NPDES MUNICIPAL SEPARATE STORM SEWER SYSTEM PERMIT NO. FLS000004

ANNUAL REPORT FOR YEAR FOUR

THE PERIOD COVERING: 1/1/98 TO 12/31/98

SUBMITTED BY: Sarasota County and City of Sarasota

CO - PERMITTEES: Venice North Port Longboat Key FDOT District 1
Annual Report - Report Certification

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.

David R. Bullock, Deputy County Administrator
Sarasota County

Dated
Annual Report - Executive Summary

As required by the Water Quality Act of 1987, Sarasota County, including the Cities of Sarasota, Venice, North Port, Longboat Key, and the Florida Department of Transportation were issued a National Pollutant Discharge Elimination System (NPDES) Permit (No. FLS000004) to operate their Municipal Separate Storm Sewer Systems (MS4s). The effective date of the permit is January 1, 1995. The Co-permittees agreed to independently administer the permit requirements for their respective jurisdictions through an interlocal agreement signed during the Part I application process. A subsequent interlocal agreement, dated July 28, 1998, delegated control to Sarasota County Government for all storm water management activities within the limits of the City of Sarasota and unincorporated Sarasota County. Refer to Appendix A for the interlocal agreement.

The Storm Water Management Program (SWMP or the Program) contained in the permit requires continuation of existing programs and development of new or expanded programs to reduce to the maximum extent practicable (MEP) the pollutant loading to the MS4. Elements contained in the Program will be implemented by the Co-permittees as required during the five-year term of the permit.

This document is the result of the combined efforts of Sarasota County and the City of Sarasota departments to produce the Annual Report for Year Four. Separate reports are provided by the other municipal jurisdictions.
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Section 2 - Stormwater Management Program Evaluation

2.1 Objective of Program

The objective of the Program is to improve the quality of surface waters in Sarasota County by improving the quality of storm water runoff, through implementation of the many elements of the permit, which was developed by Sarasota County, the City of Sarasota, the co-permitees, the Florida Department of Environmental Protection (FDEP), and the Environmental Protection Agency (EPA).
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Section 2 - Stormwater Management Program Evaluation

2.2 Major Findings

There continued to be a real need for the comprehensive pollution control activities listed in the permit. Although most of the activities were pre-existing, only through the permit have they come to be viewed as a single program. All of the elements will be required to achieve the desired result of reducing pollutant loading in receiving waters.
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Section 2 - Stormwater Management Program Evaluation
2.3 Major Accomplishments

In 1998 Sarasota County continued a Capital Improvement Program that charged property owners for improvements in the designated basins. Previously, user fees were collected to pay for only customer service, planning, and maintenance activities. The Capital Improvement Program assessments, implemented in 1995, were collected and used to construct flood-control and water-quality projects identified in adopted County Basin Master Plans. Capital improvements were completed in several basins during 1998. Additionally, five new Basin Master Plans were completed in 1998.

Improvements in surface water quality are difficult to quantify without a tremendous allocation of resources, and a closely focused objective. Nevertheless, there have undoubtedly been some significant localized improvements:

- Wastewater utilities made great improvements in those specific collections systems most prone to overflow.
- Municipal agencies improved outdated housekeeping, storage, and disposal practices.
- The well-maintained streets and storm water systems required a substantial allocation of money, manpower and coordination. The adverse (El Nino) weather experienced in 1998 did not undermine this extensive maintenance program which was essential to improving storm water quality.
• Proper disposal was made available to citizens and small businesses in Sarasota County and a tremendous amount of waste was redirected from potentially illicit disposal methods.

• The municipal use of pesticides was reduced again.

• Many minor illicit discharges were alleviated through voluntary compliance with County ordinances; others required enforcement. A significant illicit discharge from a domestic wastewater facility was stopped in 1998.
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Section 2 - Stormwater Management Program Evaluation
2.4 Overall Program Strengths and Weaknesses

The program's strength is in its comprehensive approach to controlling storm water runoff. This control was maintained through education, regulation, maintenance, basin master planning, and capital improvements. We are constantly monitoring the various aspects of our Program and are receptive to citizen comments. We strive to maintain a consistent and equitable Program.

Since implementation of the Program, Sarasota County has developed a much better inventory and understanding of the drainage systems within the City and County. Having a better understanding of the number and types of structures to be managed has improved our ability to identify, schedule, and budget maintenance activities that ensure system performance and improve water quality. Coordination and cooperation between County and City departments continued to improve through year four.
The County, the City, and the Co-permittees will continue to pursue implementation of the activities identified in the Program. Should best professional judgment dictate changing a Program activity, the Co-permittees will identify the necessary changes or modifications pursuant to Part VII of the Permit and will submit a recommendation to the EPA for a modification to the Permit. During 1998 no major permit modifications were identified. However, as part of the permit renewal process, the permittees have proposed some minor modifications to the original permit. These modifications were incorporated into an edited version of the Part II narrative (Storm Water Pollution Prevention and Management Programs) and on the edited tables from Part III of the permit (Schedules for Implementation and Compliance). For the most part, the permit elements and activities remain as originally written. Language was changed in cases where activities or practices were to be "developed" or "implemented" to reflect the continuation of the activity or practice.
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Section 3 - Summary Table for SWMP Activities

Refer to the Summary Table for a list of program elements, designated permittee, requirement, activity schedule, and comments.
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Section 4 - Narrative Reports for SWMP Activities
4.1 Maintenance of Structural Controls

Retention and Detention Structures - All City, County and State ponds were mowed, treated and inspected monthly. All debris was removed and properly disposed of at the landfill. Eighty-nine wet retention areas were inspected semiannually. Seven hundred forty-four dry retention area inspections were completed with 357 acres mowed. Five thousand two hundred five acres of wet retention areas were treated with herbicides.

Underdrain systems were flushed and maintained to restore proper capacity. During the time of inspection all skimmer plates, inlets, outlets, and weir crests were checked.

All side slopes were inspected for erosion and adequate vegetative cover. Herbicide application was performed as needed to reduce noxious aquatic plants.

Drainage Operations devoted a section to monitoring and maintenance of littoral shelves and mitigation plantings to ensure required survivorship and coverage. Maintenance of littoral shelves and mitigation areas was performed manually rather than with herbicides.

Drainage Operations initiated an Adopt-A-Pond Program in Sarasota County. Like the existing “Adopt-A-Road” program, individuals, homeowners associations, and businesses adopted publicly owned and operated storm water treatment ponds to provide litter removal and other
maintenance efforts. This program also served to satisfy a part of the public education element of this permit. Drainage Operations promoted the “Adopt-A-Pond” program through education and brochures.

**Weirs / Flow Control Devices** - Weirs and flow control devices within County drainage ways were inspected twice in 1998 for a total of 104 inspections. Items of interest during inspections were erosion, sediment, and debris accumulation; bleed down devices; underdrain systems; and general conditions of the structure. Deficiencies and maintenance needs were reported to the appropriate maintenance entity. A number of erosion deficiencies were located through inspections and repaired by Drainage Operations crews.

Several new weirs and flow control structures were built through capital improvement projects and were added to the inventory and maintenance schedule.

