



City of Marco Island

2011

Annual Report

“A sun-drenched jewel on the edge of the Gulf of Mexico, Marco Island features 6 miles of beach and over 100 miles of waterways within its 17.8 square miles. Marco Island is the largest barrier island within Southwest Florida’s Ten Thousand Islands. Marco Island’s residents and visitors call this special Island...Paradise.”

The Marco Island City Council, the City Manager and staff are proud to be a part of the now 14-year-old City that has grown in population, businesses, and visitors alike. With this growth comes the need for City services to provide all that a progressive community, anticipating a bright future, will need. Each of us works diligently every day to improve the City of Marco Island and provide quality services to all who live, work, play or vacation here.

Progress and improvements are occurring every day in Marco Island. In this annual report you will find information about successes made over the past year, as well as projects that are underway, still in the planning stage, and improvements that will enhance our residents’ quality of life.

BUILDING DEPARTMENT

The mission of the Building Department is to provide property owners and contractors a permitting, plan review, and building inspection process that is responsive to the needs of the development community and residents. It also assures that trained professionals adhere to compliance with building codes, generate sufficient revenue, and promote the general health, welfare and appearance of Marco Island.

The Department provides a full range of services to the development community and citizens, and reviews and inspects all projects requiring a permit. The Department also receives staff support from Community Affairs and Public Works staff. This support involves site plan, project review, and right-of-way permitting.

The Building Official is state certified, and all inspectors are certified in their respective disciplines. Each of the inspectors, including the Building Official, renew their respective licenses, earn necessary CEU’s, and maintain membership in Associations and local Building Chapters.

The Department purchased new EnerGov software in 2011 to provide connectivity to all

divisions for more efficient permitting, automated inspection reports, detailed reporting, data base, and automated public permitting. The Building Department continues to provide outreach and training programs, annual review of permit fees, and plan storage in electronic and digital format.

Since fiscal year 2006, the Building Department has been defined as a self-supporting Enterprise Fund. Under Florida Statutes, building permit revenues may only be used to support the operations of the Building Department. Functionally, the Building Department operates as a division of Community Affairs.

The Building Department received \$1,107,993 in building permit fees in FY 2011. New single family building permits issued in FY 2011 totaled 25. During the first quarter of FY 2012, 16 new single family building permits were issued, on pace to exceed last year’s permits. The increase in new single family building permit activity is a sign the local economy has started a positive trend for investment back into the community. Commercial building permits remain steady for renovations, however, no building permits were issued in 2011 for new commercial construction and/or development.

COMMUNITY AFFAIRS

The mission of the Community Affairs Department is to offer Marco Island residents and visitors professional staff providing information and services. The staff endeavors to utilize local resources and encourages community participation for developing programs that will enhance the natural, social, and economic environment of the island.

The Community Affairs Department is charged with providing both current and long-range planning, environmental, and zoning services. Planning staff works with the development community on proposed projects, site plan review, staff analysis of public petitions, and amendments to the Land Development Code. Long-range planning efforts focus on implementing policies contained in the adopted Comprehensive Plan, monitoring School Concurrency, updating the Evaluation and Appraisal Report, and Annual Level of Service Report.

Department responsibilities also include:

- Amendments to City’s Comprehensive Plan
- Ongoing development of EnerGov software system for permitting and data collection

- Coordination and participation with local civic organizations
- Preparation of population projections
- Monitoring and managing environmental resources, protected wildlife, plant species and water quality
- Review of dredge, riprap, fence and dock projects, special events on the beach, beach vending operations licensing, vegetation trimming and clearing, professional lawn and landscape registrations, and monitoring protected and/or archaeological sites
- Act as a liaison and technical support for the Beach, Beautification and Waterways Advisory Committees, and Hideaway Beach Special Tax District Board
- Sample surface water in twelve locations in the canal waterway system bimonthly for analysis of nutrients and bacteria
- Provide public information and outreach on environmental topics to diverse audiences via presentations, newspaper articles, brochures and workshops
- Manage volunteers who participate in wildlife monitoring and public outreach, such as Shorebird Stewards, Beach Stewards and Burrowing Owl Monitors
- Participate, as City representative, with other public entities such as Greenscape Alliance, Shorebird Alliance and Rookery Bay Management Plan Advisory Board.



The Community Rating System (CRS) recognizes and encourages community floodplain management activities that exceed the minimum National Flood Insurance Program (NFIP) standards. Flood insurance premium rates for policyholders on Marco Island are reduced up to 20% through outreach and other CRS activities. In addition, the benefit of reduced insurance rates, CRS flood-plain management activities enhance public safety, reduce damages to property and public

infrastructure, avoid economic disruption and losses, reduce human suffering, and protect the environment. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS: 1) reduce flood losses; 2) facilitate accurate insurance rating; and 3) promote the awareness of flood insurance.



Staff also participates in the Collier County Local Mitigation Strategy Working Group (LMSWG), a component of Collier County's Citizen Corps. The purpose of the group is to examine the hazards that confront people and property of Collier County and explore means to reduce the vulnerability to each hazard. Essentially, the group prioritizes a project "wish-list" that achieves the goals contained within the County's Local Mitigation Strategy (formerly the CC Hazard Mitigation Plan). Then, when monies become available, typically through a federal grant opportunity resulting from a disaster, the LMSWG submits a prioritized listing that goes with each grant application attesting to the fact that the project supports the community's hazard mitigation priorities.

Community Affairs is pursuing development of a Midtown Master Plan for Marco's core commercial district located near the center of the island. Midtown is developed with commercial land uses and consists of approximately 150 acres. Staff is working with the Planning Board, stakeholders, and the Chamber of Commerce to develop short, mid, and long-term goals for future capital improvements. The district has been divided into regions for evaluation. Recommended right-of way landscaping, signage, parking, and redevelopment improvements will be available in the near future. Arts Advisory Committee is working with staff to develop logos, banners, and signage for Midtown.

The housing crisis has impacted each and every community across the nation and Marco Island is no exception. In 2010 at the direction of the City Manager, City staff began compiling a database of foreclosed properties in order to prevent blight at an early stage and preserve property values in the neighborhoods. There is no county, state, or national database where information pertaining to Marco Island could be simply pulled out. Compiling this type of database has been a concerted effort among several City departments as well as outside sources. The foreclosure database is regularly checked for "sold" properties that are then deleted from the foreclosure database. To illustrate, in December of 2010 there were 366 properties in the foreclosure database, in December of 2011 there were 233. In 2010, 25 foreclosed properties were sold, in 2011, 248 were sold. As numbers suggest, there has been a significant shift to the better. It is important to note, that the entire foreclosure process, its speed, efficiency as well as outcomes and impact on the market are beyond Marco Island government's control. Marco's prompt reaction to the foreclosure crisis and its ability to stay on top of the issue has proven to be very effective in maintaining up to date records and a current picture of this issue on the Island.

EXECUTIVE ADMINISTRATION

The City Manager is responsible to City Council for the administration of all City affairs by providing sound policy recommendations, leadership and management of all departmental activities, and to strive for excellence in the provision of City services at a reasonable cost with an organization committed to good customer service for the citizens we serve.

The Executive Department includes the City Clerk, and provides recording, transcribing, and clerical services for boards and committees, reception at City Hall, general clerical support, property and records management, and Human Resources.

Financial Performance

The effort to "right size" the organization resulted in the elimination of seven positions, for total yearly savings of \$549,610.

Fleet management achieved a cost reduction of \$81,000 by deferring the purchase of police cruisers / take home vehicles, and the disposal of surplus vehicles no longer in service.

The creation of a one-stop customer service center at City Hall eliminated the need for leased office space and provides a projected cost savings of \$83,604 over the next three years. City Hall received much needed improvements in energy efficient upgrades with the installation of new lighting, ceiling fans, entry doors and building security.

Human Resources

Employees from each department volunteered to review insurance expenses and benefits, and substantial cost savings were achieved following a competitive bidding process that resulted in the selection of new insurance providers.

Both the City's Employee Handbook and the City Council Handbook were revised this year, reflecting changes to federal, state, and local laws and updates and changes in City policy.

