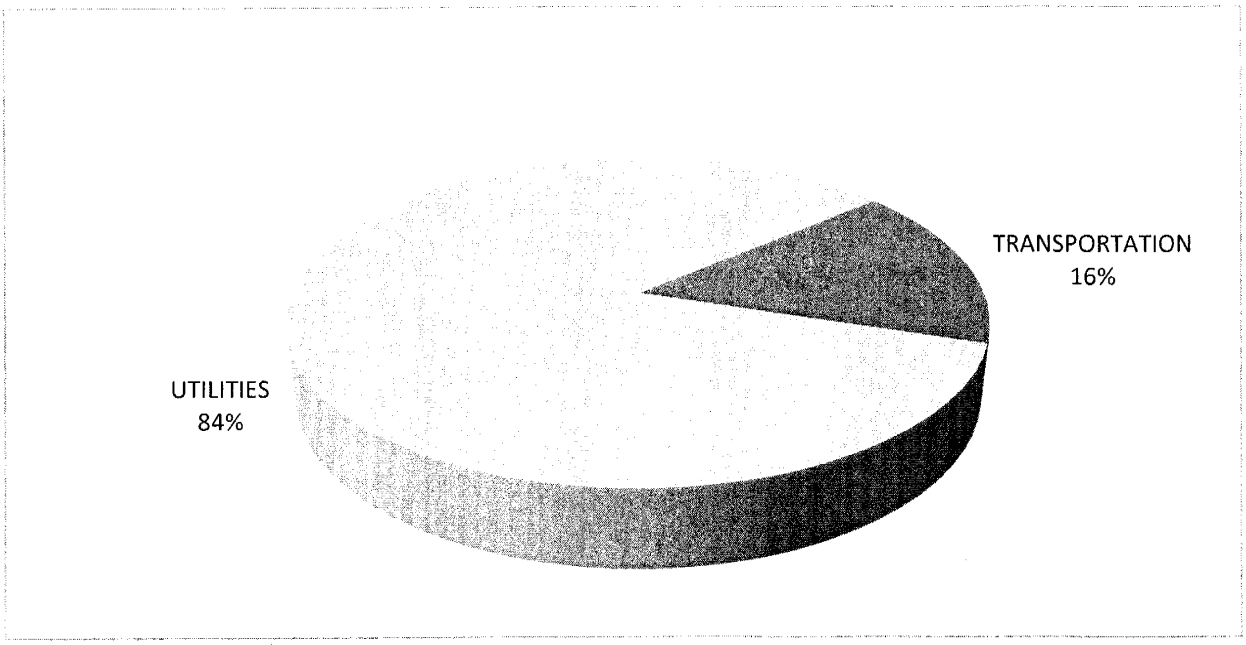
Public Works

Public Works

PROGRAM: PUBLIC WORKS
FUND: VARIOUS
PROGRAM GROUP: VARIOUS

SUMMARY

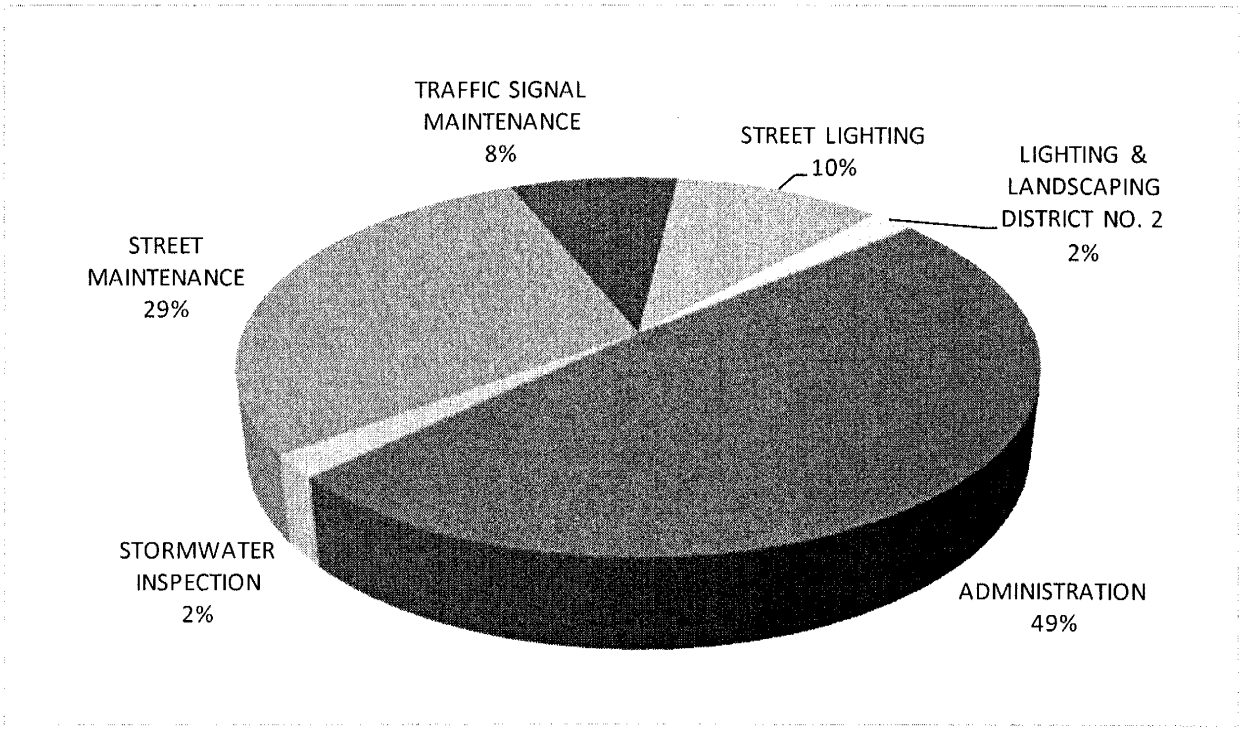
	2008-09 ACTUAL	2009-10 ACTUAL	2010-11 BUDGET	2011-12 BUDGET
PERSONNEL	$11,904,249	$12,027,292	$13,530,507	$13,246,125
MAINTENANCE & OPERATIONS	43,495,211	45,860,150	47,259,937	49,529,093
CAPITAL OUTLAY	763,931	346,416	12,237	11,710
GRAND TOTAL	$56,163,391	$58,233,858	$60,802,681	$62,786,928
FULL TIME POSITIONS	**133.95**	**134.30**	**127.95**	**122.95**
HOURLY/FTE POSITIONS	**2.20**	**2.20**	**1.70**	**2.00**



