RESOLUTION NO. 09 – 30

A RESOLUTION ACCEPTING THE FINDINGS OF THE 2009 ANNUAL LEVEL OF SERVICE REPORT DOCUMENTING THAT THE CITY OF MARCO ISLAND IS CURRENTLY IN COMPLIANCE WITH, AND ISSUING DEVELOPMENT ORDERS WITHIN, ADOPTED LEVEL OF SERVICE STANDARDS.

WHEREAS, the City of Marco Island adopted its Comprehensive Plan in January 2001, which included Level of Service (LOS) standards applicable to transportation, potable water, sanitary sewer, storm water drainage, community parks and solid waste; and

WHEREAS, as a requested component of the Comprehensive Plan the City must develop programs consistent with the Concurrency Management System outlined in the adopted Plan; and

WHEREAS, Chapter 30, Article X of the City Code contains the adopted Concurrency Management System, which involves the generation of an Annual LOS Report, and recommended actions if current LOS conditions are below adopted LOS standards; and

WHEREAS, the Planning Board considered the Annual LOS Report at a public hearing on July 17, 2009, and upon finding that no actions were warranted under Sec. 30-717(2), voted 7 – 0 to recommend that City Council receive and approve the report's findings of continued compliance with adopted LOS standards; and

WHEREAS, City Council has considered the report at a public meeting on August 3, 2009 and at a public hearing on August 17, 2009 and found that the report clearly documents that the City is operating and issuing development orders with adopted LOS standards; and

WHEREAS, the report and resolution from City Council will be forwarded to the Department of Community Affairs as the basis for the City's Annual Update and Inventory Report (AUIR).

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF MARCO ISLAND, FLORIDA, AS FOLLOWS:

The 2009 Annual LOS Report is hereby approved with a finding that the City of Marco Island is currently in compliance with and issuing development orders within adopted level of service standards.

Passed in open and regular session of the City Council of the City of Marco Island, Florida, this 17th day of August, 2009.

Attest:

Laura Litzan
City Clerk

CITY OF MARCO ISLAND, FLORIDA

Robert J. Popoff, Chairman

Approved as to form
and Legal Sufficiency:

Alan L. Gabriel, Esq.
City Attorney

2009 ANNUAL LEVEL OF SERVICE REPORT

EXECUTIVE SUMMARY

The 2009 Annual Level of Service (LOS) Report provides documentation to support findings that the City of Marco Island will maintain adopted standards throughout the next five year planning horizon, as required by Sec. 30-715 of the Land Development Code and state law.

The Concurrency Management System section of the Land Development Code (LDC) provides the mechanism by which new development is evaluated in terms of consistency with adopted Level of Service standards. The policies and procedures outlined in the Concurrency Management System section ensure that new development will occur in an orderly manner, with sufficient infrastructure capacity to accommodate new growth. The Concurrency Management System section requires the preparation of an Annual Level of Service (LOS) Report whereby growth and development trends can be tracked to ensure facilities and services necessary to support future growth are available concurrently with the demands for future growth. The timing of the LOS Report is intended to provide City staff, the Planning Board, and City Council, with advanced warning of potential deficiencies over the next five-year planning horizon, and to begin programming the funding for necessary capital improvements.

When the original Comprehensive Plan was approved and adopted in January 2001, the City of Marco Island was dependent on a number of non-City entities to provide critical infrastructure facilities and services, including potable water, sanitary sewer, and solid waste collection. Since 2001, the City has expanded services and infrastructure as necessary to provide a complete range of public services, particularly with the assumption of potable water and sanitary sewer services from Florida Water Services in 2003. As of January, 2009, solid waste disposal and school facilities are the only municipal services provided by non-City agencies.

Current Level of Service Standards

The following standards represent the adopted Level of Service (LOS) standards for the City of Marco Island:

Potable Water	200 gallons per capita per day
Sanitary Sewers	100 gallons per capita per day
Transportation	Minor Arterial - LOS "C" (SR 951 only) Collectors, Local Collectors, Local Roads - LOS "D"
Community Parks	1.2882 acres of active parkland per 1,000 residents

Storm Water Drainage

The LOS design standard for new stormwater management facilities will be the ten-year, one-hour storm event, with 3.3 inches/hour intensity duration. For existing and future drainage system components, the following design LOS standard hierarchy is provided:

LOS A:	US - US HGL > 0.5 ft.
LOS B:	US - US HGL > 0.2 ft.
LOS C:	US - US HGL > or = 0.0 ft.
LOS D:	US HGL < or = 5.2 ft., NGVD*
LOS E:	US HGL < 5.2 ft., NGVD*

For existing drainage system components, a level not to exceed the parameters of LOS shall be adopted.

(*) May be acceptable LOS standard at limited number of roadway locations due to extreme topographical conditions.

Solid Waste

1.1 tons of solid waste per capita per year; two (2) years of constructed lined landfill cell capacity to accommodate annual disposal rates; and ten (10) years of permittable landfill capacity to accommodate annual disposal rates.

Population Tracking

Three of the adopted LOS standards are directly related to population in terms of gallons per day for potable water and sanitary sewer, and acres per 1,000 permanent residents for community parklands. The Shimberg Center at the University of Florida has provided the latest ***permanent*** population estimates for Marco Island:

2008	16,718
2009	17,075
2010	17,435
2011	17,726
2012	18,017
2013	18,303

Peak population estimates are required to project demand for potable water and sanitary sewer. The latest figures representing ***peak*** population estimates were included in the 2008 EAR-based amendments to the Comprehensive Plan.

2008	40,269
2009	40,284
2010	40,298
2011	40,595
2012	40,892
2013	41,189

Current and Projected Levels of Service

Based on population estimates and the 5 Year Capital Improvement Plan adopted in 2008 (2009 to 2013), the following projections through 2013 summarize the material contained in this report:

Potable Water

200 gallons/day/capita
Current permitted capacity = 12.7 million/gallons/day (mgd)

2008	200 gallons/day/capita x 40,269 = 8.05 mgd
2009	200 gallons/day/capita x 40,284 = 8.06 mgd
2010	200 gallons/day/capita x 40,298 = 8.06 mgd
2011	200 gallons/day/capita x 40,595 = 8.12 mgd
2012	200 gallons/day/capita x 40,892 = 8.18 mgd
2013	200 gallons/day/capita x 41,189 = 8.24 mgd

Potable water capacity exceeds the adopted LOS for drinking water currently and through the five year planning horizon

Sanitary Sewer

100 gallons/day/capita
Current capacity = 3.5 million/gallons/day (mgd), planned to increase to 5.0 by 2011.

2008	100 gallons/day/capita x 27,536 = 2,753,600 gallons/day
2009	100 gallons/day/capita x 30,370 = 3,037,000 gallons/day
2010	100 gallons/day/capita x 35,670 = 3,567,000 gallons/day
2011	100 gallons/day/capita x 39,748 = 3,974,800 gallons/day
2012	100 gallons/day/capita x 41,000 = 4,100,000 gallons/day
2013	100 gallons/day/capita x 41,189 = 4.12 mgd

Sanitary Sewer capacity meets the adopted LOS currently, and along with scheduled improvements will meet the adopted LOS through the planning horizon.

Community Parks	1.2882 acres of parkland/1,000 residents x 18.303 (2013) = 21.52 acres Available community parklands in 2008 = 59 acres The current acreage of parkland exceeds the adopted LOS through the planning horizon.
Transportation	Minor Arterial - LOS "C" Projected 2013 traffic volumes < LOS "C" threshold Collectors, Local Collectors, Local Roads - LOS "D" Projected 2013 traffic volumes < LOS "D" threshold The projected traffic volumes are within the adopted LOS through the planning horizon.
Storm Water	Storm water drainage projects will continue to be planned and constructed consistent with adopted LOS design standards and LOS parameters based on project location throughout the Island. A limited number of roadways are currently maintained at Levels of Service D and E, and this condition will be improved but not eliminated during the planning horizon. This condition satisfies the adopted Level of Service.
Solid Waste	Responsibility of Collier County to ensure adequate funding and landfill capacity to serve the needs of Marco Island for LOS concurrency purposes.
Schools	Responsibility of Collier County School District to ensure adequate planning and funding for school sites and facilities during the planning horizon.

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GLOSSARY

Concurrency - An adopted process the city uses to ensure that there will be adequate infrastructure

capacity to accommodate new growth and development without negative impacts to existing development.

EAR Report - The Evaluation and Appraisal Report is a periodic study required by all local governments to monitor progress toward successful implementation of adopted Comprehensive Plans. The City of Marco Island prepared its required EAR Report in 2005.

Level of Service (LOS) Standard - A measurement system adopted by the city to monitor the future capacity/availability of public facilities and services. Compliance with adopted LOS standards is required for concurrency. Marco Island has assigned LOS standards for the following:

Storm Water Management, Transportation, Potable Water, Sanitary Sewers, Community Parks and Solid Waste.

Annual LOS Report - A report generated each year to monitor changes related to adopted Levels of Service, and to guide future capital improvement plans. The format of the report is set forth in the Concurrency Management section of the Land Development Code (LDC). Both the Planning Board and City Council must approve the Annual LOS Report.

Arterial Roads - A roadway providing service which is relatively continuous and of relatively high traffic volume, long trip length, and high operating speed.

Collector Roads - A roadway providing services which is of relatively moderate traffic volume, moderate trip length, and moderate operating speed. Collector roads collect and distribute traffic between local roads and arterial roads.

Land Development Code (LDC) - The compiled locally adopted ordinances that govern development activities associated with land improvements.

Department of Community Affairs (DCA) - Department of the State of Florida responsible for the oversight of local comprehensive plans and comprehensive planning activities.

Shimberg Center - The center at the University of Florida responsible for state-wide population projections, housing summaries, and other socio-demographic studies.

Capital Improvement Plan (CIP) - A financially feasible five to ten year plan for major infrastructure improvements.

ADOPTED LEVEL OF SERVICE VERSUS CURRENT LEVEL OF SERVICE

Pursuant to Chapter 163, Florida Statutes, all local Comprehensive Plans are required to include

standards to ensure the adequacy of public facilities. Also known as "concurrency", a local government has an obligation to provide current and future residents with an adequate supply and delivery of specific facilities. Within the City of Marco Island, the public facilities subject to concurrency are: transportation, water, sewer, drainage, parks, solid waste and school facilities. The measurement for assessing public facilities is known as Level of Service (LOS) standards.

