JURMP Annual Reports, and other staff reports and information provided by the City. MOE conducted interviews and held meetings with various City staff to investigate JRMP management and implementation. Data collection and analysis involved the following steps:

1. Identification of Expenditure Categories
2. Allocation of Staff Resources – Identified which City departments and divisions were involved in JRMP implementation. Identified staff salaries, benefits and how much effort (i.e., staff time, operating & maintenance costs and capital costs) was spent on storm water related activities.
3. Estimated Expenditures – Analyzed data and calculated the estimated program costs.

As part of the data analysis, MOE and City staff developed a metric, called "storm water factor" to quantify staff effort in terms of storm water related activities. The storm water factor is the percent of an employee's or department's time spent on storm water related activities out of the total work time for that employee or department. The data collection effort and analysis are described in more detail below.

## 3.1 Identification of Category of Expenditures

The Municipal Permit requires the City to identify categories of expenditures related to storm water management and implementation and include category descriptions of specific capital, operation and maintenance activities. Five expenditure categories were identified for this fiscal analysis to effectively communicate the types of costs reflected in the Municipal Permit. Descriptions for these categories of expenditures are provided below:

### *Administrative Tasks*

Administrative activities include a range of tasks across multiple Divisions. Such tasks include general government services related to storm water management programs and miscellaneous administrative tasks such as contract management, invoice processing, and accounting.

### *Development Planning and Construction Management*

Development planning and construction management relate to both public and private projects. City capital projects are primarily the responsibility of the Public Works Department and private discretionary projects are primarily the responsibility of the Community Development Department. Tasks include development planning review, project management, and construction site inspections.

### *Existing Development Management and O&M*

This category covers existing development and includes program implementation and management of storm water best management practices (BMPs) for the municipal, commercial, residential, and treatment control inventories. It also includes operation and maintenance activities that relate to storm water management such as street and MS4 cleaning. The Public Works Department is primarily responsible for the management and O&M of existing development.

### *Public Education and Participation*

The Environmental Division is responsible for implementing the education and public participation elements of the storm water program.