Information Technology

The Information Technology Department is responsible for the management and administration of the technological infrastructure for voice and data communication for all departments, distributed among 12 different physical locations throughout the City and Marco Shores. It also provides leadership and guidance to City staff on technology initiatives and data management best practices. IT Services is subdivided into the following support roles:

- Application Services
- Network Services
- Asset Tracking & Software Licensing
- Help Desk Support
- GIS Services & Database Management
- Television Production and Broadcast Services
- Website Administration

Organizational Development

This year IT Services was reorganized to combine the IT Director / GIS Manager positions and also include the IT Coordinator. A subcontractor provides support services to Marco Island Utilities as well as a full-time desktop support technician for citywide support. A summer intern was employed to assist with desktop support and light organizational duties. The Department embarked on the process of developing a three-year Strategic Plan for Information Technology that will include:

- Roles & Scope of Operations
- Operating Budget & Total Cost of Services

- Organizational Business Needs Assessment
- Roadmap to Key Goals & Objectives
- User & Administrative Policies

Another component of the overall IT Strategic Plan is the development of a Disaster Recovery Plan for IT Services. As part of the plan development new citywide data backup procedures are being implemented. The procedures involve a fully mirrored recovery site at the Marco Island Utilities North Plant which will enable instantaneous switching between the live site at the City's Data Center and the new backup site. Full backups to disk are performed daily and stored off-campus in a building fortified to category 4 hurricane specifications. Duplicate backups are also run to tape for an added layer of redundancy/portability. Future components of the plan also involve defining the necessary resources to restore a production environment for critical services on failover servers located at the Collier County EOC should there be significant damage to local facilities.

Accomplishments/Technology Applications

A new enterprise-level application was launched for permitting and land management called EnerGov. The software includes modules for building permitting, special event permitting, planning, and land use management, home and commercial occupational licensing, code compliance case management, and building & fire inspections. The software is web-based and closely integrated with GIS which means all information entered into the software is referenced by its location, allowing more advanced querying and analysis.

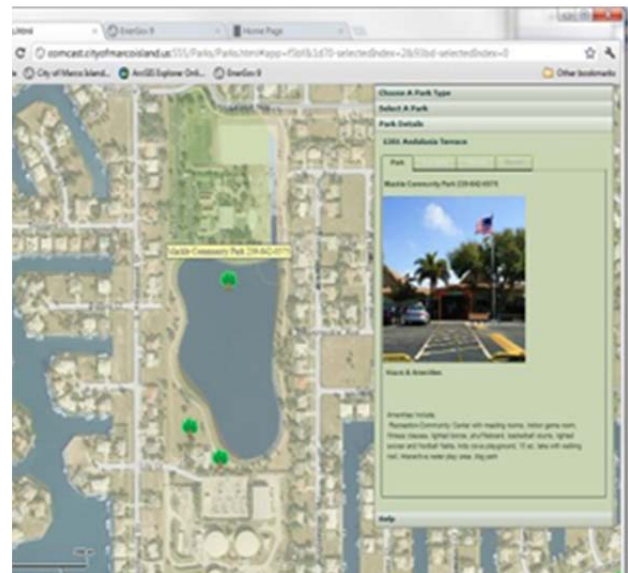
Newly deployed is a Citizen Access Portal that allows citizens to search and view permit and inspection status on-line. Other features will be added, including a decision support engine for navigating through permitting and planning submission requirements and integration with other features such as GIS mapping and zoning certificates. The Citizen Request component also provides the ability to submit code complaints or other complaint types such as a streetlight repair or sidewalk damage. Citizen Access Portal can be found at: energov.cityofmarcoisland.com/CitizenAccess.

A second means of improved governmental transparency in terms of permitting information is the automated Twitter feed implemented using GIS technologies and EnerGov software. Now when a new permit is issued a tweet is

automatically generated notifying citizens of the updated status and displaying a map of the permit location.

A kiosk to enhance customer service was installed in the City Hall lobby in 2011. This self-service kiosk allows walk-in customers to explore information & complete or print simple permit applications on their own rather than waiting in line. It provides direct access to several commonly used government websites, direct links to various map viewers, elevation certificates, zoning information, and frequently requested forms such as garage sale applications, vegetation trimming requests, and RV parking forms.

City website enhancements include a new mapping application for browsing and querying the new FEMA DFIRM maps; users can search by street name then gradually highlight map layers for both the pre-existing flood zone delineations as well as the new zones effective in May of 2012 for comparison purposes. Two other web mapping applications added this year include a Zoning viewer and a Parks viewer. The Parks viewer allows users to search by park category (e.g., beach park, boat park, general parks, schools) and retrieve details, including facilities available and hours of operation.



IT Statistics for CY2011	
✓	Number of desktops/laptops supported: 236
✓	Number of help desk tickets resolved: 2,300
✓	Average time to closure of help desk tickets: 2.5 days
✓	Number of GIS maps requested and printed: 247
✓	Total website page views for CY2011: 793,242. Average daily page views 2,173.27

In addition to the day-to-day tasks performed by the department, several enhancements were added to the IT infrastructure:

- Migration of desktop workstations from Windows XP to Windows 7
- Migration of Microsoft Office installations to version 2010
- Upgraded workstations for 44 users as part of desktop lifecycle management
- Upgraded Exchange server and added additional user accounts
- Upgraded GIS server to accommodate additional functionality and processing requirements
- Extended fiber to Station 51; installed and configured necessary hardware and software
- Implemented fraud, waste, and abuse hotline
- Created new domain for City Council members and public forum address
- Added several new videos to the programming on the Marco Island TV government access channel, including coverage of the Farmer's Market, Spring Jubilee, and public service videos for Police and Fire Departments.

Community Service

- Presentation to Rotary Club on the new website and its features
- Presentation to University Women's Association regarding current position and background
- Departmental staff participated twice in Farmer's Market informational booth regarding City IT and GIS services
- Organized and hosted two Leadership Marco sessions for the 2011 class
- Assisted with Arts Afire website development and promotional material distribution

Personnel Development

Training and career development, although critical in rapidly-evolving fields such as information technology and GIS, were obtained this year mostly through local resources such as web-based courses, local seminars and training opportunities including:

- Completed a Python scripting for GIS virtual campus course
- Training on both usage and administration of EnerGov software
- Training on administration of Website and Content Management System
- Conducted training on Content Management System for board & committee liaisons

- Attended the GIS Symposium at Rookery Bay which featured several presentations by area GIS professionals
- Attended a symposium on cloud computing for the enterprise sponsored by IBM
- CERT training
- Graduated from Leadership Marco 2010 class

FINANCE

In addition to providing financial advisory role to City Council and the City Manager, Finance provides support to all departments for accounting, budgeting, purchasing and payroll needs. It also maintains the official citywide accounting records, financial reports and legal financial compliance for the City and its operations. The Customer Service Division is an operating department with both external and internal customers as the utility billing system is used by various City departments for water consumption, meter tracking, service main and line breaks, unaccountable water loss reports, calculates impact fees and processes work orders.

A. Accounting Division

Financial Performance

- The FY11 audit was completed and issued on March 30, 2012. New Governmental Accounting Standards Board Statement No. 54 was implemented. All of the weaknesses identified in the FY10 Comprehensive Annual Financial Report (CAFR) have been resolved and nine of the ten process improvements have been implemented with the purchase of new accounting software as the sole remaining item. Further information on the CAFR is available on the City's website or in the monthly Budget Flash Report.
- The Finance Department was awarded a Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association (GFOA) for the both the FY09 and FY10 audit reports. This program allows for GFOA professional staff and peer review of the CAFR and indicates that the City's report is issued beyond the minimum requirements of generally accepted accounting principles with a view on transparency and a full disclosure tone.
- Bond rating agency Standard & Poors performed surveillance of the General Obligation (GO) and Sales Tax Bonds and re-affirmed the existing AA rating with Stable Outlook. Fitch reviewed the Water & Sewer Utility Revenue bond rating and on February

2, 2012 increased the Utility's bond rating from A+ to AA- with Stable Outlook.