**Channels** – In 1998 approximately 157 miles of ditches were maintained. Maintenance included debris, litter, and vegetation removal; herbicide application for noxious aquatic plants; excavation of accumulated sediments to return the structure back to the original cross section; and repair of eroded areas, including revegetation and restabilization of the repaired areas. Annual maintenance schedules were established for the cleaning of flood prone areas. Roadside ditches were maintained on an as-needed basis or in response to public requests. Sarasota County supplemented its work force with a number of maintenance contracts for mowing, hand cleaning, and herbicide application. Twenty-eight miles of channels were cleared of vegetation by prison labor, 130 miles by hand clearing contracts, and 404 miles were cleared mechanically.
Privately Owned and Maintained Storm Water Systems - An inventory of all residential subdivisions and commercial parcels that received credits toward their storm water management assessments was updated as development occurred. These subdivisions and parcels were credited for the proper operation and maintenance of their storm water systems. The Stormwater Division inspected the structural integrity of the systems. Outfall control structures, sediment sumps, slope erosion, underdrain/filtration systems, and sediment accumulation were compared to the construction plans or record drawings. Inspections for treatment systems were done every two years for wet detention systems. Systems utilizing underdrains or other filtration methods were inspected every 18 months.

Systems that passed inspection continued to receive the assigned assessment credit. Owners of systems with deficiencies were given 90 days to bring the facility into compliance with the design. If after 90 days the deficiencies remained, the owner was notified and assessment credits were revoked for all properties served by that system. For a failed system to re-qualify for credits, certification from a registered engineer must be submitted demonstrating that the system again operated as designed.

During 1998, 32 privately owned and maintained storm water treatment systems were inspected and all passed. The owners were cooperative and took prompt action to bring the systems into full compliance.
Training – Drainage Operations training consisted of a number of classes on erosion and sediment control and the proper installation, inspection and maintenance of Best Management Practices (BMPs).

The Suncoast Public Work Academy’s core course introduced Sarasota County job opportunities to new employees and the public. The course centered on practical approaches for effective erosion and sediment control, but also included management of runoff-related pollution. Emphasis was placed on the importance of proper inspection, maintenance, and the need to continually evaluate the effectiveness of the BMPs.

Drainage Operations selected a number of employees to attend the FW&PCOA training course. All employees successfully completed the training and passed the certification test receiving their Class C and B certificates.

Two County employees, one from the Public Works Business Center and one from the Environmental Services Business Center, participated in a FDEP sponsored training course. The course was a “train-the-trainer” instruction for the newly developed Erosion and Sediment Control Inspector’s Certification Program. In addition to the two County employees, a City of Sarasota employee participated in this course, as well as the Suncoast Public Works Academy Coordinator. The instruction was held late in 1998, therefore, the participants did not receive the instructor’s exam during this report period. It is anticipated that these four individuals will form a facilitating team when the certification course is offered at the Suncoast Public Works Academy, expected in 1999.
A County employee, who holds a Class B Certificate from the FW&PCOA, and who has taken the FDEP Erosion and Sediment Control Inspector’s Certification Course (train-the-trainer), provided field training to maintenance and construction crews. The training included hands-on instruction in the installation, inspection, and maintenance of BMPs. Several new methods of controlling off-site impacts were used. De-watering techniques were enhanced with gravel filters, stilling ponds, and innovative use of geotextiles. Classroom instruction was also provided to equipment operators. Topics included permitting regulations, stabilization of disturbed areas, and use of vegetation as erosion and sediment control.
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Section 4 - Narrative Reports for SWMP Activities
4.2 Development Planning Procedures

**Basin Master Planning** - The Basin Master Plans are in-depth studies of individual drainage basins. The scope of each Master Plan included determining basin boundaries, and evaluating existing drainage structures for deficiencies in pre-established water quantity and water quality service-level criteria. The City of Sarasota continued to participate in the County's Basin Master Planning Program during 1998, and provided input, guidance, and priorities on drainage basins located within the city limits. To date, twenty basins studies were completed; five during 1998. One basin is currently being studied. The remaining six basins are scheduled for study prior to the year 2000. Local coastal basins are studied individually, as flooding and water quality deficiencies dictate. Two coastal basin studies were completed and two were in progress.

<table>
<thead>
<tr>
<th>Studies Completed</th>
<th>Current Studies</th>
<th>Scheduled</th>
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<tbody>
<tr>
<td>1.</td>
<td>Alligator Creek</td>
<td>1. Whitaker Bayou</td>
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<td>1. Myakka River</td>
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<td>2.</td>
<td>Big Slough</td>
<td>2. Landings Coastal Basin</td>
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<td>2. Deer Prairie Slough</td>
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<td>3.</td>
<td>Clowers Creek</td>
<td>3. Pine Harrier Coastal Basin</td>
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<td>3. Little Salt Creek</td>
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<td>5.</td>
<td>Forked Creek</td>
<td>5. Braden River</td>
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<td>6.</td>
<td>Gottfried Creek</td>
<td>6. Shackett Creek</td>
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<td>7.</td>
<td>Hudson Bayou</td>
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<td>8.</td>
<td>Matheny Creek</td>
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<td>Phillippi Creek</td>
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<td>10.</td>
<td>Ainger Creek*</td>
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<td>11.</td>
<td>Cow Pen Slough*</td>
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<td>12.</td>
<td>Holiday Bayou*</td>
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<td>13.</td>
<td>Woodmere Canal*</td>
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<td>14.</td>
<td>Hatchett Creek*</td>
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<td>15.</td>
<td>Bay Acres Coastal Basin</td>
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<td>16.</td>
<td>Fox Creek</td>
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<td>17.</td>
<td>North Creek*</td>
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<td>18.</td>
<td>South Creek*</td>
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<td>19.</td>
<td>Curry Creek*</td>
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<tr>
<td>20.</td>
<td>Catfish Creek*</td>
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* Studies complete; Board of County Commissioners approval scheduled for 1999.

Sarasota County encouraged the use of pervious paving surfaces. Overflow parking areas for churches and commercial developments were logical candidates for pervious surfaces. Property owners who utilized pervious surfaces received lower storm water assessments since their contribution of runoff to the drainage system was reduced.

Owners of agricultural, commercial, and condominium properties in Sarasota County received a reduction in storm water assessments for retaining open space. If applicable, the gross parcel size was reduced by the natural area, lakes, ponds, and wetlands on the property. The storm water assessment was based on this adjusted gross area. Open space that was landscaped was assessed at a lower rate than paved areas or other impervious areas.
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Section 4 - Narrative Reports for SWMP Activities
4.3 Roadway Maintenance

Litter Control for Streets and Highways - Litter control of maintained streets and highways continued to be achieved through the scheduling of City and County employees, jail inmates, and volunteers. The Keep Sarasota Beautiful program coordinated 36 volunteer groups for Adopt-A-Highway, distributed car trash bags to many businesses, coordinated Coastal Cleanups, and promoted the Boaters and Anglers Pledge to reduce litter. These programs continued to successfully reduce the amount of roadside debris and trash that would have accumulated in the storm water system. The County Solid Waste Department augmented litter removal near the Bee Ridge Landfill by regularly removing litter from public roads adjacent to the landfill.

Maintenance Schedules - Catch basins and grates were cleaned on an as needed or storm event basis. Public complaints and work requests generated some additional maintenance, which disrupted the established schedule. Nevertheless, the schedule continued to meet the objectives of the SWMP.

