SARASOTA COUNTY
and the
CITY OF SARASOTA

NPDES MUNICIPAL SEPARATE STORM SEWER SYSTEM

PERMIT NUMBER FLS000004

FOR PERMIT YEAR ONE
APRIL 1 2002 TO APRIL 1, 2003
AND THE REMAINDER OF
THE PREVIOUS PERMIT
JANUARY 1, 2002 TO APRIL 1, 2002

SARASOTA COUNTY

and the

CITY OF SARASOTA

ANNUAL REPORT

for Permit Year One

April 1, 2002 to April 1, 2003

and the remainder of the previous permit

January 1, 2002 to April 1, 2002

National Pollutant Discharge Elimination System

Municipal Separate Storm Sewer System (MS4)

Permit Number FLS000004

Co-Permittees with:

City of Venice

City of North Port

Town of Longboat Key

Florida Department of Transportation, District 1

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Report Certification for Sarasota County

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

D R Bullock

David R. Bullock, Deputy County Administrator
Sarasota County

9-29-03

Date

Report Certification for the City of Sarasota

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R. Winters

Richard Winters for Michael McNees, City Manager
City of Sarasota

Sept. 29, 2023
Date

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This annual report is compiled and produced for Sarasota County and the City of Sarasota. The co-permittees, including the Florida Department of Transportation, District 1, the Town of Longboat Key, the City of Venice, and the City of North Port, submit annual reports that were produced independently. All co-permittees have participated in a committee discussion of the issues presented in this report that apply to all co-permittees.

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Storm Water Management Program Evaluation
Section 2.1 Objective of Program

The objective of the Storm Water Management Program (SWMP) is to effectively prohibit the discharge of non-stormwater into the MS4 and reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP) by implementing pollution prevention measures, treatment or removal techniques, stormwater monitoring, legal authority, and other appropriate means to control the quality of stormwater discharged from the MS4.

Storm Water Management Program Evaluation
Section 2.2 Major Findings

The City and County continued the Basin Master Planning program; approving new studies and updating previously completed studies. The newly approved studies, covering the Business District, Cowpen Slough, and Shakett Creek were adopted by the Board of County Commissioners during 2002. The completion of these three master plans brings the total of approved plans to 21. Master planning is underway for Myakka River (including Deer Prairie Slough and Little Salt Creek), Whitaker Bayou, and Braden River (a joint project with Manatee County, City of Bradenton, and the Southwest Florida Water Management District). It is anticipated that these basin studies will be completed in 2004. Upon reaching completion of this element, the permit will require modification. Several previously approved basin studies were updated to include a significant amount of additional information reflecting new development and infrastructure improvements. Although complete and approved, all the basin studies will be updated to reflect on-going development and new information as it is discovered. In addition, staff previously involved in the master planning process will be able to focus more directly on water quality issues rather than flood control.

Storm Water Management Program Evaluation
Section 2.3 Major Accomplishments

Additional progress was made in completing and updating Basin Master Plans and Capital Improvement Projects. Three Basin Master Plans were completed and approved, and several others were updated.

Storm Water Management Program Evaluation
Section 2.4 Overall Program Strengths and Weaknesses

The greatest strength of the SWMP is the cohesion that it brings to many separate activities, personnel, and programs. The SWMP reminds all these disparate people that what they do has an impact on stormwater quantity and quality and ultimately on the quality of the creeks, river, and bays in our community.

There were no substantial weaknesses identified in the SWMP.

Storm Water Management Program Evaluation
Section 2.5 Future Direction of Program

The Stormwater Management Program is expected to stay on the existing course.

Sarasota County has embarked on a program to better manage water resources based on watersheds. This effort will involve natural systems restoration, drinking water supply, irrigation water supply, flood control, and water quality improvements. Watershed Management objectives are expected to fit well with the objectives of the MS4 permit.

The DEP's Total Maximum Daily Loads program has improved the focus of the County on water quality issues. Although the challenges of the TMDL program loom large it is expected that the County, City, and DEP will identify truly impaired water bodies and develop cost effective measures to correct pollutant loading problems. The objectives of this permit and the TMDL program are intimately linked.

Summary Table for SWMP Activities
Section 3.1 Structural Controls, Inspection, and Maintenance

PROGRAM ELEMENT	PERMITTEE	REQUIREMENT	ACTIVITY SCHEDULE			COMMENTS
			Activities Required by SWMP	Complied With	Activities Accomplished During Calendar Year	
1. Structural Controls, Inspection and Maintenance.	Sarasota County & City of Sarasota	Inspect stormwater treatment ponds and wet retention areas every 18-24 months. Inspect channel control structures quarterly. Inspect pump stations semi-annually. Inspect channels annually. Maintain as needed on 5-year rotation. Maintain records of activities and schedules, including contract specifics. Evaluate effectiveness and summarize in annual report.	Inspect. Maintain. Keep Records. Evaluate. Summarize.	Yes	148 detention systems. Thousands of inspections conducted. 106 lakes maintained. 85 weir inspections; 1 repair. 530 miles of channels maintained.	Drainage Operations maintains extensive records that are available on request.
	Sarasota County & City of Sarasota	Update the inventory of privately owned stormwater systems. Summarize the activities to update the inventory in annual report.	Inventory. Summarize.	Yes	140 systems total; all inspected.	
	Sarasota County & City of Sarasota	Inspect privately owned stormwater systems on a 5-year rotation. Require compliance. Summarize inspections and results in annual report.	Inspect. Enforce. Summarize.	Yes	The inspection program continued. 140 private stormwater systems were inspected.	The Stormwater Assessment database identifies systems due for inspection.

Summary Table for SWMP Activities
Section 3.2 Development Planning Procedures

PROGRAM ELEMENT	PERMITTEE	REQUIREMENT	ACTIVITY SCHEDULE			COMMENTS
			Activities Required by SWMP	Complied With	Activities Accomplished During Calendar Year	
2. Development Planning Procedures	Sarasota County	Minimize effects of development on stormwater quality by adhering to Comprehensive Plan policies.	Use Comp Plans.	Yes	Development plans review process	
	City of Sarasota	Minimize effects of development on stormwater quality by adhering to Comprehensive Plan policies.	Use Comp Plans.	Yes	Development plans review process	
	Sarasota County & City of Sarasota	Complete master basin studies on schedule. Develop a course of action as completed. Summarize in annual report.	Complete Studies. Plan Actions. Summarize.	Yes	3 basin studies were adopted.	Stormwater Planning's capital improvement projects are in Appendix A.
	Sarasota County	Encourage development to reduce impervious surfaces by employing land development codes, development review, and permitting procedures.	Encourage.	Yes	LDRs allow some pervious parking lots.	AWQP and LDS implement LDRs.
	City of Sarasota	Encourage development to reduce impervious surfaces by employing land development codes, development review, and permitting procedures.	Encourage.	Yes	Application of the SWFWMD rules in urban re-developments result in exemptions on sites that were previously impervious (ie; parking lot becoming a building). The requirements of the EDCM for stormwater attenuation on every site exceeding 1500 square feet on impervious helps offset this situation.	
	Sarasota County	Require development to adhere to design criteria for on-site stormwater retention/detention and erosion and sediment control.	Require Detention. Require Erosion Control.	Yes	Development plans review process	
	City of Sarasota	Require development to adhere to design criteria for on-site stormwater retention/detention and erosion and sediment control.	Require Detention. Require Erosion Control.	Yes	Chapter 29.5 of the City Code, the City of Sarasota Engineering Design Criteria Manual (EDCM, adopted in 1989, up-dated March 2002), Part 6., Section A., paragraph c., requires permitting from the Southwest Florida Water Management District (SWFWMD) for water quality requirements of every development in the City.	

PROGRAM ELEMENT	PERMITTEE	REQUIREMENT	ACTIVITY SCHEDULE			COMMENTS
			Activities Required by SWMP	Complied With	Activities Accomplished During Calendar Year	
2. Development Planning Procedures (continued)	Sarasota County	Verify that development applicants have obtained permits from SWFWMD and DEP for stormwater treatment and discharges, including ERP and NPDES.	Verify Permits.	Yes	Development plans review process	
	City of Sarasota	Verify that development applicants have obtained permits from SWFWMD and DEP for stormwater treatment and discharges, including ERP and NPDES.	Verify Permits.	Yes	Chapter 29.5 of the City Code, the City of Sarasota Engineering Design Criteria Manual (EDCM, adopted in 1989, up-dated March 2002), Part 6., Section A., paragraph c., requires permitting from the Southwest Florida Water Management District (SWFWMD) for water quality requirements of every development in the City. Notification of NPDES Regulations is provided to developments proposed in the City of Sarasota at the time of development review prior to issuance of permits.	

Summary Table for SWMP Activities
Section 3.3 Roadway Maintenance

PROGRAM ELEMENT	PERMITTEE	REQUIREMENT	ACTIVITY SCHEDULE			COMMENTS
			Activities Required by SWMP	Complied With	Activities Accomplished During Calendar Year	
3. Roadway Maintenance	Sarasota County & City of Sarasota	Control litter along roads. Properly dispose of wastes. Keep records. Summarize activities in annual report.	Control litter. Dispose Properly. Keep Records. Summarize.	Yes	2,826 volunteers picked up 47,670 pounds of trash by Keep Sarasota Beautiful. 16,828 acres of litter control was provided by contract maintenance of roadsides.	Adopt a road, park, shore or spot, Bag It In Your Car Day, Coastal Cleanup, Great American Cleanup, Cigarette butt anti litter program.
	City of Sarasota	Control litter along roads. Properly dispose of wastes. Keep records. Summarize activities in annual report.	Control litter. Dispose Properly. Keep Records. Summarize.	Yes	300 tons from 165 cans. 54 tons from crews.	City Public Services.
	Sarasota County	Sweep streets. Properly dispose of wastes. Assess effectiveness in annual report. Provide schedule and coverage in annual report.	Sweep streets. Dispose. Assess. Report.	Yes	4,683 curb miles swept.	Disposal was to the landfill.
	City of Sarasota	Sweep streets. Properly dispose of wastes. Assess effectiveness in annual report. Provide schedule and coverage in annual report.	Sweep streets. Dispose. Assess. Report.	Yes	All residential streets swept monthly for a total of 500 miles. All commercial streets swept weekly for a total of 270 curb miles swept monthly. All FDOT streets within the City swept bi-monthly for a total of 50 curb miles swept monthly.	
	Sarasota County & City of Sarasota	Maintain roadside stormwater structures on a schedule. Dispose of materials properly. Keep a log of activities.	Maintain. Dispose. Keep Records.	Yes	33 miles ditches; 492 acres sprayed. 1337 catch basins. 1233 grates.	
	Sarasota County	Use BMPs to reduce polluted runoff from road repairs, equipment yards & maintenance shops. Inspect these facilities using SQG Program. Assess each facility in annual report. Assess effectiveness of BMPs in annual report.	Use BMPs. Inspect. Assess sites. Assess BMPs.	Yes	BMPs routinely used.	County Public Works. Haz. Waste and AWQP conducted inspections.
	City of Sarasota	Use BMPs to reduce polluted runoff from road repairs, equipment yards & maintenance shops. Inspect these facilities using SQG Program. Assess each facility in annual report. Assess effectiveness of BMPs in annual report.	Use BMPs. Inspect. Assess sites. Assess BMPs.	Yes	BMPs in place.	City Public Services used Engineering Design Criteria Manual BMPs.

Summary Table for SWMP Activities
Section 3.4 Flood Management

PROGRAM ELEMENT	PERMITTEE	REQUIREMENT	ACTIVITY SCHEDULE			COMMENTS
			Activities Required by SWMP	Complied With	Activities Accomplished During Calendar Year	
4. Flood Management	Sarasota County	Regulate construction and alteration in the floodplain using comprehensive plans, ordinances, and land development codes.	Regulate Floodplain Development.	Yes	Development plans review.	
	City of Sarasota	Regulate construction and alteration in the floodplain using comprehensive plans, ordinances, and land development codes.	Regulate Floodplain Development.	Yes	Development plans review.	
	Sarasota County & City of Sarasota	Implement flood control projects from basin master planning. Water quality treatment will be provided for all flood control projects as required by the SWFWMD. Evaluate feasibility of adding pollutant-removing retrofits to existing structures.	Build Flood Control Projects. Include WQ Elements. Consider Retrofits.	Yes	2 projects completed, 1 started, 10 in design.	
	Sarasota County & City of Sarasota	Update the list of projects and schedules. Summarize in annual report.	Update. Summarize.	Yes	2 projects completed, 1 started, 10 in design.	

Summary Table for SWMP Activities
Section 3.5 Municipal Facilities

PROGRAM ELEMENT	PERMITTEE	REQUIREMENT	ACTIVITY SCHEDULE			COMMENTS
			Activities Required by SWMP	Complied With	Activities Accomplished During Calendar Year	
5. Municipal Facilities	Sarasota County	Monitor and inspect public solid waste facilities, waste transportation fleet sites, POTWs, and sludge sites. Reduce discharges by implementing BMPs. Determine necessary permits. Use interlocal agreements. Train staff. Summarize new permits, monitoring, inspections, active BMPs, and staff training in annual reports.	Inspect. Use BMPs. Permit. Use Agreements. Train. Report.	Yes	3 Solid Waste facilities in full compliance. POTWs and residuals sites in compliance.	Solid Waste, Utilities & AWQP.
	City of Sarasota	Monitor and inspect public solid waste facilities, waste transportation fleet sites, POTWs, and sludge sites. Reduce discharges by implementing BMPs. Determine necessary permits. Use interlocal agreements. Train staff. Summarize new permits, monitoring, inspections, active BMPs, and staff training in annual reports.	Inspect. Use BMPs. Permit. Use Agreements. Train. Report.	Yes	Stormwater ponds. Careful fluid storage. Leachate control. Recycling. Composting.	All sites were regulated by EPA, DEP, or AWQP. These activities are completed by Public Works & Utilities.

Summary Table for SWMP Activities
Section 3.6 Pesticides, Herbicides, and Fertilizers

PROGRAM ELEMENT	PERMITTEE	REQUIREMENT	ACTIVITY SCHEDULE			COMMENTS
			Activities Required by SWMP	Complied With	Activities Accomplished During Calendar Year	
6. Pesticides, Herbicides, and Fertilizers	Sarasota County	Encourage the public to reduce usage of pesticides, herbicides, and fertilizers. Summarize education programs in annual report.	Educate. Report.	Yes	13,427 visitors to Florida House. 23,000 assisted with landscaping. 280,000 website hits. 172 Florida yards. 204 Educational programs conducted. 30 contractors trained. Much more promotion.	Cooperative Extension. Mosquito Management. Facilities Maintenance.
	City of Sarasota	Encourage the public to reduce usage of pesticides, herbicides, and fertilizers. Summarize education programs in annual report.	Educate. Report.	Yes	Cooperative Extension serves City as well as County.	
	Sarasota County	Reduce County use of pesticides, herbicides and fertilizers. Store properly. Train staff and contractors. Promote public education. Require proper applicator certifications. Summarize training and certification in annual report.	Reduce Usage. Train. Store Properly. Educate. Certify. Report.	Yes	Hundreds trained and certified. Dozens of education efforts. Ongoing reductions.	Cooperative Extension. Mosquito Mgt. Facilities Maintenance. Aquatic Plant Control. Drainage Ops. Forestry. Parks & Rec.
	City of Sarasota	Reduce City use of pesticides, herbicides and fertilizers. Store properly. Train staff and contractors. Promote public education. Require proper applicator certifications. Summarize training and certification in annual report.	Reduce Usage. Train. Store Properly. Educate. Certify. Report.	Yes	New chemical building. Training ongoing.	

Summary Table for SWMP Activities
Section 3.7 Illicit Discharges and Improper Disposal

PROGRAM ELEMENT	PERMITTEE	REQUIREMENT	ACTIVITY SCHEDULE			COMMENTS
			Activities Required by SWMP	Complied With	Activities Accomplished During Calendar Year	
7.a. **Illicit Discharges & Improper Disposal** - Inspections, Investigations, and Enforcement.	Sarasota County & City of Sarasota	Update list of allowable non-stormwater discharges to MS4. Discuss in annual report.	Update. Report.	Yes	20 exemptions.	
	Sarasota County & City of Sarasota	Enforce ordinance 96-02, prohibiting illicit discharges, and require compliance with BMPs. Detect, inspect and investigate prohibited illicit connections and illegal dumping into the MS4. Prioritize inspection schedule based on land use and age of development, including include random inspections. Maintain single reporting point. Maintain SOPs, including annual schedule for inspections and allocation of staff and resources. Compliance must include immediate cessation of discharge and a compliance schedule. Train employees to report illicits. Maintain inspection & enforcement log. Use interlocal agreements as needed, Summarize in annual report: schedule, allotted staff and resources, interlocal agreements, investigation programs, inspections performed, enforcement actions, and training.	Investigate. Enforce. Train. Use SOPs. Record. Report.	Yes	620 reported pollution incidents investigated. 240 violations found. 54 enforcement cases.	Ongoing programs. Amended Water Pollution Control Code in Appendix B. Internet Pollution Reporting Form in Appendix C.

