



**Annual Storm Water Permit &
Assessment Report**

Order No. 99-060/CAS004003 (CI8052)

December 1, 2003



CITY OF LONG BEACH

DEPARTMENT OF PUBLIC WORKS

333 West Ocean Boulevard • Long Beach, CA 90802 • (562) 570-6383 • FAX (562) 570-6012

December 1, 2003

Dennis Dickerson, Executive Officer
California Environmental Protection Agency
Los Angeles Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013

RECEIVED
2003 DEC - 1 PM 1:30
CALIFORNIA REGIONAL WATER
QUALITY CONTROL BOARD
LOS ANGELES REGION

Subject: Annual Storm Water Permit and Assessment Report for 2002-2003

Dear Mr. Dickerson:

The City of Long Beach is pleased to submit its "Annual Storm Water Permit Report and Assessment" for 2002-2003 in compliance with the requirements of Municipal National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0040003 (C18052), Order No. 99-060.

Should you have any questions in regard to this report, please contact Tom Leary, Stormwater Program Officer, at (562) 570-6023.

Sincerely,

Mark Christoffels
City Engineer

MC:II

Enclosure

ADMINISTRATION & PLANNING
333 W. Ocean Blvd., 9th Floor
Long Beach, CA 90802
Ph. (562) 570-6383
Fax (562) 570-6012

AIRPORT
4100 Donald Douglas Dr.
Long Beach, CA 90808
Ph. (562) 570-2600
Fax (562) 570-2601

ENGINEERING
333 W. Ocean Blvd., 9th Floor
Long Beach, CA 90802
Ph. (562) 570-6771
Fax (562) 570-6012

PUBLIC SERVICE
1601 San Francisco Ave.
Long Beach, CA 90813
Ph. (562) 570-2700
Fax (562) 570-2792

TRAFFIC & TRANSPORTATION
333 W. Ocean Blvd., 10th Floor
Long Beach, CA 90802
Ph. (562) 570-6331
Fax (562) 570-7161



CITY OF LONG BEACH

DEPARTMENT OF PUBLIC WORKS

333 West Ocean Boulevard • Long Beach, CA 90802 • (562) 570-6383 • FAX (562) 570-6012

CITY OF LONG BEACH MUNICIPAL STORM WATER PERMIT NPDES PERMIT NO. CAS0040003, ORDER NO. 99-060

Permittee Annual Stormwater Permit and Assessment Report Permit Year 2002 - 2003

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

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

Executed on the 1st day of December, 2003."

Mark Christoffel
City Engineer

ADMINISTRATION & PLANNING
333 W. Ocean Blvd., 9th Floor
Long Beach, CA 90802
Ph. (562) 570-6383
Fax (562) 570-6012

AIRPORT
4100 Donald Douglas Dr.
Long Beach, CA 90808
Ph. (562) 570-2600
Fax (562) 570-2601

ENGINEERING
333 W. Ocean Blvd., 9th Floor
Long Beach, CA. 90802
Ph. (562) 570-6771
Fax (562) 570-6012

PUBLIC SERVICE
1601 San Francisco Ave.
Long Beach, CA. 90813
Ph. (562) 570-2700
Fax (562) 570-2792

TRAFFIC & TRANSPORTATION
333 W. Ocean Blvd., 10th Floor
Long Beach, CA 90802
Ph. (562) 570-6331
Fax (562) 570-7161



TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	iv
1.0 PROGRAM MANAGEMENT.....	1-1
1.1 IMPLEMENTATION STRATEGY	1-1
1.2 REGIONAL PARTICIPATION	1-2
1.3 CURRENT PROJECTS.....	1-4
2.0 MANAGEMENT PROGRAM FOR PUBLIC AGENCY ACTIVITIES.....	2-1
2.1 TRASH AND GREENWASTE CONTROL	2-1
2.2 CODE ENFORCEMENT	2-7
2.3 STREET MAINTENANCE.....	2-9
2.4 STORM DRAIN SYSTEM OPERATIONS AND MAINTENANCE.....	2-10
2.5 PUBLIC CONSTRUCTION ACTIVITIES	2-11
2.6 LANDSCAPE MAINTENANCE	2-12
2.7 TRAINING.....	2-14
3.0 MANAGEMENT PROGRAM FOR DEVELOPMENT PLANNING AND CONSTRUCTION	3-1
3.1 CEQA	3-1
3.2 GENERAL PLAN.....	3-2
3.3 CHAPTER 18.95, "NPDES AND SUSMP REGULATIONS," OF THE LONG BEACH MUNICIPAL CODE.....	3-2
3.4 TRAINING.....	3-3
4.0 MANAGEMENT PROGRAM FOR ILLICIT DISCHARGES AND ILLICIT CONNECTIONS.....	4-1
4.1 ILLICIT DISCHARGES.....	4-1
4.2 ILLICIT CONNECTIONS.....	4-2
5.0 MANAGEMENT PROGRAM FOR PUBLIC INFORMATION AND EMPLOYEE TRAINING.....	5-1
5.1 GENERAL PUBLIC / CITY RESIDENTS	5-1
5.2 COMMERCIAL / INDUSTRIAL ESTABLISHMENTS	5-6
5.3 SCHOOL CHILDREN	5-6
5.4 CITY EMPLOYEES.....	5-9
6.0 ASSESSMENT.....	6-1
6.1 ASSESSMENT OF MANAGEMENT PROGRAM FOR PUBLIC AGENCY ACTIVITIES	6-1



TABLE OF CONTENTS

6.2 ASSESSMENT OF MANAGEMENT PROGRAM FOR DEVELOPMENT
PLANNING AND CONSTRUCTION6-3

6.3 ASSESSMENT OF MANAGEMENT PROGRAM FOR ILLICIT DISCHARGES
AND ILLICIT CONNECTIONS6-4

6.4 ASSESSMENT OF MANAGEMENT PROGRAM FOR EDUCATION AND
PUBLIC INFORMATION.....6-4

Table 2.1: **CURBSIDE RECYCLING**2-3

Table 2.2: **SPECIAL ITEM PICKUPS**2-5

Table 2.3: **HOUSEHOLD HAZARDOUS WASTE COLLECTION**2-6

Table 2.4: **INLET MAINTENANCE**2-10

Table 4.1: **DEVELOPMENT PLANNING AND CONSTRUCTION STATISTICS**.....3-2

APPENDICES

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T

**APPENDICES
ARE
AVAILABLE ON
DISK BY
REQUEST**

NPDES First Responders Call List
Citywide Task Force Matrix
EcoLink article
SMC's 2003 Annual Report
Grant Monies Summary pie chart
Long Beach Police Department NPDES
Report
Los Angeles River Trash Boom Project
Debris Collection Data
Sample of Completed Catch Basin
Cleaning Report
Rain / Emergency Checklist
Sample Acknowledgement of Training
CEQA for Public Works
Environmental Planning
LBMC Chapter 18.95
NPDES Inspection Report
NPDES Training Report
Incident Report, Case Worksheet, and
Notice of Inspection forms
570-DUMP Log Sample
Special Events FY 03
Carnival Cruise Lines ad
Long Beach Area Map ad



TABLE OF CONTENTS

U	Adopt-A-Waterway™ Revenue and Expenses
V	City of Long Beach Adopt-A-Waterway™ Sign Locations
W	City of Long Beach Adopt-A-Waterway™ Signage Annual Best Management Practices Messages
X	Adopt-A-Waterway™ video
Y	Adopt-A-Waterway™ 24 th Annual Long Beach Blues Festival ad
Z	Long Beach Business 2003-2004 Chairman's Circle
AA	Long Beach Area Chamber of Commerce 2003 Business Referral Guide and Membership Directory ad
BB	Watershed Cleanup Project presentation
CC	Windows on Our Waters webpage
DD	Key to the Sea Year Four Program Evaluation
EE	Wilson Volleyball 2003 ad
FF	Stormwater Management Program Expenditures (FY 03)
GG	Expenditure Summary for FY 00 – FY 03
HH	Assembly Bill No. 1548, Chapter 665



INTRODUCTION

The goal of the federal Clean Water Act (1972) is to protect receiving waters such as rivers, lakes and oceans from contamination by controlling pollutants from entering the storm drain system. The federal Clean Water Act amendments of 1987 established requirements for storm water discharges from municipal storm drain systems (MS4s) to obtain coverage under a nationwide permit called the National Pollutant Discharge Elimination System (NPDES). The Long Beach Storm Water Management Program (LBSWMP) is being fully implemented by the City in compliance with its NPDES permit and, most importantly, to preserve and maintain the quality of our beaches and waterways while improving marine habitat and the quality of life for residents.

In January 1999, the Department of Public Works created a new division entitled the Clean Water Division. The Division was created to assist the City in implementing the goals and objectives of the LBSWMP and ensure compliance with the requirements of its Municipal NPDES Permit. This Division was renamed the Stormwater Management Division in 2003 and includes the Stormwater Management Division Officer and an Administrative Analyst III. The Division was renamed to more accurately communicate our mission and better serve the community.

On June 30, 1999, the Regional Water Quality Control Board issued a municipal storm water NPDES permit to the City of Long Beach. The City of Long Beach became the first city in Los Angeles County to receive its own NPDES Permit and holds that distinction to date. The City of Long Beach is currently operating under this permit, which will expire on June 29, 2004.

The City of Long Beach was also the first City in Los Angeles County to be audited by the Los Angeles Regional Water Quality Control Board and EPA Region IX. The City has made adjustments to the Long Beach Storm Water Management Plan to accommodate the audit's findings and taken additional steps to tailor the program to meet specific needs.

The Annual Storm Water Permit Report and Assessment details the City's stormwater management accomplishments for the period of October 1, 2002, through September 30, 2003.

PROGRAM MANAGEMENT

The National Pollutant Discharge Elimination System (NPDES) Citywide Task Force continues to facilitate the implementation of the Long Beach Storm Water Management



Program (LBSWMP). The department representatives serving as Task Force members oversee timely implementation of the LBSWMP and are essential in providing two-way communication with staff.

Participation in regional task forces, councils, organizations, and committees related to stormwater activities is ongoing and has proved to be an excellent avenue for exchanging information and collaborating on joint projects. One such project is the Water Augmentation Study, which the City of Long Beach is working with the Los Angeles and San Gabriel Rivers Watershed Council on.

Capital Improvement Projects and the grant money that funds them are always a major focus to reduce pollution throughout the City. Projects that are new in FY 03 include the Colorado Lagoon Restoration Feasibility Study and the Pump Station Trash Rack Renovation.

PUBLIC AGENCY ACTIVITIES

The City's public agency activities are both numerous and extensive. Several improvements have been made over the past year to make particular operations more efficient. For example, more litter receptacles have been added to parks, beaches, and marinas, and the household recycling program has been converted to automated collection using larger carts that are covered. Both of these measures resulted in the collection of more waste compared to the previous year. Code enforcement, public construction procedures, and the maintenance of streets, storm drains, and landscapes continue to be vital components of the LBSWMP. To make all this work as intended, training is key. Employees continue to receive annual stormwater refresher training and have abundant resources made available to them throughout the year.

