

**CITY OF SAN DIEGO JURISDICTIONAL URBAN
RUNOFF MANAGEMENT PLAN
FISCAL YEAR 2012 ANNUAL REPORT**



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SAN DIEGO

**SUBMITTED TO:
SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD
9174 SKY PARK COURT, SUITE 100
SAN DIEGO, CA. 92123**

SEPTEMBER 30, 2012

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EXECUTIVE SUMMARY

San Diego is a beautiful city with a picturesque coastline that includes abundant aquatic resources and wildlife. San Diego also has many natural surface water resources—creeks, beaches and bays—providing miles of recreational opportunities for residents and serves as the centerpiece to San Diego’s tourist industry. The potential pollution of these resources threatens the social and economic quality of life within the region. Preserving San Diego’s natural water resources through the reduction of pollutants in storm water and urban runoff is one of the most important goals of the City of San Diego (City). The Transportation & Storm Water Department is designated as the lead City agency to achieve this goal. Urban runoff is an inevitable result of how a modern urban metropolitan society lives its daily life. Reducing urban runoff and improving water quality is reliant upon significant efforts by the City:

- A commitment to continual improvement in the effectiveness of the City’s water quality protection services at the lowest possible cost through adaptive management;
- Changing the behaviors of the residents, employees and businesses that call San Diego home;
- Best available water quality science to identify sources and solutions for pollution; and
- A commitment to abating pollution sources with proactive education, incentive and enforcement programs.

The City of San Diego implemented numerous efforts during Fiscal Year (FY) 2012 to both protect and restore water quality in its creeks, rivers, beaches, and bays on a jurisdictional, watershed and regional level. This Annual Report summarizes the jurisdictional efforts implemented by the City of San Diego during the respective reporting period. Some of the key program highlights are included below.

Program Accomplishments

Development and Construction

Land Development is one of the key areas where pollutant generation can be prevented by addressing the pollutants at their source through urban runoff friendly planning and design. The City emphasizes the importance of urban runoff requirements as project applicants complete the development process. During FY 2012 the City required priority development projects (PDP) to implement appropriate hydrologic and treatment controls, including Low Impact Development (LID) and treatment control BMPs. The City processed a total of 30 private PDPs and 5 capital improvement PDPs. From planning and design, projects then move into the construction phase of development. The City performed over 58,000 construction inspections in FY 2012 for 10,072 construction projects. In general, the inspection process found project sites were in compliance with BMP implementation. In some instances, corrective actions or higher level of enforcement were necessary to obtain compliance. Additionally, 241 development sites, where treatment control BMPs had been constructed in past years, were visited for inspections to determine their effectiveness at treatment of urban runoff. Lastly, the City completed the draft LID Design Manual in FY 2012.

Municipal Activities

The City continued to place emphasis on storm water pollution prevention practices and awareness in all activities at municipal facilities and field operations in FY 2012. Efforts conducted included:

- Inspections and appropriate follow-up at over 750 facilities;
- Collection of 5,727 tons of debris and sediment by conducting more than 85,000 miles of street sweeping and parking lot sweeping of 441 parking lots;

- Inspection of 34,102 inlets, catch basins and cleanouts; and
- Cleaning over 22,000 inlets, catch basins and cleanouts and 2.84 miles of pipeline which resulted in the removal of approximately 202 tons of debris and sediment.

Another broad indicator of the effectiveness of the City's municipal program efforts to improve water quality is the reduction of public sewer spills which are direct and major contributors of bacteria to surface waters. In 2000 there were 365 sanitary sewer spills; in FY 2012 there were only 36, a 90 percent reduction since 2000.

Industrial and Commercial Programs

The City continued to expand its industrial and commercial programs in order to institute effective measures to reduce pollutants and comply with the Municipal Permit. The City currently has an inventory of approximately 19,525 stationary facilities and 6,532 mobile businesses. The City inspected 100% of all stationary sites determined to pose a high threat to water quality. Approximately 33% of the City's commercial and industrial inventory received site visits and/or inspections. This represents that the City conducted more than 1,600 additional inspections than are required. Inspectors also distributed over 20,000 various printed educational materials to all businesses that received full inspections. During FY 2012, the Storm Water Division focused on improving database tracking of inspections, follow-up and enforcement to effectively track compliance and utilize resources efficiently.

Education and Outreach

In Fiscal Year 2012, Think Blue concluded its twelfth year of education and advocacy outreach to the citizens and businesses of San Diego in the Think Blue Media, Education, and Public Advocacy Campaign. The campaign was able to put forth a broad, multifaceted effort, which included targeting external audiences as identified in the Municipal Permit (municipal departments and personnel, construction site owners and developers, industrial/commercial owners and operators, mobile businesses, and residential community, general public and school children), participating in grant funded education and outreach activities, and actively participating in regional outreach and education efforts with other Copermittees. One of the most impactful methods of direct outreach has been the use of special events where the City uses booths to make direct contact with the target audiences. In FY 2012 the City's Think Blue messages to the general public made over an estimated 40,925,342 impressions through Public Service Announcement (PSA) airtime, placement on media websites, and PSAs in movie theaters. Internal education provided over 1,500 City staff with both general storm water education as well as job-specific storm water training.

Monitoring

In addition to participating in regional monitoring efforts with the San Diego County Regional Copermittees, the City's Storm Water Division conducted a City specific Dry Weather Monitoring (DWM) Program and Coastal Storm Drain Monitoring Program. The DWM Program is designed specifically to detect and eliminate illicit connections and illegal discharges to the storm water conveyance system using frequent, geographically widespread dry weather discharge monitoring and follow-up investigations. Typically, the Storm Water Division's DWM sites are located at storm drain outlets, manholes, or storm drain catch basins. The City performs Trash Assessments as a part of its monitoring program as well. Information on the City's Dry Weather Monitoring Program and Trash Assessments for 2012 will be included in the Illicit Discharge Detection and Elimination Component (Section 7 of this report) submitted to the Regional Board on December 15, 2012.

Special Projects

In FY 2012, the City continued to take actions towards water quality improvements as organized in its *Strategic Plan for Watershed Activity Implementation (Strategic Plan)*. The purpose of the *Strategic Plan* is to identify the most effective activities to address the highest priority pollutant sources in the highest polluting areas. There are many pollutant sources to be addressed and an equally large list of potential activities from which to choose. By prioritizing the problems and ranking the solutions based on effectiveness, this approach maximizes City resources in protecting and improving water quality. The City implemented many special projects during FY 2012 to identify effective activities. Descriptions and updates of the special projects will be included in the City's Watershed Urban Runoff Management Program Annual Reports submitted to the Regional Water Quality Control Board on January 31, 2013.

Future Directions

The City's overall program implementation continues to be a success. There are many program areas where the City has exceeded the implementation requirements, such as commercial/industrial inspections. Additionally, the City continues to be a leader in the region by conducting special studies and pilot projects aimed at identifying the highest threat to water quality sources and the most efficient and effective methods of mitigating those pollutants. To continue program improvements in FY 2013, the Transportation & Storm Water Department Storm Water Division will focus a portion of its overall efforts on the following areas:

- Continue strategic, integrated approach to planning program efforts, such as the watershed-based asset management planning efforts discussed below;
- Refinement and/or expansion of the Storm Water Division's data management and tracking capabilities to ensure permit compliance;
- Identification of data gaps and collection procedures to be modified to assist in activity and program effectiveness assessment; and
- Identification of program areas for adaptive management opportunities by utilizing findings from pilot projects, special studies, or general program implementation feedback.

Additionally, the City will continue to pursue alternative funding sources for urban runoff management and water quality protection to support the anticipated expansion of programs over time. As part of these efforts, the City will continue to partner with other stakeholders to develop water quality projects in order to compete for grant funds and leverage outside sources of funding. Staff will continue to work closely with other storm water program managers in the region to collaborate on program implementation strategies.

Watershed Asset Management Plans

With the business drivers of aging infrastructure, increasing storm water quality regulations, and limited budget and resources, the Storm Water Division (Division) is making efforts to optimize its business processes and practices through the establishment of an asset management program. A key approach that the Division has employed to optimize its business processes and practices was the integration of its planning, implementation and assessment of flood control and water quality protection programs as part of its asset management program.

In 2008, the City reorganized and increased the size of the Division more than four-fold and brought together pollution prevention, storm drain operations and maintenance, and street sweeping. Concurrently, the City began to transition to a zero-based budgeting approach. In this new framework, there were no historical budgets upon which future Division budgets could

be based. Instead, Division staff is required to show justifications for each budget dollar requested each year.

In response to these fundamental changes, the Division developed an asset management program for managing its activities. This asset management program defined each activity the Division needed to conduct as a level of service (LOS) it was required to meet either under its NPDES permit, or through the expectations of citizens regarding functions of the storm drain system and the quality of water and related services to be maintained in streams, estuaries, and at beaches. This program provided a clear relationship between services enjoyed by the citizens of San Diego that were provided by the receiving waters and drainage system and the funding needs of the Division. This relationship allows the City to make rational budgeting decisions for this program and provides transparency for elected officials and citizens.

The application of asset management to storm water and watershed management is a way to successfully optimize use of resources, integrate municipal flood control and storm water quality management, transparently justify funding requirements and management decisions, and build and transform an organization into one that can sustainably manage storm water quality and drainage on behalf of a municipality's residents, businesses and other customers. The United States Environmental Protection Agency's Office of Wastewater Management Asset Management Program was consulted during the process and endorsed the City's process in applying asset management to storm water management.

The Division has worked through program evaluation processes to develop its core mission, goals, objectives, and LOSs. The Division defined and categorized the assets it is required to manage, many of which it does not own, such as streams and beaches. From these LOSs, the Division evaluated the business processes and organizational capabilities needed to fulfill those LOSs and identified the specific capabilities and projects that are required to fulfill the LOSs required by regulators and desired by citizens. Division staff reached out to other City divisions to establish the LOSs and business processes where those divisions had roles. The City also reached out to key influential members of the public, and business, regulatory and environmental communities to vet the LOSs, receive their feedback, and incorporate the feedback into the LOSs so that the LOSs would represent what citizen's desire.

The first step in the Division's process of developing the overall asset management planning strategy was to formally define the Division's mission and goals. To do this, the Division conducted a series of workshops with Division staff, with staff in other City divisions, and with key members of the community with interests in or responsibilities for storm water quality and drainage management issues at the City. These workshops resulted in the development of a core mission and goals that all felt would fulfill what the regulators require under the MS4 NPDES permit, and what the citizens of San Diego desire from their drainage system, receiving waters, and beaches. **Figure ES-1** shows the mission and goals developed by the City.



Figure ES-1. San Diego Storm Water Division Mission and Goals

The Division, because it is both a flood control and storm water quality division, viewed its management requirements holistically. Division staff recognized that sound flood control management practices also benefitted water quality, and vice versa. The Division saw the storm water that flowed through its drains as a resource that offered opportunities for capture for beneficial use purposes.

The City elected to align asset management plans with watershed management plans, which include total maximum daily load (TMDL) implementation plans where necessary. Each watershed management plan is termed a Watershed Asset Management Plan (WAMP). Each WAMP identifies the assets owned and managed by the Division, provides an understanding of critical assets required to deliver the services, records the strategies that will be used to manage the assets, and documents the future investments required to deliver the committed services. This document currently includes the San Diego Bay WAMP. Ultimately, WAMPs will be developed for each of the six watersheds (San Dieguito, Peñasquitos, Mission Bay and La Jolla, San Diego River, San Diego Bay, and Tijuana River) located in the City. Each WAMP will serve as a road map to ensure that actions and activities that address flood control and water quality

align across City divisions. These plans will provide a vehicle to identify and prioritize potential water quality and flood control challenges; evaluate opportunities for integrating water quality and flood control management into City projects and operations and maintenance activities within the watershed; and provide a vehicle for public participation. The WAMPs will also integrate all of the City's water quality requirements and commitments, including the Division's JURMP commitments.

1 INTRODUCTION

1.1 PROGRAM OVERVIEW FOR FISCAL YEAR 2012

The City of San Diego (City) has prepared this Jurisdictional Urban Runoff Management Program (JURMP) Annual Report for Fiscal Year (FY) 2012 in compliance with San Diego Regional Water Quality Control Board (RWQCB) Order R9-2007-0001 (Municipal Permit). The purpose of the report is to provide an account of the programmatic activities conducted by the City to meet the requirements of the Municipal Permit and the City's JURMP.

During FY 2012, the Transportation & Storm Water Department's Storm Water Division continued to serve as the lead department for the efforts of the City to reduce pollutants in urban runoff and storm water to the maximum extent practicable and achieve compliance with Municipal Permit. The Storm Water Division is actively engaged in a number of activities that will cumulatively result in both the protection and improvement of storm water quality. The Citywide blueprint for protecting storm water quality is the JURMP, which was adopted by the City Council on January 22, 2008. The primary activities that the City continues to implement include, but are not limited to: public education; employee training; storm water quality monitoring; source identification; code enforcement; watershed management; and storm water best management practices (BMP) development and implementation within the City's jurisdictional boundaries.

Under its legal authority, the City implements the JURMP only within its jurisdictional boundaries. However, the City also implements the Watershed Urban Runoff Management Program (WURMP), Regional Urban Runoff Management Program (RURMP), and Total Maximum Daily Load (TMDL) programs in conjunction with other stakeholders and jurisdictions to improve storm water quality in the region. These programs are not only implemented within the City's jurisdictional boundaries, but on watershed-scales under the auspices of the Municipal Permit.

1.2 REPORT ORGANIZATION

The FY 2012 Annual Report has been organized similarly to the revised reporting format developed in FY 2011 in order to streamline the report presentation. **Figure 1-1** represents the basic format for the majority of the report.

Under the requirements of the Municipal Permit various types of data and information must be presented in JURMP Annual Reports. Quantifiable data and required confirmations are presented directly in the tabular format. However, in some cases, further descriptions or explanations of results are required. When this occurs, the supporting narrative is supplied in the sections following the tables, and referenced within the table itself. Lastly, some of the required information (e.g., inventories) is best included as appendices. In these cases, their locations are also referenced in the table.

Municipal Permit Requirements		Reporting Results
No.	Program Implementation Description	Confirmation and/or Result
1	Any updates to the industrial and commercial inventory.	See Appendices H and I for inventory update. 1
2	Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	Confirmed per the City's JURMP Appendix X. Designated BMPs were required to be implemented at industrial and commercial sites.
3	A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	See 5.2.1 below for description. 2
4	Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	Inventoried: 24,395 (18,574 stationary facilities and 5,821 mobile) Inspected: 6,300 facilities (See Appendices J and K) 3
5	Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	See Section 5.2.2 below.
6	Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	Confirmed per the City's JURMP Section 7.2.4. See Section 5.2.3 below for description.

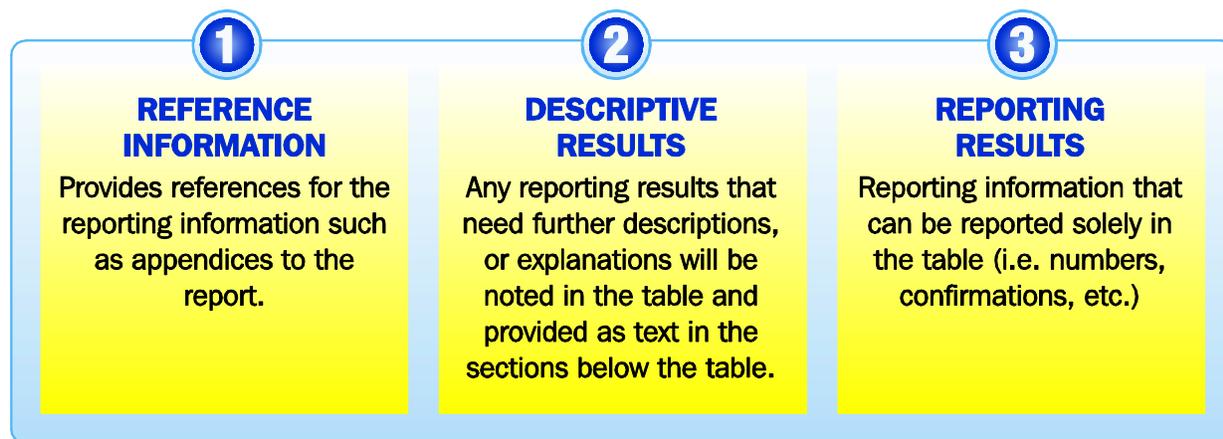


Figure 1-1: Reporting Format Description (for illustrative purposes only)

1.3 REPORTING PERIOD

This Annual Report provides information for the FY 2012 reporting period from July 1st, 2011 to June 30th, 2012.

2 DEVELOPMENT PLANNING

2.1 PROGRAM IMPLEMENTATION

Table 2-1 represents the City of San Diego’s implementation of the Development Planning component as it relates to the requirements of the Municipal Permit during FY 2012. Where reporting requirements necessitate information that is not easily tabularized, references are made in the table to locations where the information, or explanations, is located. During FY 2012, the City was compliant with all elements of Section D.1 of the Municipal Permit.

Table 2-1: Development Planning Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	See 2.2.1 below for descriptions.
2	Confirmation that all development projects were required to undergo the Copermittee’s urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	Confirmed See 2.2.2 below for description.
3	A listing of the development projects to which Standard Urban Stormwater Mitigation Plan (SUSMP) requirements were applied.	See Appendix A
4	Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	Confirmed See 2.2.2 below for description.
5	At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	See Appendix B for examples
6	A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	No PDP were allowed to implement BMPs with low-removal rankings, and therefore no such feasibility analyses were conducted
7	An updated treatment control BMP inventory.	See Appendix C. See also 2.2.3 for a summary
8	The number of treatment control BMPs inspected, including a summary of inspection results and findings.	240 private sites with 862 BMPs inspected 1 municipal site with 14 BMPs inspected See 2.2.3 below for summary
9	100% of projects with high priority TCBMPs were inspected.	5 projects were rated as high priority and all 5 were inspected
10	Confirmation that the high priority TCBMPs were inspected prior to the rainy season	Confirmed

Item No.	Program Implementation Description	Confirmation and/or result
11	At least 50% of projects with drainage insert TCBMPs were inspected.	Approximately 51% of the City's inventory of public and private TCBMPs with drainage inserts were inspected
12	A minimum of 20% of the total number of projects with approved TCBMPs, and a maximum of 200% of the average number of projects with TCBMPs approved per year were inspected.	Approximately 39% of the City's TCBMP project inventory was inspected
13	A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	See 2.2.3 below for description and summary
14	Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	See 2.2.4 below for description.
15	A listing of any projects which received a SUSMP waiver.	Not applicable. No Waiver Program in place, and no waivers issued
16	A description of implementation of any SUSMP waiver mitigation program.	Not applicable. No Waiver Program in place and no waivers issued
17	A description of Hydromodification Management Plan (HMP) development collaboration and participation.	See 2.2.5 below for description
18	A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	See 2.2.6 below for listing
19	A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	See Appendix A
20	A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	Interim HMP requirements and criteria were not applicable during FY 2012

Item No.	Program Implementation Description	Confirmation and/or result
21	The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	See 2.2.7 below for discussion
22	A description of notable activities conducted to manage urban runoff from development projects	See 2.2.8 below for descriptions

2.2 DISCUSSION SUPPORTING TABLE 2-1

2.2.1 Table 2-1 Item No. 1

General Plan Amendments (Community Plans)

Community Plan (extensions of the General Plan) activities that occurred during FY 2012 related to storm water include:

Chollas Triangle Master Plan

The Chollas Triangle Master Plan incorporates recommendations concerning the reduction of urban runoff and storm water quality in the final development of the Master Plan, which would be reflected through an amendment to the Mid-City Communities Plan. The plan area is bounded by 54th Street to the West, University Avenue to the North, and Chollas Parkway (including Chollas Creek) to the south and east. Storm water quality plays a significant role in the Master Plan process since Chollas Creek is a component of the plan area. Furthermore, surface run-off drains towards the creek, with some existing site drains emptying directly into the creek. A primary recommendation currently being developed for the plan is the restoration of the creek, consistent with the Chollas Creek Enhancement Program, which includes the reduction of pollutants that enter the storm water system from nearby uses. Another goal in the plan is to ensure a reliable system of water, storm water, and sewer facilities to serve the existing and future needs of the plan area.

During FY 2012, the Chollas Triangle Master Plan Stakeholder Working Group met three times, including one community-wide workshop, to provide input and feedback on developing the draft policies and recommendations addressing water quality. The draft plan amendment is currently being drafted by City staff. Following the completion of the mobility analysis and technical studies, the Programmatic Environmental Impact Report for the Community Plan Amendment will be released in fall 2012.

San Ysidro Community Plan Update

A comprehensive community plan update started in San Ysidro in June of 2010 and aims to reflect current conditions, improve mobility, including the pedestrian environment, and address quality of life issues. A Community Plan Update Stakeholder Advisory Committee (Advisory Committee) was established as part of the plan update effort and consists of diverse representation from residents, property owners, various business interests, local community organizations and not-for-profit groups, and participating public agencies within the plan update boundary. The San Ysidro Community Planning Group, which provides City decision-makers with input and recommendations regarding land use plans and development proposals within the San Ysidro plan boundary, makes up the majority of the Advisory Committee members. The Plan update effort is informed by technical studies and the City's 2008 General Plan which promotes current storm water, urban runoff, and water conservation policies. The plan will include a Conservation Element as well as a Public Facilities, Services and Safety Element, and will contain specific policies related to reducing storm water runoff in the San Ysidro Community planning area. Due to delays in completing technical studies, a draft plan is likely to be available in 2013.

Scripps Miramar Ranch Community Plan Amendment

Carroll Canyon Commercial Center community plan amendment to the Scripps Miramar Ranch community plan was initiated on August 4, 2011. The Amendment requested re-designation of a 9.5-acre parcel at 9850 Carroll Canyon Rd. from Industrial Park to Commercial. The proposal would allow for the development of non-base sector employment and ancillary commercial uses

that could support base sector employment within the Scripps Ranch Business Park. A tentative Planning Commission Amendment hearing date is anticipated on August 15, 2012. Per General Utility Notes for storm drainage system on Utility Sheet, runoff quality would be maintained using best management practices (BMP) in accordance with the Water Quality Technical Report (WQTR). Modification of BMP type may be required during final design of project. Modification or changes shall be accomplished by approved addendum to the WQTR at final design. All storm water BMPs shall be maintained by the storm water management and discharge control maintenance agreement executed with the final design. Bio swales would be constructed in accordance with EPA and/or California Storm Water Quality Association guidelines.

Otay Mesa Community Plan Update

In FY 2012, City Planning Staff continued to make progress regarding completion of the Otay Mesa Community Plan Update (OMCPU). The Otay Mesa Community Plan Update provides a unique opportunity to implement General Plan policies and its City of Villages Strategy for comprehensively planning the Otay Mesa community planning area by evaluating and coordinating a multi-modal transportation network, balancing economic prosperity with housing needs, and coordinating infrastructure financing and phasing with complex land use decisions. In April 2011, a draft of the update was posted to the City's website for public review and comment. The draft plan provides comprehensive, well thought out, and sensitive policy recommendations for the complex issues in Otay Mesa. The draft Public Facilities, Services, Safety Element, and the Conservation Element discuss storm water and urban runoff issues, and provide detailed policies that are consistent with the 2008 General Plan policies. The draft policies include implementation of Low Impact Development principles and identification of opportunities for additional hydromodification management measures.

Old Town San Diego Community Plan Update

Old Town San Diego Community Plan Update – A comprehensive community plan update started in 2010, when the City Council authorized the update. The effort aims to reflect current conditions, improve mobility, including the pedestrian environment, and address quality of life issues. A Community Plan Update Stakeholder Advisory Committee (Advisory Committee) was established as part of the plan update effort in November 2010. The Advisory Committee consists of diverse representation from residents, property owners, various business interests, local community organizations and not-for-profit groups, and participating public agencies within the plan update boundary. The Old Town Community Planning Group, which provides City decision-makers with input and recommendations regarding land use plans and development proposals within the Old Town plan boundary, makes up the majority of the Advisory Committee members. In addition, this effort is informed by the City's 2008 General Plan. The Advisory Committee received presentations on Regional Transportation Projects and Plans, Existing Conditions Reports, Technical Studies, Archeology and Historic Surveys and an Economic Analysis. A Walk Audit was conducted in July 2011. The plan update effort for 2012 is focused on continued outreach and collection of public comments and producing land use alternatives by the fall of 2012. For that reason a Community Workshop will be held in September 2012. Beside the Land Use Element the plan will include Mobility, Urban Design, Historic Preservation, Recreation, Economic Prosperity and Noise Elements as well as a Public Facilities, Services and Safety Element. A draft plan is likely to be available in early 2013.

Midway Pacific Highway Corridor Community Plan Update

Midway Pacific Highway Corridor Community Plan Update – A comprehensive community plan update started in 2010 when the City Council authorized the update. The effort aims to reflect current conditions, improve mobility, including the pedestrian environment, and address

quality of life issues. A Community Plan Update Stakeholder Advisory Committee (Advisory Committee) was established as part of the plan update effort in November 2010. The Advisory Committee consists of diverse representation from residents, property owners, various business interests, local community organizations and not-for-profit groups, and participating public agencies within the plan update boundary. The Midway Pacific Highway Corridor Community Planning Group, which provides City decision-makers with input and recommendations regarding land use plans and development proposals within the Midway Pacific Highway Corridor plan boundary, makes up the majority of the Advisory Committee members. In addition, this effort is informed by recent community studies and the City's 2008 General Plan. The Advisory Committee received presentations on Regional Transportation Projects and Plans, Existing Conditions Reports, Technical Studies, Archeology and Historic Surveys and an Economic Analysis. A Walk Audit was conducted in July 2011. The plan update effort for 2011 and 2012 is focused on continued outreach and collection of public comments and producing land use alternatives by the fall of 2012. For that reason a Community Workshop will be held in September 2012. Beside the Land Use Element the plan will include Mobility, Urban Design, Historic Preservation, Recreation, Economic Prosperity and Noise Elements as well as a Public Facilities, Services and Safety Element. A draft plan is likely to be available in winter 2012. In May 2012 the City of San Diego was awarded an Urban Green Grant for the Midway Pacific Highway Corridor portion of the community plan area. The plan supports the State's planning priorities which include improving air and water quality, encouraging more infill and compact development, revitalizing community centers, promoting public health, improving transportation, planning for sustainability, and meeting AB 32 goals. The North Bay Urban Greening Plan proposes to create a network of green streets that would provide enhanced recreational opportunities by creating linkages among activity centers, parks and open spaces, and improve multi-modal mobility.

Environmental Review Process Amendments

During FY 2012, there were no amendments to the City's environmental review process.

Development Project Approval Process Amendments

During FY 2012, there were no amendments to the City's development project approval process.

Development Project Requirements Amendments

During FY 2012, there were no amendments to the City's development project requirements. However, the City developed a draft Groundwater Discharge Policy. The purpose of this policy is to provide guidance on proper disposal of groundwater discharges covered under the Groundwater Discharge NPDES permits and similar subterranean flows that are not covered under the NPDES permit. The goal of this policy is ensure that only authorized groundwater discharges are allowed into the City's conveyance system and to minimize subsurface nuisance flows, ultimately reducing storm water pollution. This policy will be finalized and implemented during the FY 2013 reporting period.

Land Development Code

On April 23, 2012 the Amendments to the Land Development Code (LDC) Environmentally Sensitive Lands (ESL) Regulations consisting of clarifications to the development regulations outside of the Coastal Overlay Zone pertaining to wetlands in the following three sections of the LDC: Development Regulations for Sensitive Biological Resources (Section 143.0141); Deviations from the Environmentally Sensitive Lands (ESL) Regulations (Section 143.0150); and the Biology Guidelines in the Land Development Manual (LDM) were adopted (Resolution numbers R-307376 and R-307377/Ordinance Number O-201161).

The new language provides clarity to the sections of the LDC pertaining to the deviation findings for impacts to wetlands for three scenarios – Essential Public Project Option, Economic Viability Option, and Biologically Superior Option. The Essential Public Project Option provides a wetland deviation in order for the City to carry out a range of public facilities and infrastructure projects including, but not limited to, specific design/construction projects, maintenance of existing infrastructure, and projects initiated by the City to meet state and federal regulatory requirements. The Economic Viability Option would allow a deviation only for circumstances not of the applicant's making. The proposed amendments provide criteria for the preparation of an economic analysis. The existing wetland regulations do not allow consideration of a biologically superior option to mitigate impacts, and therefore the preservation of low quality wetlands with little or no long-term biological benefit can currently occur as mitigation. However, a deviation from the LDC under the proposed Biologically Superior Option may be warranted if an alternative project or design achieves a superior biological result. The revisions to deviation findings will better meet the needs of the community while maintaining a net improvement to wetland resources.

LID Design Manual

During FY 2012, the City completed the draft LID Design Manual. The City's Storm Water Division plans to have City staff evaluate and apply the draft LID Design manual to City projects in order to obtain feedback in the trial implementation of the draft LID Design Manual.