PROGRAM ELEMENT	PERMITTEE	REQUIREMENT	ACTIVITY SCHEDULE			COMMENTS
			Activities Required by SWMP	Complied With	Activities Accomplished During Calendar Year	
7.b. **Illicit Discharges & Improper Disposal** - Field Screening.	Sarasota County & City of Sarasota	Reserved	Reserved	Yes	No activities.	
7.c. **Illicit Discharges and Improper Disposal** - Spill Response	Sarasota County & City of Sarasota	Use Sarasota County's Hazardous Materials Emergency Plan to minimize pollutant discharges to surface waters. Train employees.	Use Plan. Train.	Yes	499 Special Operations emergency responses.	Expanded training. Expanded staffing. Expanded scope of duties.
7.d. **Illicit Discharges and Improper Disposal** - Public Notification.	Sarasota County & City of Sarasota	Publicize citizen reporting of illicit discharges and improper disposal of materials to the MS4. Use dedicated phone number for reporting. Publicize quarterly: phone number, definition of stormwater, stormwater system, allowed discharges, prohibited discharges, how to report. Use interlocal agreements, as needed. Maintain log of calls and response. Summarize promotions, calls, and investigations in annual report	Publicize. Keep Records. Summarize.	Yes	Many educational workshops. News items. Newsletters.	Ongoing program.
7.e. **Illicit Discharges and Improper Disposal** - Oil and Household Hazardous Waste.	Sarasota County & City of Sarasota	Educate the public on the proper disposal of oil and hazardous waste. Support and promote the use of two county-owned oil recycling locations, the curbside used oil and oil filter collection program, the two household chemical collection centers, the retail battery collection program, and Project Green Sweep. Use interlocal agreements as needed. Summarize promotions and the amount of wastes collected in annual report. Mark storm drain inlets. Summarize the program and the number of drains marked in annual report.	Educate. Recycle. Properly Dispose. Publicize. Use Agreements. Summarize. Mark Drains.	Yes	A total of 300 storm drains have been mapped since program inception. Many promotions. The total of All Other Household Hazardous Waste Collected was 556,090 pounds.	Map of marked storm drains in Appendix D.

PROGRAM ELEMENT	PERMITTEE	REQUIREMENT	ACTIVITY SCHEDULE			COMMENTS
			Activities Required by SWMP	**Complied With**	**Activities Accomplished During Calendar Year**	
7.f. **Illicit Discharges and Improper Disposal** - Sanitary Sewer Seepage.	Sarasota County	Inspect, seal, line, and replace sanitary sewer pipes. Limit the installation of new septic systems. Remove septic systems in areas that can be served by a sanitary sewer. Identify areas served by septic systems. Advise regulatory agency if septage found in MS4 or surface waters. Advise utility if sewage found in MS4 or surface waters. Summarize in annual report.	Fix Pipes. Limit New Septics. Replace Septics. ID Septics. Report Septage. Report Sewage. Report.	Yes	9 WWTPs. Many inspections. Extensive reuse system. Lift station maintenance. Collection system study. Pipe repairs. Fenced lift stations. Ended land application of residuals. Septic system replacement.	Ongoing programs.
	City of Sarasota	Inspect, seal, line, and replace sanitary sewer pipes. Limit the installation of new septic systems. Remove septic systems in areas that can be served by a sanitary sewer. Identify areas served by septic systems. Advise regulatory agency if septage found in MS4 or surface waters. Advise utility if sewage found in MS4 or surface waters. Summarize in annual report.	Fix Pipes. Limit New Septics. Replace Septics. ID Septics. Report Septage. Report Sewage. Report.	Yes	Collection system upgrades. 301 defective private systems and 517 private sewers upgraded.	Ongoing programs.

Summary Table for SWMP Activities
Section 3.8 High Risk Industrial Facilities

PROGRAM ELEMENT	PERMITTEE	REQUIREMENT	ACTIVITY SCHEDULE			COMMENTS
			Activities Required by SWMP	Complied With	Activities Accomplished During Calendar Year	
8.a. High Risk Industrial Facility Inspection.	Sarasota County & City of Sarasota	Inventory high-risk facilities discharging into the MS4. Identify outfall and surface waters for each. Include municipal landfills, hazardous waste TSDs, EPCRA Title III (313), and potential dischargers. Prioritize inspection schedule. Use interlocal agreements as needed. Summarize program and update inventory in annual report.	Inventory. Prioritize. Use Agreements. Report.	Yes	AWQP maintains 2 inventories. 59 facilities that are certified or permitted. 152 inspections.	Ongoing program. Map of industrial facilities in Appendix E. Inventory of industrial facilities in Appendix F.
	Sarasota County & City of Sarasota	Inspect facilities according to the priorities. Require compliance with stormwater regulations, NPDES permitting, SWPPP plan on site. Encourage use of stormwater BMPs. Have written SOPs for enforcement. Maintain a log of the inspections and results. Use interlocal agreements as needed. Summary inspections in annual report.	Inspect. Regulate. Enforce. Have SOPs. Keep Records. Use Agreements. Summarize.	Yes	AWQP maintains 2 inventories. 940 facilities. 152 inspections.	Ongoing program.
8.b. Monitoring for High Risk Industries.	Sarasota County & City of Sarasota	Reserved	Reserved	Yes	No activities.	

Summary Table for SWMP Activities
Section 3.9 Construction Site Runoff

PROGRAM ELEMENT	PERMITTEE	REQUIREMENT	ACTIVITY SCHEDULE			COMMENTS
			Activities Required by SWMP	Complied With	Activities Accomplished During Calendar Year	
9.a. Construction Planning Procedures	Sarasota County	Require construction site planning and review prior to permitting using land development codes, comprehensive plans, and ordinances. Require the use of stormwater, erosion and sedimentation control BMPs during and after construction. Verify applicants have approvals and permits from agencies, including the SWFWMD. Verify NPDES Generic Permit (Chapter 62-621.300(4) F.A.C.), Verify that there is a stormwater pollution prevention plan for the project. Evaluate innovative structural and non-structural BMPs and new technologies; adopt suitable ones. Summarize programs and report the number of permitted projects in annual report.	Review Plans. Require BMPs. Verify Permits. Verify SWPPP. Use Innovations. Report.	Yes	Between January 1, 2002 and March 31, 2003, 492 plans were reviewed by AWQP.	Ongoing programs.
	City of Sarasota	Require construction site planning and review prior to permitting using land development codes, comprehensive plans, and ordinances. Require the use of stormwater, erosion and sedimentation control BMPs during and after construction. Verify applicants have approvals and permits from agencies, including the SWFWMD. Verify NPDES Generic Permit (Chapter 62-621.300(4) F.A.C.), Verify that there is a stormwater pollution prevention plan for the project. Evaluate innovative structural and non-structural BMPs and new technologies; adopt suitable ones. Summarize programs and report the number of permitted projects in annual report.	Review Plans. Require BMPs. Verify Permits. Verify SWPPP. Use Innovations. Report.	Yes	Engineering Design Criteria require BMPs. NOIs required pre-development.	Ongoing program.

PROGRAM ELEMENT	PERMITTEE	REQUIREMENT	Activities Required by SWMP	Complied With	Activities Accomplished During Calendar Year	COMMENTS
9.b. Construction Inspections.	Sarasota County	Inspect active construction sites. Ensure compliance with permits; use enforcement. Certify all construction site inspectors, in "Florida Stormwater, Erosion and Sedimentation Control Training and Certification Course", or equivalent. Include stormwater, erosion and sedimentation control on existing field inspection checklists. Maintain a log of inspections of active construction sites, including results. Summarize the inspection program, including number of trained employees, and number of inspections conducted.	Inspect. Enforce. Train. Use Checklists. Keep Records. Summarize.	Yes	About 200-250 projects ongoing at any given time. Numerous inspections. 5 enforcement cases. Ongoing training. Inspection records in Appendix G.	All LDS inspectors are trained.
	City of Sarasota	Inspect active construction sites. Ensure compliance with permits; use enforcement. Certify all construction site inspectors, in "Florida Stormwater, Erosion and Sedimentation Control Training and Certification Course", or equivalent. Include stormwater, erosion and sedimentation control on existing field inspection checklists. Maintain a log of inspections of active construction sites, including results. Summarize the inspection program, including number of trained employees, and number of inspections conducted.	Inspect. Enforce. Train. Use Checklists. Keep Records. Summarize.	Yes	Chapter 29.5 of Code of the City of Sarasota creates the Engineering Design Criteria Manual (created 1989) which requires Erosion / Sedimentation Control Plan (signed and sealed by the Engineer of Record), a permit, including a pre-construction meeting to implement erosion / sedimentation BMP's as a condition of issuance of a Building Permit. Inspectors are being trained through the American Public Works Academy (Florida Department of Environmental Protection Erosion/Sedimentation Inspector's Certification). The City has six individuals certified as Erosion/Sedimentation Control Inspectors. They are all involved in various stages of construction site design and inspection.	City Engineering.

PROGRAM ELEMENT	PERMITTEE	REQUIREMENT	ACTIVITY SCHEDULE			COMMENTS
			Activities Required by SWMP	Complied With	Activities Accomplished During Calendar Year	
9.c. Education Activities	Sarasota County	Train employees and private contractors in the Florida Stormwater, Erosion and Sedimentation Control course. Conduct presentations to construction industry organizations about construction site management for water quality and NPDES Construction and Multi-Sector Generic Permits. Notify building permit applicants about NPDES construction site permitting responsibilities.	Train. Do Presentations. Notify Builders.	Yes	Several classes. Dozens certified.	Ongoing programs.
	City of Sarasota	Train employees and private contractors in the Florida Stormwater, Erosion and Sedimentation Control course. Conduct presentations to construction industry organizations about construction site management for water quality and NPDES Construction and Multi-Sector Generic Permits. Notify building permit applicants about NPDES construction site permitting responsibilities.	Train. Do Presentations. Notify Builders.	Yes	Contractor training is provided through the American Public Works Academy and cooperation with Sarasota County.	

Narrative Reports for SWMP Activities
Section 4.1 Structural Controls, Inspection and Maintenance

Inspect and Maintain Stormwater Structural Controls - City and County

Detention Systems (wet / dry):

City, County, and State detention systems totaling 148 were mowed, treated with herbicide as needed, and had litter removed on a monthly schedule. Underdrains were inspected and maintained at each site according to permit requirements established utilizing 18 to 24 month cycles. Monthly inspections of all detention system control structures were also performed during contract oversight at each facility. Fence repair and other maintenance were performed as needed. Collected debris was taken to the landfill as per contract specifications. Inspectors also provided assessment of all associated side slopes, inlets, and outlets for damage or sediment buildup. In 2002 Sarasota County inventoried a total of 100 wet detention systems. The City of Sarasota had an inventory of 19 wet detention systems and 7 dry detention systems. Sarasota County also provided concurrent maintenance of 30 wet detention systems for the Florida Department of Transportation. The Contractors providing herbicide maintenance were all certified by the State of Florida in pesticide application per County contract specifications. County employees providing inspections received training and were certified through the Florida Department of Environmental Protections "Stormwater, Erosion and Sediment Control Inspectors Training Program". Mowing and herbicide site inspections for both the County of Sarasota and City of Sarasota totaled 5,262.

Ponds and Lakes:

During 2002 Sarasota County and the City of Sarasota had a total inventory of 101 lakes. Of these lakes 5 sites were within the City of Sarasota and 96 sites were County. Each site was inspected, mowed, and treated with herbicides on a monthly cycle. Litter and trash was removed at each site during the monthly service cycle and taken to the landfill for disposal. Inspections during 2002 totaled 834 for both City and County Lakes and Ponds.

Weirs and Flow Control Devices:

Annual inspection of the 85 weirs and flow control devices within the channel systems in

Sarasota County were performed. Structural inspections included checking for major defects, erosion, sedimentation, bleed-down devices, and underdrains. These inspections were completed on all of the 85 weirs and flow control devices. Inspection reports identified deficiencies observed on the inspector's site visit. Repairs were made to 1 weir structure during 2002. Weekly inspection was provided to 3 pump stations to assure they were free of debris and operated properly when required.

Channels:

Maintenance and inspections were provided for 530 miles of channel systems. 30 miles were within the City of Sarasota and the remaining 500 miles were in the County of Sarasota. Maintenance was provided by hand clearing, herbicide contractors and County staff utilizing heavy equipment and prison labor. In 2002, contractor hand clearing completed 367 sites, totaling 154.79 miles. Hydraulic excavators completed 26.44 miles of channel, hydraulic mowers cleared 109 acres, and prison labor completed 14.5 miles of channel clearing. Vegetation management utilizing herbicides was also provided to City and County channel systems. Contractors provided herbicide and litter control monthly on 29 sites totaling 110.26 acres within the City of Sarasota. County staff provided quarterly inspections and herbicide management of vegetation covering 2,092 acres within County channel systems. A total of 195.73 miles and 2,311.26 acres were cleaned and maintained during 2002.

Cost Summary:

Channel maintenance:	$2,684,308	195 miles cleared; 2,311.26 acres mowed & sprayed
Weir inspections:	$5,540	85 inspections
Weir maintenance:	$40,373	1 unit / Cow Pen Slough gate repair
Pond maintenance:	$319,066	6,096 inspections (detention ponds / lakes)
Pond excavation:	$53,642	2,730 cubic yards
Mitigation maintenance:	$38,522	740 hours on site maintenance

Permit Element: Inspect, Maintain & Assess Structural Controls

Objective: Prevent flooding and reduce pollutants in MS4.

Activities: Described above.

Compliance: In compliance.

Strengths: 9953 inspections.

Weaknesses: Activity tracking

Assessment: Effective.

Future: Continue the existing program. Improve tracking elements.

Modifications: None at this time.

Annual Evaluation of Inspection/Maintenance Schedule and Equipment Use - City and County

The inspection and maintenance (I&M) program continues to be very effective and will be continued. Performance management software, Maximo, will be used to assist in improving scheduling of equipment and manpower to optimize cost effectiveness. Customer service requests are an evaluation criterion. The county has done an excellent job of satisfying customers by keeping water off of yards, streets, and septic systems. The I&M of permitted facilities has been praised in a recent letter by the director of the SWFWMD as being outstanding. Permitted facilities are ponds and wetlands mitigation areas, such as the Celery Fields site. Cost comparisons have been made to private industry and the County has been found to be very competitively priced, even economical.

Permit Element: Annual evaluation of inspection and maintenance schedule and equipment optimization.

Objective: Consider re-prioritizing annually.

Activities: Described above.

Compliance: In compliance.

Strengths: Excellent drainage improvements.

Weaknesses: None have been identified.

Assessment: Described above.

Future: Maximo software.

Modifications: No permit modifications are suggested.

Updated Inventory of Private Stormwater Systems - City and County

The inventory of residential subdivisions and commercial parcels receiving Storm Water

Assessment credits in Sarasota County and the City of Sarasota was regularly updated to account for new development.

Summary of Compliance Inspections of Private Stormwater Systems - City and County

The credit was applied to developments that operate and maintain the private stormwater management system serving a specific area. Sarasota County Storm Water Ordinance No. 94-066, and supporting resolutions, requires inspections of these credited systems to assure appropriate application of the credits. During inspections, inspectors checked the condition of skimmers, outfall structures, sediment sumps, slope stabilization, underdrain and filtration systems, and other aboveground structures or visible features. Existing conditions were compared to construction drawings or as-built drawings as needed.

The Ordinance calls for owner notification if a private stormwater system does not pass inspection. After notification, the owner has 90 days to perform remedial actions to bring the system into compliance. Noncompliance can result in revocation of the stormwater assessment credits. During 2002, 140 private systems were inspected under this program. All 140 systems passed the inspection, having been maintained and operated according to the original design. A few systems exhibited minor maintenance problems that were reported to the appropriate maintenance entity and addressed in a timely manner.

Permit Element: Inventory, inspect & require compliance of private stormwater systems.
Objective: Prevent flooding and reduce pollutants in the MS4.
Activities: Described above.
Compliance: In compliance.
Strengths: Inspection serves dual purposes of water quality and verifying assessment credit.
Weaknesses: None have been identified.
Assessment: Effective.
Future: Continue the existing program.
Modifications: No permit modifications needed.

Narrative Reports for SWMP Activities
Section 4.2 Development Planning Procedures

Stormwater Quality in Comprehensive Plans - Sarasota County

Stormwater quality is improved by implementation of land development regulations that require stormwater detention and retention. In addition, significant development planning is done in relation to the Basin Master Plans and use of the stormwater model to prevent flooding. Development planning also requires implementation and maintenance of best management practices for erosion control.

Stormwater Quality in Comprehensive Plans - City of Sarasota

Each new development within the City is required to meet the water quality standards as defined and permitted by the SWFWMD pursuant to Part 6., 2., c., of the City of Sarasota Engineering Design Criteria manual, Chapter 29.5 of the City Code. Each new development within the City is required to provide and maintain erosion/sedimentation controls during construction phases pursuant to Part 2. of the City of Sarasota Engineering Design Criteria Manual, Chapter 29.5 of the City Code.

Basin Master Planning - City and County

Sarasota County continued the Basin Master Planning program; approving new studies and updating previously completed studies. The newly approved studies, covering the Business District, Cowpen Slough, and Shakett Creek, were adopted by the Board of County Commissioners (BCC) during 2002. Subsequent to approval, all completed basin studies will be updated regularly to reflect new development, infrastructure improvements, and other physical changes to the overall stormwater system. The City of Sarasota continued to participate in the Basin Master Planning process.

Table 4.2. Basin Master Plans Status.

