



Annual Storm Water Permit &
Assessment Report

Order No. 99-060/CAS004003 (CI8052)

December 1, 2002



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, 2002

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

Subject: Annual Storm Water Report 2001-2002

Dear Mr. Dickerson,

The City of Long Beach is pleased to submit its "Annual Storm Water Report 2001-2002" in compliance with Order No. 99-060, for the Municipal National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0040003 (C18052).

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

Sincerely,

Mark Christoffels
City Engineer

MC:ll

Enclosure

ENGINEERING BUREAU

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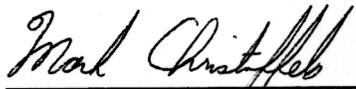
**CITY OF LONG BEACH MUNICIPAL STORM WATER PERMIT
ORDER NO. 99-060**

**Permittee Annual Program Report Form
Permit Year 2001 - 2002**

"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, 2002."



Mark Christoffels
City Engineer



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1.0 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 implemented by the City to comply with the NPDES permit and, most importantly, to preserve and maintain the quality of our beaches and waterways.

In January 1999, the Department of Public Works created a new division entitled the Clean Water Division. This division includes a Clean Water Program Officer and Administrative Analyst III and 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.

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 Executive Summary highlights the City's storm water management accomplishments from October 1, 2001 through September 30, 2002.

1.1 PROGRAM ACCOMPLISHMENTS FY 02

During FY02 the City invested **\$19,172,692** and provided a wide variety of programs, activities and services which produced:

- **2.9 million** impressions made on the general public about storm water quality
- **23** ongoing educational and interactive programs in place reaching some 55 schools and more than 160,000 people
- **823.6 cubic yards** of trash and debris collected from 3,612 catch basins, 23 pump stations and 13 open channel systems
- **\$783,000** in Prop 13 Grant monies bringing the all years total to \$5,283,000
- **\$48,000** in Adopt-A-Stormdrain revenues, creating 5 Corporate Environmental Partnerships and the installation of 18 educational signs



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- **13,112 tons** of trash and debris by street sweeping 189,672 miles of City streets
- **428** chemical releases, **58** trauma scene incidents, **102** non hazardous material spill responses.
- **14 miles** of 36" or greater storm drains inspected for illicit connections
- **2,400** local households dropped off **1,800 gallons** of used motor oil, **16,000 gallons** of used paint, **450** used car batteries, **160 gallons** of miscellaneous hazardous waste collected at the Household Hazardous Waste (HHW) event at Veteran's Stadium on March 23, 2002.
- **5** major beach and neighborhood cleanup events collecting a total of **1,553 tons** of trash and debris
- **18,076 tons** of newspaper, corrugated, commingled, mixed paper and **35,070** gallons of oil from the curbside recycling
- **3,474 tons** of furniture, tires, yard waste, etc. from the special item pickup requests
- **75,023 tons** of greenwaste collected from City tree trimming and grass mowing operations
- **114,090 cubic yards** of waste collected from 250 beach, park and marina litter receptacles
- **833 tons** of waste from commercial and residential receptacle trash collection
- **127 citations** and **17** arrests for littering and dumping related incidents.
- **8 websites (603,947 average monthly hits)** that provide 24/7 access to downloadable storm water information

For complete details of the City's implementation programs please read Sections 2 through 9 of this report. (Please see Appendix A for a complete tabular summary of the above.)

1.2 ASSESSMENT

The underlying question is, "Is it working?" Is the implementation of the Long Beach Storm Water Management Program (LBSWMP) reducing storm water pollution? Are we changing behaviors? Unequivocally yes. This City has been very busy this year! This year departments began focusing in on the LBSWMP elements that lead to the significant accomplishments listed above and throughout this report. Citywide efforts and expenditures increased in Program Management (+19%), Illicit Connection and Illicit Discharge (+34%), Development Planning and Building (+15%) and in Public Agency's "Operations and Maintenance" (+11%). "570-Dump" calls are significantly up



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while response and resolution times have also been significantly reduced. Enforcement of municipal and criminal codes is up by Police, and outreach and targeted advertising programs continue to grow citywide. Finally, the positive feedback received from constituents, be it via 570-DUMP, the Internet, newspaper editorials and/or face-to-face encounters at Council and outreach events, about our message and mission is validation that our programs are working.

1.3 CHALLENGES

The City of Long Beach and the State of California are in financial trouble. The City of Long Beach predicts an FY 03 revenue shortfall of ~\$37 million dollars followed by an FY 04 shortfall of up to ~\$80 million. As a result, a complete hiring freeze has been instituted, unmet capital needs continue to grow (\$30M need for storm drain system) and basically all new general fund purchases are being disallowed. This has a cascading effect, especially on project services and deliveries. In other words, we have or may get the money but do not have unlimited resources to design and/or construct these water quality projects. Retirements are up meaning that seasoned professionals are leaving while the hiring freeze stops replacements resulting in departments needing to restructure in order to deliver their core services. In many cases staff members wear several hats. This shortage will definitely impact staff availability making it difficult to convene "as needed" focus groups.

No rain! It would seem that this would be favorable to report; however, as witnessed by recent rain events, it simply creates a false sense of accomplishment. During excessive dry periods storm water flows do not reach most of the recreational water bodies and the AB411 testing results mirror that fact. Trash in the water and on the beach was significantly lower this year, 1,858 tons compared to 4,437 tons for the same time frame last year. The dryness also impacts the data gathering for the water quality monitoring report and skews trend analysis and assessment.

1.4 THE FUTURE

Storm water and urban runoff pollution continues to be the single greatest threat to our water quality. The City must continue to fully support the intent of the federal Clean Water Act. The beneficial uses of our waterways such as swimming, fishing and boating, are vital factors to the quality of life for our citizens and of our environment. By



EXECUTIVE SUMMARY

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providing clean beaches and waterways, these recreational activities will multiply and enhance our environment, which will not only improve the quality of life for City residents but, also, strengthen the City's allure to tourists. In addition to the continued expansion and refinement of the programs in place we must push ourselves to accomplish the following in FY03:

- **Increase Community's awareness of Information & Reporting Hotline: 570-DUMP**
- **Development of Employee Training Program**
- **Continue to participate in regional storm water pollution prevention and education efforts**
- **Conduct a citywide assessment of our Public Education and Outreach Programs**



2.0 PROGRAM IMPLEMENTATION

The key component to the success of implementing the City's Storm Water Management Program (LBSWMP) is the continued cooperation, participation and coordination among all the City departments. The LBSWMP is a citywide program and affects nearly every City department.

The Department of Public Works has been charged with the responsibility to coordinate the development and implementation of the LBSWMP among all the City departments. The City Engineer has been designated as the LBSWMP Coordinator. Particular responsibilities include, but are not limited to:

- Ensure citywide compliance with the federally mandated Municipal MS4 NPDES Permit (Order No. 99-060)
- Coordinate storm water education and outreach activities
- Develop, coordinate and assist departments with annual reporting forms and budget information
- Annual preparation of the City's Storm Water Quality Monitoring (July 15) and Storm Water Permit and Assessment Report (December 1)
- Conduct Citywide Task Force and focus groups meetings
- Participate on Los Angeles County committees and keep the Citywide Task Force members informed
- Assist City departments and bureaus in organizing storm water quality training for staff

Although coordination of the implementation of the LBSWMP is the responsibility of the Bureau of Engineering, this program is a citywide program. The cooperation, participation and coordination across all departments is necessary in order to achieve a successful program and meet regulatory compliance. In general, the responsibilities for other departments and bureaus include:

- Implement elements of the LBSWMP
- Revise existing policies and procedures
- Participate on the Citywide Task Force and focus groups
- Prepare budget reports
- Prepare annual report forms
- Educate and train staff



A citywide program implementation strategy has been developed to facilitate this process among the City departments. The program management structure consists of a Citywide Task Force and several focus groups.

Citywide Task Force members facilitate the coordination and oversee the implementation of the LBSWMP among the various departments. Ideally, every City department should be represented on the Citywide Task Force, but this is not practical or efficient. The following departments actively serve on this committee: City Attorney; City Prosecutor; Community Development; Fire; Health & Human Services; Library Services; Long Beach Energy; Parks, Recreation & Marine; Oil Properties; Planning & Building; Police; Port of Long Beach; Public Works; Technology Services and Water.