2.2.2 Table 2-1 Items No. 2 and No. 4

The City has two departments that are responsible for ensuring that all projects undergo the development process to determine appropriate BMPs: Development Services Department (DSD) and Engineering & Capital Projects (ECP).

Both ECP and DSD confirm that all projects within their purview went through the urban runoff approval process to determine the applicable project requirements. The projects (standard and priority development projects) also included the appropriate SUSMP BMPs for their priority levels. ECP and DSD track their projects and the applicable urban runoff information in proprietary databases, P6 and PTS, both of which can be downloaded to Excel for analysis.

2.2.3 Table 2-1 Items No. 7, No. 8, No. 10 and No. 13

Treatment Control BMP Inventory

The City's Storm Water Pollution Prevention Division (SWPP) maintains an inventory of both private and municipal Treatment Control Best Management Practices (TCBMPs). Results of both the annual maintenance self-verification program and maintenance verification inspection program are discussed below. As noted in previous annual reports, SWPP has found that many of the projects that were originally placed in its TCBMP tracking database are standard projects (not Priority Development Projects), and other projects have been found to have missing BMPs. SWPP continued its investigation of these issues, and further information about research and enforcement actions taken in FY 2012 is provided in subsequent sections.

The City's inventory includes two groups of projects:

1. Projects that can be inspected – Projects that can be inspected have been visited and confirmed to have TCBMPs on site or have not been visited but have BMPs clearly shown on drawings.
2. Projects that at present cannot be inspected - Projects that do not have BMPs shown on drawings, projects for which clear drawings have not been located to date, and projects

that have been visited and found to not have BMPs installed are classified as not-inspectable.

A complete list of inspectable projects is provided in the FY 2012 TCBMP Inspection Inventory (**Appendix C**). The inventory is annually updated by adding projects with approved TCBMPs. The Construction and Development Standards Section obtains a list of approved private projects from the Development Services Department (DSD) on a monthly basis and an update from the Engineering and Capital Projects Department (ECP) when a Capital Improvement Project (CIP) project completes construction. The inventoried projects are then prioritized for inspection.

In FY 2013, the City will conduct a quality control review of its permitted TCBMPs to ensure that its inventory accurately reflects the types of BMPs that have been constructed. The review will also analyze the use of BMPs with various levels of effectiveness in combination with one another (e.g., treatment train) as opposed to stand alone treatment.

Private Development Treatment Control BMPs

Annual Maintenance Verifications Results (Private Development)

During the FY 2012 reporting period, 604 private projects were mailed routine annual operation and maintenance self-verification forms instructing the responsible party to verify that adequate maintenance of their TCBMPs had been performed. Responsible parties provided a response for 567 (94%) projects.

Notable increases in maintenance self-verification response rates have been observed in each of the years since the program was first implemented in FY 2009 (summer 2008), which reflects improvements in both SWPP's approach and in responsible parties' maintenance programs. Historical response rates from all four years that the self-verification mailing has been conducted are presented in Figure 2-1 below.

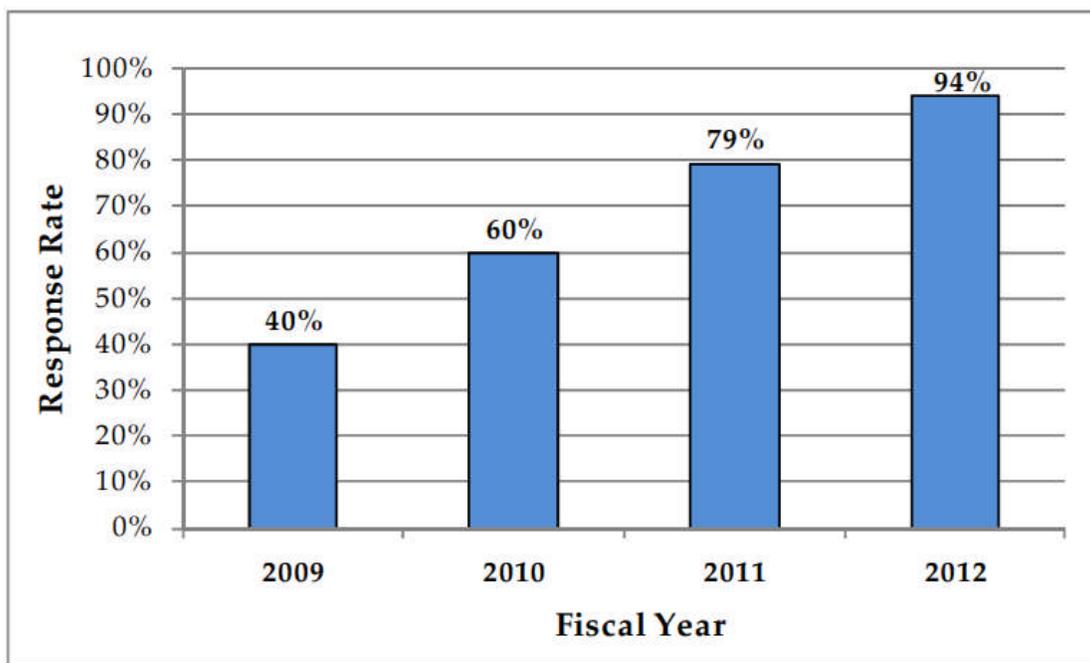


Figure 2-1: Maintenance Self-Verification Response Rates for Private Projects

Annual Verification Procedure (Private Development)

FY 2012 marked the fourth year that City conducted its mail-based, annual maintenance self-verification program. The mailing contained the following documents:

- Cover letter explaining the BMP inspection and maintenance self-verification program
- BMP inspection and maintenance information sheet
- Database-generated maintenance self-verification form

The first round of mailings was sent in early August 2011. If mailings were returned by the U.S. Postal Service as undeliverable or the recipient reported that they were not the responsible party, the City's inspection consultant researched additional project contacts and resent the mailing packet. Projects that did not respond to the first mailing were mailed a second form in late August 2011. If the responsible party failed to respond to two separate mailings, the project was placed into one of two categories. Some projects were visited by the City's inspection consultant, and projects that failed inspection were subject to the standard follow-up and enforcement procedures associated with inspections. The remaining projects were assigned to a SWPP inspector, who called the responsible parties of each project and instructed them to submit the maintenance self-verification form directly to him. If the responsible party failed to complete and submit the form, the SWPP inspector conducted an inspection of the project and issued an Administrative Citation if any maintenance deficiencies were observed. Further information regarding these enforcement actions is provided in 2.2.7.

Inspections (Private Development)

There were 587 total private development projects inventoried in the City's database during FY 2012. Note that this number is smaller than the number of projects that were sent a maintenance self-verification form at the beginning of the year, because it only includes projects that could be inspected as of the end of FY 2012. As discussed above, this includes all projects that have been visited and confirmed to have TCBMPs on site or have not been visited but have BMPs shown on development plans. Out of the 587 sites, 240 private sites were inspected for TCBMPs to evaluate maintenance and operation effectiveness, which is 41 percent of the total private inventory. There were 395 total private development projects with drainage inserts inventoried in the City's database during FY 2012. Out of these 395 sites, 208 private sites were inspected for TCBMPs to evaluate maintenance and operation effectiveness for their drainage inserts, which is 53 percent of the total private inventory.

Follow-Up Inspections

Of the 240 private projects that were inspected, 89 had a BMP with a maintenance deficiency and required follow-up action. The City issued Notices of Deficient Maintenance (NODMs) to these projects, requiring them to perform all necessary maintenance to resolve the deficiencies observed during inspection and to submit documentation of these activities. A total of 80 NODMs were issued in FY 2012. The other nine projects demonstrated maintenance was conducted and submitted sufficient documentation to the City prior to NODMs being issued.

Of the 80 projects that received NODMs, 62 projects ultimately submitted documentation that demonstrated all necessary maintenance had been performed. Eighteen projects did not submit documentation or adequate documentation to demonstrate appropriate maintenance was conducted. SWPP contacted the responsible parties of 16 of these projects by phone and later performed follow-up inspections. Fifteen of the 16 projects had resolved all issues by the time of the follow-up inspection. The remaining project (of 16) had unresolved deficiencies and was issued an Administrative Citation. Although not a part of the FY 2012 reporting period, SWPP is

continuing to coordinate with the responsible parties of the remaining two projects¹ (of the 18 that did not submit documentation) to ensure the necessary maintenance is conducted. Further information about enforcement cases is provided in Section 2.2.7.

Municipal Treatment Control BMPs

Annual Maintenance Verifications Results (City Owned)

The Municipal Permit requires annual verification of operation and maintenance of municipal TCBMPs. Annual verification must be provided by the City department responsible for TCBMP maintenance and submitted to the Storm Water Department prior to the start of the rainy season (October 1st).

As of the beginning of the fiscal year, there were 35 municipal projects on the inspection inventory. Maintenance verification forms were sent to all of these projects, and all 35 completed and returned the form. At the beginning of the fiscal year there was one additional project for which there was conflicting information regarding whether the maintenance responsibility belonged to the City or to a private party. SWPP investigated this project during FY 2012 and determined that City staff would be responsible for maintenance. This determination was not made until the second half of the fiscal year, so no maintenance verification form was sent during FY 2012. A maintenance verification form will be sent for this project in FY 2013.

Inspections (City Owned)

There are 36 municipal projects on the TCBMP inventory, 15 of which have drainage inserts. During FY 2012, SWPP conducted a routine inspection of one of these projects with drainage inserts. No maintenance deficiencies were observed during this inspection.

Follow-Up Inspections

There were eight municipal projects that had unresolved maintenance deficiencies at the end of FY 2011. At the beginning of FY 2012, the deputy director of the Storm Water Division sent letters to the deputy directors of the departments responsible for the maintenance of these BMPs. The letter instructed the responsible departments to submit documentation to SWPP demonstrating that the appropriate maintenance had been performed. Documentation was submitted for seven of the eight projects. SWPP conducted a follow-up inspection at the final site to investigate the damaged BMP. A Storm Water Division Inspector evaluated the site and prepared a detailed report. The report was sent to management of the Park and Recreation Department and follow-up on this issue is continuing in FY 2013. Further information will be provided in the FY 2013 JURMP Annual Report.

2.2.4 Table 2-1 Item No 14

The City has two departments that provide verification that BMPs are constructed prior to occupancy as required in the Municipal Permit, DSD and ECP. Each department has its own method of confirming the construction of the post-construction BMPs prior to giving building occupancy. DSD has a checkbox on its project inspection forms to flag when post-construction BMPs are adequately constructed. As previously reported, private projects with Building Permit-Only are assigned to landscape inspectors to ensure that BMP construction is verified. ECP uses their standard method of inspection to ensure that what is shown and approved on the project plan set is what is constructed in the field, prior to approving the final project condition.

¹ During the FY 2013 reporting period, the Cabrillo Point Loma Homeowners Association Board is expected to approve the budget to replace/repair the non-compliant TCBMPs. The Contractor's Warehouse Site No. 004 submitted adequate documentation to demonstrate compliance with NODM.

2.2.5 Table 2-1 Item No. 17

The City of San Diego chairs an HMP Technical workgroup that is intended to improve the quality and consistency of HMP implementation amongst the regional Copermitees. Completed work products of the workgroup include an independent third party review of the San Diego Hydrology Model and Brown & Caldwell BMP Sizing Calculator, a Sizing Calculator Methodology Report, and clarification of various technical issues. Four meetings of this workgroup were held during the reporting period. Additionally, the City of San Diego chairs an HMP Monitoring workgroup and has led biweekly meetings since January 2012.

2.2.6 Table 2-1 Item No. 18

Table 2-2: FY 2012 List of Development Projects Required to Meet HMP

Project ID	Project Name	Hydrologic Control Measures Implemented
257379	JHA Residence	Bioretention Basin
262956	Petty New SDU	Two Flow Through Planters
264538	White-Nydahl Residence	Two Bioretention Basins
272632	Twelve on Alabama	Bioretention Basin
273290	Elmer Residence	Four Bioretention Basins
Soo839	Genesee Ave – Widen I-5 Crossing	Bioretention Basin
Soo870	Old Otay Mesa Rd – Westerly	Bioretention Basin

2.2.7 Table 2-1 Item No. 21

During FY 2012, enforcement actions were taken for the following types of violations:

- Failure to install BMPs proposed on plans or installation of ineffective BMPs
- Failure to respond to the annual self-verification mailing
- Failure to resolve maintenance deficiencies observed during inspections

Table 2-3: FY 2012 Treatment Control BMP Enforcement Actions Taken

Type of Enforcement	Number of Actions
Administrative Citation	3
Civil Penalty Notice	4

As discussed in the previous year’s report, the City issued Civil Penalty Notices during the second half of FY 2011 to projects with missing or ineffective BMPs. During FY 2012, both SWPP and DSD continued to work with property representatives that received these notices to resolve the outstanding issues. Furthermore, in January 2012, the City issued Civil Penalty Notices to four additional projects with missing and ineffective BMPs. In total, 144 Civil Penalty Notices were issued during the last two fiscal years, and 125 of these cases have been resolved.

Projects that failed to respond to the annual maintenance self-verification mailing were inspected later in the fiscal year and were subject to standard enforcement protocol. If any maintenance deficiencies were observed during a routine inspection by the City’s inspection consultant, SWPP sent correction notices to the responsible party. Responsible parties were required to provide documentation demonstrating that the necessary maintenance had been performed. Projects that failed to submit sufficient documentation received a follow-up inspection by a SWPP inspector, and any unresolved deficiencies during this inspection resulted in an Administrative Citation which included a \$250 fine. SWPP issued three such

Administrative Citations. One of the three projects has submitted documentation demonstrating that all necessary maintenance has been performed.

2.2.8 Table 2-1 Item No. 22

The City made the following improvements to its treatment control BMP program during FY 2012:

- 1) In an effort to inspect projects on the inventory that had never been inspected before, the City performed additional inspections beyond the normal annual requirements of the Municipal Permit. As of the end of FY 2012, 95% of the projects on the inspection inventory have been inspected at least once.
- 2) SWPP improved follow-up and enforcement procedures and began issuing Administrative Citations to projects that failed follow-up inspections. As a result of these adjustments and the City's continued efforts, the City had an improved response rate of 94% for private maintenance verification forms. This response rate has increased during each of the last three fiscal years. In addition, the program saw a decrease in the percentage of BMPs that were found to have maintenance deficiencies during routine inspections. Deficiencies were noted in 25% of the BMPs inspected in FY 2012, whereas this number had been 32% during the previous fiscal year.

3 CONSTRUCTION

3.1 PROGRAM IMPLEMENTATION

Table 3-1 represents the City of San Diego’s FY 2012 implementation of the Construction component as it relates to the requirement of the Municipal Permit. Where reporting requirements necessitate information that is not easily tabularized, references are made in the table to locations where the information, or explanations, is located. During FY 2012, the City was compliant with all elements of Section D.2 of the Municipal Permit.

Table 3-1: Construction Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	Confirmation that all construction sites were required to undergo the Copermittee’s construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	Confirmed – See Section 3.2.1 below for descriptions
2	Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	Confirmed – See Section 3.2.2 below for descriptions
3	A description of modifications made to the construction and grading ordinances and approval processes.	See Section 3.2.3 below
4	Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	Confirmed
5	Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	Confirmed – See Section 3.2.4 below
6	A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	Since the advanced treatment requirements took effect, no projects have triggered these requirements

Item No.	Program Implementation Description	Confirmation and/or result
7	For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	See Appendices D and E
8	A description of the general results of the inspections.	See Section 3.2.5 below for description
9	Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	Confirmed – See Sections 3.2.5 and 3.2.6 below for additional information
10	The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	See Section 3.2.6 below
11	A description of notable activities conducted to manage urban runoff from construction sites	See Section 3.2.7 below

3.2 DISCUSSION SUPPORTING TABLE 3-1

3.2.1 Table 3-1 Item No. 1

There are two departments responsible for implementing the construction urban runoff approval processes: ECP is responsible for planning, design and construction of all of the City's CIP projects; DSD is responsible for reviewing construction and development projects for private development in the City.

During FY 2012 ECP confirms that all ECP project managers of CIP projects were required to incorporate the construction requirements set forth in the *Storm Water Standards Manual*. The requirements are incorporated into the project specifications and plans prior to approval in order to fund the construction of the project. ECP tracks their projects using an internal database, P6, which can be exported to Excel tables.

Standard drawings were also used in conjunction with project specific drawings where appropriate. Drawings were routed internally (within the design sections) as a "peer plan check" to ensure adequate inclusion of construction BMP measures.

Private projects were reviewed by DSD staff to ensure conformance to Chapter IV of the *Storm Water Standards Manual* prior to issuance of any construction permits. During FY 2012 DSD confirms that all applicable projects were required to incorporate construction BMPs on the project plans. DSD utilizes Project Tracking System (PTS) to track projects within their system.

3.2.2 Table 3-1 Item No. 2

During the reporting period, both ECP Field Engineering and DSD Inspection Services confirm that a regularly updated construction site inventory was maintained.

Field Engineering used a Storm Water tracking database developed during previous reporting periods to track its inventory. Field Engineering began using the database in October 2010.

DSD maintained an inventory of construction permits in Project Tracking System (PTS). The system was updated as new permits were issued or closed out. The building inspectors also provided updates to this inventory based on site inspections.

3.2.3 Table 3-1 Item No. 3

During the reporting period, the City modified its construction and grading approval processes for smaller private projects and public capital projects. A "Minor Water Pollution Control Plan (MWPCP)" template has been developed to ensure smaller private projects adhere to the Storm Water Standards Manual regarding construction site BMPs. Additionally, the Storm Water Requirements in the 2012 Edition of the City's Standard Specifications for Public Works Construction (WHITEBOOK) were updated as part of a general update to the WHITEBOOK. There were no new requirements introduced and the change did not impact the approval process. The update was included to enhance the requirements and improve clarity of the requirements.

3.2.4 Table 3-1 Item No. 5

ECP Field Engineering confirms that the City's grading limitation requirements were applied to all applicable projects during the rainy season. Under the City's grading limitation, project

applicants have an option of Phased Grading not to exceed five (5) acres of active grading at one time or the implementation of additional BMPs. If a project applicant/contractor elects to grade more than five acres at one time, a Weather Triggered Action Plan (WTAP) along with BMP Implementation Plan (BIP) are required.

3.2.5 Table 3-1 Item No. 8

3.2.5.1 Field Engineering

Construction sites are required to be inspected based on the frequency schedule set forth in the City's 2008 JURMP. In general, the Resident Engineers (REs) inspected and issued Storm Water Notices as-needed in the dry season, and at least bi-weekly in the rainy season for high priority projects. Medium projects are inspected monthly during the rainy season and as-needed during the dry season. Low priority projects are inspected on an as-needed basis during both the rainy and dry seasons. A copy of the Storm Water Notice is provided to the contractor and one is filed with the project.

Appendix D lists all of the construction projects active during the reporting period and the following corresponding information on a project by project basis:

- City Work Order Number
- Project Location
- Storm Water Priority (Inspection Frequency)
- # of weeks active in the Rainy Season
- # of inspections in Rainy Season
- # inspections in Dry Season
- Total # of inspections for the site during the reporting period

During FY 2012, 247 Field Engineering construction sites were in the active construction phase: 40 high priority sites; 41 medium priority sites; and, 166 low priority sites. In total, the Field Engineering Division conducted 1,628 documented storm water inspections throughout the reporting period.

The following is a summary table of the number of high, medium and low priority projects and the inspections conducted at each type.

Table 3-2: FY 2012 ECP Field Construction Inspection Summary

Inspection Item	No. of Sites
High Priority Sites Receiving Required No. of Inspections	40 of 40
Medium Priority Sites Receiving Required No. of Inspections	41 of 41
Low Priority Sites Receiving Required No. of Inspections	166 of 166

In general, the FY 2012 inspections resulted in compliant construction sites. Due to the size of the City and the number of projects that are on-going in any given year, inspection results are widely variable. Common corrections needed after review by the City include:

- Maintaining Construction Exit/Entrances
- Dust Control
- Inadequate or poorly maintained silt fence
- Inadequate or poorly maintained erosion control

In order to ensure that all required inspection steps were performed to review for compliance, the City used a standardized process for all inspections. If compliance was not observed, enforcement actions ensued. As required by the JURMP, all inspections at a minimum included:

1. A check for coverage under the General Construction Permit (Notice of Intent (NOI) and/or Waste Discharge Identification No.) during initial inspections;
2. Assessment of compliance with the Construction Storm Water BMP Performance Standards located in Chapter IV of the *Storm Water Standards Manual* (and enforceable by San Diego Storm Water Management and Discharge Control Ordinance (“Storm Water Ordinance”) Section 43.04, et seq.);
3. Assessment of BMP effectiveness;
4. Visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff;
5. Education and outreach on storm water pollution prevention, as needed; and
6. Creation of a written inspection report.

3.2.5.2 Inspection Services

Building Inspectors in DSD’s Inspection Services Division inspect construction BMPs associated with projects performing construction under building permits. The Inspection Services Division of DSD inspects building sites routinely for compliance with storm water requirements. Each inspector routinely monitors his/her district on a daily basis. Sites are also inspected at the request of another department or in response to complaints. The Inspection Services Division utilizes a special Storm Water Correction Notice that is issued when corrections pertaining to storm water pollution prevention are needed to notify the contractor/owner that improvements must be made immediately. For more egregious or repeat issues, inspectors have been trained to issue re-inspection notices, which effectively stops work on the site until the corrections are made and the site is re-inspected. If the owner/contractor fails to comply with a Storm Water Correction Notice issued for their site, Inspection Services staff will determine what further action is necessary.

During FY 2012, 9,830 building permits were active. (i.e., issued and/or with an open permit that has not been finalized). In total, including Building, Electrical, Plumbing and Mechanical Permits, the Inspection Services Division conducted 30,996 wet weather inspections and 25,625 dry weather inspections for a total of 56,621 inspections throughout the reporting period.

Appendix E lists all of the building permit construction projects active during the reporting period and the following corresponding information on a project by project basis:

- City Permit Number
- Project Title
- Inspection Frequency Priority (where applicable)
- # of weeks active in the Rainy Season (active means the permit is open, not necessarily that construction activities were occurring)
- # of inspections in Rainy Season
- # inspections in Dry Season
- Total # of inspections for the site during the reporting period

DSD Inspection Services confirms that inspection frequencies were met with respect to inspections performed by DSD-IS at all 49 of its high priority sites and all 156 of its medium priority projects.

Many of the permits that are still active were initiated prior to the City assigning a priority to projects. The City has performed storm water inspections at these sites as well as on a normal callout basis – i.e., when a regular building inspection is called for, the inspector performs a storm water inspection as well as the trade (plumbing, electrical, etc.) inspection.

3.2.5.3 Public Utilities Department Wastewater Branch

The Public Utilities Department Wastewater Branch conducts construction inspections of its capital improvement projects. During the reporting period, Public Utilities Department Wastewater Branch had 13 active low priority projects. Table 3-3 below, provides a summary of Public Utilities Department Wastewater Branch’s construction projects:

Table 3-3: Public Utilities Department Wastewater Branch FY 2012 Construction Project Summary

Project Number/Name	Inspection Priority	# of weeks active during the rainy season	# of inspections during the rainy season	# of inspections during the dry season
Phase H-1 Sewer Rehab	Low	None	None	4
1621 Hotel Circle South Emergency	Low	None	None	1
SD Mission Rd. MH 111 Emergency	Low	None	None	10
Hillside Drive Spot Repair	Low	1	1	0
East Tecolote Area C Repair	Low	3	2	0
Pump Station 65 Condition Assessment	Low	1	2	0
Pump Station 64 Sewer Spill Emergency	Low	None	None	16
Revilla Way Sewer Spot Repair Emergency	Low	1	None	N/A
Otay River Sewer Path Maintenance	Low	None	None	1
Washington Creek Canyon Sewer Spot Repair Emergency	Low	None	None	2
Euclid and Menlo Emergency Pipe Repair	Low	None	None	2
10th Ave. Emergency Sewer Repair	Low	1	2	N/A
Mimulus Way Sewer Spot Repair Emergency	Low	None	None	1

3.2.5.4 Public Utilities Department Water Branch

The Public Utilities Department Water Branch conducts construction inspections of its capital improvement projects. During the reporting period, Public Utilities Department Water Branch had 23 active low priority projects. Table 3-4 provides a summary of Public Utilities Department Water Branch’s construction projects:

Table 3-4: Public Utilities Department Water Branch FY 2012 Construction Project Summary

Project Number/Name	Inspection Priority	# of weeks active during the rainy season	# of inspections during the rainy season	# of inspections during the dry season
Chollas Creek Emergency Water Pipe Protection	Low	None	None	8
3625 Federal Blvd Water Main Break (WMB)	Low	3	4	None
869 San Antonio Pl WMB	Low	None	None	2
901 West A St. WMB	Low	None	None	1
1731 Kettner Blvd WMB	Low	1	1	None
2275 Snead Ave. WMB	Low	1	1	None
2691 B St. WMB	Low	1	1	None
3125 Mission Rd. WMB	Low	1	2	None
3525 Bayside Lane WMB	Low	1	1	None
3560 Shawnee Road WMB	Low	1	1	None
3910 Manzanita Dr WMB	Low	None	None	2
4519 Myrtle Ave. WMB	Low	1	1	None
6642 Langston St. WMB	Low	1	1	None
7100 Camino Santa Fe WMB	Low	1	1	None
7790 Via Capri WMB	Low	None	None	1
Cushman Ave. and Morena Blvd. WMB	Low	1	2	None
N. Euclid Ave. & Lise Ave. WMB	Low	1	1	None
Lakeside Ave. WMB	Low	1	7	None
Mission Gorge Pl. WMB	Low	None	None	2
Montezuma and Yerba Santa WMB	Low	1	1	None
1801 Alta View WMB	Low	None	None	2
Elketon Blvd and Paradise Valley Rd WMB	Low	None	None	1
Sorrento Valley Blvd & Rd WMB	Low	None	None	1

3.2.6 Table 3-1 Item No. 10

Several departments conduct their own construction inspection and enforcement for construction projects that are managed by their departments. These departments include:

- 1) Engineering Capital Projects – Field Engineering Division
- 2) Development Services Department – Inspection Services Division
- 3) Public Utilities Department – Wastewater Branch
- 4) Public Utilities Department – Water Branch

Departmental inspection staff coordinates corrective actions and other enforcement directly with the responsible parties (e.g., contractors, owners, etc.). Table 3-5 below, provides a summary of the corrective notices and notices of violations issued by the inspection staff through their regular and follow-up inspections.

Table 3-5: FY 2012 Corrective Actions Summary by Department

Department Conducting Inspections	Number of Corrective Notices Issued
ECP – Field Engineering Division	293
DSD – Inspection Services Division	114
Public Utilities Department Wastewater Branch	0
Public Utilities Department Water Branch	2

In FY 2012 13 stop inspections were issued by Inspection Services Division at construction sites. The stop work orders are listed in the following table.

Table 3-6: FY 2012 Stop Work Notices

Department Conducting Inspections	Project Title	Number of Stop Inspection Notices Issued
DSD – Inspection Services Division	Sports Arena Shopping Center	1
DSD – Inspection Services Division	Fakhimi Addition	1
DSD – Inspection Services Division	Keating St Duplex - Bldg# 1	4
DSD – Inspection Services Division	Shayan SFD	2
DSD – Inspection Services Division	Gullberg: New SFD	3
DSD – Inspection Services Division	1356 Virginia Way / New SFD	1
DSD – Inspection Services Division	99 Cents Only Stores	1

In addition to the enforcement actions taken by the departmental inspection staff, the Storm Water Division conducts investigations and enforcement at construction sites for potential pollutant discharges. The Storm Water Division operates a hotline as well as other means of communication (e.g., website, main office line, and fax) to encourage the reporting of illegal discharges to the storm water conveyance system from locations within the City, including construction sites. The Storm Water Division conducted investigations at 140 different locations where there was construction related material waste in FY 2012 ([Appendix F](#)). As a result of the investigations conducted, the enforcement actions summarized in Table 3-7 were taken. The number of enforcement actions taken may be higher than the number of locations investigated because some locations may have received multiple enforcement actions. Investigations where no responsible party could be identified after a thorough investigation resulted in a “no action taken” classification and the discharge was abated and if necessary cleaned up by the City. Furthermore, code enforcement staff provided educational materials for all investigations where an enforcement action was taken.

Table 3-7: FY 2012 Code Compliance Enforcement Actions for Sites of Construction Activities

Type of Enforcement Action	Number of Actions
Administrative Citation	53
Education	13
Found to be Exempt	2
Letter	2
No Action Taken	25
No Evidence Found	2
Notice of Violation	43
Referred to another Department	10
To be Determined	10
Total	160

In order to achieve compliance, 74 of the 140 locations had follow-up visits conducted by the by the Storm Water Department’s Enforcement and Inspections Group during FY 2012.