PROGRAM: TRANSPORTATION
FUND: VARIOUS
PROGRAM GROUP: TRANSPORTATION

SUMMARY

	2008-09 ACTUAL	2009-10 ACTUAL	2010-11 BUDGET	2011-12 BUDGET
PERSONNEL	$6,421,845	$6,461,130	$6,279,755	$6,024,526
MAINTENANCE & OPERATIONS	3,941,737	4,041,763	3,895,074	4,078,438
CAPITAL OUTLAY	246,077	22,745	0	0
GRAND TOTAL	$10,609,659	$10,525,638	$10,174,829	$10,102,964
FULL TIME POSITIONS	**63.20**	**62.35**	**58.40**	**54.40**
HOURLY/FTE POSITIONS	**2.00**	**2.00**	**1.00**	**1.00**



PROGRAM: ADMINISTRATION AND CONSTRUCTION MANAGEMENT & INSPECTION

FUND: GENERAL

PROGRAM GROUP: TRANSPORTATION

ACCT NO. 0018010/0018110

	2008-09 ACTUAL	2009-10 ACTUAL	2010-11 BUDGET	2011-12 BUDGET
PERSONNEL	$4,244,247	$4,292,565	$4,195,831	$3,890,526
MAINTENANCE & OPERATIONS	765,544	670,472	903,119	1,050,383
CAPITAL OUTLAY	83,077	17,295	0	0
GRAND TOTAL	$5,092,868	$4,980,332	$5,098,950	$4,940,909
FULL TIME POSITIONS	**37.65**	**36.50**	**32.90**	**30.90**
HOURLY/FTE POSITIONS	**1.00**	**1.00**	**1.00**	**1.00**

WORK PROGRAM:

The Transportation Department supports the City Council's goals by providing high-quality service in transportation engineering, general engineering municipal projects, project management, and construction inspection. The Transportation Department provides services to the public and other city departments through preparation and processing of planning, design, and construction of capital projects and performing traffic and transportation studies. The department is also responsible for ensuring that private development and public improvements are properly designed, constructed, and inspected while maintaining public safety and the well being of the community.

PROGRAM ACTIVITIES:

Transportation and Administration Services:
Coordinate with all divisions to ensure accomplishment of City Council Goals and Objectives, provide administrative and clerical support to all divisions, ensure that the management reporting system is accurately maintained and generates all reports on schedule, and provide accurate records filed in a standardized and efficient manner.

Asset Management and Programs
Coordinate the preparation of the annual update to the city's Capital Improvement Program, manage the ongoing implementation of the Finance Districts associated with the Calavera Hills, Robertson Ranch East, Bressi Ranch and La Costa Greens developments and assist developers with the formation of additional finance districts and reimbursement agreements. Update and maintain the city's inventory of the Water, Recycled Water, Sewer, Storm Drain and Transportation assets, prepare and deliver mapping products and complete analysis of asset inventory data for various customers. Coordinate the utilization of the asset inventory data with the city's maintenance management business systems and implement the development of an updated data base structure for the assets in conjunction with the Geographic Information System division. Update the city's American with Disabilities Act Transition Plan.

Engineering Design
Design citywide capital improvement projects including sidewalk and street improvements, pedestrian and bicycle facilities, prepare master plans, and conduct special studies and investigations. For each project a variety of services are provided including planning, preparation of final plans and specifications, investigations, technical engineering assistance, mapping, facility location and administration and project management.

Traffic Engineering and Traffic Signal Services
Review, investigate, analyze, and resolve a wide variety of traffic and transportation issues, concerns, complaints, and inquiries. Maintain records of collision reports, speed surveys, and traffic counts. Assist in maintaining optimum traffic signal operations and efficient traffic flow through traffic signal timing. Provide resource assistance to other city departments on a wide variety of traffic issues.

PROGRAM ACTIVITIES (continued):

Construction Management and Inspection and Stormwater Inspection
Perform construction management and inspection for capital improvement projects and private developments. Ensure construction of high-quality public improvements. Minimize inconvenience to the public while ensuring safe work sites.

KEY ACHIEVEMENTS FOR 2010-11:

Design Completed
- Pavement Management Program Update and citywide Street Assessment
- Calendar Year 2011 Slurry Seal Overlay and Pavement Overlay
- Calendar Year 2011 Concrete Replacement Project
- MUTCD Street Name Sign Replacement Project
- Valley Street Widening Between Magnolia and Chestnut
- Beach Access Stair Repairs at Carlsbad Village Drive

Construction Completed
- Stagecoach Park Restrooms Refurbishment
- Palomar Airport Road Right Turn Lane to Melrose Drive
- Pedestrian Ramps
- 2009 Thermoplastic Pavement Markings
- Maerkle Pump Station Upgrade
- Normandy Lane Sewer Replacement
- Carlsbad Boulevard Emergency Rip Rap Repairs
- Encinas Creek Bridge
- Marbella Wall Beautification Improvements
- Terramar Pressure Reducing Station
- Palomar Airport Road Widening at Paseo del Norte
- Pavement Markings
- Maerkle Reservoir Cover
- Maerkle Reservoir Gas Scrubber Replacement
- Tamarack Sewer Repair
- La Golondrina and El Fuerte Street HDD Sewer Extensions
- Kelly Channel Repair
- Recycled Water Pump Station Removal at El Camino Real and Cassia Road
- College Boulevard Overlay
- La Costa Avenue Subdrain
- Alga Norte Community Park Mass Grading
- Corrugated Metal Pipe Replacement Program (Alder Avenue and Marron Road Storm Drains)
- Industrial Park Recycled Water Service Lines
- Vista Carlsbad Interceptor Sewer Manhole Replacements
- North Batiquitos Interceptor Sewer Manhole Replacements
- Energy Efficient Inductive Streetlight Retrofits

Private Development Inspections and Projects Completed
- Bressi Ranch – Palomar Airport Road
- Carlsbad Ranch Resort
- Date Avenue
- Fox Miller/Ventana Real
- La Costa Greens Neighborhood 1.09
- La Costa Resort Villas
- Madison Square
- Ocean Mist Condos
- Opus Point
- Palomar Forum
- Rancho Carrillo Village

KEY ACHIEVEMENTS FOR 2010-11 (continued):

- Seashore on the Sand
- Bressi Ranch – El Camino Real
- Bressi Ranch – PA 15 Affordable Housing
- Carlsbad Paseo
- Fenton Carlsbad Research Center
- Carlsbad Paseo Traffic Signal
- Bressi Commercial, Major Building "B"
- Boys and Girls Club

Grading Projects Completed
- Bressi Commercial, Major Building "B"
- Boys and Girls Club
- La Costa Greens, Neighborhood 1.17
- Life Technologies
- Park Drive Kelly Residence
- Toyota Carlsbad
- Madison Square

Asset Management and Programs
- Facilitated the preparation of the annual update to the city's Capital Improvement Program.
- Completed four Assessment Apportionments.
- Completed the creation of the new database structure, loaded the existing data into the new database, and developed new data entry tools for use in conjunction with the new database structure.
- Produced a variety of atlas books and other mapping products for use by the Utilities, Transportation and Parks and Recreation Department design, maintenance and operations staff.