With the exception of the Florida Intrastate Highway System, local governments have the authority to establish level of service standards within their jurisdiction. The premise of concurrency is that the public facilities offered by a local government will be provided in order to achieve and maintain adopted LOS standards. And per State statute, level of service standards are to be "adequate" and based on "data and analysis".

To achieve and maintain level of service standards, local Comprehensive Plans must include:

Coordinated plans for future land uses and public facilities; and
A financially feasible five year capital improvement schedule; and
A Concurrency Management System to address development permits.

The preparation of an Annual Level of Service Report is not mandated by the State of Florida. However, the City finds that such a report is essential to adequately track and measure the annual impacts of new development on existing facilities, and to provide an early warning for the need to improve or expand such facilities to accommodate future growth. Per State law, a development order (permit) cannot be issued if there is insufficient capacity to serve that new development.

The 2009 Annual Level of Service Report does not recommend any changes to the current Level of Service standards which were adopted in conjunction with the original Comprehensive Plan in 2001. Those original LOS standards were derived from a variety of sources. The transportation LOS standard came from Collier County, which had a LOS "D" standard for all local, and local collector streets. State roads on the Intrastate network have a LOS "C" standard. Collier County also set the LOS standard for Solid Waste disposal. Potable water and sanitary sewer level of service standards were developed by a private entity, Florida Water Service. The City of Marco Island derived its own LOS standard for stormwater management and community parks.

It is important to note that the original LOS standards, adopted in 2001, set *minimum* standards for service. These adopted standards do not prohibit the City from providing or maintaining services in excess of adopted standards. For example, the adopted LOS standard for Community Parklands is 1.2882 acres of parkland per 1,000 permanent residents. The City currently has an inventory of over 59 acres of parkland, and a 2008 population estimate of 16,718 permanent residents. Currently the City provides 3.53 acres of parklands per 1,000 permanent residents, or over twice the acreage required under the LOS standard.

CURRENT CAPITAL IMPROVEMENT PROGRAM

The purpose of the Capital Improvement Program is to evaluate the need for public facilities on Marco Island consistent with comprehensive plan elements; to estimate the cost of improvements for which the City has fiscal responsibility; to analyze Marco Island's capability to finance and construct the necessary improvements; to aid in adoption of financial policies to guide the funding of improvements; and to schedule the funding and construction of improvements in a manner necessary to ensure that capital improvements are provided when required based on needs identified.

Other than solid waste disposal, regional parks and public schools, the City is now the principal entity responsible for the provision of facilities and services subject to State required (LOS) standards. As confirmed by the evidence and documentation provided in this LOS Report and the Data and Analysis component of the Comprehensive Plan, the City does not have any LOS deficiencies to address in conjunction with future Capital Improvement expenditures. The City takes great pride in maintaining a financially feasible five-year CIP that nonetheless expends significant capital for the enhancement and expansion of public facilities and services for the benefit of the Island residents and visitors. Table 8.1 and Table 8.2 present, in summary form, financially feasible capital improvement programs over the next five calendar years, as adopted in December, 2008. Between Tables 8.1 and 8.2 the City and the City's Utility plans expenditures of over $88,143,200 between 2009 and 2013 on capital improvement projects.

Any bonded indebtedness held by the City is held at the highest standards, and will not limit the City's ability in any manner to address any potential LOS deficiency. The Capital Improvements documented by the City in Tables 8.1 and 8.2 are financially feasible.

EXHIBIT "A"

Table 8.1
SCHEDULE OF CAPITAL IMPROVEMENTS 2009-2013
(Transportation Facilities, Stormwater Drainage, Parks and Recreation)

Note: None of the improvements described in the following Schedule of Capital Improvement tables are required to correct current or projected Level of Service deficiencies from 2009 through 2013.

Table 8.1(a)
SCHEDULE OF CAPITAL IMPROVEMENTS 2009-13
TRANSPORTATION FACILITIES IMPROVEMENTS/ENHANCEMENTS

[---------Committed Funding Sources---------] [----Projected Funding Sources---]

PROJECT		FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	TOTALS
Description	Location/Address	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)
Bald Eagle Turn Lanes(1)	Bald Eagle Between Goldenrod & Elkcam Circle	—	—	—	$75,000 / $75,000 GF	$400,000 / $400,000 GF	$475,000 / $475,000 GF
Street Improvements(2)	City-wide	$280,000 / $200,000 RIF $80,000 GF	$400,000 / $200,000 RIF $200,000 GF	$400,000 / $200,000 RIF $200,000 GF	$300,000 / $200,000 RIF $100,000 GF	$400,000 / $200,000 RIF $200,000 GF	$1,780,000 / $1,000,000 RIF $780,000 GF
Bike Path Shoulder Widening (3)	City-wide	—	—	$100,000 / $100,000 GF	$100,000 / $100,000 GF	$100,000 / $100,000 GF	$300,000 / $300,000 GF
Marco Lake (4) Drive Sidewalk	Marco Lake Drive	$96,000 / $75,000CDBG $21,000 GF	—	—	—	—	$96,000 / $75,000 CDBG $21,000 GF
Bridge Integrity Study (5)	City-wide	---	---	---	---	$100,000 / $100,000 GF	$100,000 / $100,000 GF
Bridge Repairs (City-wide) (6)	City-wide	$1,271,600 / $1,271,600 GF	$545,000 / $545,000 GF	$350,000 / $350,000 GF	---	---	$2,166,600 / $2,166,600 GF
Bridge Repairs (7) (Smokehouse Bay)	Smokehouse Bay	$350,000 / $200,000 CIP $150,000 GF	$1,500,000 / $200,000 CIP $1,300,000 GF	$2,700,000 / $200,000 CIP $1,000,000 Grant	$3,900,000 / $200,000 CIP $1,000,000 Grant	$4,400,000 / $200,000 CIP $1,000,000 Grant	$12,850,000 / $1,000,000 CIP $3,000,000 Grant $8,850,000 GF

		---	---	$1,500,000 GF	$2,700,000 GF	$3,200,000 GF	
	ANNUAL TOTALS	$1,997,600 / $200,000 RIF $75,000 CDBG $1,522,600 GF $200,000 CIP	$2,445,000 / $200,000 RIF $2,045,000 GF $200,000 CIP	$3,550,000 / $200,000 RIF $1,000,000 Grant $2,150,000 GF $200,000 CIP	$4,375,000 / $200,000 RIF $1,000,000 Grant $2,975,000 GF $200,000 CIP	$5,400,000 / $200,000 RIF $1,000,000 Grant $4,000,000 GF $200,000 CIP	$17,767,600 / $1,000,000 RIF $3,000,000 Grant $75,000 CDBG $12,692,600 GF $1,000,000 CIP

Notes: No projected LOS deficiencies 2009-2013
Projects, Expenditures and Revenues per adopted FY 2008 Budget.

Abbreviations: GF - General Fund
RIF - Road Impact Fees
FDOT - Dept. of Transportation
GRANT- Collier County Grant
CDBG - Collier County Block Grant

(1) Bald Eagle Drive turning lanes will be provided between Goldenrod Avenue and Elkcam Circle and at the intersection of N. Barfield Drive and Bald Eagle Drive.

(2) This project involves the partial or full reconstruction of roadway intersection areas to resolve drainage problems, to replace asphalt pavement, to resolve inadequate turning radii, to remedy safety concerns, to alleviate excessive ponding of stormwater, and to construct or reconstruct paved shoulders and sidewalk improvements.

(3) This project involves widening Barfield Drive, Winterberry Drive, San Marco Road, and portions of Bald Eagle Drive for the construction of bicycle lanes along both sides of the roadway.

(4) Create a 6-foot sidewalk on 5th Avenue to provide adequate a convenient multimodal transportation system. Drainage will be addressed using valley gutters and improved drainage inlets between the existing pavement travel lanes, driveways and parking areas.

(5) The following are the repairs recommended by bridge engineering consultants based on the damage and deterioration caused by Hurricane Wilma and age.

(6) The following are the repairs recommended by bridge engineering consultants based on the damage and deterioration caused by Hurricane Wilma and age.

(7) The Smokehouse Bay Bridges have been significantly impacted by age, deterioration, and damage caused by Hurricane Wilma. These bridges are scheduled to be totally rebuilt.

Table 8.1(b)

SCHEDULE OF CAPITAL IMPROVEMENTS 2009-13
STORMWATER DRAINAGE IMPROVEMENTS/ENHANCEMENTS

[--------Committed Funding Sources--------] [----Projected Funding Sources---]

PROJECT		FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	TOTALS
Description	Location/Address	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)
Drainage Improvements(1)	City-wide, per drainage basins set in the Master Drainage Study	$600,000 / $200,000 BCBG $400,000 GF	$600,000 / $200,000 BCBG $400,000 GF	$600,000 / $200,000 BCBG $400,000 GF	$600,000 / $200,000 BCBG $400,000 GF	$600,000 / $200,000 BCBG $400,000 GF	$3,000,000 / $1,000,000 BCBG $2,000,000 GF
	ANNUAL TOTALS	$600,000 / $200,000 BCBG $400,000 GF	$600,000 / $200,000 BCBG $400,000 GF	$600,000 / $200,000BCBG $400,000 GF	$600,000 / $200,000 BCBG $400,000 GF	$600,000 / $200,000 BCBG $400,000 GF	$3,000,000 / $1,000,000 BCBG $2,000,000 GF

Notes: No projected LOS deficiencies 2009-2013
Projects, Expenditures and Revenues per adopted FY 2009 Budget.
BCBG – Big Cypress Basin Grants.

Abbreviations: GF - General Fund

(1) The repair or replacement of existing storm sewers is an on-going program necessary to preserve and maintain existing storm drainage capacity. Also annual re-grading of roadside drainage swales is required to minimize nuisance ponding and to maintain adequate stormwater drainage along local streets to achieve efficient discharge into receiving waterbodies.