Completed Studies	Updated Studies	Studies Underway	Future Studies
Ainger Creek	Phillippi Creek**	Whitaker Bayou**	Coastal Basin Improvement Areas
Alligator Creek	Matheny Creek	Myakka River	
Big Slough	Forked Creek	Deer Prairie Slough	
Clower Creek	North Creek	Little Salt Creek	
Elligraw Bayou	Woodmere Creek	Braden River	
Fox Creek	Holiday Bayou		
Hudson Bayou**	Gottfried Creek		
Catfish Creek	South Creek		
Curry Creek	Business District**		
Hatchett Creek	Cowpen Slough*		
	Shakett Creek		

* Studies completed but not yet adopted by Board of County Commissioners.

** Basin located entirely or partially within the City of Sarasota.

It is anticipated that the basin studies and necessary updates will be completed in 2004. Although complete, the basin studies will be maintained through annual updates to reflect on-going development, infrastructure improvements, and new information. The annual updates will be coordinated and shared with the Southwest Florida Water Management District.

To that end, various agencies of Sarasota County have united in a more comprehensive approach to all issues associated with water. The Sarasota County Integrated Water Resource Team (IWRT) has developed three initiatives:

- Enhance water quality in bays, rivers, creeks, and natural systems
- Provide adequate potable and irrigation water to meet projected needs
- Maximize flood protection.

A holistic approach will be developed to interconnect the hydraulic cycle so water resources can

be conserved and utilized to the greatest advantage.

Permit Element: Basin master planning.

Objective: Limit pollutant discharges from developments.

Activities: Described above.

Compliance: In compliance.

Strengths: Information from the master plans has tremendous value for flooding and water quality.

Weaknesses: Funding for projects exclusively for water quality was not readily available.

Assessment: The basin master planning program in Sarasota County is leading the way for other counties and cities.

Future: It is anticipated that water quality efforts will expand as flood control problems are resolved.

Modifications: No permit modifications needed.

Encourage Reductions in Impervious Surfaces - Sarasota County

LDRs allow up to 25% of parking spaces to be grass or other impervious (unpaved) surface. Houses of worship, schools, and certain other land uses can have entirely pervious parking, except handicapped parking spaces, which must be impervious. LDRs require pervious areas (buffers and greenbelts) in all new subdivisions.

Encourage Reductions in Impervious Surfaces - City of Sarasota

Application of the SWFWMD rules in urban re-developments result in exemptions on sites that were previously impervious (i.e., parking lot becoming a building). The requirements of the Engineering Design Criteria Manual for stormwater attenuation on every site exceeding 1500 square feet on impervious helps offset this situation.

Permit Element: Land development regulations to minimize impervious surfaces.

Objective: Reduce runoff to the MS4 and thereby reduce pollutant loading.

Activities: Described above.

Compliance: In compliance.

Strengths: An effort is being made.

Weaknesses: None.

Assessment: Moderately effective.

Future: Increase buffer widths. Allow no more than 110% of parking spaces paved and impervious.

Modifications: No permit modifications needed.

Design Criteria for Stormwater Retention/Detention and Erosion Control - Sarasota County

Sarasota County Land Development Regulations require the detention and treatment of stormwater in order to improve the quality and control of stormwater runoff. Two sections of the LDR, B.4. of the Subdivision Technical Manual, and C.1. of the Development Improvements Technical Manual (for non-subdivisions) require stormwater management detention systems to comply with SWFWMD criteria, but be modified to meet County standards and address the one hundred year 24-hour storm. In addition, these rules require: "Wet detention treatment shall be designed to treat one inch of runoff, other treatment systems shall be designed to treat runoff resulting from the first one inch of rainfall. Stormwater systems discharging directly into saltwater tidal systems, bays, or the gulf shall be designed to treat 1.5 times the volume required for the selected treatment system". Section B.4.e.3. of the Subdivision Technical Manual, Ordinance No. 2002-026 requires stormwater master plan for treatment for the entire site of all new rezones."

Design Criteria for Stormwater Retention/Detention and Erosion Control - City of Sarasota

Chapter 29.5 of Code of the City of Sarasota created the Engineering Design Criteria Manual (created 1989), which requires development in the City to meet SWFWMD rules for stormwater quality.

Permit Element: Require stormwater treatment for developments.

Objective: Reduce the amount of pollution entering the MS4.

Activities: Described above.

Compliance: In compliance.

Strengths: Flood control and limited reductions in pollutant load increases.

Weaknesses: The standards allow increases in pollutant loads to watersheds.

Assessment: Big improvement over pre-regulated conditions.

Future: The County is working with SWFWMD consider the implications of creating standards that eliminate pollutant load increases related to development.

Modifications: No permit modifications needed.

Building Permits Verify SWFWMD, DEP, ERP and NPDES Permits - Sarasota County

Land Development Services does not release (approve) construction plans until copies of all permits from other agencies, including the State of Florida and the Water Management District, have been furnished.

Building Permits Verify SWFWMD, DEP, ERP and NPDES Permits - City of Sarasota

Notification of NPDES Regulations is provided to developments proposed in the City of Sarasota at the time of development review prior to issuance of permits.

Permit Element: Verify permits.

Objective: Ensure compliance with rules before developments approved.

Activities: Described above.

Compliance: In compliance.

Strengths: Simplicity.

Weaknesses: None.

Assessment: Effective.

Future: No changes.

Modifications: No permit modifications needed.

Narrative Reports for SWMP Activities
Section 4.3 Roadway Maintenance

Litter Control - City and County

Keep Sarasota County Beautiful coordinates a great many litter control programs, including:

- Adopt a road, park, shore or spot,
- Bag it in Your Car Day,
- Florida Coastal Cleanup,
- Great America Cleanup,
- Cigarette butt anti-litter program

2,826 volunteers picked up 47,670 pounds of trash off Sarasota County's roads, waterways, and shorelines through the KSCB program.

Litter Control - Sarasota County

Mowing staff and contractors remove litter along roadways and ponds. All scheduled mowing was inspected during and after mowing.

Litter Control - City of Sarasota

The City removes litter on state roads, city streets, parking lots, public building sites and city parks within the City Limits. Approximately 165 trash receptacles have been placed throughout the City with approximately 300 tons/year being disposed annually. Additionally, approximately 54 tons/year of litter are removed from streets and highways. Public Works continues to support and participate in Keep Sarasota Beautiful and other neighborhood action cleanups.

Permit Element: Litter removal and proper disposal.

Objective: Capture litter before it enters the MS4.

Activities: Described above.

Compliance: In compliance.

Strengths: Successful programs implemented through partnerships.

Weaknesses: Lack of leadership positions.

Assessment: Effective.

Future: To increase participation in existing programs countywide.

Modifications: No permit modifications needed.

Street Sweeping - Sarasota County

Sarasota County provides street sweeping on arterial/collector roads utilizing contract services and residential sweeping with County staff and sweepers. The contract sweeping service covers 3 areas, North County with 201.42 miles, South County with 64 miles and Siesta Key with 58.30 miles. North and South County are under monthly sweeping cycles (12 times per year) and Siesta Key receives sweeping services quarterly (4 times per year). Residential sweeping within Sarasota County covers North County with 365.25 miles and South County with 151.9 miles. All residential streets are scheduled for sweeping quarterly. During 2002, 2526 miles of arterial/collector roads were swept and 2,157 miles of residential streets were swept. Total sweeping activities by contract service and County staff covered 4,683 curb miles. Total site inspections for street sweeping were 1,156.

Street Sweeping - City of Sarasota

All residential streets within the City of Sarasota are swept every 30 days, with a total of approximately 500 curb miles swept monthly. All commercial streets within the City of Sarasota are swept weekly, with a total of 270 curb miles swept monthly. All FDOT streets within the City of Sarasota are swept bi-monthly, with a total of 50 curb miles swept monthly.

Annual Assessment of Street Sweeping Program; Schedule and Coverage - Sarasota County

Drainage Operations has contracted street sweeping to reduce sedimentation of the MS4. In 2002, 201.42 miles of drainage infrastructure was swept twelve times annually. Fifty-eight miles were swept four times annually. A total of $89,504 was spent.

After a decision to remove a 58 mile portion of sweeping from contractual work, it became apparent that a continued need existed to assure the free flow of storm water. This was been reprogrammed in 2003. Sweeping is provided to assure clear and adequate flow. It is part of a continued drainage structure maintenance program and provides a reduced potential for

pollutants to enter local waterways.

Annual Assessment of Street Sweeping Program; Schedule and Coverage - City of Sarasota

The practice of mechanically sweeping all City Streets on a regular basis effectively picks up a majority of foreign materials located on said streets, and thus limits the introduction of these materials into the storm water system.

Permit Element: Sweep streets and properly dispose of waste.

Objective: Capture pollutants before they enter the MS4.

Activities: Described above.

Compliance: In compliance.

Strengths: Scheduling.

Weaknesses: None were identified.

Assessment: Effective.

Future: Continue the existing program.

Modifications: No permit modifications needed.

Maintenance of Roadside Stormwater Structures - City and County

Cleaning and maintenance of arterial/collector and residential road systems was performed to ensure proper conveyance of stormwater and ensure water quality. Street sweeping was provided within Sarasota County utilized both County staff and equipment as well as contract services. 4,683 curb miles we swept during 2002 to remove debris and sediments. County staff also serviced 2,470 storm grates and catch basins along County roadways. Roadside ditches were kept clear of weedy vegetation by applying selective herbicides. Herbicides used on 492 acres of roadside ditch systems reduced mowing frequencies and ditching activities. Ditched were cleared and dug as need to remove debris and sediments along 33.20 miles of roads within Sarasota County. Contract mowing also provided litter and debris removal (per contract specifications) along road systems to ensure debris collection prior to it entering stormwater treatment systems.

Permit Element: Maintain roadside stormwater structures.

Objective: Minimize flooding and minimize the pollutants in stormwater runoff.

Activities: Described above.

Compliance: In compliance.

Strengths: Much work accomplished.

Weaknesses: None identified.

Assessment: Schedules may be useful.

Future: Continue the established program.

Modifications: No permit modifications needed.

Reduce Pollutants from Road Repair and Related Sites - Sarasota County

BMPs were used during all road repairs, as follows: Silt screens were installed at all discharge locations from construction sites. Silt screens were effective when properly staked with the bottom of the screen, entrenched in the soil and maintained. Proper clean up of disturbed soil, excess pavement materials, and vegetation before the silt screens are removed is an important part of this BMP. Our installation, maintenance and clean up / removal is monitored periodically by our Supervisors for compliance with this BMP and it is effective.

Turbidity curtains were installed in waterways potentially impacted by construction activity, and turbidity was monitored in the waterways. Turbidity curtains were installed in waterways potentially affected by construction activity and were effective in containing sedimentation and well as floating objects. Turbidity was monitored downstream in compliance with regulatory permit stipulations and no work was suspended due to turbidity levels downstream of the turbidity curtains - therefore this BMP is considered effective.

Sedimentation devices were installed at stormwater inlet structures affected by construction activity. Hay bales or silt screens were installed around inlet structures and were evidenced effective when properly installed and maintained.

Reduce Pollutants from Road Repair and Related Sites - City of Sarasota

Continue to implement City's Engineering Design Criteria Manual standard practices to reduce pollutants associated with road repair. Continue to implement the Equipment Maintenance DEP Storage Tank Permit, which is inspected yearly by the County for DEP.

Equipment Maintenance uses BMP to reduce pollutants from entering the stormwater system. The waste metal filters are recycled by Safety Kleen. Waste parts cleaner is removed from the site by Safety Kleen every 5-6 weeks. Used Anti-freeze is stored in a 55-gallon drum and the used oil is stored in an above ground tank. Both are removed from the site by A&S Oil Recovery. Absorbent mats and rags, pig matting and donuts are used to clean up floor spills and road spills are removed by Safety Kleen.

Annual Assessment of BMPs and Facility Inspections - Sarasota County

The Hazardous Waste Program completed 26 SQG inspections at municipal facilities. Substantial amounts (17,188 pounds) of waste materials were redirected to more appropriate disposal through these inspections.

Annual Assessment of BMPs and Facility Inspections - City of Sarasota

The City continued using standards for erosion and siltation control from the Engineering Design Manual, Part 2. The BMPs used for fleet maintenance as described in previous annual reports, were still being used.

Permit Element: Implement BMPs at road work sites, yards, and shops.
Objective: Reduce pollutants in stormwater discharges to the MS4.
Activities: Described above.
Compliance: In compliance.
Strengths: The inspection programs are effective in preventing hazardous waste pollution.
Weaknesses: None identified.
Assessment: Adequate.
Future: Continue defined schedule of municipal facility inspections.
Modifications: No permit modifications needed.

Narrative Reports for SWMP Activities
Section 4.4 Flood Management

Regulation of Development in the Floodplain - Sarasota County

Sarasota County regulates/controls development in the floodplain through the Land Development Regulations. Specifically, the LDR requires developments of >30 acres or with 8 acres of impervious surface to utilize the appropriate stormwater model to demonstrate no increase in flood levels as a result of the development. All encroachments into the floodplain were required to compensate for the displaced floodwater.

Regulation of Development in the Floodplain - City of Sarasota

The Sarasota City Plan (Goal 2., Objective 4., adopted November 10, 1998) states: "The City working in cooperation with the Sarasota County Department of Emergency Management, shall continue to reduce the exposure of life and property to natural disasters and discourage population concentrations in coastal high hazard area".

The City of Sarasota Engineering Design Criteria Manual (Chapter 29.5 of the City Code), Part 6., Section A., 4., states: " No net encroachment into the floodplain, equal to or less than that encompassed by the 100-year event will be allowed, if such encroachment will adversely either conveyance, storage, water quality or adjacent lands".

Progress Report on Flood Control Projects (include water quality treatment) - City and County

Several flood control projects were completed during 2002, as recommended by the Basin Master Plans. These projects addressed structure and street flooding level of service deficiencies. Although focused on flood control, the projects included some water quality design features as well. Bank stabilization, vegetation planting, water quality inlet structures, attenuation practices, removal of sediments, and creation of lakes and ponds undoubtedly improved downstream water quality. It is anticipated that, upon completion of the flood control projects, the focus of some projects will shift toward water quality issues.

Table 4.4 2002 Flood Control Projects

Completed Projects	Projects Started	Projects in Design
Gulf View Estates Outfall	Bahia Vista/Lockwood Ridge	Arlington / Euclid
Breakwater Branch		Bahia Vista / Lockwood Ridge
Williamsburg Branch		Lower Denham
		Albee Road
		North Englewood Lateral
		St. Armands Circle
		Clark Road
		Woodmere North Branch

Two projects were being designed with specific water quality features. The Northern Branch project in the Woodmere Creek basin was being coordinated with a wetland restoration project on the County-owned Lemon Bay Preserve. Stormwater flows will be diverted into a historic wetland that had been drained to control mosquitoes in decades past. Approximately 50 acres of wetland will be re-hydrated as a result. In an entirely urban drainage basin in the City of Sarasota, the St. Armands project will incorporate eight centrifugal water quality inlet structures. The structures will separate floatables and suspended solids from the runoff entering Sarasota Bay.

During 2002, the County further developed a dredging program to facilitate navigation of area waterways. Most previous dredging removed sediment to improve drainage. In concert with the dredging programs, Sarasota County will continue to focus on sediment source abatement.

Sediment source abatement activities included erosion repair, re-vegetation of disturbed areas, street sweeping, selective herbicide application, and regular maintenance of sediment removal devices such as weirs, baffle boxes, and inlet inserts. In addition, Sarasota County has successfully applied for grant funding under Chapter 319 for the installation of three baffle-box

sediment capture devices. These devices were designed to remove sediment and vegetative material from runoff, thereby reducing the amount of suspended solids and total nitrogen entering the receiving waters. Monitoring will be conducted to measure the effectiveness of the baffle-boxes.

A new sediment monitoring program was initiated that evaluated the quality of sediment trapped above dozens of low-flow weirs located throughout the MS4. Results will be used to estimate the design and location additional weirs that would reduce downstream sedimentation, toxicity, and nutrient loading. Other considerations include contributing land-use type and the appropriate maintenance schedule.

Permit Element: Flood management.
Objective: Ensure that flood control projects include pollution reduction features.
Activities: Described above.
Compliance: In compliance.
Strengths: Flooding was reduced.
Weaknesses: Funding for water quality projects was limited.
Assessment: Effective.
Future: Continuation of existing programs and projects.
Modifications: No permit modifications needed.

Consider Water Quality Retrofits - City and County

Retrofits projects are described above.

Narrative Reports for SWMP Activities
Section 4.5 Municipal Facilities

Summarize Inspections, Best Management Practices, Permits, and Training

Solid Waste Facilities - Sarasota County

Sarasota County has three solid waste facilities: the Central County Solid Waste Disposal Complex (CCSWDC), the former Bee Ridge Landfill, and the Venice Transfer Station.

The Central County Solid Waste Disposal Complex (CCSWDC) opened in 1998 and is still active. It is subject to NPDES stormwater discharge requirements for municipal landfills. The CCSWDC obtained coverage under Sector L of the State of Florida Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity, Permit No. FLR05B637. The permit was issued on May 22, 2002 and expires May 21, 2007. Leachate is taken to the Bee Ridge Water Reclamation Facility for treatment. There are seven stormwater ponds on site. Stormwater, which does not come into contact with leachate, discharges to ponds, wetlands, and then to Cow Pen Slough.