KEY GOALS FOR 2011-12:

Transportation/Circulation
- Continue work that supports the completion of College Boulevard Reach A, Poinsettia Lane Reach E, and spot widening of El Camino Real.
- Update Traffic Signal Coordination Timing on El Camino Real, Palomar Airport Road and Rancho Santa Fe Road, Cannon Road, and Carlsbad Village Drive west of Interstate Highway 5.
- Complete the Carlsbad ADA Transition Plan.
- Revise and approve the Carlsbad Residential Traffic Management Program to include features as residential stop signs and speed cushions.
- Implement pedestrian safety improvements on Carlsbad Boulevard between Tamarack Avenue and Pine Avenue.

Design
- Continue Work on the Carlsbad Boulevard Realignment Project.
- Complete Design of El Camino Real Widening Between Tamarack and Chestnut.
- Prepare Plans for 2012 Pavement Management Concrete, Slurry and Overlay Projects.
- Complete Design for Southbound Melrose to Westbound Palomar Airport Road right turn lane.
- Complete Design of Lincoln Street and Pine Avenue Sidewalk Improvements.
- Complete Design of Bridge Concrete Barrier Improvement on Carlsbad Boulevard.

Asset Management and Programs
- Facilitate the preparation of the annual update to the city's Capital Improvement Program.
- Update to the city's component of the Regional Transportation Improvement Program.
- Complete the update to the city's American with Disabilities Act Transition Plan.
- Initiate an update of the city's Traffic Impact Fee Program.

KEY GOALS FOR 2011-12 (continued):

- Continue updating and refining the inventory of the city's Water, Recycled Water, Sewer, Storm Drain and Transportation assets.
- Support the implementation of technology that will enable the use of mobile solutions in conjunction with the creation, refinement and use of the asset inventory data in the field.

Construction Management and Inspection

- Provide Construction Management and Inspection Services for Transportation, Utilities, Fire, Police Library and Park and Recreation Projects.

SIGNIFICANT CHANGES:

- Realigning the Transportation Department to create a traffic signal systems division without increasing budget or additional employees.
- A total of 1.0 full-time deputy city engineer position has been eliminated as a result of the city's reorganization efforts.
- A total of 1.0 full-time associate engineer position has been eliminated as a result of the city's reorganization efforts.

PROGRAM: **STORM WATER INSPECTION**
FUND: **GENERAL**
PROGRAM GROUP: **TRANSPORTATION** **ACCT NO. 0018120**

	2008-09 ACTUAL	2009-10 ACTUAL	2010-11 BUDGET	2011-12 BUDGET
PERSONNEL	$99,126	$114,212	$137,557	$136,458
MAINTENANCE & OPERATIONS	305,591	90,712	213,994	92,954
CAPITAL OUTLAY	0	0	0	0
GRAND TOTAL	$404,717	$204,924	$351,551	$229,412
FULL TIME POSITIONS	**1.00**	**1.00**	**1.00**	**1.00**
HOURLY/FTE POSITIONS	**0.00**	**0.00**	**0.00**	**0.00**

WORK PROGRAM:

The Storm Water Inspection Division ensures compliance with National Pollutant Discharge Elimination System Urban Storm Water Permit No. 2007-0001 National Pollutant Discharge Elimination System Permit, the new Construction General Permit; review and approve Storm Water Pollution Prevention Plans for construction projects and special events (Carlsbad Marathon, Jazz in the Parks, Spring/Fall Village Fairs, Carlsbad 5000, etc); inspect and enforce National Pollutant Discharge Elimination System Permit requirements for construction projects and special events; annually inspect and verify maintenance and effectiveness of all permanent private storm water pollution prevention facilities installed since 2001.

PROGRAM ACTIVITIES:

Construction Project Storm Water Compliance
Transportation Department staff review and approve Construction Storm Water Pollution Prevention Plans for all private construction projects (building, grading and improvement projects) to ensure the provision of effective storm water pollution control measures. Transportation Department staff also inspects and enforces storm water pollution prevention compliance during construction activities.

Special Event Storm Water Compliance
This program activity is required by the 2007 update to the National Pollutant Discharge Elimination System Permit and additional requirements for special events were added to the Municipal Code in 2007. Promoters of special events in the city are required to prepare and submit for city approval special event Storm Water Pollution Prevention Plans describing measures to identify and prevent pollutants from entering the city's environmentally sensitive areas. Transportation Department staff review and approve the special event Storm Water Pollution Prevention Plans prior to each special event and ensure compliance during the special events. Post event inspection of the venue also takes place by Transportation Department staff.

Annual Storm Water Facility Inspection Program
This program activity is required by the 2007 update to the National Pollutant Discharge Elimination System Permit. Transportation Department staff is required to annually inspect all permanent private storm water pollution control facilities installed since 2001. Additionally, Transportation Department staff are required to administer a program requiring the owners of all private storm water pollution control facilities to verify the maintenance and effectiveness of each facility located on their property.

Annual City Storm Water Reporting
Transportation Department staff is required to prepare reports describing city compliance with the Transportation Department Storm Water Program activities for inclusion in the annual Jurisdictional Urban Runoff Management Program ("JURMP") Report to be submitted to the Sand Diego Regional Water Quality Control Board pursuant to National Pollutant Discharge Elimination System Permit requirements.

KEY ACHIEVEMENTS FOR 2010-11:

- Conducted on-site inspections of all private development and construction sites to ensure Storm Water Program compliance.
- Transitioned responsibility for all National Pollutant Discharge Elimination System inspections related to building permits to Community Development. This transfer of responsibility also resulted in a net savings of over $100,000 because of the elimination of the contractor services.
- Improvements in inventory management for Treatment Control Best Management Practices and active grading sites.

KEY GOALS FOR 2011-12:

- Key staff to complete at least one Storm Water Certification Program.
- Continue process improvements for permanent private pollution control facility inspections, verifications and tracking.
- Develop assessment tools for National Pollutant Discharge Elimination System activities.
- Continue to improve the permanent private pollution control facilities database.