- In addition to the normal repayment of principal, the Factory Bay Bridge debt was retired early.
- A partial refunding of the series 2003 water and sewer revenue bonds closed in August 2011. This resulted in a savings for rate payers of approximately \$1 million.
- In September, the permanent loan closed and paid off an interim line of credit issued for the construction of a water storage tank, high service water pumps and an operations (laboratory) building.
- Likewise, distribution of two State Revolving Funds (SRF) loans for Mackle Park and Kendall Sewer Assessment Districts paid off the construction portion of the interim financing in September.
- Close-out audits were performed on the SRF-funded Lamplighter and Sheffield Sewer Assessment District construction proceeds. To date, eight (8) SRF close-out audits with successful outcomes have been performed.
- Florida Dept. of Environmental Protection (FDEP) held hearings in which 5 districts were moved to the agency's fundable list. Applications have or will be submitted for the Gulfport, E Winterberry North, E Winterberry South, Goldenrod and Copperfield sewer assessment districts. After applications are submitted, FDEP reviews the applications and generates the SRF loan agreements.
- Bond validation for the last STRP area, Estates Sewer Assessment District, was completed in March 2011. The Estates District's SRF funding is progressing through the FDEP process and is anticipated to become available during the construction period eliminating the need for outside interim financing.
- Some investments were diversified into investments greater than one year.
- Both FY11 and FY12 budgets were submitted below the spending cap. The FY12 budget is the third consecutive year that the budget is submitted below the spending cap.
- Between FY11 and FY12 taxable value decreased by 9.3 percent from \$8.271 billion in FY11 to \$7.568 billion in FY12. The FY12 budget was adopted at 1.9592 mils for operations (inclusive of the item noted below) and 0.1177 mils for debt service.
- During the FY12 budget process, Council changed the funding of the road resurfacing program. Council voted to increase the millage rate by 0.0692 mils (from 1.89 to 1.9592 mils)

to cover the FY12 road resurfacing needs (\$500,000 for the Goldenrod and Copperfield STRP construction areas) and reduced the Water/Sewer budget for budget for road resurfacing surcharge by 2% from 6% to 4%, effective November 14, 2011.

- On March 19, 2012, Council authorized a mid-year change in the FY12 utility rates and further reduced the Road surcharge from 4% to 3%. At the same time, the ERC Buy-Down surcharge was reduced from 8% to 3%. The City will be able to meet FY12 funding requirements and required bond coverage notwithstanding this 6% reduction in surcharge revenue.
- As part of the normal budget process, water and sewer rates are modified effective October 1st of each year. As previously recommended when the 2010 bonds were issued, a 10.5% increase was applied to all water and sewer rates effective October 1, 2010 as part of the FY11 budget process. Though scheduled at 6% this year, no rate modifications were made as part of the FY12 budget pending Council's action on the Burton Cost of Service Study and Revenue Sufficiency Study.
- Various fees and user charges were modified in June 2011 which favorably impacted the FY12 budget revenue estimates for the General Fund and Building Services Fund. Increases effective October 2011 involved parks and recreation facility and program user charges, public works right of way, community affairs development, building services permitting and fire prevention inspection fees.
- A revision to the Purchasing Ordinance was adopted by Council in February 2011. This revised the City's original purchasing ordinance which was adopted when the City incorporated in 1997 and clarified the handling of many items.

Community Service

- The Finance Director was involved with creating a new local chapter of AGA (Association of Government Accountants) in the Collier County area. Prior to this initiative the closest chapter was located in Tallahassee.

Organizational Development

- Tracking of grants (both General and Water & Sewer Funds) has improved with the monthly review between the Acting Controller and the Human Resource Administrator/Grants Coordinator. The Deputy Fire Chief continues

to act as the focal point grants coordinator for the Homeland Security Haz Mat grants.

- Comparison of Farmer's Market and other major Park's revenues monthly.
- Handling of pension fund accounting has improved with monthly review and balancing of investment statements received. Tracking and balancing of employee payroll deductions and monthly employer contributions has been streamlined and is verified with Paychex data on a monthly basis.

Technology Applications

- Virtually all purchasing related resources were posted on the City website thus eliminating CD reproduction and mailing costs and providing easier and wider distribution of bidding documents. Other finance reports and additional utility billing documents were also posted on the website this year.

Personnel Development

- With the slow-down in construction projects, the Purchasing Manager's assignments include involvement in the general liability area of risk management insurance issues.
- Many Finance Department employees were trained in CERT training. Almost all employees are also CPR certified.

B. Customer Service Division

Financial Performance

- Water and Sewer Fund Financial Services & Customer Service Division was 2% under budget.
- During 2011, 529 sewer customers were added to the monthly billing cycle. For the STRP Gulfport, E Winterberry North and E Winterberry South sewer assessment district property owners, 643 letters (including vacant lots) were mailed requiring decisions on the three financing options and related paperwork reviewed and completed for proper inclusion on the tax rolls. On the utility billing system, coding for these new customers were added to the system in March and May 2011. Tracking of district property owners' abandonment of septic tanks are maintained to ensure that the volumetric charges are coded correctly and inputted timely throughout the year.
- Letters were sent out to all sewer assessment district property owners that have previously signed up for a STRP financing option (20 year deferment or annual tax billing). The informational letters provided customers with their specific current payoff amount as well as

the total cost to the property owner of the long term financing. Several customers with financing paid their accounts off in full.

Community Service

- The Customer Service Manager organized the start-up of quarterly meetings between various other area utility billing managers and finance directors for an exchange of ideas and discussion of common issues.
- The Customer Services Division worked the City Booth at the Farmer's Market answering questions and displaying a mock-up model of a typical sprinkler system to assist answering residents' questions spurred by last year's drought conditions on how to lower their water usage by properly setting their sprinklers and how to comply with the City's watering restrictions.
- Customer Service and Finance employees continue to encourage residents to sign up for auto debit and email delivery of their water and sewer utility bill. This allows customers to have the amount deducted from their checking account. 39% of our customers pay by auto debit.

FIRE-RESCUE DEPARTMENT

The mission of the Marco Island Fire-Rescue Department is to exceed your expectations of fire and life safety services, to augment and provide emergency medical services, and deliver safe and quality emergency and prevention services to all persons within the City of Marco Island. As a Team, We Have, We Currently Are and We Will Continue to, Dedicate our lives to preserve your: *Life, Health, Safety, and Property.*

Message from the Chief

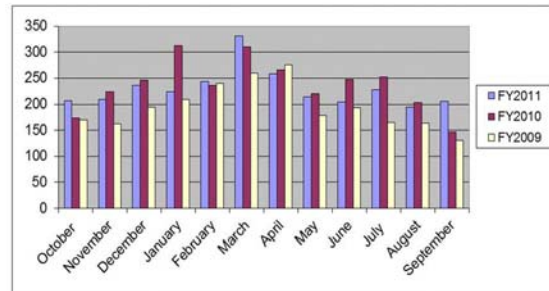
City Council continues the emphasis on the "Nice to Have-Need to Have" philosophy. The Fire Rescue Department's mission of saving lives and property is part of a need to have service and the department and personnel continue to do more with less, operate a lean organization, and attempt to offer options and innovative programs. Personnel responded to more than **2755** emergency calls, over **5000** apparatus responses, and many educational programs this year. The Department and all City Staff have scrubbed financial and service options with a continuation of Customer Service as a priority. A survey is sent out on every call we respond to and our Customer Service Survey of users, surveying 11 areas, shows a

99.9% excellent rating overall. In following up any area rated fair or poor in any category the majority were in found in hospital care. The other area commented on was response time taking too long. When the calls were examined availability of units and dispatch processing did have some impact. The Personnel are very proud of their accomplishments this year as contained within this report.



- Helpfulness of Employees
- Speed of Service
- Handling of Problems
- Knowledge of Personnel
- Appearance of Personnel
- Sensitivity of Personnel
- Communications Skills of Personnel
- Medical Care given by Personnel
- Putting out of Fire
- 911 Call Taker
- Emergency Room Care

Monthly Emergency Calls
By Fiscal Year



Financial Performance

The Fire Rescue Department operated within its allocated budget and undertook a number of major projects, including the beginning of Station 51 renovations and unplanned major apparatus repairs. Also received was the 2010 SHSGP Hazardous Materials grant of \$50,174 providing technician training and sustainment of equipment. The Collier County Regional Hazardous Materials/ WMD Team personnel also provided assistance to the Collier County Sheriff's Office to mitigate hazards found at a potential meth lab.