DEVELOPMENT PLANNING AND CONSTRUCTION

The City has found that considering the impacts of development on stormwater quality as early as possible during a project's planning phase and implementing appropriate controls during construction will reduce the discharge of pollutants into the storm drain system. The City has NPDES and SUSMP regulations detailed in Chapter 18.95 of the Long Beach Municipal Code, created and implemented a highly regarded developer information program, and makes accessible CASQA BMP Handbooks to assist and inform developers. In FY 03, there were 18 development projects for which SUSMPs



were completed, more than any other year since the Municipal NPDES Permit's adoption.

ILLICIT DISCHARGES AND ILLICIT CONNECTIONS

Departments such as Fire, Harbor, Health and Human Services, Planning and Building, Public Works, and Water all play vital roles in prohibiting illicit discharges and eliminating illicit connections. An advanced system of communication and follow-up is in place to make the process as efficient as possible. Inspectors and field workers receive annual training on how to identify, report, and eliminate illicit discharges. In addition, the Water Department uses special equipment to inspect storm drain pipes 36 inches or greater in diameter. If an illicit connection is found, the necessary steps are taken to eliminate the connection.

PUBLIC INFORMATION AND EMPLOYEE TRAINING

Educational outreach is used at length to inform the public, school children, commercial and industrial establishments, and City employees about stormwater and urban runoff issues. In FY 03, with a permit requirement of 1.5 million impressions, the City made well over 168 million impressions related to stormwater pollution prevention issues and their solutions through the use of various media. New outreach materials and methods are constantly being explored while proven techniques are carried on. One innovative approach to informing students about stormwater management, the Watershed Cleanup Project, was honored by the Los Angeles Regional Water Quality Control Board with the "2003 Water Quality Award for Water Body Conservation." In FY 03, the Stormwater Management Division made use of the Long Beach Community Television programs, the Long Beach Area Chamber of Commerce, and a host of El Dorado Nature Center programs, just to name a few. The Adopt-A-Waterway™ program continues to be a success by raising non-taxpayer funds to enhance programs aimed at educating the public about pollution prevention. Since its inception, the Adopt-A-Waterway™ program has generated \$89,953 for the City. In FY 03, Adopt-A-Waterway generated over \$14,000 for the City and relayed Best Management Practices through the 24 installed signs throughout Long Beach.

Public Information and Employee Training are fundamental in the effort to change people's behaviors and stop pollution at its source. The more people are aware of the effects that their actions have on stormwater quality and the environment in general, the more they will be the solution to pollution, rather than its cause.



1.0 PROGRAM MANAGEMENT

The Long Beach Storm Water Management Program (LBSWMP) is a citywide program that is administered by the Department of Public Works Stormwater Management Division. The objective of the LBSWMP is to improve the quality of stormwater by effectively prohibiting non-stormwater discharges and by reducing the discharge of pollutants to the maximum extent practicable (MEP). All City departments are involved in the cooperative effort to implement the LBSWMP, while it is the Stormwater Management Division's responsibility to coordinate the development, implementation, and revision of the LBSWMP.

Section One explains the City's strategy, regional efforts, and projects related to implementing the LBSWMP.

1.1 IMPLEMENTATION STRATEGY

The National Pollutant Discharge Elimination System (NPDES) Citywide Task Force (Task Force) facilitates the implementation of the LBSWMP. The Task Force is made up of representatives from City Departments. Task Force meetings are scheduled on a monthly and "as needed" basis and serve to disseminate information, receive feedback, provide guidance, and discuss pertinent issues related to NPDES. These meetings serve as a venue to concentrate on integrating the LBSWMP elements into the City's guidelines and standards. The Task Force addresses training, public education, public agency activities, development planning and construction, legal authority, industrial and commercial site visits and procedures to detect and remove illicit discharges and improper disposal into the storm drain system. Also, included in this program is a process to identify and eliminate illicit connections. (See Appendix A for NPDES First Responders Call List.)

The department representatives serving as Task Force members oversee proper and timely implementation of the LBSWMP. They are the contacts involved with the annual report preparation, training, and policy and procedure revisions. The Task Force members are essential in providing two-way communication that keeps the appropriate staff up to date with NPDES matters. (See Appendix B for Citywide Task Force Matrix.)



1.2 REGIONAL PARTICIPATION

The Stormwater Management Division staff and other staves within the City actively participate on a great number of task forces, councils, organizations, and committees that focus on stormwater, pollution prevention and education, and watershed activities.

The Los Angeles Contaminated Sediments Task Force (CSTF) works to identify contaminated sediment in Los Angeles County and develop viable disposal options. The City of Long Beach Harbor Department (Port of Long Beach) helps fund this task force and special studies related to disposal and reuse. Staff from the Harbor Department and the Stormwater Management Division attend these meetings and dedicated a total of approximately 130 hours during the past year at a cost of approximately \$15,178 to assist the CSTF with its goals and objectives.

The Los Angeles River Master Plan (LARMP) Advisory Committee works to continue the implementation of improvement projects within the Los Angeles River Master Plan, which was approved in 1996. These meetings focus on efforts and issues related to the LA River, such as maintenance, signage, and landscaping guidelines. Long Beach Stormwater Management Division staff attends these meetings and dedicated approximately six hours during the past year at a cost of approximately \$215 to assist the LARMP Advisory Committee in meeting the goals and objectives of the LARMP.

The San Gabriel River Master Plan (SGRMP) is underway and nearing the end of the planning phase. The consultant, MIG, has completed a draft version of the Master Plan with input from stakeholders at regularly held Steering Committee meetings. Staff from the Department of Parks, Recreation, and Marine and the Stormwater Management Division attend these meetings and dedicated a total of approximately 36 hours during the past year at a cost of \$1,583 to assist the SGRMP stakeholders in meeting the goals and objectives of the SGRMP.

The Los Angeles and San Gabriel Rivers Watershed Council (LASGRWC) is a nonprofit organization that engages stakeholders in dialogue promoting watershed health and resolving environmental and regulatory issues. The Water Augmentation Study is one of the LASGRWC's current projects, which will explore the potential for increasing local water supplies and reducing urban runoff pollution by increasing infiltration of stormwater runoff. The Stormwater Management Division and the Department of Parks, Recreation, and Marine continue to work with Dr. Suzanne Dallman of the LASGRWC on one of the demonstration projects for this study, which is located at Veterans Park in Long Beach. (See Appendix C for EcoLink article.) The LASGRWC holds regular stakeholder meetings that not only cover organization business but also include



PROGRAM MANAGEMENT

SECTION 1

informative workshops. Staff from the Department of Parks, Recreation, and Marine and Stormwater Management Division attend these meetings and dedicated a total of approximately 51 hours during the past year at a cost of \$2,267 to participating in the LASGRWC.

The Dominguez Watershed Advisory Council (DWAC) creates and supports implementation of a comprehensive Watershed Management Master Plan (WMMP) for the Dominguez Watershed. DWAC works very closely with the consultant, MEC, who is currently drafting the WMMP. Staff from the Harbor Department and the Stormwater Management Division attend these meetings and dedicated approximately a total of 54 hours during the past year at a cost of approximately \$1,941 to assist the DWAC in meeting its goals and objects and planning the WMMP.

The San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy (RMC) is one of seven Conservancies within the California Resources Agency. It works to preserve urban open space and habitat and undertakes projects that provide low-impact recreation, education, wildlife and habitat restoration, and watershed improvements. Vice Mayor and Third District Councilmember Frank Colonna worked with state legislators and local cities on legislation to create the RMC, of which he is currently Chair. Staff from the Department of Parks, Recreation, and Marine and Stormwater Management Division attend the RMC's public meetings for a total of approximately 50 hours at a cost of approximately \$2,807 during the past year.

The California Stormwater Quality Association (CASQA) assists those entities charged with stormwater quality management responsibilities with the development and implementation of stormwater quality goals and programs. CASQA also recently released an updated version of the Stormwater Best Management Practice Handbook set, which has separate handbooks for Construction, New Development and Redevelopment, Industrial and Commercial, and Municipal operations. Long Beach Stormwater Management Division staff attends the meetings held by CASQA, including the BMP Handbook training, and put in approximately 26 hours at a cost of approximately \$1,170 during the past year with CASQA. In addition, Tom Leary, Long Beach Stormwater Management Division Officer, was recently elected to CASQA's Board of Directors.

The Southern California Association of Governments (SCAG) promotes economic growth, personal well-being, and livable communities through leadership, vision, and progress. The City of Long Beach has recently been selected to join SCAG, and Tom Leary, Stormwater Management Division Officer, participates in the SCAG Water Policy Task Force.



The City of Long Beach, the only municipality representative, continues to be an active member of the Stormwater Monitoring Coalition (SMC) of Southern California, which is a collaborative working relationship of stormwater regulators and municipal stormwater management agencies. The goal of this group is to develop the technical information and tools needed to improve stormwater decision-making. (See Appendix D for the SMC's 2003 Annual Report.)

The Long Beach Stormwater Management Division actively participates on several committees and task forces coordinated by the Los Angeles County Department of Public Works.

- The NPDES Municipal Stormwater Permit Executive Advisory Committee (EAC) actively discusses stormwater issues among its stakeholders and with representatives from the Los Angeles Regional Water Quality Control Board. Long Beach Stormwater Management Division staff attends these meetings and TMDL subcommittee meetings and dedicated approximately 76 hours during the past year at a cost of approximately \$3,995 to assist the EAC with meeting its goals and objectives.
- The Los Angeles County Best Management Practice (BMP) Task Force is an ongoing forum to facilitate the selection, implementation, and financing of effective BMPs. Long Beach Stormwater Management Division staff attends these meetings and dedicated approximately 20 hours during the past year at a cost of approximately \$1,081 to assist the BMP Task Force with meeting its goals and objectives. In addition, the Stormwater Management Division Officer made a presentation to the BMP Task Force on April 7, 2003, detailing aspects of BMP efforts being made at Hamilton Bowl, such as the 20th and Walnut CDS unit, the Prop 13 BMP Effectiveness Study with the Southern California Coastal Water Research Project (SCCWRP), and the Prop 13 Trash Reduction Project with Signal Hill.
- Long Beach Stormwater Management Division staff also participates in the Los Angeles and San Gabriel Rivers Joint Watershed NPDES Permittee meetings and Public Education and Outreach meetings. In addition, the Long Beach Stormwater Management Division Officer was on the review panel to select the new vendor for public education and outreach services.

1.3 CURRENT PROJECTS

The Long Beach Stormwater Management Division is currently project managing several capital improvement projects aimed at reducing pollution throughout the city.



The following are made possible through various grant awards. (See Appendix E for Grant Monies Summary pie chart.)

1.3.1 HAMILTON BOWL TRASH REDUCTION

In 2002, the City of Signal Hill, Los Angeles County Department of Public Works, and Long Beach Stormwater Management Division partnered on a grant application to reduce trash going into Hamilton Bowl. This facility is a combination detention basin / pump station system that is owned by Los Angeles County and leased to the City of Long Beach for recreational purposes. The total project budget is \$1,168,000, and the agreement to receive \$783,000 in Prop 13 funds is expected to be in place by February 2004. John L. Hunter and Associates, Inc., serves as project manager for the cities and county. In preliminary planning for this project, the Long Beach Stormwater Management Division had a consultant draft a BMP Selection Report in February 2003. The State Budget Act Appropriation of FY 2000-2001 provided funding for the BMP Selection Report. Another Long Beach Stormwater Management Division project, the 20th & Walnut Continuous Deflective Separation (CDS) Unit, is being used as a match for this project's Prop 13 grant.