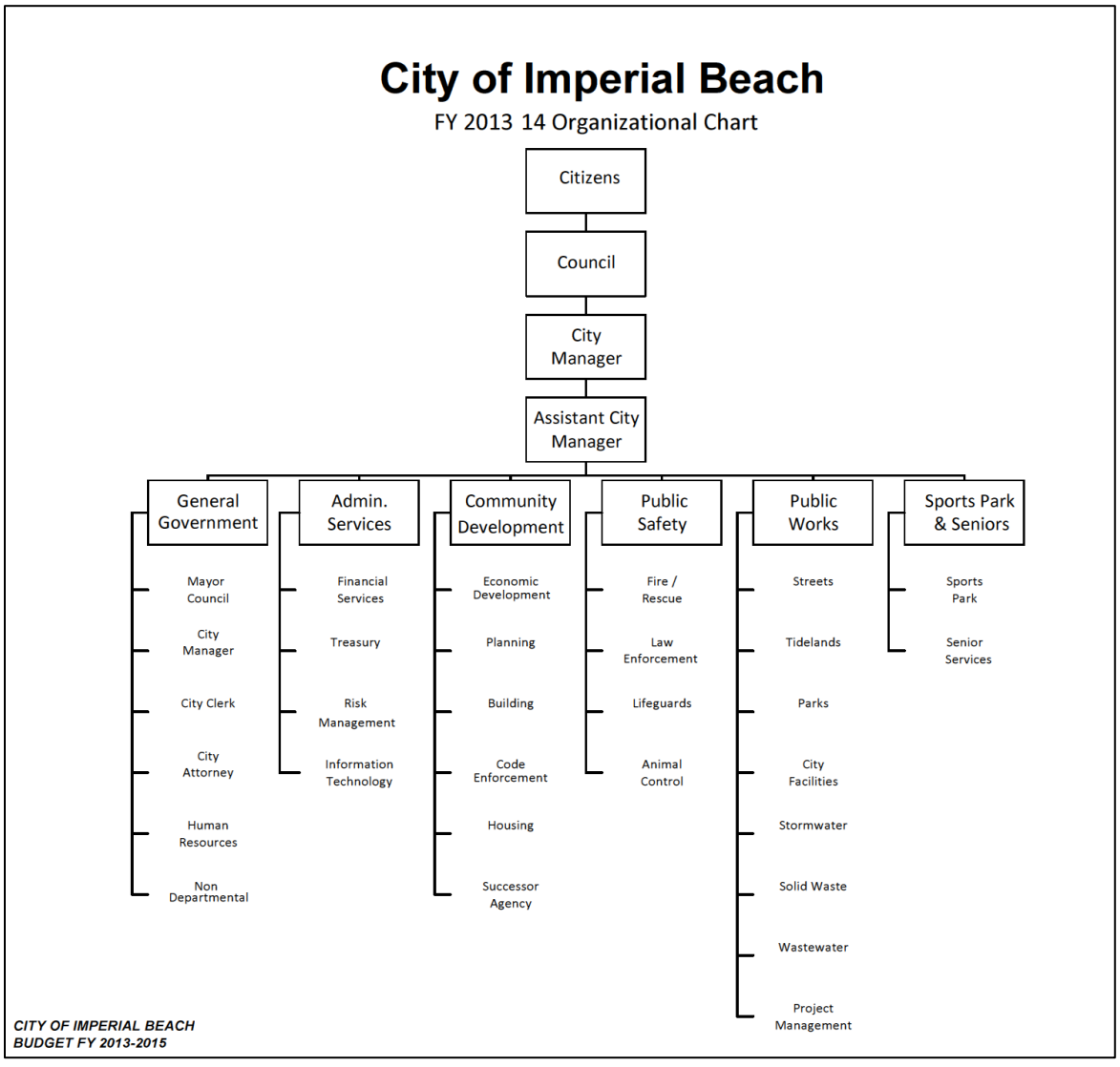
### *Watershed and Regional Costs*

Regional and watershed costs are allocated from the Environmental Division and tracked according to work orders.

## 3.2 Allocation of Staff Resources

For the fiscal years 2013-2015, the City's overall staff resources includes 94 full-time equivalents (FTEs). As shown in Figure 1 below, the Department of Public Works houses the City's Storm Water Staff, consisting of two FTEs. The Storm Water Staff are responsible for implementing several programs mandated by federal, state and local laws including the City's JRMP.

**Figure 1: City of Imperial Beach Organizational Chart**



To meet the storm water management requirements in the Municipal Permit, implementation efforts and costs are shared across the entire City. In this fiscal analysis, MOE and City staff reviewed previous JRMP Fiscal Analyses and collected information from interviews with various City staff in order to identify all departments, divisions and individual staff involved in storm water management and their particular activities.

MOE reviewed work orders, staff reports, and performed interviews with City departments to understand staff resources dedicated to the development and implementation of the City's storm water management program. Below is the list of identified City departments and divisions that contribute staff resources to storm water management. A summary of the collection and availability of information used for expenditure analysis is also provided.

### *Public Works Department*

City staff interviewed the Public Works Superintendent and analyzed work orders to identify how much department staff time is spent on JRMP related activities. Work orders were analyzed and/or interviews were conducted with Engineering Administration, Streets, Tidelands, Facilities, Parks, Solid Waste, Environmental/Storm Water, Wastewater, Capital Improvement Programs, and Fleet divisions in order to estimate staff effort, operating & maintenance and capital costs related to storm water management.

### *General Government Services*

In order to determine the amount of time the City Clerk, City Manager, City Council and Mayor spend on storm water related activities, City staff analyzed the quantity of staff reports for meeting agenda items related to storm water. The number of storm water related agenda items was divided by the total number of agenda items heard and averaged over the last three year period to calculate approximately how much time was spent discussing and planning JRMP related activities.

### *Community Development Department*

MOE and City staff conducted interviews with the Community Development Department in order to estimate the amount of staff time spent on JRMP related activities. Interviews included staff from the Planning, Building, and Code Enforcement divisions. City Engineering reviews development project plans in accordance with the City's storm water ordinances and the Municipal Permit.

### *Administrative Services Department*

Administrative Services functions as the City's support network for information technology, risk management, and finance services. The Finance Director worked closely in the development and implementation of this fiscal analysis study and participated in multiple interviews with City staff.

Table 1 below lists the identified expenditure categories and their work activities related to storm water management.

