



Stormwater/Water Quality Needs Assessment Project Prioritization

Martin County Engineering Department
Ecosystem Restoration & Management Division
March 2013

The projects on this list collectively represent a series of stormwater and water quality improvements which should be implemented by Martin County. The first and second priority and sewer conversion projects are intended to improve water quality and assist Martin County in the effort to remain in compliance with the Total Maximum Daily Load (TMDL) of 0.72 mg/L of Total Nitrogen (TN) and 0.081 mg/L of Total Phosphorus (TP) by the end of the 15 year Basin Management Action Plan timeline (BMAP). The current loading rates, target allocation, percentage required reductions for Martin County are the following:

TN Starting Load (lbs/yr)	TN Allocation (lbs/yr)	% Reduction Required	TP Starting Load (lbs/yr)	TP Allocation (lbs/yr)	% Reduction Required
103,345	70,581	32%	22,809	8,029	65%

Martin County will be required in the first five year increment to provide a 30% reduction in Total Phosphorus loads and Total Nitrogen loads. The 25 stormwater projects that have been completed thus far have earned Martin County 45% and 35% of the required TN and TP reductions, respectively.

The list also contains 25 flood control projects that need to be implemented countywide. Some of these projects can be implemented to include water quality improvements, especially those located with direct drainage to the St. Lucie River or in septic tank conversion areas.

The projects were prioritized as follows:

First Priority projects are primarily stormwater quality projects that could help Martin County meet the TMDL goal, are located within the BMAP boundary, and are eligible for project credit under the BMAP. These are projects that can be retrofitted for optimization of nutrient reductions and have the best dollar value for nutrient reduction.

Second Priority projects are stormwater quality and flood mitigation projects that fall outside the BMAP boundary. Not all of the projects listed in this tier will help Martin County meet the TMDL goal, although some may. However, all of these projects are essential to meeting the water quality goals for Martin County. The BMAP boundary may be revised to include more of these areas in the next five year iteration.

Sewer Conversion projects are the most expensive projects that need to be completed and will partially assist in meeting the TMDL. However, these projects are more focused on achieving overall water quality goals for Martin County, including protecting human health. These are the septic to sewer conversion priority areas that were identified in the *Martin County Environmental Services 10-Year Septic System Elimination Study* (2001). Scientists have documented that microbes move readily through sandy, saturated soils surrounding septic tanks into nearby water bodies. These priority areas are communities located adjacent to the St. Lucie River and Estuary and its tributaries. Furthermore, the projects have been ranked in priority order with regard to potential environmental and health hazards.

Flood Control projects were identified following recent storm events including Tropical Storm Fay (2008), Tropical Storm Isaac (2012), and Hurricane Sandy (2012). These projects will partially assist in achieving the TMDL, however, they focus on addressing localized flooding issues.

mg/L of Total Phos
 (1000000)

Martin County Stormwater and Water Quality Needs Assessment
 Ecosystem Restoration and Management Division
 March 2013

District	Project	Project Type	Project Cost	Notes
First Priority				
5	All American Boulevard Ditch	Ditch Retrofit & STA	\$2,300,000	Identified as a Management Measure (MM) in the St. Lucie River Watershed Protection Plan (SLRWPP); 2008 costs; land acquisition from SFWMD required. SFWMD permits required
5	Citrus Boulevard (Bessey Creek)	Detention Retrofit	\$2,100,000	Submitted to FDEP as a water quality project for potential funding.
2	Coral Gardens	Hybrid Wetland Treatment Technology	\$0	Potential and dependent upon legislative funding.
5	Danforth Creek - Phase II	STA Expansion	\$1,380,000	Identified as a MM in the SLRWPP and submitted to FDEP as a water quality project for potential funding.
5	Danforth Creek - Phase II	Hybrid Wetland Treatment Technology	\$0	Potential and dependent upon legislative funding.
2	Fern Creek - Phase II	STA Modifications & Expansion	\$1,900,000	Land acquisition is required. Martin County has been approached with an offer of \$400,000 for ~27 acres.
2	Gaines Avenue	Detention Retrofit	\$1,300,000	Land acquisition may be necessary.
5	Hogg Creek	Detention Retrofit & STA	\$2,400,000	Land acquisition and easements required.
1	Leilani Heights	Detention Retrofit	\$200,000	Work will occur on County property and right-of-way; coordination with HOA required.
1	North River Shores	2nd Generation Baffle Boxes	\$500,000	Submitted to FDEP as a water quality project for potential funding.
1	Rio	Exfiltration and Baffle Boxes	\$510,000	A \$240,000 grant has been received.
1	Warner Creek Phase IV	Detention Area and STA	\$3,200,000	Land acquisition required.
Sub-Total			\$15,790,000	