An active Citywide Task Force is critical to the success of this program. The Citywide Task Force members provide guidance, disseminate information and obtain approvals from their respective departments, as necessary.

Citywide Task Force members oversee the operation of the LBSWMP to ensure proper and timely implementation and resolve issues and/or conflicts. (See Appendix B for Citywide Task Force Matrix.)

FOCUS GROUPS- As Needed Basis

The focus groups are a subset to the Citywide Task Force and meet on an “as needed basis” throughout the year. The focus groups concentrate on integrating the LBSWMP elements into the City’s procedures, guidelines and standards. Examples of the focus groups include:

- Illicit Connections and Illicit Discharges (IC/ID)
- Citywide NPDES Training
- Grant Writing
- Annual Report

Illicit Connection/Discharges:

This task force addresses 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 C for NPDES First Responders Call List.)

The general objective of this program is to improve the quality of storm water by effectively prohibiting non-storm water discharges and by reducing the discharge of



pollutants to the extent practicable. To achieve this objective, the City will implement the program, which includes the following major components:

- Illicit Connection / Illicit Discharge Elimination
- Public Reporting
- Reporting Hazardous Substances Entering the Storm Drain System

Citywide NPDES Training:

The purpose of this focus group is to enhance the Citywide NPDES employee training program. Training formats include videos, written materials, "on-the-job" training, guest trainers and interactive media. The goal is to continually develop programs that are specific to our operations and assist with compliance.

Grant Writing Task Force:

Members of this task force help develop grant proposals for Federal and State grant monies. Since its inception, this committee has secured **\$5.3M** in grant funds (See Appendix D for grant summary.)

Annual Report:

Each year the City must file an Annual Storm Water Permit and Assessment Report. Departments that have NPDES and NPDES-related expenditures are represented on this committee. The Clean Water Division provides training, the reporting forms and guidance during report preparation. The annual report is filed on December 1 of each year with the Los Angeles Regional Water Quality Control Board.

2.1 FY 02 HIGHLIGHTS

FY 02 has been a year of transition, a year of extreme challenge, a year for fine tuning and looking towards the future, but most importantly, a year of significant accomplishment. This section has been set aside to highlight key events, elements, activities and awards that demonstrate the proactive and aggressive nature this City has in dealing with storm water pollution prevention and education. Please review Sections 3 through Section 7 for complete details of each LBSWMP element.

To start, new partnerships have been created to address non-point source pollution. On April 23, 2002 the City became then first large City, population over 100,000, in the nation to implement the Adopt-A-Stormdrain (AASD) program. This partnership has already generated approximately \$48,000 in revenues and has purchased nearly



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\$15,000 in storm water pollution prevention and education that would not have been possible prior to this partnership. Shortly thereafter, the City joined the Long Beach Chamber of Commerce in an effort to better educate and empower the business community. It is now our goal to facilitate new Corporate Environmental Partnerships (CEPs) between Chamber businesses and AASD. Additionally, the City has become an active member of the Stormwater Monitoring Coalition (SMC) (See the SMC Annual Report in Appendix E) and sits on 14 recurring countywide committees (See Appendix F to view the committee listings.)

NPDES compliance is costly. This is an un-funded, federally mandated, program for which survival means aggressively searching for both non-traditional (AASD) and traditional (grant monies) funding opportunities. This past year the City partnered with 45 cities and LACDPW on 3 Prop 13 applications totaling \$2,418,000 in requested funds. The first partnered the City of Signal Hill, LACDPW and Long Beach (Prop 13 #388) on a project entitled, "Hamilton Bowl Trash Reduction Project." The total project budget was \$1,168,000 (\$783,000 in Prop 13 funds). This application was successful and the stakeholders, under the direction of the City of Signal Hill, will soon begin implementation. The second application (Prop 13 #490) partnered the City of Seal Beach, LACDPW and Long Beach on a project entitled, "San Gabriel River Trash Debris Boom." The total project budget was \$660,000 (\$360,000 in Prop 13 funds). This application was not successful, but the information gained is sure to lead to innovative measures at a later date. The third application was with 43 Los Angeles River Watershed Cities and the County (Prop 13 #574) in an effort to secure monies for the, "Los Angeles River Characterization Study – Phase II." The total project budget was \$1,500,000 (\$1,275,00 in Prop 13 funds). Though this application did not receive approval, it did prove that 43 cities and LACDPW, over several months, could work together, come up with 225,000 in matching funds, and more importantly, propose a regional solution.

Public Information and Education is discussed in detail in Section 7 of this report; however, it is important to point out that in this past year alone, 5 databases were created to track and monitor illicit connections and discharges, 570-DUMP responded to 46 calls, 3 hotlines and 7 websites provide 24/7 storm water and related information to the general public, City staff attended 90 outreach events and 2.9 million impressions were made on the general public, using very targeted materials and messages, about storm water quality via a wide variety of mass media.

It is also nice to be recognized for the commitment and dedication, and this year the City received several validations. In January 2002, Public Works Clean Water Division's website, <http://www.lbstormwater.org>, won the **International Golden Web Award 2000-2001** for design, creativity and content. In September, the City received



the **3CMA Award for Excellence – Best Video – “LA River Story.”** The video brings an awareness to people about the river and the trash that comes down it to the Long Beach shores. It also teaches the viewer how simple changes in behavior can lead to a reduction of trash. This was a collaborative effort between Public Works; Technology Services; Long Beach Energy and Parks, Recreation and Marine. Finally, the City’s 2002 James C. Howland Award (National League of Cities) submittal, “Adopt-A-Stormdrain” will be chaptered in a Municipal Reference Guide because of the program’s potential for enhancing the quality of life in Long Beach.

2.2 FY 02 CHALLENGES

The City of Long Beach and the State of California are in financial trouble. The City of Long Beach predicts an FY 03 revenue shortfall of ~\$37 million dollars followed by an FY 04 shortfall of up to ~\$80 million. As a result, a complete hiring freeze has been instituted and basically all new general fund purchases are being disallowed. This has a cascading effect, especially on project services and deliveries. In other words, we have or can get the money but don’t have the resources to design or construct the projects. Additionally, retirements are up meaning that seasoned professionals are leaving and a hiring freeze stops replacement and departments need to restructure to deliver their core services. In many cases staff members wear several hats. This shortage will definitely impact staff availability making it difficult to convene “as needed” focus groups.

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Part 3 (STORM WATER MANAGEMENT, MONITORING, AND REPORTING), III, 2,a of the permit requires that if permit deadlines are not met then an explanation of why the requirement was not met, how the requirement will be met in the future, including a projected implementation date, must be included in the annual update report. Listed below are three permit required items that are not fully implemented.

- **(Part 4.1.F.13) Parking Lot Washing Program – Uncovered parking lots with greater than 25 spaces, will be swept at least monthly. By October 1, 2000**



an uncovered parking lot washing program shall be developed and implemented.

The City has been struggling with this requirement since its inception. The monthly sweeping of 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. Equally incapacitating is cost of washing this massive inventory. Preliminary cost estimates indicate that it would cost the City as much as \$450,000 annually for this BMP alone. Finally, the City did conduct a study, "Characteristics of Parking Lot Runoff Produced by Simulated Rainfall" in 2001 and it was concluded that even though pressure washing "appeared" to be partially effective in reducing the accumulation of runoff constituents that parking lot maintenance did not affect the accumulation of runoff constituents. 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 (See Section 3 of this report) and will continue to enforce the SUSMP (controlling runoff and pollutant mitigation) requirements and municipal code (See Appendix G.) A Parking Lot Washing program status report will be submitted to the Executive Officer on or before June 30, 2003.

- **(Part 4.1.G.5) LBUSD – Educate 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; however, the goal still has not been reached. We have no jurisdiction (Findings, #14) over LBUSD, and therefore, are unable at this time to meet the permit requirements. We hope to develop stronger relationships with LBUSD via the Vice Mayor's office and plan on expanding the "Environmental Defenders" and introducing the "Tidepool Cruiser" in 2003. A follow-up report with our findings will be submitted to the Executive Officer on or before June 30, 2003.