**Table 1: Expenditure Categories & Work Related to Storm Water Management**

| Category of Expenditures | City Division | Work Related to Storm Water Management |
|---|---|---|
| **Public Works Department** | | |
| Administration Tasks | Public Works Administration | Administrative activities such as permit and application reviews, inspections, project administration, and staff reports |
| Existing Development Management and O&M | Streets | Repair, maintenance & cleaning of the City right-of-way (roadways, signage, sidewalks, and storm drains) including implementation of minimum BMPs and reporting of illegal discharges or connections |
| Existing Development Management and O&M | Tidelands | This includes routine maintenance and cleaning of beach, facilities, parks, and City right-of-way along the beachfront including pier and parking areas |
| Existing Development Management and O&M | Parks | Repair, maintenance & cleaning of City Parks, right-of-way planters, open space, and trails including landscape maintenance |
| Existing Development Management and O&M | Facilities | This includes maintenance, repair and rehabilitation of all City owned buildings |
| Existing Development Management and O&M | Solid Waste | Manages solid waste contract, including implementation of integrated solid waste programs, street sweeping, residential house hold hazardous waste, and education |
| Administration Tasks; Existing Development Management and O&M; Public Education and Participation; Development Planning and Construction Management; Watershed and Regional Costs | Environmental/ Storm Water | Development and implementation of JRMP and storm water management programs including ICID enforcement, BMP inspections for existing development, annual storm water training, education and outreach, monitoring, regional collaboration, and review of development plans |
| Existing Development Management and O&M | Fleet | Provide maintenance and repair to City's vehicles and equipment |
| Existing Development Management and O&M | Wastewater | Maintain and enhance the City's sewer collection system and provide annual cleaning of catch basins and storm drain lines |
| Development Planning and Construction Management | Capital Improvement Projects | Variable costs per year on City Capital projects and includes project design, construction, and post construction BMPs for storm water |
| **General Government Services** | | |
| Administration Tasks | Council/Mayor | Reviews City Council agendas, resolutions and agreements |
| Administration Tasks | City Manager | Reviews City Council agendas, resolutions and agreements |
| Administration Tasks | City Clerk | Manages City Council agendas, resolutions and agreements |
| Administration Tasks | Human Resources | Administrative and personnel activities |
| Administration Tasks | City Attorney | Conducts administrative and legal procedures and enforces City ordinance |
| **Community Development Department** | | |
| Development Planning and Construction Management | Planning | Reviews and issues development permits and ensures that projects reduce pollutants to MEP through project conditions of approval |
| Development Planning and Construction Management | Building | Reviews and issues building permits and ensures that projects reduce pollutants to MEP through inspections |
| Existing Development Management and O&M | Code Enforcement | Issues citations according to City's enforcement ordinances and the municipal permit and coordinates with Environmental Program Specialist on ICID enforcement cases |
| Development Planning and Construction Management | City Engineer | Reviews priority development projects for consistency with storm water permit and BMP sizing criteria |
| **Administrative Services Department** | | |
| Administration Tasks | Finance | Provides financial management, accounting, and administrative support services for the implementation of storm water management programs |

## 3.3 Estimated Expenditures

The Municipal Permit requires the City to estimate expenditures related to storm water management and implementation of the JRMP. After completing data collection efforts, City staff and MOE analyzed identified expenditure categories and staff resources. The next step was to develop metrics to quantify an employee's or department's effort spent on activities related to the JRMP.

The metric is called "storm water factor" and it represents the percent of time spent on storm water management activities. The storm water factor was multiplied by the total FY 2015 budget for the specific expenditure category to get the total estimated cost for storm water management related activities. For example, the Code Enforcement subcategory has a storm water factor of .05 which means the Code Enforcement Office spends 5% of the total work time on tasks specific to storm water management. All expenditure categories, associated storm water factors, and FY budget allocations are listed in Table 2.

It is important to note that Capital Improvement Project (CIP) expenditures are tracked separately and are not included in the estimated total JRMP expenditures. However, they should be included in future annual fiscal analyses as data and information become available. In addition to the capital costs for design and construction, CIP costs typically include Storm Water Pollution Prevention Plans (SWPPPs), implementation of construction BMPs and construction storm water inspections.

# 4 Funding Sources

The Municipal Permit requires the City to identify funding sources for expenditure categories related to storm water management and implementation. The JRMP is funded almost exclusively by the City's General Fund; however, the City's Sewer Enterprise Fund, Developer Fees, and Permit Fees cover a portion of staff costs for each respective division. In addition, the City uses grants along with Transnet and General Fund dollars to maximize the capital improvement program to achieve multiple benefits above and beyond the requirements of the Municipal Permit. While the Environmental Division in the Department of Public Works is responsible for developing and implementing the JRMP, other City departments also have direct or indirect roles in storm water management. Table 2 below lists expenditure categories, their respective City departments, and their associated funding sources.