Community Service

In 2011 responded to **2755** emergency calls for service involving **5035** apparatus responses. In May 2011 the Department experienced 331 incidents, the highest monthly total in the history of the Department.

Fire Rescue staff participated in special event planning as members of the City's Special Event Team. The collaboration of City staff has been well received by event coordinators and has resulted in well-coordinated public events.

The Department received a **99.9% excellent rating** from the users of our emergency service

The Department spent over **two weeks** participating in Marco Island YMCA Water Wise Program teaching 3rd graders from Tommie Barfield & Manatee Elementary schools basic first aid awareness, water safety & pool safety.



Twenty-five members of the Fire Rescue Dept. were honored by City Council and Collier County Commissioners and were presented with the Phoenix Award for their actions that resulted in a life saved.



Fire Chief Mike Murphy
Div. Chief Scott Schultz
Div. Chief Don Jones
FF/EMT Ray Ladurini
FF/PM Dan Stoller
FF/EMT Leo Rodriguez
Capt/EMT Chris Crossan
Eng/PM Dustin Beatty
FF/PM Nelson Ramirez
Res/Lt. Oscar Hernandez
Res/Lt. Robert Riegler
FF/PM Sergio Deleon
FF/EMT Leigh Crane

FF/PM Edward Cabal
FF/PM Munier Gattas
Eng/EMT Steve Hagmann
Res/Lt. James Jay
Capt/PM Jim Pope
FF/PM Hafid Oliver
Capt/EMT Dean Heasley
FF/PM Heath Nagel
Div. Chief Jeff Kutzke
FF/EMT Chris Bowden
FF/EMT Ken Stenback
FF/PM Albert Munoz

Organizational & Personnel Development

CERT: Fire Rescue Department trained 56 City Employees in Community Emergency Response Team (CERT). Two City employees utilized their skills at auto accidents. The current CERT Team consists of 81 members. They participated in a major county regional drill in March 2011.



The Fire Rescue Department, in conjunction with the Police Department provided a Police Fire Youth Academy as a summer program through the Parks & Recreation Department.



Organizational & Personnel Development

In house Fire Rescue instructors initiated the State of Florida Fire Officer 1 certification program teaching a seven course curriculum to ten of the Department's future Fire Officers. Department members exceeded the training requirements in the following categories to maintain certifications and licensure:

- Hazardous Materials Tech.
- Dive Rescue
- Marine Rescue / Boat Operations
- Aerial, Engine & Pump Operations
- Paramedic & Emergency Medical Tech.

Four fire officers completed the State of Florida Safety Officer Program consisting of a series of 40-hour courses.



Inspection/Prevention Statistics 2010-2011

- Fire Plan/SDP Reviews – 974
- Fire Inspections – 3,954
- Hydrant flow tests – 4
- Occupational Licenses – 77
- Fireworks Permits – 3
- Special Event Inspections-53
- Fire Investigations – 26

Public Education - Classes / Drills

- Crowd Manager – 4
- Individual Contractor – 20
- Large Attendance Contractor – 2
- Fire Safety Presentations – 22
(Pub. Ed., Fire Drills)
- Consults/Meetings – 241

Technology Applications

The Fire Rescue Department has undergone many technology improvements this year. Through a cooperative effort with Collier County, the Department replaced its record management system from Firehouse to Image Trend. This mobile based system provides seamless patient care reporting which is directly integrated with our area hospitals. The NFIRS fire reporting system offers an upgraded platform including mobile applications.

The Fire Prevention Bureau transitioned to EnerGov in conjunction with the building department to improve customer service and efficiency.

The Department completed reprogramming of all radio equipment to meet new state and federal guidelines concerning the re-banding of the 800 Mhz system.

PARKS & RECREATION

The mission of the Parks and Recreation Department is to enhance the quality of life for Marco Island residents and visitors by providing high quality recreation programs and facilities for athletics, arts, education, socialization, and lifelong learning experiences.

The Department manages City parks, baseball and soccer fields, community center, racquet center, recreation programs, special events, linear paths and open spaces. It organizes and delivers comprehensive recreation programs for adults and children, sports camps, premier farmer's market, festivals, concerts, benefits, and special events.

Since incorporation in August 1997, the City has successfully acquired title to all lands currently used for neighborhood and community parks from Collier County. Four community parks, two neighborhood parks, six open space parks, and two beach access easements totaling 60 acres are maintained and managed by the City.

Mackle Park

Mackle Park is 28 acres in size and is the largest community park boasting a community center with meeting rooms, game room, teen center, and administrative offices. The park campus provides a Kid's Cove playground, water spray park, tot-lot basketball court, covered basketball, bocce courts, shuffleboard, sand volleyball, soccer field, multi-purpose

fields, off-lease dog parks, walking trail around an eight-acre lake, fishing, model sailing, sheltered picnic facilities, and vehicular parking. The park is also host to special events including movies in the park, big band concerts, festivals, Easter egg hunt, Halloween event, Christmas event, community yard sale, and various sports camps. The park athletic fields, walking paths, landscaping and lighting were renovated in 2009 and 2010 with assistance from Florida Recreation Development Assistance Program Grants totaling \$400,000.



Racquet Center

The City Racquet Center located on three acres provides a separate campus for tennis, racquetball, and pickleball enthusiasts. The venue hosts six classic clay courts, two hard courts, two racquetball courts and three pickleball courts. Open play is available to Marco Island residents and visitors. The pro shop provides retail sales, racquet stringing, and beverage sales. Tennis professionals provide tournaments and lessons for all ages.

Veterans' Community Park

Veterans' Community Park is a passive seven-acre community park located in midtown. The park provides expansive grass fields and parking facilities and is host to large community

events and festivals. These festivals draw an attendance from 2,500 to 5,000 people. The park is also host to a premier Farmer's Market occurring every Wednesday from November 1st to April 30. The Farmer's Market provides 113 vendor booths and average weekly attendance is 2,000 to 3,000 people. The market specializes in fresh produce, local seafood, homemade bakery goods, pastas, sauces, dips, flowers, locally crafted artwork, lunch specials, and entertainment.

A new Veterans' Memorial was recently completed at the park and revealed during the Veterans' Day Ceremony on November 11, 2011. City Council provided \$100,000 of the \$220,000 design and construction cost. A citizen committee raised an additional \$120,000 to augment and complete the project. The memorial boasts a large circular paver reflection area, custom granite service branch emblems, granite perimeter rings, granite Seal of the United States, service branch flag poles and up-lighting, custom seating around the perimeter, and donation pavers approaching the memorial circle.



Winterberry Park

Winterberry Park is a five-acre community park providing a softball sports complex with concessions, restrooms, bleachers and ballfield lights. The park also provides a multi-use field in the outfield for soccer and football. There are ten men's softball teams, ten senior softball teams, five little league teams, one high school football team, five middle school football teams, and ten soccer teams utilizing the park throughout the year. This year the Parks Department hosted two softball games with the Wounded Warriors softball team. Teams were assembled with members from the men's and senior softball teams and the Police and Fire Departments.

Through local donations and raffle tickets, approximately \$5,000 was raised for the Wounded Warriors team. The team will return again on Veterans' Day.

Winterberry Park is also host to the annual softball game between the Fire Department and the Police Department. Showcasing their third season, both teams are crowd favorites and always provide a trick or two on the field and with the referees. Both teams are competitive and play with great pride and spirit. The MIFD has been on the victorious side, winning the 1st annual game 22-9 and the second annual game 12-9. The MIPD seeks revenge in 2013.



The City is also fortunate to have an array of neighborhood parks located throughout the island. These parks include Founders Park, Leigh Plummer Park, Calusa Park, and Jane Hittler Park. Many of these parks provide walking paths, mature landscaping, and the opportunity to reflect in landscaped open spaces on park benches with a covered trellis overhead. Two of the passive parks, Marriott Crystal Shores and Madeira, provide public access to the gulf.