Best Management Practices - Sarasota County continued to reduce the discharge of pollutants from roadway maintenance through the use of BMPs. The County Transportation Department Best Management Practices and Integrated Pest Management Manual identified the BMPs and included procedural instructions for compliance. The manual continued to be used as a guideline for the maintenance crews. It was included in previous annual reports.
Municipal Maintenance Yards - County and City equipment yards and maintenance shops of all sizes continued to minimize the discharge of pollutants by employing good housekeeping and materials handling methods. These sites did not contribute pollutants to storm water runoff. Established procedures required immediate clean up of all spills. Some wastes were recycled, others had proper disposal. All recycling and disposal contractors were required to possess the necessary authorizations and certifications to transport and handle the specific materials involved.

The County Fleet Management, Transit, and Fire Departments operated facilities for the maintenance and repair of vehicles and equipment and for storage and distribution of supplies. As reported in previous annual reports, proper procedures continued to be used for the acquisition, storage, and disposal of solid, liquid, and gaseous materials used at these facilities.

The City of Sarasota Public Works and Police Departments maintained three fleet maintenance facilities in 1998. Materials and wastes were stored in appropriate containers, until they were either recycled or disposed of by a licensed waste hauler (A & S Oil). Housekeeping practices improved at these facilities in 1998, as they have in previous years.
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Section 4 - Narrative Reports for SWMP Activities

4.4 Flood Management

Routine maintenance by County employees and contractors continued to provide effective flood management. Removal of debris, brush, vegetation, and accumulated sediments from drainage ways, culverts, and inlets resulted in acceptable levels of service for residents during most rain events. Sarasota County performed this maintenance within the City of Sarasota by means of an Interlocal Agreement adopted in 1990, and renegotiated in 1998. The modified agreement obligated Sarasota County to continue maintenance, basin planning, and capital improvements within the City of Sarasota. A new aspect of the agreement assigned to the County the NPDES reporting responsibilities for permit activities performed by the City of Sarasota. A copy of the renegotiated Interlocal Agreement is included in this report as Appendix A.

Critical Capacity Ordinance - As a result of widespread flooding experienced in July 1995, the County continued to enforce a Critical Capacity Ordinance (No. 95-278). This ordinance identified drainage basins that were considered to be "areas of known stormwater problems". Specific discharge rates based on the existing capacity of the existing downstream drainage facility were determined for each of the affected basins. The Ordinance is intended to eliminate the "problem" designation once capital improvement projects within the affected basins are completed. This was achieved in the Elligraw Bayou basin during 1998, following the completion of the capital improvement project there.
Basin Master Plans- Flood control was also achieved through Basin Master Planning as discussed in Section 4.2. A result of the severe flooding during the summer of 1995, the schedule for completing Basin Master Plans was accelerated in 1995 and continued to be accelerated through 1998. Completed Basin Master Plans were referenced by staff during the review and approval process for rezone petitions, development plans, and construction plans. The Plans were also used in administration of the Community Rating System program.

Some actions that were the result of recently completed Basin Master Plans were as follows:

Phillipi Creek
The Redbug Slough capital improvement project was substantially designed in 1998 to address structure flooding along this tributary of Phillippi Creek. This project proposed to construct a by-pass conveyance for storm water during high flows. It was anticipated that, when complete, several structures would be removed from the threat of flooding.

Alligator Creek Basin
Construction of the Dolphin Lake Outfall project was substantially completed during 1998. This project, designed to address structure flooding in the Alligator Creek basin, incorporated several lakes into the conveyance system. These lakes will have a positive impact on the quality of the storm water flowing to the creek. Stabilization of the formerly eroded canal banks eliminated a large source of sediments that previously was carried downstream to the creek and bay.

Hudson Bayou Basin
In the urbanized Hudson Bayou basin, the School Desiltation project was designed during
1998. This project addressed structure and street flooding as well as water quality issues. Consisting of a desiltation basin, recontoured banks, planting of wetland vegetation, and channel stabilization improvements, the School Desiltation project will reduce pollutant loading in Hudson Bayou. Construction of this project is scheduled for 1999.

While primarily intended to reduce structure and street flooding, all of the Stormwater capital improvement projects also contain elements to reduce pollutant loading in receiving waters. In almost every case, the capital improvement projects include modification of the canal banks, stabilization, and use of weirs and lakes to improve not only the quantity of water conveyed but the quality of the water, as well.

A copy of the prioritized project list and construction schedule was included as Appendix C.
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Section 4 - Narrative Reports for SWMP Activities
4.5 Municipal Facilities

Solid Waste Facilities

The Sarasota County Bee Ridge Landfill was subject to NPDES Permit FLS0039306. The overall objective of the NPDES permit is to eliminate polluted discharges to surface water from the landfill and other activities on the property. Specific objectives include operation and maintenance of storm water structures, record keeping, and annual reporting. The landfill began closure construction in 1998, but the permit still requires pollution prevention procedures. In the event of a discharge, the permit requires discharge documentation to be sent to the EPA. Periodic reports are also sent to the FDEP Tallahassee Self-Monitoring Subsection.

Approximately 120 acres of the landfill were closed. These areas had grass established and were well drained by a system of berms, swales, and side-slope pipes. The runoff from closed portions of the landfill was directly discharged to two storm water retention basin. Approximately 100 acres of the landfill were receiving final cover. Closure is expected to be complete in late 1999. Interim control measures include silt fences and hay bale dikes.

All structures leading to storm water swales were in excellent shape and did not require any maintenance in 1998. The site was mowed on a regular basis and cleaned to grade when necessary. The maintenance schedule form submitted with the 1997 Annual Report is still in use.
The property was cleaned on an as-needed basis, including the interior and exterior roads. The exterior roads were cleaned more often because the vehicles using these roads contribute the major volume of roadside litter found outside the landfill. The FDEP Operation Permit also requires litter control. The litter control schedules included in the 1997 Annual Report are still in use.

Waste oils were stored in drums until picked up by a certified oil recycler. Used filters were drained and stored in drums until picked up by a certified oil recycler. Used oily rags were stored in drums, picked up, cleaned, and returned to the department for reuse. Oil drums were stored under roofs and in cradles with drip pans under each drum. The drip pans were dumped into the recycled used oil drums when necessary. All oil drums were kept locked after-hours as was the entire compound where the oil was stored.

Central County Solid Waste Disposal Complex (CCSWDC)

The CCSWDC was opened in 1998, and was subject to the NPDES storm water discharge requirements for municipal landfills. The Storm Water Pollution Prevention Plan for the CCSWDC is included in Appendix K. FDEP also regulates the site.

Jackson Road Transfer Station at the former Venice Landfill

The former Venice Landfill was closed in 1986 and was subject to a FDEP Long Term Care Permit that included storm water issues. The transfer station leachate control and storm water pollution prevention issues were also subject to FDEP regulations.
Browning Ferris Industries (BFI) Transfer Station

The City of Sarasota continued to contract with BFI to operate a solid waste transfer facility. The facility was regulated by a NPDES multisector permit, the Southwest Florida Water Management District (SWFWMD), and a FDEP Solid Waste Transfer Station Operation Permit. Leachate was discharged to the sanitary sewer. Runoff was detained in a SWFWMD regulated storm water pond.

Publicly Operated Wastewater Treatment Works (POTW)

Sarasota County Utilities owned and operated ten wastewater treatment plants:

- Bee Ridge Water Reclamation Facility (WRF) – FLA013372
- Central County WRF – FLA013455
- Meadowood WRF – FLA013385
- Septage Treatment Plant – FLA013375
- Venice Gardens WRF – FLA0434940
- Atlantic-Brentwood Wastewater Treatment Plant (WWTP) – FL0025887
- Plantation WRF – FLA013365
- Circlewoods WWTP – FLA013406
- Gulf View WWTP – FLA013465
- Proctor Road WWTP – DO58-248477

All were designed, constructed, and operated according to FDEP regulations. The FDEP permits required the County to develop and implement procedures to reduce polluted discharges
from POTWs, including overflows, and spills of materials stored on the plant sites. All abnormal events were appropriately reported to FDEP and Pollution Control. Appropriate clean-up, disinfection, and sampling procedures were followed.