Through the investigations, enforcement, and follow-up activities compliance was achieved at 130 of the 140 locations in FY 2012. The remaining ten (10) locations were either reported/ investigated toward the end of June 2012 or the cases are still noted as active rather than complete in the City’s database due to processing data or additional review or follow-up². These locations will be included in the FY 2013 JURMP Annual Report.

3.2.7 Table 3-1 Item No. 11

During the reporting period, the City conducted several notable activities related to the management of construction sites, including:

- 1) ECP-Field upgraded the Storm Water Pollution Prevention inspection tracking system it uses to collect data about the storm water compliance to provide notice to the division's inspectors when the next scheduled inspection would be due on any given project by reporting the number of days remaining before the next scheduled inspection opportunity would lapse.
- 2) DSD staff systematically reviewed over 5,700 permits that did not list Storm Water Priority Tags³. They were able to cancel, complete or verify these permits were still active. As a result, several thousand Projects were closed this past fiscal year. However, those permits which were still active remain in PTS and will be completed or cancelled as time progresses.
- 3) The City evaluated its overall enforcement responsibilities and redistributed them across several departments. The following page shows the distributions of these enforcement responsibilities.

² In the FY 2011 JURMP Annual Report there was one pending JUR construction case. Compliance was achieved and the case was closed 7/2/2012.

³ These permits without Storm Water Priority Tags (also known as inspection priorities) are legacy permits that were in PTS prior to the City assigning Storm Water Priority Tags.

Figure 3-1: Construction Enforcement Responsibilities

STORM WATER CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPs) AND DISCHARGE ENFORCEMENT RESPONSIBILITIES				
ROLES	INSPECTION & ENFORCEMENT OF CONSTRUCTION BMPs		ENFORCEMENT FOR SW DISCHARGE*	ENFORCEMENT OF MUNICIPAL CODE
PERMIT TYPE	DSD - Building Construction & Safety Division	ECP - Field Engineering Division	T & SW - Storm Water Division, Code Enforcement	DSD - Neighborhood Code Compliance Division
Capital Improvement Projects (CIP)	None	YES	DISCHARGE ONLY*	None
Construction Permits (Grading or Right of Way)	None	YES	DISCHARGE ONLY*	None
Building Permit	YES	None	DISCHARGE ONLY*	None
Demolition Permit	YES	None	DISCHARGE ONLY*	None
Small Construction not requiring any Permit	None	None	DISCHARGE ONLY*	None
Abandoned Sites with Active Permits	YES for Building Permits and refer to DSD Engineering Section	YES for Construction Permits and refer to DSD Engineering Section	DISCHARGE ONLY*	None
Abandoned Sites with Expired Permits	None	None	YES**	YES
Illegal Construction (No Permit obtained)	None	None	DISCHARGE ONLY*	YES

*Report discharges to Think Blue Hotline at 619-235-1000.
 **Storm Water Division is responsible for enforcing Minimum BMPs per respective land use.

A change for the better begins with you - Think Blue.

4 MUNICIPAL

4.1 PROGRAM IMPLEMENTATION

Table 4-1 represents the City of San Diego’s implementation of the Municipal component as it relates to the Municipal Permit requirements during FY 2012. For any items in the table where an explanation, description, results, inventory, or examples are necessary, references are noted in the table, and are included as an Appendix, or are provided in Section 4.2. During FY 2012, the City was compliant with all elements of Section D.3.a. of the Municipal Permit with the exceptions of the specific issues identified below.

Table 4-1: Municipal Program Implementation

Item No.	Program Implementation Description	Confirmation and/or Result
1	Any updates to the municipal inventory and prioritization.	See Appendix G for inventory update and See Section 4.2.1 below.
2	Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	Confirmed. BMPs were required to be implemented per the JURMP Section 6.3.3.1.1, 6.3.3.1.2 and Sections 6.X.3.1.1 and 6.X.3.1.2 for each Department or Division.
3	A description of inspections and maintenance conducted for municipal treatment controls.	See Section 4.2.2 below
4	Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	Inventory =20,920 (See Section 4.2.3 below) Inspected =34,102 (all catch basins and inlets were inspected at least once during FY 2012 ⁴ and some inspected more than once) Catch basins found with accumulated waste exceeding cleaning criteria = 17,110 ⁵ Catch Basins/Inlets Cleaned =22,894 ⁶ (See Section 4.2.3 below)

⁴ All high priority catch basins and inlets were inspected at least once between May 1st and September 30th.

⁵ Since some catch basins are inspected more than once, this number includes some repeat catch basins found with debris.

⁶ While all catch basins found with accumulated waste exceeding the cleaning criteria were cleaned during FY 2012 some catch basins were cleaned more than once.

Item No.	Program Implementation Description	Confirmation and/or Result
5	Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	Total Distance of MS4=1,245 miles Distance of MS4 inspected = 2.84 miles at a minimum (The distance is most likely higher. However due to variability of the distance visually inspected at each cleanout/inlet the total distance is not formally tracked). Distance of MS4 found with accumulated waste = 2.84 miles Distance of MS4 Cleaned = 2.84 miles
6	Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	Open Channels = 39 miles Inspected = 9.66 miles (see Section 4.2.3 below) Distance found with anthropogenic litter = 1.61 miles Cleaned = 1.61 miles
7	Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	Catch Basins/Inlets and MS4 = 202 tons Open Channels = 37.83 tons
8	Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	None identified at this time.
9	Inspection at least once a year between May 1 and September 30 of each year for all MS4 facilities (catch basins, storm drain inlets, open channels, etc.) that receive or collect high volumes of trash and debris.	Yes - with the exception of 5 catch basins that were inspected 2 months prior to May 1 st .

Item No.	Program Implementation Description	Confirmation and/or Result
10	Inspect all MS4 facilities (catch basins, storm drain inlets, open channels, etc.) that do not receive or collect high volumes of trash and debris at least annually throughout the year.	Not all were inspected – See Section 4.2.3 below
11	Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	Confirmed. BMPs were required per the JURMP Section 6.3.3.1.2 and Sections 6.X.3.1.2, for each Department/Division
12	Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	1,384 curb-miles swept weekly
13	Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	313 curb-miles swept monthly
14	Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	3,540 curb-miles swept every other month
15	Identification of the total distance of curb-miles swept.	88,945 miles (See Section 4.2.4 below)
16	Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	Total Parking Lots =441
		Sweeping frequency = 1x per year (operation yards swept 1x per month)
		Parking Lots Swept = 428 (See Section 4.2.4 below)
17	Amount of material (tons) collected from street and parking lot sweeping.	5,727 tons

Item No.	Program Implementation Description	Confirmation and/or Result
18	A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	See Section 4.2.5 below
19	Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	# of Sites requiring inspections = 805 Inspection frequency = 2x per year Sites inspected 2x per year = 795 ⁷ (See Section 4.2.6 below for explanation)
20	A description of the general results of the inspections.	See Section 4.2.6 below
21	Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	Confirmed. Inspections implemented in accordance with the JURMP Sections 6.X.4.1 for each Department/Division
22	The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	See Section 4.2.7 below
23	A description of any efforts conducted to reduce pollutant discharges from non-emergency fire-fighting flows.	See Section 4.2.8 below
24	A description of notable activities conducted to manage urban runoff from municipal areas and activities	See Section 4.2.9 below

⁷ A Park and Recreation Department facility was newly constructed and added to the inventory in FY 2012. This facility was only required to be inspected one time due to it being under construction when the first inspection should have occurred.

4.2 DISCUSSION SUPPORTING TABLE 4-1

4.2.1 Table 4-1 Item No. 1

The City's municipal inventory is included as **Appendix G**. The City decided in FY 2012 to remove facilities associated with its Homeless Services Division from the municipal inventory. The City has agreements with operators of these two facilities that are responsible for implementing BMPs, similar to a commercial facility. The two facilities will be included in the commercial inventory and will be inspected under the industrial and commercial program in FY 2013.

4.2.2 Table 4-1 Item No. 3

The City's municipal Treatment Control BMP (TCBMP) inventory includes 36 constructed projects (**Appendix C**). The City department responsible for the maintenance of each municipal TCBMP performs inspections and cleanings of these BMPs on a routine basis. Please refer to Section 2.2.3 for more information on the inspection and maintenance of municipal TCBMPs.

4.2.3 Table 4-1 Item No. 4 and No. 10

The City has over 15,000 inlets and catch basins that are maintained by the Storm Water Division's Operation and Maintenance Group. The Operation and Maintenance Group did not categorize open channels into high, medium, and low priority in FY 2012. Therefore, during the reporting period there was approximately 29.34 miles of open channels that were not inspected. The Operation and Maintenance Group is ensuring appropriate measures are taken in future reporting periods to conduct the applicable prioritization, inspections, and cleanings.

In addition to the City's Storm Water Division's Operation and Maintenance Group maintenance of inlets and catch basins, various City departments or divisions that operate and maintain buildings are also responsible for inspecting and cleaning all storm drain facilities associated with their properties (approximately 2,606) as noted in Table 6.3.2 of the City's JURMP. During FY 2012, the Fire Department did not conduct cleaning of their catch basins (63) due to a change in staff. The new staff was unaware of the catch basin cleaning requirement during FY 2012. Once the issue was identified, the Fire Department deployed a contractor to clean the catch basins as a corrective action. The catch basins were cleaned July 26th & 27th, 2012. While the Police Department conducted inspections of all of their catch basins, there were 4 low priority catch basins with filters that contained debris. Due to budget constraints the 4 drains were not cleaned during FY 2012. The drains were cleaned under a new purchase order in the first quarter of FY 2013, and the Police Department is working to rectify the issue in future fiscal years.

4.2.4 Table 4-1 Item No.16

The City's Storm Water Division's Operation and Maintenance Group conducted street sweeping of improved roads, streets, and highways during FY 2012. While the City's high and low priority roads, streets, and highways were all swept at least two times per month and at least annually, respectively, in accordance with the Municipal Permit, there were some segments of high and low priority roads, streets, and highways that were not swept at the City's sweeping frequencies (high priority swept weekly; and low priority swept every other month). High and low priority road, street, and highway miles were occasionally missed due to crew members being on sick

leave, jury duty, etc. All medium priority roads, streets, and highways were swept at the City's sweeping frequencies during FY 2012.

The City maintains 441 parking facilities, which also includes operation yards. During FY 2012 the Public Utilities Department, Water Operations Branch, did not conduct sweeping in twelve parking lots and one operation yard due to lack of staffing. The Water Operations Branch is working on a course of action for FY 2013 to resolve the issue.

4.2.5 Table 4-1 Item No. 18

The Public Utilities Department, Wastewater Branch currently maintains over 3,000 miles of City sewer main line with over 250,000 service connections. During FY 2012, the department conducted field inspections and televised sewer lines, which can reveal blockages from debris to roots to grease and show pipeline cracks, breaks, or deterioration. Through proactive maintenance, spills or leaks to the storm drain system were minimized.

In FY 2012, the Wastewater Branch reduced the number of sewer spills, and helped to protect storm water quality by inspecting or televising 67 miles, repairing or performing maintenance on 0.5 miles, and cleaning 2,060 miles of sewer lines. These efforts helped to prevent and eliminate sewer spills and the potential for sewer infiltration to the storm drain system in FY 2012. Further discussion on sewer spills will be included in the City's Illicit Discharge Detection and Elimination Section which will be submitted by December 15, 2012.

The Wastewater Branch also continues to implement the Grease Disposal Program to prevent sewer line blockages and resulting spills caused by the disposal of grease into the sewer system. The program aims to educate residents and businesses on the proper disposal alternative for fats, oils and grease.

4.2.6 Table 4-1 Item No. 19 and No. 20

Municipal Facility Inspections

During FY 2012, the City of San Diego conducted a total of 1,599 inspections of municipal facilities. The City has a significant inventory of municipal facilities, and, through the efforts of dedicated staff, over 99% of the inventory received the JURMP required number of inspections (twice per year) during FY 2012. Out of the 805 facilities 795 facilities were inspected two times at the City's required frequency during the reporting period. For the 10 facilities that did not have two inspections within the City's required inspection frequency, there were five facilities where the pre-rainy season inspections were not conducted by the General Services Department's Facilities Division. This was a result of staffing changes with the Facilities Division. The responsibility for conducting facility inspections has been transferred to staff that will be responsible for ensuring the inspections are conducted in FY 2013. Homeless Services did not conduct inspections of one of their facilities. Similar to READ managed facilities Homeless Services will no longer be listed as municipal facilities. Homeless Services will be included under the commercial inventory in FY 2013 and inspected under that program. There were also three Department of Park and Recreation facilities that did not receive their second inspections within the January to April timeframe. Rather, they were inspected in June 2012. The other facility that did not receive a pre-rainy season inspection was a Park and Recreation facility that is new to the inventory and was under construction and was not open before the rainy season.

In addition to the steps individual departments are taking to ensure that inspections are conducted in accordance with the City's JURMP, the Storm Water Division sent out a

memorandum to all departments in September 2011 reminding staff of the inspection requirements for municipal facilities. The Storm Water Division plans to send out this memorandum annually. The Storm Water Division will also coordinate meetings with the Department's Storm Water liaisons and specifically discuss this issue, among others.

The majority of municipal facilities inspected during FY 2012 did not have any storm water issues. The facilities where issues were noted typically included missing trash can lids due to theft, broken sprinkler heads, overgrown landscape, vegetation on ground, and catch basins needing cleaning. These issues were followed-up and corrected by replacing trash can lids where applicable, repairing sprinkler heads, trimming landscape, removing vegetation on the ground, and cleaning catch basins. Inspection forms are available upon request.

Special Event Inspections

During FY 2012, the Office of Special Events issued 333 city-wide special event permits for a total of 1,000 event dates and required Special Event BMPs to be implemented at special events, as applicable. In addition the Office of Special Events continued to refine written materials provided to applicants including the permit application questions and published operational support guidelines. Strategies that have been successfully used by event organizers are shared with other applicants at City production meetings and training meetings.

The Office of Special Events inspected the San Diego Sicilian Festival in Little Italy and no deficiencies were noted during the inspection. The inspection form is on file at the City and can be provided upon request.

Other Departments also issue event permits for events that are not classified as a special event by the Office of Special Events. Though these events are not considered "special event" according to the City's Municipal Code, they do follow the special event requirements in the Municipal Permit. During FY 2012, the Park and Recreation Department issued more than 5,000 event permits, the Public Utilities Department, Water Operations Branch issued eight (8) event permits, and Qualcomm Stadium issued 76 event permits. The Park and Recreation Department, Qualcomm Stadium, and the Public Utilities Department, Water Operations Branch all required BMPs to be implemented at the events, as applicable. While inspection forms are not utilized, it is the Park and Recreation Department's practice to visit every site at the conclusion of the event and report any issues noted to the Storm Water Division. The Public Utilities Department, Water Operations Branch conducted inspections of all eight (8) events, and Qualcomm Stadium inspected one (1) of the events. There were no deficiencies noted during event inspections in FY 2012. Inspection forms for Qualcomm Stadium and the Public Utilities Department, Water Operations Branch are available upon request.

4.2.7 Table 4-1 Item No. 22

In FY 2012, Storm Water Division Code Compliance Officers conducted investigations of potential discharges associated with municipal land uses, facilities, or activities at 41 locations (**Appendix F**). This total is representative of all investigations on City properties including municipal facilities, parks, parking lots, and rights-of-way regardless of who generates the discharge. As a result of the investigations conducted by the Storm Water Division Enforcement and Inspections Group, the following enforcement actions were taken as shown in Table 4-2.

Table 4-2: FY 2012 Municipal Facilities and Activities Enforcement Actions Taken

Type of Enforcement Action	Number of Actions
Education	3
Found to be Exempt	1
Letter	2
No Action Taken	17
No Evidence Found	4
Notice of Violation	6
Pending ⁸	5
Referred to another Department	3
Total	41

Investigations where no responsible party could be identified after a thorough investigation were classified as “no action taken” resolutions. These discharges, created by unidentified parties, were most often abated and cleaned up by the City. Furthermore, code enforcement staff provided educational materials for all investigations except when no action was taken or no evidence was found.

In order to achieve compliance, 12 of the 41 locations had follow-up visits conducted by the Storm Water Department’s Enforcement and Inspections Group during FY 2012. Through investigations, enforcement, and follow-up activities compliance was achieved at 36 of the 41 municipal locations during FY 2012. The remaining five (5) locations were either reported/investigated toward the end of June 2012 or the cases are still noted as active rather than completed in the City’s database due to processing data or additional review or follow-up. The resolution for these locations will be included in the FY 2013 JURMP Annual Report⁹.

4.2.8 Table 4-1 Item No. 23

During FY 2012 the Fire-Rescue Department implemented the City’s 10 minimum BMPs and BMPs for pesticide and fertilizers department-wide as detailed in Section 6.6.3.1.1 of the 2008 JURMP. In addition the Fire-Rescue Department was proactive in conducting training of 877 staff members in regards to vehicle washing, training activities, refuse dumpsters, hazardous waste storage areas, hazardous materials storage areas, landscaping activities, and parking lot maintenance. During FY 2012, the Fire Department also confirmed that the wash water from fire training, equipment, etc. was directed toward bioswales or landscaped areas when applicable and practical. Additionally, the Fire-Rescue Department installed a custom debris filter at the storm drain grate to capture larger size debris at Fire Station 29.

4.2.9 Table 4-1 Item No. 24

Several departments conducted activities above and beyond permit requirements during the reporting period. These additional activities are summarized below.

⁸ Pending enforcement actions will be reported in the FY 2012 JURMP Annual Report

⁹ In the FY 2011 JURMP Annual Report there were 11 pending cases at the time of reporting. The cases achieved compliance during the current reporting period.

- In addition to parking lot and storm drain cleaning, the Park and Recreation Department collected 5,154 tons of debris from the parks, beaches, and bay, including collecting 198 tons of debris as a result of the 2011 July 4th holiday.
- The Fire Rescue Department installed a custom debris filter at the storm drain grate to capture larger size debris at Fire Station 29.
- The Stadium conducted additional measures to prevent erosion of a dirt pile that was stored on site for dirt show events. The dirt pile was sprayed with a product to prevent erosion during the rainy season. Additionally a K-rail and topsoil were added along the curblineline that parallels Murphy Canyon Creek along the northeastern parking lot to also assist in prevent erosion during the rainy season.
- The Storm Water Division conducted weekly sweeping of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris and also conducted sweeping every other month of the improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris. These sweeping frequencies are above and beyond what is required by the Municipal Permit.

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5 INDUSTRIAL AND COMMERCIAL

5.1 PROGRAM IMPLEMENTATION

Table 5-1 represents the City of San Diego’s implementation of the Industrial and Commercial component as it relates to the Municipal Permit requirements during the FY 2012 reporting period. For any items in the table where an explanation, description, results, inventory, or examples are necessary, references are noted in the table, and are included as an Appendix or are provided in Section 5.2. During FY 2012, the City was compliant with all elements of Section D.3.b. of the Municipal Permit.

Table 5-1: Industrial and Commercial Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	Any updates to the industrial and commercial inventory.	See Appendices H and I for inventory update
2	Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	Confirmed per the City’s JURMP Appendix X. Designated BMPs were required to be implemented at industrial and commercial sites.
3	A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	See Section 5.2.1 below for description
4	Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	Inventoried: 26,057 (19,525 stationary facilities and 6,532 mobile) Inspected: 6,514 facilities (33% of stationary inventory - See Appendices J and K)
5	Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	See Section 5.2.2 below
6	At a minimum, 100% of all sites (excluding mobile sources) determined to pose a high threat to water quality (TTWQ) shall be inspected.	100% (1,172 sites) of all inventoried stationary sites determined to pose a high TTWQ were inspected.
7	At a minimum, 25% of the sites inventoried as required in section D.3.b.(1) of the Permit (excluding mobile businesses) shall be inspected.	Approximately 33% of the City’s commercial and industrial inventory received site visits and/or inspections. See Section 5.2.3 below for details.

Item No.	Program Implementation Description	Confirmation and/or result
8	Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	Confirmed per the City's JURMP Section 7.2.4. See Section 5.2.4 below for description.
9	Identification of the number of third party inspections conducted.	None
10	Identification of efforts conducted to verify third party inspection effectiveness.	None
11	A description of efforts implemented to address mobile businesses.	See 5.2.5 below for description
12	The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	See 5.2.6 below for discussion
13	A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	Followed steps described in JURMP Section 7.2.4.6. See Appendix L for list of non-filers
14	A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources	See 5.2.7 below for description

5.2 DISCUSSION SUPPORTING TABLE 5-1

5.2.1 Table 5-1 Item No. 3

Notification letters were sent to all stationary businesses on the City's inventory that had not yet been inspected within the current Permit cycle as of the date of the initial mailing in March 2011. The letters that were sent included educational information about the City's industrial/commercial program, including BMP requirements. The mailing materials also included a response form that businesses could send back to update contact information and/or operational status (e.g., moved to another City, no longer in business, etc.). The responses to the BMP requirement notification letters were still being received and processed in FY 2012. Businesses that were added to the City's inventory as part of this process in the beginning of FY 2012 were selected for inspection to reinforce the notifications of the City's BMP requirements.

In addition, all (stationary and mobile) businesses that have a business license with the City received a notification of the minimum stationary and mobile BMPs as part of their annual business renewal application notification during FY 2012.

5.2.2 Table 5-1 Item No. 5

Prior to the start of the Storm Water Division's FY 2012 inspections, the City's inventory was prioritized according to a process consistent with the requirements for the Municipal Permit. During FY 2012 all high threat to water quality (TTWQ) industrial and commercial businesses were selected for inspection. Additional sites selected for inspection were predominantly businesses that were newly added to the City's inventory that had not yet received an inspection, or medium TTWQ sites that had not been inspected in recent years. These businesses were predominantly selected from business categories identified as potential problems such as auto repair shops, auto paint and body shops, building material suppliers, contractors deemed likely to have storage yards, restaurants, and trucking or other transportation operations.

5.2.3 Table 5-1 Item No. 7

Industrial and Commercial inspections are conducted through three (3) methods: The Public Utilities Department's Wastewater Branch's Industrial Wastewater Control Program (IWCP) inspections ([Appendix J2](#)), the Public Utilities Department's Wastewater Branch's Food Establishment Wastewater Discharge (FEWD) inspection program ([Appendix J1](#)), and the Storm Water Division's inspection program ([Appendix K](#)). Table 5-2 summarizes industrial and commercial facility inspection numbers for FY 2012.

Table 5-2: Stationary Industrial and Commercial Facilities Inventoried and Inspected

Number of Facilities Inventoried	IWCP Inspections	FEWD Inspections	Storm Water Division Routine Full Inspections	Total Inspections	% of Inventoried facilities inspected
19,525	56	3,608	2,850	6,514	33%

5.2.4 Table 5-1 Item No. 8

All inspections conducted during FY 2012 addressed the required inspection steps to determine full compliance by utilizing the City's standard industrial/commercial inspection form, which

was designed to mirror the City’s minimum BMP requirements. In addition to the inspection form an industrial attachment and a recheck attachment were used where applicable to collect information on Industrial Permit compliance status and high priority storm water deficiencies. An inspection form was completed at all sites that received a full inspection.

BMPs were required to be implemented at all industrial and commercial sites; and if BMPs were not implemented at facilities where inspections were conducted, then facility personnel were notified both verbally and by mail. Every business that received a full inspection was provided with inspection results by mail in the form of a database generated report. The results outlined the BMP deficiencies observed during the inspection and notified businesses of any Industrial Permit related violations. Inspection results were accompanied by a letter describing the City’s storm water program and reason for inspection. The letter also directed facility personnel to the City’s website where the minimum BMPs are posted.

Furthermore, the City utilized a priority rating system for follow-up inspections. During FY 2012, the Storm Water Division revised the priority definitions for Priority 1 and Priority 2 follow-ups (Priority 3 remained unchanged) and is summarized in Table 5-3.

Table 5-3: Industrial and Commercial Inspection Follow-up Priorities Redefined

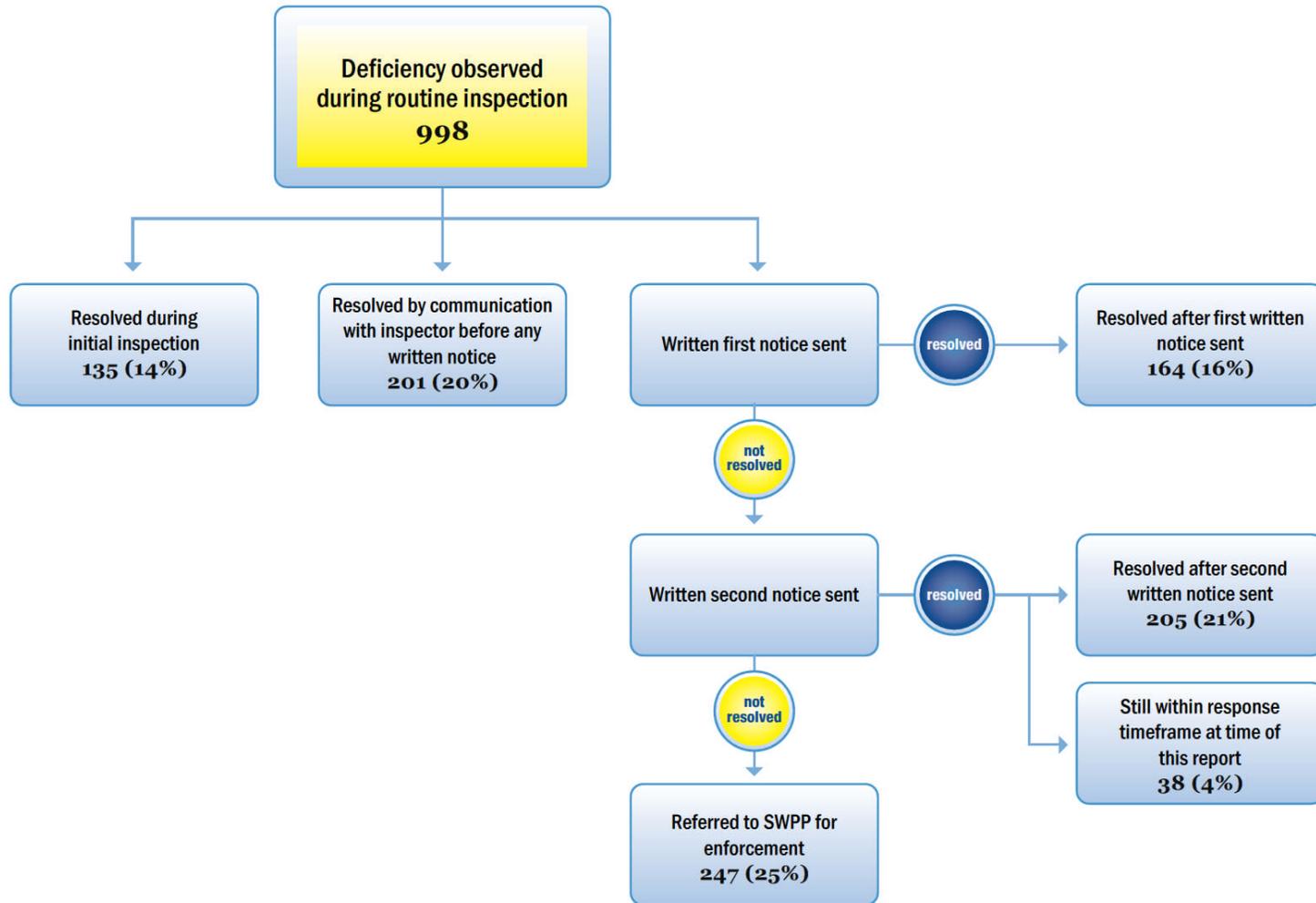
Follow-up Priority	Description	Follow-up Conducted
1	<ul style="list-style-type: none"> • Active Discharge, evidence of past discharge that appears likely to recur in the future • Severe BMP deficiency 	<ul style="list-style-type: none"> • Active discharges are referred to Storm Water Division Code Compliance Officers for immediate follow-up • Evidence of past discharges, or BMP issues are referred to Storm Water Division’s Industrial and Commercial Inspections consultant for follow-up and to inspectors for additional follow-up and enforcement as necessary.
2	<ul style="list-style-type: none"> • Significant BMP deficiency 	<ul style="list-style-type: none"> • Referred to Storm Water Division’s Industrial and Commercial Inspections consultant for follow-up, and to inspectors for additional follow-up and enforcement as necessary.
3	<ul style="list-style-type: none"> • Minor BMP deficiency 	<ul style="list-style-type: none"> • The inspection report mailed to the business lists the required corrections and tells the recipient that there is a possibility of a follow-up inspection.

As a result of the industrial and commercial inspections conducted by the Storm Water Division in FY 2012, there were a total of:

- 112 Priority 1 facilities;
- 752 Priority 2 facilities;
- 1,956 Priority 3 facilities; and
- 32 facilities where no follow-up was needed.

All priority 1 and 2 facilities were directed to correct their deficiencies both verbally and by mail during FY 2012. Additionally, during FY 2012, the City’s inspection contractor initiated follow-up activities during the routine inspection wherever possible, completed re-inspections, and processed compliance documentation sent in by facilities. A flowchart is presented below to illustrate this process, including the number of cases in each category.