Table 8.1(c)

SCHEDULE OF CAPITAL IMPROVEMENTS 2009-13
PARKS, RECREATION AND OPEN SPACE IMPROVEMENTS/ENHANCEMENTS

[--------Committed Funding Sources--------] [----Projected Funding Sources---]

PROJECT		FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	TOTALS
Description	Location/ Address	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)
Mackle Park Improvements (1)	1361 Andalusia Terrace	$220,000 / $200,000SPRG $20,000 GF	$7,605,000 / $7,605,000 BOND*	—	$150,000 / $150,000 GF	$150,000 / $150,000 GF	$8,125,000 / $320,000 GF $200,000 SPRG $7,605,000 BOND*
Winterberry Park Improvements (2)	1408 San Marco Rd.	$350,000 / $350,000 GF	---	—	—	—	$350,000 / $350,000 GF
Veterans Community Park (3)	Windward Drive & West Elkcam Circle	$275,000 / $275,000 CIP Cash Forward	$2,000,000 / $2,000,000 BOND	—	—	—	$2,275,000 / $275,000 CIP $2,000,000 BOND
Leigh Plummer Park Improvements (4)	758 N. Barfield Drive	—	—	$300,000 / $300,000 GF	—	—	$300,000 / $300,000 GF
Hard Court Conversion (5)	Racket Center	$80,000 / $40,000 RF $40,000 GF	---	---	---	---	$80,000 / $40,000 RF $40,000 GF
Roadside Border Landscaping(6)	South Collier Boulevard	$220,000 / $220,000 DOT	$150,000 / $150,000 GF	$150,000 / $150,000 GF	$200,000 / $200,000 GF	$200,000 / $200,000 GF	$920,000 / $220,000 DOT $700,000 GF
Capital Contingency	—	$120,000 /	$196,000 /	$270,000 /	$100,000 /	$100,000 /	$786,000 /

		$120,000 GF	$196,000 GF	$270,000 GF	$100,000 GF	$100,000 GF	$786,000 GF
Impact Fees	—	$150,000 / $150,000 IF	—	$300,000 / $300,000 IF	$150,000 / $150,000 IF	$150,000 / $150,000 IF	$750,000 / $750,000 IF
	ANNUAL TOTALS	$1,415,000 $200,000SPRG $275,000 CIP $40,000 RF $150,000 IF $530,000 GF $220,000 DOT	$9,951,000 $9,605,000 BOND $346,000 GF	$1,200,000 / $720,000 GF $300,000 IF	$600,000 / $450,000 GF $150,000 IF	$600,000 / $450,000 GF $150,000 IF	$13,586,000 / $2,496,000 GF $200,000 SPRG $275,000 CIP $40,000 RF $750,000 IF $9,605,000 BOND $220,000 DOT

Notes: No projected LOS deficiencies 2009-2013
Projects, Expenditures and Revenues per adopted FY 2009 Budget.

Abbreviations:
GF - General Fund
PIF - Park Impact Fees
DOT - Department of Transportation LAP agreement
SPRG - State Park and Recreation Grant
IF - Parks Impact Fees
CIP - Capital Improvement Plan Cash Forward
RF - Recreational Fund
* Bond Referendum anticipated to provide significant funding for major 2010 projects.

(1) On-going improvements to the City's flagship park pursuant to recommendations contained in the Mackle Park Master Plan.
(2) Improvements and enhancements to playing fields.
(3) Major improvements to be master planned.
(4) Construction of pathways and landscaping enhancements.
(5) Funding allows for the resurfacing of hard courts one and two with a synthetic surface. To replace under ground irrigation at courts three and four.
(6) To improve the quality of landscaping, in medians and roadside areas, on south Collier Boulevard between Winterberry Drive and Collier Court.

Table 8.2
SCHEDULE OF CAPITAL IMPROVEMENTS 2009-2013
(Potable Water and Sanitary Sewers)

Note: None of the improvements described in the following Schedule of Capital Improvement tables are required to correct current or projected Level of Service deficiencies from 2009 through 2013.

Table 8.2(a)
SCHEDULE OF CAPITAL IMPROVEMENTS 2009-13
POTABLE WATER FACILITIES IMPROVEMENTS/ENHANCEMENTS

PROJECT		FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	TOTALS
Description	Location/Address	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)
SCADA System (1)	Radio Polling System	$10,900 / $10,900 W R&R	—	—	—	—	$10,900 / $10,900 W R&R
Leak Detection (2)	Pilot location TBD	$100,000 / $100,000 W R&R	—	—	—	—	$100,000 / $100,000 W R&R
Inoperative Valves (3)	System-wide	$250,000 / $250,000 W R&R	—	—	—	—	$250,000 / $250,000 W R&R
Meter Replacement Program (4)	System-wide	—	$250,000 / $250,000 W R&R	$300,000 / $300,000 W R&R	$325,000 / $325,000 W R&R	—	$875,000 / $875,000 W R&R
Renewal & Replacement (5)	System-wide	—	$750,000 / $750,000 W R&R	$750,000 / $750,000 W R&R	$800,000 / $800,000 W R&R	$820,000 / $820,000 W R&R	$3,145,000 / $3,145,000 W R&R
RO Plant Membrane Replacement (6)	South Plant,, Lily Court and Heathwood Drive	$320,000 / $320,000 Cap. Reserves	$350,000 / $350,000 Cap. Reserves	$350,000 / $350,000 Cap. Reserves	$375,000 / $375,000 Cap. Reserves	$395,000 / $395,000 Cap. Reserves	$1,835,000 / $1,835,000 Capital Reserves
Vehicle Replacement Program (7)	—	—	$555,000 / $555,000 W R&R	$570,000 / $570,000 W R&R	—	—	$1,125,000 / $1,125,000 W R&R
South Plant Water	South Plant,, Lily Court and	—	—	—	$4,600,000 / $4,600,000 Bond	—	$4,600,000 / $4,600,000 Bond

Storage (9)	Heathwood Drive						
Unscheduled Capital Projects (10)	Contingency Funds	—	$150,000 / $150,000 Cap. Reserves	$150,000 / $150,000 Cap. Reserves	$150,000 / $150,000 Cap. Reserves	$150,000 / $150,000 Cap. Reserves	$600,000 / $600,000 Cap. Reserves
Filter Upgrades – North Plant (11)	North Plant Elkcam Circle	$1,598,300 / $1,598,300 Bond	—	—	—	—	$1,598,300 / $1,598,300 Bond
Emergency Generator – North Plant (12)	New Generator at North Plant	$1,500,000 / $1,500,000 Bond	—	—	—	—	$1,500,000 / $1,500,000 Bond
	ANNUAL TOTALS	$5,254,200 / $4,573,300 Bond $360,900 W R&R $320,000 Reserves	$6,055,000 / $4,000,000 Bond $1,555,000 W R&R $500,000 Reserves	$2,120,000 / $1,620,000 WR&R $500,000 Reserves	$6,250,000 / $4,600,000 Bond $1,125,000 W R&R $525,000 Reserves	$1,365,000 / $820,000 W R&R $545,000 Reserves	$21,114,200 / $5,505,900 W R&R $2,435,000 Reserves $13,173,000 Bond

Notes: No projected LOS deficiencies 2009-2013
Projects, Expenditures and Revenues per adopted FY 2008 Budget.
* Capital Reserves
** Anticipated Future Water Bond Issues
*** Actual and anticipated grant awards from SFWMD
**** FDEP grant award

Abbreviations: GF - General Fund
WIF - Water Impact Fees
Reserves - Capital Reserves
Bond - Future Bond Issue
SFWMD - SF Water Man. District
W R&R - Water Repair & Restoration Fund
Grant - FDEP grant

(1) To improve reliability of the SCADA System and expand capabilities of the system.
(2) An older area of Marco Island will be selected and sound wave technology will be used to identify leaks. Once identified and determined the source and quantity of lost water, then appropriate action will be taken.

(3) The program will allow Marco Island Utilities to have fewer customers out of service in maintenance situations, such as water main breaks and utility relocation. The age, environment, and infrequent use of the valves have created an urgent need to begin the valve replacement program.
(4) Water meter accuracy deteriorates with time. The normal life of a meter is 10 years. The Utility Department should replace approximately 10% per year and convert to "touch pad" devices to improve accuracy of readings.
(5) Historically, the Utility experiences a variety of distribution and collection system repairs. These repairs are unplanned and in some cases unknown.
(6) The Reverse Osmosis facility has 6 parallel treatment trains, each with 24 membrane tubes. As the membrane ages, the rejection level of solids decreases, allowing more dissolved solids to pass through the treatment plant. Replace one train per year with chemical cleaning of remaining trains annually.
(7) Scheduled replacement of field vehicles.
(8) To add an additional 1.67 million gallons per day of surface water treatment capacity.
(9) Design and construction of a new 2-3 million gallon storage tank at the South Plant complex.
(10) An annual budget allocation for a contingency account is proposed for each year of the Five-Year CIP.
(11) Rehabilitation of the lime softening clarifier includes replacement of radial and effluent launders.
(12) Design and install emergency generator at the North Water Plant. The generator will provide standby power during electrical outages to operate the plant continuously.