All wastewater treatment plants were designed with considerations for flood protection. Plant service commitments were required to consider capacity analysis to ensure no hydraulic overloads. The plants were typically inspected a minimum of twice a day for leaking pipes, malfunctioning equipment, and other potential problems. Daily inspections were for pretreatment, biological nutrient reduction, chlorination equipment, and effluent. A private contractor hauled residuals to approved Residuals Management Facilities. The contract held the contractor responsible for any non-compliance issues. The Utility maintained contracts for emergency hauling of residuals to sites of higher elevations during periods of wet weather, which greatly reduced the possibility of storage problems at the treatment plants.

Most of the treated effluent discharged from County-owned wastewater treatment plants was reclaimed and used for irrigation of golf courses and residential areas. All plants that discharge are required to meet permit limitations in the quality of their effluent. Quarterly ground water monitoring is required at most sites where reclaimed water is applied. The plant effluent is monitored once a year for all primary and secondary State drinking water standards. In addition, all ground water monitor wells are tested during permit renewal for primary and secondary State drinking water standards. Most golf courses have storage ponds that the Utility discharges effluent into for later use as irrigation. These ponds are regulated by FDEP. When a reclaimed water storage pond is part of a storm water management system, the appropriate
storm water permits are obtained from the SWFWMD.

Mineral acid tanks, fuel tanks, and hazardous substance tanks with a capacity over 550-gallons are regulated and inspected by the FDEP. Although State rules require a visual inspection of these tanks once a month, they are actually inspected daily.

The City of Sarasota Public Works Department continued to operate one domestic wastewater treatment facility, which was staffed 24 hours per day. Diesel, acid, and caustic tanks were all within secondary containment. Wastewater residuals were composted and reused. Effluent disposal was subject to a NPDES permit for direct discharge to Whitaker Bayou, or to reuse irrigation. The Spill Response Plan approved by Pollution Control was still employed.
The Sarasota County Co-operative Extension Service continued to sponsor education programs to address the reduction in the use of pesticides, herbicides, fertilizers, and in the reduction of landscape watering. The Extension Service provided advice on native plantings, xeriscaping, the appropriate use of fertilizers (including slow release), and Integrated Pest Management (emphasizing the "least-toxic" approach). The Florida Yards and Neighborhoods program educated the public about utilizing Environmental Landscape Management principles. The Florida House Learning Center demonstrated materials and methods to reduce energy, wastes and environmental impact.

In 1998, the Extension Service conducted 70 tours and welcomed 9000 visitors to the Florida House. Ninety-three educational landscape programs were conducted for more than 2000 attendees. The Florida Yards program enrolled 122 citizens, and 10 achieved Certified Florida Yard status. An outreach program in the public school system promoted the responsible use of pesticides, herbicides, and fertilizers. All these programs offered by the Co-operative Extension Service are available to any citizen of the County, including city residents.

Sarasota County employees whose duties include the application of pesticides and herbicides are certified by the Florida Department of Agriculture and trained by the Co-operative Extension Service. As a condition of employment, all pesticide applicators are required to obtain State certification within six months of employment. Certification was maintained
through continuing education credits as specified by the Department of Agriculture. Additional training is provided to employees during monthly in-house workshops, that include calibration of spray equipment, herbicide label directions, water-quality testing, and safety equipment. The training regimen was periodically re-evaluated by the personnel involved in the use of pesticides, herbicides, and fertilizers.

The Extension Service facilitated reports and evaluations performed by the County Environmental Pest Management Advisory Board, that reviewed the Integrated Pest Management (IPM) programs of selected departments. They also formed the County Landscape Review Committee, that examined all plans for new and renovated landscaping to ensure compliance with NPDES principles, and developed detailed guidelines for landscape architects designing new landscapes for County facilities. The Extension Service evaluated County facilities involved in storage of pesticides and fertilizers and reviewed and made adjustments to County Purchasing documents to ensure that materials obtained were less polluting (e.g., slow release fertilizers).

Employees of the School Board, the City of Sarasota, the City of North Port, and the City of Venice joined the IPM working group. The IPM Coordinator gave three presentations to the public in 1998 about least toxic pest management techniques.

Sarasota County continued to follow the Integrated Pest Management Program Administrative Directive as adopted in January of 1995. The objective of this program is to reduce the County's usage of pesticides and herbicides. When use of pesticides or herbicides is deemed
necessary, the policy emphasized the least toxic approach to achieve the desired results. The IPM Program proposes changes in policies and practices in response to new information, regulations, and technology.

Alternate methods of controlling pests, those with less environmental and health hazards, are used when deemed equally effective:

- Mosquito Control Division used mosquito larva eating fish in permanent pools of water. The fish were supplied to homeowners and other groups free of charge.
- Aerators and grass carp consumed unwanted aquatic vegetation in County maintained lakes.
- Some aquatic plant control was accomplished using computer operated spray systems that assure the proper rate of herbicide application, thus reducing the chance of excess application.
- The Transportation Department bought a Hot Water Weed Control Machine in 1998. Hot water was used as an alternative to herbicides for weed control along roadways.
- A pine oil resin was instituted as a nontoxic alternative to pesticides for control of fire ants on County properties.
- Parks and Recreation initiated a pesticide notification program to tell the public when pesticides had been used at public facilities. Some parks were established as pesticide-free playgrounds.
Pollution Control and the Hazardous Waste Program thoroughly investigated many citizen complaints and agency referrals, and also initiated many proactive facility inspections involving illicit discharges to the MS4. Investigations were well documented, sometimes enhanced by photographs, field-testing, and sampling. Responsible parties were promptly advised of the illicit discharges and typically complied voluntarily. Enforcement usually was via code enforcement or referral to another regulatory agency. Citizens and responsible parties were educated about illicit discharges. Refer to Appendix E for standard investigative procedures.

Nineteen types of discharges, listed under Part II.A.7.a of the permit, and uncontaminated roof drains were allowed to discharge into the MS4.
Annual Report

Section 4 - Narrative Reports for SWMP Activities
4.8 Field Screening

Dry-weather field screening of major storm water outfalls was conducted to detect illicit connections and improper discharges to the MS4. Pollution Control exceeded the permit requirements to field screen one third of the outfalls. Eighty-five sites were screened in the City of Sarasota and 87 were screened in the unincorporated County. During 1998, a few minor illicit discharges were found as a result of the required dry weather field screening. No field measurements or laboratory analyses detected contaminants above State water quality standards. Refer to Appendix L for lists of dry weather field screening sites in the City and County.
Annual Report

Section 4 - Narrative Reports for SWMP Activities
4.9 Spill Response

The Sarasota County Hazardous Materials Plan described procedures to be followed in the event of a hazardous materials spill, as reported in the annual report for year one. An interlocal agreement between the City of Sarasota and Sarasota County consolidated the Fire Departments in 1996, so the plan is followed in both jurisdictions. The Fire Department Special Operations Team is the lead agency and responded to 634 calls in 1998. Hazardous Waste assisted in 21 instances.
Section 4 - Narrative Reports for SWMP Activities
4.10 Public Reporting of Illicit Discharges

The Pollution Control Division continued the 24-hour on-call response to pollution events as described in the annual report for year three. The Water Quality Section Staff responded to 416 complaints or pollution incidents during 1998. A summary table of incident types is included in Appendix F.