Additionally, the City offers destination beaches. Collier County owns and operates two public beaches. Tigertail Beach is located at the north end of the coastal beach, encompasses 32 acres of beachfront property, and provides parking, restrooms, and concessions. South Beach is a public beach access located at the south end of the coastal beach and provides upland parking and restroom facilities. The Marco Island Civic Association owns and operates a private 14-acre beachfront property providing parking, restrooms, and concessions, located near the center of the coastal beach.

POLICE DEPARTMENT

Financial Performance

There are three primary classifications to the budget:

- personnel services;
- operating expenses; and
- capital outlay.

Each primary classification has a number of sub-classes. Police Personnel Services, MIPD finished FY11 1% under budget overall, however, there are several important factors to consider. The Police Department had a number of short and long-term vacancies in FY11; these openings conserved funds and facilitated the Department meeting its budgetary projections.

Without these vacancies the Department could have exceeded its FY11 personnel services budgetary goals. Overtime was 23% above the bar set in the FY11 budget, while unemployment compensation expenditures were 52% above projections. It should be clearly understood, the Police Department is extremely aggressive throughout the year in an attempt to control overtime expenditures. Unfortunately, some events such as court, prisoner transports, delivery of mentally ill/suicidal persons to reception center, and other criminal justice functions cause unavoidable overtime.

The Police Department expended 100% of its operating expense and capital budget in FY11. Utilities, vehicle repair & maintenance, building repair & maintenance, public education, fuel, and training were the sub-classifications which exceeded their predicted goals. Decreasing budget allotments over the past few years combined with rising fuel costs and increased maintenance requirements for both our building and especially our aging and well-worn fleet resulted in the most note-worthy individual line item overages.

MIPD was given operational, administrative and financial oversight responsibilities for the City's code compliance function in May, 2010. As such, the Code Unit had its own budget in FY11. During FY11, MIPD's Code Compliance Unit used 92% of its budgetary funds: 96% of its personnel services funds, and 81% of its operating expense funds. The Code Compliance Unit did not have any Capital Funds allotted in FY11. Personnel vacancies in the Code function, as well as the transition from one City

Department to another, yielded some unintentional expenses as well as savings.



Community Service

Community Policing is a cornerstone principal of the Marco Island Police Department. Virtually every one of the Department's 71,000 + calls for service/service activities in 2011, involved what is traditionally viewed as community service.

Examples of some of the more unique 71,000 calls for service/service activities in 2011, the Department responded to approximately:

- 500 unverified 9-1-1 calls
- 600 parking complaints
- 390 domestic related disturbances
- 300 school speed zone/student safety details (AM/PM)
- 84 living resource violations
- 67 missing persons (children, adults, and Alzheimer patients)
- 50 suspicious vessels in and around canals
- 43 suicidal/mental illness calls
- 1,000 medical/rescue assists

The Department conducted over 4,600 foot patrols in 2011, in residential, commercial and/or mixed use locations, and continued its aggressive program of foot patrols of schools, while adding City of Marco Island and Collier County Parks to this high-profile plan.

A measure of effectiveness, and certainly a metric of citizen satisfaction are call response times. In 2011, the average call intake to dispatch time was 3.195 minutes, slightly up from 3.060 minutes in 2010. These times represent the time it takes from the moment an individual's phone call is answered by the Collier County Communications Center until the time it is dispatched via radio to Marco Island Police Officers.



For the second year, the Marco Island Police Department's members funded a backpack and school supplies drive. Members provided dozens of backpacks filled with much needed school supplies to the Collier County Domestic Violence Shelter to distribute to at-risk and in-need children.



Organizational Development

In 2011, there were slightly more than 2,000 criminal traffic violations, felony, & misdemeanor crimes reported on Marco Island, a 6% increase since 2010, when just over 1,880 of these events were reported. There were 213 Part I crimes (rape, robbery, aggravated assault, burglary, theft and motor vehicle theft), up from the 179 which were reported in 2010.

The crime clearance rate for 2011, was approximately 29% which is a slight drop from the 33% clearance rate reported in 2010. (Note: 2011, Uniform Crime Report (UCR) statistics are currently being formalized by the state).

The Department observed an interesting trend in that many offenders who commit crimes on Marco Island are often responsible for multiple crimes. There were 688 individuals arrested by

the Department in 2011, this is an increase of 16% since 2010, when 582 individuals were arrested.

As crime and criminals do not observe jurisdictional boundaries, the MIPD aggressively works with our local, state and federal law enforcement partners to deter and solve crime. Interagency cooperation and information exchange between the Collier County Sheriff's Office, Naples Police Department and many other state and federal agencies has resulted in the arrests of subjects who commit crime on Marco Island. As an example, a process is in place to periodically check the numbers and descriptions affiliated with stolen property to determine if the stolen items were sold at any pawn shop in the State of Florida.

In August, 2011, the Marco Island Police Department stood up an Honor Guard. This group of five officers has dedicated countless hours of practice to ceremonially represent the Department and City at several community and City events.



During 2011, the Department maintained nearly 2,000 pieces of property and evidence which is held in the MIPD evidence & property rooms, with the most common items being drugs and drug paraphernalia. This is a fluid process with items being impounded, secured, released, destroyed (by court order) or submitted for testing on a daily basis.

While those with expertise or even those with limited criminal justice or municipal government background acknowledge the Marco Island Police Department is an exceptionally lean organization based on community demographics, its members find themselves involved and often solely responsible for a number of projects that have either

Departmental or city-wide affect. The following indicates those types of assignments and projects.

Technology Applications

The MIPD aggressively uses technology as a communications medium, force multiplier, crime prevention tool, and analytical mechanism to solve crime. Since 2003, the Department has utilized a stand-alone crime and incident records management system (NetRMS) that is used both within the actual police facility on Bald Eagle Drive, as well as in patrol vehicles. It is critical to note that the vendor has ceased improving the decade old product and will soon stop supporting it as well. Several years ago, MIPD was one of a few pilot agencies in Florida that tested and developed a free computerized motor vehicle crash reporting system (TRACS). The Department continues to use the TRACS program in a LAN and wireless environment, saving the City thousands of dollars.

In 2011, the Department continued towards meeting the federal government's unfunded mandates with respect to encryption and biometric computer access in remote computing environments. These mandates require substantial staff intervention as well as financial expenditures.

The Department increases the likelihood of prosecution and reduces liability exposure through the use of digital video recording devices in each patrol vehicle. Patrol vehicles have the technological capacity to access the National and Florida based Crime Information Center databases, scan a driver's licenses, print limited forms and search the internet for criminal justice purposes.

2011, saw the deployment of the following new technology within the MIPD: EnerGov reporting system for code compliance, FINDER inter-agency database, COPLINK interagency database, more robust and widespread access to the e-mail system using hand-held smart devices, and compulsory Comcast digital TV upgrades.

One of Chief Hunter's technology-based agency improvements has been the development and deployment of a system whereby daily crime and incidents reports are being automatically e-mailed to command staff twice daily at the start of each shift, providing fresh incident knowledge and more eyes on issues and potential problems.

It is imperative to communicate the technology improvements or replacement needs identified by the Marco Island Police Department in FY11:

- Aging server hardware and software replacements and upgrades.
- Records management system coming to end of service life.
- Patrol laptop replacements - some of these laptops are 4 years old.
- Color scanning devices in the police facility.
- Replace driver's license card readers.
- Replace thermal image printers in police vehicles. Current units are several years old.
- Panasonic Arbitrator digital video recording units consolidate technology as we now run two independent video recording systems.
- Additional/supplemental secondary advanced authentication as required by the FBI 5.0 CJIS security policy – i.e. server side biometrics, tokens, smart cards.
- Replace mobile radios (800 MHz)—including radios that are 10+ years old, no longer produced or unsupported by the manufacturer.
- Citywide emergency VHF radio system modification or replacement due to yet another unfunded federal mandate [On January 1, 2013, all public safety and business industrial land mobile radio systems operating in the 150-512 MHz radio bands must cease operating using 25 kHz efficiency technology, and begin operating using at least 12.5 kHz efficiency technology].