SIGNIFICANT CHANGES:

- The Municipal Permit will expire in January 2012. Significant changes in the new Municipal Permit may require Transportation Department staff to update procedures and take on new work tasks.

PROGRAM: STREET MAINTENANCE
FUND: GENERAL
PROGRAM GROUP: TRANSPORTATION

ACCT NO. 0018210

	2008-09 ACTUAL	2009-10 ACTUAL	2010-11 BUDGET	2011-12 BUDGET
PERSONNEL	$1,853,638	$1,815,366	$1,709,045	$1,756,118
MAINTENANCE & OPERATIONS	1,268,062	1,287,191	1,151,464	1,155,752
CAPITAL OUTLAY	15,008	0	0	0
GRAND TOTAL	$3,136,708	$3,102,557	$2,860,509	$2,911,870
FULL TIME POSITIONS	**22.05**	**22.35**	**22.00**	**20.00**
HOURLY/FTE POSITIONS	**1.00**	**1.00**	**0.00**	**0.00**

WORK PROGRAM:

The Street Maintenance Division performs street and roadside maintenance to maximize the safety and circulation efficiency of the roadway system for vehicles and pedestrians.

PROGRAM ACTIVITIES:

Contract Management
Contract Management provides for contract design, inspection and support.

Roadside Maintenance
Roadside maintenance activities include weed abatement, debris hauling, cement repair, sidewalk, handrail and guardrail maintenance.

Drainage System Maintenance
Drainage system maintenance provides for the cleaning of public surface drainage improvements including brow ditches, catch basins, drainage ways and gutters.

City Sign Maintenance
City sign maintenance activities include for the fabrication, installation, and maintenance of all traffic, street name and special signs throughout the city.

Asphalt Maintenance
Asphalt maintenance includes crack sealing, surface patching, trench repair, base replacement and pothole patching.

Paint Maintenance
Pavement markings include line striping, crosswalks and stop bars, pavement messages, and curb painting. Also included are painting retaining walls, handrails, guardrails and graffiti removal.

KEY ACHIEVEMENTS FOR 2010-11:

- Initiated replacement of street name signs to conform to new Federal and State retro-reflectivity standards.
- Continued repair and replacement of concrete and tile in the Redevelopment Area.
- Developed a Program to address Federal and State mandated retro-reflectivity requirements for city signs.
- Implementation of traffic calming pilot projects on Donna Drive and Sierra Morena Avenue.

KEY GOALS FOR 2011-12:

- Continue replacement of street name signs to conform to new retro-reflectivity standards.
- Begin replacement of regulatory, warning, and guide signs to conform to new retro-reflectivity standards.
- Continue repair and replacement of concrete and tile in Redevelopment Area.
- Outsourcing of graffiti removal services.

SIGNIFICANT CHANGES:

- A total of 2.0 full-time maintenance aide positions have been eliminated as a result of the city's reorganization efforts.
- A total of two 0.50 part-time positions have been added as a result of the maintenance aide position eliminations.

PROGRAM: TRAFFIC SIGNAL MAINTENANCE
FUND: GENERAL
PROGRAM GROUP: TRANSPORTATION

ACCT NO. 0018220

	2008-09 ACTUAL	2009-10 ACTUAL	2010-11 BUDGET	2011-12 BUDGET
PERSONNEL	$89,882	$87,955	$91,293	$92,800
MAINTENANCE & OPERATIONS	543,134	642,657	714,125	708,361
CAPITAL OUTLAY	147,992	5,450	0	0
GRAND TOTAL	$781,008	$736,062	$805,418	$801,161
FULL TIME POSITIONS	**0.95**	**0.95**	**0.95**	**0.95**
HOURLY/FTE POSITIONS	**0.00**	**0.00**	**0.00**	**0.00**

WORK PROGRAM:

The Traffic Signal Maintenance Division is responsible for maintenance of the city's traffic signal system to maximize the safety and efficiency of the roadway system for vehicles and pedestrians.

PROGRAM ACTIVITIES:

Signal maintenance activities include the department's timely response to traffic signal repair requests, marking of underground utilities in coordination of the Dig Alert System, coordination and inspection related to the installation and modification of traffic signals and administration of the city's Traffic Signal Maintenance Agreement.

KEY ACHIEVEMENTS FOR 2010-11:

- Installed software and initiated Traffic Management Center.
- Completed Traffic Management Center Pilot Project on schedule and under budget.
- Completed Phase I of the Traffic Management Center Project Plan for linking all traffic signals to the Traffic Management Center.
- Conversion of deteriorated illuminated street name signs to retro-reflective, non-illuminated street name signs.
- Secured regional funding for installation of audible pedestrian and countdown signal equipment at twenty-one (21) intersections.
- Replaced UPS Batteries at sixty (60) intersections.
- Relocated video detection cameras to mast arms to improve detection and minimize delays.
- Replaced deteriorated signal heads and framework with poly carbonate along Carlsbad Village Drive.

KEY GOALS FOR 2011-12:

- Install wireless links from the Traffic Management Center to signal equipment on El Camino Real and Palomar Airport Road.
- Upgrade video detection equipment on El Camino Real and Palomar Airport Road.
- Upgrade emergency pre-emption equipment on El Camino Real and Palomar Airport Road.
- Continue to replace deteriorating signal heads and framework with polycarbonate along Carlsbad Village Drive.
- Replace deteriorated Type III Electric Service Pedestals.
- Continue conversion of deteriorated illuminated street name signs to retro-reflective street name signs.
- Replace green LED's installed prior to 2006.
- Installed audible pedestrian push buttons at several locations to aid visually impaired pedestrians for safe crossing o busy roadways.
- Adopted new city standard for countdown style pedestrian crossings.
- Began updating traffic-controllers.

SIGNIFICANT CHANGES:

- Implementing traffic control center, interconnecting signals, and creating improved signal timing plans.

PROGRAM: STREET LIGHTING
FUND: MAINTENANCE ASSESSMENT
PROGRAM GROUP: TRANSPORTATION

ACCT NO. 1626357

	2008-09 ACTUAL	2009-10 ACTUAL	2010-11 BUDGET	2011-12 BUDGET
PERSONNEL	$134,952	$151,032	$146,029	$148,624
MAINTENANCE & OPERATIONS	872,409	1,136,253	715,219	854,141
CAPITAL OUTLAY	0	0	0	0
GRAND TOTAL	$1,007,361	$1,287,285	$861,248	$1,002,765
FULL TIME POSITIONS	**1.55**	**1.55**	**1.55**	**1.55**
HOURLY/FTE POSITIONS	**0.00**	**0.00**	**0.00**	**0.00**

WORK PROGRAM:

Maintain the city's street lighting system to maximize the safety and circulation efficiency of the roadway system.