In 1998, the public was made more aware of the necessity to report illicit discharges:

- Each complaint investigation involved educating the persons involved.
- The Florida Local Environmental Agencies 1998 annual conference was addressed about NPDES storm water issues.
- Several presentations were made to schools and promotional materials were distributed.
- Refrigerator magnets and other promotional materials were created and distributed. Each item advertised the 24-hour service to receive reports of pollution events.
- Several news items appeared in local newspapers and on television about illicit discharge investigations of popular interest.
- Natural Resources newsletter, that was distributed to the public, included several articles about investigations of illicit discharges and storm water issues.
- Presentations were made to environmental clubs and other interested groups regarding illicit discharges.
The Hazardous Waste Program provided citizens with a proper method of disposal for household hazardous waste and used oil. Businesses defined as Conditionally Exempt Small Quantity Generators (CESQGs) were provided an inexpensive method of disposal for hazardous wastes.

Six oil drop-off locations were open to the public 24 hours a day, 7 days a week, and collected (and subsequently recycled) 27,660 gallons of used oil that may have otherwise been dumped into the MS4.

Two permanent household hazardous materials collection stations were open to the public one day each week. A mountain, 440,966 pounds, of household hazardous waste was collected through the use of these stations and also from Amnesty Day events.
The three most likely sources of sanitary sewage seepage were from sewer lines, manholes, and lift stations. As previously reported, all wastewater treatment facilities are regulated by local, State and Federal rules and permits regarding all aspects of design and operation.

Sarasota County Utilities continued to make improvements to ten treatment facilities and associated collection systems, thereby reducing the severity of system failures and sewage overflows:

- All aspects of wastewater systems construction were inspected for compliance by the County.
- Lift stations were fenced to prevent vandalism that could cause station failures or overflows.
- A County vacuum truck flushed an average of 2000 lineal feet of gravity sewer lines daily.
- Utilities completed phase one of a telemetry system (SCADA) that was installed on 280 lift stations in 1998. The system dramatically reduced the response time to malfunctioning lift stations. Spill response was faster and less volume was discharged.
- An improved program of regular lift station maintenance was continued.
- The Spill Response Standard Operations Procedure was continued.
- A video truck was purchased in 1998. By viewing broken and misaligned pipes, resources were allocated to those sections most likely to fail.
A Sanitary Sewer Evaluation Study (SSES) continued to assess the integrity of gravity sewer lines and manholes. Inflow and infiltration were reduced in the worst portions of the collection system first.

The City of Sarasota Public Works Department continued to improve one domestic wastewater treatment facility:

- Substantial maintenance and capital upgrades improved the system in 1998.
- Although grant funding was no longer available, an infiltration and inflow control project was continued.
- The cleaning and televising study of the collection system focused repairs (including slip lining) on the weakest components.
- A pilot project to reduce infiltration by replacing 500 privately owned portions of the collection system was initiated.
- The Spill Response Plan approved by Pollution Control was still employed.
- Wastewater residuals were composted and reused as mulch.
- Effluent disposal was subject to a NPDES permit for direct discharge to Whitaker Bayou, or to reuse irrigation.

Wastewater treatment facilities, including their collection and transmission systems, were regulated by Pollution Control and the FDEP. In 1998, the FDEP delegated the regulation and permitting of smaller (less than 100,000 gallons/day) domestic wastewater facilities to Pollution Control.
Eighty Wastewater Treatment Facilities in Sarasota County reported 98 discharges and 105 other abnormal events to Pollution Control and FDEP in 1998. All citizen reports of discharges from sanitary sewers were promptly reported to the appropriate utility.

All reports of septic system discharges were referred to the Sarasota County Health Department. Pollution Control investigated some of the reports. Many cases resulted in code enforcement, primarily initiated by the Health Department.
Annual Report

Section 4 - Narrative Reports for SWMP Activities

4.13 High Risk Industrial Facility Inspections

In 1998, 166 facilities were inspected by Pollution Control using the same methods as described in previous annual reports. Refer to Appendix M for lists of the 58 inspected facilities in the City and 108 in the County. Refer to Appendix H for the inspection protocol. Refer to Appendix I for the permitting manual to be distributed to select businesses.

Few significant discharges were found at these facilities. Most violations discovered during inspections by the Pollution Control Division generated voluntary compliance. A few code enforcement actions were generated by the inspections.

The County Hazardous Waste Management Division inspected 121 businesses during 1998. The inspection included completing a NPDES Storm Water Inspection form that was later forwarded to Pollution Control.
Sarasota County Land Development Regulations (LDR) are updated annually in regard to storm water pollution. The LDRs specifically prohibited construction activities from violating water-quality standards as established by State rule. Aspects addressed by the LDRs included flood control criteria, pre- and post-development runoff rates, retention and detention of "first flush" runoff, construction phasing, and operation and maintenance plans for the storm water system. BMPs were required by the LDRs to minimize pollution, to control erosion, and to remove sediment from surface water runoff. Sarasota County Transportation is still considering the development of a Storm Water Management Technical Manual to append to the LDR, as reported in previous annual reports.
Annual Report

Section 4 - Narrative Reports for SWMP Activities
4.15 Construction Inspections

Natural Resources inspected more than 56 construction sites during 1998 and in all cases the developer quickly rectified all violations found. Enforcement was possible through the LDRs (Ordinance No. 95-021 amending Ordinance No. 81-12), and the Pollution Control Code (Ordinance No. 96-020, as amended).

Chapter 29.5 of the City Code of the City of Sarasota required erosion and siltation permits for all soil disturbing activities, all commercial construction permits, and some residential construction permits. The permit required implementation of BMPs for erosion, siltation, and pollution prevention. Inspections were conducted by an employee of the City Engineer's office, who was certified through FW&PCOA for construction site erosion and siltation BMPs. Enforcement was handled by the Building Department, using code enforcement or stop work orders.

During Year Four of the permit, several County employees received training on erosion and sediment control. The classes were sponsored by various organizations, including the International Erosion Control Association, and were facilitated by the Suncoast Public Works Academy. The Sarasota County Storm Water Division staff conducted in-house training. American Society for Civil Engineers (ASCE) classes were also taken.
Annual Report

Section 4 - Narrative Reports for SWMP Activities

4.16 Education Activities

Sarasota County participated in the FDEP certification program. In 1998, two County employees participated in the “train-the-trainer" program for this certification course. In addition, an employee of the City of Sarasota Engineering Department and the Suncoast Public Works Academy Coordinator also participated in the “train-the-trainer” program. It is anticipated that the certification course would be offered at the Suncoast Public Works Academy beginning in 1999.