1.3.2 20th & WALNUT CDS UNIT

The Long Beach Stormwater Management Division, with the technical guidance of the Public Works Capital Project Coordinator (CPC) and engineers, is overseeing the installation of a CDS unit on 20th Street, west of the intersection of 20th Street and Walnut Avenue and adjacent to the northwest corner of Hamilton Bowl. The unit will be placed on a pipe that drains into Hamilton Bowl in an effort to eliminate or significantly reduce trash being deposited by stormwater into the Bowl. This BMP will assist with LA River Trash TMDL compliance. The total project budget is \$708,000 and is funded by the State Budget Act Appropriation of FY 2000-2001. Construction is currently in progress and scheduled to be completed by January 2004. This installation is likely to be part of the BMP effectiveness study mentioned in 1.3.7.

1.3.3 COLORADO LAGOON

In 2001, the State Water Resources Control Board granted the City of Long Beach \$500,000 through the Clean Beaches Initiative for the purpose of eliminating or significantly reducing bacteria in Colorado Lagoon. A feasibility study concluded that sanitary sewer diversions, the original intent, is cost-prohibitive and will not lead to water quality improvements. Therefore, the Long Beach Stormwater Management Division is exploring alternative projects within Colorado Lagoon that will meet the same goal of



bacteria elimination or reduction. This project is scheduled to be completed in June 2004.

1.3.4 LOS ANGELES RIVER CDS UNIT

In 2001, the State Water Resources Control Board granted the City of Long Beach \$500,000 through the Clean Beaches Initiative for installation of a CDS Unit in the watershed area tributary to the Los Angeles River. A feasible location is currently being sought. This project is scheduled to be completed in June 2004.

1.3.5 PUMP STATION TRASH RACK RENOVATION

Several City-owned pump stations (SD 1, 3, 4, 5, 6, and 9), including five that discharge directly to the Los Angeles River, are in need of trash rack repairs and improvements to prevent litter and other debris from getting into the pumps and, ultimately, the receiving water body. The project's design budget is \$100,000, and when completed the total project is expected to cost well over \$1,000,000. The goal of this project is not only to repair existing trash racks but also to take the trash capture to the next level for TMDL compliance. It is scheduled to be completed in June 2004 and is funded by the State Budget Act Appropriation of FY 2000-2001.

1.3.6 COLORADO LAGOON RESTORATION FEASIBILITY STUDY

In April 2003, the City of Long Beach signed an agreement with the California State Coastal Conservancy to receive \$200,000 in grant funds for a Colorado Lagoon Feasibility Study. The feasibility study will assist the City in prioritizing and integrating issues of concern to stakeholders, including the restoration of the estuarine ecosystem of Colorado Lagoon, improvement of the quality of both the water and sediment, the management of stormwater, and supporting environmental education, public recreation, and public access. The study will look at water and sediment quality, flood control, pollution abatement, habitat, and other aspects while involving the community, a citizen advisory group, and the expertise of a Technical Advisory Committee. The goal is for this to be part of a larger master plan for the Colorado Lagoon. All work for this project is scheduled to be completed by October 2004.

1.3.7 BMP EFFECTIVENESS STUDY

The Stormwater Management Division is working with the Southern California Coastal Water Research Project (SCCWRP) and Los Angeles County Department of Public Works, Santa Monica Bay Restoration Commission, the Los Angeles and San Gabriel



PROGRAM MANAGEMENT

SECTION 1

Rivers Watershed Council, Orange County Water District, County of Orange Public Facilities and Resources Department, and the Los Angeles Regional Water Quality Control Board on a project to study BMP effectiveness. In 2001, \$354,866 of Prop 13 funds was granted for this project, which has a total budget of \$388,316. SCCWRP serves as the project director and coordinates with the Stormwater Management Division to study the effectiveness of BMPs located at sites within the City of Long Beach. Both wet and dry weather flows will be analyzed in CDS-type units, dry detention basins, UV treatment systems, and wetland systems.



2.0 MANAGEMENT PROGRAM FOR PUBLIC AGENCY ACTIVITIES

The City of Long Beach puts into practice public agency activities to control the discharge of pollutants into the storm sewers and reduce the discharge of pollutants to Long Beach receiving waters to the maximum extent practicable. In order to effectively improve the quality of stormwater, the City has the following in place:

- Trash and Greenwaste Control,
- Code Enforcement,
- Street Maintenance,
- Storm Drain System Operations and Maintenance,
- Public Construction Activities,
- Landscape Maintenance, and
- Training.

2.1 TRASH AND GREENWASTE CONTROL

Trash and greenwaste are controlled through various operations across several departments. These include

- Litter Receptacles,
- Neighborhood Cleanup Assistance,
- Household Recycling,
- Greenwaste Disposal,
- Special Collection,
- Used Oil Recycling,
- Household Hazardous Waste Collection, and
- Trash Collection on the Beach and Along Water Bodies.

Long Beach Energy's Environmental Services Bureau (ESB) continues to utilize grant funds provided by the California State Department of Conservation (DOC) to reduce litter by encouraging beverage container recycling. The City uses the money to promote litter reduction opportunities for both the business and residential communities of Long Beach. Funds are also used for the No Litter Zone campaign and to support Long Beach Beautiful. The No Litter Zone campaign encourages businesses to adopt the sidewalk and gutter in front of their place of business, keeping the area free of litter. Long Beach Beautiful is a community-based effort that allows volunteers to develop a



MANAGEMENT PROGRAM FOR PUBLIC AGENCY ACTIVITIES

SECTION 2

strategic approach to keep the City litter-free and beautiful. In FY 03, there were 9 events. Approximately 120 volunteers assisted with corridor cleanups held in conjunction with the Long Beach Area Chamber of Commerce Women's Council.

Adopt-A-Street is a program that allows local businesses the opportunity to adopt portions of streets that will be serviced by special litter cleanup crews on a monthly basis. The City of Long Beach adopted eleven half-mile stretches.

The Adopt-A-Gutter curriculum engages students and teaches them about the effects of trash along the street and curb and basic storm drain education. The program now includes student monitoring and characterization of trash in gutters around each student's home. Students received magnets, rulers, pencils and literature to remind them that they personally are the solution to ocean pollution.

2.1.1 LITTER RECEPTACLES

The placement and servicing of litter receptacles provides people an alternative to littering, and, thus, aids in keeping refuse from collecting in the storm drain system. There are approximately 288 litter receptacles along residential streets and 865 litter receptacles along commercial streets. Approximately 858 tons of waste was collected from these litter receptacles in FY 03. In addition, the Long Beach Parks, Recreation, and Marine Department maintains about 640 litter receptacles at park locations. In FY 03, approximately 1,899 tons of trash was collected from these litter receptacles. There are approximately 160 beach receptacles, which are emptied five times per week during the summer and three times per week during the winter. Marina trash receptacles, totaling approximately 80, are emptied six times per week. The Queensway Bay area has approximately 30 litter receptacles, which are emptied daily. In FY 03, over 2,067 tons of trash and debris was collected along the beaches and marinas through the use of litter receptacles. This is an increase of approximately 11% from the 1,864 tons collected in FY 02. During special events, additional litter receptacles are provided as needed and collected on the day of the event.

The Environmental Services Bureau of Long Beach Energy continues to provide incentives to the general public, businesses, and private waste haulers in an effort to curb litter and reduce stormwater pollution. An ordinance (LBMC 8.60.270) requiring businesses to provide and maintain litter and cigarette receptacles for customers and employees continues to be enforced. Also, all private waste haulers have contractual requirements to collect overflow debris when servicing their accounts. Refuse Field Investigators regularly monitor accounts serviced by private waste haulers and notify haulers when necessary. Both programs have proven successful at litter reduction.



MANAGEMENT PROGRAM FOR PUBLIC AGENCY ACTIVITIES

SECTION 2

2.1.2 NEIGHBORHOOD CLEANUP ASSISTANCE

The Neighborhood Services Bureau of the Community Development Department assists neighborhood volunteers in conducting cleanups. In FY 03, there were 166 cleanup events, which resulted in 1,704 tons of waste being collected. This is an increase of approximately 10% from the 1,544 tons collected in FY 02 at 152 cleanups. The Bureau provides free trash dumpsters, trash bags, and gloves and can borrow tools for use during the cleanup events. Neighborhood groups are also given free use of community computers and photocopiers to produce flyers for the event. In addition, the Bureau's Neighborhood Leadership Program Class of 2003 engaged in a neighborhood cleanup project on Anaheim Street.

2.1.3 HOUSEHOLD RECYCLING

ESB continues to improve the City's household recycling program. The manual collection of materials in open bins is being converted to automated collection of materials in covered carts. Residents are provided with 32-gallon, 64-gallon, or 96-gallon carts for commingled collection of recyclables in the categories of newspaper, cardboard, mixed paper, plastic, cans (aluminum, steel, and tin), glass, and empty paint and aerosol cans. The City anticipates that the revised household recycling program will further reduce litter and increase compliance with AB939. Approximately 17,700 tons was collected through the curbside recycling program during FY 03. Table 2.1 shows recyclables collected in FY 03. This is approximately a 10% increase from the 16,064 tons collected in FY 02. This increase is related to the use of larger containers in the new program.

Table 2.1: **CURBSIDE RECYCLING**

Item	Tons Collected
Newspaper	10,735
Corrugated Cardboard	2,393
Commingled Containers	4,011
Mixed Paper	561
TOTAL	17,700



MANAGEMENT PROGRAM FOR PUBLIC AGENCY ACTIVITIES

SECTION 2

2.1.4 GREENWASTE DISPOSAL

The City requires residents to tie tree limbs, shrubs, and trimmings into bundles and securely wrap materials for proper disposal. The Special Collection Program provides pickup for these materials. If a special pickup is not needed, residents may put greenwaste in refuse cans for collection. Long Beach Energy has begun investigating the possibility of greenwaste recycling for residents; however, the estimated additional cost to each household would be approximately \$3.00 to \$5.00 per month, which makes the program cost prohibitive.

The City departments minimize the amount of greenwaste collected from City facilities by reuse. Grass clippings are evenly distributed over the areas that are being mowed (grasscycling). Excess grass clipping and other greenwaste, such as tree limbs, are recycled. BMP's, such as surrounding the base of bulk materials with sand bags and covering with plastic tarps, are utilized to assure that exposed materials will not migrate from their temporary storage locations. The Energy Department recycled approximately 69,882 tons of grass from City grounds in FY 03. This is a slight increase compared to the 69,586 tons collected in FY 02. The Street Landscaping Division recycled approximately 3,831 tons of grass and tree limbs last year. This is a decrease of approximately 30% compared to the 5,437 tons collected in FY 02. The decrease is attributed to reduced staffing and a recent problem of materials being commingled with greenwaste. The bin used by City staff for greenwaste recycling is accessible to the public, and when trash and debris are mistakenly put into the bin, the greenwaste cannot be recycled.

The City participates in seminars on composting and distributes literature, which explains methods of greenwaste composting. Monthly composting education classes are offered through the Parks, Recreation and Marine Department.