PROGRAM ACTIVITIES:

Street light maintenance activities include the department's timely response to street light repair requests, troubleshooting and/or repair of underground circuits and associated equipment, marking of underground utilities in coordination with the Dig Alert System, conducting night surveillance to identify and schedule needed repairs and the installation of technological advances.

KEY ACHIEVEMENTS FOR 2010-11:

- Completed the Inductive Light Retrofit Program for all city street lights.

KEY GOALS FOR 2011-12

- Complete billing adjustments to reflect energy savings.

SIGNIFICANT CHANGES:

- Completed the Street Light Retrofit Program whereby city-owned streetlights were converted to induction lighting resulting in significant reductions in energy and maintenance costs.
- The first loan payment on the 1% low interest loan will be Fiscal Year 2011-12 and is reflected in the amounts budgeted.

PROGRAM: LIGHTING & LANDSCAPING DISTRICT NO. 2
FUND: MAINTENANCE ASSESSMENT
PROGRAM GROUP: TRANSPORTATION

ACCT NO. 164XXXX

	2008-09 ACTUAL	2009-10 ACTUAL	2010-11 BUDGET	2011-12 BUDGET
PERSONNEL	$0	$0	$0	$0
MAINTENANCE & OPERATIONS	186,997	214,478	197,153	216,847
CAPITAL OUTLAY	0	0	0	0
GRAND TOTAL	$186,997	$214,478	$197,153	$216,847
FULL TIME POSITIONS	**0.00**	**0.00**	**0.00**	**0.00**
HOURLY/FTE POSITIONS	**0.00**	**0.00**	**0.00**	**0.00**

WORK PROGRAM:

Lighting & Landscaping District No. 2 is for new developments in the city. It is to pay for the costs of streetlights, street trees and medians within those areas.

PROGRAM ACTIVITIES:

Each development within District No. 2 will be considered a separate zone, with their own assessment based on the costs for that particular area of the city. The 11 zones in District No. 2 are Calavera Hills II, Kelly Ranch, the Oaks South, Thompson/Tabata, the Palomar Forum/Raceway, Bressi Ranch, the Greens, the Ridge, the Oaks North Industrial, Robertson Ranch (East Village), and the Oaks North Residential developments.

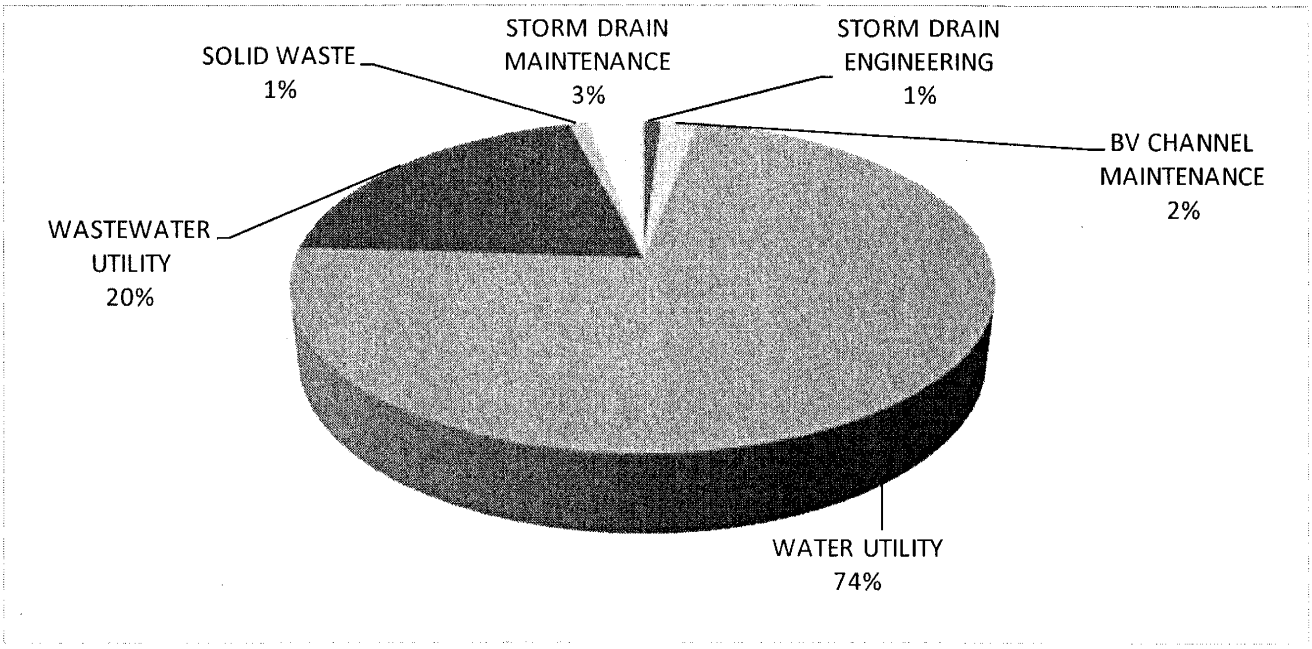
SIGNIFICANT CHANGES:

- None

PROGRAM: UTILITIES
FUND: VARIOUS
PROGRAM GROUP: UTILITIES

SUMMARY

	2008-09 ACTUAL	2009-10 ACTUAL	2010-11 BUDGET	2011-12 BUDGET
PERSONNEL	$5,482,404	$5,566,162	$7,250,752	$7,221,599
MAINTENANCE & OPERATIONS	39,553,474	41,818,387	43,364,863	45,450,655
CAPITAL OUTLAY	517,854	323,671	12,237	11,710
GRAND TOTAL	$45,553,732	$47,708,220	$50,627,852	$52,683,964
FULL TIME POSITIONS	**70.75**	**71.95**	**69.55**	**68.55**
HOURLY/FTE POSITIONS	**0.20**	**0.20**	**0.70**	**1.00**



PROGRAM: STORM DRAIN ENGINEERING
FUND: GENERAL FUND
PROGRAM GROUP: UTILITIES

ACCT NO. 0016310

	2008-09 ACTUAL	2009-10 ACTUAL	2010-11 BUDGET	2011-12 BUDGET
PERSONNEL	$219,553	$225,261	$248,938	$256,081
MAINTENANCE & OPERATIONS	64,152	54,331	13,170	25,236
CAPITAL OUTLAY	0	0	0	0
GRAND TOTAL	$283,705	$279,592	$262,108	$281,317
FULL TIME POSITIONS	**0.75**	**1.85**	**1.90**	**1.90**
HOURLY/FTE POSITIONS	**0.00**	**0.00**	**0.00**	**0.00**

WORK PROGRAM:

Storm Drain Engineering develops and updates the city's drainage master plan, evaluates the condition of existing storm drain channels, pipelines, and structures, prepares background information for all storm drain projects placed in the city's capital improvement program, designs, prepares plans and specifications, and monitors and reviews construction of storm drain improvement projects, maintains Engineering Standard Specifications and Drawings used for land development and city storm drain projects, works collaboratively with operation and maintenance staff in evaluating deficiencies in the city's storm drain system (capacity and condition), and coordinates concurrent activities with various city departments for construction and repair of storm drains and water quality improvements including implementation of treatment technologies and facilities.