Table 8.2(b)
SCHEDULE OF CAPITAL IMPROVEMENTS 2009-13

SANITARY SEWER FACILITIES IMPROVEMENTS/ENHANCEMENTS

PROJECT		FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	TOTALS
Description	Location/Address	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)	Expenditure / Revenue Source(s)
Renewal & Replacement (1)	System-wide	—	$300,000 / $300,000 W R&R	$325,000 / $325,000 W R&R	$350,000 / $350,000 W R&R	$375,000 / $375,000 W R&R	$1,350,000 / $1,350,000 W R&R
W'Water Treatment Plant Improve (2)	North Plant, East Elkcam and Windward Drive	$2,448,100 / $2,448,100 Capital Reserve	—	—	—	—	$2,448,100 / $2,448,100 Capital Reserve
Deep Well Injection (3)	North Plant	$2,448,100 / $2,448,100 Sewer Assessments	—	—	—	—	$2,448,100 / $2,448,100 Sewer Assessments
Unscheduled Capital Projects(4)	Capital Projects	—	$400,000 / $400,000 Capital Reserve	$400,000 / $400,000 Capital Reserve	$400,000 / $400,000 Capital Reserve	$400,000 / $400,000 Capital Reserve	$1,600,000 / $1,600,000 Capital Reserve
W'Water Treatment Plant Improve (5)	North Plant Elkcam Circle	$11,771,000 / $11,771,000 Bond	—	—	—	—	$11,771,000 / $11,771,000 Bond
Gravity Line Upgrades (6)	System Repairs	—	—	—	$187,500 / $187,500 Bond	$2,000,000 / $2,000,000 Bond	$2,187,500 / $2,187,500 Bond
Re-Use 2 MG Storage	South Plant	—	—	—	$2,000,000 / $2,000,000 Bond	—	$2,000,000 / $2,000,000 Bond

Tank (7)							
W'Water Treatment Plant Expan. To 5 MGD (8)	North Plant	$3,144,500 / $3,144,500 Sewer Assess.	—	—	—	—	$3,144,500 / $3,144,500 Sewer Assess.
STRP Road Re-surfacing (9)	STRP Road Re-surfacing	$1,415,400 / $1,415,400 RBI	$2,221,800 / $2,221,800 RBI	$1,149,300 / $1,149,300 RBI	$939,700 / $939,700 RBI	—	$5,726,200 / $5,726,200 RBI
	ANNUAL TOTALS	$21,227,100 / $5,592,600 Sewer Assess. $2,448,100 Capital Reserve $11,771,000 Bond $1,415,400 RBI	$2,921,800 / $400,000 Capital Reserves $300,000 W R&R $2,221,800 RBI	$1,874,300 / $400,000 Capital Reserves $325,000 W R&R $1,149,300 RBI	$3,877,200 / $400,000 Capital Reserves $350,000 W R&R $2,187,500 Bond $939,700 RBI	$2,775,000 / $400,000 Capital Reserves $375,000 W R&R $2,000,000 Bond	$32,675,400 / $4,048,100 Cap. Reserve $1,350,000 W R&R $15,958,500 Bond $5,592,600 Sewer Assess. $5,726,200 RBI

Notes: No projected LOS deficiencies 2009-2013

Projects, Expenditures and Revenues per adopted FY 2009 Budget.

Abbreviations: W R&R - Wastewater Repair and Restoration Fund
Sewer Assessments
Wastewater Capital Reserve

(1) Historically, the Utility experiences a variety of distribution and collection system repairs. These repairs are unplanned and in some cases unknown.

(2) To upgrade and expand the existing wastewater treatment plant to 5 million gallons per day capacity to facilitate the completion of the STEP program.

(3) The existing deep injection well takes reject water from the RO facility as well as wastewater effluent that does not meet reuse standards. Expansion of the wastewater treatment plant will increase the amount of treated wastewater that may have to go down the injection well. The existing deep injection well is at maximum capacity and cannot accommodate these increase. A second injection well is required to expand these capacities.

(4) To have the resources available within the CIP budget to meet unscheduled needs.
(5) To upgrade and expand the existing wastewater treatment plant to five million gallons.
(6) Historically, the utility experiences a variety of distribution and collection system repairs. These repairs are unplanned and in some cases unknown.
(7) The utility is making provisions to increase the capability to deliver additional reuse water. The majority of potential new irrigation users are along South Collier Boulevard to Collier Court.
(8) Replace and improve the wastewater treatment plant to five million gallons per day capacity.
(9) To resurface the roads that are impacted during the installation of the Septic Tank Replacement Program.

AVAILABLE OR POTENTIAL FUNDING SOURCES

A variety of revenue sources and funding mechanisms are available to fund capital improvement financing. The revenue sources that are currently available are discussed below:

1. Ad Valorem Taxes

Chapter 166, Florida Statutes, provides for the levy of Ad Valorem taxes on real property and tangible personal property. The definition in Section 192.001 states, "the term 'property tax' may be used interchangeably with the term 'Ad Valorem tax'". The Florida Constitution limits local governments to a maximum of 10 mills of Ad Valorem taxation.

The City's taxable value for 2008 as determined by the Collier County Property Appraiser was $10,486,293,910. At the adopted millage rate of 1.4766 mils, the Ad Valorem revenue will be $14,709,857. This revenue is calculated at 95% to allow for uncollectible revenue from prompt payment discounts of up to 4%, and other adjustments in accordance with Florida Statutes.

2. Local Option Gas Tax

Local governments are authorized, pursuant to ss. 206.41(1)(e) and 206.87(1)(c) F.S. to levy up to 11 cents of local option fuel taxes in the form of two separate levies. The first is a tax on one to six cents on every net gallon of motor and diesel fuel sold in the County, pursuant to s. 336.025(1)(a), F.S. A tax of six cents was adopted by Collier County in March, 1987. The proceeds may be used to fund transportation expenditures.

The second tax is a one to five cent levy upon every net gallon of motor fuel sold in a County, pursuant to s. 366.025(1)(b), F.S. Diesel fuel is not subject to this tax. This additional tax was adopted by Collier County effective January 1994. These funds must be used to meet the capital element of the comprehensive plan.

Any newly incorporated municipality, eligible for participation in the distribution of monies under the Local Government Half-Cent Sales Tax and Municipal Revenue Sharing Program and located in a county levying either local option fuel tax, is entitled to receive a share of the tax revenues. The distribution shall be:

- Equal to the County's per lane mile expenditure in the previous year times the number of lane miles within the municipality's jurisdiction or scope of responsibility, in which case the County's share would be reduced proportionately; or
- Determined by the local act incorporating the municipality.

Collier County extended the six-cent fuel tax in 1999. Through an agreement with the City, Collier County designated 4.97% of the fuel tax collection to Marco Island. This percentage is equal to that calculated by the above formula.

3. Municipal Cigarette Tax *Note: May have expired*

In 1943 Florida levied its first tax on cigarettes at a rate of three cents per pack. It was not until 1971 and the creation of the Municipal Financial Assistance Trust Fund that the state began to share a portion of the state cigarette tax revenues with municipalities. The enacting legislation, creating the Trust Fund, required that the fund be financed from the proceeds of a two-cent per pack tax. The current tax is $0.339 per pack. The share of this fund for an individual municipality is not determined by the value of cigarettes sold within the boundary of each city. Instead, a formula is used where the primary factor is the ratio of each city's population versus the countywide municipal population. These funds are considered to be general revenue and can be used for any specific public purpose.

4. Municipal Revenue Sharing Proceeds

Chapter 72-360, Laws of Florida, created the Revenue Sharing Act of 1972, providing for general revenue sharing. Revenues from this fund comes from 32.4% of the tax on each pack of cigarettes, the one-cent municipal gas tax, and 25% of the State's alternative fuel decal user fee. The share of this fund for an individual municipality is determined by a complex formula that includes its own population, statewide municipal population, county population, county sales tax collections, total statewide sales tax collections from municipalities, statewide municipalities' property valuation, and by a factor measuring relative revenue-raising ability. About 35% of these funds are a result of the municipal gas tax. This percentage of the proceeds can be used only for transportation purposes, including transportation related public safety activities.

5. Half-Cent Sales Tax

Chapter 82-154, Laws of Florida, created the local government half-cent sales tax program. The primary purpose of the tax was to provide relief from Ad Valorem taxes in addition to providing counties and municipalities with revenues for local programs. Current revenues from this fund come from 9.653% of the state sales tax, which is shared by both counties and cities. The distribution formulas are population-oriented but not directly proportional to population increase. Municipalities can use these funds for municipal-wide programs. These funds can also be pledged towards repayment of bonds or used for capital projects.

6 Franchise Fees

The City has adopted franchise agreements with Lee County Electrical Cooperative. The agreement provided for payment of a franchise fee equal to 5% of revenues. Effective January, 2009, the City's share decreased to 3.6%. These funds are solely for the use of undergrounding electric lines on the Island.

7. Impact Fees

Impact fees are used to allow new development to pay its proportionate share of capital outlay and infrastructure improvements required because of new development. Impact fees that can be used for capital improvement projects include:

- Community Park Impact Fees
- Road Impact Fees
- Police and Fire Impact Fees

In addition to these impact fees, the County also collects several other impacts fees for schools, regional parks, EMS, libraries, correctional facilities, and governmental facilities. It is the County's responsibility to provide for these services, and to insure that facilities are installed/upgraded concurrent with new development.

8. General Obligation Bonds

These bonds are secured by a pledge of the issuer's full faith and credit. In March, 2004, the Rating agencies assigned the following to the City's General Obligation Bonds: Fitch - "AA"; Moody- "Aaa"; S&P- "AA-".

9. Revenue Bonds

Debt service on these bonds is payable solely from the revenue generated from the operation of the facilities being financed or from other non-tax sources. In March, 2004, the ratings were as follows:

Sales Tax:	Fitch- "AA"; Moody- "Aa2"; S&P- "AA-"
Utility (underlying)	Fitch- "A-" ; Moody- "A2"; S&P- "A"
Utility (BBIA Ins.)	Fitch- "AAA"; Moody- "Aaa"; S&P- "AAA"

10. Grants

Grants from FDOT, SFWMD and FDEP have been successfully awarded to the City of Marco Island, and used for a variety of enhancement and land acquisition/improvement projects. These will be continually pursued.

CURRENT FACILITIES INVENTORY

This section provides an overview of current facilities for each service subject to a Level of Service

standard, and programmed improvements and/or enhancements over the next five years.

A. TRANSPORTATION:

The various functional classifications of the Marco Island roadway network are listed below along with the number of lanes for each facility. The Island's roadway network is comprised of one minor arterial, two collectors, eleven local collector roads, and numerous local roads.

Roadway	Designation	# Through Lanes
N Collier Blvd. (Jolley Bridge to San Marco Rd)	Minor Arterial	4
Bald Eagle Drive (CR 953)	Collector	4/2
San Marco Road (CR 92)	Collector	2
North Barfield Drive	Local Collector	2
South Barfield Drive	Local Collector	4/2
S. Collier Blvd. (South of San Marco Rd.)	Local Collector	4
Winterberry Drive	Local Collector	2
Landmark Street	Local Collector	2
Elkcam Circle	Local Collector	2
S. Heathwood Drive	Local Collector	2
Yellowbird Street	Local Collector	2
Hernando Drive	Local Collector	2
Tigertail Court (portion)	Local Collector	2
Kendall Drive (portion)	Local Collector	2

Level of Service (LOS) Standards

As a qualitative measure of operational characteristics, the Level of Service (LOS) descriptions used for transportation planning, adopted from the Transportation Research Board, Highway Capacity Manual, 2000 (Washington, DC: TRB, 2000), are a follows:

LOS "A" The highest quality of service a particular class of highway can provide. It is a condition of free flow in which there is little or no restriction on speed or maneuverability caused by the presence of other vehicles in the traffic stream. Stopped delay at intersections is minimal.