An AWQP inspector inspects this facility annually and is a member of the facility's Stormwater Pollution Prevention Plan team. All stormwater permit conditions are met within allowed time frames. The stormwater systems are inspected daily and repairs are made as needed. The letdown structures are kept free of debris and the swales are mowed as needed. The structures the CCSWDC are only a few years old and in good condition. No modifications are planned for the system until Phase 1 is closed, then permanent letdown structures will be built to carry the stormwater to the proper swales and then to the holding pond before discharge. The permanent storage facility at the CCSWDC has been completed and all fuels and oils are stored inside. No equipment maintenance is done on site.

The Class I Bee Ridge Landfill closed in February 2000 and was subject to Long Term Care Permit No. 40049-002-SF, as well as wastewater Permit No. FLS0039306. The wastewater permit expired on March 31, 2000. The Bee Ridge Landfill obtained coverage under Sector L of

the State of Florida Multi-Sector Generic Permit No. FLR05F499 for Stormwater Discharge Associated with Industrial Activity. The permit was issued on May 20, 2002 and expires May 19, 2007. Runoff from the site drains to stormwater detention ponds large enough to hold the first ten inches of rainfall. Greater flows discharge from the pond to offsite via a weir.

An AWQP inspector inspects Bee Ridge annually and is a member of the facility's Stormwater Pollution Prevention Plan team. All stormwater permit conditions are met within allowed time frames. The stormwater systems are inspected daily and repairs are made as needed. The stormwater swales are cleaned and kept in good condition. The letdown structures are kept free of debris. The structures are only a few years old and in good condition. The site is regularly mowed. There is no maintenance of equipment done on site. There are no modifications planned for the Bee Ridge Landfill.

The former Venice Landfill was closed in 1986 and is now subject to a DEP Long Term Care Permit that includes stormwater issues. The active Jackson Road Transfer Station shares the site and is regulated by DEP. The leachate control system that was deactivated in October 1998. The landfill and transfer station are not required to have a MSGP for stormwater discharges.

Venice landfill is sixteen years old but the storm water system is inspected daily and repairs made immediately, when needed. The letdown structures are kept free of debris. The storm water swales are cleaned and kept in good condition. The site (including swales) is mowed regularly. All stormwater permit conditions are met within allowed time frames. There are no modifications planned for site. There is no equipment maintenance done on site.

Solid Waste Facilities - City of Sarasota

The City uses both City personnel and a private hauler for solid waste and recyclable materials. The City contracts with Browning Ferris of North America to operate a solid waste transfer facility, a recyclable processing center, and a recyclable buy back center - all at one facility. BFI will continue to implement their Florida Multi-Sector Generic Permit for Stormwater Discharge, which is inspected by the County once a year.

Solid Waste Fleet and Equipment Maintenance and Storage Yards - Sarasota County

Solid Waste fleet and equipment is maintained by County Fleet Services. Fleet vehicles and equipment are stored at the CCSWDC. The CCSWDC obtained coverage under Sector L of the Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity, Permit No. FLR05B637. Both the DEP and the County inspect the CCSWDC. County personnel inspect Fleet Services also.

Solid Waste Fleet and Equipment Maintenance and Storage Yards - City of Sarasota

Equipment Maintenance uses BMP to reduce pollutants from entering the stormwater system. The waste metal filters are recycled by Safety Kleen. Waste parts cleaner is removed from the site by Safety Kleen every 5-6 weeks. Used Anti-freeze is stored in a 55-gallon drum and the used oil is stored in an above ground tank. Both are removed from the site by A&S Oil Recovery. Absorbent mats and rags, pig matting and donuts are used to clean up floor spills and road spills are removed by Safety Kleen.

Publicly Operated Wastewater Treatment Works (POTWs) - Sarasota County

There are 62 wastewater treatment plants in Sarasota County. Thirteen of these are municipal or County POTWs. AWQP personnel inspect all of the wastewater treatment facilities monthly, and perform compliance sampling inspections annually for each delegated facility. Four POTWs discharge to surface water or to the MS4, including the City of Sarasota, the City of Venice Eastside, Sarasota County Gulf Gate, and Sarasota County Southgate. Gulf Gate and Southgate were acquired by the County in August 2002. These four facilities do not have State of Florida Multi-Sector Generic Permits for Stormwater Discharge Associated with Industrial Activity. Some of the wastewater treatment facilities have DEP or SWFWMD stormwater permits that require mowing of small stormwater detention ponds.

Mineral acid tanks, fuel tanks, and hazardous substance tanks over 550 gallons are regulated and inspected by the DEP. Treatment work personnel perform a visual inspection of these tanks daily.

Publicly Operated Wastewater Treatment Works - City of Sarasota

The Stormwater Pollution Prevention Plan for the WWTP continued to serve as the controlling document for the management of vehicle maintenance and storage facilities at the plant. SWMP activities are conducted according to the Spill Response Plan approved by Pollution Control. Effluent discharges complied with the NPDES permit.

Wastewater Residuals Application Sites - Sarasota County

AWQP staff conducts monthly compliance inspections of all regulated wastewater residuals application sites. In 2002, the Water Pollution Control Code (Ordinance 96-020) was amended to increase regulation of residuals land spreading site requirements and setbacks (Appendix B). Since implementation of the new rules in August 2002, three domestic wastewater residuals sites have withdrawn their Agricultural Use Plans from the DEP. The remaining two sites no longer receive biosolids. Presently, the County has no properties that are permitted to receive biosolids. The properties that were previously used for land application continue to be inspected on a monthly basis to ensure compliance with the harvesting restrictions in effect. Industrial residuals sites are directly regulated by the DEP.

Wastewater Residuals Application Sites - City of Sarasota

Wastewater residuals were composted and sold in bulk for use as a soil amendment; approximately 1500 dry tons of sewage sludge were composted, rather than being land applied.

Wastewater Utilities Fleet and Equipment Maintenance and Storage Yards - Sarasota County

Vehicles are stored in Utilities parking lots. Vehicles are maintained off-site by County Fleet Services. County personnel inspect Fleet Services.

Wastewater Utilities Fleet and Equipment Maintenance and Storage Yards - City of Sarasota

Equipment Maintenance uses BMP to reduce pollutants from entering the stormwater system. The waste metal filters are recycled by Safety Kleen. Waste parts cleaner is removed from the site by Safety Kleen every 5-6 weeks. Used Anti-freeze is stored in a 55-gallon drum and the used oil is stored in an above ground tank. Both are removed from the site by A&S Oil Recovery. Absorbent mats and rags, pig matting and donuts are used to clean up floor spills and

road spills are removed by Safety Kleen.

Permit Element: Municipal facility stormwater controls.

Objective: Reduce pollution in stormwater.

Activities: Described above.

Compliance: In compliance.

Strengths: Most municipal facilities are inspected by both the DEP and the County. Inspections performed by the County are more frequent than those performed by the DEP and help to ensure consistent adherence to environmental regulations and stormwater pollution prevention practices. Municipal landfills obtained coverage under Sector L of the State of Florida Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity and actively update their Stormwater Pollution Prevention Plans. An AWQP inspector, who focuses on water quality and stormwater pollution prevention, inspects the municipal landfills annually and is a member of the facility's Stormwater Pollution Prevention Plan team.

Weaknesses: None.

Assessment: Stormwater controls are effective.

Future: Continue the existing program. Work with the four POTWs that discharge to surface water, to determine if they need coverage under the State of Florida Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity. Continue to perform monthly inspections of domestic wastewater residuals sites until their respective harvesting restrictions are no longer in effect. All monthly inspections of these sites should cease by December 2003.

Modifications: No permit modifications needed.

Narrative Reports for SWMP Activities
Section 4.6 Pesticides, Herbicides, and Fertilizers

Summary of Public Education Efforts to Reduce Usage of Pesticides, Herbicides, and Fertilizers

Community Services, Cooperative Extension Service - City and County

Public education programs continue to address the reduction of landscape watering, the reduced use of pesticides, herbicides, and fertilizers, and the design of landscapes to minimize stormwater runoff. The Sarasota County Cooperative Extension Service primarily sponsors and performs these programs. Sarasota Extension also provides advice on native plantings, xeriscaping, appropriate use of fertilizers (including slow-release), and Integrated Pest Management (emphasizing "least-toxic" approaches). Most of these services are provided through the Florida Yards & Neighborhoods program, utilizing Environmental Landscape Management principles. The dominant Sarasota Extension facility demonstrating and educating these principles is the Florida House Learning Center, which utilizes many innovative materials and methods to reduce energy, wastes and environmental impact. Another facility, the Green Office Building at Twin Lakes Park, will open in early 2004 to highlight Florida-friendly landscaping for commercial office buildings. All Sarasota Extension programs are offered and available to all County residents, including residents of the cities of Sarasota, Venice, North Port, and Longboat Key.

From January 2002 to March 2003, Sarasota County Cooperative Extension Service welcomed 13,427 recorded visitors to Florida House, with another 4,000 visitors estimated to have visited the landscape alone. Another 23,586 people received landscape assistance from Extension staff in direct outreach efforts, primarily through contact with the Extension Helpdesk and Satellite Service, and there were over 280,000 hits (unique page views) on the office website, which features resource conservation and Environmental Landscape Management information. There were more than 204 landscape and pesticide educational programs conducted, and 26 achieved Certified Florida Yard status in the Florida Yards & Neighborhoods Program (bringing the total number of Certified Florida Yards to 172 in Sarasota County). There is an active outreach program to the public school system to promote the responsible use of pesticides, herbicides, and fertilizers.

The outreach program assisting condominium and homeowner associations to reduce stormwater runoff and improve stormwater quality through landscape and irrigation modifications continues to show impressive results. The number of associations contacted and receiving some form of educational outreach has grown to 220. This is not a static number as many of these continue to receive educational information and continue to make minor and major changes over time. Based on the observed results, so far, it can be expected that 90% of the 220 associations will make some changes. The most typical changes are expected to be capping irrigation heads, selecting drought-tolerant plants, eliminating turf strips, tying smaller beds together, and adjusting irrigation systems seasonally. These small changes have shown water savings of approximately 50-70%. Water savings actually measured by four associations add up to 21,400,000 gallons, a reduction of 84%, from 10 gal./sq.ft. down to 1.6gal./sq.ft. A conservative estimate of 50% reduction in water use for the 127 associations already reported to have made changes would yield estimated water savings of approximately 314,000,000 gallons for this 32-month time period. An even more conservative estimate of future water savings for the 220 associations would yield expected reduction of approximately 456,000,000 gallons per year.

A new outreach program was implemented targeting the builders, developers and landscape/irrigation installation industries, which started in late 2002. This FY&N Builder/Developer Outreach Program educates this audience on how to comply with the Sarasota County Landscape Water Conservation Ordinance. This Ordinance has the following requirements for all new building landscapes in unincorporated Sarasota County: less than 50% of landscape in high water use irrigation; all tree and shrub beds to be micro-irrigated; no irrigation or plants installed within the dripline of the building; and various other requirements. This educator has been doing site visits to physically demonstrate how to make these changes. By March 2003, over 30 contractors have been educated, representing hundreds of new homes and landscapes.

<u>Mosquito Management Services - City and County</u>

Community education programs expanded during 2003. A full-time program assistant was hired for the education and outreach program. The public was educated about how to prevent

mosquitoes around individual homes and communities without spraying. Public service announcements (2 videos), newspaper articles (6), television interviews (10), web page information, and brochures (1038) on how citizens can prevent mosquitoes were produced.

Public Works, Facilities Maintenance

- Two horticultural staff members give presentations through our County Library educational programs, local civic groups, and County-sponsored public workshops on Environmental Landscape Management, pesticide reduction, native plants, and water conservation. Integrated Pest Management and the least toxic control alternatives are always emphasized.
- Facilities Maintenance maintains the landscaping at all County libraries, which have all been certified under the Florida Yards and Neighborhoods Program. Signage designating the library as a Certified Florida Yard is by each front entrance, and information for the public to have their yard certified is available inside the library.
- Public bid documents for Environmental Landscape Management services include explanations, for educational purposes, of the environmental reasons we require the services requested. Specific examples from the bid documents include:
    - Mulching mowers are required. These specialized mowers chop grass clippings into small pieces that fall amongst the grass, rather than blow out large clumps of grass that can end up in street gutters and stormwater systems.
    - Fertilization: "Concern about the harmful environmental impact of nitrate leaching on both surface water and groundwater quality will dictate sound turfgrass management practices to ensure that the nitrogen applied is utilized by the turfgrass and not lost below the root zone. Some of the methods Facilities Management uses in achieving this goal are: efficient irrigation systems operated in a manner that minimizes percolation below the root zone, slow release nitrogen source, lower application rate, reduced frequency of nitrogen application."
    - All turf is fertilized with a granular 100% natural organic fertilizer, no sewage sludge products are allowed. Chelated iron is applied in place of a

nitrogen application.

- Fertilizer used must be approved prior to application. " To further minimize surface water contamination, fertilizer shall not be applied any closer than 15 feet from the top of bank of any ponds, lakes, or ditches."
- Integrated Pest Management: " Our intent is to focus on prevention or suppression of pest problems with minimum impact on human health, non-target organisms, the environment, and surface and groundwater. We have developed specific use/risk reduction strategies that include the use of biological pesticides and other approaches to pest control that are considered safer than traditional chemical methods. When treatment is necessary, the least toxic most target-specific, non-synthetic chemical pesticide will be chosen. The primary objective of the IPM program is to prevent pest problems and, therefore, eliminate the need for any pesticide applications in the first place."
- Facilities Maintenance is a partner in the U.S. Environmental Protection Agency's Pesticide Environmental Stewardship Program. This EPA program is designed to minimize pesticide risk to human health and the environment.

City of Sarasota

The City encourages the use of xeriscaping and Florida native plants through a brochure called "Watering Wisely" which was mailed to all the residents. This brochure described how to create a Florida-friendly yard that could help restore bays and estuaries.

Permit Element: Educate the public about using less pesticide, herbicide, and fertilizer.

Objective: Minimize pesticides, herbicides, and nutrients in stormwater runoff.

Activities: Described above.

Compliance: In compliance.

Strengths: Widespread public support for IPM.

Weaknesses: Mosquito-borne diseases could reduce public support for IPM.

Assessment: Effective.

Future: Expand existing programs. Make permanent the condo outreach position. Assign a

full-time Mosquito Management employee to public education.

Modifications: No permit modifications needed.

Summarize Internal Efforts to Reduce Usage, Ensure Proper Mixing and Storage, Train Staff, and Require Applicator Certification

Cooperative Extension Service - City and County

Sarasota County businesses and employees whose duties include the application of pesticides and herbicides are certified by the Florida Department of Agriculture and Consumer Services and are trained and/or tested by the Sarasota County Cooperative Extension Service. 146 pesticide tests were administered. 468 people attended Quarterly Pesticide Training seminars, Limited Landscape Maintenance Certification Qualification Seminars, Limited Lawn & Ornamental Training Seminars, and other less formal group learning activities, and have become more educated in proper pesticide handling and application and in proper landscape management. All pesticide and landscape management training programs currently conducted incorporate training for proper pesticide mixing and storage, and for minimizing pesticide use.

Mosquito Management Services - City and County

- IPM methods were used to manage mosquitoes. When treatment of water was needed, the least toxic, practical larvicides were used, e.g. *Bacillus thuringiensis or Bacillus sphericus;* methoprene- insect growth regulator.
- All pesticides were stored, applied, and containers disposed of according to their individual EPA-registered labels;
- Storage of pesticides was confined to the pesticide storage facility, a 40 by 60-foot building with concrete floors and a 120-gallon impervious sump;
- All application of pesticides was done in compliance with the EPA pesticide labels. Non-insecticide methods of mosquito management were used whenever practical; these methods include source reduction, predator mosquito fish distribution, public education, and review of engineering plans to prevent artificial mosquito habitats;
- No pesticide rinsates were accumulated; all pesticide rinsates were applied at treatment sites;

- Pesticide drums were removed on a regular basis by a registered recycling service and containers were disposed of according to their label instructions;
- Personnel were trained to handle and apply pesticides to eliminate chances of spills or accidents. However, if spills did occur, personnel also had the training and skills to contain and clean-up spills. Any spilled pesticides/materials and clean-up materials were identified and packaged for pick-up by the County's registered Household Hazardous Waste contractor; no pesticide spills occurred during 2003.
- The Safety and Health Specialist or designee inspects the chemical storage building weekly and oversees immediate corrective action if any deficiencies are found;
- The Safety and Health Specialist or designee inventories pesticides each week;
- All operational staff members hold Florida Department of Agriculture and Consumer Services, Core and Public Health Pest Control certifications that must be maintained by 16 hours of continuing education units during a four-year period.

The Safety and Health Specialist or other certified instructors trained the staff in the following:

- Hazard Communication (Right to Know);
- Fire Prevention and Evacuations;
- Emergency Preparedness;
- Personal Protective Equipment;
- Respirator;
- Hazardous Waste Operations;
- Hurricane Emergency; and
- First Aide/CPR.

Spraying of pyrethroid and organophosphate adulticides was reduced by 75% in adulticide reduction areas, which covered 26 square miles. The use of less-toxic larvacides was used in these areas, which were mapped using GIS technology. Maps and records were maintained of larvicide and adulticide applications and summarized in a weekly inspection report. In 2002, the ratio of acres larvicided to acres adulticided was 1:128, which exceeded the goal of 1:500 by 74.4%.

The habitat elimination and modification program was expanded in its second year and focused on the elimination of aquatic weeds that provide mosquito habitat. Fifty-five acres of aquatic weeds were eliminated. DEP refused to consider a plan to conduct mosquito ditching.