Personnel Development

A primary component of personnel development is training. A multi-faceted concept that includes:

- Enhancing potential
- Developing potential
- Developing strengths
- Improving knowledge

"Failure to Train": Training is one of the most critical and significant functions in any police department concerned about quality, productivity, liability, and morale. This concept is driven by the landmark 1989 US Supreme Court ruling, City of Canton, Ohio v. Geraldine Harris, in which the court made it clear that training police personnel is a critical managerial responsibility and should not be viewed as a luxury. In addition, municipal government and its administrators may be held liable if inadequate training causes injury to a citizen or department member or violates a citizen's constitutional rights. A number of benefits result from quality police training; increased productivity, greater commitment from

personnel, reduction in crime and lawsuits, more efficient use of resources, and better delivery of services.

Police Officers have multiple levels of continuing education training and certification requirements. During 2011, five Department members met their four-year mandatory training requirements on or ahead of required dates. In 2012, twelve members will need to meet these requirements. In addition, all Department members that are due for recertification thru 2014, have already met the minimum training standards. The Marco Island Police Department has a multi-tiered training program which facilitates personnel development.

One element of the Department's personnel development program is "roll call training". This training is delivered in very small blocks at the beginning of an Officer's daily shifts on a routine schedule. Under the leadership of Lt. Beucler, with the significant assistance of Officer Steiger, during 2011, nearly all members received twenty-one (consistency) hours of roll call training. Sgt. Spina trained and certified six Department Officers on the use of tactical patrol rifles, and like number of Officers were certified by Lt. Beucler and his assistants on the Department's personal watercraft.

The Marco Island Police Department hosted four classes which were instructed by outside law enforcement agencies in 2011:

- Terrorism: Past, Present & Future – New York, New Jersey Port Authority PD
- Basic Street Gang – Collier County Sheriff's Office
- Snake Recognition – Florida Fish and Wildlife Conservation Commission
- E-Trace Firearms Trace – U.S. Alcohol, Tobacco & Firearms

The final component of the Department's personnel development program consists of Officers attending off-Island training at various criminal justice or public safety trainings in Florida. In 2011, MIPD was severely challenged to provide this type of training due to budgetary restrictions.

Operational Improvements

The year 2011, saw operational improvements within the Marco Island Police Department. The addition of the Code Enforcement function, and its philosophical shift to Code Compliance improved not only the Department but the

community. The Department hired two individuals to staff the Code Officer function, and both individuals brought a wealth of life experience and communication skills, one member has the full complement of four Florida Code Compliance certifications. It should be noted that the Department is working towards the goal of using Code Compliance Officers in a secondary role as Community Service Officers whereby they assist Police Officers with patrolling neighborhoods and commercial areas to identify and report suspicious situations, provide traffic control, assist in finding missing children and the elderly or mentally challenged, assist with public education campaigns, and a myriad of other activities.

Continuing with the subject of staffing improvements, in 2011, the Department was able to finally attract, train, and deploy a part-time school crossing guard candidate. A valued member of the Department, our part-time School Crossing Guard has over 20 years in the criminal justice profession and her deployment permits Police Officers to patrol in excess of an additional 360 hours annually. Like our members in Code Compliance, our Crossing Guard is also utilized for traffic control and as an extra set of eyes and hands during large scale community events.

Midway through 2011, the Department conducted a school violence training exercise. The large scale exercise involved dozens of members of the Marco Island Police and Fire Departments, Florida Fish and Wildlife Conservation Commission and Naples Police Department. This exercise was preceded by many months of meetings, table – top exercises and exercise "walk-throughs". The Department continues to study its performance in the exercise and develop operational modifications in response to the lessons learned.



In 2011, specific segments of the Department's General Orders or policy manual were reviewed and updated. This is an on-going process and it is critical that additional Department resources are devoted to the review of current policy as well as development of new polices which guide our daily operation. Presently the Code Compliance unit does not have a policy manual, but will be required to work towards the goal of the development of a Code Compliance Policy Manual.

The department conducted numerous electronic speed surveys of various island streets in an effort to improve traffic safety. Results of these surveys were utilized to conduct intelligence-driven traffic enforcement as well as submit to the City's Public Works Department for use in traffic engineering.

One patrol vehicle was replaced as it was damaged beyond repair in a motor vehicle crash, as was a second vehicle that reached the end of its useful service life in 2011. Chevy Tahoe Police Pursuit Vehicle (PPV) platforms were selected due to operational needs such as safety, ground clearance, equipment, cargo space, mass-muster capacity and the recent and major changes in the police fleet industry. These vehicles are specifically designed for law enforcement operations and are anticipated to withstand the tremendous wear and tear of daily police duties in the sub-tropics. The Department also instituted a process that whenever possible (based on current equipment and budget limitations), these vehicles are being outfitted in exactly the same manner so as to increase officer safety, effectiveness and efficiency.

PUBLIC WORKS and COLLECTIONS & DISTRIBUTION

The Public Works Department is responsible to plan, design, construct, operate, and maintain roads, stop-controlled intersections, signalized intersections, controlled intersections, waterways, bridges, streetlights, public sidewalk network, surface and underground drainage systems, utility water and wastewater collection and distribution systems, and maintenance of rights-of-way.

The department's goal is to develop and maintain the optimum public infrastructure system, secure adequate recourses, and foster planned, quality growth to promote the welfare of the community. This is accomplished by evaluating and assessing community needs, providing programs consistent

with the goals and objectives outlined by the City Council, setting the standards to achieve long-term economic progress and developing programs that address target goals and to minimize maintenance costs.

Financial Performance

Generated **\$33,175** revenue from Right of Way permits.

- Streets and Drainage
Budget = \$1,223,890
Actual = \$1,020,333 - (-19.95%)
- Collections/Distribution
Budget = \$1,556,615
Actual = \$1,224,668 - (-27.11%)
- Beautification
Budget = \$599,280
Actual = \$637,789 - (+ 6.43%)
- Parks Maintenance
Budget = \$593,850
Actual = \$574,495 - (- 3.37%)

Community Service

- Participated in and provided staff support for:
 - Hideaway Beach Tax District
 - Waterways Advisory Committee
 - Beautification Advisory Committee
 - Parks & Recreation Advisory Committee
 - Technical Advisory Committee of the Collier County Metropolitan Planning Organization
- Participated in the staff representation at the Farmers Market.

Organizational Development

- Restructured Parks & Recreation Department to add Beautification Division and Parks Maintenance Division to the Public Works Department.
- Transitioned to in-house engineering for all right-of-way permitting and inspections.

Personnel Development

- Trained all staff in CERT and CPR.

Employee Certifications

Employees achieving the FDEP Distribution Operators License:

- Mike Chidester, Level II
- Frank Clark, Level III
- Mike Lynch, Level I
- Chris Nygard, Level II

Training

- Jim Hodgdon(2011 FTGA Regional Seminar)-CEU's; IFAS/FTGA CEU Day 2011
- Jim Hodgdon, Richard Peets, John Richard, Bill Cookson-CERT training

- Bill Cookson/Steve Cunningham, FL Green Industries Best Manage Practices certification

Significant Accomplishments – Streets & Drainage Division

- Retro-filled 50 Grate Inlets with Suntree Skimmer boxes, Island wide
- Serviced 1280 Suntree Skimmer boxes
- Rehabilitated 8 major storm drain outfall
- Re-graded 750 square feet of swales
- Conducted approximately 226 right-of-way inspections
- Administered 111 Utility permit reviews and inspections
- Received & responded to approximately 450 citizen requests for services
- Completed 30 right-of-way drainage improvement projects island wide
- Secured a \$350,000 grant from South Florida Water Management District to repair or replace existing storm drain outfalls and street drainage
- Reconstructed four inter-sections with cross drains to eliminate flooding
- Renewed annual contracts for full service ground/facility maintenance contracts at city landscaped medians and roadway trees

Completed Major Projects:

- Hideaway Beach Renourishment and T-Groin Project
- Phase 1 - Sanitary Sewer and Manhole Rehabilitation Project
- Linear Park Trail Phase 1 Project
- SCB Sidewalk Project
- Hernando Bridge Rehabilitation Project
- Bridge Lighting Project – Navigation and Walkway Lighting on three Bridges.
- Bald Eagle Storm Drain at Collier Blvd.
- Constructed a temporary office and trailer site at the SWTP

On-Going Major Projects:

- Bald Eagle Dr. Street Lighting Project
- NCB Storm Drainage Phase 3 Project
- NCB Storm Drainage Phase 4 Project
- Design Review of the Smokehouse Bay Bridge Project

Parks Maintenance & Beautification Division

- Performed landscape maintenance for over 70 acres of city parks, recreation facilities and government buildings.
- Provided all support services to special events and recreation programs along with civic

associations for events and festivals at city parks and grounds.