Included in "Sales Tax Project List"

Alternative Technology Project

SFWMD Identified Water Quality Hot Spot

Martin County Stormwater and Water Quality Needs Assessment
 Ecosystem Restoration and Management Division
 March 2013

District	Project	Project Type	Project Cost	Notes
Second Priority				
3	East Fork Creek	Culvert Replacement	\$1,200,000	FDOT and HOA approvals and easements required.
2 & 4	East Hansen Grant Phase III	Detention Retrofit & STA	\$2,000,000	Land acquisition may be necessary.
5	Horseshoe Point Road	Exfiltration	\$900,000	Work will occur on County right-of-way.
1	Jensen Beach Phase I	Retrofit & Exfiltration	\$3,800,000	Identified as a MM in SLRWPP; easement acquisition required.
3	Kitching Creek/Flora Ave	STA Modifications & Expansion	\$850,000	Work will occur on County owned property.
4	MacArthur Lake	Phoslock	\$0	SFWMD and Contractor Demonstration Project.
4	Manatee Pocket Southwest Prong	Baffle Box	\$340,000	A FDEP grant has been applied for but not yet awarded. Utility conflicts with water and force main likely.
4	Manatee Pocket Southwest Prong	STA	\$2,500,000	Land acquisition required.
All	Martin County	Baffle Boxes	\$2,500,000	Identified as a MM in SLRWPP.
4	Rocky Point	Exfiltration and Baffle Boxes	\$1,100,000	Land acquisition may be necessary.
3	Turtle Creek	Weirs	\$800,000	Need HOA approval & easements.
2	Willoughby Creek	STA	\$2,000,000	Work will occur on County and School Board properties.
Sub-Total			\$17,990,000	

Included in "Sales Tax Project List"

Alternative Technology Project

SFWMD Identified Water Quality Hot Spot

Martin County Stormwater and Water Quality Needs Assessment
Ecosystem Restoration and Management Division
March 2013