PROGRAM ACTIVITIES:

- Evaluate severely deteriorated pipelines and prepare plans and specifications for their replacement on an annual basis as part of the Northwest Quadrant Storm Drain Replacement Program.
- Prepare and monitor annual maintenance contracts for Buena Vista Channel west of El Camino Real.
- Prepare and monitor the Corrugated Metal Pipe replacement program.
- Replace deteriorated storm drains identified at various locations throughout the city.
- Coordinate the maintenance of detention and desiltation basins (public and private).
- Monitor, repair, and/or replace lined and unlined storm water channels.

KEY ACHIEVEMENTS FOR FY 2010-11

- Repaired/replaced numerous storm drains throughout city to prevent flooding.
- Identified mitigation site for Agua Hedionda Channel improvements.

KEY GOALS FOR 2011-2012:

- Develop project alternatives and funding for Kelly Drive Channel Replacement.
- Initiate studies for the Regional General Maintenance Permit.
- Secure all Resource Agency permits for Agua Hedionda Channel and initiate improvements.
- Continue Northwest Quadrant Storm Drain Replacement Program.
- Continue Corrugated Metal Pipe Replacement Program.

PROGRAM: BUENA VISTA CHANNEL MAINTENANCE
FUND: MAINTENANCE ASSESSMENT
PROGRAM GROUP: UTILITIES

ACCT NO. 1636312

	2008-09 ACTUAL	2009-10 ACTUAL	2010-11 BUDGET	2011-12 BUDGET
PERSONNEL	$3,444	$1,794	$7,500	$6,350
MAINTENANCE & OPERATIONS	35,860	79,419	96,040	287,161
CAPITAL OUTLAY	0	0	0	0
GRAND TOTAL	$39,304	$81,213	$103,540	$293,511
FULL TIME POSITIONS	**0.00**	**0.00**	**0.00**	**0.00**
HOURLY/FTE POSITIONS	**0.00**	**0.00**	**0.00**	**0.00**

WORK PROGRAM:

The Buena Vista Channel Maintenance Assessment District was created to ensure that adequate monies would be collected to administer and maintain the Buena Vista Creek from Jefferson to Haymar Bridge. Property owners are assessed annually and the revenues are placed in a fund to cover annual maintenance and the costs of major dredging of the creek.

PROGRAM ACTIVITIES:

- Administration of the Buena Vista Channel Maintenance District, monitoring revenues and calculating fees.
- Monitoring and periodic clearing of the overgrowth and silt within the channel, maintaining a healthy channel.
- Remove exotic growth and replant native vegetation as necessary.
- Clear one-fifth of the north side of the channel every year.

KEY ACHIEVEMENTS FOR 2010-11:

- Fiscal Year 2010-2011 was the second year of the second five-year maintenance cycle associated with the Buena Vista Channel Clean-up and Dredging Project. Per the renegotiated Streambed Alteration Agreement, one-fifth of the channel length outside the coastal zone was cleared and exotic vegetation was removed from the entire channel.

KEY GOALS FOR 2011-12:

- Clear one-fifth of the channel length outside the coastal zone under the renegotiated Streambed Alteration Agreement.

SIGNIFICANT CHANGES:

- During Fiscal Year 2011-12 the permit associated with the Buena Vista Channel Clean-up and Dredging Project will need to be renewed. Due to the addition of several new rare bird species, the permit requirements and related costs are expected to increase.

PROGRAM: WATER OPERATIONS
FUND: WATER ENTERPRISE
PROGRAM GROUP: UTILITIES

ACCT NO. 5016310/5026310

	2008-09 ACTUAL	2009-10 ACTUAL	2010-11 BUDGET	2011-12 BUDGET
PERSONNEL	$3,267,294	$3,226,707	$4,218,959	$4,217,834
MAINTENANCE & OPERATIONS	28,954,069	32,293,137	33,603,882	34,729,102
CAPITAL OUTLAY	25,659	230,733	12,237	11,710
GRAND TOTAL	$32,247,022	$35,750,577	$37,835,078	$38,958,646
FULL TIME POSITIONS	**39.90**	**39.90**	**39.60**	**40.10**
HOURLY/FTE POSITIONS	**0.00**	**0.00**	**0.50**	**0.00**

PROGRAM GROUP DESCRIPTION:

The Carlsbad Municipal Water District, a subsidiary district of the City of Carlsbad, provides potable water service to approximately 85% of the city (84,838 customers). The District purchases 100% of its potable water as treated water from the San Diego County Water Authority. The District also supplies customers with recycled water from the District's Phase II Recycled Water Plant, and from recycled water purchased from the Leucadia Wastewater District and Vallecitos Water District.

PROGRAM ACTIVITIES:

Water Operations

- Provide operation and maintenance of the potable and recycled water reservoirs, pumping, regulating, and disinfection activities; collect water quality samples to ensure compliance with state and federal regulations.

Water Construction/Maintenance

- Schedule and perform water system maintenance to ensure a safe and efficient water distribution system.

Meter Services

- Collect water customer usage data for utility billing to ensure financial viability of the District through timely and accurate revenue collections; provide customer service for water utility customers; and install, replace and maintain water meters.

Cross-Connection Control

- Implement and enforce cross-connection control of potable and recycled water systems to ensure a safe supply of potable water and compliance with state and federal regulations.

PERFORMANCE/WORKLOAD MEASURES:

Water Cost

- Annual water loss not to exceed 6% as set by the California Department of Water Resources. Distribution system losses commonly range between 6% and 15%. The American Water Works Association recommends that the loss after treatment be maintained at 10% or less.