Gambusia (fish predatory on mosquito larva) were introduced into more than 180 new sites. They were provided to the public for new detention systems and ponds.

Research on safer alternatives to spraying was conducted in collaboration with USDA and Florida Medical Entomology Laboratory.

The container abatement program was continued in 2002.

The program was routinely reviewed by the DACS bureau of Entomology, the County IPM Advisory Board and the Steering Committee. The chemical storage building and container disposal plan met EPA requirements. Written protocols were in place; regular inspections were made of the storage facility. Records were kept of container disposal. Monthly reports were submitted to the DACS Bureau of Entomology on pesticide usage. The inventory pesticide storage building was routinely inspected.

Continuing education training was required for all full time employees (FTE), and OSHA & DACS training was required for all employees. The state maintained certification records and employees signed acknowledgement of receipt of OSHA required training. Florida DOACS, OSHA and EPA-required training was completed for 19 full-time employees. Fourteen seasonal employees were trained and up to 15 will be trained in 2003.

Facilities Maintenance - Sarasota County

The Maintenance Coordinator provides interior IPM, termite control, and bat mitigation using outside vendors for service. Our policy is to focus on prevention or suppression of pest problems with minimum impact on human health, non-target organisms, the environment, and our water resources. We have developed specific use/risk reduction strategies that include the use of biological and other approaches to pest control that are considered safer than synthetic chemical

methods. The primary objective of our IPM program is to prevent pest problems first, then choose least-toxic methods when control is necessary. We are members of the EPA Pesticide Environmental Stewardship Program (PESP).

The horticulturist oversees our Environmental Landscape Management Program that was developed to eliminate or reduce the use of pesticides, herbicides, and fertilizer while maintaining safe, attractive landscapes in a cost-effective manner. No herbicides were used in lawn areas, slow release and organic fertilizers were used to protect water quality and reduce pollutants reaching our water resources. Plants are pruned to retain their natural shape and provide shelter and food for our native birds. All our Library landscapes are certified under the Florida Yards and Neighborhood Program to serve as an example for our community.

The Maintenance Coordinator serves on the County Landscape Review Committee and oversees design of Florida Friendly Landscapes at all our facilities to enhance the quality of life in our community. Our award winning landscaping, that is both attractive and water conserving, has been recognized by Southwest Florida Water Management District as setting an example for others to follow.

The Maintenance Coordinator serves on the County Water Conservation Committee, which have been the leaders in County government for landscape water conservation. We select plants for landscape installation that are drought tolerant, utilize native plant species to the greatest extent possible, reduce or eliminate water consuming lawn areas, utilize low volume micro-irrigation in all landscape beds, and mulch beds with recycled mulch to conserve water and reduce weeds. Our IPM and ELM programs help protect the water quality in our community. Low volume irrigation minimizes runoff, allowing water to slowly soak in around plant roots, rather than spray all over and have excess run off.

In accordance with BOCC Resolution No. 90-252 and County Ordinance No. 2001-081, we design and install water conserving micro-irrigation systems, have rain shut-off devices on all irrigation systems, utilize reclaimed water whenever available, and provide ongoing irrigation system preventative maintenance to ensure our systems operate properly, reduce runoff, and

conserve water.

Aquatic Plant Control - Sarasota County

New employees were required to be certified within six months of employment and certification was also required of contractors. All ten aquatic plant control applicators hold DACS Restricted Use Pesticide Licenses with aquatic and Right-of-Way endorsements attached.

Drainage Operations - Sarasota County

Re-shaping channels to lessen slopes in order to reduce erosion. This also improves access for hand clearing and mowing, there-by reducing the need for herbicide application on slopes.

Forestry Operations

The Forestry Division reduced its use of fertilizers in the past year. Through a new fertilizer contract, the application of Quick N fertilizer was reduced by going to 9-month application cycles. The Forestry Division also decreased its use of Round-Up herbicide through the use of rubber mulch mats and through the use of a pH regulator in mix tanks. This also resulted in decreasing by 50% the use of glyphosate in the mix. Finally, we decreased pre-emergents and herbicide use in mulch areas by 10%.

Due to recent staff turnover and new employees, the Forestry Division currently has 4 Limited Lawn and Ornamental (LLO) certifications for applicators out of 13 field staff. Certifications cost $150.00 each and last for 3 years. Forestry Division arborists also took a CEU class in Manatee County. Our goal is to have all field staff LLO-certified in the next year. All arborist will have CEUs and Limited lawn and ornamental as part of their job requirements.

Parks and Recreation - Sarasota County

Two Environmental Pest Management Technicians holding (Limited Certification for Governmental Pesticide Applicators in Lawn & Ornamental) who scout and treat pest and weed problems on athletic fields countywide. Six certified Arborist & Horticulture Technicians who control pest & weed problems at landscaped facilities (Limited Certification for Governmental Pesticide Applicators in Lawn & Ornamental). One Certified Pest Control Operator – Lawn &

Ornamental.

Pest problems are kept with in reasonable control without excessive amounts of pesticides being applied to athletic fields or landscaped areas. 95% of the pesticides utilized for pest and weed control carry the Caution Label.

All individuals currently certified in their respective category meet the requirements of Chapter 482 F. S. They comply with the IPM directive of Sarasota County and meet the required Florida State requirements for re-certification schedules.

Ninety percent of the pesticides are stored in one location at Twin Lakes Park. Need to examine other sites for the safe storage of small quantities of products such as Amdro for Fire Ant control and similar products such as Round up for weed control around signs, bollards and post & cable.

The north and south athletic divisions have arranged with their respective pesticide and fertilizer suppliers to only deliver the amount of product for the schedule activity. This has resulted in a minimum fifty percent reduction in the fertilizer stored at various facilities. Pesticide storage has been reduced by a similar amount and was further reduced by Operation Clean Sweep. This program administered by the Florida Department of Agriculture removes old, unused, or products no longer labeled for a give crop to a safe disposal site at no charge to the county. Estimate a cost saving of $10,000.00 versus removal by a hazardous waste contractor. Reduction in the total amount of fertilizer applied from 200 pounds per acre to 125 pounds. Fertilizers are now blended with slow release forms of nitrogen and potassium to minimize leaching into the groundwater stream. Surface runoff has also been minimized by better scheduling of applications during the rainy season.

We need a funding source for strategic locations of wash down facilities that will recover residues on spray rigs, trucks and other grounds maintenance equipment. This will prevent them from being washed off equipment and polluting maintenance yards.

Fertilizer pollutants can be reduced by vigorous soil testing for available nutrients and then only

applying those needed fertilizer elements to maintain health plant growth.

City of Sarasota

Continue to follow Best Management Practices and follow integrated pest management from the University of Florida and the County Extension Office.

Constructed a new chemical building meeting state design. The City spent $3850 for Ant killer, $5633 for Roundup and $2290 for fertilizer.

The City will continue to have contractors installing plant material follow Architect specifications that use BPM and IPM. Also we will continue to train employees. A BMP class was put on by Earth Advisors Inc. for 20 employees in Landscaping. We trained five new employees on the use of ant killer and roundup. Steve Stafford received his Ornamental & Turf License for public applicators.

Public Works Aquatic Plant Control Section - Sarasota County

- Storage of pesticides was confined to the same 40 by 60-foot pesticide storage building used by Mosquito Management Services;
- Chemicals that were applied by Aquatic Plant Control were approved by the DEP for use in water bodies;
- Aquatic Services did scheduled maintenance on canals and drainage ditches throughout the year. Canal slopes and banks were spot treated with herbicides.

Environmental Services, Resource Management

All herbicides are stored, applied, and disposed of in accordance with their individual EPA-registered labels. Two staff members were certified for herbicide application allowing them to treat Public Lands and aquatic habitats. Herbicide application licenses are maintained by attending training to receive continuing education unit credits. All herbicide application is performed by certified employees or contractors, or under the direct supervision of a certified applicator. Records were kept of the types and amounts of herbicides applied on the Pinelands and the Carlton Memorial Reserve from January 2002 through March 2003.

Reduced Use and Proper Storage and Mixing of Pesticides, Herbicides, and Fertilizers - City of Sarasota

Proper methods for storage and mixing of pesticides, herbicides, and fertilizers were employed.

Permit Element: Train handlers of pesticides, herbicides and fertilizers.

Objective: To minimize the pesticides, herbicides, and nutrients in stormwater runoff.

Activities: Described above.

Compliance: In compliance.

Strengths: Requiring certifications.

Weaknesses: Hiring sufficient seasonal staff to accomplish the adulticide reduction project is problematic. Certification for government employees is too easy. Governmental employees should be required to meet the same standards as commercial certification for pesticide application, which is a more difficult test and requires more training for certification and to maintain certification.

Assessment: Effective.

Future: Expand outreach to residential audiences through the volunteer Master Gardener program. Expand outreach to commercial horticulture service providers and the building construction industry. Continued decreases in adulticide spraying of organophosphates; increased use of biological control, habitat elimination and research on safer alternatives. Continue the container abatement program.

Modifications: No permit modifications needed.

Narrative Reports for SWMP Activities
Section 4.7.a. Illicit Discharges & Improper Disposal Inspections, Investigations, and Enforcement

Allowed Discharges to MS4 - City and County

1. Uncontaminated roof drains;
2. Water line flushing;
3. Landscape irrigation;
4. Diverted stream flows;
5. Rising ground waters;
6. Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)) to separate storm sewers;
7. Uncontaminated pumped ground water;
8. Discharges from potable water sources;
9. Foundation drains;
10. Air conditioning condensate;
11. Irrigation water;
12. Springs;
13. Water from crawl space pumps;
14. Footing drains;
15. Lawn watering;
16. Individual residential car washing;
17. Flows from riparian habitats and wetlands;
18. Dechlorinated swimming pool discharges;
19. Street wash waters; and
20. Discharges or flows from emergency fire fighting activities.

Permit Element: List allowable discharges to MS4.

Objective: Appropriate discharge prohibitions.

Activities: Listed above.

Compliance: In compliance.

Strengths: The list continued to be appropriate.

Weaknesses: AWQP is considering how to handle mobile car detailing businesses, mobile pressure washing businesses, and landscapers.

Assessment: The present list of allowable non-stormwater discharges is effective. In addition, AWQP encourages citizens, local businesses, and other County offices to use stormwater pollution prevention techniques and best management practices to minimize the effects that these allowable non-stormwater discharges may have on the MS4 and surface waters.

Future: Continue with the existing list.

Modifications: No permit modifications needed.

Summary of inspection schedule, reporting point, SOPs, allotted staff and resources, interlocal agreements, investigations, enforcement, recordkeeping, and training - City and County

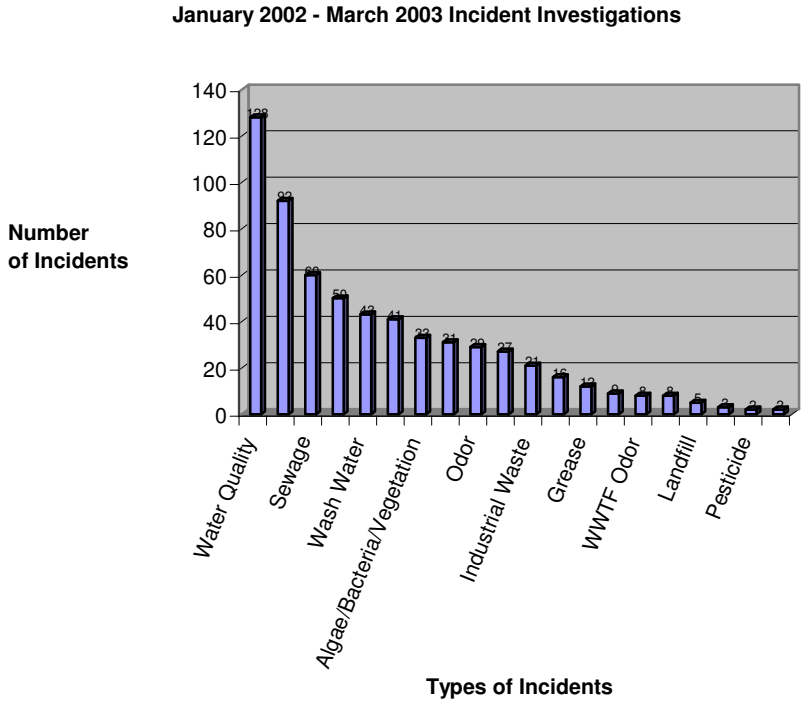
The Sarasota County Pollution Control Code (Ordinance 96-020) gives authority to AWQP to prohibit illicit discharges. This ordinance prohibits illicit discharges, illicit connections, and improper disposal to all waters, including stormwater, throughout Sarasota County (including the City of Sarasota). The specific language of the rule requires that all waters, at all places, at all times, within the territorial limits of Sarasota County remain free from floating, settleable, deleterious, and toxic substances. It prohibits any person from spilling, dumping, or discharging any material or substance into any stormwater conveyance, other than those composed entirely of stormwater. A copy of the recently amended ordinance is in Appendix B.

AWQP actively investigates citizen complaints, inspects industrial and domestic wastewater facilities, and performs proactive inspections. Compliance is often achieved through voluntary compliance thus eliminating the need for formal enforcement. When voluntary compliance is not possible, enforcement is vigorously pursued. During this reporting period, 620 pollution incidents were investigated with a total of 240 violations found. Voluntary compliance was achieved for 153 investigations. In thirteen cases the identity of the responsible party could not be determined, so there was no enforcement. Twenty cases were referred to other agencies for enforcement. Thirty-five Field Violation Notices were issued and all resulted in compliance.

Fifteen Non-compliance Letters, 2 Warning Letters, and 2 Short Form Consent Orders were issued. Thorough records were kept of all investigations and enforcement. Written procedures were maintained.

To respond to citizen's reports of pollution, AWQP maintained a 24-hour hotline telephone number that was active seven days a week. Inspectors also pursued proactive investigations, using field experience and professional knowledge to find and correct illicit discharges and improper disposal. Inspectors used land-use, age of development, previous problem areas, and areas located near surface waters to choose proactive inspections sites. These programs were highly productive. All AWQP inspectors were trained to spot evidence of illicit discharges, illicit connections, and improper disposal in the course of their regular inspections and duties.

Promotion of public reporting of illicit discharges was added to the County's Internet site allowing citizens to report their pollution concerns via the Internet. A copy of the reporting form is included in Appendix C.



Permit Element: Inspections and enforcement of discharge prohibitions.

Objective: Reduce polluting discharges to the MS4.

Activities: Described above.

Compliance: In compliance.

Strengths: AWQP continues to be an innovative and highly effective regulator of prohibited discharges.

Weaknesses: None.

Assessment: This SWMP element is among the most effective.

Future: Continue the programs. AWQP will expand outreach training to other field personnel in Sarasota County and City of Sarasota governments.

Modifications: No permit modifications needed.

Narrative Reports for SWMP Activities

Section 4.7.b. Illicit Discharges & Improper Disposal Field Screening

Reserved

Narrative Reports for SWMP Activities
Section 4.7.c. Illicit Discharges & Improper Disposal Spill Response

The Sarasota County Emergency Services, Fire Department Special Operations Team was responsible for emergency response to hazardous materials spills for Sarasota County. In 2002, $ 1,013,304 was spent responding to 499 emergencies.

During the last year, initiatives centering around increased customer responsiveness were completed. The primary objectives that were addressed included:

- Expansion of the number of fire operations personnel assigned to Hazardous Materials response mission from 33 to 42 with an ultimate goal of achieving a team of 54 personnel.
- Development of an interagency memorandum of understanding with the Sarasota County Sheriff's Office that will add an additional 10 law enforcement officers to the Hazardous Materials (Special Operations) mission. This will result in a greater capacity to respond incidents involving illicit use of hazardous substances/materials.
- Development of a Hazardous Materials Cost Recovery methodology. This cost system establishes one lead agency for the purpose of recovering costs during emergency operations phases of an event.
- Development of a clearly defined entry level and continuing education program for hazardous materials technicians. This program utilizes the Florida SERC Training Guidelines and the Hazardous Materials Technician Competency Assessment methodology previously developed by LEPC District 4.

During the FY 2004 time frame, the Special Operations (HazMat) Team has identified the following strategic initiatives:

- Increased emphasis for hazardous materials technician training in the areas of advanced response tactics.
- Develop a strategy and seek funding sources for establishment of a greater coastal spill response capability. This capability would be rapidly deployable to handle spills

on waterways or tributaries thereof and will likely involve Emergency Services Marine Operations unit.

- Comprehensive entry-level training for new technicians assigned to the team.
- Deployment of a new Special Operations response vehicle to provide greater support to field operations.

Permit Element: Respond to emergency spills of pollutants.

Objective: Minimize pollutants in MS4 while protecting the public from risk.

Activities: Described above.

Compliance: In compliance.

Strengths: Well-trained professionals.

Weaknesses: Enhancements in coastal spill response capabilities desirable.

Assessment: Effective.

Future: Continue to expand into response to terrorist attacks and tie that response capability to benefit environment response capabilities.

Modifications: No permit modifications needed.

Narrative Reports for SWMP Activities
Section 4.7.d. Illicit Discharges & Improper Disposal Public Notification

Summarize Publicity Program - City and County

AWQP continued using a dedicated telephone number for citizen reporting of suspected illicit discharges and improper disposal, with active staff response around the clock, seven days per week.