Figure 5-1: FY 2012 Industrial and Commercial Follow-Up Process and Results Flowchart¹⁰



¹⁰ Note: One routine inspection was completed by SWPP staff and is not included in the above flowchart, but is included in the overall SWPP inspection counts.

No follow-up was required for 135 cases that reached resolution during the initial inspection, and 578 cases were resolved by inspectors. Of the remaining 285 cases, 38 are still within their initial response period and 247 are being handled by the Storm Water Pollution Prevention (SWPP) inspectors for enforcement. Of these, 23 of 38 Priority 1 referrals have been resolved by City inspectors with 15 still in progress at the time of reporting, and 115 of 209 Priority 2 referrals have been resolved by City inspectors with 94 still in progress at the time of reporting. The final resolution of cases that are still in progress at the time of this report will be included in the FY 2013 JURMP Annual Report. Priority 1 and Priority 2 follow-ups have been resolved through the actions identified in Table 5-4 below.

Table 5-4: Type of Follow-up Actions for Priority 1 and 2 Resolved Sites

Type of Follow-up Action	# of Actions for Priority 1 Sites	# of Actions for Priority 2 Sites
Administrative Citation	-	2
Corrective Action Letter	-	7
Education	20	69
No Action Taken	-	1
No Evidence Found	7	8
Notice of Violation	7	87
Total	34	174

Any site where an active discharge was observed has been resolved and compliance achieved. Of the 107 sites where active discharges were observed, 74 were discontinued while the inspector was onsite, and 33 were called in to the storm water hotline and resolved by Code Compliance staff. Cases where additional BMPs would be required to prevent future discharges were recommended for additional follow-up. An overall summary of the follow-up case resolution in regards to active discharges is summarized in Table 5-5.

Table 5-5: Follow-up Status by Discharge Type

Follow-Up Priority	Total #	# Resolved	# In Progress	% Resolved
Active Discharge Observed	107	107	0	100%
No Active Discharge Observed	863	716	147	83%
Totals	970	823	147	

During FY 2012 the Enforcement and Inspection group continued to send out letters documenting the issues and requesting the industrial or commercial operator to fix the issues and send back photo documentation of the corrective action taken to illustrate compliance within ten (10) business days. The City has found this to be an effective means of communication for achieving compliance and have received the requested documentation from the industrial or commercial operators.

5.2.5 Table 5-1 Item No. 11

The mobile sources inventory is based on the same sources of information utilized for the industrial and commercial stationary inventory as noted above. Of the 26,057 currently inventoried industrial and commercial facilities within the City, 6,532 are mobile businesses, while the other 19,525 are stationary facilities. There are zero (0) high TTWQ, 1,914 medium

TTWQ, and 4,618 low TTWQ mobile businesses. The FY 2012 updated inventory and prioritization is included in [Appendix I](#) of this report.

The City has identified minimum BMPs that are required for all mobile businesses based on the type of activity that is being conducted (see *Appendix XI, “Minimum BMPs for Mobile Businesses”*, of the City’s 2008 JURMP). There were no changes to the minimum BMPs required in the City’s 2008 JURMP during the FY 2012 reporting period.

During FY 2012, Storm Water Division Code Compliance Officers conducted over 1,000 investigations of potential discharges and identified mobile businesses as a responsible party at 164 locations where investigations were conducted ([Appendix F](#)). These locations are within multiple land use types (e.g. residential, commercial, industrial, etc.) but are being summarized here for reporting purposes. As a result of the investigations, the following enforcement actions were taken and are summarized in Table 5-6 below. The number of enforcement actions taken may be higher than the number of locations investigated because some locations may have received multiple enforcement actions.

Table 5-6: FY 2012 Mobile Business Enforcement Actions Taken

Type of Enforcement Action	Number of Actions
Administrative Citation	47
Education	12
No Action Taken	29
No Evidence Found	13
Found to be Exempt	4
Letter	8
Pending	10
Referred to another Department	7
Notice of Violation	55
Total	185

In order to achieve compliance, some locations were revisited by the Storm Water Department’s Enforcement and Inspections Group. There were 64 follow-up visits conducted during FY 2012. Compliance was achieved at 151 of the 164 locations where mobile businesses were identified as the responsible party. The remaining 13 locations are still in the process of obtaining compliance and resolutions will be included in the FY 2013 Annual Report.

During FY 2012, mobile businesses received education and outreach through one-on-one outreach provided to individual mobile businesses during investigations and/or enforcement and through the annual business license renewal application which includes information on minimum BMPs.

5.2.6 Table 5-1 Item No. 12

Complaint Investigation Follow-up and Enforcement – Stationary Industrial and Commercial Facilities

During FY 2012, Storm Water Division Code Compliance Officers conducted investigations of potential discharges associated with industrial and commercial facilities at 351 different locations (**Appendix F**). As a result of the investigations, enforcement actions were taken and are summarized in Table 5-7 below. The number of enforcement actions taken may be higher than the number of locations investigated because some locations may have received multiple enforcement actions.

Table 5-7: FY 2012 Stationary Industrial and Commercial Enforcement Actions Taken

Type of Enforcement Action	Number of Actions
Administrative Citation	69
Education	29
Found to be Exempt	5
Letter	32
No Action Taken	63
No Evidence Found	21
Notice of Violation	118
Pending	30
Referred to another Department	7
Total	374

In order to achieve compliance, 106 of the 351 locations had follow-up visits conducted by the Storm Water Department’s Enforcement and Inspections Group during FY 2012. Through the investigations, enforcement, and follow-up activities, compliance was achieved at 312 of the 351 industrial and commercial locations during FY 2012. The remaining 39 locations were reported/investigated toward the end of June 2012 or are still noted as active rather than complete in the City’s database due to processing data or additional review or follow-up. The resolution for these locations will be included in the FY 2013 JURMP Annual Report¹¹.

5.2.7 Table 5-1 Item No. 14

The City conducted notable activities related to its implementation of the Industrial and Commercial component. These notable activities are described below.

- As noted above, the Storm Water Division revised the definitions of priority 1 and 2 follow-ups. The Storm Water Division also improved the tracking of inspections with a follow-up priority of 1 or 2 in its SAP tracking database. For each site that required a follow-up inspection (priority 1 or 2), and was unable to achieve compliance through the efforts of the City’s inspection contractor, a new notification was created in SAP to record the inspection. The new notification was tagged as a failed first inspection, and supporting materials such as inspection photos and a scanned copy of the inspection form were uploaded to the database. This process allowed the Storm Water Division to more effectively track compliance status of sites found to be noncompliant, and for which

¹¹ There were 3 industrial and commercial locations that were pending in the FY 2011 JURMP Annual Report. These locations achieved compliance in FY 2012 through the issuance of an administrative citation, Notice of Violations, and education.

enforcement actions were necessary and also to more effectively prioritize noncompliant sites for follow-up to allocate limited inspector resources as efficiently as possible.

- Changed the follow-up inspection procedure significantly to allow businesses to send in compliance documentation, or arrange for re-inspection within a specified time-frame. Second notice letters were sent via certified mail restating the required corrective actions and asserting a deadline for compliance. Facilities that failed to prove compliance by this deadline were forwarded to City inspectors for enforcement, and all case documents accumulated by that point were uploaded to a new notification in SAP. This resulted in increased compliance rates and more effective use of City inspector time.
- During the fiscal year the Enforcement and Inspection Group continued to work with RWQCB staff to target non-filers posing a comparatively high threat to water quality.

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6 RESIDENTIAL

6.1 PROGRAM IMPLEMENTATION

Table 6-1 represents the City of San Diego's implementation of the Residential component as it relates to the Municipal Permit requirements during FY 2012. For any items in the table where an explanation, description, results, inventory, or examples are necessary, references are noted in the table, and are included as an Appendix or are provided in Section 6.2. During FY 2012, the City was compliant with all elements of Section D.3.c. of the Municipal Permit.

Table 6-1: Residential Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	Identification of the high threat to water quality residential areas and activities that were focused on.	The City considers all residential areas within City limits to be high threat to water quality residential areas and activities.
2	Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	Confirmed. Designated BMPs, per Appendix XII of the JURMP, were required to be implemented
3	A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	See Section 6.2.1 below
4	Types and amounts of household hazardous wastes (HHW) collected, if applicable.	494 tons of mixed HHW
5	The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	NOV = 148
		Citation = 76
		Civil Penalty = 0
		For more information see Section 6.2.2
6	A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	See Section 6.2.2 for description
7	A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	See Section 6.2.3 below
8.	A description of notable activities conducted to manage urban runoff from residential areas and activities	See Section 6.2.4 below

6.2 DISCUSSION SUPPORTING TABLE 5-1

6.2.1 Table 6-1 Item No. 3 and No. 4

Environmental Services Department (ESD) held eight (8) auto product recycling events in order to provide City residents with opportunities to properly dispose of used oil, oil filters, and contaminated oil. ESD promoted these events via event flyers which were distributed to City facilities; the Union Tribune, Pennysaver inserts; postcards mailed directly to City trash customers; and eight 3-minute advertisements on local television stations (KUSI and channel 6). The City's Miramar Household Hazardous Waste Transfer Facility was open 47 Saturdays during the respective reporting period and accepted used oil, oil filters, and contaminated oil from City residents. Further information regarding the event promotional material is summarized in Table 6-2. Sixteen certified oil collection centers were inspected during the reporting period. Over 6,500 promotional items were distributed to promote proper recycling of used oil and oil filters at the certified used oil collection centers and auto product recycling events. These items included shop towels, KarBord oil mat, used oil filter bags, and used oil recycling containers with funnels.

Table 6-2: FY 2012 ESD HHW Program Education and Outreach to the Public

Outreach Material	Target Audience*	# of times	Estimated # of people targeted
Auto Product Recycling Events Education and Outreach			
Pennysaver Inserts	4,5 (all mailing addresses in selected zip codes)	8	928,913
San Diego Union Tribune Inserts	4,5 (all mailing addresses in selected zip codes)	8	235,510
Community Newspaper Inserts (Peninsula Beacon; Beach & Bay Press)	4, 5	2	40,000
The San Diego Union Tribune Newspaper Advertisements	4, 5	5	930,881
Calendar Article promoting collection events in Union Tribune	4, 5	30 placements	Circulation is 275,000 with each publication
Auto Product Direct Mail	4	5	399,654
Direct distribution of event calendar to citizens calling hotline and City staff	4	N/A	14,500
Local Television Station Advertisements (3-5 minute advertisements)	4, 5	8	Unknown
Government Access Cable Channel video bulletin board	4, 5	2,400 bulletin board slides promoting 8 events	Unknown
Auto Product Recycling Event Ads	4, 5	10	287,578
Certified Oil Collection Center Locations Education and Outreach			
The San Diego Union Tribune Newspaper Advertisements	4, 5	6	1,383,205

Outreach Material	Target Audience*	# of times	Estimated # of people targeted
HHW Transfer Facility Education and Outreach			
Direct Mailings included in Water Bills	4	1	275,000
Direct Mailings – Postcards	4	5	99,788
Direct Distribution of brochures (Universal Waste & Appliance Recycling Guide; HHWTF brochure)	4	6,200	6,200
Direct Mailings – Postcards	4	5	99,788

*Construction Site Owners and Developers; 2. Industrial Owners and Operators; 3. Commercial Owners and Operators; 4. Residential Community, General Public, and School Children; 5. Under-represented audiences in 1-4

6.2.2 Table 6-1 Item No. 5 and No. 6

Verification and enforcement of the Minimum BMPs for Residential Areas and Activities occurred at the jurisdictional level. During FY 2012, the City’s Storm Water Hotline, (619) 235-1000, was a tool provided to the public so they could report violations of the Storm Water Ordinance. Violations were also recorded as observed by code enforcement staff or other City staff in the field. These mechanisms represent the methods utilized by the Storm Water Division as oversight of residential areas and activities. During FY 2012, Storm Water Division Code Compliance Officers conducted investigations at 555 residential locations ([Appendix F](#)).

As a result of the investigations conducted by the Storm Water Division’s Enforcement and Inspections Group, the enforcement actions in Table 6-3 were taken. The number of enforcement actions taken may be higher than the number of locations investigated because some locations may have received multiple enforcement actions.

Table 6-3: FY 2012 Residential Enforcement Actions Taken

Type of Enforcement Action	Number of Actions
Administrative Citation	77
Education	53
Found to be Exempt	14
Letter	52
No Action Taken	112
No Evidence Found	43
Notice of Violation	180
Pending	36
Referred to another Department	21
Total	588

In order to achieve compliance, 222 of the 555 locations had follow-up visits conducted by the Storm Water Department’s Enforcement and Inspections Group during FY 2012. Through the investigations, enforcement, and follow-up activities, compliance was achieved at 508 of the 555 residential locations in FY 2012. The remaining 47 locations were either reported/ investigated toward the end of June 2012 or the cases are still noted as active rather than complete in the

City's database due to processing data or additional review or follow-up. The resolution for these locations will be included in the FY 2013 JURMP Annual Report¹².

6.2.3 Table 6-1 Item No. 7

Regional Residential Education Program

Think Blue was a sponsor of both the 2011 and 2012 San Diego County Fairs during FY 2012. *Think Blue* utilized pet and automotive-themed display booths and provided targeted information and giveaways to reach pet owners and auto enthusiasts. *Think Blue* also sponsored the Fair's "EnviroDay" on June 23, 2012 and invited members of the Regional Residential Sources Workgroup to distribute regionally-themed information. Additional information regarding Regional Residential Education activities for FY 2012 will be included in the Regional Urban Runoff Management Plan (RURMP) Annual Report submitted to the San Diego RWQCB in January 2013.

6.2.4 Table 6-1 Item No. 8

The Storm Water Division partnered with the Public Utilities Water Conservation Division to promote a residential rain barrel rebate program. The program allowed residents residing within City limits to receive a \$0.50 per gallon rebate up to \$200.00. The program will continue implementation in FY 2013.

¹² There were 42 residential locations that were pending in the FY 2011 JURMP Annual Report. There were 8 administrative citations, 1 education, 10 letters, 6 no action taken, 3 no evidence found, and 14 Notices of Violation issued. As a result compliance was achieved at all 42 locations and the cases are considered complete.

7 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 PROGRAM IMPLEMENTATION

Table 7-1 presents the City of San Diego’s implementation of the Illicit Discharge Detection and Elimination (IDDE) Component as it relates to the requirements of the Municipal Permit during FY 2012. Where reporting requirements necessitate information that is not easily tabularized, references are made in the table to locations where the information and/or explanations are located.

During FY 2012, the City was compliant with all elements of Section D.4 of the Municipal Permit, with the exception of the issue identified in 7.2.1.

Table 7-1: Illicit Discharge Detection and Elimination Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	See Appendix R
2	Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	See Appendix S and 7.2.1 below
3	Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	Not applicable
4	A brief description of any other investigations and follow-up activities for illicit discharges and connections.	See 7.2.2 and 7.2.7 below for description.
5	The number and a brief description of illicit discharges and connections identified.	See 7.2.2 and 7.2.7 below for description
6	The number of illicit discharges and connections eliminated.	Illicit discharges eliminated = 1,215 Illicit connections eliminated = 5

Item No.	Program Implementation Description	Confirmation and/or result
7	Identification and description of all spills to the MS4 and response to the spills.	See 7.2.3 below for identification and description
8	A description of activities implemented to prevent sewage and other spills from entering the MS4.	See 7.2.4 below for description
9	A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	See 7.2.5 below for description
10	Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	See 7.2.6 below
11	A description of efforts to publicize and facilitate public reporting of illicit discharges.	See 7.2.6 below for description
12	The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	See 7.2.7 below
13	A description of notable activities conducted to manage illicit discharges and connections.	See 7.2.8 below

7.2 DISCUSSION SUPPORTING TABLE 7-1

7.2.1 Table 7-1 Item No. 2

Urban Runoff Monitoring – 2012 Dry Weather Monitoring

The City confirmed the completion of required observations, field screening, and analytical monitoring of 511 dry weather sites. The 511 dry weather sites were “wet” sites that had either flowing or ponded water conditions where a sample could be collected. In addition to the 511 wet sites sampled, 189 sites were visited and found to be dry or were tidally influenced. Visual observations and trash assessments were completed for every site visited regardless of whether the site was “wet” or dry. Collected information was recorded on standard Dry Weather Monitoring (DWM) and Trash Assessment Field Sheets. A summary of monitoring activities is presented in **Table 7-2**, and **Appendix S** contains all of the 2012 DWM Program data.

Table 7-2: Summary of 2012 Dry Weather Monitoring

Number	Monitoring Activity
700/690	Total number of sites visited (wet or dry) / trash assessments completed
511	Total number of dry weather sites monitored with flowing or ponded conditions
163/26	Total number of dry sites / tidal sites
210	Sites exceeding one or more action level(s)
363	Total number of recorded discrete exceedances (may have multiple at one location)
265	Exceedances that were dry on resample, re-sampled within acceptable limits, or eliminated using Best Professional Judgment (BPJ)
99	Total number of exceedances that required additional investigation or action
64	Total number of sites that required additional investigation or action
36 / 28	Total number of illegal discharges identified/ Total number of sites with an illegal discharge identified

For any sites where a Dry Weather Monitoring Action Level was exceeded, the City either conducted an investigation to identify the source of the discharge or provided rationale for why the discharge did not pose a threat to water quality and did not need further investigation. **Appendix S** includes a summary of the 2012 DWM exceedance investigations conducted including a summary of the source and/or result of the investigations.

During 2012 there were 4 exceedances out of 364 in which more than two business days passed before follow-up occurred; however, the 4 sites were resampled as soon as possible. The 4 sites not resampled within two business days are summarized in **Table 7-3**. The City made every effort to meet permit requirements related to follow-up but was faced with challenges in 2012 which included continuing issues with data entry and review, and staff turnover. The City continues to make improvements to streamline the resampling process in order to mitigate future oversights including updating the data collection tool and emphasizing a need for staff to enter data into the database on a daily basis, and requiring review of the Field Sample Result log on a daily basis to provide a cross-check of results.

Table 7-3: 2012 Dry Weather Monitoring Late Resample Summary

Site ID	Event Date	Analyte(s)	Results Received	Resample Date	Reason Why Late
DW 020	7/10/2012	Fecal Coliform	7/18/2012	8/8/2012	Data entry/review error
DW181	8/14/2012	Ammonia	8/14/2012	8/22/2012	Data entry/review error
DW303	6/19/2012	Orthophosphate	6/19/2012	7/25/2012	Data entry/review error
DW 590	7/19/2012	MBAS	7/19/2012	8/8/2012	Data entry/review error

7.2.1.1 Field Screening Results Summary

The City conducted 5,600 field measurements during the 2012 dry weather monitoring site visits. As a result of the 5,600 field measurements, 5,347 results were below action levels and 253 measurements exceeded action levels. The field screening analytes most frequently exceeding action levels were turbidity, ammonia, and Methylene blue active substances (MBAS), which is consistent with the 2009, 2010, and 2011 DWM results (**Figure 7-1**). During the 2012 DWM season, the City used Best Professional Judgment (BPJ) in evaluating the conductivity samples that were strongly influenced by tidal intrusion and did not consider them as exceedances. The following factors influenced the BPJ process: (1) field test kits are not designed for salt water applications and may cause erroneous results, and; (2) the goal of the DWM program is to determine potential pollutants coming from the storm drain - not testing bay or ocean water. This accounts for the decrease in the number of conductivity exceedances during the 2012 DWM season as compared to previous DWM seasons.

Follow-up was conducted at the sites with exceedances, and the field screening exceedance outcomes for 2012 are summarized along with 2011, 2010, and 2009 DWM exceedance results for comparison purposes in **Figure 7-2**. Many of the sites were found to be dry on a revisit, or were resampled and were below action levels. Another outcome of an identified exceedance is the use of best professional judgment (BPJ) to determine that resampling or upstream investigation would not result in the elimination of an illegal discharge, and thus, the City does not continue its investigation of the exceedance. Some exceedances, especially conductivity exceedances, were resolved using BPJ because of tidal or groundwater intrusion.

In 2008, Copermittees began testing for MBAS in the field. This proved problematic because saltwater or groundwater intrusion can interfere with the test kit and result in a false positive. As in previous years, the City of San Diego continued to send samples to an outside laboratory for confirmation of the presence of MBAS when necessary. As a result, many of the MBAS exceedances were resolved with laboratory confirmation of MBAS being non-detect or below the action level as noted in **Appendix S**.

The City continues to retain the use of the Basin Plan Water Quality Objective of 20 NTU as the guideline for initiating turbidity follow-ups. Consideration is given as to whether or not the location was flowing or ponded, or if the sample was collected from a shallow water source via a syringe. Visual observations such as color, clarity, and flow rate influence whether or not a turbidity exceedance warrants resampling. There were 55 sites where turbidity was the only exceedance and were resampled during the 2012 DWM season (**Appendix S**).

Figure 7-1: 2012 Field Screening Analytes with Exceedances

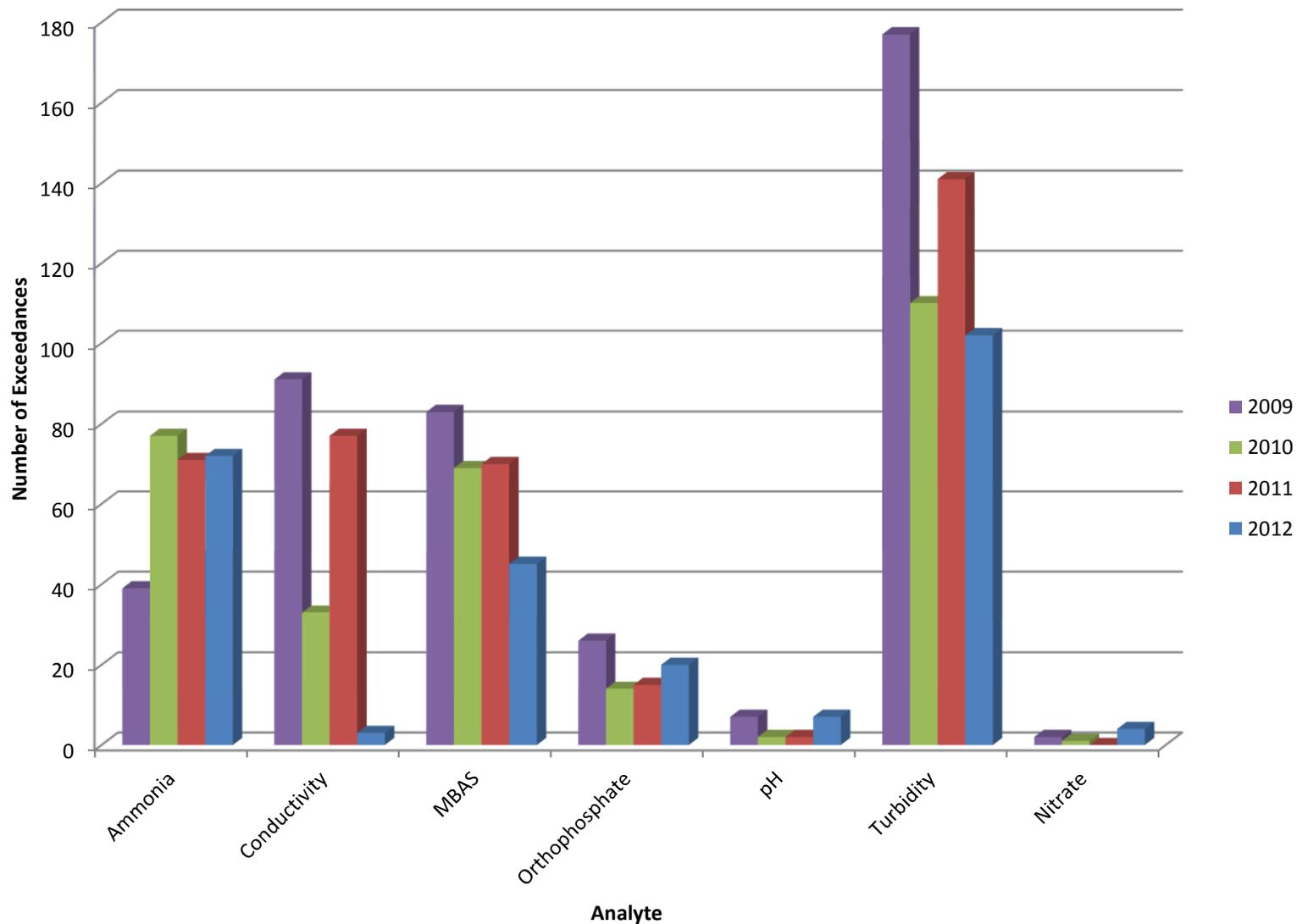
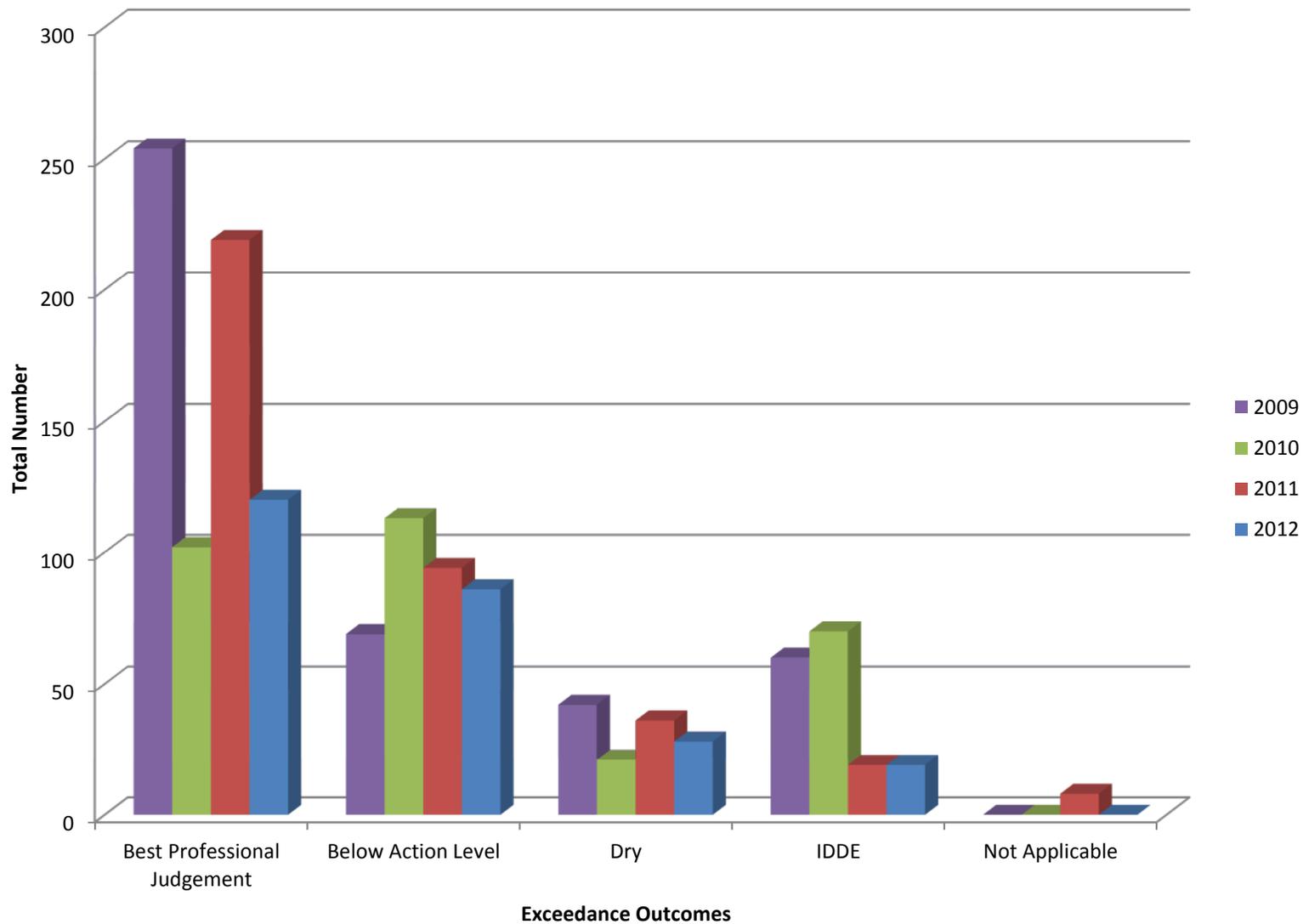


Figure 7-2: 2012 Field Screening Exceedance Outcomes



7.2.1.2 Analytical Results Summary

The City conducted 1,408 laboratory constituent analyses as a result of site visits during the 2012 Dry Weather Monitoring season. As a result of the 1,408 constituents analyzed, 1,299 results were below action levels, and 110 constituents exceeded action levels. The analytical constituents that most frequently exceeded action levels were Total Coliform, Fecal Coliform, and Enterococcus, which is consistent with past monitoring results from the 2009, 2010, and 2011 DWM seasons (**Figure 7-3**).