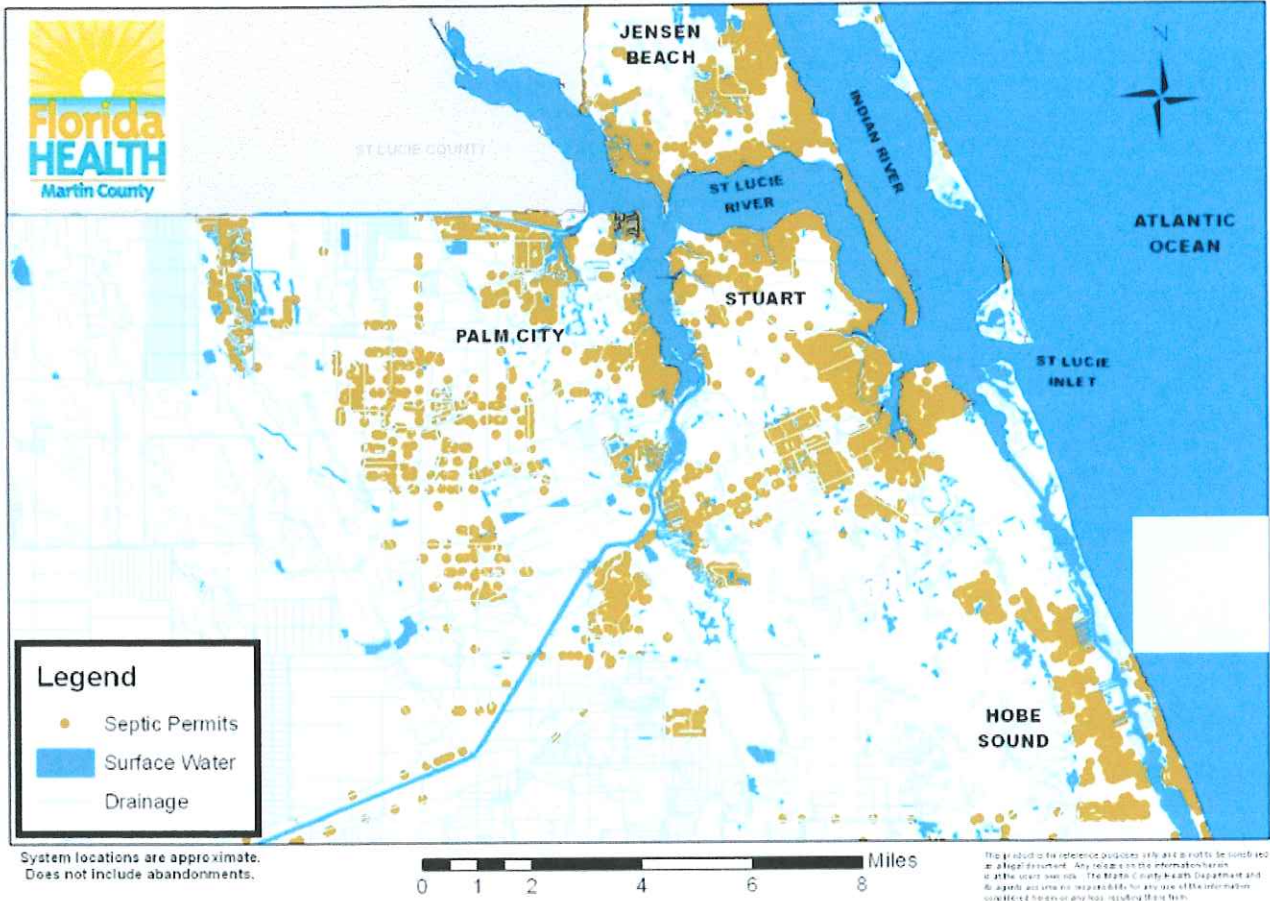
District	Project	Project Type	Project Cost	Notes
Sewer Conversions				
5	Martin Downs/Sunset Gardens	Septic to Sewer	\$16,400,000	
4	Salerno/Manatee Pocket	Septic to Sewer	\$6,100,000	
2	Golden Gate	Septic to Sewer	\$4,000,000	
1	Rosewalk/ Galleon Bay	Septic to Sewer	\$840,000	
4	Salerno/US 1	Septic to Sewer	\$4,800,000	
4	Hibicus Park	Septic to Sewer	\$17,200,000	
5	Hideaway Isles/Mid Rivers	Septic to Sewer	\$13,700,000	
4	Tropical Farms	Septic to Sewer	\$6,600,000	
1	North River Shores Phase II	Septic to Sewer	\$6,000,000	Identified as a MM in the SLRWPP and submitted to FDEP as a water quality project for potential funding.
1	Sewall's Point	Septic to Sewer	\$12,500,000	
Sub-Total			\$88,140,000	

Septic to Sewer

Septic to Sewer cost estimates prepared by MCU using cost estimates from a 2001 report, "10-Year Septic System Elimination Study." Costs were adjusted using the Engineering News Record 20-City Average Construction Cost Index (CCI). Septic to Sewer projects are listed in priority order as presented in the referenced 2001 report.

MARTIN COUNTY, FLORIDA PERMITTED SEPTIC SYSTEMS

MARCH 1998 TO JULY 2013



Sponsored Results

ASCC Hot Stock Pick
Dynamic Company, Growing Market - Huge Opportunity,
www.LuxuriaBrands.com

Powdercoat Equipment
Coating ovens powder booths, Wagner guns & more.
reliantfinishing.com

Blue Fire Stock
Invest In The Future Of America's Oil Production.
www.BlueFireEquipment.com

Features



Sinkhole
Resort villa in Clermont falling into sinkhole.



Lotto
Florida Lottery jackpot rises to \$51 million.



Hillary Copsey
Soup search leads to success for ailing reader.

On the Web: [Contact us](#) [Facebook](#) [Twitter](#) [Google+](#) [Databases](#) [Special Coverage](#) [PrepZone](#)
[Story Archive](#) [Find Stuart Jobs](#) [Public Notices](#)

Your Stuff: [Submit](#) [Events](#) [Share Your Photos](#) [Letters to the Editor](#) [YourNews](#)

Special Features: [Shopping](#) [Luminaries](#) [Jupiter Courier](#) [Vero Beach Newsweekly](#) [Contests](#)
[Ask the Candidates](#) [Reader Rewards](#) [Progress & Innovation](#) [IRC Tax Proof](#)
[We Sponsor the Treasure Coast](#) [Treasure Guide](#) [Readers' Choice Awards](#)

Partners: [WPTV NewsChannel 5](#) [Sun Sentinel](#) [LawInfo](#)

Business Directory: [See directory links](#)

Business Directory

Businesses: e.g. salon

Locations: e.g. Stuart, FL