AWQP continued public education outreach activities, and provided citizens with information and materials describing what stormwater is, the components of the stormwater system, how to spot an illicit discharge, generally what can be discharged into the MS4, the problems associated with illicit discharges and improper disposal, and how to report incidents.

AWQP participated in the following educational and promotional activities:

- Earth Day (April 2002),
- 2002 Sarasota County Alliance for Environmental Education Solutions, "Teaching Teachers" workshop (June 2002),
- Pollution Prevention Month (September 2002),
- Annual Domestic Waste Workshop (November 2002),
- Reading Festival (November 2002),
- G.Wiz (Gulf Coast Wonder and Imagination Zone) Water Festival (March 2003),
- Earth Day (April 2003), and
- Stormwater Month (April 2003).

Activities during Pollution Prevention Month included stormwater pollution prevention displays at two local libraries. Personnel stationed at Earth Days, the Reading Festival, and Water Festival booths provided thousands of citizens with information and materials on the hotline number, stormwater pollution, its effects on water quality and animal life, as well as how prevent it. Some of the activities during Stormwater Month included a large stormwater pollution prevention display in the foyer of the Sarasota County Administration Building, a stormwater

pollution prevention display at two local libraries, a Natural Resources Staff Storm Drain Marking Day (approximately 250 drains were marked), two television interviews on the local Channel 40 television station, an article on channel 40's website, and an article in the Pelican Press Newspaper. In addition to these activities, eighteen presentations were given at local schools (elementary, middle, and high schools respectively) in a focused effort to educate youth to understand and recognize the importance of stormwater pollution and their role in preventing it. Personnel also continued to promote the Clean Marina Program and to educate citizens, business owners, and employees during incident responses and facility inspections. Environmental Services also provided internal environmental education through its business center newsletters, EarthTones and Executive Update.

Permit Element: Promote reporting of pollution by the public.

Objective: Reduce polluting discharges.

Activities: Described above.

Compliance: In compliance.

Strengths: AWQP has a year-round commitment to public education.

Weaknesses: Education efforts are very time consuming. Some stormwater details could be more fully explained.

Assessment: Effective.

Future: Develop promotional methods that are more systematic and less time consuming, like expanded use of the Internet site and pre-formulated press releases.

Modifications: No permit modifications needed.

Narrative Reports for SWMP Activities
Section 4.7.e. Illicit Discharges & Improper Disposal
Oil and Household Hazardous Waste

Summary of Promotional Activities, Waste Collection, and Recycling - City and County

The Used Oil Collection and Household Hazardous Waste Programs were promoted via various means: Local TV promotional spots, notices in county utility bills, neighborhood mobile collections were promoted by door to door flyers, program information was placed on the county internet site, scgov.net, and also on the Earth911 internet site. County staff also promotes our programs while doing presentations at homeowner, civic and business groups.

The Hazardous Waste program was very active:

- Assistance was provided to 43 emergency response events to ensure proper clean up and disposal of hazardous waste.
- Inspections of 82 commercial demolition and renovation projects were performed, resulting in 3,434 fluorescent lamps, 80 HIDs, 42 mercury thermostats, 32 mercury switches, 6100 pounds of ballasts, 19 rechargeable batteries, 6 pounds of lead, and 51 pounds of miscellaneous hazardous materials collected.
- 31 responses to public reporting of illicit discharges were completed.
- Development of a business-training program was initiated. Training will be conducted at the new hazardous waste facility.
- 990 Small Quantity Generator (SQG) inspections were performed, resulting in 75,447 lbs. of hazardous waste collected.
- Staff conduct educational presentations in front of business groups through the Solid Waste Education / Outreach Program.
- The Mobile Chemical Collection Program is in place.
- The Curbside Electronics Collection Program is in place.
- The construction of a new Household Chemical Collection Facility is in progress.
- The Bee Ridge Household Chemical Collection Facility is open 3 days week, including Saturday.
- The Jackson Road Household Chemical Collection Facility is open 2 days per week,

and 2 Saturdays per month.

- Project Green Sweep, a program for small business and organizations is in place.
- The Curbside Used Oil Collection Program is in place.
- Two County Owned Oil Recycling Locations are open to public 5 to 6 days per week.
- The Retail Battery Collection Program is in place.
- Five Mobile Chemical Collections were held.
- 435,165 pounds of electronics were collected through the Curbside and Household Collection Facilities.
- 7,131 residents and 338 businesses participated in the household and business collection programs.
- 30,650 gallons or 233,553 pounds of used oil was collected through the Curbside Collection and County Oil Recycling Drop Off programs.
- A total of 1,564 propane cylinders, weighing approximately 24,136 pounds, were collected.
- The total of All Other Household Hazardous Waste Collected was 556,090 pounds.

Permit Element: Support and promote oil and household hazardous waste collection.

Objective: Prevent improper waste disposal into the MS4.

Activities: Described above.

Compliance: In compliance.

Strengths: Inspection and enforcement programs have resulted in diversion of thousands of pounds of hazardous waste from the environment.

Weaknesses: None have been identified.

Assessment: Highly effective.

Future: The new Hazardous Waste Household Chemical Collection facility will be open to the public for expanded hours.

Modifications: No permit modifications needed.

Summary of Storm Drain Placarding Program - City & County

Sarasota County Public Works, Neighborhood Response Team (NRT) and AWQP assumed responsibility for the program in 2002 and made significant strides in reorganizing the program. An inventory of new and old marked drains was created for a total of 300. Placards were located using GPS and a GIS data set was created. The map of marked storm drains is in Appendix D. A development plan was written, program materials (i.e. volunteer training packets, flyers, posters, door hangars, and T-shirts) were developed and supplies were replenished.

The Storm Drain Marking Program was promoted extensively. County employees were encouraged to participate in the program and the response was good. Promotion of the program was part of the many AWQP promotions described in 4.7.d of this report. The Pelican Press did a newspaper article (April 2003) and two interviews were aired on the local Channel 40 television station and their Internet site (April 2003).

Permit Element: Mark storm drains with warnings messages against dumping.
Objective: Reduce polluting discharges to the MS4.
Activities: Described above.
Compliance: In compliance.
Strengths: Year-round promotions. The inventory. Motivated staff.
Weaknesses: Volunteers don't always thoroughly report tasks completed.
Assessment: Raises public awareness; needs to stay cost effective.
Future: Continue the program and focus on unmarked areas near the coast.
Modifications: No permit modifications needed.

Narrative Reports for SWMP Activities
Section 4.7.f. Illicit Discharges & Improper Disposal
Sanitary Sewer Seepage

Improvements in Sanitary Sewer Collection System - Sarasota County

Sarasota County Utilities operates the following nine wastewater treatment plants:

- Bee Ridge Water Reclamation Facility (WRF) FLA013372
- Central County WRF FLA013455
- Meadowood WRF FLA013385
- Venice Gardens WRF FLA043494
- Atlantic WRF FLA134333
- Plantation WRF FLA013365
- Proctor Road WWTF FLA013447
- South Gate AWWTP FL0032808
- Gulf Gate AWWTP FL0032816

Sanitary sewer seepage occurs from three main sources: gravity sewer lines (including manholes), sewer force mains, and lift stations. A concerted effort by Utilities to eliminate and minimize such spills is described below.

- Treatment facilities were inspected at least twice a day, during which the operator looked for evidence of leaking pipes and malfunctioning equipment. Two checklists were completed daily. The treatment facility was inspected at least once a day for the items on the pretreatment, biological nutrient reduction, chlorination equipment, and effluent checklists. The equipment running hours checklist was filled out daily, as a check on potential equipment problems.
- Most of the effluent was reused for irrigation of golf courses and residences. Most golf courses had an effluent storage pond from which irrigation water was drawn. These ponds were regulated by the DEP and SWFWMD.
- A vacuum/flush truck was used to flush gravity sewer lines. Flushing prevented the development of obstructions in the pipes that cause sewage backups and overflows.
- A SCADA telemetry system provided a radio connection between the treatment

plants and lift stations. Malfunctions were identified faster and responses were faster, resulting in fewer spills. The SCADA system installation is nearly complete.

- Sarasota County Utilities spent $3,125,000 on lift station maintenance and rehabilitation.
- The ongoing Sanitary Sewer Evaluation Study (SSES) evaluated the integrity of gravity sewer lines and manholes, and helped prioritize replacement and repair projects. The purpose of the project was to prevent groundwater or stormwater from inflowing or infiltrating (I&I) into the collection system, but also reduced the potential for leakage during periods of low groundwater. The SSES findings resulted in the expenditure of $760,000 for relining of gravity sewer lines and rehabilitation of manholes.
- Sarasota County Utilities spent $1,200,000 on wastewater pipeline repair and maintenance.
- All lift stations were fenced to reduce vandalism.
- Utilities followed an in-house protocol for spill response: “Spill Response Standard Operations Procedures.” Appropriate clean up, disinfection, and sampling procedures were followed.
- Treatment plant service commitments were reviewed annually after each plant reached 50% of its capacity. Treatment plants expansion was planned to prevent hydraulic overload conditions that could lead to wastewater spills or substandard effluent.
- In response to citizen and governmental concerns, effective January 28, 2003, the County no longer land applies domestic wastewater residuals. Residuals are now dewatered and disposed of in a lined landfill, significantly reducing the potential for ground water pollution. The additional cost to the County for landfill disposal in lieu of land application is $1,000,000 per year.
- Greater participation in EPA's Capacity, Management, Operation and Maintenance (CMOM) program is planned. CMOM training has already begun.
- Sarasota County has begun a ten-year project to replace residential septic tank systems with central sewer systems. Sarasota County Utilities spent $4,500,000 on septic tank replacements.

Improvements in Sanitary Sewer Collection System - City of Sarasota

Continued capital and maintenance funding of sanitary sewer inflow/infiltration control program.

- Cleaning and televised inspection of sewer lines.
- Slipline repair and manhole rehabilitation.
- Mainline replacements.
- Lift Station upgrades.

The private building sewers replacement pilot project was completed. 301 defective private sewers of 517 private sewers in the test area were replaced using no-dig technology. This project valued at $1.1 million reduced extreme wet weather flow through the area lift stations by up to 40%. Given the success of the pilot, we are developing another area of 226 private sewers to be replaced.

Permit Element: Reduce sewage spills into the MS4.

Objective: Minimize the amount of wastewater entering the MS4.

Activities: Described above.

Compliance: In compliance.

Strengths: Focus on collection system.

Weaknesses: Collection system improvements are expensive.

Assessment: Effective.

Future: Continue the existing program.

Modifications: No permit modifications needed.

Limit Installation of New Septic Systems - Sarasota County

The Department of Health issues permits for septic systems and ensures that standards are met. AWQP reviews site and development applications (subdivision, not single family homes) and encourages installation of sanitary sewer systems instead of septics. In the past, some lots were platted for installation of septic systems and cannot now be forced to use sanitary sewer service.

Limit Installation of New Septic Systems - City of Sarasota

The City discourages installation of new septic tanks. It is uncertain if a septic system might be allowed at all. New construction is required to build pump stations and little force-mains to

reach the sanitary sewer collection system if necessary. There are some pre-existing septic systems, but the City is working to eliminate those too.

Replace Existing Septic Systems with Sanitary Sewer - Sarasota County

Sarasota County's Phillippi Creek Septic System Replacement Program began construction in 2002 and is planned to replace 13,650 septic systems in north County by the year 2010.

Replace Existing Septic Systems with Sanitary Sewer - City of Sarasota

Back in 1999, the City notified 65 properties that had existing sewer lines abutting their properties to connect. As of October 2001 all had complied. There remain 71 sites that would require relatively minor line extensions to reach, 31 that would require more extensive line extensions, 140 that have no sewer available without major construction including lift stations, and 28 with other miscellaneous issues that prevent connection. This compares with the more than 18,000 customers that we have. The City continues to look for opportunities associated with redevelopment, and/or road construction activities to provide service to those on septic systems.

Identify Areas Served by Septic Systems - City & County

Areas served by septic systems were identified in the Preliminary Report on County Water and Sewer Service in Sarasota County by Post, Buckley, Schuh, & Jernigan (1994). The Department of Health also maintains a database of addresses that were issued septic system permits. Sarasota County Geomatics has created several map layers of properties that have received permits for septic system installation or repair.

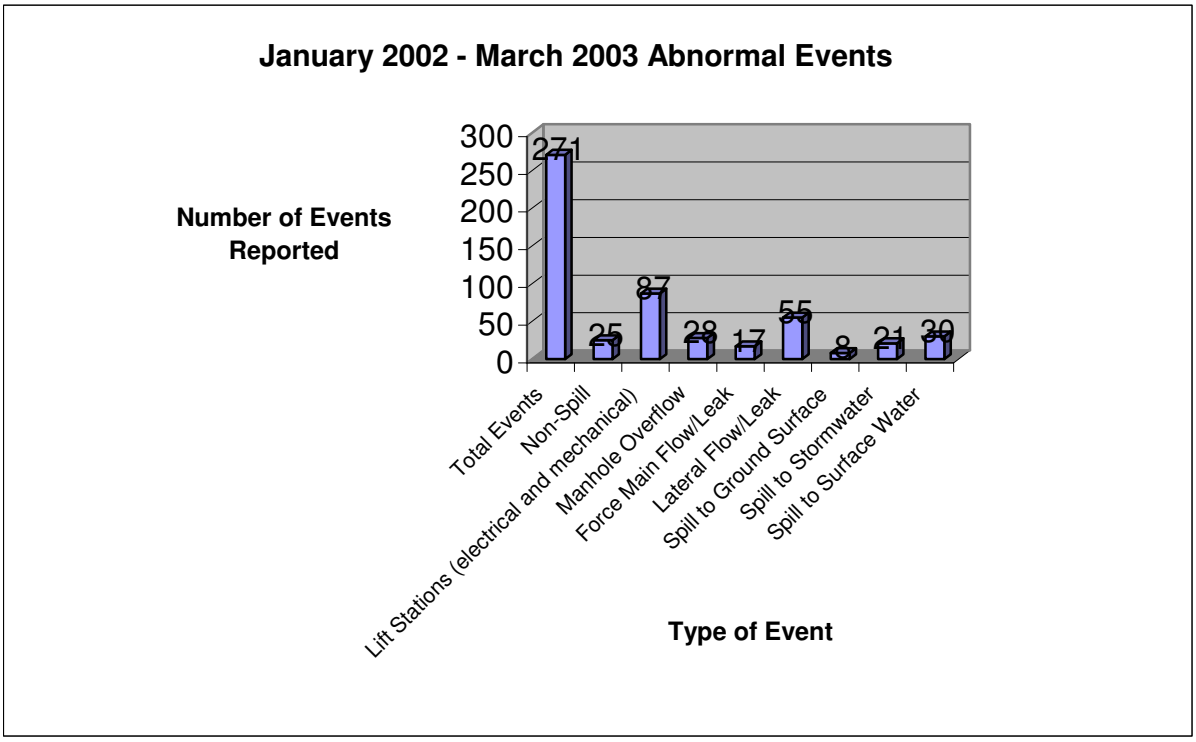
Report to Utility When Sewage Detected in Stormwater - City & County

All citizen and staff reports of discharges from sanitary sewers were reported promptly to the appropriate utility. All reports of septic system discharges were promptly reported to the Sarasota County Department of Health.

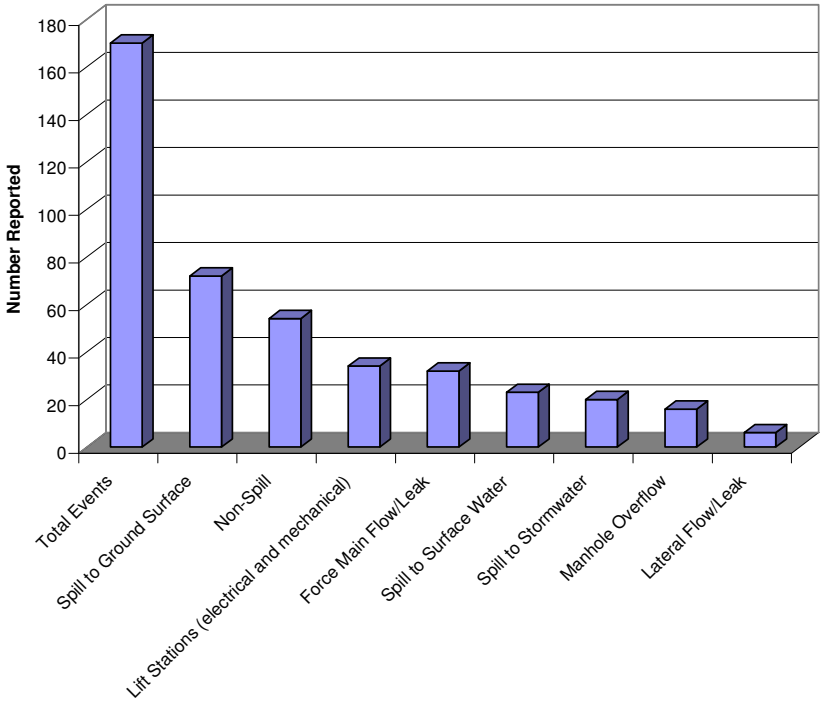
Air and Water Quality Protection personnel investigated 60 reports related to sewage; 9 related to septage; 8 related to wastewater treatment facility odor; 3 related to wastewater treatment

facilities, and 2 related to sludge.