- **(Part 4.1.I.1) Inlet/Catch Basin Stenciling – "no dumping" signage for channels.**

Inventory and jurisdictional discrepancies have impaired our ability to complete the signage. Recent surveys indicate 13 City-owned channels need signage. This signage of the City-owned channels will be completed by March 2003.



2.3 PROGRAM MANAGEMENT IN FY 03

There are only two minor enhancements planned at this time. The first is that beginning in 2003 a portion of the monthly NPDES Task Force meeting will be dedicated to training. "Train the Trainers" Training will be done using handouts, videos, guest speakers or by site tours.

Additionally, the Clean Water Division is beginning to build up a library of literature resources and plans to continue to add materials that can be checked out by employees. Our newest additions to the library include *The "Greenbook," Standard Specifications for Public Works Construction, 2003 Edition*, *Designing for Effective Sediment and Erosion Control on Construction Sites* and *Field Manual on Sediment and Erosion Control, Best Management Practices for Contractors and Inspectors*.



3.0 INTRODUCTION

The general objective of this program is to improve the quality of storm water runoff by reducing the amount of trash, greenwaste and other pollutants entering the City's receiving waters. To achieve this objective, the City has implemented procedures in the following areas:

- Trash collection along water bodies,
- Catch basin and open channel cleaning,
- Municipal street sweeping,
- Refuse/Recycling,
- Landscape and recreational facilities, and
- Training

3.1 TRASH COLLECTION ALONG WATER BODIES

Routine trash collection is conducted along, on and/or in water bodies. The Beach Maintenance and Queensway Bay Divisions service approximately 250 litter and trash receptacles on our beaches, marinas and the park areas of the Greater Queensway Bay. The beach receptacles (approx. 145) are emptied 4 times weekly during the summer and twice weekly in winter. Marina trash receptacles (approx. 75) are emptied 6 days per week. Queensway Bay litter receptacles (approx. 30) are emptied daily. Our ocean front beaches are raked 5-6 days per week depending on conditions. In FY 02, 1,864 tons of trash and debris were collected along the 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." Special events are provided with additional litter containers on an as-needed basis and are collected on the day of the event.

The Parks, Recreation, and Marine Department is responsible for the maintenance of recreation water bodies at Heartwell, Scherer, and El Dorado Parks, the Colorado 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. Table 3.1 shows trash collected from litter receptacles as reported by the Parks, Recreation, and Marine Department.



Table 3.1

TRASH COLLECTION ALONG WATER BODIES		
Land Use	# of Receptacles	Ft³ Collected
Parks	30	21,900
Beaches	145	45,240
Marinas	75	46,950
TOTAL	250	114,090

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

- 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. There are currently twenty-six Adopt-A-Beach groups, bringing more than 450 people to clean the beach four times per year.
- 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 as quarterly wetlands training attract increasing numbers of participants. These groups cleaned the Golden Shore Reserve eight times in FY 02.
- At the 18th Annual Coastal Cleanup in September, 1200 people picked up 3-4 tons of debris from beaches and the Colorado Lagoon. At the Earth Day Spring Beach Cleanup in April, 500 people bagged nearly two tons of debris.
- In the combination of two river events, fifty people collected about five hundred pounds of litter along the San Gabriel River.
- Special cleanups also took place at Marine Stadium, Seaside Way, Mother's Beach and Colorado Lagoon



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 picking up debris from the water such as wood piles, industrial debris, construction debris, plastics, etc.

Los Angeles County Department of Public Works has a boom, known as the “Nautilus Boom,” installed at the base of the Los Angeles River within Long Beach city limits. The most recent storm (Nov 8-9) brought about 150 tons of trash and debris, 90% of which is estimated to be greenwaste. This amount almost surpassed the total amount of trash collected from its inception (FY 01, 76.2 + FY 02, 84.8 = 161 tons).

3.2 CATCH BASIN, OPEN CHANNEL, AND PUMP STATION MAINTENANCE

The City has a total of 3,612 catch basins, which are cleaned and maintained by the Water Department. During FY 02, the total amount of trash and debris collected was 505.4 yd³. 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, and the most likely source of the greenwaste is individuals and landscapers sweeping, hosing, or blowing this material into the storm drain. In May 2002, the Water Department developed 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 database printout.)

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 02 was 198.2 yd³. 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. (See Appendix I for a sample of the database.)

There are 23 City-owned pump stations, all of which are cleaned annually. The trash and debris collected in FY 02 amounted to 120 yd³.

Table 3.2 shows the amount of trash and debris collected during the cleaning of catch basins, open channels, and pump stations.



Table 3.2

INLET MAINTENANCE		
Activity	# of	Yd³ Collected
Catch Basin Cleaning	3612	505
Pump Stations	23	120
Open-channel Systems	13	198
TOTAL		823

Areas of the MS4 have been designated as high priority based on the amount of trash and debris that is normally collected. The Rain / Emergency Checklist identifies catch 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. There is a separate list of areas to be checked while it is actually raining to ensure that no clogged systems contribute to flooding. (See Appendix J for samples of checklists.)

3.3 MUNICIPAL STREET SWEEPING

The City's weekly street sweeping service is the largest and most effective program supporting storm water 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. To increase the program's effectiveness, signs are posted and citations issued to encourage vehicle owners to leave certain streets vacant on specific days to maximize the effectiveness of the sweep. Long Beach Energy collected approximately 13,111 tons of debris while sweeping 189,672 street miles and 2,747 alley miles last year. All streets in the harbor district are swept daily. The Public Service Bureau of the Public Works Department also collected approximately 61 tons of trash and debris from alleys and sidewalks.

Along similar lines, the Neighborhood Services Bureau of the Community Development Department assisted neighborhood volunteers who conducted 152 clean-up events in FY 02, which resulted in 1,544 tons of waste being collected. The Bureau provides free trash dumpsters, trash bags, gloves, and can borrow tools for their events. Neighborhood groups are also given free use of community computers and



photocopiers to produce flyers for the event. In addition, the Bureau sponsored a “Broom Across Long Beach” cleanup on July 27, 2002 and created a partnership with 25 community organizations to host a daylong cleaning of the entire length of Anaheim Street.

3.4 REFUSE/RECYCLING

The City’s Refuse Collection and Recycling Divisions contribute to higher quality storm water through a variety of pollution prevention programs. Two of the well-publicized special item collection programs, the “Personal Clean Sweep” and “Dumped Item Pickup,” are designed to reduce bulky items and litter from alleys throughout the City. The City offers each household two opportunities per year to receive a free “Personal Clean Sweep,” which includes collection of bulky items. Additional collections may be requested starting at \$6 per visit. Table 3.3 shows the amounts collected from special item pickup requests.

Table 3.3

SPECIAL ITEM PICKUP REQUESTS		
Category	# of collection requests	Tons Collected
Furniture	8,966	1,429
Yard Waste/Tree Trimmings	1,672	677
Bins	684	127
Out Lates	3662	1,175
Other:	9,502	66
TOTAL	21,190	3,474

The Dumped Item program allows residents to report illegally dumped items for collection. The Environmental Services Bureau (ESB) works closely with the Police Department to help enforce laws against illegal dumping. In FY 02, Refuse staff collected 1,275 tons of illegally dumped items, and the Police Department issued 127 citations and made 17 arrests for littering and dumping related issues. (See Appendix K for database.)



PUBLIC AGENCY ACTIVITIES

SECTION 3

ESB continues to provide incentives to residents and businesses in an effort to curb litter and reduce storm water pollution. Incentives include continued enforcement of an ordinance (LBMC 8.60.270) requiring businesses to provide and maintain litter and cigarette receptacles for customers and employees. Also, all private waste haulers have contractual incentives requiring them 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 incentive programs have proven successful at trash reduction.

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. "Adopt-A-Street" 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 throughout the City. ESB also used DOC funds to continue a "No Litter" Zone campaign, which encourages businesses to adopt the sidewalk and gutter in front of their place of business, keeping the area litter free. Funds also support the "Long Beach Beautiful" program, a community-based effort that allows residents and other volunteers to develop a strategic approach to reducing litter in the City of Long Beach.