The Pollution Control Division sponsored the fourth annual Domestic Waste Workshop in October of 1998. Participants at the workshop included wastewater treatment facility permittees and operators, FDEP personnel, engineers, laboratory personnel, and other representatives. The informative presentations included permitting changes, rule changes, reporting requirements, grease management, residuals, disaster preparedness, and catastrophic failures.
Annual Report

Section 4 - Narrative Reports for SWMP Activities
4.17 Monitoring Activities

The Pollution Control Division continued to perform dry-weather field screenings of major outfalls and inspections of high-risk industrial facilities within the City of Sarasota and unincorporated area.
Section 4 - Narrative Reports for SWMP Activities
4.18 Additional SWMP Activities

There were no additional activities to report at this time.
Section 5 - Monitoring Program Report

5.1 Monitoring Objectives

In accordance with Part V.B., Sarasota County and co-permittees are required to conduct a monitoring program for representative data collection for the term of the permit. The Surface Water Ambient Monitoring Program (SWAMP) required that the Sarasota County permittees perform not only conventional in-water monitoring and water chemistry, but also analyze biological indicators and sediment samples in designated watersheds. The MS4 permit also limited the costs associated with the monitoring program, that were not to exceed the projected costs proposed by the co-permittees in the May 1993 Part II application submittal.

During year four, the monitoring data served to provide base-line information.
Annual Report

Section 5 - Monitoring Program Report
5.2 Summary Table of Completed Monitoring

Refer to Table 5.2 for a list of monitoring locations, parameters, and date and frequency of sample collection.
Annual Report

Section 5 - Monitoring Program Report
5.3 Monitoring Conclusions

As required in Part V.B of the NPDES permit, the monitoring program continued during year four. Sarasota County Natural Resources continued a contract for long-term ambient water-quality monitoring, which included a total of 40 stations (25 stations in Sarasota Bay, 5 stations in Lemon Bay, 5 stations in Upper Myakka River, and 5 stations in Lower Myakka River). Analytical parameters and monitoring frequency for these stations are in Table 5.2. Field and laboratory results from one of the monthly sampling events are included in Appendix N. All data generated from the ambient monitoring is stored in the STORET database.

During 1998 samples were collected in the drainage basins of Phillippi Creek, Big Slough, and Hudson Bayou. The samples were collected during the dry season for water quality parameters and for biological analysis. The laboratory results are provided in Appendix O.

The Phase I heavy metals monitoring program for Hudson Bayou was completed in May 1998. Twelve sediment cores were sampled and analyzed for grain distribution, aluminum, lead, copper, zinc, chromium, total nitrogen, total phosphorus, and total organic carbon. A few of the samples showed elevated levels of lead. The laboratory results are provided in Appendix P.

Before progressing on to Phase II, the Pollution Control Division will be preparing a sampling plan to detail the resources needed for additional field sampling and laboratory analyses in the many tributaries and major storm water outfalls entering the bayou. This sampling is scheduled for 1999. The Hudson Bayou Phase II program is scheduled for year five. This phase employs
the use of automated samplers to collect composite water samples at five stations. The location of the samplers will be based on the results of the Phase I sediment monitoring.

During 1998 Mote Marine Laboratory was under contract by the Sarasota Bay National Estuary Program to identify the historic and present-day regions within the Hudson Bayou watershed that have the potential to contribute toxic compounds to the receiving waters. The report contained five activities; historical sources, present-day sources, multi-sector sources, storm water loadings, and new analyses. The report is in draft form only and will be finalized in 1999.
Annual Report

Section 5 - Monitoring Program Report
5.4 Monitoring Compliance

The monitoring program involved the use of three contractors to perform the tasks of field sampling, laboratory testing, and biological sampling and identification. All contractors coordinated their efforts to assure timely results. A majority of the monitoring program was performed as required. The exceptions to this program were the wet season samples and sediment core samples that were not collected as a result of an oversight. Two of the six sediment core samples were included in the May 1998 sampling of Phase I, heavy metals monitoring, for Hudson Bayou. The sediment core samples scheduled for collection in December 1998 have been rescheduled for collection in July 1999.
Sarasota County and co-permittees request that the Part V.B. monitoring program be revised to delete the language of designated sampling months of April/May and July/August. As a result of unforeseen weather patterns, the County and co-permittees are requesting to have the flexibility to determine the dry and wet season periods without being bound to exact months.

In addition, Sarasota County and the co-permittees are requesting a change to the heavy metals monitoring program in Hudson Bayou, Phase II. The change to the program would delete the use of Isco automated samplers as a result of the high cost proposed by the field sampling contractor. The County experienced several problems trying to accommodate this request such as having a contractor “on-call” during storm events, placing the samplers in unsecured areas, power requirements, and back up power supplies. The program would be modified to have all monitoring conducted on two separate grab samples. Samples will be taken from the point of discharge prior to mixing with the receiving water while the outfall is discharging. The first grab sample will be collected within the first 30 minutes of the discharge event or as soon thereafter as practicable. The second grab sample will be collected after two hours of the discharge event or upon termination of the rainfall, whichever occurs first. Sarasota County and co-permittees are in agreement to sample four storm events instead of the eight proposed. The results will be included in the year five annual report.
No new major outfalls were added to the inventory during 1998.

Three major outfalls were missing the coordinate information from the consultant and as a result, could not be located.

<table>
<thead>
<tr>
<th>Drainage Basin</th>
<th>Basin Number</th>
<th>Station Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackburn Canal</td>
<td>OF-SC-10</td>
<td>2055</td>
</tr>
<tr>
<td>Curry Creek</td>
<td>OF-SC-10</td>
<td>1428</td>
</tr>
<tr>
<td>Curry Creek</td>
<td>OF-SC-10</td>
<td>1456</td>
</tr>
</tbody>
</table>

Six major outfalls were verified to be located within the limits of the City of Sarasota and have been transferred to that list.

<table>
<thead>
<tr>
<th>Drainage Basin</th>
<th>Basin Number</th>
<th>Station Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whitaker Bayou</td>
<td>OF-SC-01</td>
<td>698</td>
</tr>
<tr>
<td>Whitaker Bayou</td>
<td>OF-SC-01</td>
<td>705</td>
</tr>
<tr>
<td>Whitaker Bayou</td>
<td>OF-SC-01(SA-01)</td>
<td>729</td>
</tr>
<tr>
<td>Whitaker Bayou</td>
<td>OF-SC-01(SA-01)</td>
<td>732</td>
</tr>
<tr>
<td>Whitaker Bayou</td>
<td>OF-SC-01(SA-01)</td>
<td>735</td>
</tr>
<tr>
<td>Whitaker Bayou</td>
<td>OF-SC-01(SA-01)</td>
<td>738</td>
</tr>
</tbody>
</table>
Thirteen major outfalls were not field screened as a result of accessibility issues or construction activities.

<table>
<thead>
<tr>
<th>Drainage Basin</th>
<th>Basin Number</th>
<th>Station Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ainger Creek</td>
<td>OF-SC-16</td>
<td>1331</td>
</tr>
<tr>
<td>Ainger Creek</td>
<td>OF-SC-16</td>
<td>1341</td>
</tr>
<tr>
<td>Catfish Creek</td>
<td>OF-SC-16</td>
<td>1211</td>
</tr>
<tr>
<td>Catfish Creek</td>
<td>OF-SC-16</td>
<td>1214</td>
</tr>
<tr>
<td>Curry Creek</td>
<td>OF-SC-10</td>
<td>1443</td>
</tr>
<tr>
<td>Myakka River</td>
<td>OF-SC-18</td>
<td>1161</td>
</tr>
<tr>
<td>Myakka River</td>
<td>OF-SC-18</td>
<td>1281</td>
</tr>
<tr>
<td>Phillippi Creek</td>
<td>OF-SC-03</td>
<td>14</td>
</tr>
<tr>
<td>South Creek</td>
<td>OF-SC-08</td>
<td>1090</td>
</tr>
<tr>
<td>Whitaker Bayou</td>
<td>OF-SC-01</td>
<td>739</td>
</tr>
<tr>
<td>Whitaker Bayou</td>
<td>OF-SC-01</td>
<td>2099</td>
</tr>
<tr>
<td>Big Slough</td>
<td>OF-SC-20</td>
<td>1365</td>
</tr>
<tr>
<td>Big Slough</td>
<td>OF-SC-20</td>
<td>1347</td>
</tr>
</tbody>
</table>

One major outfall could not be located as per the map locations.