Follow-up was conducted at dry weather monitoring sites where analytes exceeded action levels, and the analytical exceedance outcomes for 2012 along with results from the 2011, 2010 and 2009 DWM seasons for comparative purposes are summarized in **Figure 7-4**. Many of the sites were found to be dry on a revisit, or were resampled and were below action levels. Similarly to field screening follow-ups, BPJ was utilized when it was determined that resampling or upstream investigation would not result in the elimination of an illegal discharge, and thus, the City does not continue its investigation of the exceedance. Additionally, when no specific source was identified, and if conditions observed in the pipe system warranted, the site was referred to the Storm Water Division's Operations and Maintenance Section for cleaning as noted in **Appendix S**.

During the 2012 DWM season there was an increase in the use of BPJ (based on knowledge of bacteria exceedances from previous DWM seasons) and a decrease in investigations for follow-up exceedance outcomes as illustrated in **Figure 7-4**. These changes are the result of a procedural modification for the 2012 DWM season. In previous DWM seasons, the City had investigated bacteria exceedances and often was not able to determine a source or the source was stagnant ponded outfalls or organic debris (leaves, grass clippings, etc.) decaying in the curb-line and or catch basins. There are many DWM sites where bacteria exceedances occur annually with no discrete discharge. During the 2012 DWM season, the City collected Polymerase Chain Reaction (PCR) samples to determine if there was any sanitary sewage contamination at sites that tend to have annual bacteria exceedances. If the site was negative for sanitary sewage and the City was unable to determine a definite source, the investigation was closed and was typically referred to the Storm Water Division's Operations and Maintenance Section for cleaning and/or distribution of educational door hangers to the applicable neighborhood.

Figure 7-3: 2012 Analytical Monitoring Analyte Exceedances

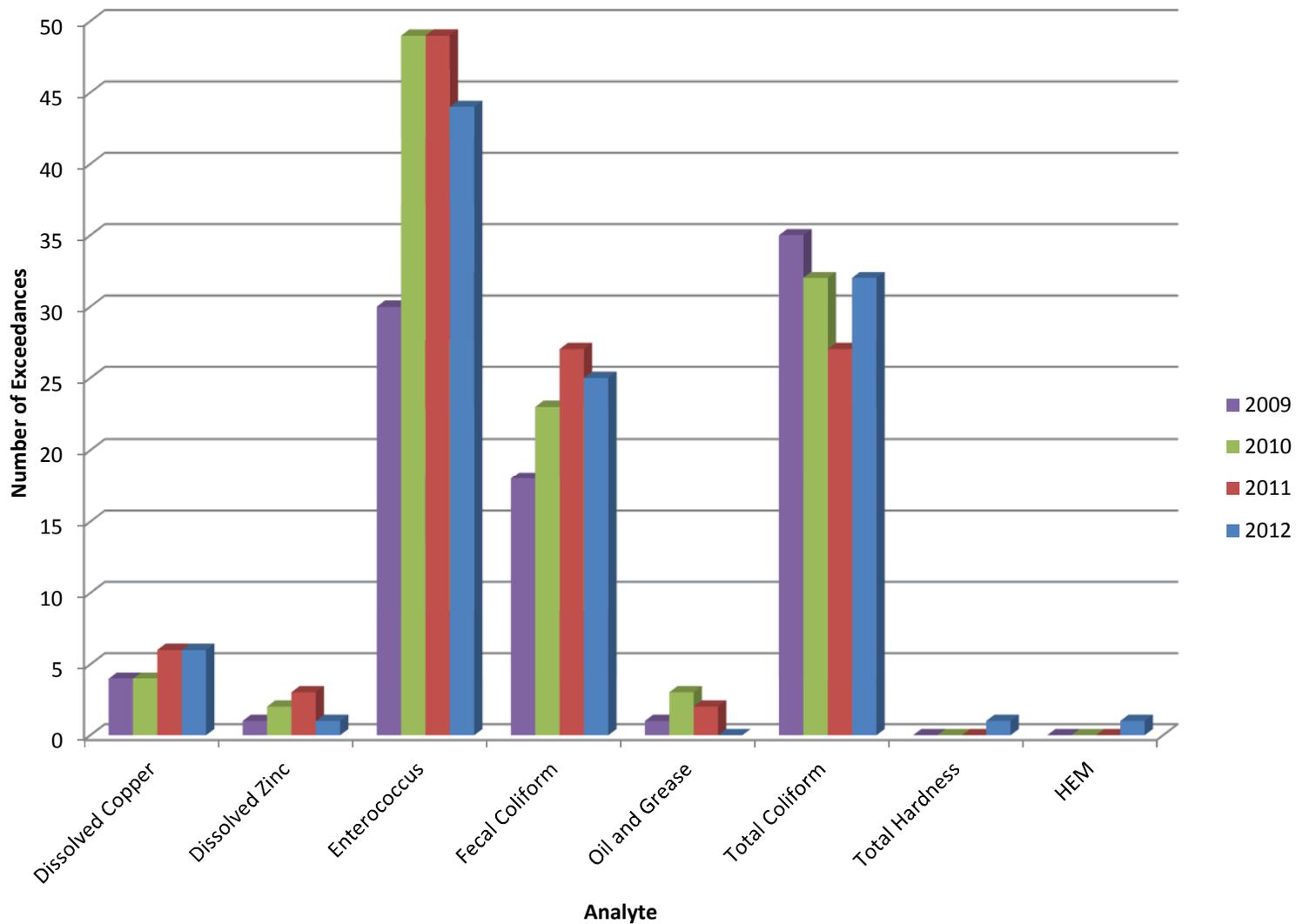
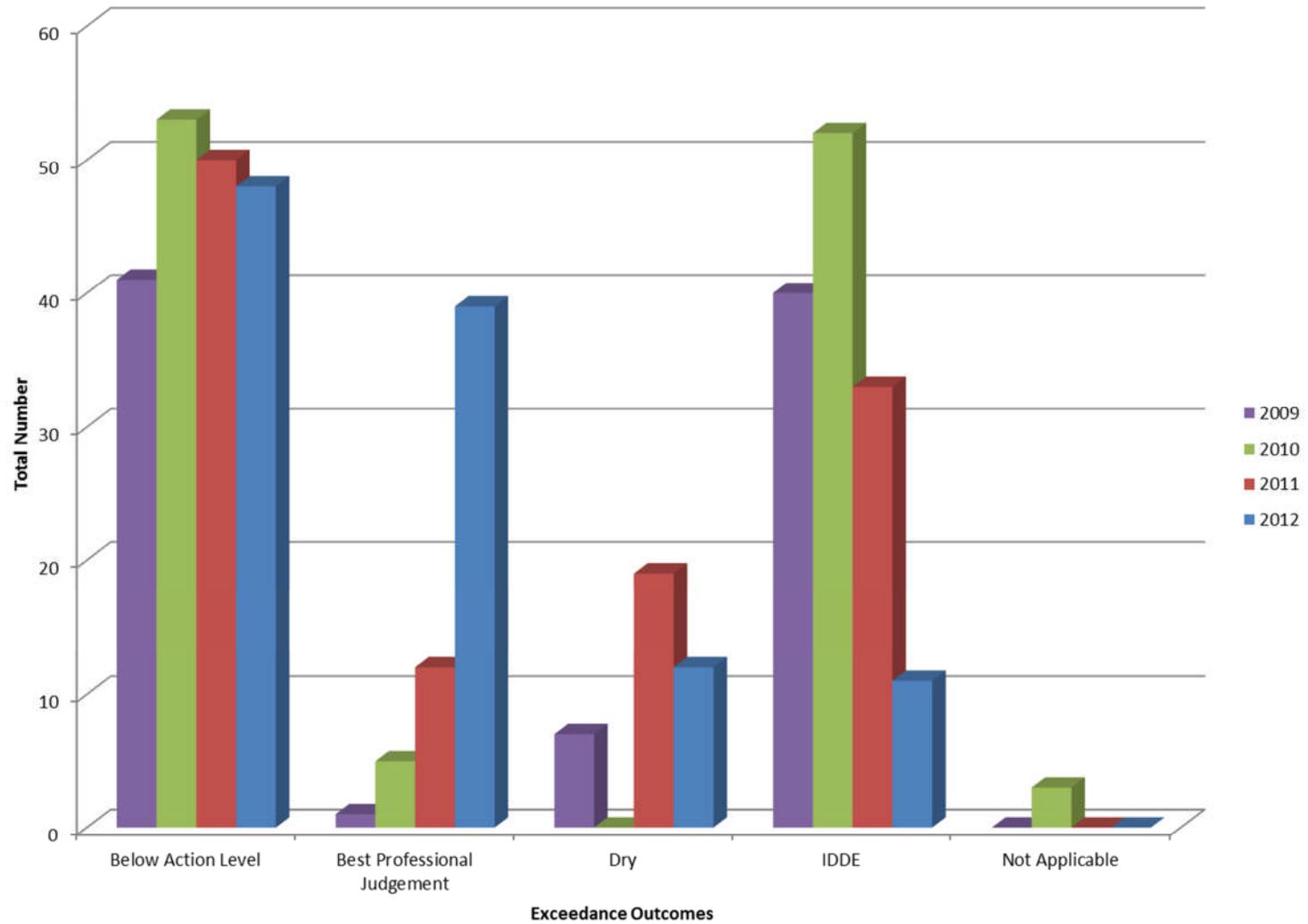


Figure 7-4: 2012 Analytical Monitoring Exceedance Outcomes



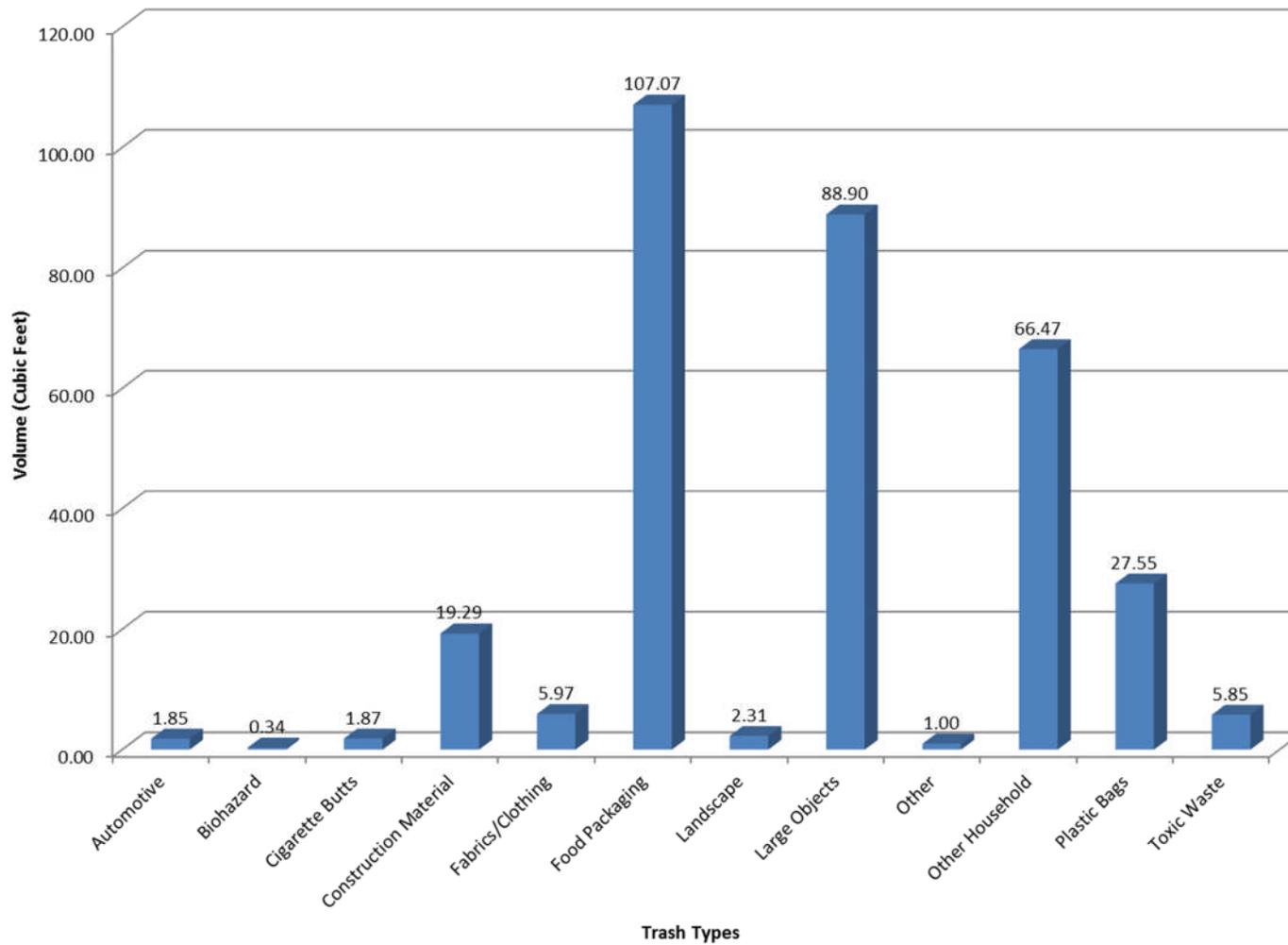
7.2.1.3 Trash Assessment Results

Trash was assessed and characterized at monitoring sites as part of the City’s DWM Program during the reporting period. The City’s Storm Water Division’s Monitoring Group developed and finalized Standard Operating Procedures (SOP’s) for trash assessment in April 2009. Staff utilizes the SOP along with a standardized Trash Assessment Worksheet (**Appendix T**) to assess trash at each location. The Trash Assessment Worksheet contains a rating system which considers the overall level of trash, threat to aquatic life, threat to human health, dumping, littering, trash accumulation from storm drain, and trash accumulation from outside transport at each site in order to provide an overall site score. This score then correlates to a trash assessment category for that site: optimal, sub-optimal, marginal, poor, or very poor. **Table 7-4** below contains the summary of information recorded for the City’s 2012 Trash Assessment. The results of the 2012 Trash Assessment indicated that food packaging continued to be the most common type of trash found at sites (**Figure 7-5**). Large objects (e.g., shopping carts, furniture, etc.) was the second most common category of trash followed by household trash observed in the 2012 Trash Assessment. Littering (tossed or dropped trash) was the method of trash disposal within the City 95% of the time and dumping was the method of trash disposal 5% of the time. Data from the City’s 2012 Trash Assessment also indicates that 95% of the time the potential trash source was the general public (non-business community), while the remaining 5% consisted of business-related and homeless encampment potential trash sources.

Table 7-4: 2012 Trash Assessment Results Summary

Trash Assessment Parameters	Overall Trash Assessment Results
Total number of sites assessed	688
Total area assessed (cubic feet)	4,245
Total estimated volume of trash observed (cubic feet)	328
Number of sites with no trash observed (%)	209 (30%)
Number of optimal sites (%) (includes no trash sites)	243 (35%)
Number of suboptimal sites (%)	398 (58%)
Number of marginal sites (%)	45 (7%)
Number of poor sites (%)	2 (.3%)
Number of very poor sites (%)	0 (0%)

Figure 7-5: 2012 Common Types of Trash at Trash Assessment Sites



7.2.2 Table 7-1 Item No. 4

Field Reconnaissance and Complaint/Referral Investigations

The prescriptive monitoring requirements, associated follow-up investigations, and hotline based cases are not the only sources of investigations. Monitoring staff routinely walk canyons and newly developed communities looking for hidden or new drains, drains plumbed over hillsides, and illegal discharges. In addition, monitoring staff respond to citizen and city employee referrals where complicated conditions exist and/or multiple sources make identifying a responsible party difficult. Once a responsible party is identified, the information is referred to a Code Compliance Officer for enforcement, including follow-up visits to ensure elimination of the discharge.

In 2012, the monitoring staff investigated 19 alleged discharges as a result of these referrals or observations, which resulted in 7 referrals to the Enforcement and Inspections Group or to other relevant departments (e.g., Water Conservation, Sewer/Waster hotline, Parks and Recreation). **Table 7-5** provides a summary of non-routine illicit discharge investigations.

Table 7-5: FY 2012 Summary of Investigations Not Related to Dry Weather Monitoring

Action	Number
No Evidence of Violation	12
Cases referred to Code Enforcement or other departments	7

7.2.3 Table 7-1 Item No. 7

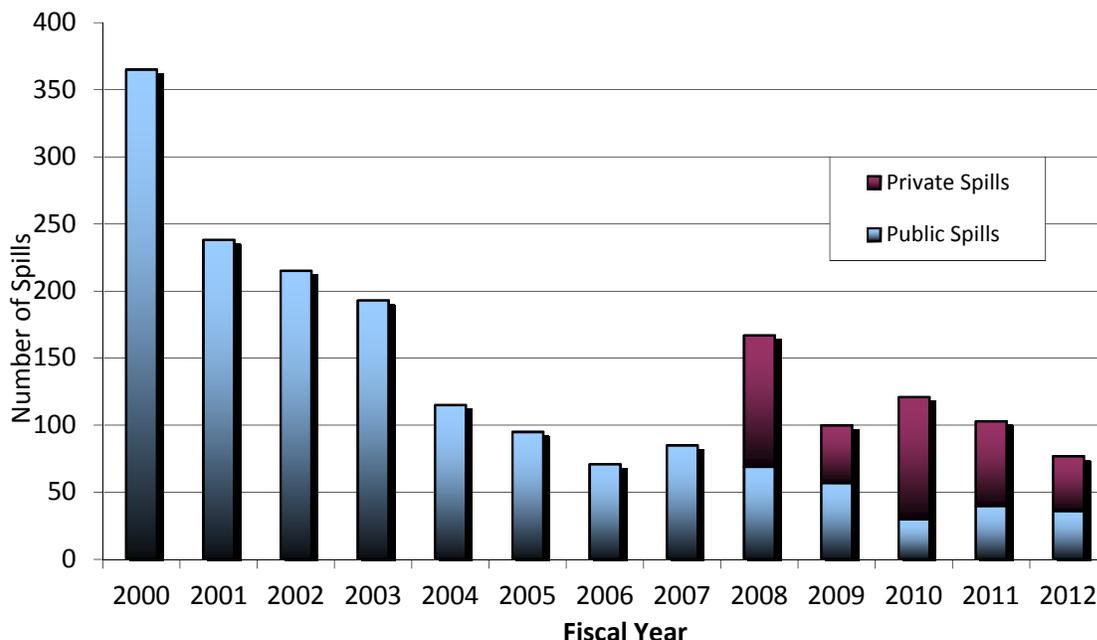
24 Hour Spill Reporting

In FY 2002, SWPP developed a 24-hour discharge reporting form that was disseminated to applicable departments with instructions on what discharges should be reported to the Regional Board. In addition, the Public Utilities Department’s Waste Water Branch developed and continued to use a standard sewer overflow form to promptly notify City Departments and resource agencies regarding the date, time, magnitude, location, and receiving water (if applicable) of sewer discharges. The Public Utilities Department was the only Department to report and submit significant discharges that required a pollutant discharge notification to the Regional Board during FY 2012.

During the reporting period, the Water Operations Branch of the Public Utilities Department responded to 17 significant discharges from City facilities. The Public Utilities Department’s Waste Water Branch responded to and abated a total of 77 spills, of which 36 were public and 41 private. **Figure 7-6** shows the number of sewage spills each calendar year since 2000, as reported by the Waste Water Branch¹³.

¹³ FY 2000-FY 2007 only show public spills due to available data whereas FY 2008 – FY 2012 show both public and private spills

Figure 7-6: Sewer Spills from FY 2000- FY 2012¹⁴



Response Measures

The City implemented spill prevention measures to reduce the occurrence of spills and to ensure that when spills occur, they are promptly contained and properly cleaned up. Information on the City’s procedures for spill response is included in Section 9.3, “*Spill Reporting, Response, and Prevention*” and Section 6.8, “*Metropolitan Wastewater Collection,*” of the City’s 2008 JURMP.

7.2.4 Table 7-1 Item No. 8

Spill Prevention

The City implemented spill prevention measures to reduce the occurrence of spills and to ensure that when spills occur, they are promptly contained and properly cleaned up. Information on the City’s procedures for spill response is included in Section 9.3, “*Spill Reporting, Response, and Prevention*” and Section 6.8, “*Metropolitan Wastewater Collection,*” of the City’s 2008 JURMP.

During FY 2012, the Waste Water Branch’s Wastewater Collection Division implemented a comprehensive sewer main cleaning maintenance program to assist in the prevention and elimination of sewer spills. This program utilized information received from cleaning crews to adjust the cleaning frequency of sewer collection pipes. The program has created a more efficient cleaning program by eliminating redundant cleanings (i.e., cleaning pipes that did not require cleaning) and utilizing resources in a more effective and efficient manner. Along with this program, the Waste Water Branch also utilized Closed Circuit Television (CCTV) crews to investigate problems as they were discovered by the field cleaning crews. The problem pipes

¹⁴ FY 2008 spills include 69 public and 98 private, FY 2009 spills include 57 public and 43 private, FY 2010 spills include 30 public and 91 private, and FY 2011 includes 40 public and 63 private spills (previous years represent only public spills)

identified were then prioritized and repairs were conducted as needed to keep the system functioning and prevent spills from occurring.

During FY 2012, the Waste Water Branch conducted the following activities with the goal of preventing and eliminating sewer spills and infiltration to the storm drain system:

- Inspected/televised 67 miles of sewer pipes;
- Repaired or maintained 0.5 miles of sewer mains; and
- Cleaned 2,060 miles of sewer pipes.

Grease Disposal Program

The Waste Water Branch continued to implement the Grease Disposal Program to prevent sewer line blockages and resulting spills caused by the disposal of grease into the sewer system. This program educates residents and businesses on the proper disposal alternatives for fats, oils, and grease. This program is described in more detail in Section 5 of this report.

Sanitary Sewer Canyon Program

The urban canyons of San Diego pose a unique challenge to the Waste Water Branch. If a sewer spill occurs in a canyon, it could go undetected for a period of time. With approximately 250 miles of sewer lines located in the City's canyons and open spaces, the Waste Water Branch has taken aggressive measures through the implementation of the multifaceted Canyon Program to reduce the possibility of canyon sewer spills and to increase the chances that such a spill will be detected and reported quickly.

Current efforts include physical inspection of canyon facilities by City staff to prevent sewer spills in the region's urban canyons. After every significant rainfall, the Waste Water Branch's Wastewater Collection Division crews hike through portions of "critical canyons" (i.e., canyons where a sewer spill could easily end up in a river, bay or the ocean) to inspect the sewer lines and manholes. Additionally, after a significant rainfall (greater than 1/2 inch in 24 hours) Waste Water Branch staff together with San Diego Police Department helicopter staff fly over canyon areas to look for sanitary sewer overflows. The Waste Water Branch has also partnered with Volunteer Canyon Watchers to report any indications of real or potential canyon sewer spills observed during recreational hikes through our urban canyons.

MS4 Inspection

The Storm Water Division's Operations and Maintenance (O&M) Section is responsible for the routine inspection and maintenance of the City's MS4 and surrounding areas. If illicit discharges are detected while performing inspections or other field activities, the O&M Section contacts the Pollution Prevention Section to initiate an investigation. Please refer to *Section 4.0 Municipal Component* for more information regarding efforts by the Storm Water Division's O&M Section.

7.2.5 Table 7-1 Item No. 9

Private Sewer Lateral Notification

During FY 2012, the City was notified of sewage spills from private sewer laterals via the emergency services line (619-515-3525). When there is a problem with a private sewer lateral the responsible property owner is instructed to contact a plumber to relieve the blockage. If the plumber is unable to fix the problem outside of the private property line, the plumber is instructed to call the City's emergency services line and notify the City of the problem. City crews will respond and repair the sewer lateral at no additional cost to the responsible private party to prevent sewer spills from private property sewer laterals.

7.2.6 Table 7-1 Item No. 10 and No. 11

Public Reporting of Illicit Discharges

In FY 2012, the Storm Water Division received 1,251 contacts from the public through the hotline, reporting webpage, and other means of communication (i.e., email or main office line). The most frequently reported types of discharges were wash water and waste water (291), auto-related (174), sewer-related (69), construction (133), paint (59), and sediment (63). All of the 1,251 contacts were referred to the City’s Storm Water Division Enforcement and Inspections Group for investigation during FY 2012.

The Storm Water Division uses several strategies to capture citizen attention and impart the importance of recognizing and reporting illicit discharges and connections through television and radio programming, the *Think Blue* website, and educational fliers and handouts. The number of contacts from the public was greater in FY 2012 than FY 2011 (846), but less than FY 2010 and FY 2009, which had a total of 1,353 and 1,468 contacts logged by staff respectively. In general, residential areas were the most common area reported as possible Storm Water Ordinance violations and waste water was the most common potential discharge reported.

7.2.7 Table 7-1 Item No. 12

Follow-up and Enforcement

The City detects illicit discharges and connections through a number of activities including the Dry Weather Monitoring Program, MS4 inspection, Sanitary Sewer Canyon Program, hotline calls, and referrals from other sources. By responding to issues reported the Storm Water Division’s Enforcement and Inspections Group investigated 1,251 potential illegal discharges. As a result of the investigations conducted by the City various enforcement actions were taken and are summarized in **Table 7-6**. The City also identified and removed five illicit connections during the reporting period.

Table 7-6: FY 2012 Enforcement Actions Taken

Type of Enforcement Action	Number of Actions
Citation	244
Education	110
Found to be Exempt	26
Letter	96
No Action Taken	246
No Evidence Found	83
Notice of Violation	307
Referred to another Department	48
To be Determined	36
Unknown	40
Total	1,251

Investigations where no responsible party could be identified after a thorough investigation were classified as “no action taken” resolutions. These discharges, created by unidentified parties, were most often abated and cleaned up by the City. Furthermore, code enforcement staff provided educational materials for all investigations except when no action was taken or no evidence was found.

In order to achieve compliance, some locations were revisited by the Storm Water Department’s Enforcement and Inspections Group. There were 478 follow-up visits conducted during FY 2012. Compliance was achieved at 1,137 of the 1,251 locations during the reporting period.

Please refer to Sections 3, 4, 5, and 6 of this JURMP Annual Report for information on the remaining locations.

Appendix F previously submitted with the FY 2012 JURMP Annual Report contains more information for all enforcement actions conducted during FY 2011.

7.2.8 Table 7-1 Item No. 13

There were no additional notable activities conducted for IDDE activities other than the efforts described above during FY 2012.

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8 EDUCATION

8.1 PROGRAM IMPLEMENTATION

Table 8-1 represents the City of San Diego’s implementation of the Education component as it relates to the Municipal Permit requirements during FY 2012. For any items in the table where an explanation, description, results, inventory, or examples are necessary, references are noted in the table and are included as an Appendix or are provided in Section 8.2. During FY 2012, the City was compliant with all elements of Section D.5 of the Municipal Permit.

Table 8-1: Education Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	A description of education efforts conducted for each target community.	The target communities are covered in items 2-6 of this table and all descriptions provided in Sections 8.2 below and noted Appendices are applicable to this item.
2	A description of how education efforts targeted underserved target audiences, high risk behaviors, and “allowable” behaviors and discharges.	See section 8.2.1 below
3	A description of education efforts conducted for municipal departments and personnel.	See section 8.2.2 below
4	A description of education efforts conducted for the new development and construction communities.	See section 8.2.3 below
5	A description of education efforts conducted for Industrial and Commercial owners/operators	See section 8.2.4 below
6	A description of jurisdictional education efforts conducted for residents, the general public and school children.	See section 8.2.5 below

8.2 DISCUSSION SUPPORTING TABLE 8-1

8.2.1 Table 8-1 Item No. 2

Hispanic Outreach

Think Blue continued its partnerships with local non-profits including I Love A Clean San Diego, the Media Arts Center and Tijuana River National Estuarine Research Reserve in an effort to engage and educate the Hispanic community within San Diego. *Think Blue* staffed a number of informational booths and handed out educational materials in Spanish at a number of Hispanic community events such as the San Diego Latino Film Festival, Fiesta Del Sol and Fiesta Del Rio. Additional events are detailed in **Appendix N**. Other efforts included connecting with Hispanic Chamber of Commerce, attending Hispanic Business events, and providing bilingual staff to answer questions and distribute informational surveys to assess knowledge of storm water issues among Hispanic and Spanish-speaking residents. *Think Blue* continued to air public service announcement in Spanish on both Spanish language television and radio stations. Other departments in the City, such as ESD, also utilized print media when targeting underserved audiences to inform individuals about auto product recycling events as noted in Section 6.2.1, Residential. The City will continue to look for opportunities to reach other underserved target audiences including African American, Vietnamese and Filipino communities, among others.

8.2.2 Table 8-1 Item No. 3

Municipal Departments and Personnel

Municipal General Storm Water Training

New Employees

During FY 2012 *Think Blue* conducted four quarterly trainings at the City's "New Employee Orientation" (NEO) workshops. Newly hired City staff who were in attendance (between 35-55 per workshop) received a basic introduction to storm water issues through an introductory presentation and the "Storm Water News You Can Use" video training module created by *Think Blue*.