The City operates a curbside residential recycling program. Residents are provided with free 18-gallon bins for manual collection of recyclable materials. They are also provided with free used motor oil recycling containers at their request. Starting next year, residents will be provided with 96-gallon wheeled carts for automated collection of recyclables. The automated carts will increase recycling and reduce litter and debris not only because of their size but also because they have lids. Waste Management Incorporated (WMI) staff collects the containers and leaves empty replacement containers. Table 3.4 shows recyclables collected in FY 02 in addition to 35,000 gallons of used motor oil.



Table 3.4

CURBSIDE RECYCLING	
Item	Tons Collected
Newspaper	10,266
Corrugated	1,689
Commingled	3,740
Mixed Paper	369
Waste	2,012
TOTAL	18,076

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. Los Angeles County has recognized Long Beach as having one of the most successful HHW Roundup programs due to our extensive outreach efforts. Table 3.5 shows the amounts of hazardous waste collected at last year's event.

Table 3.5

Household Hazardous Waste Collection held at Veteran's Stadium (3/23/02)	
<i>Approximately 2,400 households were served by this collection event.</i>	
Item	Amount Collected
used motor oil	1,800 gallons
used paint	16,000 gallons
used car batteries	450
misc wastes (pesticides, pool chemicals, etc)	160 drums



3.5 LANDSCAPE AND RECREATIONAL FACILITIES

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.” 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 has employed 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 GPM's (gallons per minute) are flowing through the regulator and will automatically shut the system down.

Native Vegetation

Native plant materials are of particular concern in three 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



SECTION 3

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 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. It resulted in 1,200 native plants being placed in the community last year.

Greenwaste Disposal

Grass clippings are evenly distributed over the areas that are being mowed. 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 about 69,586 tons of grass from City grounds in FY 02. The Parks, Recreation, and Marine Department recycled about 240 yd³ of grass, and the Street Landscaping Division recycled about 5,437 tons of grass and tree limbs last year.



Municipal Swimming Pools

The City has 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 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 capacity issues do not allow for this now, however.

3.6 TRAINING

Employees whose jobs directly affect storm water quality and those who respond to questions from the public receive an annual refresher training regarding the requirements of the storm water management program, BMP implementation, and identifying and reporting illicit discharge. Requirements under the Development Planning and Construction section apply to public agency development and construction projects. (See Appendix L for sample training acknowledgement.)



4.0 INTRODUCTION

The general objective of this program is to have developers and owners consider storm water quality management during the project's planning phase and implement appropriate controls during construction. Applying this program to applicable development projects will effectively prohibit non-storm water discharges and reduce the discharge of pollutants into the storm drain system. This program applies equally to privately and publicly owned property. To achieve this objective, the City has implemented:

- California Environmental Quality Act (CEQA) guidelines,
- General Plan considerations for watershed and storm water management,
- Chapter 18.95 of the Long Beach Municipal Code, and
- Training.

4.1 CEQA

The City of Long Beach is required, under the CEQA Act of 1970, to consider the potential environmental impacts of proposed developments. This is handled by Gerry Felgemaker, Environmental Planning Officer, and Jerry Olivera, 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 are 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. Recently, a training session was conducted by the Environmental Planning Officer for Public Works explaining the requirements and internal process associated with the Environmental Planning program.

4.2 GENERAL PLAN

The Open Space and Recreation Element of the General Plan was recently rewritten and finalized on October 15, 2002. Watershed and storm water management



DEVELOPMENT PLANNING AND CONSTRUCTION

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considerations were included in the rewrite of this element. (See Appendix M, pages 6 and 16 – 19.) The Land Use Element is in the beginning stages of being rewritten and is scheduled for completion in 2004. The other elements (Air Quality, Housing, Transportation, Seismic Safety, Public Safety, Noise, Local Coastal Program, and Conservation) will be rewritten in the order of oldest and/or most important being done first.

4.3 CHAPTER 18.95 OF THE LONG BEACH MUNICIPAL CODE

The Long Beach Municipal Code includes a chapter specifically for NPDES / SUSMP requirements. (See Appendix N.) 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. However, database programming changes are being made to separate the two for future record keeping and reporting processes. This change will facilitate more accurate reporting of enforcement actions. Table 4.1 shows statistics for Development Planning and Construction.

Table 4.1

Development Planning and Construction Statistics	
Number of projects requiring SWPPPs in FY 02	129
Number of Inspections in FY 02	*+18,507
Number of development projects for which SUSMPs were completed in FY 02	10
Number of development projects for which SUSMPs were completed since the permit was adopted	13
Percentage of total development projects for which a SUSMP was completed in FY 02	.135%
Percentage of total development projects for which a SUSMP was completed since the permit was adopted	.108%

*This includes enforcement actions.

+One site may have several inspections done during one visit. Checking each BMP is considered a separate inspection. See Appendix O for subtotals per BMP (ex. the Water Conservation BMP, code 260, had 1,906 inspections).



DEVELOPMENT PLANNING AND CONSTRUCTION

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4.4 TRAINING

Employees engaged in development planning, construction, or inspection receive training on storm water management requirements and BMP implementation. (See Appendix P for training log.) No changes have been made in the last year to the developer information program.



5.0 INTRODUCTION

The general objective of this program is to improve the quality of storm water by effectively prohibiting illicit discharges and eliminating illicit connections, which allow for the release of illicit discharges. This will reduce the pollutants entering the storm drain system that negatively affect the receiving water quality. To achieve this objective, the City has implemented procedures in the following areas:

- Identifying and eliminating illicit connections,
- Detecting, removing, and preventing illicit discharges,
- Maintaining offshore oil properties, and
- AB411 water quality monitoring.

Many departments such as Fire, Harbor, Health and Human Services, Planning and Building, and Water play important roles in investigating possible illicit connections and discharges. They communicate their findings to the appropriate parties, oversee cleanups, and follow-up as needed. Reports of suspected illicit connections and discharges may come from the public via the Clean Water Division hotline (562-570-DUMP) and website (www.lbstormwater.org).

5.1 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 13 open channels and 3,612 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, 14 miles of the total 48 miles has been inspected. The remaining 34 miles will be inspected prior to June 2004.



ILLICIT CONNECTIONS and ILLICIT DISCHARGES

SECTION 5

A database has been created which includes the type of connection, location, evidence of illicit discharge, date of initial inspection, enforcement action taken, date of follow-up inspection, and date of removal. (See appendix Q.)

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 investigating, no illicit connections were found in FY 02. The Water Department spent \$20,775 to actively look for illicit connections.

5.2 ILLICIT DISCHARGES

Illicit discharges include all non-storm water discharges except discharges pursuant to an NPDES permit and discharges that are exempt or conditionally exempt. When the City is informed of a possible illicit discharge, the appropriate department investigates it and a cleanup is ordered if necessary. If the source of the discharge is known, the individual is usually educated, and enforcement action is taken when needed. These serve as preventive measures for future illicit discharges. In FY 02, the Police Department issued 127 citations and made 17 arrests for littering and dumping related issues. (See Appendix K.)

Last year the Water Department responded to 28 sewer overflows, and the Department of Health and Human Services responded to:

- 428 chemical release incidents
- 58 trauma scene incidents
- 102 non hazardous waste spills

The Clean Water Division hotline and website have proven very useful in the cleanups and elimination of illicit discharges. These calls and emails are routed to the appropriate department for investigation and subsequent cleanup or enforcement action. Several calls a month come in from the public that may have otherwise gone undiscovered. Most calls are resolved within one business day. (See Appendix R for hotline database and sample reporting email from website.)

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



5.3 OIL PROPERTIES

The Long Beach Unit of the Wilmington Oil Field is created by a combination of three adjoining mineral tracts mostly under Long Beach Harbor. Four islands were constructed years ago off shore in Long Beach Harbor for the purpose of accessing oil under the harbor. Current procedures are in place for preventing and dealing with oil spills. Being prepared is the key, and the Department of Oil Properties has a tailored action plan for dealing with spills. Rig maintenance is done in accordance with the recommended practices of the American Petroleum Institute and is enhanced by experienced staff providing onsite supervision. Certified inspectors verify ongoing maintenance procedures and periodic refurbishments. All major onshore pipelines are also subject to Federal Department of Transportation regulation. 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 storm water.