LOS "B" A zone of stable flow and representing reasonably unimpeded traffic operations at average travel speeds. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Operating speed is beginning to be restricted by other traffic. Drivers are not generally subject to appreciable tensions.

LOS "C" Still represents stable traffic flow operations, however, the ability to select speeds, maneuver and change lanes may be more restricted than in LOS "B". Longer queues (traffic lines) and/or adverse signal coordination may contribute to lower average travel speeds. Motorists will experience an appreciable tension while driving.

LOS "D" Approaching unstable flow. Tolerable operating speeds are maintained but are subject to considerable and sudden variation. Freedom to maneuver and driving comfort are low because of increased lane density. The probability of accidents has increased and most drivers consider this level of service undesirable.

LOS "E" The upper limit of LOS "E" is the capacity of the facility. Operation at this level of service is unstable, and speeds will fluctuate widely from point to point. There is little independence of speed selection and maneuverability. Driving comfort is low and accident potential is high.

LOS "F" Describes forced-flow operations and represents traffic flow characteristics by extremely low speeds. Speed and rate of flow are below levels attained in LOS "E", and may, for short time periods, drop to zero. Intersection congestion is likely at critical signalized locations, with high approach delays resulting with the queue continuing to grow upstream as long as the arrival rate continues to exceed the discharge rate.

The original comprehensive plan adopted a LOS "D" as the minimum acceptable level of service for Marco Island's roadway, except for the portion of North Collier Blvd. (San Marco Road to the Jolley Bridge), which was required to operate at a LOS "C".

Current Travel Conditions

The table below is intended to illustrate the difference between the maximum traffic under adopted LOS standards, and actual traffic counts (2004), for selected roadways.

Average Daily Traffic Counts

Roadway	Classification	Adopted LOS Max. Volume	Volume 2004	V/Std Ratio
N. Collier Blvd.	Minor Arterial	38,900	27,743	0.713
S. Collier Blvd.	Local Collect	29,500	18,885	0.640
Bald Eagle Drive	Collector	15,300	13,233	0.865
San Marco Road	Collector	15,300	12,080	0.790
North Barfield Dr.	Local Collector	13,400	8,480	0.633
South Barfield Dr.	Local Collector	13,400	4,267	0.318

Winterberry Drive	Local Collector	13,400	4,961	0.370
Elkcam Circle	Local Collector	13,400	6,940	0.518
S. Heathwood Dr.	Local Collector	13,400	5,515	0.411
Yellowbird Street	Local Collector	13,400	2,469	0.184
Tigertail Court	Local Collector	13,400	2,756	0.205
Kendall Drive	Local Collector	13,400	3,454	0.258

As of 2009, it is estimated that all roadways on Marco Island operate within adopted Level of Service (LOS) standards.

Future Traffic Circulation

Based on the original comprehensive plan, and supplemented by annual Level of Service Reports, the Island's roadways are anticipated to function above the adopted LOS "D" standard well into the future, and therefore the City can focus on desired upgrade projects rather than rectification of deficiencies. Further, the Island's roadway network is functioning and will continue to function at a level that will not create any problems for future development. Nevertheless, the City continues to make system upgrades that enhance safety, capacity, bicycle/pedestrian usage, and beautification.

Future Road Link and Bridge Capacity Improvements

The next table identifies the existing and proposed number of lanes for the primary roadways on the Island. The decision on future number of lanes for the roadways was based on projected future traffic volumes, current conditions, and community desires. Hurricane evacuation also plays an important role in determining roadway widths and lane requirements.

2012 Roadway Lane Summary

Roadway	From/To	Existing Lanes	Planned
Collier Boulevard	Jolley Bridge/Collier Ct.	4	4
N. Barfield Dr.	Bald Eagle/San Marco Rd.	2	2
S. Barfield Dr.	San Marco Road/South	4	4
Bald Eagle Dr.	N. Barfield Dr./San Marco Rd.	2	3-4
San Marco Road	Collier Blvd./East of Barfield Dr.	2	3-4
Winterberry Dr.	S. Collier Blvd/S. Barfield Dr.	2	2
S. Heathwood	Bald Eagle Dr./Winterberry	2	2
Yellowbird St.	Bald Eagle/ N. Collier Blvd.	2	3

The potential widening of Bald Eagle Drive, San Marco Road and Yellowbird St. will continue to be studied. Intersection improvements should help relieve congestion along these roadways, which should enhance capacity and safety, and keep the roadways operating at or above adopted LOS "D"

standards.

Major Intersection, Maintenance and Traffic Operations Improvements

There are ten major intersections on the Island for which improvements have either been made, or will be made in conjunction with future roadway projects. The ten major intersections are listed below:

1. North Collier Boulevard/North Barfield Drive
2. North Collier Boulevard/Bald Eagle Drive
3. Collier Boulevard/San Marco Road
4. Bald Eagle Drive/San Marco Road
5. Barfield Drive/San Marco Road
6. Collier Boulevard/Tigertail Court
7. Kendall Drive/Collier Boulevard
8. Winterberry Drive/Collier Boulevard
9. North Barfield Drive/Bald Eagle Drive
10. Bald Eagle Drive/Elkcam Circle

Improvements to the ten intersections identified above were analyzed and designed by the City's transportation consultant. The improvements, which are combinations of right and left turning lanes and signalization, are consistent with the roadway cross sections proposed for the Island.

A situation mandating special consideration occurs when intersections (e.g., South Heathwood and Winterberry Drive) are located too near to bridges or other vertical alignments. Vertical alignments disrupt sight lines and affect vehicular speed. These intersections should be signed to make drivers, pedestrians, and bicyclists aware of potential dangers. Vehicular speeds should be reduced to minimize the danger potential at these intersections.

In addition to the improvements discussed above, the Five Year Schedule of Capital Improvements contained in the Capital Improvement Element presents cost and time frames for programmed improvements which are needed for maintenance, traffic flow and operational purposes. None of the subject local transportation improvements are required to maintain roadway LOS standards. These on-going improvements will, in total, improve the capacity of the transportation network and keep the City's primary roads at or above the adopted LOS "D" standard.

Planned and Programmed FDOT and MPO Projects

The current Five Year CIP for Marco Island serves as the de-facto program for MPO projects on Marco Island. Per the CIP, the City has committed $15,116,600 for bridge improvements and $2,651,000 for roadway improvements. These commitments are both engineering and financially feasible.

Maintaining LOS Standards and Advancing Plan Goals, Objectives and Policies

Marco Island experiences a significant seasonal traffic variation. The peak season begins in November and extends through April. There is also an increase in population and traffic during the summer months, but that increase is not nearly as significant as the increase during the winter months.

To remain consistent with established concurrency guidelines, the City of Marco Island must maintain adopted LOS "D" standards. Up to 2005, the Collier County's Transportation Department provided quarterly traffic counts for thirty (30) stations throughout the Island. The City will conduct traffic counts in the future. Should a roadway begin to near the threshold for LOS "D" operation, additional measures will be undertaken to measure traffic volumes to determine peak hour volumes. However, as of 2009, no roadway subject to concurrency requirements, except for Bald Eagle Drive, is close to LOS "D" thresholds.

B. POTABLE WATER

Existing Potable Water Facilities

With the acquisition of Florida Water Services assets and resources, the City of Marco Island became the primary source for potable water and sanitary sewer services not only for city residents, but also for the residents of Marco Shores located approximately two miles north of the Island. The City also provides potable water to Collier County for distribution to Goodland and Key Marco.

There are two potable water treatment facilities on the island. A smaller "package treatment" facility at Marco Shores was operated by Marco Island Utilities (MIU) until August, 2007. From that time forward, under an Interlocal agreement with Collier County, MIU has purchased potable water for resale to customers at Marco Shores. The North potable water treatment plant is located off Windward Drive, in the East Elkcam Circle area of the Island. The raw (untreated) water supply for the Elkcam Circle plant is piped from an open aquifer or from underground storage in an Aquifer Storage and Recovery (ASR) well field, both located nine miles north of the island. This open aquifer, the "Collier Pit" or "Marco Lake" collects rainfall and surface waters that naturally flow into the lake, and also draws raw water from the Lower Hawthorne Aquifer, where MIU stores the raw water in an ASR facility consisting of seven wells and a pre-treatment facility. This potable water treatment facility is permitted to pump and treat 6.7 million gallons per day (mgd).

The second on-island treatment facility is the South water plant, located off Heathwood Drive, behind Mackle Park. The raw water treated through the reverse osmosis process comes from 18 wells, each approximately 500 feet depth, drawing water from the Mid-Hawthorne Aquifer, which is part of the deep Florida aquifer system. The Reverse Osmosis (RO) plant is permitted to produce 6.0 mgd.

The combined permittable treatment capacity of the two on-Island plants is 12.7 mgd, or 1.7 mgd greater than in 2001 when the original comprehensive plan was adopted. In addition to the treatment plants, the City maintains transmission and distribution lines, force mains, and seven ASR (aquifer storage and retrieval) injection wells.

Potable Water Demand

The demand for potable water is influenced primarily by two factors. The first factor is the significant population fluctuation during "season" (November through April) when the current year-round population of 17,075 (2008 Shimberg estimate) will swell to over 40,000 due to the influx of tourists and seasonal residents.

The second factor is the amount of rainfall fluctuation throughout the year. The "dry season", when rainfall averages 1 to 2 inches per month correlates when the population on the island is at its greatest. Conversely, during the "wet months" (June through September) average rainfall is about 8 to 9 inches per month when the service population is at its lowest levels.