During the reporting period, a total of 323 new employees received training. All staff who attended were given a pre-test and a post-test containing questions related to storm water and the topics covered in the training. The results from the tests showed that the training sessions resulted in substantial increase in knowledge of storm water issues among new City employees. The average score on the pre-test was 3.27 out of 5 (65%) and the average score on the post-test was 4.81 out of 5 (96%). More analysis can be found in Section 12, Effectiveness Assessment, of this report.

Existing Employees

During the previous reporting period (FY 2011), the Pollution Prevention Division began formulating ways to incorporate the new storm water training video into the "refresher" storm water training for existing City employees. The refresher training is intended to be given every two years to randomly selected City staff with regular access to a computer. Research was conducted to determine the feasibility of implementing a training that contained a knowledge assessment component, and was administered through "e-tests" to City employees. During FY 2012, the City made recommendations as to the software best suited to handle computer based training while continuing to gather graphic materials and review survey data in conjunction with the Employee Training Division and the web development team.

City Council

In an effort to keep members of the City Council informed and aware of local storm water issues, Municipal Permit compliance activities, and state and local regulations, the Storm Water Division continued to schedule informational briefings with council members and staff throughout FY 2012 on an as-needed basis. This fiscal year, emphasis was placed on educating Council members regarding the proposed Master Maintenance Plan to clean natural and concrete lined storm drain channels throughout the City as well as a variety of other storm water related projects.

Activity-Specific Storm Water Training

Municipal Development Planning and Municipal Construction Activities

During FY 2012, the Development Services Department, Storm Water Division, and the Public Utilities Department provided storm water-specific development planning and construction training. Details regarding this training are included as **Appendix M-1** and **M-2**.

The Storm Water Division's engineering staff provides assistance to other City Departments (such as ECP and DSD) with the training and implementation of the municipal storm water development planning requirements, and training in municipal construction activity requirements. In order to stay informed regarding new development planning storm water information and policies and new construction information, Division staff receives training from a variety of sources. During FY 2012, Division staff attended the following trainings:

- 2011 Floodplain Management Association Conference
- Three Day QSD Training (October 2011);
- Construction BMP Training by the American Public Works Association (APWA) (September 2011);
- CASQA Conference (September 2011);
- Meetings and Phone Conferences with proprietary BMP Vendors
- San Diego Hydromodification Training (January 2012); and
- Low Impact Development Training Workshop by Kristar

The Storm Water Division also distributes the *Stormwater* Magazine and *Erosion Control* magazine as additional informative resources to Division staff.

Municipal Industrial/Commercial Activities

Industrial and commercial staff from the Transportation & Storm Water Department and the Public Utilities Department Waste Water Branch with responsibility for conducting storm water compliance inspections and enforcement of industrial and commercial facilities received the required annual training as summarized in **Appendix M-3**.

Other Municipal Activities

Departments that performed work activities specifically identified in the Municipal Permit and/or performed work that directly impacted storm water quality provided activity-specific training sessions to their employees. During FY 2012, City Departments/Divisions conducted over 465 activity-specific trainings for staff (see **Appendix M-4** for more details).

8.2.3 Table 8-1 Item No. 4

Construction Site Owners and Developers

The Storm Water Division also provided outreach and education to construction site owners and developers. During FY 2012, the Enforcement and Inspections Section distributed 112 "Clean

Construction” brochures along with 112 Construction BMPs flyers to construction site owners and developers.

Staff from Development Services Department (DSD) Inspection Services attended the 2011 Fall and 2012 Spring Home and Garden Shows to provide construction related information to attendees which included construction site owners and developers and the residential community.

Two memorandums from the DSD Assistant Deputy Director were distributed to the Building Industry Association (BIA). The memorandums provided information on Hydromodification requirements (Guidelines for Determining Exemptions and Infeasibility) and revision to applicability of updated requirements in the City’s Storm Water Standards Manual. The memorandums were distributed in January 2012.

8.2.4 Table 8-1 Item No. 5

Industrial and Commercial Owners and Operators

During FY 2012, the Storm Water Division targeted Industrial and Commercial Owners and Operators by distributing educational materials during facility inspections. A summary of the material distributed is included in Table 8-2.

Table 8-2: FY 2012 Educational Material Distributed to Stationary Industrial and Commercial Sites/Sources

Material	# Distributed	Material	# Distributed
NOI	116	Authorization/Intro Letter – Spanish	3
NONA/NEC	319	Authorization/Intro Letter – Vietnamese	1
Industrial Facilities Handout – English	7	BMP Guide – Landscaping Practices	4
Industrial Facilities Handout – Spanish	3	BMP Guide – Trash Areas	8
Spills Handout – English	1,648	BMP Guide – Washing Activities	2
Spills Handout – Spanish	182	BMP Guide – Pet Waste Disposal	11
Impervious Surfaces Handout – English	1,679	BMP Poster – English	170
Impervious Surfaces Handout – Spanish	161	BMP Poster – Spanish	29
Automotive Fluids Handout – English	705	Think Blue Calendar	17
Automotive Fluids Handout – Spanish	99	Think Blue Tips – English	29
Industrial/Commercial Regulations Handout	1,831	Think Blue Tips – Spanish	6
Dumpster and Loading Dock Area Handout – English	1,825	Template – Best Management Practices	2,422
Dumpster and Loading Dock Area Handout – Spanish	147	Template – Hazardous Materials Inventory	1,002
Car Washing Handout	64	Template – Spill Plan	2,413
Think Blue Poster – English	4	Template- Education	2,388
Think Blue Poster – Spanish	107	What’s Cooking Guide	19
Authorization/Intro Letter – English	2,750	Green Wrench Guide	14

Total = 20,185

In a previous reporting period (FY 2009), *Think Blue* initiated a plan to implement more comprehensive outreach to local businesses in the City of San Diego through the creation of several BMP Guidebooks for businesses. During FY 2012, development of content for the Business Guidebooks was modified as part of a more comprehensive business outreach strategy. The City has begun the process of contacting local business organizations and groups in an effort to initiate a more cooperative relationship with local businesses in San Diego. The increased effort to provide educational materials and programs to the business community will continue into FY 2013 and beyond.

The City's Airport Division also conducted outreach to the industrial target audience by sending informational material to its tenants and lease holders addressing Airport policies regarding the Storm Water Pollution Prevention Plan (SWPPP) and the City's regulatory compliance expectations. Additionally, the City's Airport Division ensured that the commercial operating permits contain language to inform permittees of the regulations from the City Airports and other controlling agencies concerning acceptable activities and their associated BMPs.

During FY 2012, the City's Treasurer's Office continued to include a Think Blue San Diego flyer insert in the mailing of business tax certificates to all businesses within the City. The flyer contains general information on pollution prevention for businesses. There were approximately 950 business tax certificates mailed out weekly. Additionally, flyers were included in each annual business license update notifying businesses (including mobile businesses working within City limits) that they must prevent runoff from entering the City storm drains. The flyers were inserted in November 2011 and will continue in the future. To date, more than 8,000 notifications are being sent to businesses per month.

8.2.5 Table 8-1 Item No. 6

Residential Community, General Public, and School Children

Media Efforts

In FY 2012, media advertising plans continued to place an emphasis on targeting a younger male audience as they are more likely to engage in high risk behaviors, have less knowledge of storm water issues, and are more likely to pollute than other demographics. Additionally, there was an increase in media outreach to middle-aged female audiences due to the drop in knowledge and awareness of storm water issues according to research. Therefore, the media mix focused sports and automotive programming on television and radio stations to reach the male demographic and news and daytime programming to meet the female demographic to build awareness of the *Think Blue* brand and storm water issues across both genders.

During the reporting period, the Storm Water Division continued to air its more popular and impactful public service announcements (PSAs) including "Don't Trash Our Future" and "Fowl Water". *Think Blue* also continued to air six "Pollution Prevention Requirements" PSAs which focus on the City's storm water ordinance that requires residents and businesses to implement minimum BMPS to reduce pollution. The radio and television spots were aired in English and Spanish to maximize audience reach and retention.

Think Blue also continued its business outreach initiative by working with local radio stations (KIFM-FM, KMYI-FM) to create a contest encouraging businesses to contact the stations and describe what their businesses do to "*Think Blue*" and prevent pollution in San Diego. More than 100 entries were received between the two stations, and prizes were awarded to those businesses that had the best or most innovative responses.

The television and radio PSAs aired a total of 3,592 times and made an estimated 38,763,046 impressions. Additionally, placement on media websites resulted in an estimated 837,724 impressions during the reporting period.

Television and radio media opportunities in FY 2012 continued to include several community events such as music festivals, car shows and live remotes to widen *Think Blue's* exposure to the target demographics. Other advertising elements included the incorporation of *Think Blue* tips and messaging on environmental-themed web pages of several media outlets. Local radio personalities from KPBS-FM and KFMB-FM provided ad lib endorsement spots discussing pollution and storm water issues to encourage listeners to change their behaviors by using a direct appeal from a person they like and trust, as opposed to simply a generic PSA. *Think Blue* also leveraged partnerships with San Diego sports teams including the San Diego Chargers, and the San Diego State Aztecs in order to reach the young male target audience via sporting events and venues.

Think Blue also showed its popular Fowl Water PSA in 15 movie theaters throughout San Diego. The spots ran prior to the feature movie and made an estimated 1,324,572 impressions during this reporting period.

Qualcomm Stadium also reached approximately 125,000 individuals by displaying the *Think Blue* message on the marquee at the stadium 20 times during the reporting period. Qualcomm Stadium also had signage to promote the proper disposal of trash and recycling during events at the Stadium, and all inlet grates are painted with the "No dumping drains to Ocean" message. There were approximately 900,000 individuals at the Stadium during FY 2012 who may have been influenced by this signage.

Community and Special Events

Community and special events offer a variety of opportunities for the *Think Blue* program to educate the public about storm water pollution prevention. There were approximately 2,863,100 total attendees at the events in which *Think Blue* participated in during FY 2012, and a summary of the larger events attended by *Think Blue* is provided in [Appendix N](#).

Collateral Materials

[Appendix O](#) identifies the *Think Blue* collateral materials available and distributed in FY 2012 to both general and targeted audiences. The italicized entries were new items for FY 2012. During FY 2012, the Pollution Prevention Division distributed a total of 38,520 materials, 36,510 of which were in English and 2,010 of which were in Spanish. Other City Departments/Divisions also distributed additional collateral materials to target audiences in FY 2012 and the summarized information is included in [Appendix O](#).

Education for School Age Groups

In 2011-2012, Project SWELL reached more than 50,000 students in five grades in San Diego Unified School District (SDUSD), and one grade level in Oceanside Unified School District (OUSD). It was taught in 132 elementary schools in SDUSD and 17 elementary schools in OUSD. Separate SWELL hands-on materials kits have been created for all grade levels to ensure that students and teachers have adequate resources to thoroughly explore their local water issues. Additionally, project partners collaborated to recreate the Project SWELL website to be adaptive to developing technologies in the classroom, and to reach more teachers countywide. In FY 2012, first grade kits were added to the overall Project SWELL curriculum and implemented throughout SDUSD.

In addition to SWELL in the classroom, San Diego Coastkeeper (project partners) participated in several community education events based on Project SWELL lessons, to ensure that students without access to hands-on science kits in their classroom are able to experience the benefit of Project SWELL’s unique learning system. Events included: San Diego Junior Lifeguards Environmental Day, San Diego High Tech Fair, San Diego Science Festival, and Walk the Watershed.

Table 8-3 identifies the *Think Blue* collateral materials available and distributed in FY 2012 to student age groups by *Think Blue*.

Table 8-3: FY 2012 *Think Blue* Collateral Materials for Student Age Groups

Category Title	Quantity Distributed in FY 2012
<i>San Diego Unified School District SWELL: Kindergarten, “Clean Water in San Diego”</i>	10,564
<i>San Diego Unified School District SWELL: 1st grade “Water Everywhere” Kit</i>	10,600
<i>San Diego Unified School District SWELL: 2nd grade “Pebbles, Sand, and Silt” Kit</i>	9,931
San Diego Unified School District SWELL: Investigation 4 th Grade “Ecosystems” Kit	9,436
San Diego Unified School District SWELL: Investigation 5 th Grade “Water” Kit	9,415
San Diego Unified School District SWELL: Investigation 6 th Grade “Landforms” Kit	9,263
<i>Oceanside Unified School District SWELL: 5th Grade Kit</i>	1,689
Total	59,209

Junior Lifeguards’ Environmental Day: The San Diego Junior Lifeguard program is a City program run by the Lifeguards Division of the Fire-Rescue Department. The program is implemented every summer for two one-month sessions. The Junior Lifeguards program introduces young people to safe marine and aquatic recreational opportunities, and is designed to improve young people’s physical conditioning, their understanding and respect for the environment, and their respect for themselves and others. Junior Lifeguards (JGs) range in age from 9-17 years old. FY 2012 was the 4th Annual *Think Blue* Environmental Day for the Junior Lifeguards.

Watershed Education Presentations: *Think Blue* and I Love A Clean San Diego (ILACSD) continued its outreach to high school students through its watershed education program. In this reporting period, *Think Blue* and ILACSD implemented the watershed Education Presentation program at 12 middle and high schools throughout the City of San Diego. Sixty-seven classroom presentations were successful in engaging 1,957 students from grades 7 through 12.

Think Blue Brigade: *Think Blue* initiated an environmental club initiative to foster more awareness and commitment from high school students. Dubbed the Think Blue Brigade, the program encourages students to take a more proactive role in pollution prevention, increase knowledge of storm water issues and affect change within your community. The program was pilot tested in select schools around the city and will be monitored into FY 2013.

EnviroDay: *Think Blue* partnered with several other City Departments as well as several Non-Governmental Organizations (NGO's) to create a broad-based experience for the children called EnviroDay during FY 2012. This one-day event took place August 6, 2012. Partners included *Think Blue*, City of San Diego Lifeguards, City of San Diego Environmental Services Department, City of San Diego Public Utilities Department, Water Conservation Division, I Love A Clean San Diego, Scripps Institution of Oceanography and San Diego Coastkeeper.

The EnviroDay event was set up like an educational fair, with each partner hosting a booth focused on environmental topics. The children spent approximately 15 minutes at each booth, and then rotated to the next booth. The following activities were among the topics presented at the various educational booths: E-waste, Water Conservation, Environmental Jeopardy, Marine Life Critter Learning Station, Recycle Relay Race, Watershed Model Demonstration, Ocean Acidification Touch Tank and a Water Quality Testing Demonstration. A total of 236 children were educated as a result of *Think Blue's* Enviro-Day.

9 PUBLIC PARTICIPATION

9.1 PROGRAM IMPLEMENTATION

Table 9-1 represents the City of San Diego’s implementation of the Public Participation component as it relates to the Municipal Permit requirements during the FY 2012 reporting period. During FY 2012, the City was compliant with all elements of Section D.6 of the Municipal Permit.

Table 9-1: Public Participation Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	A description of public participation efforts conducted	See Section 9.2.1 below

9.2 DISCUSSION SUPPORTING TABLE 9-1

9.2.1 Table 9-1 Item No. 1

The following storm water pollution prevention public participation efforts were implemented by the City of San Diego during FY 2012.

Residential Telephone Survey

In February 2012, the Storm Water Division conducted a telephone survey of adult residents in the City of San Diego. The purposes of the survey were:

- To explore residents attitudes about storm water pollution;
- To explore barriers to behavioral change that might reduce storm water pollution; and
- To assess different potential motivations for change including those that address barriers.

Approximately 800 telephone interviews were conducted with adult residents using a random-digit dial methodology, in which active residential and wireless telephone numbers served as the sample. Of these interviews 29% were completed via wireless telephone numbers, and 3% were completed in Spanish. The margin of error for citywide results is plus or minus 3.4% at a 95% confidence level.

Key findings include:

- 51% of all San Diego residents have heard the *Think Blue* slogan, down from 53% in FY 2011 but higher than any other year since 2004.
- 51% of residents know that storm water is not treated, which is a decrease from 57% in FY 2011.
- Residents who had heard of *Think Blue*, or the steps the City has been taking to prevent storm drain pollution, were more than twice as likely to make a behavior change.

A few questions in this survey were asked in similar studies conducted in previous years. As seen in the key findings, some of the results were compared to those from previous surveys. The report also presents results by subgroups of adult residents (i.e., by men versus women or by zip code) only if the differences are both statistically significant and are of relevance. Where statistically significant and relevant, the results are broken out by watershed. The survey findings are included as **Appendix P**.

Event Surveys

Additionally, the *Think Blue* program gathered feedback on storm water issues and the program at community events. Members of the public who visited the *Think Blue* booth at community events were encouraged to fill out one of several versions of a short 5-6 question survey. The cards touched on a variety of pollutants including automotive and dog waste. Surveys were available in English and Spanish.

Survey data was collected at 32 events between July 1, 2011 and June 30, 2012. During FY 2012, a total of 7,721 event survey cards were collected with an additional 1,902 from the San Diego County Fair. Of the 7,721 1,159 were pet waste surveys, 1,337 were automotive surveys, and 5,225 were litter surveys. The survey cards also included an option for participants to provide an e-mail address to be added to a mailing list. Nearly 40% of those who filled out a survey card provided an e-mail address, adding to a contact list database consisting of over 5,000 e-mail addresses. The contact list will provide a mechanism to provide additional public participation

opportunities for ongoing outreach, including newsletters, emails and for assessment activities such as focus groups.

Public Reporting of Storm Water Violations

Both the Storm Water Hotline and online reporting webpage were useful mechanisms in the identification of residents and businesses that were potentially violating the City's Storm Water Ordinance. In FY 2012, the Enforcement and Inspection Group conducted 1,101 investigations as a result of hotline calls and online reporting. The results of these investigations are summarized throughout this document.

Storm Drain Stenciling

The City coordinated with I Love A Clean San Diego to facilitate the City's Storm Drain Stenciling Program which encouraged volunteers and businesses to paint a "No Dumping, Drains to Ocean" bilingual message above storm drain inlets to increase awareness about litter prevention and watershed connectivity from inland areas to the coast. Throughout FY 2012, ILACSD coordinated 407 volunteers that painted 939 storm drains in 58 communities within the City of San Diego, and contributed 1,374 service hours. Participants were divided evenly amongst businesses and volunteer groups in FY 2012, with 55% volunteers and 45% businesses. Accomplishments made by these groups was also evenly distributed with 51% of drains painted by volunteers and 49% painted by businesses. Groups were also evenly distributed in FY 2012, indicating that ILACSD's volunteer outreach combined with City of San Diego's business inspections successfully engages volunteers as well as businesses into the program. Volunteer outreach is conducted using the Storm Drain Stenciling brochure developed by ILACSD and City of San Diego Think Blue.

ILACSD continued to update the stenciled locations on the GIS inventory, listing all stenciled drains by the date they were painted. To date, mapping indicates that stenciling gaps occur in the following communities: University City, Black Mountain Ranch, Torrey Pines, Sabre Springs, Bay Ho, Allied Gardens, San Carlos, Serra Mesa, University Heights, Emerald Hills, Golden Hill, Chollas View, Skyline, and Paradise Hills. These areas will be targeted in FY 2013 for special events, projects, and outreach.

Web Site

As comprehensive information repositories, the City's two storm water related web sites (<http://www.sandiego.gov/thinkblue> & <http://www.sandiego.gov/stormwater/index.shtml>) continued to encourage public involvement by informing the residents about the important issues associated with the Storm Water Division. During the reporting period, the *Think Blue* website was visited 35,759 times (Table 9-2), while the Storm Water Division site was visited 40,950 times (Table 9-3). Visits were not recorded during November 2011 due to website maintenance being conducted. A "visit" is considered a series of actions that begins when a visitor views the first page they are taken to in the site (from a search engine or other source) and ends when the visitor leaves the site or remains idle beyond thirty minutes.

Table 9-2: FY 2012 Think Blue Website Visits by Month

Month	Number of Visits	Month	Number of Visits
July 2011	4,727	January 2012	2,620
August 2011	4,102	February 2012	2,827
September 2011	4,410	March 2012	3,162
October 2011	2,577	April 2012	3,338
November 2011	N/A	May 2012	2,966
December 2011	2,083	June 2012	2,947

Table 9-3: FY 2012 Storm Water Website Visits by Month

Month	Number of Visits	Month	Number of Visits
July 2011	6,220	January 2012	2,808
August 2011	4,493	February 2012	3,126
September 2011	4,948	March 2012	3,122
October 2011	3,518	April 2012	3,079
November 2011	N/A	May 2012	3,372
December 2011	2,684	June 2012	3,580

Meetings, Hearings, Open Houses, and Workshops

The City continued to host and attend public meetings in an effort to provide the public the opportunity to have questions answered and concerns acknowledged. The City also continued to properly notify the public of these meetings, and provided times and locations that are convenient for the public to attend.

The City Planning and Community Investment Department (Planning Department) facilitated public participation through the following forums during FY 2012:

- San Diego IRWM Land Use Workshop, May 2, 2012 (25 attendees)
- City Council Hearing on Wetland Deviations, April 23, 2012 (50 attendees)
- Planning Commission Hearing on the Scripps Community Plan Amendment Initiation, August 4, 2011 (30 attendees)
- Chollas Triangle Master Plan Stakeholder Working Group on Draft Storm Water Policies, Quarterly meetings, (20 attendees)
- Midway Pacific Highway Corridor Stakeholder Meeting on Land Use alternatives, July 2011 (15-20 attendees)

During FY 2012, the Development Services Department (DSD) Land Development Review Division conducted quarterly meetings open for public participation on October 27, 2011, January 26, 2012, and May 24, 2012. The meetings focused on updates to the storm water requirements, new HMP requirements, changes in the grandfathering interpretation, and the Administrative Draft Municipal Storm Water Permit. DSD Inspection Services also was available to the public through their presence at the 2011 Fall Home Garden Show and 2012 Spring Home Garden Show.

Partnerships

During the reporting period, the City continued to seek out and coordinate initiatives and activities with well-established organizations in an effort to engage the public and encourage their support and participation. During FY 2012, *Think Blue* and the Storm Water Division

continued to work with local stakeholder groups including San Diego River Foundation, San Diego Coastkeeper, I Love A Clean San Diego, Groundwork San Diego Chollas Creek, the Tijuana River Estuary, and San Dieguito River Valley Conservancy among others to educate the public about storm water issues in each community. The Storm Water Division also maintained partnerships with San Diego Unified School District and San Diego Coastkeeper in an effort to continue, and expand, the Project SWELL curriculum.

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10 FISCAL ANALYSIS

10.1 PROGRAM IMPLEMENTATION

Table 10-1 represents the City of San Diego’s implementation of the Fiscal component as it relates to the Municipal Permit requirements during FY 2012. Further explanations and results are provided in Section 10.2. During FY 2012, the City was compliant with all elements of Section G of the Municipal Permit.

Table 10-1: Fiscal Analysis Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	A fiscal analysis of the Copermittee’s urban runoff management programs which meets all requirements of section G of Order No. R9-2007-0001.	Completed – See Section 10.2 below.

10.2 DISCUSSION SUPPORTING TABLE 5-1

10.2.1 Table 10-1 Item No. 1

10.2.1.1 General Budget Information

The Storm Water Division is responsible for annually reporting on the JURMP, WURMP, and RURMP's fiscal analysis to the San Diego RWQCB in accordance with the Fiscal Analysis Method. The Storm Water Division collected and analyzed financial information from 23 City departments/divisions through its "Annual Report Form Questions", as well as financial information from within the Storm Water Division. A summary of the findings is included below.

10.2.1.2 Fiscal Analysis Methods

While the City utilized the format and guidelines included in the Fiscal Analysis Method for reporting purposes, a few modifications were necessary in order to address how the City tracks accounts internally. The modifications to the expenditure categories are described in the relevant sections below. In addition, since the City does not specifically track expenditures by municipal permit component for budgeting purposes, in many cases estimated percentages were utilized to allocate expenditures into the appropriate municipal permit component categories, including watershed and regional.

10.2.1.3 Fiscal Analysis Results

10.2.1.4 Expenditures

The City's FY 2012 jurisdictional (JURMP), watershed (WURMP), and regional (RURMP) expenditures for the implementation of the Municipal Permit requirements are summarized in Table 10-2.

Table 10-2: FY 2012 Jurisdictional, Watershed, Regional Expenditures Summary

Jurisdictional Component	
Administration	\$536,961
Development Planning (includes public and private projects)	\$11,482,676
Construction (includes public and private projects)	\$9,372,038
Municipal (including Non-emergency Fire Fighting expenditures)	\$16,926,207
Industrial and Commercial	\$1,142,811
Residential, Education, and Public Participation	\$1,753,316
IDDE	\$4,872,827
Jurisdictional Total	\$46,086,836
Watershed Component	
San Dieguito Watershed	\$553,356
Los Peñasquitos Watershed	\$1,000,185
Mission Bay Watershed	\$2,699,743
San Diego River Watershed	\$596,806
San Diego Bay Watershed	\$2,167,387
Tijuana River Watershed	\$295,830
Watershed Total	\$7,313,307
Regional Component	
Total Copermittee Cost Share for the City of San Diego	\$570,432
Additional Regional Costs for education efforts, monitoring, document reviews, regional meeting attendance, and special projects	\$105,271
Regional Total	\$675,703
Total Costs	\$54,082,449

JURMP Expenditures

The City's FY 2012 City-wide expenditures for the implementation of the jurisdictional Municipal Permit requirements are depicted in Figure 10-1. In many cases expenditures were provided as actual costs and when the actual costs could not be determined estimates of actual costs were provided. The Storm Water Division utilized the expenditure categories detailed in the Fiscal Analysis Method for jurisdictional reporting. However, because of implementation overlap of the City's education, public participation, and residential Municipal Permit components, it is difficult to separate out individual component costs. Therefore, the expenditures for residential, education, and public participation are reported as one expenditure category.

A total of \$46,086,836 was expended in FY 2012 for the implementation of City-wide JURMP activities. This amount includes costs paid by sewer and water rate payers (which are used for sewer and water-related services) and costs reimbursed by project applicants. An overview of the expenditures reflected in this component is described below.

Administration (\$536,961)

Activities identified in this section represent personnel and non-personnel expenses for administration and contracts, grant management, city-wide management, reporting and assessment of the Municipal Permit.

Development Planning (\$11,482,676)

Activities identified in this section represent personnel and non-personnel expenses for plan check reviews, project design and SUSMP implementation, and General Plan updates. This category includes expenses for private and public projects.

Construction (\$9,372,038)

Activities identified in this section represent personnel and non-personnel expenses for plan check review services, field inspections related to grading permits, public improvements, and building activities. This category includes expenses for private and public projects.

Municipal (\$16,926,207)

Activities identified in this section represent personnel and non-personnel expenses for street sweeping, storm drain and channel maintenance, BMP implementation, and municipal facility and activity inspections. Additionally, this section includes the expenditures for Fire Department activities that are not related to emergency fire-fighting such as facility inspections, storm water BMPs, etc.

Industrial and Commercial (\$1,142,811)

Activities identified in this section represent personnel and non-personnel expenses for inspection of industrial and commercial facilities. This also includes personnel and non-personnel expenses for FEWD and IWCP inspections.

Residential, Education, and Public Participation (\$1,753,316)

Activities identified in this section represent personnel and non-personnel expenses for educational materials, outreach efforts and events, PSAs, HHW and used oil outreach, and community events.

Illicit Discharge Detection and Elimination (\$4,872,827)

Activities identified in this section represent personnel and non-personnel expenses for identification and elimination of illicit discharges, enforcing the City's storm water ordinance and implementation of the administrative civil penalties and citation process, and the urban runoff monitoring program.

WURMP Expenditures

The City's watershed expenditures during FY 2012 for the implementation of the watershed Municipal Permit requirements were provided as actual costs and when the actual costs could not be determined estimates of actual costs were provided. The Storm Water Division utilized the expenditure categories (administration, watershed activities, cost share contribution, and other) detailed in the Fiscal Analysis Method for watershed reporting. The watershed expenditures included in this report only capture City expenditures and do not account for any expenditure disbursed by other Copermittees within the watershed(s).

A total of \$7,313,307 was expended in FY 2012 for the implementation of City-wide WURMP activities. This amount includes costs for the implementation of applicable TMDLs along with special studies.

RURMP Expenditures

The City's FY 2012 regional expenditures (\$682,306) for the implementation of the regional Municipal Permit requirements were provided as actual costs and when the actual costs could not be determined estimates of actual costs were provided. The Storm Water Division utilized the expenditure categories (administration, cost share contribution, regional activities, and other) detailed in the Fiscal Analysis Method for regional reporting. The regional expenditures included in this report only capture City expenditures, and do not account for any expenditure disbursed by other Copermitees in the region.