5.4 AB411 WATER QUALITY MONITORING

Recreational swimming areas that receive more than 50,000 people per year are subject to AB411 beach water quality monitoring and regulatory standards for Total and Fecal Coliform bacteria, and Enterococcus bacteria. The City of Long Beach Department of Health and Human Services, Environmental Health Bureau, monitors 23 locations weekly for these three bacteria. If the laboratory test results show the number of bacteria detected exceed State standards, then an advisory is issued to the Lifeguards, advisory signs are posted, and additional water samples are taken. If succeeding samples continue to exceed State standards, then the Health Officer can close the water body, and closed signs would be posted.

The Clean Water Division closely monitors the AB411 water quality monitoring results because we believe it serves as another indicator of illicit connections and illicit discharges even though it is specifically for bacteria. Sewage spills and similar occurrences cause exceedances in regulatory standards. In these instances, testing picks up the abnormality and the situation is investigated to determine the source and prevent future incidents. AB411 testing records indicate that there were zero closures and 107 advisory postings in FY 02. (See Appendix S for map of testing locations.)



SPECIAL PROJECTS AND STORM WATER MANAGEMENT PROGRAM BUDGET

SECTION 6

6.0 SPECIAL PROJECTS

The City constantly strives to find new and innovative ways to educate, motivate and empower members of our targeted audiences. The City also aggressively pursues grant funds for water quality improvement and pollutant removal projects that could not be funded by the cash-strapped general fund. Many are already detailed in other sections of this report; however, listed below are some examples of new and innovative projects that began in FY02.

- **LONG BEACH CHAMBER OF COMMERCE:** The Clean Water Division became an active member of the Long Beach Chamber of Commerce in May 2002. The Chamber is a platform for business to provide leadership, education and advocacy so that the Long Beach area thrives in the 21st Century. Since becoming a member this year, we have already participated in several trade shows, have distributed BMP educational materials targeted to the business community through the award winning Chamber Magazine (250 impressions), secured a summer intern to assist with access database creation, have a presence on the chamber website (<http://www.lbchamber.com>), have designed an advertisement with a message that targets tourists that will appear in the Carnival Cruise Line Stateroom books and terminals (500,000 annual impressions), secured inside cover advertising space in the Long Beach Chamber – 2003 Edition (18,000 impressions) and will be partnering with Adopt-A-Stormdrain to conduct a special training seminar to the chamber members in December 2002. (See Appendices T & U for advertising and educational material samples.) Membership cost: \$165.00.
- **“S.O.O.B.” Save Our Ocean Brothers:** Partnering with local artist, Rob Padilla, a targeted educational campaign geared towards middle and high school kids is in development. Three whimsical characters: Duke, a Pelican; Jaws, a shark; and Chuy, a dolphin, band together to educate and motivate. This advertising campaign is scheduled to kick-off at Earth Day 2003 events here in Long Beach at a cost of \$9,500.
- **Innovative Structural BMPs:** Mr. Luis Pinel, Latino Entrepreneur Association, a long time fisherman, has approached the City with an innovative way to capture and remove trash at the mouth of the Los Angeles River, in the Catalina landing area and adjacent to the Queen Mary and Rainbow Harbor using nets placed in stream. The Departments of Public Works and Parks, Recreation and Marine have been working with Mr. Pinel, LADPW, and other local regulatory agencies to determine feasibility, costs and applicability. It is hoped that this BMP may be copied in other areas of the City like the Los Cerritos Channel, which may lead to



SPECIAL PROJECTS AND STORM WATER MANAGEMENT PROGRAM BUDGET

SECTION 6

the protection of the Los Cerritos Wetlands. Demo project costs are estimated at \$10,000.

- **EAC – TMDL CONSULTANT COST-SHARING AND RETENTION AGREEMENT:** Partnership with Executive Advisory Committee cities to assist with TMDL development, implementation and compliance. Initial contribution ~\$7,500.
- **LOS CERRITOS WETLANDS:** Development of trash collection net/boom to protect Los Cerritos Wetlands (Project Proponent: Lenny Arkinstall). Demo project costs are estimated at \$12,500.
- **GRANT APPLICATIONS:** The City of Long Beach partnered this past year with 45 neighboring cities, the County of Los Angeles and several environmental groups in an effort to secure various grant funds. These partnerships have netted \$983,000 for projects located in the City of Long Beach. (See Section 2 for full details.)

6.1 STORMWATER PROGRAM EXPENDITURES

Table 6.1

EXPENDITURE COMPARISON (FY 01 / FY 02)			
PROGRAM TOTALS	FY01	FY02	INC/(DEC)
<i>Program Management</i>	\$281,853	\$346,213	19%
<i>Illicit Connections/Illicit Discharges</i>	\$992,840	\$1,503,455	34%
<i>Development Planning/Construction</i>	\$344,185	\$405,298	15%
<i>Construction Inspection Activities</i>	\$350,000	\$350,000	0%
<i>Public Agency Activities</i>			
<i>operations and maintenance</i>	\$7,096,815	\$7,996,818	11%
<i>municipal street sweeping</i>	\$5,900,000	\$4,654,135	-21%
<i>fleet and public agency facilities</i>	\$247,485	\$140,725	-44%
<i>landscape and recreational facilities</i>	\$2,398,329	\$2,525,197	5%
<i>Capital Costs</i>	\$0	\$60,000	
<i>Public Information and Participation</i>	\$1,334,541	\$665,636	-51%
<i>Monitoring Program</i>	\$657,500	\$525,216	-20%
<i>Other</i>	\$150,750	\$0	-100%
TOTAL EXPENDITURES-CITYWIDE	\$19,754,297	\$19,172,692	-3%



SPECIAL PROJECTS AND STORM WATER MANAGEMENT PROGRAM BUDGET

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6.2 FISCAL SUMMARY

The Fiscal Summary (FY 02) on resources dedicated to the storm water program is located in Appendix V.



7.0 INTRODUCTION

The goal of this element is to inform and involve; to inform about the impacts of storm water and urban runoff pollution and to involve the

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

in the implementation of solutions. To achieve this goal, the Clean Water Division takes the lead on this program element. Throughout the year City staff participate in numerous activities to deliver the storm water message and supply the tools and guidance on how to be the solution to pollution. The City 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 and 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. (See Appendix W for a list of outreach activities with populations reached and Appendices X, Y, Z, AA, BB, CC, DD, EE, FF for sample materials.)

In addition to the City's stand-alone efforts, the Clean Water Division participates in the Five Year Public Education Strategy implemented by the Los Angeles County Department of Public Works. The Clean Water Division represents the City of Long Beach in the County's Educational Sub-committee and is involved in the consultant selection process that the County is currently undergoing for its Education program.

7.1 GENERAL PUBLIC

The Clean Water Division of Public Works continues to be a principal player in educating the targeted groups listed above on ways to modify behavior that will lead to improved water quality. The information and reporting hotline, **562-570-DUMP**, and website, www.lbstormwater.org, are excellent educational tools and give the public a way to become active participants in the fight against pollution by being able to easily report illegal dumping telephonically and/or electronically. In response to receiving a number of calls reporting large dumped items, such as sofas and refrigerators, in alleys or vacant lots, the message on the hotline was updated to include a referral number for directly reporting this information and to learn more about refuse and recycling. The



PUBLIC INFORMATION AND EDUCATION

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storm water website is a very dynamic tool that is constantly being assessed and enhanced to mirror the development and implementation of the citywide storm water program. For example, the latest Water Quality Monitoring (2001-2002) report is available for viewing and/or downloading, and the "Latest News" scrolling marquee provides links to the new Adopt-A-Stormdrain[®] program and other current events and activities in and outside the City. It's encouraging to receive emails and telephone calls from areas outside of California, like Colorado and New Hampshire, with input that confirms that the materials on our website are being used to assist in the development of their storm water programs. In the case of the Adopt-A-Stormdrain[®] program, calls came in from Canada.

The Clean Water Division is always looking for new and innovative ways to deliver the message. During this reporting period, examples of new targeted outreach materials include, flyers, door hangers, keyboard calendars, and plastic bags. Each was created to address a specific target audience and pollutant. During special events, such as off-site City Council meetings, health and safety fairs, and cleanups, the Clean Water Division staff are present to listen to constituent concerns and answer storm water and related questions from the attendees. Informational literature, along with promotional items such as magnets, pencils, and rulers, is always made available.