2.1.5 SPECIAL COLLECTION

Two of the well-publicized special item collection programs, the Oversized Items Pickup and Dumped Item Pickup, are designed to reduce bulky items and litter from alleys throughout the City. The City offers each household two free Oversized Items Pickups per year. Additional collections may be requested starting at \$6 per visit. The Environmental Services Bureau (ESB) of Long Beach Energy created a new trilingual (English, Spanish, and Khmer) promotional flyer to inform residents about the Oversized Items Pickup program. Table 2.2 shows the amounts collected from special item pickup requests. This is down slightly from the 3,474 tons collected in FY 02.



MANAGEMENT PROGRAM FOR PUBLIC AGENCY ACTIVITIES

SECTION 2

Table 2.2: **SPECIAL ITEM PICKUPS**

Category	# of collection requests	Tons Collected
Furniture	7,245	439
Tires	252	36
Yard Waste/Tree Trimmings	1,120	135
City-provided recycling bins (old)	1,119	506
Out Lates (missed collections)	330	1,175
E-Waste	938	Not Available
Appliances	861	Not Available
Other:	9,101	1,283
TOTAL	20,966	3,412

The Dumped Item Pickup program allows residents to report illegally dumped items for collection. ESB works closely with the Police Department to help enforce laws against illegal dumping. Surveillance cameras have been installed in some alleys to detect this behavior. In FY 03, Refuse staff collected 917 tons of illegally dumped items. Enforcement and vigilance have led to a 28% decrease from the 1,275 tons collected in FY 02. Additionally, the Police Department issued 149 citations and made 15 arrests for littering and dumping-related issues in FY 03. Citations increased approximately 17.3%, and arrests decreased approximately 12% compared to FY 02. (See Appendix F for Long Beach Police Department NPDES Report.)

2.1.6 USED OIL RECYCLING

The City operates a curbside residential recycling program that includes collection of used motor oil and oil filters. Residents are also provided with free used motor oil recycling containers at their request. Waste Management, Inc., collects the containers and leaves empty replacement containers. ESB staff attended numerous community events throughout the year to promote the Used Motor Oil Recycling program. Motor oil containers and funnels were distributed at community events during FY 03. ESB continues to display tri-lingual street pole banners with Cleaner Long Beach slogan promoting motor oil recycling as a method of supporting clean beaches and waterways. Last year 32,724 gallons of used motor oil was collected through the curbside recycling program.



MANAGEMENT PROGRAM FOR PUBLIC AGENCY ACTIVITIES

SECTION 2

The City has a separate used oil recycling program for marinas. The City maintains a storage tank where marinas residents can deposit motor oil. Last year approximately 4,500 gallons of used motor oil was collected from Long Beach's four marinas.

In addition, drop-off locations throughout the City, such as gas stations and auto parts stores, that accept used motor oil are posted on the Long Beach Energy website and listed in educational materials. These certified drop-off centers are managed and maintained by the business owners and supplement the City's programs.

2.1.7 HOUSEHOLD HAZARDOUS WASTE COLLECTION

ESB staff, in partnership with the Los Angeles County Department of Public Works and the Sanitation Districts of the County of Los Angeles, held a very successful Household Hazardous Waste (HHW) Roundup held at Veterans Stadium in Long Beach. Table 2.3 shows the amounts of hazardous waste collected at the March 29, 2003, event. Approximately 2,000 cars were served by this collection event.

Table 2.3: **HOUSEHOLD HAZARDOUS WASTE COLLECTION**

Motor Oil	2,500 gallons
Oil Filters	440 lbs
Car Batteries	333 lbs
Antifreeze	160 gallons
Paint	12,000 gallons
Batteries	570 lbs
E-Waste	725 lbs
Misc Waste (pesticides, pool chemicals, etc)	160 lbs

2.1.8 TRASH COLLECTION ON THE BEACH AND ALONG WATER BODIES

The Long Beach Parks, Recreation, and Marine Department conducts routine trash collection along, on and/or in water bodies. Several miles of ocean front beaches are raked five to six days per week, depending on conditions. In FY 03, the Long Beach Parks, Recreation, and Marine Department collected 4,942 tons of storm debris from City beaches. There is a debris curtain at the entrance of Rainbow Harbor, and floating debris is removed from the waters on a daily basis by using a skimmer boat, known as the "Predator," and by a stationary skimmer box.

The Parks, Recreation, and Marine Department is responsible for the maintenance of recreation water bodies at Heartwell, Scherer, and El Dorado Parks, the Colorado



MANAGEMENT PROGRAM FOR PUBLIC AGENCY ACTIVITIES

SECTION 2

Lagoon and Rainbow Lagoon. At all locations, the contractor is required to remove trash, including floating and submerged debris, from the lakes on a daily basis. Trash removal from the restored wetland area of Queensway Bay is done by hand (usually from a boat) with great care.

In addition, several cleanup efforts are ongoing. The Parks, Recreation, and Marine Department coordinates most of the following.

- At the 19th Annual International Coastal Cleanup in September, five beach sites and Colorado Lagoon were cleaned by 1,359 people. At the Earth Day Spring Beach Cleanup in April, volunteers participated in Long Beach's first underwater cleanup and marine life survey in addition to the traditional beach cleanups. Between the two events, 6.4 tons of trash and debris was collected.
- Special volunteer cleanups also took place at the San Gabriel River, Marine Stadium, Golden Shore Reserve, Dunster Marine Reserve, and Hamilton Bowl.

The Port of Long Beach Maintenance Department operates a boat, called the "Big Dipper," which patrols the waters throughout the Port picking up debris that has fallen into the water. The Big Dipper is operated by a two-person crew approximately three days a week and picks up wood piles, industrial debris, construction debris, plastics, etc.

Los Angeles County Department of Public Works has a boom installed at the base of the Los Angeles River within Long Beach city limits. During the last storm season, the boom collected 204 tons of material. (See Appendix G for Los Angeles River Trash Boom Project Debris Collection Data.) The three-year total since the project's inception is 350 tons.

2.2 CODE ENFORCEMENT

The City conducts several code enforcement activities that assist with controlling the discharge of pollutants into the storm sewers and reduce the discharge of pollutants to Long Beach receiving waters to the maximum extent practicable. These include

- Property Maintenance,
- Weed Abatement,



MANAGEMENT PROGRAM FOR PUBLIC AGENCY ACTIVITIES

SECTION 2

- Abandoned / Inoperative Vehicle Abatement, and
- Oil Code Enforcement.

2.2.1 PROPERTY MAINTENANCE

Property maintenance activities deal with enforcing Municipal Codes aimed at eliminating unsightly conditions and governing the maintenance of buildings and surrounding property. Complaints of trash and debris in yards, overgrown vegetation, inoperative or abandoned vehicles, etc. are investigated and violation notices or citations issued where warranted. Failure to comply may result in a referral to the City Prosecutor or in a cleanup by City forces at the owner's expense. In FY 03, the Department of Planning and Building conducted 8,028 investigations, which resulted in the correction of 667 violations. When compared to FY 02, investigations decreased approximately 25%, and the number of violations corrected decreased approximately 40%.

2.2.2 WEED ABATEMENT

This enforcement activity is closely related to Property Maintenance but strictly focuses on prohibiting overgrown vegetation on vacant lots or in yards. Notices to Clean are issued where warranted. Failure to comply may result in a referral to the City Prosecutor or in a cleanup by City forces at the owner's expense. In FY 03, there were 12,175 investigations conducted, which resulted in the issuance of 1,618 Notices to Clean. Investigations decreased approximately 27%, and Notices to Clean decreased approximately 28% from FY 02 to FY 03.

2.2.3 ABANDONED / INOPERATIVE VEHICLE

This activity is directed towards the removal of abandoned and inoperative vehicles (including unlicensed) vehicles located on vacant lots or visible yard areas. There were 5,767 investigations last year, which resulted in the removal of 523 vehicles. This represents an increase in investigations of approximately 4% and a decrease in vehicles removed of approximately 13%.

2.2.4 OIL CODE ENFORCEMENT

The Code Enforcement Division of the Department of Planning and Building is responsible for enforcing City regulations governing the drilling of new wells and the maintenance of production sites. Annual permits are issued, and investigations are made for compliance. In FY 03, there were 4,031 investigations conducted, which



MANAGEMENT PROGRAM FOR PUBLIC AGENCY ACTIVITIES

SECTION 2

resulted in five enforcement actions. This is an increase of approximately 56% in investigations, but the same number of enforcement actions were taken due to education and a thorough permit issuance program.

Four islands were constructed years ago off shore in Long Beach Harbor for the purpose of accessing oil under the harbor. Strict procedures are in place for preventing and dealing with oil spills. Monthly field inspections cover housekeeping practices, potential safety hazards, security, and a number of other issues. Employees are trained annually, and the department stays abreast of new technologies and industry progress by attending various committees and focus groups, including ones specifically related to stormwater.

2.3 STREET MAINTENANCE

The City's street sweeping service is one of the largest and most effective programs supporting stormwater pollution prevention. The majority of streets and street medians in Long Beach are swept on a weekly basis, which greatly exceeds the permit requirement of twice per month. Pine Avenue and adjacent streets located in the downtown area of Long Beach are swept five days per week. All streets in the harbor district are swept daily. To increase the effectiveness of street sweeping, signs are posted and citations issued to encourage vehicle owners to leave certain streets vacant on street sweeping days. In addition, street sweeping and refuse collection routes have been better coordinated this past year to provide more efficient service, such as having street sweeping occur after refuse collection on a given street. Long Beach Energy collected approximately 12,619 tons of debris while sweeping 176,112 street and alley miles last year. This is approximately 3.7% less than the 13,111 tons collected in FY 02. The Street Maintenance Division of Public Works also collected approximately 95 tons of trash and debris from alleys and sidewalks.

Good housekeeping practices are implemented to properly manage wastes that are generated during street and road maintenance activities. Employees who conduct street and road maintenance activities are educated about the potential pollutants that may be released as a result of maintenance activities and trained in the usage of appropriate BMPs.



2.4 STORM DRAIN SYSTEM OPERATIONS AND MAINTENANCE

The City owns approximately 3,872 catch basins, which are cleaned and maintained by the Water Department. During FY 03, the total amount of trash and debris collected was 334.4 yd³. This is approximately 33% less than the 505.4 yd³ collected last year. Waste characterization shows that the predominant types of debris include trash (combination of plastics, polystyrene-foam, glass, and paper) and greenwaste. The most likely source of the trash is littering, where the most likely source of the greenwaste is individuals and landscapers sweeping, hosing, or blowing this material into the storm drain. The Water Department maintains a storm sewer cleaning database that includes the number of catch basins, cross drains, and grates cleaned for each date as well as categories and quantities of the debris removed for each date. (See Appendix H for Sample of Completed Catch Basin Cleaning Report.)

All open-channel systems (total of 13) are cleaned annually during the period of May 1 and September 30. The total amount of trash and debris collected in FY 03 was 282.45 yd³. This is approximately a 42% increase over the 198.2 yd³ collected last year. The Water Department has developed a database to record the inspection and cleaning of open channels along with categories and quantities of the debris collected.