- The original Comprehensive Plan set a Level of Service (LOS) standard of 200 gallons per capita per day for potable water. With the total permittable capacity of the on-Island treatment facilities at 12.7 mgd, there is more than sufficient treatment capacity to meet peak season population LOS requirements (12,700,000 gallons/41,000 people = 310 gallons per capita per day). However, when combining peak season population with irrigation needs during the corresponding dry season, the system could potentially be pushed to meet demands without other strategies and policy measures. Therefore, additional surface water treatment is being programmed for 2014/2015, and reuse water storage and distribution will be improved.

Water Conservation

With the assumption of potable water services, the City has established and adopted significant water conservation regulations as contained in Section 18 of City Code. In particular, Section 18-75 provides for year-round landscape irrigation restrictions which limit irrigation to three days per week between the hours of 12:01 am and 8:00 am. In addition, "all water irrigation activities must and shall be operated in an efficient manner so as to not allow water to be applied to travel lanes on adjacent roadways" and "all water irrigation systems shall be equipped with a properly installed rain sensor switch". Failure to comply can result in an initial fine of $75 and $500 for repeat offenders. Further regulations have been imposed by the South Florida Water Management District limiting irrigation to two days per week during extreme drought conditions.

The City does provide exceptions to the irrigation limitations for:

- Landscaping irrigation from which the source of the water is 100 percent reclaimed water.
- Landscaping irrigation from which the source of the water is 100 percent saltwater.
- Irrigation wholly from a low volume irrigation system.
- Use of low volume mobile washing equipment provided all unused water drains into a ground surface.
- Water use to the extent authorized by a specific consumptive use permit, or similar permit, issued to the respective water user by the South Florida Water Management District.

Future Water Facilities Needs

When the City acquired the potable water assets from Florida Water Services, it recognized that there were significant infrastructure issues to address in addition to the need to enhance and expand capacity. While there is currently sufficient capacity to meet the adopted LOS standard of 200 gallons per capita per day over the next five years (2009 – 2013) the City, through its Utility Department (Marco Island Utilities), will expend $ 21,114,200 in potable water system capital expenditures. Funded through bonds, impact fees, and assessments, these capital improvements projects will enhance service delivery, storage capacity, facility expansion, and overall system reliability.

C. SANITARY SEWER

Existing Sanitary Sewer (Wastewater) Facilities

When the original Data and Analysis section of the 2001 Comprehensive Plan was prepared, there were three entities involved in the collection of sanitary sewage on Marco Island: Florida Water Services (FWS), Collier County, and North Marco Utilities (Old Marco). These three entities provided collection service (all treated by FWS) for approximately 50% of the Island. The remaining areas, utilized individual septic tank systems. Throughout the initial years of cityhood, and after the acquisition of the water/wastewater system from FWS, permits for individual septic tank systems were issued by the Collier County Health Department to accommodate new residential growth and development on the Island.

When the City acquired the wastewater facilities from Florida Water Services in November 2003, the City identified necessary capital upgrades and improvements. Assets and facilities acquired by the City included the main wastewater treatment plant on Windward Avenue (Elkcam Circle) with a permitted treatment capacity of 3.5 million gallons per day; a deep well for effluent disposal; reclaimed water lines to the golf course, Tommie Barfield Elementary School, and along a portion of Collier Boulevard serving commercial and multi-family developments; and miles of collection lines and lift stations. Off-island, the City also assumed ownership of the Marco Shores package treatment plant, a reclaimed water reuse site at Marco Shores, and reclaimed water distribution lines for Marco Shores and the Isle of Capri sewage collection system.

For the past several years the new Marco Island Utilities has been working diligently to make neglected system-wide improvements, to coordinate system upgrades in conjunction with major infrastructure projects such as the reconstruction of Collier Boulevard, and to prepare plans for the future expansion of sanitary sewer services for the entire Island. Most of the initial system upgrades and maintenance projects were financed by the initial bond to purchase the utility and its assets from Florida Water Services. While Collier County no longer maintains any wastewater services on the Island, (transferred to the City), North Marco Utilities continues to provide collection services to a limited customer base in the Old Marco area. The collected wastewater is treated by the City.

Current Sanitary Sewer Demand and Capacity

The City of Marco Island acquired the wastewater (sanitary sewer) facilities and assets from Florida Water Services (FWS) in November 2003. FWS owned and operated one on-Island treatment facility on East Elkcam Circle, and one off-Island treatment plant at Marco Shores. The Elkcam Circle facility acquired from FWS is now operated by Marco Island Utilities, which is responsible for the 5.0 million gallon per day (mgd) Membrane Biological Reactor (MBR) plant, 250 miles of sewer collection lines, 88 wastewater lift stations, and 40 miles of reuse distribution lines. The off-island facility at Marco Shores, also operated by Marco Island Utilities, has a permittable capacity of 300,000 gallons per day (gpd).

Adjacent to the North wastewater treatment plant are two deep well injection systems for the disposal of brine reject water from the Reverse Osmosis (RO) potable water plant and wastewater effluent that does not meet FDEP total dissolved solids requirement or is able to be sold as reuse water. As an alternative to deep injection well disposal, the City is able to transfer a limited capacity of effluent via existing piping to a percolation pond at the Marco Shores development for naturally settling and infiltration recovery.

With the high cost per unit for potable water, expanding the re-use of treated water for irrigation purposes is desired by many potential on-Island customers, particularly multifamily and commercial developments. As a service provider, the ability to recoup some treatment costs with the resale of treated water is economically efficient. Over the next seven years, the City is seeking to expand storage capacities for treated effluent by 2 mg, and to expand the distribution system to make reuse water available to a wider customer base. The enhanced storage capacities will allow for a more reliable source for irrigation throughout the year, particularly in the dry season.

The 2001 Comprehensive Plan established a LOS standard of 100 gallons per capita per day for sanitary sewer service. This was the LOS standard that was applicable prior to cityhood, and which Florida Water Service was committed to providing. It remains as the current Level of Service following the adoption of the EAR –based amendments in 2008.

Future Wastewater Needs

The City of Marco Island is implementing a septic tank replacement program for the replacement of septic tanks with central sewer disposal and treatment. The Table below identifies the areas scheduled for the Septic Tank Replacement Program and outlines the approved design and construction schedule.

7-Year Septic Tank Replacement Program

Sewer District	Year Built	ERC's	Average Flow (gallons per day)
South Barfield	2006	125	27,500
Tigertail	2006	253	55,660
North Marco	2007	298	65,560
North Barfield	2007	468	102,960
West Winterberry	2007	648	142,560
Lamplighter	2008	393	86,460
Sheffield	2008	441	97,020
Kendall	2009	671	147,620
Mackle Park	2009	656	144,320
Gulfport	2010	346	76,120
East Winterberry North	2010	116	25,520
East Winterberry South	2010	196	43,120
Copperfield	2011	250	55,000
Goldenrod	2011	367	80,740
Estates	2012	569	125,180
Total		6,094	1,30,680

The Septic Tank Replacement Program will be funded via neighborhood assessments. The City of Marco Island is providing a range of payment options and deferral programs for payment of costs associated with the connection to central sewers.

In addition to the septic tank replacement program, the City, through its Utilities Division, is undertaking a capital improvement program that will both expand and enhance the wastewater system capacity. Concurrent with the septic replacement program, the City is expanding treatment capacity from 3.5 to 5.0 million gallons per day by 2011. Between 2009 and 2013, the City will

make $32,675,400 in system upgrades and expansion projects, both on-Island and off-Island at the Marco Shores facility.

Per the capital plans adopted by the City, there should be sufficient capacity over the next five years, and beyond, to accommodate new growth and development consistent with the adopted LOS standard of 100 gallons per capita per day, including those new customers from converted septic tank systems. Nonetheless, the City will require that a finding of adequate public facilities is issued in conjunction with and prior to the issuance of any new development permit.

D. STORM WATER MANAGEMENT

Storm water management involves man-made means to address the flow of waters that result from a rainfall event. Storm water management facilities include structures that are designed to collect, convey, hold, divert, or discharge storm water and may involve storm water sewers, canals, detention facilities and retention facilities. The Deltona Corporation constructed the majority of the storm water management structures on Marco Island in the 1970s and early 1980s. At the end of the Deltona period the operation and maintenance of the storm water facilities became the responsibility of Collier County.

Collier County operated and maintained the storm water management and drainage infrastructure until the City incorporated in August, 1997. With the creation of the City's Public Works Department, the operation and maintenance of storm water facilities became the responsibility of the City effective October 1, 1998. That acknowledgment of responsibility coincided with the transfer of rights-of-way from Collier County to the City via an Interlocal Agreement.

Marco Island's storm water management and drainage facilities consist of a system of swales, catch basins, underground drainage conduits, and outfall structures of various materials which collect and discharge the runoff from rainfall events. The runoff is generally directly discharged into man-made and natural water bodies which are connected to the natural bays and tidal water bodies. All water bodies receiving direct discharge are classified as Class II or Class III waters in accordance with the Florida State classification system (Chapter 62-302.400, F.A.C.). Ultimately all runoff is received by the Gulf of Mexico.

The development of Marco Island's infrastructure has resulted in the following average post-development elevations. The majority of the roadways vary in elevation from 4.5' - 8' NGVD (National Geodetic Vertical Datum) or 'sea level', as it is commonly referred to. Undeveloped lots range in elevation from 5' - 7' NGVD. Seawalls vary in elevation from 4' to 5' NGVD. Typically, swales vary in elevation from 2.5' to 5' NGVD. Exceptions to these generalized elevation descriptions exist along the beach front, around Barfield Bay, within the southeastern portion of the Estates section, and on the south side of Robert's Bay. These four sizable areas contain a unique soil deposit that consists of small rolling dune-like hills with elevations ranging from 10' to 45' NGVD.

The Master Drainage Report (March, 2000) began with a review of the Deltona Corporation's plans for the development of the Island which indicated that their drainage system was designed to pass a 10 year, one hour storm with an intensity of duration of approximately 3.3 inches per hour. The Rational Method was used to size the drainage system conduits. The design storm of 1 hour is the rainfall event that both the City of Naples and Collier County use as the minimum standard for the design of subsurface drainage facilities. Per the Master Drainage Report, it was recommended that the City of Marco Island utilize the 10 year, one hour storm event as the minimum standard for the design of subsurface drainage facilities for the City.