Another outreach tool proven to be quite effect is the posting of storm water educational materials in the Civic Center Plaza kiosk 6-panel displays during the months of September and October of each year. During 2001-2002, approximately 155,419 people were exposed to these storm water pollution prevention panels aimed at educating and modifying personal behaviors.

The Clean Water Division reaches out to vast numbers of people through a variety of broadcast media. In FY 02, target audiences were reached via the "Earth Day" supplement of the *Press Telegram* and with the *School News* publication. *School News* is distributed to every teacher in the Long Beach Unified School District as well as a variety of local businesses and organizations. The 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. Table 7.1 illustrates these advertising efforts.



PUBLIC INFORMATION AND EDUCATION

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Table 7.1

FY '02 - TARGETED ADVERTISING		
Key: (A) general public (B) residents (C) commercial/ industrial establishments (D) school children (E) city employees		
Publication	Target Audience	Population
School News (LBUSD publication)	A, B, C, D	30,000
“Earth Day” supplement of the Press Telegram	A,B,C,D,E,	810,000
PR&M Quarterly Class Schedule	A, B, D, E	1,950,400
TOTAL		2,790,400

We will continue to target our advertising projects for FY 03 as exemplified by one aimed at tourists and the tourism industry. This campaign, “Protecting our ocean and beautiful beaches is easy!” consists of a beautifully-designed advertisement, strategically placed inside the Carnival Cruise Lines Commemorative book that targets the type of pollutants you find on the beach. The advertisement photo draws you in and the easy-to-read copy gives you the, “what, where, how and why.” This hardcover book will be used as an informative guide to the 500,000 cruise passengers that are expected to sail to and from 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.

The combined efforts of the Clean Water Division and other City departments, using mass media buys, handouts, direct mail methods, and websites as described earlier, account for 2.9 million impressions on the targeted audiences about storm water quality in FY 02. The following are descriptions of public information and participation activities performed by other departments.

The Environmental Services Bureau (ESB) staff of the Long Beach Energy Department participated in 65 events/meetings to promote refuse and recycling programs. Staff continues to distribute key handouts including the tri-lingual motor oil recycling brochure, which educates the public about proper disposal of used motor oil. The brochure is printed in English, Spanish, and Khmer, the three languages most commonly spoken in Long Beach. ESB 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



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message in the hotline voicemail box, which is then responded to during the next business day. The hotline processes approximately 67,000 calls a year regarding recycling, hazardous waste disposal, and many related issues.

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 NPDES. Following are brief descriptions of EDNC's educational outreach programs that address issues of non-point source pollution and storm water management and are geared towards school children and the general public.

Adopt-A-Beach is an innovative conservation program that encourages school clubs, businesses and community associations and other groups to get involved. A partnership is formed where the participants agree to clean up a quarter mile section of the Long Beach shoreline four times annually. By participating in this program, people of all ages and diverse backgrounds have become part of the solution to ocean pollution, increasing public awareness that what they pick-up on beach gets there via the storm drain system and because of human behavior.

Adopt a Wetland: EDNC sponsors several educational programs about wetlands in Long Beach, an issue of great concern and commitment for the Department of Parks, Recreation and Marine. These fragile areas are intensely impacted by upstream storm drain systems. The first heavy rain, also known as the "first flush," leaves the beachfront and wetlands (ie: Golden Shore & Los Cerritos) full of debris and trash. It is vital to educate citizens to be more personally responsible at home, at the office or at play. Numerous programs promulgate this information. On January 12th of this year "Water Birds of Winter" featured a morning exploration of Bolsa Chica Wetlands with a wildlife biologist. On February 20 and 24 the same biologist, Claudia Freitas along with EDNC Director, Mary Blackburn, taught and led a classroom/kayak exploration of the Los Cerritos Wetlands called "Wetland Wonders." On May 12, "Focus on Wetlands," offered people an opportunity to study the aquatic ecosystem at Golden Shore and then participate in a cleanup of the trash and debris. The Adopt-A-Wetland program trains volunteer groups to care for these fragile ecosystems. After training, groups contract to visit and clean the wetlands four times annually. During this fiscal year trainings took place on October 20, January 19, February 23, May 18, July 20 and August 17. Additionally, an exhibit at EDNC has been developed to help educate people about the irreplaceable value of our wetlands and about the effects of people's actions upstream on the health of these precious areas. The word is getting out and citizen involvement in this program has markedly increased.



Nature Center staff, in conjunction with consultants, developed an educational signage program 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.

Parades are another way to reach out to the community. The El Dorado Nature Center staff participated in the Daisy Lane Christmas Parade, the Belmont Shores Christmas Parade, and the 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.

Developer Information Program:: The Planning and Building Department continues to educate contractors, developers, and "do-it-yourselfers" through the use of its Developer Information Program and various brochures, pamphlets, and handouts. In addition, during normal business hours, every permit applicant has access to staff at the Development Services Center. Information about storm water management, applicable BMPs, and related permit requirements is made available on the 4th floor of City Hall.

Water Conservation: The Long Beach Board of Water Commissioners recognizes water conservation as a top priority in their water resource strategy. The Water Department's "Water Conservation Master Plan 2002" (See Appendix GG) is the implementation tool. Implementation of conservation BMPs and a variety of educational outreach programs are integral parts of the 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 Program" 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. Another innovation is the development of two educational brochures developed in a partnership with the Clean Water Division and Health and Human Services entitled: "Fats, Oils, and Grease" and "Sewage Spills." (See appendix HH.)



7.2 COMMERCIAL / INDUSTRIAL ESTABLISHMENTS

The main focus of the educational site visit program is 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. (See Appendix II & JJ.)

During the period of October 2001 through December 2001, DHHS staff conducted 38 educational site visits. On December 13, 2001, Order No 01-182, NPDES Permit No. CAS004001, was issued to the County of Los Angeles and 84 incorporated cities except the City of Long Beach. In the new permit, the Industrial/Commercial Educational Program has been replaced by the Industrial/Commercial Facilities Control Program. Subsequently, in January 2002, the Los Angeles County Department of Public Works notified and ceased reimbursement to the City of Long Beach's DHHS for educational site visits. As a result, a department reorganization was made necessary due to the loss of site visit revenue and a request from the Regional Board for reporting changes that required enhancements to the database. DHHS continued educational site visits at a slower rate until a reallocation of funds and the new program implementation staff could be thoroughly trained. In FY 02, the total number of educational site visits conducted was 42, and none of the businesses visited were identified as having failed to file a NOI or SWPPP. The program is now fully operational and in the past few weeks (October 1 – November 15), 158 educational site visits have been conducted. DHHS will submit the quarterly report requested by the Regional Board that identifies those Phase I industrial facilities that fail to produce proof of an NOI filed with the State and/or not having a SWPPP on site, beginning January 2003.

Businesses in general are being targeted through the use of focused outreach and new relationships formed by the Clean Water Division. In FY 02, the division joined the Long Beach Area Chamber of Commerce and has taken advantage of many opportunities to educate businesses about storm water pollution prevention and their legal obligations related to such issues. The division had an outreach flyer inserted into the *Long Beach Business* publication that the Chamber distributes to 2,400 members (See Appendix KK.) Other benefits associated with being a Chamber member are participating in the quarterly business expos and being listed in the Chamber website. In FY 03, the Chamber's Business Directory will feature an advertisement that targets the business community and introduces them to the Adopt-A-Stormdrain[®] program and encourages their participation. A spin-off advertisement was also created that will be printed and



handed out at outreach events.