# 5 Budget Allocation Process

The City of Imperial Beach adopts a two-year budget that contains the revenues, appropriations and other financial information pertaining to all City operating and other revenue funds. These budgets are accounted for using the modified accrual basis of accounting. The City's budget goals are to achieve a balanced budget with revenues, including reimbursements from other funds for services provided, equal to or greater than expenditures.

**Table 2: Total Estimated Cost for Storm Water Related Activities**

| City Department/ Category of Expenditures | Storm Water Factor | Total Estimated Cost for Storm Water Related Activities | Source of Funds |
|---|---|---|---|
| **Public Works Department** | | | |
| Public Works Administration | 0.05 | $22,401 | General Fund |
| Streets | 0.24* | $250,071 | General Fund |
| Tidelands | 0.34* | $314,385 | General Fund |
| Parks | 0.14* | $58,293 | General Fund |
| Facilities | 0.02* | $5,177 | General Fund |
| Solid Waste | 0.5* | $41,721 | General Fund |
| Storm Water | 1 | $340,607 | General Fund |
| Wastewater | 0.1* | $134,671 | Sewer Fund and General Fund |
| | **Total** | **$1,167,326** | |
| **General Government Services** | | | |
| Council/Mayor | 0.06 | $10,674 | General Fund |
| City Manager | 0.06 | $27,163 | General Fund |
| City Clerk | 0.06 | $18,753 | General Fund |
| Human Resources | 0.05 | $13,052 | General Fund |
| City Attorney | 0.06 | $12,300 | General Fund |
| | **Total** | **$81,942** | |
| **Community Development** | | | |
| Planning & Building | 0.1 | $86,150 | Developer fees, Permit fees and General Fund |
| Code Enforcement | 0.05 | $8,800 | General Fund |
| City Engineering | 0.4 | $16,200 | Developer fees and General Fund |
| | **Total** | **$111,150** | |
| **Administrative Services Department** | | | |
| Finance | 0.05 | **$29,867** | General Fund |
| **Total Expenditures** | | **$1,390,285** | |

*Storm water factors generated through evaluation of work orders and discussions with Public Works Superintendent, other factors generated through interviews with staff.

The City Manager and Administrative Services Director provide guidance to the departments prior to preparation of department budgets related to economic outlook and parameters for budgeting. The biennial budget cycle begins with the development of budget instructions, including policy directives and a budget calendar. Budget projections are submitted by Department Heads to the Finance Division. The Administrative Services Director submits the draft proposed City budget to the City Manager for review. If the sum of the departments' proposed expenditure requests are more than the total sum of the City's anticipated revenues, the City Manager and Administrative Services Director work with the Department Heads to reach consensus in order to present the City Council with a proposed balanced budget. The City Council holds public meetings and adopts the City budget no later than June 30th. The second year of the two-year budget is reviewed and if needed, revised in the subsequent year again by June 30th.

As explained above, the City estimates its storm water related expenditures according to the implementation of the JRMP and the requirements of the Municipal Permit. Estimates of storm water

related activities are included in budget projections for the Public Works Department and subsequently submitted to the City Manager for review.

The City adopts budgets on a two-year cycle and can only commit to allocating funds on a two-year cycle for all departments, including storm water management related activities. This may limit the planning and forecasting efforts of the City for program implementation.

# 6 Conclusions

The fiscal analysis results show that total estimated JRMP expenditures are approximately $1,390,000. This estimate includes part-time and/or full-time FTEs from almost all City departments and divisions. Table 3 lists the percent of total estimated expenditures related to storm water management, per City department. The Public Works Department holds the majority of expenditures at approximately 84% of the total estimated City expenditures for storm water management related activities.

**Table 3: Percent of Total Estimated Expenditures for Storm Water Management by Department**

| Estimated Expenditures by Department | Percent of Total Estimated Expenditures |
|---|---|
| Public Works | 84% |
| General Government | 5.9% |
| Community Development | 8% |
| Administrative Services | 2.1% |

While the primary responsibility of managing the JRMP lies with the Department of Public Works, almost all other City departments participate in the implementation of the program. Each Department and associated Division has an established role in implementing the components of the JRMP and therefore have associated expenditures related to storm water management. For this reason, the City's JRMP is considered a City-wide approach to control pollution and storm water runoff and inherently involves City staff and resources from various City departments. As shown in Table 2 and Table 3, expenditures related to storm water management are distributed across City departments and staff members.

It is difficult to estimate CIP expenditures related to storm water management on a year-to-year basis due to the nature of CIPs. CIP expenditures were not included in the estimated expenditures related to storm water management, however, they should be included in future annual fiscal analyses as data and information become available.