10.2.1.5 Grant Funding for Special Studies

In addition to resources identified for Municipal Permit requirements, the City actively seeks grants, and other funding sources, for special studies and CIPs. For the most part, funding for these projects may be limited to the projects specified and which may restrict funding reallocation to other projects. Therefore, these resources are currently not incorporated in calculations for total Municipal Permit requirements expenditures detailed in Section 10.2.1.4 above. The following table lists projects that were initiated and/or in progress during FY 2012. It is important to note that the projects span multiple years and the amounts listed below are not just representative of FY 2012.

Table 10-3: Funding for Special Projects

Funding Source	Project	Amount	Matching Fund Amount	Total Amount¹⁵
United States Environmental Protection Agency	Kellog Park Infiltration	\$873,000	\$714,272	\$1,587,272
California Department of Water Resources	Memorial Park Infiltration	\$255,651	\$295,904	\$551,555
California Department of Water Resources	Bannock Avenue Streetscape Enhancement	\$630,500	\$125,000	\$755,500
State Water Resources Control Board	Tijuana River Sediment and Trash Abatement	\$700,000	N/A	\$700,000
State Water Resource Control Board	Four ASBS Pollution Mitigation Projects	\$2,500,000	\$625,000	\$3,125,000
California State Coastal Conservancy	Nelson Sloan Quarry Reclamation Studies and Plans	\$250,000	N/A	\$250,000
Total Grant Funding		\$5.21 million	\$1.76 million	\$6.97 million

¹⁵ Amounts span multiple years and not just FY 2012

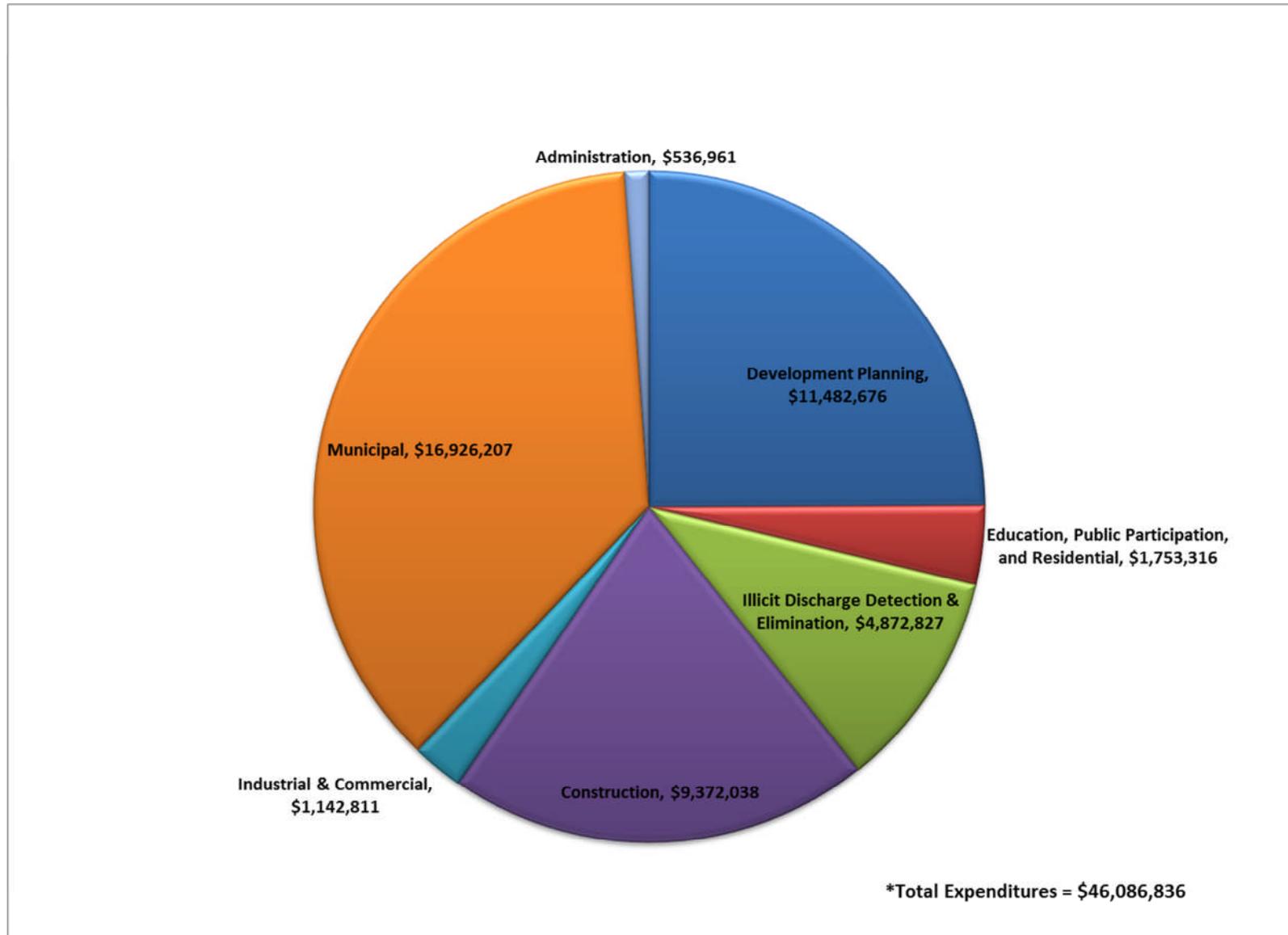


Figure 10-1: FY 2012 Citywide JURMP Expenditures by Permit Area

10.2.1.6 Funding Sources

City-wide implementation of Municipal Permit requirements is funded through four main types of governmental funds: the General Fund, Special Revenue Funds, Enterprise Funds, and Internal Service Funds.

10.2.1.6.1 General Fund

The General Fund is the main fund for the City, and is supported by major revenue sources including property tax, sales tax, transient occupancy tax and franchise fees. Departments funded by the General Fund provide core community services.

10.2.1.6.2 Special Revenue Funds

Special Revenue Funds account for revenues received for specifically identified purposes. Some of the larger funds that fall under this category include Transnet, Gas Tax and Special Promotion programs.

10.2.1.6.3 Enterprise Funds

Enterprise Funds are initiated for specific purposes and funded through fees for services. This funding type is designated for the operations, management, maintenance, and development of the department providing the service. For implementation of City-wide JURMP activities, activities are funded through the following enterprise funds:

- Airports Fund
- Development Services Enterprise Fund
- Golf Course Enterprise Fund
- Recycling Fund
- Refuse Disposal Fund
- Sewer Revenue Funds
- Water Utility Fund

10.2.1.6.4 Internal Service Funds

Internal Service Funds are comprised of fees for services provided by one City department to another City department or division. For implementation of City-wide JURMP activities, activities are funded through the following internal service funds:

- Engineering and Capital Projects Fund
- Equipment Division Funds

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11 SPECIAL PROJECTS

This section identifies and describes the City's completed, ongoing, and planned special projects and grants that are designed to examine and/or improve storm water quality or habitat conditions in the San Diego region.

In addition to its JURMP activities, the City also participates in the implementation of six (6) WURMPs in cooperation with other stakeholders and jurisdictions to improve storm water quality not only within the City's jurisdiction but as part of the larger, regional watersheds. Below is a list of the City's special projects that will be reported by the Watershed Copermittees as part of the FY 2012 WURMP Annual Reports for those watersheds in which the City is a part. The special projects discussed in the WURMP Annual Reports also include storm water related projects implemented under other regulatory programs such as Areas of Special Biological Significance (ASBS), Total Maximum Daily Loads (TMDLs), and Clean Up and Abatement Orders (CAOs).

Special Projects to be Included in the San Dieguito WURMP Annual Report:

- RB Alive Event
- Storm Water Drain Insert Pilot Study

Special Projects to be Included in the Los Peñasquitos WURMP Annual Report:

- Marindustry Drive Hydrodynamic Separator
- Fiesta de Los Peñasquitos
- ESD Phased Green Mall and Underground Vault
- Mira Mesa Library Bioretention and Infiltration Retrofit
- Flanders Canyon Sediment Monitoring
- Catch Basin Inlet Cleaning Pilot Study Phase I

Special Projects to be Included in the Mission Bay and La Jolla WURMP Annual Report:

- Mission Bay Focused Outreach
- La Jolla ASBS Compliance Monitoring
- Mission Bay Sewer Interceptor System Upgrades
- Kellogg Park Green Lot Retrofit Project
- Mount Abernathy "Green Street" Retrofit Project
- La Jolla Dry Weather Flow Diversions (Phase IV)
- Bannock Avenue Streetscape Enhancements
- Avenida de la Playa Low Flow Diversion
- Crew Classic Residential and Tourism Outreach
- Lindbergh Park Low Flow Limited Storm Drain Inlet Multi-Pollutant Treatment System
- ASBS Bioaccumulation Study, Phase I
- Catch Basin Inlet Cleaning Pilot Study Phase I

Special Projects to be Included in the San Diego River WURMP Annual Report:

- San Diego River Foundation Sponsorship
- Cabrillo Heights Park Rain Garden Filtration Project
- Park Ridge Blvd Hydrodynamic Separator BMP
- Famosa Slough Erosion Sediment Control BMP
- Robb Field Water Treatment and Reuse

- Qualcomm Stadium Trash Segregation BMP
- Allied Gardens Green Lot
- Complex Street Green Mall
- Storm Water Drain Insert Pilot Study

Special Projects to be Included in the San Diego Bay WURMP Annual Report:

- Chollas Creek Diazinon and Dissolved Metals TMDL Annual Compliance Monitoring
- Chollas, Switzer, Paleta Creek Mouths TMDL Modeling
- Shelter Island Yacht Basin Copper TMDL Annual Compliance Monitoring
- Southcrest Park Infiltration Retrofit
- El Cajon Boulevard Trash Segregation BMP Installation
- Memorial Park “Green Lot” Infiltration Project
- 43rd and Logan Biofiltration Project
- Maple Street Canyon Water Quality Improvement Pilot
- Beta Green Alley
- Catch Basin Inlet Cleaning Pilot Study Phase I
- PAH Aerial Deposition Study Phase I
- Juneteenth Community Event
- Storm Water Drain Insert Pilot Study

Special Projects to be Included in the Tijuana River WURMP Annual Report:

- Tijuana River Gross Solids and Sediment BMPs Design
- Fiesta del Rio
- Beyer Blvd. Trash Segregation BMP
- Catch Basin Inlet Cleaning Pilot Study Phase I
- Cesar Chavez Community Park – Hydromodification
- Storm Water Drain Insert Pilot Study

The following projects span multiple watersheds within the City and may be reported in each of the WURMP Annual Reports:

- I Love a Clean San Diego Trash Clean-up
- Comprehensive Load Reduction Plans Development
- San Diego Coast Keeper Trash Clean-up
- Strategic Plan implementation
- Public Service Announcements
- Watershed Brochures
- Posting Non-posted Street Sweeping Routes Pilot Study, Phase V (Planning)
- Rain Water Harvesting Rebate Pilot Program (Rain Barrels)
- Qualcomm Stadium Drop Off Community Cleanup & Recycling Event Sponsorship

12 EFFECTIVENESS ASSESSMENT

12.1 INTRODUCTION

The Municipal Permit specifies that Copermittees assess both annually and in the long term (five-year intervals), the effectiveness of their JURMP at three levels: programmatic, component, and activity-specific. The City uses these effectiveness assessments as part of an iterative feedback loop that incorporates planning, implementation and assessment of its overall Storm Water Program.

The City has identified areas for future improvement, such as enhanced data collection and information sharing, as well as more frequent departmental coordination. These efforts will help to ensure that the City meets all targeted outcomes for compliance with the Municipal Permit during future reporting periods.

This section outlines an integrated effectiveness assessment process that includes compliance assessment results for FY 2012 and program changes that reflect the City's approach to adaptive management. The City conducts special studies and BMP Efficiency Assessments for a select group of pilot activities to generate recommendations for optimizing its Storm Water Program. Provided below is an update on those assessments and how the City has begun to use them to adapt their management of program implementation.

12.2 EFFECTIVENESS ASSESSMENT PROCESS

The 2008 JURMP describes the City's overall process for assessing and optimizing its Storm Water Program. An abridged version of this process is presented below.

The City's Effectiveness Assessment process is driven by the following goal:

Optimization of the "means & methods" of implementing its Storm Water Program

- Optimization meaning the most cost-effective allocation of resources to effect pollutant load reductions and improvements to storm water quality
- "Means & methods" meaning the processes, materials, treatment controls, equipment, etc. that are used to achieve pollutant load reductions and improvements to storm water quality

The City uses a simplified approach to assessing the effectiveness of its Storm Water Program. Assessment is one phase of the Storm Water Program "Process", which also includes Planning and Implementation phases (Figure 12-1).

It is noted that the City does not include in their effectiveness assessment the following items as discussed in the Permit to be used where applicable and feasible:

- 1) Utilization of outcome levels 5 & 6 to assess the effectiveness of program activities, components and the program as a whole
- 2) Utilization of monitoring data and analysis from the Receiving Waters Monitoring Program to assess the effectiveness of program activities, components and the program as a whole

The above items are found to not be applicable assessment tools at a jurisdictional level because water quality results are not easily associated with the activities as they are implemented,

reported and assessed in jurisdictional programs. The above items are better assessed on a watershed basis where there is a nexus between drainage areas (e.g., watersheds) and water quality. Therefore, an Integrated Assessment that includes MS4 contributions and receiving water conditions is not included at this time.

As shown in Figure 12-1, the Assessment phase includes an integration of the Baseline BMPs and BMP Efficiency Assessments. By using what is learned about effectiveness and the resources necessary to implement BMPs, the City can refine its Baseline BMPs to maximize resources. The following subsections include descriptions of the two integral pieces of the Assessment phase of the Storm Water Program Process.

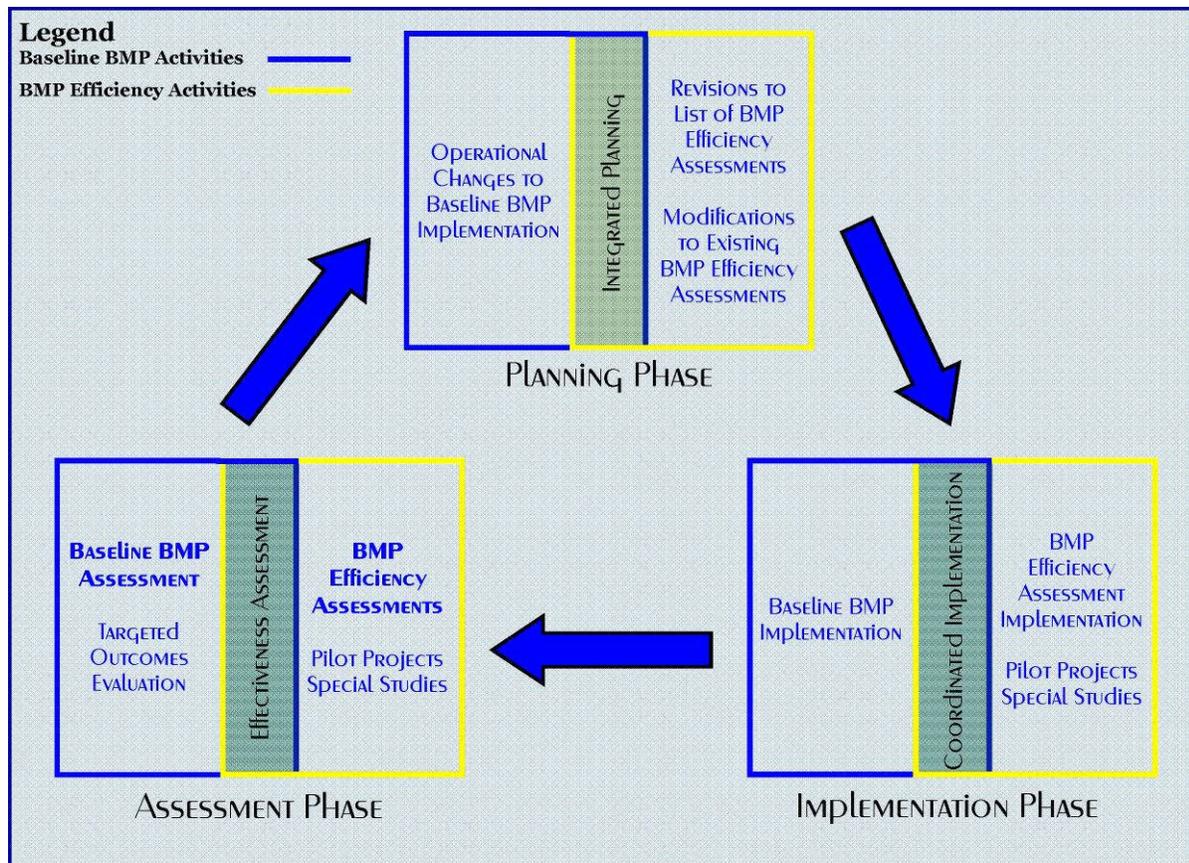


Figure 12-1: Storm Water Program Process

Baseline BMPs

Baseline BMPs include specific Storm Water Program significant activities as identified in the Municipal Permit and the City’s 2008 JURMP. The majority of these BMPs are implemented at the jurisdictional level (i.e., citywide). The City uses the Effectiveness Assessment Levels (1-4) defined in the Municipal Permit to evaluate its Baseline BMPs to determine compliance. If targeted outcomes are met, compliance is achieved. If targeted outcomes are not met, the Baseline BMP Assessment will generate recommendations for improvements to the Planning and/or Implementation phases of the City’s Storm Water Program Process (Figure 12-1). These improvements will ultimately result in the City meeting its targeted outcomes for compliance with the Municipal Permit.

The Baseline BMP Assessment for FY 2012 is located in Section 12-3.

BMP Efficiency Assessments

BMP Efficiency Assessments¹⁶ are defined as pilot projects and special studies or evaluations. The purpose of the BMP Efficiency Assessments is to obtain data and information that may be used to evaluate both the effectiveness and efficiency of BMPs as part of an adaptive management program. By implementing and assessing these pilot projects and special studies, the City can make informed decisions about the appropriate allocation of limited storm water resources to maximize pollutant load reductions and improvements to storm water quality. Furthermore, the results of the BMP Efficiency Assessments will be used to generate recommendations for improvements to the Planning and Implementation phases of the City's Storm Water Program Process. For example, the City will be undertaking a long-term assessment and update of its storm water program efforts as part of the City's watershed-based Comprehensive Load Reduction Plans (CLRP) development to address existing and future TMDLs and other 303(d) listed pollutants in multiple watersheds. This comprehensive effort will draw from the totality of BMP assessment information the City has amassed over the current Municipal Permit cycle. The City also intends to utilize this planning effort to identify a comprehensive watershed plan and strategy that will serve as the implementation mechanism for the next Municipal Permit.

The City maintains a list of conceptual BMP Efficiency Assessments for program planning purposes. When applicable, each assessment is designed to answer specific management questions for optimizing current Baseline BMPs. Priority for implementation of BMP Efficiency Assessments is based on several factors, including: results of Baseline BMP Assessments, availability of mechanisms to implement the assessments, and availability of resources. A list of conceptual BMP Efficiency Assessments can be found in Section 12.3.

Integrated Program Assessment

The City integrates its Baseline BMP Assessment and BMP Efficiency Assessments to develop recommendations for optimizing its Storm Water Program.

These recommendations typically fall in one of the three following categories:

- 1) Revisions to the list of conceptual BMP Efficiency Assessments (additions, deletions or reprioritization)
- 2) Revisions to implementation of specific BMP Efficiency Assessments
- 3) Modifications to Baseline BMP implementation (processes, materials, equipment, etc.)

It is this iterative feedback loop that will drive the City's Storm Water Program toward optimization.

Long-Term Assessment

The City participates in efforts of the WURMPs and the Regional Copermittees to develop and implement long-term effectiveness assessments of the programs. These long-term efforts include long-term effectiveness assessments as well evaluation of Outcome Levels 5 & 6 at a watershed scale.

¹⁶ BMP Efficiency Assessments are assessments of activities that are above and beyond the Baseline BMPs required by the Jurisdictional portion of Order R9-2007-0001, and may include Pilot Studies and Special Projects or Evaluations.

12.3 EFFECTIVENESS ASSESSMENT RESULTS

12.3.1 Baseline BMP Assessment

The City assesses the effectiveness of its specific activities, program components and overall JURMP by evaluating at the following outcome levels.

Table 12-1: Effectiveness Assessment Outcome Levels 1-4

Outcome Level	Description	Assessment
1	Program Compliance	Measured by comparison to targeted outcomes, and the City's effectiveness at implementing the Municipal Permit
2	Changes in Attitudes, Awareness and Knowledge	Measured by pre- & post-surveys and questioning of specific regulated communities
3	Behavioral Changes and BMP Implementation	Measured by analysis of inspection findings
4	Load Reductions	Measured by direct method – how much waste material is collected and disposed

Level 1 – Compliance Assessment—Activity, Components and Program

Overall program compliance is based on the summation of the individual Municipal Permit component compliance evaluations. Municipal permit component compliance is determined by comparing data collected from departments citywide to the targeted outcomes for specific activities. For FY 2012, the targeted outcomes for each permit activity are defined as fulfilling the baseline Municipal Permit requirements of Order R9-2007-0001. The assessment results are provided in the program implementation tables located at the beginning of each component section of this annual report.

Some highlights from the City's Baseline BMP activities include the following:

- Estimated 38,763,046 Public Services Announcement (PSA) impressions were made – the television and radio PSAs aired a total of 3,592 times
- Estimated 837,724 impressions from placement of PSAs on media websites were made
- Estimated 1,324,572 movie theater impressions were made from the Fowl Water PSA airing in 15 movie theaters.
- Estimated 2,863,100 people reached through *Think Blue* community and special events
- Approximately 202 tons of debris and sediment removed from City catch basins, inlets, and cleanouts
- Swept approximately 88,945 curb miles and municipal parking lots removing approximately 5,727 tons of debris and sediment from city roadways and parking lots
- ESD collected approximately 494 tons of HHW
- ECP Field Engineering, DSD Inspection Services Division, and the Public Utilities Department conducted 58,342 construction site inspections.
- Conducted more than 6,500 inspections of commercial and industrial businesses, resulting in 1,632 businesses inspected above and beyond the Permit requirements

Level 2 – Changes in Knowledge, Awareness and Attitudes Assessment

During FY 2012, the City continued its efforts to collect data and information regarding changes in attitude, awareness and knowledge. Methods of data collection included commercial/industrial business inspections, surveys and assessments of training.

BMP Knowledge Assessments

As in previous years, part of the commercial and industrial business inspection process was to assign each facility inspected a rating to reflect the level of BMP implementation noted at the site (Level 3 Assessment), and a separate rating to reflect the facility manager/responsible party's level of storm water knowledge. The assessment ratings were designed to gauge knowledge of storm water pollution prevention measures and implementation of effective BMPs. The ratings were assigned based on how many of the following questions were answered correctly:

- What is storm water?
- What is the difference between the storm drain system and the sanitary sewer system?
- Where does storm water flow?
- Is storm water treated prior to discharge?
- What are examples of pollutants?
- Is sediment a pollutant?
- Do you know what good housekeeping or best management practices are?
- Do you know what NPDES is or means?

Individuals who answered all of the aforementioned questions correctly and demonstrated an in-depth knowledge of storm water pollution prevention measures and NPDES were rated "Level 5". Individuals who answered four or more questions correctly, and had a basic understanding of storm water pollution prevention measures but did not know or understand what the NPDES Storm Water Program was received a "Level 4" rating. A "Level 3" rating indicated an individual who answered three questions correctly, "Level 2" indicated one or two correctly answered questions, and a "Level 1" rating indicated that the individual was not able to answer any of the questions correctly.

BMP knowledge assessments have been obtained through business inspections conducted over the past seven years, and compared to previous years, overall knowledge scores seem to have improved during the reporting period. During FY 2012, a greater percentage of inspections were completed at facilities that have received an inspection in the past few years than had been in previous years' inspection programs. This could contribute to the improvement in knowledge scores. The City continues to monitor the results to determine any necessary program changes.

Residential Telephone Survey

The Storm Water Division conducted a telephone survey of adult residents in the City of San Diego between February and March 2012. Approximately 800 telephone interviews were conducted using a random-digit dial methodology, in which active residential and wireless telephone numbers served as the sample. Of these interviews 29% were completed via wireless telephone numbers, and 3% were completed in Spanish. The margin of error for citywide results is plus or minus 3.4% at a 95% confidence level.

Key findings include:

- Half (51%) of respondents have seen or heard the *Think Blue San Diego* slogan. This is down slightly from 53% in 2011 but remains higher than in any other year since 2004.
- Television remains the most recalled source of information about the Think Blue program among all respondents, with 46% reporting they had seen a television commercial in the past year – including 15% who had not initially recalled the slogan.
- Asked for the first time this year, a high 42% had seen a stencil painted on sidewalks in front of storm drain openings.

Event Surveys

In order to assess the effectiveness of event attendance, *Think Blue* implemented a program by which it solicited participation in a brief survey about storm water issues. The survey cards consist of five to six questions designed to measure storm water knowledge, awareness and behavioral intentions. Data from the *Think Blue* event surveys collected during 36 FY 2012 events are as follows:

- A total of 9,621 event survey cards were collected
 - 1,337 were pet waste surveys
 - 2,896 were automotive surveys
 - 5,388 were litter surveys
- Fifty-seven percent (57%) of the individuals who completed an event survey had heard of *Think Blue* prior to attending the event (5,489 individuals)
- Sixty percent (60%) of respondents knew that storm water is not treated (5701 individuals)
- Approximately 4% of all of the surveys completed were completed in Spanish (441 individuals)
- 42% of those who filled out a survey card provided some type of contact information (approximately 4,009 people)

The data presented above represent continued positive response to *Think Blue's* campaign efforts, including attendance at special events. A consistent presence at events has maintained a high level of knowledge and awareness.

When comparing the FY 2012 event survey data to the FY2011, FY 2010, and FY 2009 data, some improvements are demonstrated. During FY 2012, there was a 9% increase in the number of individuals who had heard of *Think Blue* prior to attending the event compared to FY 2009. The number of respondents from FY 2010 to FY 2012 who knew that storm water goes untreated has remained relatively stable.

New Employee Training

Think Blue conducted trainings at the City's "New Employee Orientation" (NEO) workshops. Newly hired City staff in attendance received a basic introduction to storm water issues through a video, "Storm Water News You Can Use". In FY 2012, 323 new employees received the training. All staff who attended were given a pre-test and a post-test containing questions relating to storm water topics covered in the training. Results showed that the training sessions resulted in substantial learning among new City employees. The average score on the pre-test was 3.27 out of 5 (65%). The average score on the post-test was 4.81 out of 5 (96%) demonstrating a successful training course. As in previous years, the most substantial learning is related to knowledge of the storm drain system and that water in the system is not treated before being released into waterways.

Level 3 – Behavioral Changes and BMP Implementation Assessment

During FY 2012, the City continued its efforts to collect data and information for assessing behavioral changes and BMP implementation. The primary method of data collection was inspections of various sites/facilities to determine BMP implementation. Currently, there are only confirmations of BMP implementation available for the majority of the site/facility types with the exception of the commercial/industrial businesses.

As in previous years, part of the commercial and industrial business inspection process was to assign each facility inspected a rating to reflect the level of BMP implementation noted at the

site. At the conclusion of each inspection, the inspector evaluated his or her notes and corrective actions and assigned each facility a BMP assessment rating. The following provides a breakdown of how BMP assessment ratings were designated at inspected facilities:

- “Rating 5”: means all required general and activity specific BMPs had been implemented effectively. If available, monitoring results indicated that all constituents sampled were below established benchmarks.
- “Rating 4”: means BMPs had been implemented effectively but a dumpster lid was observed open and/or oil stains were noted in the parking lot (but were not associated with the business’ activities). If available, the monitoring data indicated that one or two constituents were slightly above the established benchmarks.
- “Rating 3”: means BMPs had been implemented with the less than two corrective actions identified during the inspection, with the exception of dumpster lids being open or oil stains in the parking lot. If available, monitoring data indicated that one constituent consistently exceeded the established benchmarks.
- “Rating 2”: Minimal BMP implementation was in place. Three or more corrective actions were noted, with the exception of dumpster lids being open or oil stains in the general parking lot. No illegal discharge or illicit connection was noted. If available, monitoring data showed concentrations of two or more constituents well above the established benchmarks.
- “Rating 1”: A violation of one or more of the City’s Storm Water Ordinances (illegal discharge, illicit connection, failure to properly implement required BMPs, and/or significant littering) was noted. BMP implementation was poor.

The commercial/industrial BMP implementation ratings have been obtained for the past seven years. Compared to previous years, overall BMP scores seem to have improved in FY 2012. There was an additional effort during the reporting period to elicit immediate corrections at facilities which may have assisted in improving the scores.

Level 4 – Load Reduction Assessment

During FY 2012, the City continued its efforts to collect data and information for assessing pollutant load reductions. The primary method for determining pollutant load reductions was to collect data from departments on specific storm water activities; such as storm drain cleanings, parking lot sweeping, and municipal inspections. Until more data and information becomes available to accurately estimate pollutant load reductions from non-cleaning activities, the City will rely on these activities as the primary quantifiable pollutant load reduction activities.