There are 23 City-owned pump stations, all of which are cleaned annually. The trash and debris collected in FY 03 amounted to 80 yd³. This is approximately 33% less than the 120 yd³ collected in FY 02. This decrease may be attributed to more rain pushing the trash and debris through the pumps rather than accumulating in the forebays for collection.

Table 2.4 shows the amount of trash and debris collected during the cleaning of catch basins, open channels, and pump stations.

Table 2.4: **INLET MAINTENANCE**

Activity	Quantity	Yd ³ Collected
Catch Basin Cleaning	3,872	334
Pump Stations	23	80
Open-channel Systems	13	282
TOTAL		696

Areas of the MS4 have been designated as high priority based on the amount of trash and debris that is normally collected. A Rain / Emergency Checklist identifies catch



MANAGEMENT PROGRAM FOR PUBLIC AGENCY ACTIVITIES

SECTION 2

basins, grates, cross drains, etc. that are checked immediately prior to when rain is forecasted. These areas are cleaned of any trash and debris prior to a storm event to ensure that these pollutants are not washed into the receiving waters. (See Appendix I for Rain / Emergency Checklist.) A separate list of areas to be checked while it is actually raining to ensure that no clogged systems contribute to flooding is also maintained.

The Water Department is also operates and maintains the City's sanitary sewer system, as detailed in the Public Agency Activities section of the LBSWMP. Procedures are implemented to keep sewage from entering the storm drain system. Methods may include education, inspection, covering or blocking storm drain inlets and catch basins or containing and diverting the sewage away from open channels and other storm drain facilities. In FY 03, the Water Department responded to eight sewer overflows totaling 3,030 gallons. This 70% decrease is due to educating the community about the effects of fats, oils, and grease in the sewer system.

2.5 PUBLIC CONSTRUCTION ACTIVITIES

Public construction activities within the public street right of way incorporate and implement appropriate controls to reduce pollutant discharges from entering the storm drain systems.

City projects are those construction contracts administered by the City and may be administered by one of many departments. Plans and specifications are prepared by City design staff and by City consultants. The design staff and consultants have the responsibility to include appropriate BMPs in the design plans and specifications. BMPs selected are to be based on rational criteria including magnitude and type of potential pollutant.

The Public Works Department regulates non-City construction projects within the public street right of way by issuing Public Works permits. The Construction Division has the responsibility of requiring appropriate BMPs in the Public Works Permit Conditions.

Municipal inspectors routinely verify that the construction work is in compliance with the contract documents or Public Works permit for construction projects within the public street right of way. When a project is not in compliance with the contract documents or Public Works permit, the municipal inspectors have the authority to enforce the contract or permit by issuing verbal warnings, written notices, withholding progress payments, or



MANAGEMENT PROGRAM FOR PUBLIC AGENCY ACTIVITIES

SECTION 2

suspending the work. In FY 03, Public Works inspectors filed 14 NPDES Incident Reports.

2.6 LANDSCAPE MAINTENANCE

The goal of this component is to make stormwater quality a concern when conducting landscape maintenance activities. These include

- pesticide, herbicide, and fertilizer usage,
- native vegetation practices, and
- municipal swimming pools maintenance.

Greenwaste disposal was previously covered in Section 2.1.4.

2.6.1 Pesticide, Herbicide, and Fertilizer Usage

The use of pesticides, herbicides, and fertilizer (for both street medians and parks) is supervised by Pest Control Advisors who are licensed by the State Department of Agriculture. These products are only applied "as needed" and never just before or during a rain event. Staff receives annual updates in the laws governing the use and storage of these chemicals and applicable BMPs, such as restricted use around waterways and prohibition of spraying when rain is forecasted. All grounds and landscape maintenance contractors with the Parks, Recreation, and Marine Department must also possess a Pest Control Advisors License, have certified Pest Control Applicators on staff, and possess a Los Angeles County Agricultural Permit.

Cesar Chavez Park and Queensway Bay both employ Integrated Pest Management (IPM) practices to minimize the necessity for pesticide applications. It should also be noted that Cesar Chavez Park employs a state-of-the-art BMP known as "fertigation," which is a system that applies fertilizer efficiently and with a minimal amount of run-off. The fertigation system at Chavez Park applies liquid fertilizer to approximately 25 acres of turf and landscaped areas (23 acres for Chavez Park and then the remainder is the acreage for other small greenbelts in the area). This system consists of pumps, timers, flowmeters and several underground tanks that are tied into the Cal Sense irrigation system on the site. A valuable feature for water conservation efforts and NPDES is that the irrigation system has a master valve function that acts in case of an emergency. In the case of a large break after hours, the system will read that an excess of gallons per minute are flowing through the regulator and will automatically shut the system down.



MANAGEMENT PROGRAM FOR PUBLIC AGENCY ACTIVITIES

SECTION 2

2.6.2 Native Vegetation Practices

Native plant materials are preferred in three separate and diverse locations: the El Dorado Nature Center, the Queensway Bay Area (which includes the "Mitigation Area," or Golden Shore Reserve), and the Bluff Erosion Enhancement Area. The Nature Center is a mixture of native and non-native plant material that was originally planted over thirty years ago. The policy of the Parks, Recreation, and Marine Department is to replace any material that must be removed (for various reasons such as disease or general decline) with native plants. In addition, any new plantings are designed with native plants only. The expansion site at the Nature Center is exclusively native plant material. The plant material is irrigated only on an as-needed basis as determined by the maintenance and Nature Center staff. Herbicides and pesticides are minimally used to eliminate invasive weeds.

In the Queensway Bay Area, native species have been planted in Shoreline Park (Lighthouse Point and Beach Garden) and in the restored wetland area commonly referred to as the Golden Shore Reserve. The selection of native species, which include perennials, grasses, and aquatic species, has been done with input from consultants (i.e., MBC Applied Environmental Science, Acorn Group) and from qualified in-house staff. Herbicides and pesticides are minimally used to eliminate invasive weeds.

The City has adopted a Plan of Development for Bluff Erosion to protect public and private property from the existing erosive conditions. One of the project goals is to establish native vegetation habitats. Two project demonstration areas have been planted with native plants and are being monitored for success. Additional areas, based on priorities identified in the Plan of Development, will be planted with native vegetation in the near future.

Chapter 18.95, "NPDES and SUSMP Regulations," of the Long Beach Municipal Code requires that during subdivision design, native vegetation clearing should be limited to the minimum needed to build lots, allow access, and comply with fire protection regulations. The Parks, Recreation, and Marine Department holds an annual Native Plant Sale, which results in native plants being placed in the community.

2.6.3 Municipal Swimming Pool Maintenance

The City owns four municipal swimming pools. Two of these pools discharge water directly into the sanitary sewer. In the other two, the water is dechlorinated by evaporative loss (all pump and chemical systems shut down) for a period of 72 hours



MANAGEMENT PROGRAM FOR PUBLIC AGENCY ACTIVITIES

SECTION 2

prior to discharging into the storm drain system. One of the City's future goals is to have all municipal swimming pools connected to the sanitary sewer. Current funding and sanitary sewer capacity issues do not allow for this now, however.

2.7 TRAINING

Employees whose job activities directly affect stormwater quality and those who respond to questions from the public related to stormwater pollution prevention and education receive an annual refresher training regarding the requirements of the stormwater management program, BMP implementation, and identifying and reporting illicit connections and discharges. (See Appendix J for Sample Acknowledgement of Training.)



MANAGEMENT PROGRAM FOR DEVELOPMENT PLANNING AND CONSTRUCTION

SECTION 3

3.0 MANAGEMENT PROGRAM FOR DEVELOPMENT PLANNING AND CONSTRUCTION

The Development Planning and Construction program is in place to have developers and owners consider stormwater quality management during the project's planning phase and implement appropriate controls during construction. This program applies equally to privately and publicly owned property. Projects within the public right of way are addressed in the Public Agency Activities Section. Applying this program to applicable development projects will effectively prohibit non-stormwater discharges and reduce the discharge of pollutants into the storm drain system. To achieve this objective, the City has implemented the following:

- California Environmental Quality Act (CEQA) guidelines,
- General Plan considerations for watershed and stormwater management,
- Chapter 18.95, "NPDES and SUSMP Regulations," of the Long Beach Municipal Code, and
- Training.

3.1 CEQA

Under the CEQA Act of 1970, the City of Long Beach is required to consider the potential environmental impacts of proposed developments. This review is conducted by the Planning and Building Department's Environmental Planner. Environmental review is required for projects that cause a public official or body to take "discretionary" action in approving or denying a project. The environmental review documents do not result in approval or denial of projects but serve as guidance and informational documents provided to the person or persons who must make a decision about the project. Projects may be processed as a Categorical Exemption (exempt from CEQA Act), a Negative Declaration (declares that there are no impacts or that impacts can be mitigated), or an Environmental Impact Report (done for large projects that are likely to have significant effects on the environment). The outcome of the environmental review is included in Council reports, and documents are attached in the case of Negative Declarations and Environmental Impact Reports. (See Appendix K for CEQA for Public Works and Appendix L for Environmental Planning.)



MANAGEMENT PROGRAM FOR DEVELOPMENT PLANNING AND CONSTRUCTION

SECTION 3

3.2 GENERAL PLAN

The Open Space and Recreation Element of the General Plan was recently rewritten and finalized on October 15, 2002. Watershed and stormwater management considerations were included in the rewrite of this element. The Land Use and Mobility (also known as Transportation) Elements are in the beginning stages of being rewritten and are scheduled for completion in 2005. The Air Quality, Housing, Seismic Safety, Public Safety, Noise, Local Coastal Program, and Conservation elements will be rewritten. However, a schedule has yet to be finalized. The City will notify the Regional Board of the dates once they have been finalized.

3.3 CHAPTER 18.95, “NPDES AND SUSMP REGULATIONS,” OF THE LONG BEACH MUNICIPAL CODE

The Long Beach Municipal Code includes a chapter specifically for NPDES / SUSMP requirements. (See Appendix M for LBMC Chapter 18.95.) This addresses requirements for BMPs, Storm Water Pollution Prevention Plans, and Standard Urban Storm Water Mitigation Plans. Enforcement actions are currently not documented separately from inspections. Table 4.1 shows FY 03 statistics for Development Planning and Construction.

Table 4.1: **DEVELOPMENT PLANNING AND CONSTRUCTION STATISTICS**

Number of projects requiring SWPPPs in FY 03	96
Number of Inspections in FY 03	*+19,387
Number of development projects for which SUSMPs were completed in FY 03	18
Number of development projects for which SUSMPs were completed since the permit was adopted	31
Percentage of total development projects for which a SUSMP was completed in FY 03	.21%
Percentage of total development projects for which a SUSMP was completed since the permit was adopted	.15%

*This includes enforcement actions.

+One site may have several inspections done during one visit. Checking each BMP is considered a separate inspection. (See Appendix N for NPDES Inspection Report.)



MANAGEMENT PROGRAM FOR DEVELOPMENT PLANNING AND CONSTRUCTION

SECTION 3

3.4 TRAINING

Employees engaged in development planning, construction, or inspection receive training on stormwater management requirements and BMP implementation. (See Appendix O for NPDES Training Report.) No changes were necessary last year to the Developer Information Program except for making available the newly released CASQA BMP Handbooks.