- Maintained all athletic fields for citywide sports programs along with taking over the renovation and daily maintenance of the Marco Island Charter Middle School practice field.
- Over seeded athletic fields at Winterberry Park, Mackle Park, and Charter Middle School for winter turf establishment.
- Renovated Winterberry softball field and Tommie Barfield baseball field by reverse tilling and laser grading and adding additional ball field clay.
- Assisted with the annual Arbor Day tree planting at Veteran's Park and Tract C&D.
- Managed along with LCEC to complete trimming and removal of trees for the 70 most critical cul-de-sacs as listed by Beatification Advisory Committee.
- Continued to coordinate water truck operations for beautification medians and public spaces.
- Installed and removed all special event and beautification banners on city light poles.
- Assisted in the managing and installation of the Veteran's Memorial project at Veteran's Community Park.
- Improved drainage project at city tennis facility.

Collections and Distribution Division **Underground Utility Locates**

Marking the City underground infrastructure is required by Florida State Law in order to minimize potential damage, prevent service interruption, and loss of revenue. This past year the Collections and Distribution Locate Crew received over 4263 utility locate tickets. This is a very high number but is related to projects such as STRP, installation of phone cables, fiber optics, and the construction of the new Jolly Bridge. All of which are large areas of new utility installations or relocations.

Water Service Leaks

This past year we have had 163 water service leaks, usually at the connection of the main where there are dissimilar metals that have been assembled to create the service connection. The number of service leaks has decreased over the past few years due to plant improvements and we are getting closer to eliminating those types of services.

Water Main Breaks

C&D Crew repaired 12 water main breaks this past year. Some were caused by contractors but most were because of poor bedding and the shifting (expansion/contraction) of our barrier island. The number is down from previous years due to plant improvements and improvements to the water and sewer system through projects like the STRP.

Hydrant Repairs

Thanks to our Asset Management System and our Valve Exercising Program we are able to better manage the hydrants throughout Marco and Marco Shores. The Valve Exercising Program is required by FDEP and requires us to operate each valve in the distribution system including hydrants. When the employee finds something wrong with a hydrant or a valve the information is loaded into a computer and a work order is generated to repair a valve or hydrant. Once complete the work order is recorded in the Asset Management System. For the past year Collections and Distribution Department repaired 45 hydrants.

Stuck Meters

C&D has changed out 98 stuck meters and returned to manufacturer to determine if warranty issue or not.

Relocation of Meters

As part of the meter change out program some meters have to be moved out of the sidewalk and into the grass area. This is much harder to do and the Meter Change Out Techs do not have the equipment to perform this type of work. Fifteen meters have been relocated and change to touch read meters by the Collections and Distribution Department.

Dead End Flushing

FDEP requires that all water mains that are not on a loop system be flushed so water quality will be maintained for the customer. C&D installed 256 flushing points this past year.

Valve Exercising Program

FDEP requires that all valves in the water distribution system be exercised at least once per year. We have been able to do this consistently each year and track each valve in the Asset Management System for replacement and repairs as needed. A total of 1227 water valves are exercised each year.

Waste Water Force Main Breaks

Collections and Distribution has repaired 1-force main breaks this year, all were reported to FDEP and no fines have been issued.



Additional Hydrants

City ordinance requires that a hydrant be within 1000 feet of the furthest residential home. After a study done by Black and Vetch, the City determined where water main improvements and additional hydrants were needed. In an attempt to save money, C & D was given a chance to install some of the mains and hydrants as a pilot study to see if costs could be saved. To date C & D has installed seven hydrants: Old Marco Lane, Gayer Way, Twin Oaks, Edington Place, South Seas Ct, Giralda Ct, and Milan Ct. A total savings of approximately \$17,000.00.

UTILITIES – WATER & SEWER WATER TREATMENT OPERATIONS

North Water Treatment Plant (NWTP)

- The north plant treated and delivered 1.2 billion gallons of water to the island during the past year (*see table below of water treated and distributed*).
- The north plant was accident free during the past year. Hence, there were no hours lost due to accidents or injuries.
- The consumer confidence report was completed in accordance with all DEP standards.
- DEP performed its annual inspection of the water plant and noted only minor discrepancies which were promptly resolved.
- Two employees upgraded their water treatment licenses by passing the state exam. There are a total of nine (9) licensed operators

at the north plant: three “A” licenses, one “B” license, and five “C” licenses. All operators obtained their continuing education credits required to maintain their licenses.

- The main support bearing of the lime reactor mixing mechanism seized. Consequently, the plant ran at reduced flow without the reactor for 6 weeks resulting in the treatment of half of the normal flow. The SWTP increased its treatment during this time to compensate for the lost treatment capacity at the NWTP. Spare parts were ordered to minimize down time in case of another bearing failure.
- The filter cloths on the lime sludge press were replaced.

Source Water Facility (Raw Water)

- 482 million gallons of surface water were injected into the underground ASR system during the wet season. 401 million gallons of water from ASR wells were recovered during the dry season. Presently the city has almost one billion gallons of fresh water stored underground in the ASR system.
- The ammonia pipe line to the ASR raw water pipe was replaced.
- All ASR monitoring wells and sampling points were cleaned and new gravel was installed.
- The chemical tanks, pumps, panels, and floor were cleaned and painted.
- The facility has been fully secured with security fencing. “No Trespassing” signs have been installed on the security fence.



South Water Treatment Plant (SWTP)

- The south plant treated and delivered 1.3 billion gallons of water to the island during the past year (see table below of water treated and distributed).
- Plant operators attended ammonia awareness class and had onsite training with the fire department for ammonia leaks.

- Two operators were cross-trained on the entire reverse osmosis (RO) membrane facility operations.
- The use of #5 and #8 wells was discontinued because of high turbidity and salinity levels to save the pre-filters and RO membranes. Presently 12 of the original 21 wells remain in service. There are three wells that are being repaired to bring them back into operation for a total of 15 wells.
- RO membranes in all trains were replaced with the 420’ membrane. This has caused a pressure reduction of 80 psi during ground water treatment operations. This is a significant cost savings.



- The RO membranes in every train were tested for conductivity of salts and total dissolved solids (TDS) every month to ensure proper membrane performance.
- All train supports were replaced with new non-metallic supports that will not rust.
- Leaking caustic soda piping was replaced.

Water Treated and Distributed to the Island
(measured in millions of gallons)

Month	NWTP	SWTP	TOTALS
Jan 2011	103.6	114.4	218.00
Feb 2011	95.9	117.5	213.4
Mar 2011	113.1	145.2	258.3
Apr 2011	106.1	144.6	250.7
May 2011	97.3	123.4	220.6
Jun 2011	102.0	121.8	223.7
Jul 2011	87.6	118.9	206.5
Aug 2011	82.5	99.0	181.5
Sep 2011	84.3	86.2	170.5
Oct 2011	113.9	72.0	185.9
Nov 2011	85.5	76.2	161.8
Dec 2011	83.4	82.2	165.6
TOTAL	1,155.2	1301.4	2456.5

Wastewater Treatment Operations

- New procedures were developed for tracking solids being hauled to the landfill in dry tons.
- A new "A" licensed operator, Nigel Noone was hired/trained. The wastewater team is fully staffed with 9 team members.
- Modifications to sludge holding tank #4 were made so that it can be used to treat solids being hauled from the Marco Shores WWTP.