The Level of Service (LOS) design standard for new storm water management facilities on Marco Island is the ten (10) year, one (1) hour, storm event with 3.3 inches/hour intensity duration. For existing and future drainage system components the following design LOS standard hierarchy is provided:

LOS Standard A: Upstream (US) Ground Elevation - Upstream Hydraulic Grade Line (US HGL) > 0.5 Feet.

LOS Standard B: US Ground Elevation - US HGL > 0.2 Feet.

LOS Standard C: US Ground Elevation - US HGL > or = 0.0 Feet.

LOS Standard D: US HGL < or = 5.2 Feet, NGVD*.

LOS Standard E: US HGL > 5.2 Feet, NGVD*.

For existing drainage system components, a level not to exceed the parameters of LOS shall be adopted.

(*) May be acceptable LOS standard at a limited number of roadway locations due to extreme topographical conditions.

Future LOS Conditions

Resolution and preventative maintenance are the hallmarks of Marco Island's strategy to address storm water drainage. Between, 2009 and 2013, the City has scheduled $3,000,000 for storm water drainage projects in the Capital Improvement Plan. The following items are included under the storm water drainage improvement projects:

- Replacement of existing outfalls

- Right-of-way swale drainage improvements
- Citywide drainage improvements (special needs)
- Reconstruction of throat inlets
- Florentine Gardens outfall (enhanced)
- Swallow Avenue outfall (enhanced)
- Between Elkcam Circle and Rose Court

Based on information and recommendations contained in the City's Master Drainage Plan, consultants have reviewed the design plans and subjected field-verified conditions to a simulated hydraulic model. The resultant engineering data and findings indicated that the existing surface and sub-surface drainage infrastructure generally has the capacity to convey and discharge runoff from the ten-year (frequency) one-hour (duration) storm event. However the plan emphasizes that some planned outfalls were never constructed, and also recommends that extensive reconstruction/replacement work is necessary for the Stormwater drainage system to function at design capacity.

In recognition that drainage deficiencies exist throughout the City requiring diverse corrective actions, the current CIP and prior CIP's provided for a multifaceted approach to support various improvement actions. While significant progress has been made with critical drainage failures addressed in a timely fashion, remaining drainage systems requiring improvements will be perpetuated due to the limited capital funds.

E. COMMUNITY PARKS

The Marco Island community is served by a wide array of public and private recreation sites and several active and passive open space areas. With outstanding natural resources and a favorable climate, recreation and open space opportunities are, and will continue to be, a primary component of the City's superb quality of life.

Within one year of incorporation, the City was successful in acquiring title to five neighborhood and community parks from Collier County. The City has also acquired title to the former Glon property (Veteran's park) as well as several undeveloped tracts to support linear parks and greenways. The County still owns and operates three park facilities on the Island. Private developments host numerous amenities for their residents, including swimming pools and tennis facilities. Further, there are several private and quasi-public clubs and organizations that provide important recreational facilities and amenities that are available for a fee.

The City now has a Parks and Recreation Department to operate and maintain the community parks and open space areas throughout the community. From active league play to concerts, the City's Parks and Recreation Department provides residents and visitors with year-round recreational opportunities.

Public Sites and Facilities

There are currently eight public park sites, one joint use recreational facility, and five passive, open space locations on Marco Island (See Table below). Of the eight park sites, three are owned and managed by Collier County as part of their Regional Park system. While they are considered by Collier County as part of their Regional Park system, the parks actually function as community parks in terms of use and accessibility to Marco Islanders. The City owns outright five park sites, and four open space sites. The facilities at Tommie Barfield are owned by the Collier County School Board, but maintained by the City through an Interlocal Agreement. In total, the residents and visitors of Marco Island have ready access to 100 acres of neighborhood, community, regional and joint-use parklands and amenities, and another 6.8 acres of accessible, passive open space.

Park and Open Space Facilities on Marco Island

Neighborhood Parks	**Ownership/Management**	**Facilities**	**Acreage**
Leigh Plummer	City of Marco Island	Passive, playground	5
Tommie Barfield	Collier County School Board/City of Marco Island	Baseball, tennis, playground	10
TOTAL			15 acres
Community Parks	**Ownership/Management**	**Facilities**	**Acreage**
Frank E. Mackle	City of Marco Island	Community Center, Basketball, Jogging Path, playground	30
Winterberry	City of Marco Island	Ballfields	5
Racquet Center	City of Marco Island	Tennis/Racquetball	3
Veterans'	City of Marco Island	To be Master Planned	7
Tigertail Beach	Collier County	Public beach access, parking, playground	32
Caxambas	Collier County	Boat ramp, parking, fuel	5
South Marco Total	Collier County	Beach Access, parking, picnic	3 85 Acres
Open Space	**Ownership/Management**	**Facilities**	**Acreage**
Jane Hittler Park	City of Marco Island	Passive	>1

Pier 81 Easement	A&N Corporation	Passive	>1
Tracts C&D	City of Marco Island	Linear park, trail	3
Barfield/Collier Blvd.	City of Marco Island	Passive, gateway	>1
Heathwood/San Marco	City of Marco Island	Passive/parking	>1
Beach Access Easement	Madeira Condominium	Passive	>1
Beach Access Easement	Marriott Crystal Shores	Passive	>1
TOTAL PARK and OPEN SPACE			109 Acres

In addition to the public recreation sites and amenities, there are several private recreation sites that provide facilities and amenities for the Marco Island community. The Table below identifies some of the private recreation sites on the Island, and a brief summary of facilities that are available to the public, for a fee, on Marco Island.

Private Recreational Facilities on Marco Island

Facility	Classification	Facilities/Amenities	Land/Water Acreage	Total
Marriott Resort	Resort	Tennis, Pools, Beachfront	34.5/0.0	34.5
Island County Club	Golf Course	Golf, Tennis	105.0/21.5	126.5
Island Yacht Club	Yacht Club	Saltwater Marina, Slips	5.0/12.0	17.0
YMCA	Recreation Center	Gymnasium, Pool, Tennis, Playground	9.0/0.0	9.0
Marco River Marina	Marina	Saltwater Marina, Slips, Dry Storage	3.67/1.97	5.64
Moran's Barge	Marina	Saltwater Marina, Boat Launch-Ramp	2.5/8	10.5
Residents Beach	Private Beach	Beach, Parking, Concessions	14.0	14.0
MICA Beach Access	Beach Access	Beach Access	3.0	3.0

Level of Service Standards

For guidance in developing a level of service (LOS) standard for parkland acreage on Marco Island, City staff consulted the Collier County Growth Management Plan (GMP). The County's GMP identified an LOS standard of 2.9412 acres per 1,000 residents for regional parks and 1.2882 acres per 1,000 residents for community parks.

As stated earlier in this element, the regional park facilities on Marco Island truly act and serve as extensions of the City's community park network. These "regional parks" are readily accessible by residents, and are located adjacent to residential areas of the community. While there is a fee charged for the use of these facilities, residents of Marco Island, as well as, Collier County can access the parks free of charge with a resident sticker. Tigertail Beach provides a local alternative to Resident's Beach for those residents who elect not to join that facility. Likewise, the South Beach access is free to anybody, with only a modest charge for accessory parking. The Caxambas boat launching facility provides a means for inland boat owners to quickly access the water resources of Marco Island. The regional parks located on Marco Island, which total approximately 40 acres, provide important special use facilities (i.e., beach access, boat launching) to augment and enhance the City's neighborhood and community park network.

The City of Marco Island currently owns or operates two neighborhood and four community parks that total 59 acres. Veterans' Park is still to be master planned. Combining the park resources owned by the City with those County owned facilities on the Island, the total parkland on Marco Island is over 100 acres. Utilizing the Community Park LOS standard of 1.2882 acres/1,000 residents, the City has sufficient active city-owned neighborhood and community parklands to accommodate growth through build-out. Further, the City has imposed a Park Impact Fee to help fund park improvements associated with new development.

The provision of Regional Parks is the responsibility of Collier County. The current LOS for regional parks is 2.9412 acres of land per 1,000 residents. To facilitate the expansion of regional parks the County also imposes an Impact Fee. Per the most recent County report, there are sufficient regional parklands to meet and exceed demands over the next five years.

F. SOLID WASTE

Existing Collection and Disposal Facilities

The collection and disposal of solid wastes generated on Marco Island are currently under the supervision and management of the Collier County Solid Waste Management Department. Marco Island is located within Solid Waste Collection District Number 1 where solid waste collection is mandatory. Waste Management of Collier County, Inc. is the franchised waste collector to provide collection services to residential, commercial and industrial generators on the Island. Other wastes,

resulting from land clearing, construction materials, and demolition wastes may be collected by any independent waste collector who has an approved occupational license with the County.

In residential areas of Marco Island, solid waste collection services include twice-weekly curbside pick-up and curbside recycling and yard debris pick-up on a weekly basis. Residential customers can make special arrangements with Waste Management for the removal of large items such as discarded furniture and appliances. The frequency of commercial and industrial collection depends on the waste stream generated by a particular use or business.

Solid waste collected by Waste Management is brought to the Collier County landfill for final disposal. This 320 acre facility, which is approximately 20 miles north of Marco Island, is operated by contract with Waste Management of Florida, Inc. In addition to this facility, the County has one other landfill site, a 100 acre facility in Immokalee, which services the eastern portion of the County.

Some of the waste stream generated on Marco Island, in particular yard debris and construction materials, had been brought to the transfer station located on Elkcam Circle. The function of a transfer station is to provide temporary collection of solid waste prior to transport to a processing plant or to final disposal. The transfer station is the only solid waste facility located on Marco Island, and is permitted by the Florida Department of Environmental Protection. This County owned and operated facility does not handle large volumes of solid wastes. The transfer station also functions as a collection center for recyclable materials, white goods, household hazardous materials and landscape debris.