The wastewater treatment facilities (City, County, and private) in Sarasota County reported a total of 208 abnormal events. Although 208 total abnormal events were reported to Air and Water Quality Protection, 271 abnormal events are represented in the chart. The inflated number results from situations when one reported abnormal event is represented by multiple types of spills or leaks.



2001 Wastewater Treatment Facility Abnormal Events



Report to Regulator When Septage Detected in Stormwater - City & County

All reports of septic system discharges were promptly referred to the Sarasota County Department of Health.

Permit Element: Report to authorities when sewage detected in MS4.

Objective: Reduce the amount of sewage entering the MS4.

Activities: Described above.

Compliance: In compliance.

Strengths: Reporting has been conducted for a long time.

Weaknesses: Abnormal events are not always fully reported.

Assessment: Effective.

Future: Continue the existing program.

Modifications: No permit modifications needed.

Narrative Reports for SWMP Activities
Section 4.8.a. High Risk Industrial Facilities

Inventory Facilities Discharging to MS4 - City and County

Sarasota County maintains and updates two inventories of facilities discharging to the MS4. One inventory is the Industry Inspections database. This database tracks NPDES industrial facilities, newly discovered potential NPDES industrial facilities, and NPDES industrial facility inspections. The second inventory is a list of NPDES industrial facilities that are either permitted (covered under the State of Florida Multi-Sector Generic Permit for Stormwater Discharges Associated with Industrial Activity) or certified (covered under a State of Florida No Exposure Certification for Exclusion from NPDES Stormwater Permitting). This second inventory is maintained by a Geographical Information System (GIS) database that links each permitted or certified facility to its associated property parcels and stormwater outfalls. Using this GIS capability, Air and Water Quality personnel are able to map this information. Mapping allows a spatial representation of each facility, the land area associated with the facility's industrial activity, the outfall to which the stormwater from that land area drains, and the MS4 or water body that receives stormwater from the facility's outfall.

The Industry Inspections database contains approximately 940 facility entries. Presently, there are approximately 59 facilities within Sarasota County that are permitted or certified by the State of Florida for stormwater discharges associated with industrial activity. Maps of permitted and certified facilities are in Appendix E. A prioritized schedule is maintained for industrial facility inspections. Thirty-two new facilities were discovered and inspected. Twenty-one of these facilities were determined to be industrial facilities. The list of new facilities is in Appendix F.

Permit Element: Maintain an inventory of dischargers.

Objective: Ensure permitted discharges stay within legal limits.

Activities: Described above.

Compliance: In compliance.

Strengths: GIS made the information more useful.

Weaknesses: The list does not include some facilities that need to obtain permit coverage (or

No Exposure Exclusion) but have not submitted the proper paperwork.

Assessment: Getting better.

Future: Continue the program.

Modifications: No permit modifications needed.

Summary of Facility Inspection Program - City and County

AWQP inspects high-risk facilities included in the high-risk facility inventory. County personnel also perform proactive inspections of high-risk facilities based on staff observations and respond to citizen complaints. From January 2002 through March 2003, AWQP inspected approximately 152 facilities; 74 were within the unincorporated County and 78 within the City of Sarasota. Inspectors verify the facility's Standard Industrial Classification Code and determine if a State of Florida Multi-Sector Generic Permit for Stormwater Discharges Associated with Industrial Activity or a No Exposure Certification for Exclusion from NPDES Stormwater Permitting is required. Pollution prevention suggestions and information on best management practices is provided. AWQP also provides assistance in the permitting process, thereby acting as a liaison between the business and the DEP.

Permit Element: Inspect facilities that have potential to contaminate the MS4.

Objective: Ensure that polluted runoff is minimized.

Activities: Described above.

Compliance: In compliance.

Strengths: Providing pollution prevention and BMP information. Acting as a liaison between the DEP and businesses. Introduction of GIS.

Weaknesses: Tracking businesses as they move. The Occupational License Database is inefficiently organized.

Assessment: Effective.

Future: Continue the program.

Modifications: No permit modifications needed.

Narrative Reports for SWMP Activities
Section 4.8.b. Monitoring for High Risk Industries

Reserved

Narrative Reports for SWMP Activities
Section 4.9.a. Construction Site Runoff
Construction Planning Procedures

Summarize Review and Verification Program - Sarasota County

Site & Development Plans and Subdivision Plans submitted in accordance with the Land Development Regulations are reviewed by AWQP to ensure that BMPs for erosion control are adequately represented. Plans must include locations of erosion control equipment, equipment details, and approval stipulations. Plans are also reviewed to ensure compliance with the erosion control conditions of Developments of Regional Impact, if applicable. Approximately 20-25% of the AWQP engineer's duties involve development plan reviews and related activities.

Between January 1, 2002 and March 31, 2003, four hundred ninety two (492) plans were reviewed for the objectives mentioned above. Beginning February 1, 2003 the number of projects (several revised plans may be submitted per project) and the number of approvals is being tracked. Between February 1, 2003 and March 31, 2003, eighty plans were submitted for seventy different projects. Thirty-nine of the seventy projects were approved.

Summarize Review and Verification Program - City of Sarasota

Chapter 29.5 of Code of the City of Sarasota created the Engineering Design Criteria Manual (1989) which requires an Erosion/Sedimentation Control Plan (signed and sealed by the Engineer of Record), a permit, including a pre-construction meeting to implement erosion and sedimentation BMP's as a condition of issuance of a building permit. The process was very effective in compelling construction site operators to practice erosion and sedimentation control measures. This code requirement and process were in effect since prior to issuance of the initial NPDES MS4 permit.

Permit Element: Require erosion and sedimentation controls.

Objective: Minimize the amount of sediment entering the MS4.

Activities: Described above.

Compliance: In compliance.

Strengths: All plans clearly identify the initial erosion controls to be implemented.

Weaknesses: Field confirmation is required to ensure that the approved BMP are being installed and properly maintained.

Assessment: Effective.

Future: AWQP will attempt to identify priority sites, such as sites that are actively dewatering, for field inspections and potential sampling of off-site discharges by staff, in order to ensure compliance and minimize off-site discharges of turbid water. Provide closer coordination with SWFMD for sites that violate plan and permit conditions.

Modifications: No permit modifications needed.

Narrative Reports for SWMP Activities
Section 4.9.b. Construction Site Runoff Construction Inspections

Summary of Inspections, Training, and SOPs - Sarasota County

Stormwater Stop-Work Orders Issued by Land Development Services:

- 2/01/02, Tabernacle Church
- 6/12/02, Summerwood Phase 2
- 8/16/02, Barton Farms Phases 3 & 4
- 3/31/03, Publix at Palmer Ranch
- 6/27/03, Mockingbird Subdivision

All LDS inspectors are certified in stormwater management. Four attended Erosion and Sediment Control training in August 2003. There are from 225 to 250 active projects on a regular basis. About 100 projects were closed out during this permit reporting period. All sites are inspected and in compliance on a regular basis. A red tag is issued if turbid water is being discharged, and all work is stopped until the water leaving the site is acceptable. Each set of approved plans show what and where the BMPs are. With the improved inspector and contractor training, inspector confidence has increased, as has public education and the quality of water leaving the sites.

Summary of Inspections, Training, and SOPs - City of Sarasota

Chapter 29.5 of Code of the City of Sarasota creates the Engineering Design Criteria Manual (created 1989), which requires Erosion/Sedimentation Control Plan (signed and sealed by the Engineer of Record), a permit, including a pre-construction meeting to implement erosion/sedimentation BMP's as a condition of issuance of a Building Permit. This code requirement and process have been in effect since prior to the issuance of the initial NPDES MS4 permit.

Permit Element: Conduct Compliance Inspections for Construction Site Runoff.

Objective: Improve erosion control at construction sites and reduce sedimentation into the MS4.

Activities: Described above.

Compliance: In compliance.

Strengths: The process is very effective in compelling construction sites to practice erosion and sedimentation control measures.

Weaknesses: Developers are better at installing BMPs than maintaining them.

Assessment: Highly effective. Regulation of erosion control is improving.

Future: Continue programs.

Modifications: No permit modifications needed.

Narrative Reports for SWMP Activities
Section 4.9.c. Construction Site Runoff Education Activities

Erosion and Sedimentation Training - Sarasota County

Many employees of local governments were trained in the DEP Stormwater, Erosion, and Sedimentation Control for Inspectors classes at the Suncoast Public Works Academy at the Sarasota Vocational Technical Institute in spring of 2002. Trained municipal employees taught the class. Attendees included: 19 attended, 18 certified, 3 from Sarasota County Government, 5 from Manatee County Government, 3 from consulting engineering firms, 2 from developer firms, 1 from the City of Sarasota, 2 from the City of North Port, 1 from the City of Venice, 1 from the Sarasota County Schools, 1 resident. A class was scheduled for October 2002 but was canceled.

In spring of 2003 another class drew the following attendees: 8 Manatee County, 1 Consulting Engineer, 2 City of Bradenton Beach, 3 City of Sarasota, 2 Town of Longboat Key, 1 City of North Port, 1 Resident.

In August 2003, an Air and Water Quality Protection staff member will attend an Advanced Best Management Practices and Regulatory Updates course for construction sites.

Permit Element: Train employees.
Objective: Improve stormwater maintenance and erosion controls.
Activities: Described above and in Section 4.9.b.
Compliance: In compliance.
Strengths: Better erosion controls.
Weaknesses: None were identified.
Assessment: Effective.
Future: Continue the existing program.
Modifications: No permit modifications needed.

Presentations to Construction Industry - City and County

The Suncoast Public Works Academy at the Sarasota Vocational Technical Institute offered other classes too. The DEP Stormwater, Erosion, and Sedimentation Control for Contractors class had 12 contractors attend in May 2002; a December class was canceled. On June 13, 2003, a class about Understanding the Stormwater Program in Sarasota County was taught to the following attendees: 7 students, 2 from SWFWMD, 4 from Sarasota County Government, and 1 resident; a class in January 2002 was canceled. The classes were facilitated by staff from Sarasota County and the City of Sarasota.

Permit Element: Train developers in erosion control.

Objective: Reduce erosion from construction sites.

Activities: Described above.

Compliance: In compliance.

Strengths: The design, development, and construction communities are receiving the same instruction as are the inspectors.

Weaknesses: Contractors have not shown a strong interest in attending classes.

Assessment: Feedback from attendees has been positive.

Future: Continue the existing program, offering classes twice per year.

Modifications: No permit modifications needed.

Notify Building Permit Applicants about NPDES - Sarasota County

For all projects, the following is required:

If the project area disturbs:

- One acre of greater of land or is part of a larger common plan of development that will disturb between one and five acres of land (Small Construction Activity), or
- Five acres or greater of land or is part of a larger common plan of development that will disturb five acres or greater of land (Large Construction Activity),

A completed copy of a FDEP Notice of Intent for a Generic Permit for Stormwater Discharge from Large and Small Construction Activities must be submitted to Land Development Services

prior to Construction Authorization.

Notify Building Permit Applicants about NPDES - City of Sarasota

Notification of NPDES regulations was provided to developers at the time of development review, prior to the issuance of permits.

Permit Element: Notify building permit applicants about NPDES regulations.

Objective: Reduce erosion into the MS4.

Activities: Described above.

Compliance: In compliance.

Strengths: None have been identified.

Weaknesses: None have been identified.

Assessment: Effective.

Future: Continue the existing program.

Modifications: No permit modifications needed.

Narrative Reports for SWMP Activities
Section 4.10 Additional SWMP Activities

Compliance with Effluent Limitations: Reserved.

Numeric Effluent Limitations: Reserved.

Monitoring Program Report
Section 5.1 Monitoring Objectives

The monitoring program was developed in phases. The permit required:

- Seasonal loading and event mean concentration data to be reported in the Annual Report for Year Four (Part V.A.1.);
- Investigation of organic pollutants identified in the permit application to be reported in the Annual Report for Year Three (Part V.A.2.); and
- Development of additional monitoring conditions (Part V.B.).

Additional monitoring conditions were defined in a letter from the U.S. EPA to Sarasota County Government dated March 27, 1997 and required:

- Long-term monthly ambient water quality sampling from several bays and the Myakka River starting December 31, 1996 and to be reported on Discharge Monitoring Report forms with the Annual Report for Year Five (Part V.B.1.a.);
- Long-term sampling near the North Port water plant to be reported by the City of North Port (Part V.B.1.b.);
- Long term ambient sediment, water, and biological sampling from Big Slough, Phillippi Creek, and Hudson Bayou to be reported in the Annual Report for Year Five (Part V.B.2.); and
- Two-phased investigation of metals contamination in Hudson Bayou, including sediment and stormwater samples, to be reported in the Annual Report for Year Five (Parts V.B.3. and 4.).

The objectives for these monitoring activities are two-fold. The objective of long term ambient monitoring, as well as the seasonal load and event mean concentration data, is to characterize water quality trends (improvements or degradations). The objective of the Hudson Bayou and organics investigation data is to find and eliminate sources of pollutants.

Subsequent to permit renewal, the permit co-permittees submitted a revised monitoring plan to the DEP, which was approved on July 2, 2003. There are two elements of the monitoring plan:

continuing ambient monitoring of bays and the Myakka River estuary, and in-situ metering of tributaries. This monitoring program, which is still in development, will begin in 2004. The details of the new monitoring program are in Appendix H.

Monitoring Program Report
Section 5.2 Summary Table of Completed Monitoring

Table 5.2 Completed Monitoring

Station Locations	Sample Type	Parameters	Frequency	Completed	Comments
Seasonal loading and event mean concentration (Part V.A.1.).	Water	BOD, COD, TSS, TDS, TKN, NO2+NO3, TP, O&G, Cd, Cr, Cu, Pb, Zn, and dissolved P.	Once.	Yes. Completed in 1998-99.	Pollutant loads increasing, as reported in report submitted on October 14, 1999, subsequent to the Annual Report for Year Four (1998).
Richardson Road / 1 station. (Part V.A.2.)	Storm Water	Bis(2-ethylhexyl)phthalate.	Once.	Yes. Completed in 1999.	No pollutant sources identified, as reported in the annual report for Permit Year Five (1999).
East Avenue / 1 station. (Part V.A.2.)	Storm Water	3,4 benzofluoranthene, Bis(2-ethylhexyl)phthalate, Chrysene, and 4,4'-DDE.	Once.	Yes. Completed in 1999.	No pollutant sources identified, as reported in the annual report for Permit Year Five (1999).
Several bays and Myakka River / 40 stations. (Part V.B.1.a.)	Water	Temperature, pH, DO, salinity, specific conductance, BOD, color, turbidity, TSS, dissolved NO2, dissolved NO3, NO2+NO3-N, dissolved and total ammonia, dissolved inorganic nitrogen, TKN, TN, orthophosphate, TP, chlorophyll, and secchi depth.	Ongoing Monthly.	Yes. Completed from 1995 to present.	Minor modifications in 2001: Early morning meter readings discontinued, but sampling expanded to include Big Sarasota Pass and northern Sarasota Bay. Descriptive charts in Appendix I. All data available on request.
Several bays and Myakka River / 40 stations. (Part V.B.1.a.)	Water	In-situ: water temperature, pH, dissolved oxygen, salinity, and specific conductance.	Ongoing. One early morning per month.	Partial. Completed from 1995 to 2001.	Early morning meter readings were discontinued in 2001, but were replaced by expanded coverage in Sarasota Bay and Big Sarasota Pass. Midday meter readings were continued. Descriptive charts in Appendix I. All data available on request.
Several bays and Myakka River / 40 stations. (Part V.B.1.a.)	Water	Hydrolabs measure continuous 24-hour in-situ: water temperature, pH, dissolved oxygen, salinity, and specific conductance.	Ongoing. Two per month.	Yes. Completed from 1995 to present.	All data available on request.
Phillippi Creek, Hudson Bayou, and Big Slough / 6 stations. (Part V.B.2.)	Water	COD, BOD, NO2+NO3-N, TKN, total and dissolved P, TDS, TSS, oil & grease, cadmium, chromium, copper, lead, zinc, temperature, pH, DO and specific conductance.	Ongoing. Twice annually in wet season and dry season.	Yes. Continued through 2003.	Discussion in Section 5.3 and descriptive charts in Appendix J. All data available on request.
Phillippi Creek, Hudson Bayou, and Big Slough / 6 stations. (Part V.B.2.)	Biological	Analysis of Biological Community.	Ongoing. Twice annually in wet season and dry season.	Yes. Continued through 2003.	Discussion in Section 5.3 and descriptive charts in Appendix K. All data is available on request.
Phillippi Creek, Hudson Bayou, and Big Slough / 6 stations. (Part V.B.2.)	Sediment	Particle size, aluminum, cadmium, chromium, copper, lead, zinc, TN, TP, and TOC.	Ongoing. Annually in December.	Yes. Continued through 2003.	Discussion in Section 5.3 and descriptive charts in Appendix L. All data is available on request.
Hudson Bayou / 12 Stations. (Part V.B.3.)	Sediment	Grain size, aluminum, lead, copper, zinc, chromium, total nitrogen, total phosphorus, and total organic carbon.	One time.	Yes. Completed in 1999.	Very elevated levels of lead contaminated sediments found throughout Hudson Bayou. Data was reported in the annual report for Permit Year Five (1999).
Hudson Bayou / 5 stations. (Parts V.B.4.)	Storm Water	Cadmium, lead, copper, zinc, and chromium.	Four times.	Yes. Completed in 1999 and 2000.	Metals found in stormwater, but not greatly elevated, and no point or area sources indicated. The data was provided in the Annual Report for Year Five (1999).