On April 23, 2002, the City reached another milestone by becoming the first large City, population greater than 100,000, to contract with and implement the Adopt-A-Stormdrain[®] (AASD) program. AASD will provide the City with funding for storm water quality programs through corporate sponsorship signs that comply with the City's advertising and sponsorship policy. Signs will be posted on public property at up to 89 locations approved by the Department of Public Works at no cost to the City. Corporate sponsors will be acknowledged on the signs, which will also carry an environmental message. The City will receive 80% of the funds generated through corporate sponsorship. Participation in the program has the potential to generate up to \$100,000 in annual revenue and will assist the City in compliance with the requirements of its NPDES permit. The initial term of the agreement is two years, with a renewal option for two additional two-year periods. AASD raises money by recruiting businesses to help local governments pay for pollution prevention efforts that will improve water quality. The benefit to businesses that support the program is that they receive previously unavailable outdoor advertising in the form of a colorful sign posted in high-traffic areas (See Appendix LL for example.) The signs announce their participation in the program and prominently display their company logos along with a BMP. To date, the City, in partnership with AASD, has 5 executed Corporate Environmental Partners (CEPs), 18 installed signs, and \$48,000 in revenue (See Appendix MM for Revenue/Expense Summary matrix.) This money allows the City of Long Beach to fund storm water pollution prevention and educational activities that would have otherwise not been possible.

7.3 SCHOOL CHILDREN

Getting the storm water message and materials into the Long Beach Unified School District (LBUSD) has proven to be an extremely difficult undertaking. Nevertheless, several different programs are in place and/or being created to specifically target this 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 Clean Water Division staff goes out to schools to give presentations and answer questions about storm water 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.



PUBLIC INFORMATION AND EDUCATION

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In the works for next year is a Watershed Awareness and Cleanup project involving the Clean Water Division, student organizations at Wilson and Poly High Schools, Surfrider (local environmental group), and the office of Second District Councilmember Dan Baker. The venture is a series of activities that combines storm water education and watershed beautification. There are plans to develop and print a "How to Cleanup a Watershed" manual so that the program can be duplicated throughout the City and County. This project will be incorporated into the City's Earth Day 2003 events.

This past year we began negotiations with Mr. Gary Poe of "Window On Our Waters" 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 NN.) 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 of southern California.

TREC: ESB staff conducts extensive public outreach to LBUSD schools. The Traveling Recycling Education Center (TREC) is a mobile classroom used to educate students and Long Beach residents at public events about conservation and recycling. During FY 02, TREC visited 3 LBUSD schools, making 45-minute presentations to six 4th grade classes for a total of 210 students. TREC also participate in weekend events, spreading the recycling and anti-littering message to the Long Beach community.

ESB has also assisted 38 LBUSD schools establish recycling programs. A Recycling Specialist works with a LBUSD principal who is on special assignment to coordinate school recycling. Together they meet with principals, teachers, and maintenance staff members to educate them about the City's recycling program and to help them set up a recycling program in their schools.

Discover Long Beach Parks: a program conducted by the EDNC, works with third grade boys and girls, getting them actively involved in the care and maintenance of "adopted" parks and neighborhoods. The general lesson theme in the program is "park beautification," during which students act to improve their neighborhoods by picking up litter, learning about recycling, planting trees, painting over graffiti, and refurbishing park equipment. By gaining a sense of ownership for their parks and by taking pride in their neighborhoods, the students become more engaged stewards of aquatic and terrestrial environments. Among other lessons, this program addresses the problem of urban runoff and the resulting impact on ocean water quality in Southern California. 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 1,000 third graders in 50 classes on



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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 were awarded buttons and certificates.

Children ages five to nine years old were given the opportunity to discover what a wetland is and why wetlands are important at "**Waterworld**," a "Winter Break Workshop."

The Nature Center's Moveable Museum includes two presentations, "**Protect Our Watery World**" (**POWW**) and "**Paws and Jaws**." Trained volunteers visit area elementary schools to increase student awareness of water quality issues. POWW includes hands-on 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.

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. Moveable Museum, staffed by trained volunteers, visited 42 classrooms in Long Beach and adjoining communities. POWW training, for example, involves twenty-five hours, including 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.

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 implemented last year 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 run off, and the effects of pollution.

Environmental Defenders: The Environmental Defenders is a program of the Los Angeles County Department of Public Works. It is a free assembly geared for children



in K-6 grades. 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), storm water pollution, household hazardous waste, illegal dumping and water conservation. In FY 02, the Environmental Defenders program visited 19 LBUSD schools.

7.4 CITY EMPLOYEES

City employees are educated about storm water issues through trainings, flyers, displays, and other means. Annual training of City employees takes place at the department level and varies depending on the type of personnel. The Clean Water Division plans to enhance the training program during FY 03 to ensure thoroughness and consistency. 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 Clean Water Division has also utilized the City's payroll system to distribute information. The paycheck dated September 13, 2002, which went to every City employee (~5,800), had the following message printed on it:

"Be the Solution to Pollution! www.lbstormwater.org 570-DUMP"

(See Appendix OO.) Another useful tool is the City's telephone system. Callers on hold hear a series of messages including one that has the Clean Water Division's key educational points, hotline telephone number, and website address.

A flyer was inserted into the newsletter that is distributed to Engineering and Administration Bureau employees. The attractive and informative sheet is posted in prominent areas as a reminder of things they can do to improve water quality. One goal for FY 03 is to have an educational flyer inserted with every employee's paycheck.

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.

Table 7.2 is a compilation of resources available to all targeted audiences on a continuous basis.



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Table 7.2

Resource	Contact Information	Description	Website Hits (Monthly Avg)
Hotline Number	562-570-DUMP (3867)	Public Works/Clean Water Division Storm Water Pollution Prevention and Education	
Hotline Number	562-570-2876	Long Beach Energy/ Environmental Services Refuse/Recycling	
Hotline Number	562-570-4199	Health and Human Services Recreational Waters	
Website	http://www.lbstormwater.org/home.html	Public Works/Clean Water Division	539
Website	http://www.ci.long-beach.ca.us/irb/home/index.htm	LB Energy/ Environmental Services	53,831
Website	http://www.ci.long-beach.ca.us/health/enviro_health.html	Health Human Services	72,841
Website	http://www.ci.long-beach.ca.us/park/index.htm	Parks, Rec, and Marine	381,027
Website	http://www.ci.long-beach.ca.us/plan/index.htm	Planning and Building	71,980
Website	http://www.lbwater.org	Water Department	8,491
Website	http://www.ci.long-beach.ca.us/	City of Long Beach	2,305,646
LB Municipal Code	http://www.ci.long-beach.ca.us/cityclerk/lbmc/title-08/frame.htm	SOLID WASTE, RECYCLING AND LITTER PREVENTION (ESB)	
LB Municipal Code	http://www.ci.long-beach.ca.us/cityclerk/lbmc/title-18/frame.htm	NPDES & SUSMP REGULATIONS (Planning and Building)	
LB Municipal Code	http://www.ci.long-beach.ca.us/cityclerk/lbmc/table-of-contents.htm	City of Long Beach MUNICIPAL CODES	

Table 7.2



8.0 INTRODUCTION

The city submitted its "Stormwater Monitoring Report 2001-2002 on July 15, 2002. The report, in its entirety, can be found on the city's website located @ <http://www.lbstormwater.org>.

The City hosted its second annual stormwater monitoring report presentation on August 28 2002. City staff and representatives from Kinnetic Laboratories, Inc., and Southern California Coastal Water Research Project (SCCWRP) presented the report findings, responded to questions from Regional Board staff and discussed the monitoring goals and objectives for the balance of the current permit period.

8.1 CONCLUSIONS

Stormwater and dry weather monitoring has been carried out at four mass emission stations and one receiving water station. Twenty-one wet weather events have been monitored along with twenty dry weather inspections/monitoring efforts. The program involved a coordinated chemical analysis and toxicity testing (marine and freshwater) approach.

Exceedances of provisional benchmark values have been identified for some metals, primarily zinc and copper, and for diazinon and chlorpyrifos (organophosphate pesticides). Stormwater discharges have consistently shown measured toxicity to freshwater and marine test species, but the one receiving water site (lower Alamitos Bay) does not show measured toxicity, consistent with indicated dilution. Bacterial levels in the wet weather discharges are 2 to 3 orders of magnitude above receiving water criteria and dry weather discharges also exceed criteria. Data from the Alamitos Bay receiving waters and from the city's Health Dept (AB411) show that the Bay bacterial levels are elevated during rain events, but are at relatively low values during dry weather periods.