The Marco Island transfer station and the County landfill are both owned and operated by Collier County. County Department of Solid Waste employees staff the transfer station, which is a collection facility. Per franchise and contractual agreements, Waste Management of Florida, Inc., provides collection services on Marco Island, and operation and maintenance of the County landfill facility. Per an agreement between Collier County and the City, the land previously utilized for the transfer station (parcel 56930520002) was swapped with land located across Elkcam Circle (parcel 57040160005) also described as lots 3 and 4 of Block 777, acquired by the City in 2006. In 2007, Collier County received a conditional use permit to reopen the transfer station on lots 3 and 4, and the previous transfer site received a conditional use permit to construct a 3.5 million gallon finished water storage tank for expansion of the Marco Island North Water Treatment Plant.

Level of Service Standards

The original Level of Service standards for Solid Waste adopted in the 2001 Comprehensive Plan were based on the Solid Waste Sub-element prepared by Collier County, as adopted in 1997. Those LOS standards are as follows:

- 1.10 tons of Solid Waste per capita per year
- A minimum of two (2) years of constructed lined landfill cell capacity at the

calculated waste generation rate.

- A minimum of ten (10) years of permittable landfill capacity at the calculated generation rate.

The two years of lined cell requirement addresses the amount of time required to design, permit and construct a new cell area on an existing permitted landfill site. The ten-year requirement assures adequate time to identify, purchase, rezone, design, permit and construct a new landfill site.

The method used by the County to calculate the two year supply of constructed cell capacity is to multiply the weighted population average by the annual per capital waste generation rate to yield the total tons of lined cell space consumed each year. This total is then subtracted from the remaining constructed cell capacity. The method for calculating the ten-year capacity is based on the permittable tonnage capacity at existing sites. This method is consistent with the current calculation for the two-year minimum supply of constructed lined cells.

As the City is not the primary provider of solid waste services, the levels of service adopted by Collier County, and as amended in the future, will operate as the standards for the City's concurrency management system.

Facility Capacity Analysis

Collier County has developed and implemented a Solid Waste Master Plan. The County has established the means to provide for solid waste collection and disposal facilities for a 20-year planning period and beyond. The County is engaged in the process from securing additional landfill sites. A landfill operating contract is in place that provides for daily operations and all capital costs for future construction, closure and post-closure monitoring. The current tipping fee schedule provides for payment to the contractor, County administration costs, and reserves for development of future solid waste management. The County has developed a pay-as-you-go program with no debt service. Continued accumulation of reserves will provide funding for future solid waste management needs, keeping Collier County, the entity responsible for solid waste services, in a strong position financially.

Per information provided by Collier County, the County projects the following capacities (in tons) over the next five years:

Landfill 2 Year Lined Cell Capacity

Year	2 Year Capacity Required	Lined Cell Capacity
2008	444,000	1,477,000
2009	477,000	2,114,000
2010	486,000	1,878,000

2011	495,000	1,637,000
2012	504,000	2,227,000
2013	513,000	1,977,000

Landfill 10 Year Permittable Disposal Capacity

Year	10 Year Capacity Required	Remaining Capacity
2008	2,501,000	9,120,000
2009	2,574,000	8,912,000
2010	2,623,000	8,676,000
2011	2,672,000	8,435,000
2012	2,723,000	8,190,000
2013	2,774,000	7,940,000

There is no formal allocation of landfill space for waste generated on Marco Island. Rather, the waste stream from Marco Island is considered part of the overall waste stream handled at the Collier County landfill site. The tables above demonstrate adequate capacity to meet LOS standards over the five year planning horizon.

G. SCHOOL FACILITIES

This year will be the first reference to Schools as a "Category A" facility as we move toward the adoption of the next Capital Improvement Element (CIE) in the fall, 2009. The Public School Facilities element, adopted into the Comprehensive Plan in 2008, requires the City to "adopt by reference" the School District's 5 Year capital Improvement Plan into the CIE. The School District will have already adopted its 5 Year Capital Improvement Plan by that time. It might be noted that in 2009, the only preliminary LOS deficiency identified by the School District during the 5 year planning period is a need for 220 additional seating (classroom capacity) at Laurel Oaks Elementary School. The Level of Service standard currently adopted by the School District is:100% permanent FISH (Florida Inventory of School Houses) capacity for high schools; 95% permanent FISH capacity for middle schools; and 95% permanent FISH capacity for elementary schools.

CURRENT POPULATION AND FIVE-YEAR POPULATION PROJECTIONS, BY YEAR

One of the most difficult tasks for the City of Marco Island is to project current and future permanent populations. When the city incorporated in 1997 "Marco Island" was considered a Census Designated Place (CDP), the boundaries of which may have included or excluded actual incorporated land areas. At the time the original Comprehensive Plan was adopted, the 2000 Census

results had not been released; therefore the City relied on previous Census data and population estimates from the Shimberg Center at the University of Florida.

Over the years, the City has taken issue with the estimated permanent population for the city as determined by the Shimberg Center. On at least one occasion, the City was able to mount a successful challenge to the population estimate, and the Center increased the population above their initial estimate. Nevertheless, trying to establish a sound year-round population estimate remains a difficult task.
Per the original Comprehensive Plan (2001) the permanent population estimates for the City were as follows:

Year	Island Population
1990	9,773
1995	11,010
2000	12,670
2005	14,285
2010	15,792

And as the Shimberg Center's estimates are recognized by the State for revenue sharing purposes, it has been determined that the numbers (projections) from the Shimberg Center, reflect the permanent population for Marco Island, and will be recognized in this LOS Report.

The Shimberg Center at the University of Florida has provided the following permanent population estimates for Marco Island:

PERMANENT POPULATION

Year	Permanent Population
2008	16,718
2009	17,075
2010	17,435
2011	17,726
2012	18,017
2113	18,308

For purposes of the 2009 LOS Report, the peak season population is derived from the 2008 EAR based amendments to the Comprehensive Plan, Table 1.3, Future Land Use Element:

PEAK POPULATION

Year	Island Peak Population

2008	40,269
2009	40,284
2010	40,298
2011	40,595
2012	40,892
2013	41,189

Two of the adopted LOS standards are directly related to peak population in terms of gallons per day for potable water and sanitary sewer. Community parks are based on permanent population.

COMPARISON OF THE PREVIOUS YEAR'S BUILDING PERMIT ACTIVITY TO THE PAST FIVE-YEARS INVENTORY

Of primary importance are those building permits specifically related to LOS standards, and the impacts thereof. Therefore, the inventory of current and past year permit activity will be limited to new residential units, both single and multifamily. The table below identifies, by year, the number of single family and multifamily dwelling units permitted by year. The table also includes demolition information, by year, for reference purposes:

Single Family & Multifamily Dwellings by Year

Year	Single Family	SF Demo's	Multifamily
2001	257	21	111
2002	199	21	254
2003	209	30	525
2004	231	102	639
2005	136	60	614
2006	72	48	0
2007	38	26	0
2008	27	30	7

As the Table reveals, from 2001 to 2008, the City issued 1,169 new single family building permits and authorized the construction of 2,150 new multifamily dwelling units. Over the same time period, the City issued 338 demolition permits.

A number of factors have influenced the construction market over the past few years, most importantly the immediate and lingering affects of Hurricane Wilma, but also rising land and construction costs, and a general downturn in housing on a regional and national level. In terms of the provision of services vis-a-vis adopted Level of Service standards, the slowing of residential and multifamily permits reinforce the availability of remaining capacity to accommodate new growth over the next five years.

POTENTIAL DEVELOPMENTS, REDEVELOPMENTS, OR ANNEXATIONS WHICH COULD HAVE AN IMPACT ON CURRENT LEVELS OF SERVICE

There are several projects either underway or pending that can be accommodated under currently adopted LOS standards without any adverse impacts:

Radisson Resort - conversion of 274 hotel units (counted for density purposes) to 219 timeshare units.

Calusa Island Marina – 45 new hotel units, 180 new dry slips.

Annecy – continuing care facility for 122 assisted living units.

Casa Marina- 50 condo/hotel units.

There are no anticipated annexations within the future planning horizon.

RELATIONSHIP TO THE GOALS, OBJECTIVES AND POLICIES OF THE COMPREHENSIVE PLAN

The Capital Improvement Element provides the policy direction to ensure that adopted Levels of Service standards will remain in continued compliance, supported as necessary by a financially sound five-year capital improvement program. This Level of Service Report provides the foundation for the City's commitments to the Florida Department of Community Affairs, and more importantly, the citizens of Marco Island, to ensure that necessary public facilities and services will be available to accommodate future growth. Through the process of updating and adopting annually Five-Year Capital Improvement Programs the Goals, Objectives and Policies of the Capital Improvement Element, and other Plan elements, remain relevant, measurable, and attainable.

RESOLUTION NO. 09 –

A RESOLUTION ACCEPTING THE FINDINGS OF THE 2009 ANNUAL LEVEL OF SERVICE REPORT DOCUMENTING THAT THE CITY OF MARCO ISLAND IS CURRENTLY IN COMPLIANCE WITH, AND ISSUING DEVELOPMENT ORDERS WITHIN, ADOPTED LEVEL OF SERVICE STANDARDS.

WHEREAS, the City of Marco Island adopted its Comprehensive Plan in January 2001, which included Level of Service (LOS) standards applicable to transportation, potable water, sanitary sewer, storm water drainage, community parks and solid waste; and

WHEREAS, as a requested component of the Comprehensive Plan the City must develop programs consistent with the Concurrency Management System outlined in the adopted Plan; and

WHEREAS, Chapter 30, Article X of the City Code contains the adopted Concurrency Management System, which involves the generation of an Annual LOS Report, and recommended actions if current LOS conditions are below adopted LOS standards; and

WHEREAS, the Planning Board considered the Annual LOS Report at a public hearing on July 17, 2009, and upon finding that no actions were warranted under Sec. 30-717(2), voted 7 – 0 to recommend that City Council receive and approve the report's findings of continued compliance with adopted LOS standards; and

WHEREAS, City Council has considered the report at a public meeting on August 3, 2009 and at a public hearing on August 17, 2009 and found that the report clearly documents that the City is operating and issuing development orders with adopted LOS standards; and

WHEREAS, the report and resolution from City Council will be forwarded to the Department of Community Affairs as the basis for the City's Annual Update and Inventory Report (AUIR).

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF MARCO ISLAND, FLORIDA, AS FOLLOWS:

The 2009 Annual LOS Report is hereby approved with a finding that the City of Marco Island is currently in compliance with and issuing development orders within adopted level of service standards.