MANAGEMENT PROGRAM FOR ILLICIT DISCHARGES AND ILLICIT CONNECTIONS

SECTION 4

4.0 MANAGEMENT PROGRAM FOR ILLICIT DISCHARGES AND ILLICIT CONNECTIONS

The general objective of this program is to improve the quality of stormwater by effectively prohibiting illicit discharges and eliminating illicit connections, which allow for the release of illicit discharges. The goal is to reduce the pollutants entering the storm drain system that may negatively affect receiving water quality.

Departments such as Fire, Harbor, Health and Human Services, Planning and Building, Public Works, and Water play important roles in investigating possible illicit connections and discharges. They communicate their findings to the Stormwater Management Division and other appropriate parties, oversee cleanups, and follow-up as needed. Incident documentation is recorded and maintained by the responsible department. (See Appendix P for Incident Report, Case Worksheet, and Notice of Inspection forms) Reports of suspected illicit connections and discharges may also come from the public via the Stormwater Management Division hotline, 562-570-DUMP (3867) and website, www.lbstormwater.org.

4.1 ILLICIT DISCHARGES

When the City is informed of an alleged illicit discharge(s), the Fire Department is the lead responder. The Fire Department evaluates the situation and, when necessary, will dispatch the Hazardous Materials (Haz Mat) unit of the Department of Health and Human Services involved. Haz Mat will then verify the magnitude of the spill, identify the responsible party, and give instructions on how to proceed with the cleanup. The responsible party is then required to have the area cleaned up. The education and procedures serve as preventive measures for future illicit discharges. Haz Mat will oversee the cleanup and decide when the situation has been adequately remedied. If the responsible party does not have an established account with a cleanup contractor, the City's contractor is used and the expense charged to the responsible party. If no responsible party can be identified, the City will pay for the cleanup done by a contractor, or the Haz Mat Specialist will personally conduct the cleanup if the discarded amount is small. Discarded hazardous waste is stored at a Fire Department location for future proper disposal. The responsible party may choose to do the cleanup personally if the amount is small. In this case, the responsible party may dispose of materials at a household hazardous waste roundup. These disposals must be verified by the presentation of a receipt to the Haz Mat Specialist.



MANAGEMENT PROGRAM FOR ILLICIT DISCHARGES AND ILLICIT CONNECTIONS

SECTION 4

The Department of Health and Human Services responded to and provided cleanup oversight to 446 chemical release incidents, 117 non-hazardous waste spills, and 75 trauma scene incidents in FY 03. This is approximately 4.2% more chemical release incidents, 29% more trauma scene incidents, and 14.7% more non hazardous waste spills compared to FY 02.

The Stormwater Management Division hotline and website have proven very useful in assisting with the cleanups and elimination of illicit discharges. Hotline calls and emails are received and reviewed by the Stormwater Management Division and then routed to the appropriate department for investigation and subsequent cleanup or enforcement action. Once the issue has been resolved, the Stormwater Management Division is informed of the outcome for recordkeeping. It is important to note that several calls a month come in from the public on illicit discharges and connections that may have otherwise gone undiscovered. Most calls are resolved within one business day. (See Appendix Q for 570-DUMP Log Sample.)

Inspectors and field workers receive an annual refresher training on how to identify and report illicit discharges. Instructional videos and guest lecturers are used in conjunction with a review of the department/division procedures.

4.2 ILLICIT CONNECTIONS

An illicit connection is any man-made conveyance that is connected to the storm drain system through which prohibited flows are discharged. The City of Long Beach has never issued permits for storm drain connections. Historically, the City has encouraged through-curb connections rather than direct pipe connections because these are the easiest and least expensive to survey for illicit connections that convey illicit discharges. They are located above ground and can be easily observed by City staff. In addition, City staff checks the inside of catch basins and the sides of open channels during regular maintenance activities for any illicit connections. All open channels and catch basins owned by the City have been inspected for illicit connections.

Investigating underground pipes for pipe-to-pipe illicit connections is the most expensive and least effective for illicit connection inspection. The Water Department uses special camera equipment to inspect storm drain pipes 36 inches in diameter or greater for illicit connections. To date, 21 miles of the total 48 miles has been inspected.

If the presence of an illicit connection is suspected, storm sewers are investigated and the necessary action is taken to eliminate the connection. Regardless of thorough



MANAGEMENT PROGRAM FOR ILLICIT DISCHARGES AND ILLICIT CONNECTIONS

SECTION 4

investigating, no illicit connections were found in FY 03. The Water Department spent \$22,000 actively looking for illicit connections in the last year.



5.0 MANAGEMENT PROGRAM FOR PUBLIC INFORMATION AND EMPLOYEE TRAINING

The City of Long Beach takes a comprehensive approach to stormwater and urban runoff educational outreach. The goal is to inform about the impacts of stormwater and urban runoff pollution and to involve the

- general public / city residents,
- school children,
- commercial/industrial establishments, and
- City employees

in the implementation of solutions. The Stormwater Management Division is the lead on this program. Many other departments are also active in educational outreach and include urban runoff pollution prevention messages in their programs and materials. Throughout the year, City staff participate in numerous activities to deliver the stormwater message and supply the tools and guidance on how to be the solution to pollution. The Stormwater Management Division conducted outreach at 32 events, reaching approximately 585,000 people. (See Appendix R for Special Events FY 03.) The Stormwater Management Division has developed and continues to develop outreach materials to explain the nature of non-point source pollution and its significant contribution to water quality impairment. These materials are used to encourage behavioral changes that will lead to reducing pollutants at the source. Many materials are applicable to more than one targeted audience and pollutant, and the City uses tried-and-true resources as well as a host of new outreach efforts to educate and empower its audience.

5.1 GENERAL PUBLIC / CITY RESIDENTS

The City of Long Beach has a diverse population that is the recipient of outreach and public education efforts. The Stormwater Management Division is always looking for new and innovative ways to deliver the message. During this reporting period, examples of new targeted outreach methods include using an electronic message board viewable from the 405 Freeway, presenting information to the Marine Advisory Commission and City Council, and various appearances on Long Beach Community Television. During special events, such as health and safety fairs and cleanups, the Stormwater Management Division staff are present to listen to constituent concerns and answer stormwater and related questions from the attendees. Informational literature,



PUBLIC INFORMATION AND EMPLOYEE TRAINING PROGRAM

SECTION 5

along with promotional items such as magnets, pencils, and rulers, is always made available.

The Long Beach Stormwater Management Division continues to be the principal player in educating the public on ways to modify behavior that will lead to improved water quality. The information and reporting hotline, 562-570-DUMP (3867), and website, www.lbstormwater.org, are excellent educational tools that give the public a way to become active participants in the fight against pollution by being able to easily report illegal dumping via telephone or email 24 hours a day, seven days a week. The stormwater website is a very dynamic tool that is constantly being assessed and enhanced to mirror the development and implementation of the LBSWMP. It is also linked to the websites of the Long Beach Area Chamber of Commerce and other organizations.

An additional medium for outreach is the 6-panel kiosk strategically placed in the Civic Center Plaza, which is centrally located in the area of City Hall, public parking, and the library. During September and October of each year, people are exposed to these stormwater pollution prevention panels aimed at educating and modifying personal behaviors.

In FY 03, target audiences were also reached via the *School News* publication. *School News* is distributed to every teacher and principal in the Long Beach Unified School District as well as a variety of local businesses and organizations for a total distribution of 30,000 per publication. The Stormwater Management Division continues to advertise in the Parks, Recreation, and Marine quarterly class schedule not only because of the audience it serves but because it gets into peoples homes and has a three-month shelf life. This publication accounts for approximately 1,950,400 annual impressions.

Advertising projects continued to be targeted to specific pollutants and audiences in FY 03. For example, one such advertisement is aimed at tourists and the tourism industry. This campaign consists of a beautifully designed advertisement strategically placed inside the Carnival Cruise Lines Commemorative book that targets the type of pollutants found on the beach. This hardcover book will be used as an informative guide to the 500,000 cruise passengers that are expected to sail into and out of the new Long Beach cruise terminal during its first year of operation. The book will be in every stateroom aboard the Ecstasy and Elation ships along with being distributed to travel agents, dignitaries, cruise and travel executives and tour operators. (See Appendix S for Carnival Cruise Lines ad.)



PUBLIC INFORMATION AND EMPLOYEE TRAINING PROGRAM

SECTION 5

The Stormwater Management Division was just awarded \$281,588 for a Used Oil Opportunity Grant from the California Integrated Waste Management Board. The proposed program that this grant will fund is aimed at reducing illegal dumping of used oil in the Southern Los Angeles River watershed area. The program will focus on conducting research and implementing outreach efforts and will be detailed in next year's annual report.

As a member of the Chamber of Commerce, the Stormwater Management Division was able to advertise in the 2003-2004 official Long Beach Area Map that is made available to tourists and newcomers. The map has an annual distribution of approximately 25,000. (See Appendix T for Long Beach Area Map ad.)

The Stormwater Management Division continues to take advantage of the Adopt-A-Waterway™ (formerly Adopt-A-Stormdrain) program. Adopt-A-Waterway™ is a national program, which raises non-taxpayer dollars through business sponsorships to help municipalities fund stormwater pollution prevention and education activities. (See Appendix U for Adopt-A-Waterway™ Revenue and Expenses.) This program brings revenue into the City specifically for stormwater pollution prevention and education but also educates the public with its signs. There are currently 24 signs installed, and each has an environmental message, such as "Please Do Not Litter," displayed below the corporate sponsor's information. These signs are placed in high traffic areas and account for approximately 165,972,070 annual impressions. (See Appendix V for City of Long Beach Adopt-A-Waterway™ Sign Locations and Appendix W for City of Long Beach Adopt-A-Waterway™ Signage Annual Best Management Practices Messages.)

The Stormwater Management Division Officer and Adopt-A-Waterway™ manned an informational booth at the 24th Annual Long Beach Blues Festival where the Adopt-A-Waterway™ cable TV (PSA) video was shown periodically on the big screen for all attendees to see. Approximately 35,000 attended the festival and viewed the video hourly over the two-day event. An Adopt-A-Waterway™ advertisement was strategically placed on the inside back cover of the program for this event that attendees received, which was likely viewed by more than just attendees. (See Appendix X for Adopt-A-Waterway™ video and Appendix Y for Adopt-A-Waterway™ 24th Annual Long Beach Blues Festival ad.)

The Environmental Services Bureau (ESB) staff of the Long Beach Energy Department participated in approximately 45 events/meetings to promote environmental programs. These included City Council and neighborhood association meetings, safety and community fairs, composting and vermiposting classes, and support to events held by other departments. As mentioned in the Public Agency Activities Section, ESB



PUBLIC INFORMATION AND EMPLOYEE TRAINING PROGRAM

SECTION 5

continues to display tri-lingual street pole banners promoting motor oil recycling as a behavior that will lead to cleaner beaches and waterways. The Bureau also has an informational and reporting hotline, 562-570-2876, which is staffed by five full-time employees (FTEs) Monday through Friday and one FTE for a half day on Saturdays. After-hours callers have the option to leave a message in the hotline voicemail box, which is then responded to during the next business day.