<table>
<thead>
<tr>
<th>Drainage Basin</th>
<th>Basin Number</th>
<th>Station Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catfish Creek</td>
<td>OF-SC-06</td>
<td>1208</td>
</tr>
</tbody>
</table>

Two major outfalls were reassigned from Big Slough basin to Ainger Creek basin.

<table>
<thead>
<tr>
<th>Drainage Basin</th>
<th>Basin Number</th>
<th>Station Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ainger Creek</td>
<td>OF-SC-16</td>
<td>1331</td>
</tr>
<tr>
<td>Ainger Creek</td>
<td>OF-SC-16</td>
<td>1341</td>
</tr>
</tbody>
</table>
One new major outfall was added to the inventory during 1998.

<table>
<thead>
<tr>
<th>Drainage Basin</th>
<th>Basin Number</th>
<th>Station Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hudson Bayou</td>
<td>OF-SA-02</td>
<td>HB-SA-001</td>
</tr>
</tbody>
</table>

Eight major outfalls could not be located as per the map locations.

<table>
<thead>
<tr>
<th>Drainage Basin</th>
<th>Basin Number</th>
<th>Station Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hudson Bayou</td>
<td>OF-SA-02</td>
<td>1862</td>
</tr>
<tr>
<td>Whitaker Bayou</td>
<td>OF-SA-01</td>
<td>95</td>
</tr>
<tr>
<td>Whitaker Bayou</td>
<td>OF-SA-01</td>
<td>150</td>
</tr>
<tr>
<td>Whitaker Bayou</td>
<td>OF-SA-01</td>
<td>151</td>
</tr>
<tr>
<td>Whitaker Bayou</td>
<td>OF-SA-01</td>
<td>159</td>
</tr>
<tr>
<td>Whitaker Bayou</td>
<td>OF-SA-01</td>
<td>160</td>
</tr>
<tr>
<td>Whitaker Bayou</td>
<td>OF-SA-01</td>
<td>318</td>
</tr>
<tr>
<td>Whitaker Bayou</td>
<td>OF-SA-01</td>
<td>548</td>
</tr>
</tbody>
</table>

Three major outfalls were not field screened as a result of accessibility issues.

<table>
<thead>
<tr>
<th>Drainage Basin</th>
<th>Basin Number</th>
<th>Station Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hudson Bayou</td>
<td>OF-SA-02</td>
<td>1918</td>
</tr>
<tr>
<td>Hog Creek</td>
<td>OF-SA-23</td>
<td>342</td>
</tr>
<tr>
<td>Hog Creek</td>
<td>OF-SA-23</td>
<td>343</td>
</tr>
</tbody>
</table>
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Section 5 - Monitoring Program Report
5.7 Investigation of Organic Pollutants

This element of the monitoring program will be completed during 1999.
Estimates of the seasonal pollutant load and of the event mean concentration of a representative storm for specified parameters will be completed in 1999. The completed study will be mailed to EPA and FDEP as soon as results are available. Refer to Appendix Q for the purchase order and scope of services.
Sarasota County has not modified the Storm Water Management Plan described in or required by the permit. However, the permit allows modifications to the management program if activities are determined to be inefficient or ineffective elements. Any necessary modifications to the Program throughout the permit term will be justified and reported during the permit renewal process.
Pollution Control determined that the list of outfalls in the permit application contained many errors. The Division will be developing a more accurate database of each outfall. A format appropriate to the actual system components and considering the new definitions of major outfalls in the Phase II regulations will be developed. The same sub-basin names as are used by the County Storm water Division and the United States Geological Service will be used. Gradually, all outfalls to significant surface waters, and those with other significant characteristics, will be included in the database. Each will be defined by size, drainage area, land use, and major or minor status according to current rule definitions.
Section 6 - Permit Modifications
6.3 Other Permit Modifications

There were no permit modifications during year four of the permit.
Annual Report
Section 7 - Fiscal Analysis

These figures were based on the best available information from Sarasota County and the City of Sarasota that were responsible for implementing the elements. In some cases, the fiscal requirements for the previous year were not available. Other elements had insignificant costs and were not accounted for separately.

Table 7.1 Financial Survey for Year Four (1998)