Monitoring Program Report
Section 5.3 Monitoring Conclusions

V.A.1. Seasonal Loading and Event Mean Concentration

Monitoring of event mean concentrations (EMCs) was required for the NPDES MS4 permit application in 1993. This local EMC data was input into a pollutant-loading model to submit seasonal loading estimates that were also required for the permit application. Other model inputs included land use, rainfall, baseflow, and runoff coefficients. In 1999, the model was updated and run to produce seasonal loading estimates required by the permit. The 1999 report concluded that total pollutant loads increased slightly because of increased urbanization, despite the addition of stormwater control structures. EMCs were found to be approximately the same in both seasons. For every basin, the wet season had a higher pollutant load than the dry season, which was attributed to more rainfall.

V.A.2. Stormwater Investigation on Richardson Road and East Avenue

Low concentrations of common pollutants were detected during the permit application process. The sub-basins were investigated and resampled, but no significant pollution sources were found. It was concluded that stormwater inherently contains low levels of pollutants, in roughly equivalent amounts as detected during the permit application process.

V.B.1.a. Ambient Water Quality of Bays and River

This monitoring was conducted since January 1995 in most of the coastal estuaries and the southern portion of the Myakka River. The program divided the water bodies into segments with five sub-divisions (called stations) in each. Every station was sampled once per month. Appendix I contains a map and charts of the data.

Two kinds of charts are presented for significant parameters. The annual fluctuations chart shows all of the data for each water body averaged for each month over the duration of the monitoring program. These charts are very descriptive of seasonal variations and provide a

visual ranking of the various bays. The Myakka River is a very interesting contrast to the coastal bays. The second type of chart simply plots significant parameter concentrations against time for each water body over the duration of the program. The trend lines are not statistically significant; they are just linear depictions of the bulky data. Percentile values for Florida estuaries, streams, and blackwater streams, provided by the DEP Bureau of Watershed Management, are another bit of information that helps to provide context to the data.

This data set is truly powerful and can be rearranged to answer many questions. Lately, it has shown great value in the Group 2 Charlotte Harbor Verified List process conducted by DEP and local stakeholders. Some generalities:

- Lemon Bay often ranks poorly against the other bays, with more BOD, more chlorophyll, lower light transmissivity, more color, less dissolved oxygen, and more nutrients, especially in late summer. Little Sarasota Bay also ranks poorly. Both bays have the worst circulation (no passes) and greater freshwater influence. By contrast, Sarasota Bay almost always has the best water quality, is saltiest, and has more open water and passes to the Gulf of Mexico.
- The Myakka River has very low dissolved oxygen concentrations during summer when nitrogen levels are high, but does not show a coincident rise in biochemical oxygen demand. The Myakka is an interesting system with a tremendous amount of preserved land in the watershed.
- There appears to be an increase in salinity in all water bodies. The explanation is elusive.
- Our water bodies are too shallow for secchi depth to be a powerful measurement of water clarity, at least using the stations we have. It is common for the secchi depth to be greater than water depth.
- None of the water bodies have elevated levels of nitrogen as compared to statewide percentile values.
- Total phosphorus is very high in this area, especially in the Myakka River and Lemon Bay. It is believed to be caused by naturally occurring ores and for that

reason is a relatively insignificant indicator of water quality, because it is probably never a limiting nutrient that could cause aquatic plant abundance. Variations show little seasonality. TP appears to be increasing.

- Total suspended solids is a very different parameter. The bays are similar to each other and show little seasonality. Sarasota Bay is not distinctly better and may be slightly worse than the other bays. The Myakka shows low TSS during summer the wetlands are draining into the river and color is darkest. Apparently the color is not caused by detritus and is entirely dissolved tannins.

V.B.2. Ambient Water Quality of MS4

Ambient water quality monitoring has been conducted from 1998 to the present at six locations, in three watersheds. Two locations each from Hudson Bayou, Phillippi Creek, and Hudson Bayou were sampled during wet and dry seasons. Hudson Bayou is a marine waterbody that receives stormwater directly from the urban City of Sarasota and some suburban areas. Much of the stormwater flows directly to the bayou, without any detention, infiltration or treatment. Phillippi Creek is a freshwater stream, but has tidal influence high into the flat watershed (above Bahia Vista). It drains a large urban and suburban area containing a mix of directly connected impervious surfaces (DCIA) and areas served by BMPs. Septic systems are known to have a polluting influence in Phillippi Creek. Myakkahatchee Creek is a drinking water source for the City of North Port. The City is extensively ditched, is rural and suburban, and has rapid development in progress. Myakkahatchee Creek has a natural appearance.

The following field data sheets were completed for each site:

- Physical/Chemical Characterization Field Sheet (DEP Form FD 9000-3);
- Stream/River Habitat Sketch Sheet (DEP Form 9000-4);
- Stream/River Habitat Assessment Field Sheet (DEP Form 9000-5); and
- Chain-of Custody Record.

V.B.2. Ambient Water Quality of MS4

Monitoring concentrations were compared to two standards: Florida's Surface Water Quality Standards, Chapter 62-302, F.A.C., and median values for Florida streams published in the DEP 2000 Florida Water Quality Assessment Report (305b). A summary of the data is presented in Appendix J. The data shows the following:

- The water quality differences between wet and dry seasons are not profound.
- In a majority of the samples, the contract laboratory determined that the lead and zinc concentrations were greater in the dissolved (filtered) samples than in the total metals samples. The samples were visually inspected to verify that the samples were correctly labeled and analyzed by both ICP and graphite furnace. The field filtering process will be evaluated.
- In several samples, the dissolved copper values were slightly higher than the same samples for total copper. This could suggest that the copper present is in the dissolved form.
- During the August 2002 sampling event, four stations (Phillippi Creek at Bahia Vista, Myakkahatchee Creek at the water plant, and both Hudson Bayou sites showed low levels of field measured dissolved oxygen.
- The Phillippi Creek at Bahia Vista site was dredged in December 2002 from bank to bank and the aquatic vegetation was removed along the shoreline.

V.B.2. Ambient Biological Quality of MS4

Since 1998, dip net samples were taken from the freshwater locations in Myakkahatchee Creek and Phillippi Creek. Petite ponar samples were taken of bottom dwellers in the Hudson Bayou estuary. Benthic macroinvertebrate samples were analyzed to provide a taxonomic identification and a Stream Condition Index (SCI) value was determined for the sites in Phillippi Creek and Myakkahatchee Creek. The Hudson Bayou sites are estuarine and are not suitable sites for conducting a SCI evaluation. In August 2002 during the wet season, both Hudson Bayou sites showed an extremely low level of benthic macroinvertebrate abundance. This could have been a

result of the changes in salinity from recent rainfall events. Also during this sampling event, no organisms were found in the twenty dip net sweeps at the Myakkahatchee Creek near the City of North Port water plant site. During the dry season sampling, the benthic macroinvertebrate abundances increased at the Myakkahatchee Creek near the water plant site and the Hudson Bayou sites compared to the wet season. Summary tables of the data are presented in Appendix K.

V.B.2. Ambient Sediment Quality of MS4

The metals present in the sediment samples have shown high variability, even from replicate samples. Nevertheless, the data clearly shows Hudson Bayou to have the highest concentrations of the three watersheds. Hudson Bayou is an urbanized watershed with a high level of directly connected impervious surfaces and few stormwater BMPs in place. The Phillippi Creek at Bahia Vista site also shows elevated levels. Charts are in Appendix L.

V.B.3. Hudson Bayou Sediment Quality and V.B.4. Hudson Bayou Stormwater Quality

Monitoring of Hudson Bayou was very informative, as described in the Annual Report for Year Five (1999). The Bayou contains lead contaminated sediments, but does not currently receive correspondingly high amounts of lead from stormwater or other discharges. Concentrations of lead in the water column were intermittently elevated, probably related to weather conditions that stir up contaminated sediments. An interagency investigation of the situation has expanded far beyond the permit required monitoring. No source of the contamination was identified.

Monitoring Program Report
Section 5.4 Monitoring Compliance

All monitoring was completed in full compliance with permit conditions.

Monitoring Program Report
Section 5.5 Monitoring Program Revisions

No revisions to the monitoring program are proposed as part of this annual report.

Monitoring Program Report
Section 5.6 Inventory of Major Outfalls

The complete outfall inventory is in Appendix M.

Permit Element: Maintain an inventory of major stormwater outfalls.

Objective: Improve knowledge of the MS4.

Activities: Described above.

Compliance: In compliance.

Strengths: Useful to AWQP investigations of facilities.

Weaknesses: Not yet in GIS format.

Assessment: Somewhat effective.

Future: Good GIS maps of the entire County within a year or so.

Modifications: No permit modifications needed.

Permit Modifications
Section 6.1 SWMP Modifications

Transfer of Ownership - Sarasota County

North Port has annexed large tracts of land that are described by maps in Appendix N. The following properties were annexed into the City of Venice from Sarasota County:

0412-07-0001	0412-07-0002	0412-07-0003
0407-10-0009	0414-04-0004	0387-03-0001
0387-07-0001	0387-07-0002	0430-12-0032
0177-02-0041	0178-16-0015	0400-12-0010
0178-16-0016	0175-06-0016	0175-06-0037
0175-06-0038	0430-12-0037	0430-13-0004
0400-05-0001	0400-05-0003	0412-07-0001
0412-07-0002	0412-07-0003	0414-04-0005
0414-04-0004	0178-16-0008	0177-08-0037
0389-00-1000	0430-13-0017	0389-00-2002
0405-13-0074	0405-13-0075	0406-04-0048
0406-04-0049	0407-06-0002	0178-16-0027
0429-15-0019	0177-02-0030	0178-16-0023
0390-00-2020		

Transfer of Ownership - City of Sarasota

None.

Permit Modifications
Section 6.2 Monitoring Program Modifications

The monthly ambient water quality sampling program for the bays and river was modified in 2003. An estuarine area of bays, canals, and tidal creeks located near the City of Venice was added to the program.

A new monitoring program was approved by DEP subsequent to MS4 permit renewal. The County will discontinue the unproductive monitoring in the six locations in Myakkahatchee Creek, Hudson Bayou, and Phillippi Creek. Four dataloggers will be purchased and deployed in tributaries throughout the County to measure daily and seasonal patterns of water quality conditions. The DEP letter of approval for the new monitoring plan is in Appendix H.

Permit Modifications
Section 6.3 Other Permit Modifications

No other permit modifications are suggested as part of this annual report.

Section 7 Fiscal Analysis

These figures are based on the best available information from the Sarasota County and the City of Sarasota staff who were responsible for implementing and reporting on these elements.

Table 7.1. Financial Survey:

Program Activity	Previous Year	Current Year	Future Year	Funding Source/Comments
1. Structural Controls Inspection and Maintenance - City & County	$2,536,492	$3,102,880	$3,102,880	Stormwater Fees
1. Structural Controls Inspection and Maintenance - Private Stormwater Systems - City and County	Not Available as a Line Item Cost			Stormwater Service Assessments
2. Development Planning Procedures - Basin Master Plans - City and County	$ 1,598,000	$ 1,114,000	$ 1,114,000	Stormwater Service Assessments
3. Roadway Maintenance - Litter Control - City and County	Not Available	$177,085	$177,000	Keep Sarasota Beautiful
3. Roadway Maintenance - Litter Control - County	$244,009	$42,283	$57,656	Transportation General Funds & Stormwater Fees
3. Roadway Maintenance - Litter Control - City	$142, 576	$146,986	$151,395	Landscaping & Solid Waste Budgets
3. Roadway Maintenance - Street Sweeping - County	$175,994	$209,372	$209,372	General Funds
3. Roadway Maintenance - Street Sweeping - City	$ 408,718	$ 386,886	$ 421,583	Gas Tax
3. Roadway Maintenance - Maintain Roadside Stormwater Structures - City & County	$48,310	$610,947	$610,947	Stormwater Fees
3. Roadway Maintenance - Road Repair & Facility BMPs - County	Road Program: $72,370	Road Program: $141,894	Road Program: $165,282	Infrastructure surtax, road impact fees, telecommunications tax, ELMS gas tax, ad valorem tax, developer's contributions, regional roadway funds, grants.
3. Roadway Maintenance - Road Repair & Facility BMPs - City	$7,200	$13,650	$11,000	Streets Operating Budget
4. Flood Management - City & County	$ 5,568,000	$ 5,756,000	$ 5,055,000	Stormwater Capital Improvement Assessments

Program Activity	Previous Year	Current Year	Future Year	Funding Source/Comments
5. Municipal Facilities - County	Solid Waste: $447,069	Solid Waste: $358,759	Solid Waste: $404,058	Tipping Fees, Interest Earnings
5. Municipal Facilities - City	POTW: $3,600 Solid Waste: $14,400	POTW: $3,600 Solid Waste: $22,760	POTW: $3,600 Solid Waste: $18,200	Utility User Fees
6. Pesticides, Herbicides & Fertilizers - Public Education - City & County	Coop. Ext: $78,376 Mosquito: $15,100	Coop. Ext: $107,228 Mosquito: $16,200	Coop. Ext: $110,000 Mosquito: $17,000	University of Florida IFAS, Sarasota County Utilities & Stormwater, DACS Grant, Ad Valorem taxes.
6. Pesticides, Herbicides & Fertilizers - Public Education - City	$2800	$2932	$3000	General Fund
6. Pesticides, Herbicides & Fertilizers - Certification and BMPs - County	Extension: $1,050 Mosquito: $25,650 Drainage: $1,320 Forestry: $500	Extension: $1,897 Mosquito: $26,600 Drainage: $2,200 Forestry: $500	Extension: $2,000 Mosquito: $27,800 Drainage: $3,000 Forestry: $700	University of Florida IFAS, Stormwater Fees, Transportation Trust Fund, DACS Grant, Ad Valorem taxes.
6. Pesticides, Herbicides & Fertilizers - Certification and BMPs - City	$11,856 $2,000	$33,395 $2,525	$12,000 $2,500	General Fund
7.a. Illicit Discharges & Improper Disposal - Inspections - City & County	$463,057	$465,000	$466,178	Unincorporated Area Services Funds, Surcharge on Solid Waste Tipping Fees.
7.b. Illicit Discharges & Improper Disposal - Field Screening - City & County	$0	$0	$0	Not Funded
7.c. Illicit Discharges & Disposal: Spill Response - City & County	$910,000	$1,013,304	$1,013,304	Fire Department General Funds
7.d. Illicit Discharges & Improper Disposal - Public Notification - City & County	Not Available as a Line Item Cost			Included in Cost of Inspections, Ordinances & Enforcement
7.e. Illicit Discharges & Improper Disposal - Oil & Household Hazardous Waste - City & County	$ 158,572	$ 339,761	$ 231,109	Landfill Fee Surcharge
7.e. Illicit Discharges & Improper Disposal - Storm Drain Marking - City & County	Not Available	$1000	$1000	Stormwater Service Assessments
7.f. Illicit Discharges & Improper Disposal - Sanitary Sewer Seepage - County	$3,600,000	$10,585,000	$3,000,000	Utilities Fees
7.f. Illicit Discharges & Improper Disposal - Sanitary Sewer Seepage - City	O&M: $1,732,518 CIP: $2,269,347	O&M: $1,832,569 CIP: $4,146,847	O&M: $1,907,297 CIP: $2,451,258	Utility User Fees
8a. High Risk Industrial Facility Inspection - City & County	Not Available as a Line Item Cost			Included in Cost of Inspections, Ordinances & Enforcement
8.b. High Risk Industrial Facility Inspection - Monitoring - City & County	Not Funded			Not Funded

Program Activity	Previous Year	Current Year	Future Year	Funding Source/Comments
9.a. Construction Site Runoff - Construction Planning Procedures - County	Not Available as a Line Item Cost			Unincorporated Area Services Fund. Site & Development and Subdivision Plan review fees
9.a. Construction Site Runoff - Construction Planning Procedures - City	Not Available as a Line Item Cost			
9.b. Construction Site Runoff - Inspections - County	Not Available as a Line Item Cost			
9.b. Construction Site Runoff - Inspections - City	$938	$4611	$5000	General Fund
9.c. Construction Site Runoff - Education Activities - City & County	Drainage: $2,500	Drainage: $12,589	Drainage: $8,000	Stormwater Service Assessments and Suncoast Public Works Academy registration fees.
V.A.1. Seasonal Loadings and Event Mean Concentrations - City & County	$0	$0	$0	Stormwater Fees
V.A.2. Investigation of Organic Pollutants - City & County	$0	$0	$0	Stormwater Fees
V.B.1. Existing Monthly Bay and Stream Runs - City & County	$131,232	$131,232	$154,239	Unincorporated Area Services Funds
V.B.2. Monitoring in Big Slough, Hudson Bayou & Phillippi Creek Basins - City & County	$31,964	$31,964	$27,516	Stormwater Fees
V.B.3. Heavy Metals Monitoring Program in Hudson Bayou, Phase I - City & County	$0	$0	$0	Stormwater Fees
V.B.4. Heavy Metals Monitoring in Hudson Bayou, Phase II - City & County	$30,000	$0	$0	Stormwater Fees
NPDES MS4 Permit Fees - City and County	$11,628	$11,628	$11,628	Stormwater Fees
Totals	$20,747,146	$30,856,084	$20,956,502	City and County