Below is a summary of the quantifiable pollutant load reduction activities that the City conducted during the FY 2012 reporting period:

- ESD collected 494 tons of HHW.
- The Park and Recreation Department collected 5,154 tons of debris from the parks, beaches, and bay, including over 198 tons of debris collected during the 2011 July 4th holiday along the shoreline of Mission Bay and Shoreline/Beach Parks.
- The City (as a whole) conducted 34,102 inspections of catch basins and inlets, and found and cleaned 22,894 catch basins and inlets with accumulated waste exceeding cleaning criteria. Approximately 202 tons of debris was removed.
- The City has approximately 39 miles of channels. Approximately 1.61 miles of open channels were found with anthropogenic litter, 1.61 miles of channels were cleaned, and 37.83 tons of anthropogenic litter and sediment was removed.

- Through the implementation of the City's street sweeping program, 88,945 curb miles were swept and 5,727 tons of debris (including parking lots) was removed within the City.

12.3.2 BMP Efficiency Assessments

The City has identified BMP Efficiency Assessments to collect data for its programmatic optimization strategy as described in the 2008 JURMP. As previously stated, the City will use several factors to prioritize the implementation of these assessments.

As a part of the BMP Efficiency Assessments, the City has initiated multiple special and pilot projects through its WURMPs. These projects include the collection of targeted data for calculating pollutant load reductions or identifying sources (Table 12-2), and activity-specific costs for determining project efficiencies (Table 12-3). These projects are designed to answer specific management questions and generate recommendations that will feed into the City's overall Integrated Assessment Program. This will ultimately result in greater Storm Water Program optimization.

Tables 12-2 and 12-3 on the following pages lists the special and pilot projects that have been recently completed, are currently in implementation or are planned for near-future implementation. Projects intended to provide additional data for pollutant load reductions or identifying sources are summarized in Table 12-2 and BMP Efficiency Assessments are summarized in Table 12-3.

Table 12-2: Pollutant Load Reduction or Source Identification Special and Pilot Projects by Watershed

Project	San Dieguito River	Los Peñasquitos	Mission Bay & La Jolla	San Diego River	San Diego Bay	Tijuana River	Project Status
Regional Harbor Monitoring Program					X		Ongoing
Chollas Creek TMDL Annual Compliance Monitoring and Reporting					X		Ongoing
Chollas Creek Water Effects Ration Study					X		Complete
Shelter Island TMDL Annual Compliance Monitoring and Reporting					X		Ongoing
Mission Bay and Tecolote Special Bacteria TMDL Monitoring			X				Complete
Famosa Slough Eutrophication TMDL Modeling				X			Ongoing
San Diego River Integrated TMDL Monitoring and Reporting				X			Completed
Los Peñasquitos Lagoon Ocean Inlet Modeling and Reporting		X					Completed
Los Peñasquitos Creek Watershed Sediment, Nutrient, & Bacteria Monitoring and Reporting		X					Completed
Downtown Anchorage, B Street Piers Toxicity Assessment Modeling and Reporting					X		Ongoing
Switzer, Chollas, and Paleta Creeks Toxicity Assessment Modeling and Reporting					X		Ongoing
Develop Monitoring Framework	X	X	X	X	X	X	Completed
Sustainable Conservation Brake Pad Partnership			X		X		Completed
Dry Weather Historical Data Trend Analysis	X	X	X	X	X	X	Completed
ASBS Ocean Plan Exception Compliance Monitoring and Reporting			X				Ongoing
Shipyards Clean-up & Abatement Order Monitoring Plan Development					X		Completed
Bacteria Reference Study	X	X	X	X	X	X	Ongoing
PAH Literature, Data Analysis, and Gap Analysis					X		Completed

Project	San Dieguito River	Los Peñasquitos	Mission Bay & La Jolla	San Diego River	San Diego Bay	Tijuana River	Project Status
PAH Aerial Deposition Study					X		Ongoing
Channel Monitoring	X	X	X	X	X	X	Ongoing
ASBS White Paper			X				Ongoing
Flanders Canyon Creek Sediment Study		X					Ongoing
ASBS Bioaccumulation Study			X				Ongoing
Peñasquitos Outfall Assessment		X					Completed
Los Peñasquitos Lagoon Vegetation Mapping		X					Ongoing
TDS and Bioassessment Special Study	X	X	X	X	X	X	Ongoing
ASBS Dilution Study			X				Ongoing
Scripps and Tecolote Bacteria Compliance Monitoring and Reporting			X				Ongoing
High Flow Suspension Special Study	X	X	X	X	X	X	Ongoing
QMRA Work Plan Development			X				Ongoing
ASBS Compliance Plan Development			X				Ongoing

Table 12-3: BMP Efficiency Special and Pilot Projects by Watershed

Project	San Dieguito River	Los Peñasquitos	Mission Bay & La Jolla	San Diego River	San Diego Bay	Tijuana River	Project Status
Geographically-based Business Inspections	X	X	X	X			Complete
Median Sweeping, Phase III	X	X		X			Complete
Sweeper Speed Efficiency Study, Phase IV					X	X	Complete
Mira Mesa Library Bioretention and Infiltration Project		X					Ongoing
Phased Green Mall and Underground Vault Pilot		X					Ongoing
Targeted Auto Facility Inspections			X			X	Complete
Kellogg Park Green Lot Retrofit Project - Construction			X				Complete
Mount Abernathy "Green Street" Retrofit Project			X				Ongoing
Cabrillo Heights Park Rain Garden Filtration Project				X			Ongoing
Park Ridge Blvd Hydrodynamic Separator BMP				X			Ongoing
Robb Field Water Treatment and Reuse – Concept Planning				X			Complete
Allied Gardens Green Lot Filtration				X			Ongoing
Complex Street Green Mall Filtration				X			Ongoing
Targeted Aggressive Street Sweeping Pilot Study – Phases I & II					X		Complete
Mobile Trash Collection and Assessment, part of Groundwork San Diego Chollas Creek's Family Stream Team Project					X		Complete
Southcrest Park Infiltration Retrofit					X		Ongoing
Maple Canyon Water Quality Improvement Pilot					X		Ongoing

Project	San Dieguito River	Los Peñasquitos	Mission Bay & La Jolla	San Diego River	San Diego Bay	Tijuana River	Project Status
Memorial Park “Green Lot” Infiltration Project					X		Complete
43rd and Logan Biofiltration Project					X		Ongoing
Beta Alley Green Street Filtration					X		Ongoing
San Ysidro Green Mall Infiltration Retrofit					X		Ongoing
Catch Basin Inlet Cleaning Pilot Study Phase I			X		X	X	Complete
LID Regulatory Barriers and Solutions Project – Feasibility Study	X	X	X	X	X	X	Complete
Municipal Artificial Turf Evaluation				X			Complete
Targeted Landscape BMP Rebate and Incentive Program – Feasibility Study	X	X	X	X	X	X	Complete
Targeted Landscape BMP Rebate and Incentive Program (rain barrels, irrigation hardware, and weather based irrigation controllers)	X	X	X	X	X	X	Ongoing for several years
Expanded Targeted Landscape BMP Rebate and Incentive Program – Feasibility Study	X	X	X	X	X	X	Ongoing
Municipal Rain Barrel and Downspout Disconnect Pilot Project	X	X	X	X	X	X	Complete
Municipal Rain Barrel and Downspout Disconnect Pilot Project – Monitoring and Assessment	X	X	X	X	X	X	Complete
Targeted Aggressive Street Sweeping Pilot Study – Phase V Posting Non-Posted Routes	TBD	TBD	TBD	TBD	TBD	TBD	Ongoing
Stormwater Drain Insert Pilot Study	x			x	x	x	Complete

The above lists include activities implemented as part of WURMP Activities, and WURMP Annual Reports contain detailed information on the activities noted in Tables 12-2 and 12-3 above.

12.3.3 Integrated Program Assessment

Water quality and integrated assessments are most appropriately performed at long-term intervals (e.g., every five years) at a watershed scale where changes in water quality may be detected. The City of San Diego participated in the development of the San Diego Regional Copermittees' 2011 Long-Term Effectiveness Assessment that collected programmatic and water quality data and information from regional, watershed, jurisdictional, and Municipal Permit-required programs (e.g., TMDL programs). The data and information was compiled, analyzed and assessed for areas within the City's watersheds as well as the region. For more information regarding this portion of the City's integrated assessment, the reader is encouraged to review the 2011 Long-Term Effectiveness Assessment (found at www.projectcleanwater.org under Regional Work Products).

Integrated Program Planning

The City will continue to adapt its program based upon assessments of the baseline program and the BMP efficiency assessments. Program adaption may occur to correct compliance issues with baseline program implementation, or as enhancements by implementing its program in a more effective and efficient manner.

Prior to implementing changes to the program through adaptive management, the City evaluates each proposed program modification based on three base criteria:

- 1) Environmental Benefits (e.g., ability to reduce/eliminate loads or change behavior)
- 2) Economic Considerations (e.g., cost to implement the program modification)
- 3) Social/Institutional Benefits (e.g., public support, aesthetic, community engagement)

The Transportation & Storm Water Department makes a determination on implementation based on the results of this analysis.

Baseline BMP Assessment

The City recognizes that in order to have an efficient Storm Water Program, it is important to maintain compliance with the Municipal Permit. During the first quarter of FY 2012, the City has already begun the process of addressing each of the missed targeted outcomes as identified in relevant component sections. The first and foremost action is for the Storm Water Division to provide support to other City departments to complete their specific requirements.

The City of San Diego is one of the largest and most complex municipalities in the region. Having a large and complex organization poses many challenges, such as varying data tracking and reporting systems and multiple lines of communication for educating staff. However, the City is committed to instituting the necessary changes to current processes, protocols and systems to ensure that program requirements are implemented, tracked and reported adequately to the Regional Board. Table 12-4 lists areas identified for improvement in FY 2013 and provides the status of the corrective actions planned to address these issues.

Table 12-4: Programmatic Corrective Actions

General Issue	Corrective Actions	Current Status
Municipal Facility Inspections Not Completed	The Facilities Division has transferred the responsibility for conducting facility inspections to staff that will be responsible for ensuring the inspections are conducted in FY 2013. The Park and Recreation Department is working to ensure that inspections occur within the correct timeframe. In addition, the Storm Water Division has sent and will send regular reminders to all of the departments to conduct the appropriate municipal facility inspections and that all inspections must be documented.	These actions are currently being implemented.
Municipal Parking Lot/Operation Sweeping not Conducted	The Public Utilities Department, Water Operations Branch, did not conduct some of the parking lot and operation yard sweeping due to lack of staffing. The Water Operations Branch is working to determine a course of action for FY 2013 to resolve the issue.	These actions are currently being implemented.
Municipal Catch Basin Cleaning	Due to budget constraints there were 4 low priority Police Department drains with debris that were not cleaned during FY 2012. The drains were cleaned under a new purchase order in FY 2013, and the Police Department is working to rectify the issue in future fiscal years.	These actions are currently being implemented.
	New staff at the Fire and Rescue Department was unaware of catch basin cleaning requirements. The Fire Department deployed a contractor to clean the catch basins as a corrective action and the catch basins were cleaned July 26 -27, 2012.	These actions were implemented.
Municipal Open Channels Inspections and Cleanings	The Storm Water Division's Operations and Maintenance Group did not prioritize open channels into high, medium, and low priority and did not conduct the specified inspections and cleanings of the open channels. The Operation and Maintenance Group is ensuring appropriate measure are taken in future reporting periods to conduct the applicable prioritization, inspections, and cleanings.	These actions are currently being implemented.

In addition to the specific corrective actions identified in Table 12-4, the City will be coordinating post-annual report meetings with City departments as necessary. These meetings will focus on revising procedures and developing corrective action plans to address the issues identified above. In the event that there are modifications to the JURMP as a result of the post-annual report debrief process, those modifications will be reflected in next year's annual report.

Adaptive Management

During FY 2012, the City applied adaptive management to their program by utilizing findings from the FY 2010 Baseline BMP and BMP Efficiency to modify their program implementation. This is a direct result of applying the process shown in Figure 12-1 above.

By using the assessment information collected through the annual reporting process, studies and investigations, the City can best plan the use of its limited resources to improve overall program effectiveness. Table 12-5 lists the changes to the City's program that were implemented in FY 2012 based upon the adaptive management approach and process along with modifications that are either planned or are potential program modifications in future fiscal years.

Table 12-5: Adaptive Management Program Modifications

Program Element	Program Modifications	Basis for Modification	Expected Outcome
Implemented Program Modifications			
Street Sweeping	The City has reallocated its four vacuum sweepers to flat routes with good road surfaces compared to FY 2011.	The results of a street sweeping pilot study demonstrate that vacuum sweepers are more effective than mechanical sweepers at removing debris and fine particulates (including metals) along flat routes with good road surface conditions and well-defined curb and gutter.	This sweeping modification will allow the City to benefit from improved water quality without impacting existing budgets and resources.
Residential	The Storm Water Division along with the Public Utilities Department offered a City wide Rain Barrel Rebate Program as part of the Public Utilities Department's ongoing Outdoor Water Conservation Rebate Program and Storm Water Division's Targeted Landscape BMP Rebate and Incentive Program.	Rain barrels are a viable option for reducing volume of rain water discharging to the storm drains.	This is an ongoing project that will result in a reduction in the volume of wet weather flows into the storm drain system.
Planned Program Modifications			
Industrial/ Commercial	The City is developing a property based inspections component to be included in the industrial and commercial inspections during FY 2013. This will incorporate site specific conditions such as outdoor activities and locations of physical structures into the prioritization process for inspections.	An inspections program pilot activity focused in specific watersheds found that many BMP issues occur in common/shared areas where a business cannot always be identified as the responsible party. By focusing on the properties during the inspections, the property owner/manager becomes the responsible party for final compliance in the common areas.	A greater efficiency may be achieved for the amount of resources needed and the quantity of businesses inspected by utilizing the property inspection methodology; thereby, providing the ability to inspect more property and business areas and activities per visit, potentially leading to program efficiency and effectiveness.
Land Development	The City will implement key changes to development regulations and policies, in order to encourage and implement Low Impact Development practices.	The Storm Water Division assessed the City's Municipal Code and supporting guidelines and policies to find any barriers to the implementation of LID. Active and passive barriers were identified through this process.	Consider appropriate code amendments and policy changes for greater implementation of LID, which will help improve water quality.
Land Development	The City is planning to amend its SUSMP (including the potential addition of retrofit requirements) to focus on the reduction of priority pollutants from trash areas and loading/unloading areas.	The City's watershed inspection pilot activity identified trash enclosure areas and loading/unloading areas as primary areas of concern at businesses and properties. The pilot study report recommended that the City consider enhancing development requirements for these areas.	Reduced pollutant discharges from future trash storage areas and loading/unloading areas as part of new development and redevelopment.
Minimum BMPs	The City is planning to update its minimum BMPs for existing residential, commercial and industrial development and enforcement.	The Storm Water Division has found that the minimum BMPs need to be updated in order to more effectively prohibit non-storm water discharges.	The updated minimum BMPs will allow the City to be more efficient in preventing non-storm water discharges.

Program Element	Program Modifications	Basis for Modification	Expected Outcome
Enforcement	In conjunction with the update to its minimum BMPs, the City plans to increase enforcement of over-irrigation.	Reduction of irrigation runoff will minimize discharges to the storm drain system.	Volume reduction in dry weather flows.
Education & Outreach	Beginning in FY 2014, the City will increase its education and outreach programs in support of the planned program modifications identified in this table in response to existing and future TMDLs.	Education and outreach will be adapted and enhanced in response to assessment results, and in order to support any new programs and projects implemented based on new regulatory requirements.	Enhanced outreach will be more effective at reaching target audiences and providing information on programs and projects, as well as be adaptive to meet new regulatory requirements.
Private Roads & Parking Lots	In conjunction with the update to its minimum BMPs, the City plans to require sweeping of private roads and parking lots and inspections and cleanings of private catch basins.	In the same manner that trash management and other BMPs on private property provide important pollutant load reductions, requiring the sweeping of private roads and parking areas and inspection and cleanings of private catch basins would represent an additional means of reduction.	These new requirements will allow the City to benefit from improved water quality by removing more pollutants from area roadways and private inlets which will help meet water TMDLs Waste Load Allocations (WLAs).
Street Sweeping	Beginning in FY 2014, the City plans to sweep an additional 1000 miles of a combination of high priority water quality routes and center medians per watershed (6,000 miles total) with a vacuum sweeper.	The results of the street sweeping pilot study demonstrate that the vacuum sweepers are generally more effective than mechanical sweepers at removing debris, particularly fine particulates (including metals). The pilot study further shows that a significant amount of pollutants build up on center medians and those areas are currently not swept.	These sweeping modifications will allow the City to benefit from improved water quality by removing more pollutants from area roadways which will help meet TMDLs WLAs.
Future Potential Program Modifications			
Catch Basin Inlet Cleaning Pilot Study Phase I	The City is assessing the effectiveness of manual and vactor cleaning methods in different land use settings during the wet season and during the dry season to determine if there are modifications that can be made to increase the effectiveness of the City's catch basin cleaning program.	Phase I of the pilot study demonstrated there are differences in amounts of materials and pollutants that can be removed from catch basin inlets. Attributing those differences to factors such as removal methods, categorical land uses, timing in relation to rain events, frequency of cleaning, or a number of unmeasured factors is difficult given the small sample size and confounding factors.	It was determined to develop a Phase II in FY 2013 to determine the findings during the dry season as the wet season study was completed in FY2012.

Program Element	Program Modifications	Basis for Modification	Expected Outcome
Street Sweeping	<p>The City is considering the following future program modifications to its street sweeping program:</p> <ul style="list-style-type: none"> • Transition fleet of sweepers to a more equitable mix of vacuum and mechanical sweepers (target = 50% vacuum, 50% mechanical); • Connect with communities interested or requesting more aggressive (e.g., 1x/week) sweeping; and • Identify commercial and industrial routes for aggressive (e.g., 2x/week) sweeping. 	<p>These long-term, programmatic modifications to the City's street sweeping program will impact future fiscal year budgets. Therefore, the City will be comparing the cost-effectiveness of these potential program modifications with other BMPs in order to make comprehensive and balanced decisions that will help meet both current and future water quality regulations. However, the preliminary results from the City's street sweeping pilot studies indicate that these potential modifications may result in improved water quality at a relatively low cost, and therefore warrant further analysis.</p>	<p>These potential program modifications may result in improved water quality by removing more pollutants and debris from City roadways.</p>

The City continued to implement BMP Efficiency Assessments (pilot studies and special investigations) during the FY 2012 reporting period. As previously stated, the majority of these will be presented and assessed as individual WURMP Activities. Additionally, as more data and information is collected regarding the modified program elements, the City will report on the effectiveness of the program modifications.

13 JURMP REVISIONS

In order to improve the efficiency and effectiveness of the City’s efforts in protecting and improving storm water quality, the City updated its JURMP in March 2008. Additional revisions since the 2008 update may be made as necessary, and Table 13-1 summarizes the revisions made during FY 2012 (specific language changes are in [Appendix Q](#)).

Table 13-1: FY 2012 Summary of JURMP Revisions

JURMP Section	JURMP Revisions
Table 5.3 – BMPs and Discharge Enforcement at Construction Sites	Replace Table 5-3 with a revised table summarizing the department’s responsibilities regarding BMPs and discharge enforcement at construction sites.
6.3.1 Background	Clarify that the Homeless Services Division mentioned in this section pertains to the building that houses the City of San Diego staff for this Division and not the actual Homeless Services facilities.
6.3.3.1.2 Activity-Specific BMPs	Revised Table 6.3-2 to add weed abatement and herbicides
6.10	Clarified Events for Park and Recreation Department
6.12.1 Background	Revised Special Events descriptions
6.13	Clarified Events for Stadium
Table 6.14-2 BMPs Designated for Areas and Activities Related to Street and Storm Drain System Maintenance	Added Weed Abatement activity to the table.
6.16	Clarified Events for Water Systems
14.0 Modifications to the JURMP	Revised Special Events
Appendix XIV	Revised Special Event inspection Form

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14 CONCLUSIONS AND RECOMMENDATIONS

14.1 SUCCESSES AND CHALLENGES

14.1.1 Successes

This reporting period the Storm Water Division continued to utilize and refine its streamlined reporting format to provide an effective and concise means for presenting program data to the reader to illustrate compliance with the Municipal Permit.

Special projects are an integral tool in the City's effort to leverage limited resources with grant dollars and partnerships with environmental organizations and agencies. During FY 2012, the Storm Water Division participated in seven Total Maximum Daily Load (TMDL) programs (either through implementation or development of TMDLs) and numerous special water quality monitoring investigations to determine the sources of various storm water quality problems. Special projects are also important for providing information on potential adaptive management program modifications. An example of a special project resulting in changes is the Street Sweeping Special Study. The results of this study demonstrated that vacuum sweepers are more effective than mechanical sweepers at removing debris and fine particulates (including metals) along flat routes with good road surface conditions and well-defined curb and gutter. As such, during FY 2012 the City reallocated its four vacuum sweepers to flat routes with good road surfaces. This sweeping modification will allow the City to benefit from improved water quality without impacting existing budgets and resources.

In addition, the Storm Water Division achieved significant benefits to storm water quality beyond its budget by leveraging special projects. Specifically, over the course of several years in many cases, the City has received approximately \$5.21 million in grant funds, supplemented by approximately \$1.76 million in City and partner agency matching funds. The grants, which generally span multiple years, helped further the City's clean water efforts in San Diego Bay, Tijuana River, and Mission Bay watersheds.

The Storm Water Division achieved many other successes in implementing the JURMP in FY 2012.

- Removed 240 tons of debris, anthropogenic litter, and sediment from City catch basins, inlets, cleanouts and open channels.
- Removed 5,727 tons of debris from City parking lots and streets.
- Continued its efforts to seek out and abate illegal discharges; and the Storm Water Division's Code Enforcement Group was responsible for issuing 284 notices of violation, 177 citations, and conducting 372 follow-up location visits for FY 2012.
- The *Think Blue* messaging effort provided approximately 837,724 impressions from placement of PSAs on media websites.
- The *Think Blue* storm water education campaign made contact with approximately 2,863,100 individuals through special events.
- Revised and completed new annual reporting forms to facilitate easier and more accurate data collection for the City's JURMP Annual Report.
- The City has also reduced the number of sewage spills between 2000 and 2012 (see Figure 14-1).

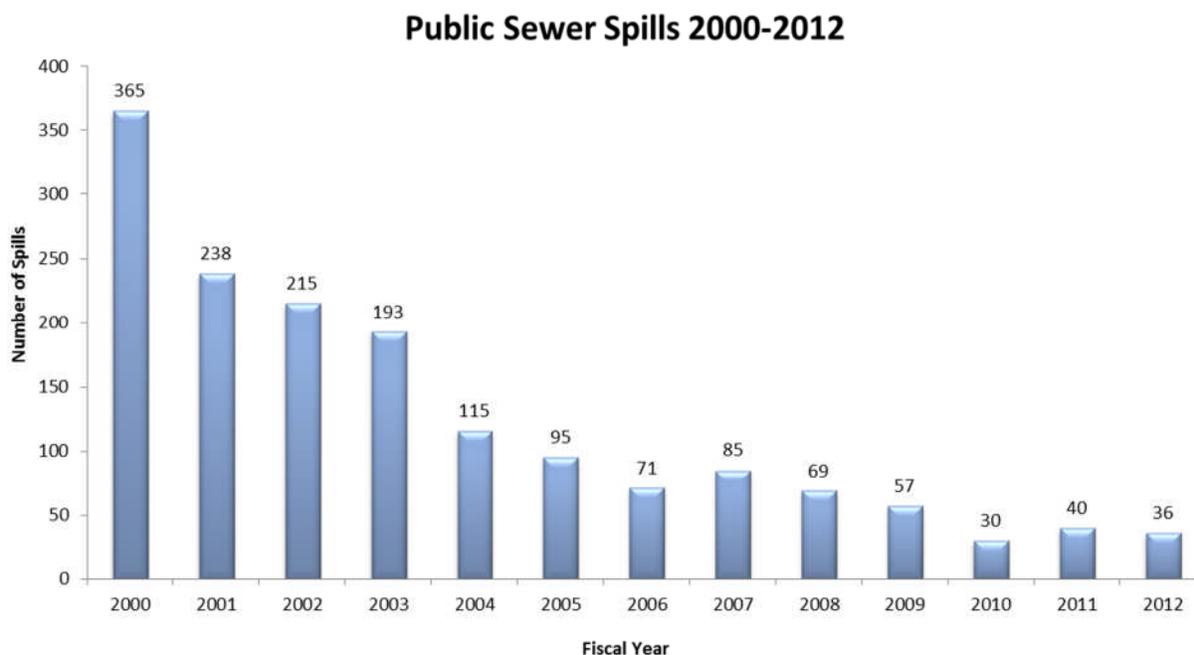


Figure 14-1: Number of Public Sewer Spills in the City between 2000 and 2012

14.1.2 Challenges

Although the City’s programs are continually implemented, there are still many challenges that pose issues to staff and the functionality of certain aspects of the program. Some of these challenges are discussed below.

In addition to the Municipal Permit, the City must also simultaneously comply with the requirements of other regulatory programs, such as Areas of Special Biological Significance (ASBS), TMDLs, and Clean-up and Abatement Orders (CAOs). Although these regulatory programs are separate from the Municipal Permit, their ultimate goal is the same—the improvement and protection of the region’s water quality. The convergence of these regulatory programs mandates that the City devote resources to advance planning efforts and nurture even stronger bonds and partnerships with other stakeholders in the region to achieve its goal of improved storm water quality.

The City faces significant challenges in effectively gathering and managing storm water program data. With a growing population of over 1.2 million residents and 237 square miles of urbanized development, the City is larger than other incorporated jurisdictions in the region. The enormity of the data management challenge is something the Storm Water Division and other departments are continually working to improve. For example, DSD must manage data from 100,000 inspections per year and are continuously working on improvement to its data tracking systems. The Storm Water Division will continue to focus on data management and the standardization of data collection and will continue to closely coordinate with other Departments.

The City of San Diego has a sizeable inventory of municipal facilities, and during FY 2012 99% of municipal facilities received two inspections. In order to ensure that inspections are conducted

in accordance with the City's JURMP during the next reporting period, the Storm Water Division sent out a memorandum in August 2011 to all departments reminding staff of the inspection requirements for municipal facilities and rainy season requirements. A second reminder was also sent towards the end of September 2011. The Storm Water Division plans to send out these reminders annually. The Storm Water Division will also coordinate meetings with City Departments, and staff will be available to conduct training via walk-along inspections of municipal facilities.

14.2 FUTURE RECOMMENDATIONS

To continue to improve program efforts, the Storm Water Division has identified four major program goals, as detailed below.

- 1) Continue strategic approach to program planning and implementation (Municipal Permit, ASBS, and TMDLs). The water quality regulatory programs, namely: the Municipal Permit, TMDLs, ASBS, and CAOs, have often times set stringent water quality standards that the City must meet. In order to meet the requirements, it is necessary to implement structural (e.g., CIPs) and non-structural (e.g., education and outreach, street sweeping) activities. The City will continue to closely coordinate programs in order to try to avoid overlapping efforts, wasted resources, and loss of time. This will be particularly important as the City has begun the process of developing a Comprehensive Load Reduction Plan as part of the Bacteria TMDL for the City's watersheds. The City is employing an integrated approach towards meeting the requirements of these regulatory programs simultaneously. Most recently, the City is developing a watershed-based asset management plan that integrates storm water quality and flood control (See [Executive Summary](#)).
- 2) Implement Adaptive Management Program Modifications. The Storm Water Division will continue to evaluate results and information from special studies, pilot projects, and general program implementation to identify adaptive management opportunities to improve program effectiveness and efficiency.
- 3) Improve data management, reporting and assessment. The City will be working with the other Copermittees in refining their reporting and effectiveness assessment standards to facilitate cross-jurisdictional and cross-programmatic comparisons and evaluations. The refined standards will lead to a more regionally-integrated approach to storm water quality improvement efforts. In addition to continued inter-jurisdictional cooperation, the Storm Water Division will continue to increase coordination with other City departments to ensure permit compliance and data collection. The Storm Water Division will also look for methods to modify and improve data gaps and collection procedures to assist in activity and program effectiveness assessment.
- 4) Refine municipal inspection program. The Storm Water Division will continue to work with departments to ensure that the City meets its inspection requirements as outlined in the City's JURMP. Specifically, the Storm Water Division will send out reminders Citywide about Municipal Permit responsibilities in FY 2013.

In conclusion, this FY 2012 demonstrates the City's compliance with the Municipal Permit and continued success in the implementation of the City's 2008 JURMP. The City is committed to implementing and improving pollution reduction efforts by utilizing iterative implementation strategies, identifying areas for improvement, collaborating with other Copermittees, and maximizing program efficiencies.

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