The **Developer Information Program** continues to be used by the Planning and Building Department to educate contractors, developers, and “do-it-yourselfers.” In addition, during normal business hours, every permit applicant has access to staff at the Development Services Center. Information about stormwater management, applicable BMPs, various brochures, pamphlets, and handouts, and related permit requirements are always made available in the Development Services Center on the 4th floor of City Hall.

Water Conservation is a top priority of the Water Department, especially the Long Beach Board of Water Commissioners. Implementation of conservation BMPs and a variety of educational outreach programs are integral parts of their master plan. This is another example of how the City of Long Beach exceeds a permit requirement (Part 3.1.A.2.f, Water Conservation Practices). The “Water Ambassador” volunteers of the Water Department routinely attend events throughout the year to promote water conservation and water quality issues. The Department continues to make use of a mobile, interactive water conservation kiosk, which rotates to different City buildings for display and use in the lobby area. Landscape/gardening education classes, which address issues such as water conservation and fertilizer/pesticide use, are sponsored by the Water Department. Recently, the department revised its public information video/DVD and redesigned its website, www.lbwater.org, which serves as an educational medium for water-related issues such as water conservation.

The programs and services provided by the El Dorado Nature Center (EDNC) of the Parks, Recreation and Marine Department are critical to the success of the City’s public information and education program for stormwater. EDNC is a 102.5-acre wildlife habitat with two lakes, a stream, two miles of dirt trail, and a 1/4-mile paved access trail. The site is near the mouth of the San Gabriel River, one of the largest carriers of stormwater in the City. EDNC also has interactive, hands-on exhibits in the museum and offers a wide variety of educational programs. All of this makes EDNC the perfect setting for NPDES education. Following are brief descriptions of EDNC’s educational outreach programs and events that address issues of non-point source pollution and stormwater management and are geared towards the general public.



PUBLIC INFORMATION AND EMPLOYEE TRAINING PROGRAM

SECTION 5

Adopt-A-Beach is an innovative conservation program which allows school clubs, businesses, community associations and other groups to get involved, agreeing to clean up a quarter mile section of the Long Beach shoreline four times annually. People of all ages and diverse backgrounds have become part of the solution to ocean pollution, increasing public awareness that trash on the land inevitably becomes trash on the beach. This past fiscal year, more than 2,800 volunteers from 30 groups contributed more than 3,600 hours of combating non-point source pollution on City beaches.

The **Adopt-A-Wetland** program trains groups to care for these fragile ecosystems. After training, groups contract to visit and clean the wetlands four times annually. Adopt-A-Wetlands groups are increasing, and trainings took place throughout the year.

At the **19th Annual International Coastal Cleanup** in September, five beach sites and Colorado Lagoon were cleaned by 1,359 people. At the **Earth Day Spring Beach Cleanup** in April, volunteers participated in Long Beach's first underwater cleanup and marine life survey in addition to the traditional beach cleanups. Between the two events, 6.4 tons of trash and debris was collected. These events serve as educational venues by having staffed informational booths and hands-on activities available.

Two **Wetlands Wonders** classes took guided kayak groups into Los Cerritos Wetlands and taught participants about the marsh's habitat.

The **30th Anniversary of the Clean Water Act**, celebrated by the Nature Center, brought more than 700 people of all ages together for fun and information. People were connected with a variety of exhibitors and even got a lesson in water sampling.

Giving Thanks Day was a gratitude event and an opportunity for the public to learn about composting, recycling, and Earth-friendly crafts.

The **Summer Solstice Simple Living Festival** reinforced techniques and attitudes of making the world safer and healthier. More than 1,200 attendees enjoyed demonstrations, workshops, and entertainment, all with the overarching theme of learning to enjoy life more and consume less.

Parades are another way to reach out to the community. The El Dorado Nature Center staff participated in the Daisy Lane Christmas Parade and Martin Luther King Holiday Parade, increasing the Nature Center's profile and sharing the message of renewal and restoration. Staff passed out "You're the Solution to Ocean Pollution" items to thousands of parade-goers.



PUBLIC INFORMATION AND EMPLOYEE TRAINING PROGRAM

SECTION 5

Signage is now in place at Rainbow Harbor, enlightening visitors about local history and wildlife and the positive actions each person can take to make a difference. One sign devoted to the L.A. River watershed explains how debris and litter travel down the Los Angeles River to the Long Beach shores. Other signs emphasize the importance of recycling and conservation of natural resources. Three additional signs at Golden Shore Marine Reserve explain the value of wetlands and the crucial role of individuals in reducing non-point source pollution.

5.2 COMMERCIAL / INDUSTRIAL ESTABLISHMENTS

The educational site visit program is used to distribute and discuss applicable BMP and educational materials to business owners/facility operators including information about the City's Municipal NPDES permit, and requirements regarding Notice of Intent (NOI) and Storm Water Pollution Prevention Plans (SWPPP). The City's Department of Health and Human Services (DHHS) performs the educational site visits and has enhanced its database used to track visits and other information. In FY 03, DHHS conducted 960 educational site visits. Staff also check for applicable Notices of Intent and Storm Water Pollution Prevention Plans at phase I industrial facilities.

The Stormwater Management Division continues to take advantage of its membership with the Long Beach Area Chamber of Commerce and is now a member of the prestigious Bronze Circle. (See Appendix Z for Long Beach Business 2003-2004 Chairman's Circle.) The 2003 edition of the Business Referral Guide and Membership Directory features an advertisement that targets the business community. It introduces them to the Adopt-A-Waterway™ program and encourages their participation. (See Appendix AA for Business Referral Guide and Membership Directory ad.) In addition, the Long Beach Stormwater Management Division Officer and Paul Polizzotto, founder and president of Adopt-A-Waterway™, made a joint presentation at Good Morning Long Beach and educated attendees about the latest efforts to reduce storm drain pollution and preserve the oceans and beaches. Adopt-A-Waterway's cable T.V. (PSA) video can be viewed at the Stormwater Management Division's website, www.lbstormwater.org.

5.3 SCHOOL CHILDREN

Getting the stormwater message and materials into the Long Beach Unified School District (LBUSD) continues to be an extremely difficult undertaking. Nevertheless, several different programs are in place and/or being created to specifically target this



PUBLIC INFORMATION AND EMPLOYEE TRAINING PROGRAM

SECTION 5

very important audience. At outreach events open to the general public, school children are often enticed by the division's promotional items and are undoubtedly being influenced by their messages. In addition to programs already described, whenever possible Stormwater Management Division staff goes out to schools to give presentations and answer questions about stormwater quality issues, the storm drain system, the effects of pollution, and behavioral changes that children can make to keep the ocean and other waterways clean.

During FY 03, a Watershed Awareness and Cleanup project engaged people of ages. The oversight committee was comprised of the Stormwater Management Division, student representatives from Wilson and Poly High Schools, Surfrider (local environmental group), and the office of Second District Councilmember Dan Baker. The venture was a series of activities that combined stormwater education and watershed beautification. A "How to Cleanup a Watershed" manual has been drafted so that the program can be duplicated throughout the City and County. This project won the distinguished 2003 Water Quality Award for Water Quality Conservation. (See Appendix BB Watershed Cleanup Project presentation.)

This past year, Mr. Gary Poe of "Window On Our Waters" was brought on board to contract the Tidepool Cruiser for LBUSD outreach efforts. This mobile educational vehicle addresses many of the critical issues of nonpoint source (NPS) pollution and its effect on the marine environment in an exciting, innovative, and hands-on way (See Appendix CC for Windows on Our Waters Webpage.) Most importantly, participants are given the tools they need to decide for themselves the type of impact they will have on the beaches and coastal waters. In FY 03, the Tidepool Cruiser brought its message to 1,861 students.

The Stormwater Management Division was once again able to contribute \$4,000 to support Heal the Bay's "Key to the Sea" Marine Education Program. This will allow over 1,400 LBUSD students to participate in the program, which helps instill in students a sense of social responsibility toward their environmental choices. (See Appendix DD for Key to the Sea Year Four Program Evaluation.)

The Aquarium of the Pacific held a "Creating a Sustainable Coastal Community for the Long Beach of Tomorrow" workshop for fifth and sixth graders from LBUSD. The students were immersed in real-world experiences and created a future model for Long Beach to become a sustainable coastal community. The Stormwater Management Division was proud to contribute \$1,000 to this educational workshop.



PUBLIC INFORMATION AND EMPLOYEE TRAINING PROGRAM

SECTION 5

In addition, the Stormwater Management Division continues to support Partners of Parks, a nonprofit organization supporting Long Beach parks, recreation, and beaches. A pollution prevention account has been established for an NPDES Educational Scholarship Fund, and the first scholarship award is planned for this spring.

Another avenue for reaching LBUSD students was to advertise in the 2003 Wilson High School Volleyball program. This publication is distributed not only to players and their parents but also to friends and followers of the volleyball team. (See Appendix EE for Wilson Volleyball 2003 ad.)

TREC, the Traveling Recycling Education Center, is used by ESB staff to conduct extensive public outreach to LBUSD schools. TREC is a mobile classroom used to educate students and Long Beach residents at public events. During FY 03, TREC made a total of 32 visits to 16 LBUSD schools, making 45-minute presentations to over 65 4th grade classes. TREC also participated in one weekend event, spreading the recycling and anti-littering message to the Long Beach community.

ESB has also assisted 44 LBUSD schools establish recycling programs. This is an increase of six facilities in the past year.

Discover Long Beach Parks is a program conducted by the EDNC that works with third graders, getting them actively involved in the care and maintenance of “adopted” parks and neighborhoods. Among other lessons, this program addresses the problem of urban runoff and the resulting impact on ocean water quality. Students tabulate the types and amounts of trash found in the gutters of each park. They learn about the storm drain system and about the effects of trash and debris on wildlife and human health. Naturalists worked with more than 920 third graders in 46 classes on the **Adopt-A-Gutter** curriculum. The curriculum has been extended to include student monitoring and characterization of trash in gutters around each student’s home as well as basic storm drain education. Students received materials enabling them to perform these studies. They are given magnets, rulers, pencils and literature to remind them that they personally are the solution to ocean pollution. Upon completion, students are awarded buttons and certificates.

The Nature Center’s **Moveable Museum** includes two presentations: “**Protect Our Watery World**” (POWW) and “**Paws and Jaws.**” POWW training is twenty-five hours and includes in-depth education about non-point source pollution effects on marine life, human health and regional water quality, and cleanups of Los Cerritos Wetlands and Golden Shore Marine Reserve. Trained volunteers visit area elementary schools to increase student awareness of water quality issues. POWW includes hands-on



PUBLIC INFORMATION AND EMPLOYEE TRAINING PROGRAM

SECTION 5

exploration of coastal marine life and visually illustrates negative impacts of litter and non-point source pollution on the aquatic ecosystem. Students learn that their choices and behaviors do make a crucial difference. The Stormwater Management Division Officer regularly makes a presentation at the POWW training and provides information and materials related to NPDES and pollution prevention. In FY 03, Stormwater Management Division staff was trained and made two school presentations in addition to those presentations made by volunteers. Paws and Jaws conveys a strong message of stewardship for our planet and especially for our aquatic eco-systems. It, too, includes Adopt-A-Gutter as a way young people can make a difference in protecting habitat. Magnets, pencils, rulers and posters reinforce the message.