Fiscal Year	Water Loss	Cost per Acre-Foot
2004-05	5%	$828
2005-06	6%	$901
2006-07	3%	$972
2007-08	5%	$1,047
2008-09	6%	$1,139
2009-10	6%	$1,470

PERFORMANCE/WORKLOAD MEASURES (continued)

Potable Water Quality

- Benchmark: Ninety-eight percent (98%) of bacteria samples free of coliform bacteria as adopted by the city's Performance Measurement Team. The state requirement is that less than 5% of all samples collected during any month are total coliform-positive.

Fiscal Year	No. Samples Collected	Percent Bacteria-Free
2003-04	1,752	99.9%
2004-05	1,724	99.8%
2005-06	1,719	99.9%
2006-07	1,716	100.0%
2007-08	1,601	99.8%
2008-09	1,590	100.0%
2009-10	1,560	100.0%

Water Service Delivery

- The ratio of total leaks and breaks compared to the total water pipe in the system. This measure is calculated by dividing the total number of leaks and breaks during the reporting period by the total miles of pipe in the water distribution system and multiplying the result by 100. The benchmark is to not exceed the national average rate of 32.7 as reported by the American Water Works Association.

FY 2009-10	Leaks	Breaks	Miles of Distribution Pipe	System Integrity Rate per 100 miles
Potable Water	88	40	450	28.4
Recycled Water	1	0	77	1.3

KEY ACHIEVEMENTS FOR FY 2010-11:

- Replaced 2,321 water meters with remote reading and leak detection capabilities and completed over 340,000 water meter reads.
- Replace an additional 2,431 water meters with remote reading and leak detection capabilities.
- Managed through water supply cutbacks by conducting outreach focused on conservation efforts. Consumer response exceeded required cutback targets.
- Participated in the planning of the desalination delivery regime
- Participated in the community events such as the Agua Hedionda World Water Day, and the Citizen's Academy.
- Obtained 2 grants from the San Diego County Water Authority to produce water conservation related Public Service Announcement videos.
- Implemented technology which reduced the workload associated with manually placed door hangers. Resources were redeployed to customer service backlogs.
- Initiated a regional North County recycled water delivery plan in conjunction with 10 other water agencies.
- Performed 322 residential water conservation audits.
- Converted an additional 14 customer sites, totaling 20 meters from potable water to recycled water.

KEY GOALS FOR FY 2011-12:

- Implement next phases of Automated Meter Reading Program.
- Update the Urban Water Management Plan.
- Completion of the Water and Recycled Water Master Plans.
- Identify customer base for expansion of recycled water system.
- Continue to partner with the Water Authority and surrounding agencies on a regional recycled water plan.
- Continue progress on Maerkle hydroelectric power generation facility.
- Renegotiate recycled water purchase agreement.
- Review rate structure to fund operations and infrastructure replacement as well as re-establish reserve levels in accordance with Board policies.

SIGNIFICANT CHANGES:

- 11.5 miles of water mains were added to the system.
- 464 water valves were added to the system.
- 129 fire hydrants were added to the system.
- 218 meters and water services were added to the system.
- Transferred 0.50 part-time positions to Wastewater Operations.
- Transferred 0.15 FTE Engineering Technician II and 0.35 Scada Technician FTE from Wastewater Operations to better meet workload needs.

PROGRAM: WASTEWATER OPERATIONS
FUND: WASTEWATER ENTERPRISE
PROGRAM GROUP: UTILITIES

ACCT NO. 5116310

	2008-09 ACTUAL	2009-10 ACTUAL	2010-11 BUDGET	2011-12 BUDGET
PERSONNEL	$1,532,465	$1,617,432	$2,190,929	$2,146,916
MAINTENANCE & OPERATIONS	9,483,484	8,309,245	8,317,294	8,911,208
CAPITAL OUTLAY	478,121	77,072	0	0
GRAND TOTAL	$11,494,070	$10,003,749	$10,508,223	$11,058,124
FULL TIME POSITIONS	**24.15**	**24.00**	**22.10**	**20.60**
HOURLY/FTE POSITIONS	**0.00**	**0.00**	**0.00**	**1.00**

PROGRAM GROUP DESCRIPTION:

The Wastewater Division operates and maintains the sanitary sewer system which covers approximately 65% of the geographic area of the city (65,870 customers). Sewage is treated by the Encina Wastewater Treatment Plant, a facility jointly owned by the cities of Carlsbad and Vista, the Leucadia County Water District, the Vallecitos Water District, the Buena Vista Sanitation District, and the Encinitas Sanitary District.

PROGRAM ACTIVITIES:

Sanitation Operations

- Provide operation, maintenance and inspection of the 14 sanitary sewer system lift stations and wet wells to ensure compliance with state and federal regulations.

Sanitation Collections

- Provide cleaning and inspection of approximately 288 miles of sanitary sewer system conveyance main lines and associated access holes to ensure proper system performance and compliance with state and federal regulations.

PERFORMANCE MEASURES:

Sewer Cost Efficiency

Fiscal Year	Expenses	Annual Flow (MG)	$/MG
2004-05	$3,992,462	2,688	$1,485
2005-06	$3,766,058	2,416	$1,559
2006-07	$5,346,096	2,486	$2,150
2007-08	$6,354,547	2,906	$2,187
2008-09	$6,948,887	2,823	$2,461
2009-10	$6,852,857	2,590	$2,646

PERFORMANCE MEASURES (continued):

Sewer System Service Delivery

- The ratio of sewer overflows compared to the total sewer pipe in the system. This measure is calculated by dividing the total number of sewer overflows during the reporting period by the total miles of pipe in the sewage collection system and multiplying the result by 100. This indicator is a measure of the collection system piping condition and the effectiveness of routine maintenance.

Fiscal Year	No. of Overflows	Total Miles of Sewer Pipes	Rate per 100 Miles
2004-05	11	254	4.33
2005-06	7	260	2.69
2006-07	13	265	4.90
2007-08	7	284	2.46
2008-09	4	284	1.40
2009-10	6	288	2.08

KEY ACHIEVEMENTS FOR 2010-11:

- Rebuilt Villas lift station with new submersible pumps & control panel
- Installed new submersible pump at Gateshead lift station
- Repaired force main valve at Poinsettia lift station
- Continued rehab of sewer lines in the system
- Installed two Anue wet well conditioning units at Poinsettia & Chinquapin lift stations
- Repaired the water line to Fox's lift station
- Installed new check valves at Simsbury lift station
- Eliminated La Golondrina lift station

KEY GOALS FOR 2011-12:

- Creating a condition assessment priority list of collection lines that are in need of repair
- Develop a habitat easement reference guide
- Replace Home Plant lift station
- Replace Terramar lift station
- Realign sewer line to remove Vancouver lift station
- Create asset management plan
- Continuing to work & prepare for SSMP audit

SIGNIFICANT CHANGES:

- Added La Costa Meadows into Carlsbad sewer service area – approximately 65 homes.
- Eliminated 1.0 FTE Utility Worker II position.
- Converted 0.7 part-time positions from Water Operations and Solid Waste departments plus an additional 0.3 part-time was added to Wastewater Operations for a total of 1.0 part-time position to replace the eliminated Utility Worker II position.
- Transferred 0.15 Engineering Technician FTE and 0.35 Scada Technician FTE to Water Operations.