- Automated valves were installed on the sludge holding tanks for the new solids waste system.
- A new cassette frame and air diffuser system was installed by staff on Zenon's prototype membranes and further tests are being run by staff for GE/Zenon.
- 687.7 million gallons of wastewater was treated by the RWPF and 616.7 million gallons of reclaimed water sent out into the reuse distribution system.
- The GE/Zenon plant was reconfigured to reduce the aeration cycle by 2/3 resulting in electricity savings since only three blowers are now running simultaneously instead of five.
- The GE/Zenon plant has also been reprogrammed so that operation of the membrane trains is rotated thereby shutting off the RAS pumps when not in operation as opposed to continuous operation. This also results in an electricity cost savings.



Utilities Maintenance

- Sanitary pump station control panels are now being fabricated and assembled in house resulting in a savings of \$10,500 per panel for a total savings of \$147,000 for 14 panels.
- Valves, blowers, and some smaller motors are now being rebuilt in house. This work involves replacing bearings and seals and machining shafts and valve body parts resulting in a savings of several thousand dollars.
- Repairs to the lime reactor mixing mechanism, lime sludge diaphragm pumps, lime slakers, vertical turbine pumps, submersible sanitary pumps, and well pumps are being done in house.
- Staff installed individual programming logic controllers (PLC's) on each membrane train at the SWTP and re-wired the entire control system so that if there is a problem with one train the rest can continue to operate.
- Maintenance staff is re-constructing the concrete bases for high service pumps at raw water.
- Staff has rehabilitated nine sanitary pump stations including valve pits, piping, fittings, and control panels.

Utilities Engineering & Capital Improvements

South Water Treatment Plant (SWTP)

- A three million gallon water storage tank was constructed
- A storage warehouse was constructed
- Multiple leaking water valves were replaced
- A new 30" diameter water distribution main was installed
- Multiple pipes were relocated and installed to accommodate the new storage tank and to interconnect the tank and plant piping.



- Perimeter landscaping was installed to provide a buffer for the surrounding residential area.
- A driveway and gate were constructed to access the plant along the south end of Mackle Park away from the residential areas.
- The C/D trailers, storage containers & infrastructure were relocated within the plant to accommodate the new tank location.

- The reinforcing steel on the existing one million gallon water storage tank was repaired.
- The city saved almost \$90,000 on the various construction projects at the SWTP by using city staff for construction observation and management instead of consulting engineers (details available upon request).

North Water Treatment Plant (NWTP)

- Construction has begun on the new membrane filtration system to replace the old sand filters.
- The lime sludge thickener was drained, sand-blasted, repaired, cleaned, and painted.
- The ammonia tank has been relocated.
- A portion of the damaged perimeter fencing has been replaced.



- The old 1.67 MGD Zenon membrane system was demolished to make room for the new Pall system.
- Temporary utility administration trailers have been setup, and the old trailers have been demolished.
- The sludge blow-down pit at the base of the lime reactor was rehabilitated.



- City project management staff saved the city \$70,000 on the MF contract by conducting value engineering prior to construction. The savings were reflected in a contract amendment, so the purchase order was \$70,000 less than the amount awarded by council.
- Gravel is being installed in lieu of grass to eliminate ongoing lawn maintenance fees.

Reclaimed Water Production Facility (RWPF)

- Two existing 500,000 gallon water storage tanks are being converted to wastewater equalization storage tanks.
- Two new air blowers are being installed as part of the odor control system for the newly converted tanks.
- Five new wastewater feed pumps were installed to transfer wastewater from the wastewater equalization storage tanks to the MLE process tanks.
- The wastewater laboratory and control structure is being constructed.
- The old return activated sludge pump building has been demolished.
- The old gravity belt thickener is being replaced by new drum thickeners.
- The roof over the existing wastewater membrane filters was completed and hurricane screening was installed around the structure.
- The old diesel fuel tank serving the generators was replaced.
- Photocells installed on most of the new outdoor lighting so lights turn off automatically at dawn resulting in energy cost savings.
- Electrical wiring conduit bank system installed to connect the NWTP and RWPF generators.
- New lighting systems installed on the chlorine contact chamber and around the plant that give better lighting and are less intrusive for the homes surrounding the plant.
- City saved approximately \$69,000 on various construction projects at the RWPF by using city staff for construction observation and management rather than consulting engineers (details of savings available upon request).
- City project management staff saved the city over \$400,000 on RWPF Phase 4 contract by conducting value engineering prior to construction. The savings were reflected in a contract amendment, and purchase order was more than \$400,000 less than council award.

Septic Tank Replacement Program

- Goldenrod Sewer Design The coordination of building 5 new fire hydrants with the sewer construction project will save approximately \$1,000 in mobilization and restoration costs.
- Copperfield Sewer Design The coordination of building 800 feet of new water main and 2 new fire hydrants with the sewer construction

project will save about \$3,000 in mobilization and restoration costs.

- **Copperfield Sewer Design** The coordination of building 800 feet of new Water Main and 2 new Fire Hydrants with the Sewer construction project will save about \$3,800 in mobilization and restoration costs.
- **Estates Sewer Design**
A design change being coordinated with LCEC to supply single-phase electric power (instead of 3-phase power) to the 9 proposed Estates Lift Stations is expected to net a savings of approximately \$56,000 per lift station or over \$500,000 in construction costs. There is also an undetermined amount of annual operating costs savings with this design modification. A design modification to build extended laterals within utility easements to serve +/- 10 individual properties with gravity sewer, instead of building and maintaining Grinder Pump Stations will net an approximate savings of \$23,000 per lift station or +/- \$230,000 in construction costs. The coordination of building 2.5 lane miles of bike lane with the sewer construction will save approximately \$25,000 in restoration costs. The coordination of building 4600 feet of 20" Water Main and 500 of 10" Water Main with the sewer construction will save approximately \$100,000 in mobilization and restoration costs.

Sewer Assessment Districts completed:

- South Barfield
- Tigertail
- North Barfield
- West Winterberry
- North Marco
- Old Marco
- Port Marco
- Lamplighter
- Sheffield
- Kendall
- Mackle Park
- Gulfport
- East Winterberry North
- East Winterberry South

General STRP Soils Management

- Ownership and management of excess construction generated soils from past and current STRP construction projects has resulted in the ability to sell soils to others at a profit to the City. In the past year, soils have been sold to several buyers including the contractor building the Marco Airport runway. The City has realized a return of approximately \$40,000.

General STRP Project Management

- The City's STRP construction team has addressed multiple minor construction problems and issues without the involvement of the design engineer. This approach has

preserved the design engineer's budget and prevented engineering change orders. The solutions determined by staff are consistent with the design plans and do not compromise the quality of construction.

- Quick response by City construction management team to problems as they are identified, has preserved contract time by addressing issues immediately, and in most cases without additional work requiring change orders to the contract.
- While it is difficult to assign an exact dollar amount to these time savings, we estimate that conservatively, the construction management team has saved several consulting hours per month for each of the STRP contracts under construction. For the 2010-2011 period we believe a minimum of \$6,900 has been saved.

Asset Management

- Water Valve exercise program – All city owned water valves have been spatially mapped and scheduled in Cityworks (our asset management software) for annual valve exercising.
- This process has virtually eliminated any repeated valve exercises because routes and spreadsheets with addresses and locations have been provided to staff before they start exercising and valves. Where we used sometimes have three or four repeats per phase, we now have none. (\$50/valve=from \$150 to \$200/month= 2400/year).
- Has allowed staff to re-locate several older valves which caused us to update our utility maps to show exact locations for valves in the field, which helps crews locate valves more quickly so that water mains can be shut down during main breaks.
- This program has reduced the time it takes to calculate unaccounted for water from two or three days down to several minutes. (approximately between \$350 to \$540 per month, or \$4200 to \$6480/yr.)
- All auto-flushers have been setup in a bi-monthly valve flushing program to insure they are in working order. This process has also helped to eliminate repeated valve exercises.
- Has allowed staff to re-locate several older auto-flushers
- Has helped to setup a blow-off replacement program, which replaces water valve blow-off at the end of cul-de-sac.
- One additional benefit is it has allowed us to account for the total number of cul-de-sacs (332) in the city, with addresses. We are