The Water Department has recently made more of an impact on school children with two new programs. The first is a joint effort between the department and the Aquarium of the Pacific. Together, an education program was created for all Long Beach Unified School District third grade classes who visit the Aquarium. The program is designed to inform and educate the third grade students about water, water conservation, the water cycle, marine life and habitat, and the protection of all water supplies. Another program that was recently implemented is the **Admiral Splash Program**. This is a program that allows our Water Ambassadors (the Department's volunteer group) to visit schools within our service area and teach lessons about water, water conservation, urban runoff, and the effects of pollution.

The ***Environmental Defenders*** is a program of the Los Angeles County Department of Public Works. It is a free assembly geared for children in grades K-6. Two professional actors present the interactive 30-minute program. Through animated and live action video segments, role-playing, an action-packed game and educational giveaways, students are taught about important environmental concepts. Topics covered in the assembly include the Three R's (Reduce, Reuse and Recycle), stormwater pollution, household hazardous waste, illegal dumping and water conservation. This program received extra promotion last year through an announcement in *School News* sponsored by the Stormwater Management Division. In FY 03, the Environmental Defenders program visited a total of 8,052 students in LBUSD schools.

5.4 CITY EMPLOYEES

City employees are educated about stormwater issues through trainings, flyers, displays, the Intranet, and other viable means. Annual training of City employees takes place at the department level and varies depending on the type of personnel. The Stormwater Management Division has paid for and will send employees to appropriate



PUBLIC INFORMATION AND EMPLOYEE TRAINING PROGRAM

SECTION 5

external training workshops, such as the BIA Construction Stormwater Compliance Training Seminar, and then follow up with a survey to get feedback from those who attended. In FY 03, the Stormwater Management Division expanded its video library and distributed an inventory of titles to Task Force members. Videos are available for training purposes and periodically shown at Task Force meetings. Within the Engineering Bureau of Public Works, NPDES training is incorporated into quarterly safety meetings and is viewed by the entire Bureau. Many Departments incorporate NPDES training into their regular training and safety meetings.

The Stormwater Management Division made a presentation at the Landscape Maintenance Training held by the Water Department. This was a free training for professional but also included many City employees. Many NPDES-related topics were addressed, such as pesticide application, water conservation, and the Municipal Code for leaf blowing.

Another useful tool is the City's telephone system. Callers on hold hear a series of messages including one that has the Stormwater Management Division's key educational points, hotline telephone number, and website address.

Additionally, many City employees live and shop in Long Beach; therefore, they are also exposed to all the materials designed for the general public, such as the Civic Center Plaza kiosks, advertisements, and promotional items.



6.0 ASSESSMENT

The Long Beach Storm Water Management Program (LBSWMP) continues to be implemented, revised, and expanded as needed to ensure effective reduction in urban and stormwater pollution. In FY 03, the City spent \$18,291,660 on NPDES expenditures. This is a slight decrease of less than 5%, which is the result of resource reductions in light of the City's structural budget deficit. (See Appendix FF for the FY 03 Stormwater Management Program Expenditures and Appendix GG for Expenditure Summary for FY 00 – FY 03.) It is important to note, however, that the average expenditure over the past four years has been \$19,124,056. At this point in time, it is impossible to forecast FY 04 expenditures due to local and state economic instabilities. Assessments of Public Agency Activities, Development Planning and Construction, Illicit Connections and Illicit Discharges, and Education and Public Information are detailed in this section.

6.1 ASSESSMENT OF MANAGEMENT PROGRAM FOR PUBLIC AGENCY ACTIVITIES

The costs associated with Public Agency Activities dropped by approximately 6% from FY 02 to FY 03 in accordance with the City's three-year strategic plan to reduce or eliminate its budget deficit. This minimally affected some operations, while others continue to become more effective and efficient.

Additional litter receptacles have been placed in parks, beaches, and marinas that resulted in the collection of 11% more trash from beaches and marinas alone. An increase in community support and volunteer participation has also made a difference. One illustration of this is with the Neighborhood Cleanup Assistance program. There were 14 more cleanups held and 11% more waste collected by volunteers in FY 03 compared to FY 02. Similarly, the 19th Annual International Coastal Cleanup and Earth Day Cleanup resulted in an 18% increase in trash and debris collected. Volunteerism is also on the rise as demonstrated by over 13% more volunteers participating in the Annual International Coastal Cleanup compared to the year before. The Household Recycling program has been expanded and now includes larger bins that are covered. This proactive approach resulted in 10% more recyclables collected in FY 03 versus FY 02. In addition, dumped item collections are down 28% due to increased enforcement and vigilance. The Department of Public Works Street Maintenance Division collected 95 tons of trash and debris from cleaning alleys and sidewalks, which is 58% more than the 60 tons collected last year. The Long Beach Parks, Recreation, and Marine Department collected 165% more trash and debris from City beaches in FY 03 than in



FY 02. This is due to more rain during the 2002-2003 winter storm season, which pushed trash and debris through the tributary storm drain systems and onto the beaches. The dedication of staff to keep City beaches free of unsightly pollutants is also reflected in the totals of trash and debris collected.

Code enforcement issues and/or subsequent violations have become less of a problem due to educating the public and explaining the Long Beach Municipal Code and the associated consequences for failing to comply. This is demonstrated by a decrease of approximately 40%, 28%, and 13% in property maintenance violations corrected, weed abatement violations corrected, and abandoned / inoperative vehicles removed, respectively.

The 3.7% decrease in the amount of trash collected by street sweeping and the 70% decrease in sewer overflows can also be credited to targeted educational campaigns that give residents information allowing them to make better choices, such as not littering or putting fats, oil, and grease in their sewer drains. The Water Department collected 33% less waste from catch basins and pump stations. Like the increase in beach debris collected, this is due to more rain in the 2002/2003 storm season than the prior year.

The stenciling of catch basins and installing signage for channels is an ongoing effort. In FY 03, the Department of Public Works Street Maintenance Division stenciled 261 catch basins, or 100% of all catch basins known to have no stencils or illegible stencils. The Stormwater Management Division is currently arranging to have these painted stencils replaced with thermoplastic resin stencils, which are far more permanent and visible. Additionally, the Stormwater Management Division purchased two "No Dumping – This Drains to Ocean" brass stamps, at a cost of \$1,732, for use when catch basins are being constructed. City staff and contractors have used this stamp on all new catch basins since July 2003. The Stormwater Management Division is currently communicating with Los Angeles County to resolve the signage deficiency for channels. The intent is that either the County or its vendor will produce the signs needed to put the City in compliance with this requirement. The projected implementation date is February 2004.

The City has been struggling with Parking Lot Washing Program requirement since its inception. The permit states that uncovered parking lots with greater than 25 spaces will be swept at least monthly and that a parking lot washing program shall be developed and implemented. The monthly sweeping of City lots has been in place from the beginning. The City has not been able to implement a washing program due primarily to the quantity, age, and variety of qualifying City-owned lots. The current



inventory indicates that the City has 94 qualifying lots with approximately 10,201 parking spaces. Many lot surfaces are either too old and worn out or made of materials that cannot be washed without significant cost and irreparable damage. The City funded a study, conducted by the Southern California Coastal Watershed Research Project (SCCWRP), entitled, "Characteristics of Parking Lot Runoff Produced by Simulated Rainfall." A secondary objective of the study was to assess the effects of traffic use and maintenance on the chemical composition and toxicity of parking lot runoff. Some of the more telling conclusions reached were: parking lot usage did not affect the accumulation of runoff constituents; parking lot maintenance did not affect the accumulation of runoff constituents; pressure washing appeared to be partially effective in reducing the accumulation of runoff constituents; most constituent concentrations and some toxicity levels decreased over time; and that improved technologies and/or BMPs will be required in order to reduce concentrations of contaminants in parking lot runoff. Equally incapacitating is the cost of washing this massive inventory. Preliminary estimates indicate that it would cost the City as much as \$450,000 annually for this BMP alone. City staff is in the process of looking for alternative, cost-effective methods and technologies in order to comply with this requirement. Until then, the City will continue to aggressively maintain its properties and enforce the SUSMP requirements and municipal code.

6.2 ASSESSMENT OF MANAGEMENT PROGRAM FOR DEVELOPMENT PLANNING AND CONSTRUCTION

Development Planning and Construction costs decreased by approximately 3% from FY 02 to FY 03. This is due to a combination of staff becoming more efficient in plan reviews and the developer community becoming more educated about regulations. A major component of streamlining the Development Planning and Construction program is training. In FY 03, the Department of Planning and Building staff spent 280 hours in NPDES training.

The number of projects requiring Storm Water Pollution Prevention Plans (SWPPPs) decreased 25%, the number of projects for which Standard Urban Stormwater Mitigation Plans (SUSMPs) increased 80%, and the number of inspections increased 4.8% from FY 02 to FY 03.



6.3 ASSESSMENT OF MANAGEMENT PROGRAM FOR ILLICIT DISCHARGES AND ILLICIT CONNECTIONS

The costs associated with Illicit Connections and Illicit Discharges dropped by approximately 3.2% in FY 03. This is in spite of the Department of Health and Human Services responding to approximately 4.2% more chemical release incidents, 29% more trauma scene incidents, and 14.7% more non hazardous waste spills in FY 03 compared to FY 02. The staff's efficiency accounts for this cost savings.

The Water Department has made steady progress with inspecting storm drain pipes of 36 inches or greater for illicit connections. More than seven miles were inspected in FY 03 using state of the art equipment and well-trained staff.

6.4 ASSESSMENT OF MANAGEMENT PROGRAM FOR EDUCATION AND PUBLIC INFORMATION

The Stormwater Management Division's special event outreach alone made over 580,000 impressions, and several other departments continue to implement programs that carry the NPDES message. When ads in publications, Adopt-A-Waterway™ signs, educational programs, and other media are included, well over 168 million impressions were made in FY 03. This far exceeds the required 1.5 million annual impressions. New events, such as celebrating the 30th Anniversary of the Clean Water Act and Support Your Local Ocean, are continually being developed in an effort to reach more people with the pollution prevention message. One series of activities, the Watershed Cleanup Project, was even honored with the 2003 Water Quality Award for Water Quality Conservation. The beach cleanups are being expanded into the inland community and occur at several water bodies, not just beaches. The Department of Health and Human Services has been diligently conducting educational site visits, and the Stormwater Management Division has received several calls from business asking for posters and other educational materials. In addition, the local cable channel has been an excellent medium for getting out information. Shows such as Snapshot Long Beach, Heart of the City, and recorded City Council presentations have provided new avenues for stormwater education.

According to the permit, the City is required to education a minimum of 50% of all school children (K-12) every two years on storm water pollution. In the past year, the City has made significant progress in this area with new programs, such as the Tidepool Cruiser. However, the goal still has not been reached. Long Beach Unified School District (LBUSD) is not under the City's jurisdiction. Therefore, this permit requirement



has not been met. The Long Beach Stormwater Management Division will continue to develop stronger relationships with LBUSD in an effort to accomplish this requirement and will monitor very closely the progress of AB1548, Chapter 665 to develop complimentary environmental education programs. (See Appendix HH for Assembly Bill No. 1548, Chapter 665.)

Overall, Education and Public Information costs decreased by only a slight 1.38% from FY 02 to FY 03, which has had no program impacts.