PROGRAM: SOLID WASTE MANAGEMENT
FUND: SOLID WASTE ENTERPRISE
PROGRAM GROUP: UTILITIES

ACCT NO. 520XXXX

	2008-09 ACTUAL	2009-10 ACTUAL	2010-11 BUDGET	2011-12 BUDGET
PERSONNEL	$61,013	$79,091	$105,006	$94,168
MAINTENANCE & OPERATIONS	400,123	418,044	424,551	477,088
CAPITAL OUTLAY	12,400	14,401	0	0
GRAND TOTAL	$473,536	$511,536	$529,557	$571,256
FULL TIME POSITIONS	**0.60**	**0.80**	**0.90**	**0.90**
HOURLY/FTE POSITIONS	**0.20**	**0.20**	**0.20**	**0.00**

WORK PROGRAM:

The Solid Waste Division of the Utilities Department administers and monitors the solid waste contract and the Palomar Transfer Station agreement, and is responsible for the waste reduction and recycling components of the Source Reduction and Recycling Element and Household Hazardous Waste Element to comply with state mandated AB939 and SB1016 diversion and disposal requirements.

PERFORMANCE MEASURES:

Customer Satisfaction
- Eighty-nine percent (89%) rate trash collection as "Good" or "Excellent" based on FY 09 results.
- Eighty percent (80%) rate recycling collection service as "Good" or "Excellent" based on FY 09 results.

Cost Efficiency
- Commercial rates (adjusted for city fees) are the lowest when compared to our benchmark partners. Residential rates (adjusted for city fees) are the lowest when compared to our benchmark partners. The benchmark is to be the lowest one-third in San Diego County; Carlsbad has continued to attain that position.

Disposal Rate
- 2009 Disposal rate (pounds per person per day) as reported to CalRecycle: 5.8; well below maximum target of 8.4.

PROGRAM ACTIVITIES:

Solid Waste
- Administer and monitor the solid waste contract.
- Review tonnage and revenue reports from authorized collector for accuracy.
- Coordinate solid waste activities with the Countywide Technical Advisory Committee.
- Provide outreach and education to the public about the solid waste programs.
- Ensure proper collection and disposal of solid waste generated in the city.
- Continue to look at improved solid waste services while remaining in the lowest one-third rate category for San Diego County cities.
- Prepare, and submit required annual disposal rate reports to CalRecycle according to the new SB 1016 requirements.

PROGRAM ACTIVITIES continued:

Recycling/Diversion

- Prepare state and county grant applications.
- Manage drop off, door-to-door and annual one day event programs including residential education of the programs.
- Attend regional recycling meetings and coordinate city efforts with other agencies.
- Coordinate and monitor all recycling programs.

KEY ACHIEVEMENTS FOR 2010-11:

- Development of solid waste contract options for City Council consideration.
- The city met the Disposal Rate target.
- Held fifth annual special collection event for Household Hazardous Waste.
- Completed City Council workshop regarding future waste hauling options.
- Continued to review special event applications for compliance with solid waste and recycling best practices.

KEY GOALS FOR 2011-12:

- Development of options for new waste hauling programs to be included in a future waste hauling contract.
- Improve disposal rate (pounds per person per day).
- Improve household hazardous waste participation.
- Improve education and outreach to residential and commercial customers.

SIGNIFICANT CHANGES:

- Transferred 0.20 part-time FTE to Wastewater Operations.

PROGRAM: STORM DRAIN MAINTENANCE
FUND: SOLID WASTE ENTERPRISE
PROGRAM GROUP: UTILITIES

ACCT NO. 5216310

	2008-09 ACTUAL	2009-10 ACTUAL	2010-11 BUDGET	2011-12 BUDGET
PERSONNEL	$398,635	$415,877	$479,420	$500,250
MAINTENANCE & OPERATIONS	615,786	664,211	909,926	1,020,860
CAPITAL OUTLAY	1,674	1,465	0	0
GRAND TOTAL	$1,016,095	$1,081,553	$1,389,346	$1,521,110
FULL TIME POSITIONS	**5.35**	**5.40**	**5.05**	**5.05**
HOURLY/FTE POSITIONS	**0.00**	**0.00**	**0.00**	**0.00**

WORK PROGRAM:

The Storm Drain Maintenance Division ensures that the city's storm drain system is inspected, cleaned and maintained. This division also responds when there is a threat to the storm drain system, or the surrounding lagoons and ocean outfalls, such as a fuel spill or illicit connection to the storm drain.

PROGRAM ACTIVITIES:

In accordance with the National Pollutant Discharge Elimination System Urban Storm Water Permit, the Storm Drain Maintenance division is responsible for the inspection and removal of waste from the city's storm drain system each year, with record keeping of inspections and amount of materials removed. In addition, the Storm Drain Maintenance Program manages a street sweeping contract to reduce material accumulation in the Municipal Separate Storm Sewer System (MS4), contracts with outside vendors to remove solid waste and bulky items citywide, and to clean the MS4 on a regular basis and during incidents.

KEY ACHIEVEMENTS FOR 2010-11:

- In 2010, the division utilized a matrix of in-house services and outside contracts to remove over 45 tons of sediment, silt and debris from under sidewalk drains, outfalls and trapezoid channels.
- Received an excellent rating from D-max during the annual inspection of the municipal yard. This is an annual inspection that is required by the San Diego Regional Water Quality Control Board.
- Revised the process to continuously and accurately update the GIS mapping system.
- The program for cleaning the under sidewalk drains was revised to include the use of containment booms.
- Developed a contract monitoring system for the maintenance of outfalls.

KEY GOALS FOR 2011-12:

- Continue to work with GIS to update the storm drain inventory.
- Establish a new procedure for out-fall cleaning and inspection.
- Complete implementation of contract monitoring system for the maintenance of outfalls.
- Continue to improve the storm water runoff quality at the municipal yard with new BMPs.
- Establish process for permitting maintenance activities in environmentally sensitive areas.