<table>
<thead>
<tr>
<th>Program Activity</th>
<th>Previous Year (FY 1997)</th>
<th>Current Year (FY 1998)</th>
<th>Future Year (FY 1999)</th>
<th>Funding Source/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. O &amp; M of Structural Controls; Inspect Structural Controls</td>
<td>$36,000</td>
<td>$37,000</td>
<td>$37,000</td>
<td>Stormwater Fees</td>
</tr>
<tr>
<td>1. O &amp; M of Structural Controls; Private Storm Water Systems</td>
<td>Not Available as a Line Item Cost</td>
<td></td>
<td></td>
<td>Costs included with Inspections of Structural Controls</td>
</tr>
<tr>
<td>1. O &amp; M of Structural Controls; Inspector Training</td>
<td>$7,450</td>
<td>$8,450</td>
<td>$8,450</td>
<td>Stormwater Fees &amp; Transportation General Funds</td>
</tr>
<tr>
<td>2. Control of Discharges; Adopt Ordinances and LDRs</td>
<td>Not Available as a Line Item Cost</td>
<td></td>
<td></td>
<td>Negligible Costs</td>
</tr>
<tr>
<td>2. Control of Discharges; Basin Planning</td>
<td>$1,929,953</td>
<td>$1,929,953</td>
<td>$1,010,000</td>
<td>Stormwater Fees</td>
</tr>
<tr>
<td>3. O &amp; M of Roads; Litter Control</td>
<td>$75,000</td>
<td>$80,000</td>
<td>$80,000</td>
<td>Transportation General Funds &amp; Solid Waste Fees</td>
</tr>
<tr>
<td>3. O &amp; M of Roads; Street Sweeping - County</td>
<td>$3,143,525</td>
<td>$3,143,525</td>
<td>$3,143,525</td>
<td>Transportation General Funds</td>
</tr>
<tr>
<td>3. O &amp; M of Roads; Street Sweeping - City</td>
<td>$250,000</td>
<td>$250,000</td>
<td>$250,000</td>
<td>Public Works Department</td>
</tr>
<tr>
<td>3. O &amp; M of Roads; Catch Basin and Ditch Maintenance</td>
<td>$1,975,000</td>
<td>$1,975,000</td>
<td>$1,975,000</td>
<td>Stormwater Fees</td>
</tr>
<tr>
<td>3. O &amp; M of Roads; Pollution Reduction Practices - County</td>
<td>$2,844</td>
<td>$2,844</td>
<td>$2,844</td>
<td>Transportation General Funds</td>
</tr>
<tr>
<td>Program Activity</td>
<td>Previous Year (FY 1997)</td>
<td>Current Year (FY 1998)</td>
<td>Future Year (FY 1999)</td>
<td>Funding Source/Comments</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>--------------------------</td>
<td>------------------------</td>
<td>-----------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>3. O &amp; M of Roads; Pollution Reduction Practices - City</td>
<td>$4,000</td>
<td>$4,000</td>
<td>$4,000</td>
<td>Police &amp; Public Works Waste Hauling Costs</td>
</tr>
<tr>
<td>4. Flood Control Projects; Basin Plans</td>
<td>$1,975,000</td>
<td>$1,975,000</td>
<td>$11,493,000</td>
<td>Stormwater Capital Improvement Assessments</td>
</tr>
<tr>
<td>5. Discharges from Municipal Waste and POTW Facilities - County</td>
<td>Not Available as a Line Item Cost</td>
<td></td>
<td></td>
<td>Utility Fees &amp; Solid Waste Fees</td>
</tr>
<tr>
<td>5. Discharges from Municipal Waste &amp; POTW Facilities - City</td>
<td>Not Available as a Line Item Cost</td>
<td></td>
<td></td>
<td>Utility Fees &amp; Solid Waste Fees</td>
</tr>
<tr>
<td>6. Pesticides, Herbicides, and Fertilizers; Public Education</td>
<td>$6,000</td>
<td>$8,000</td>
<td>$20,000</td>
<td>Extension Service General Funds</td>
</tr>
<tr>
<td>6. Pesticides, Herbicides, and Fertilizers; Employee Training</td>
<td>$6,000</td>
<td>$7,000</td>
<td>$7,000</td>
<td>Stormwater &amp; Transportation &amp; Extension Service General Funds</td>
</tr>
<tr>
<td>6. Pesticides, Herbicides, and Fertilizers; Minimize Use and Proper Storage</td>
<td>$166,608</td>
<td>$166,608</td>
<td>$166,608</td>
<td>Stormwater &amp; Transportation &amp; Extension Service General Funds</td>
</tr>
<tr>
<td>7a. Illicit Discharges &amp; Disposal; Non-Storm Water Discharges Allowed</td>
<td>Not Available as a Line Item Cost</td>
<td></td>
<td></td>
<td>Included in Cost of Illicit Inspections and Enforcement</td>
</tr>
<tr>
<td>7a. Illicit Discharges &amp; Disposal; Inspections and Enforcement</td>
<td>$355,529</td>
<td>$355,529</td>
<td>$460,945</td>
<td>Unincorporated Area Services Funds</td>
</tr>
<tr>
<td>7a. Illicit Discharges &amp; Disposal; Amend Ordinances</td>
<td>Not Available as a Line Item Cost</td>
<td></td>
<td></td>
<td>Included in Cost of Illicit Inspections and Enforcement</td>
</tr>
<tr>
<td>7b. Illicit Discharges &amp; Disposal; Outfall Inventory &amp; Field Screening</td>
<td>Not Available as a Line Item Cost</td>
<td></td>
<td></td>
<td>Included in Cost of Illicit Inspections and Enforcement</td>
</tr>
<tr>
<td>7c. Illicit Discharges &amp; Disposal; Investigate Illicit Connections</td>
<td>Not Available as a Line Item Cost</td>
<td></td>
<td></td>
<td>Included in Cost of Illicit Inspections and Enforcement</td>
</tr>
<tr>
<td>7d. Illicit Discharges &amp; Disposal; Spill Response</td>
<td>NA</td>
<td>$181,940</td>
<td>$181,940</td>
<td>Landfill Fee Surcharges &amp; Fire Department General Funds</td>
</tr>
<tr>
<td>7e. Illicit Discharges &amp; Disposal; Publicize Reporting of Illicit Discharges</td>
<td>Not Available as a Line Item Cost</td>
<td></td>
<td></td>
<td>Included in Cost of Illicit Inspections and Enforcement</td>
</tr>
<tr>
<td>7f. Illicit Discharges &amp; Disposal; Hazardous Waste Collection</td>
<td>$441,000</td>
<td>$415,000</td>
<td>$415,000</td>
<td>Landfill Fee Surcharge</td>
</tr>
<tr>
<td>7f. Illicit Discharges &amp; Disposal; Storm Drain Stenciling</td>
<td>Not Available as a Line Item Cost</td>
<td></td>
<td></td>
<td>Costs Included in Litter Control</td>
</tr>
<tr>
<td>7g. Illicit Discharges &amp; Disposal; Sanitary Sewer Seepage - County</td>
<td>NA</td>
<td>$3,800,000</td>
<td>$3,800,000</td>
<td>Utility Fees</td>
</tr>
<tr>
<td>Program Activity</td>
<td>Previous Year (FY 1997)</td>
<td>Current Year (FY 1998)</td>
<td>Future Year (FY 1999)</td>
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</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>--------------------------</td>
<td>------------------------</td>
<td>------------------------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>7g. Illicit Discharges &amp; Disposal; Sanitary Sewer Seepage - City</td>
<td>NA</td>
<td>$2,500,000</td>
<td>$2,500,000</td>
<td>Utility Fees</td>
</tr>
<tr>
<td>8a. Industrial and High Risk Runoff; Facility Inspections</td>
<td>Not Available as a Line Item Cost</td>
<td></td>
<td></td>
<td>Included in Cost of Illicit Inspections and Enforcement</td>
</tr>
<tr>
<td>8b. Industrial and High Risk Runoff; Monitoring</td>
<td>Not Available as a Line Item Cost</td>
<td></td>
<td></td>
<td>Included in Cost of Illicit Inspections and Enforcement</td>
</tr>
<tr>
<td>9a. Construction Site Runoff; Amend Rules &amp; Track Projects</td>
<td>Not Available as a Line Item Cost</td>
<td></td>
<td></td>
<td>Natural Resources &amp; Transportation General Funds</td>
</tr>
<tr>
<td>9b. Construction Site Runoff; Inspection and Enforcement</td>
<td>$56,000</td>
<td>$56,000</td>
<td>$56,000</td>
<td>This value is only for Resource Permitting Services inspection costs.</td>
</tr>
<tr>
<td>9c. Construction Site Runoff; Site Operator Training &amp; Notification</td>
<td>$700</td>
<td>$700</td>
<td>$1000</td>
<td>Natural Resources General Funds</td>
</tr>
<tr>
<td>V.A.1. Seasonal Loadings and Event Mean Concentrations</td>
<td>NA</td>
<td>NA</td>
<td>$7500</td>
<td>Stormwater Fees</td>
</tr>
<tr>
<td>V.A.2. Investigation of Organic Pollutants</td>
<td>NA</td>
<td>NA</td>
<td>$1000</td>
<td>Stormwater Fees</td>
</tr>
<tr>
<td>V.B.1. Existing Monthly Bay and Stream Runs</td>
<td>$119,941</td>
<td>$119,941</td>
<td>$119,941</td>
<td>Unincorporated Area Services Funds</td>
</tr>
<tr>
<td>V.B.3. Heavy Metals Monitoring Program in Hudson Bayou, Phase I</td>
<td>NA</td>
<td>$2020</td>
<td>NA</td>
<td>Stormwater Fees</td>
</tr>
<tr>
<td>V.B.4. Heavy Metals Monitoring in Hudson Bayou, Phase II</td>
<td>NA</td>
<td>NA</td>
<td>$4600S</td>
<td>Stormwater Fees</td>
</tr>
<tr>
<td>Totals</td>
<td>$10,575,726</td>
<td>$17,043,686</td>
<td>$25,770,529</td>
<td></td>
</tr>
</tbody>
</table>