Toxicity Identification Evaluations (TIEs) implicate organophosphate pesticides (diazinon and chlorpyrifos) in causing toxicity to the freshwater water flea. In addition, dissolved metals, primarily zinc and perhaps copper, are implicated in the toxicity to the purple sea urchin (marine).



As a result of this year's findings, the proposed stormwater monitoring program refinements/recommendations were:

- The Dominguez Gap Pump Station discharges infrequently to the Los Angeles River, only during periods of large and intense rains (3 events captured to date). Dry weather flows at this station are non-existent. It is recommended that the monitoring efforts and resources be directed elsewhere in the program.
- Additional TIE work needs to be conducted to verify the preliminary results on the causes of toxicity in Long Beach stormwater and dry weather flows.
- Considerations should be given to further receiving water sampling to measure chemical and toxicity impacts in the receiving waters. Establishing two receiving water stations in upper Alamitos Bay may help to evaluate if receiving water quality criteria are being impacted by stormwater discharges. This may be achieved by relocating the current lower Alamitos Bay receiving water site and redirecting resources currently expended at the Dominguez Gap site to establishment of a second receiving water location in upper Alamitos Bay.

8.2 STORMWATER MONITORING PROGRAM ADJUSTMENTS

On November 13, 2002, the city received the following stormwater monitoring program adjustments made by Dennis Dickerson, Executive Officer of the Los Angeles Regional Water Quality Control Board:

- Continue monitoring at Dominguez Pump Station. Toxicity testing of stormwater discharges from this station are presently waived.
- Eliminate monitoring of semi-volatile organic compounds during the 2002-2003 season. Identify sampling /analytical options and strategies for measuring polynuclear aromatic hydrocarbons at lower detection limits than presently used. These limits must meet minimum California Toxics Rule (CTR) levels, and shall be used during the 2003/2004 monitoring season.
- Eliminate the Alamitos Bay Receiving Water Site. A pilot receiving water program as detailed in your September 2, 2002 letter (See Appendix PP) will more directly evaluate possible stormwater impacts on receiving waters in Alamitos Bay. The result from the pilot receiving water program will be submitted as a part of the 2002-2003 Storm Water Quality Monitoring Report.
- Conduct upstream investigations if extreme pH values are encountered in any Mass Emission Stations during subsequent Dry Weather monitoring.
- Participate in the development of particulate toxicity testing protocol through the Southern California Stormwater Monitoring Coalition (SMC).



- Participate in Southern California Coastal Waters Research Project's (SCCWRP) Bight 03.

The city has already begun implementing these changes.

8.3 Regional Participation - SCCWRP

The City is a member of the Stormwater Monitoring Coalition (SMC) and will participate in the Laboratory Intercalibration Study being conducted by SCCWRP. Unfortunately, recent unexpected reductions in the City's general fund are prohibiting the City from financially participating in the Microbial Source Tracking (MST) study.

Future regional projects include the development of particulate toxicity testing protocols (SMC) and BIGHT 03 (SCCWRP).



9.0 ASSESSMENT

The underlying question is, "Is it working?" Is the implementation of the Long Beach Stormwater Management (LBSWMP) program reducing storm water pollution? Are we changing behaviors? Unequivocally yes. This City has been very busy this year! This year departments began focusing in on the LBSWMP elements that lead to the significant accomplishments listed above and throughout this report. Citywide efforts and expenditures increased in Program Management (+19%), Illicit Connection and Illicit Discharge (+34%), Development Planning and Building (+15%) and in Public Agency's "Operations and Maintenance" (+11%). "570 Dump" calls are significantly up while response and resolution times have also been significantly reduced. Enforcement of municipal and criminal codes is up by Police, and outreach and targeted advertising programs continue to grow citywide. Finally, the positive feedback we've been receiving from our constituents, be it via 570 DUMP, the internet, newspaper editorials and or face to face encounters at council and outreach events, about the our message and mission is validation that our programs are working.

9.1 FUTURE GOALS & TIMELINES

Listed below are past goals of the City's Storm Water Management Program. Updates, in bold text, are provided:

(FY 00)

- Integration of the Long Beach Stormwater Management Program (LBSWMP) and National Pollutant Discharge Elimination System Permit (NPDES) into the City's "Strategic Plan"

Accomplished: (See Appendix QQ.) "A HEALTHY ENVIRONMENT – A SUSTAINABLE CITY."

- Identification of Chemical Constituent exceedances through Water Quality Monitoring

Accomplished: Please see WQM Report 2001-2002 @ <http://www/lbstormwater.org>

- Increase the number of Citywide Task Force members and create a Steering Committee of Core Members to enhance program effectiveness.



ASSESSMENT AND FUTURE GOALS

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Accomplished: Department participation on the Citywide NPDES Task Force has increased. Currently 11 out of 12 City Manager controlled departments participate and an additional 4 non City Manager controlled departments

actively participate adding up to a total of 15 of 20 total departments participating.

- Develop and implement an NPDES financial tracking method/code to be added to the City's Financial Accounting Management Information System (FAMIS) to better track NPDES costs

Our current Financial Management software will not allow for this due mainly to the fact that many departments have multi-year, multiple charge point activities that have significant expenditure restrictions. Charges that may appear on audit reports to certain federally funded programs may result in lost funding. There appears to be no alternative, except manual tracking, as is done today.

- Establish Public/Private Cooperatives for Grant Funding

Accomplished: Adopt-A-Stormdrain

- Continued cooperative effort on TMDL Development

Accomplished: The City of Long Beach diligently worked with LA River Watershed cities, LACDPW and the Regional Board on the LA River Trash TMDL. That level of commitment will continue on future TMDLs.

- Continued participation in Regional storm water studies

Accomplished: Storm Water Monitoring Coalition, BIGHT 03, Intercalibration Study.

- Development and implementation of a uniform Citywide NPDES DATA BASE and ELECTRONIC Reporting Format

Accomplished: Since filing the first Annual Report, electronic forms and reporting information is transmitted via the internet and disk backup copies (when necessary) are supplied to satellite offices not equipped for internet.



ASSESSMENT AND FUTURE GOALS

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(FY 02)

The City's Stormwater Management Program will never remain static. New construction, ever changing demographics, the introduction of TMDLs and the City's commitment to this program will move us forward with the intent of accomplishing the following, in addition to the Permit requirements, in Fiscal Year 2001-2002:

- Increased participation in Watershed and Regional storm water studies and committees

Accomplished: Storm Water Monitoring Coalition, BIGHT 03, Intercalibration Study.

- Development and implementation of an IC training, monitoring, and reporting program

Accomplished: Database created, mapping of IC inspections in process and annual reporting on schedule

- Expansion of the City's Website

Accomplished: WQM Report 2001-2002 online.

- Development and implementation of Assessment Surveys

Assessments are still in the "development stage." Working with the City Manager's Office and Adopt-A-Stormdrain to produce and distribute an effective tool.

- Development and implementation of Target Educational Campaigns (IE: Trash and Residential Pesticide Usage)

Accomplished: See Section 7 of this report for full details. Samples of materials will be found in appendices.

- Fully implementing the modifications to the Water Quality Monitoring Program, once finalized.

In process: The WQM Program adjustments were received on November 13, 2002 and are being incorporated as required.



ASSESSMENT AND FUTURE GOALS

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(FY 03) – NEW!

- **Increase Community's awareness of Information & Reporting Hotline: 570-DUMP**
 - Display on Cal Worthington Sign (Adjacent to 405 Freeway) – December 2002
 - "School News" – LBUUSD – Targeted advertisement in February 2003 edition.

- **Development of Employee Training Program**
 - Training at Monthly TASK FORCE MEETINGS – Beginning Feb 03
 - Topic/site specific (IE: P&B – Developer/BMP/Code enforcement 6/2003)
 - Topic/site specific (IE: Water– IC ID Investigations/Procedures 3/2003)
 - Include information with paychecks (flyers) (on or before July 2003)

- **Regional Efforts**
 - Actively participate in BIGHT03 (began Fall 2002-ongoing)
 - Financially participate in LADPW Countywide Education Program (Project Pollution Prevention) Beginning Spring 2003

- **Assessment of Public Education and Outreach Program**
 - Conduct two assessment surveys in FY03. The first in April 03 (prior to dry season) and the second in August (prior to we season).