

1. REQUESTED MOTION:

ACTION REQUESTED: Approve Lee County's portion of the fifth Annual Report for the Lee County NPDES (National Pollutant Discharge Elimination System) Storm Water Permit (FLS000035) and authorize staff to transmit the report to the United States Environmental Protection Agency (USEPA). Authorize Chairman to sign the Certification Page for the NPDES Fifth Annual Report.

WHY ACTION IS NECESSARY: Annual Reports are required as a permit condition of the Lee County NPDES permit

WHAT ACTION ACCOMPLISHES: Provides certification that the report provides an accurate description of the activities associated with the NPDES permit.

2. DEPARTMENTAL CATEGORY:

Natural Resources
COMMISSION DISTRICT #: CW

C8B

3. MEETING DATE:

03-18-2003

4. AGENDA:

- CONSENT ADMINISTRATIVE
- APPEALS PUBLIC
- WALK ON TIME REQUIRED:

5. REQUIREMENT/PURPOSE:
(Specify)

- STATUTE
- ORDINANCE
- ADMIN. CODE
- OTHER Report Certification

6. REQUESTOR OF INFORMATION:

- A. COMMISSIONER
 - B. DEPARTMENT Lee County - Public Works
 - C. DIVISION Natural Resource Div.
- BY: Roland Ottolini, Director
[Signature]

7. BACKGROUND:

In October 1997, Lee County obtained a permit to operate its Municipal Separate Storm Sewer System (MS4) from the U.S. Environmental Protection Agency (USEPA). The purpose of the permit is to track activities associated with the operation and maintenance of the MS4. It also specifies certain legal and educational activities required of the County. The result of the permitted activities is to improve the waters discharged to federal waters from the Lee County MS4.

The Annual Report is **due by March 31, 2003**, or six months after the end of fiscal (also permit) year of operation. It contains summaries of activities performed by Lee County, and will be combined with the reports of the other Co-permittees. A copy of the final report (containing all of the reports from all of the Co-permittees) will be submitted to the Clerk for the record upon its filing with the FDEP.

Activities associated with the permit are currently budgeted and funded. No additional funding is required.

Attachments: One (1) Copy of NPDES Executive Summary/Annual Report
Two (2) Original Certification Pages (one to be retained by the Clerk's office and one returned to Div.)

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8. MANAGEMENT RECOMMENDATIONS:

9. RECOMMENDED APPROVAL:

A Department Director	B Purchasing or Contracts	C Human Resources	D Other	E County Attorney	F Budget Services <i>W/om 3/6/03</i>				G County Manager
					OA	OM	Risk	GC	
<i>[Signature]</i> 3-4-03				<i>[Signature]</i> 3/4/03	<i>P.M.</i> 3/5/03	<i>W/om</i> 3/6/03	<i>W/om</i> 3/6/03	<i>RS</i> 3-5-03	<i>[Signature]</i> 3-4-03

10. COMMISSION ACTION:

- APPROVED
- DENIED
- DEFERRED
- OTHER

Rec. by CoAtty
Date: *3/4/03*
Time: *2:00 pm*
Forwarded To:
By Admin: 3-4-03 2:45

RECEIVED BY
COUNTY ADMIN. *PM*
3-5-03
8:00
COUNTY ADMIN.
MAIL ROOM: *PL*
3/6/03
10:10 AM



**Annual Report
Report Certification**

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.

Ray Judah, Chairman,
Lee County Board of County Commissioners

Date: March 18, 2003

Approved as to Form:

County Attorney's Office



LEE COUNTY
SOUTHWEST FLORIDA

**Annual Report
Report Certification**

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.

Date: March 18, 2003

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LEE COUNTY
SOUTHWEST FLORIDA

**Annual Report
Cover Page**

**N.P.D.E.S. MUNICIPAL SEPARATE
STORM SEWER SYSTEM PERMIT NO. FLS000035**

**ANNUAL REPORT
FOR
YEAR 5**

**PERIOD COVERING:
10/01/2001
TO
09/30/02**

SUBMITTED BY:

**Lee County
and**

CO - PERMITTEES:

City of Fort Myers
City of Cape Coral
City of Sanibel
City of Bonita Springs
Town of Fort Myers Beach
Gateway Services District
East Mulloch Control District
East County Water Control District
San Carlos Estates Drainage District
Bay Creek Community Development District
River Ridge Community Development District
Bayside Improvement Community Development District
Florida Department of Transportation - District One
The Brooks Community Development District

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Section 1 – List of Contacts for the Co-permittees

TABLE

OF

LEE COUNTY PERMITTEE CONTACTS

<p>Mr. Tony Pellicer Lee County Board of County Commissioners P.O. Box 398 Fort Myers, FL 33902 Phone: (941) 479-8129 Fax: (941) 479-8108 E-mail: pellicla@leegov.com</p>	<p>Ms. Connie Jarvis City of Cape Coral P.O. Box 150027 Cape Coral, FL 33915-0027 Phone: (941) 574-0745 Fax: (941) 574-0861 E-mail: cjarvis@capecoral.net</p>	<p>Mr. Thomas (TW) Hunt, P.G. City of Fort Myers P.O. Drawer 2217 Fort Myers, FL 33902 Phone: (941) 332-6851 Fax: (941) 332-6604 E-mail: twhunt@cityftmyers.com</p>
<p>Mr. Gates Castle City of Sanibel 800 Dunlop Road Sanibel, FL 33957 Phone: (941) 472-6397 Fax: (941) 472-6041</p>	<p>Mr. Dan Folke Town of Fort Myers Beach P. O. Box 3077 Fort Myers Beach, FL 33932 Phone: (941) 765-0202 Fax: (941) 765-0909 E-mail: folke@fmbeach.org/</p>	<p>Mr. Gary Price, City Manager City of Bonita Springs 9220 Bonita Beach Rd., St. 111 Bonita Springs, FL 34135 Phone: (941) 390-1000 Fax: (941) 390-1004 E-mail: gary.price@cyberstreet.com</p>
<p>Mr. Brian Lamb Assistant Director of Operations Gateway Service District 985 Pelican Marsh Boulevard Naples, Florida 34108 Phone: (941) 592-5181 Fax: (941) 592-9021 E-mail: blamb1234@aol.com</p>	<p>Mr. Robert Dwyer District Maintenance Environmental Administrator FDOT Division of Maintenance 801 N. Broadway Ave. Bartow, FL 33831 Phone: (863) 519-2762 Fax: (863) 534-7045 E-mail: Robert.Dwyer@dot.state.fl.us</p>	<p>Mr. Brian Lamb Assistant Director of Operations River Ridge Community Development District 985 Pelican Marsh Boulevard Naples, Florida 34108 Phone: (941) 592-5181 Fax: (941) 592-9021 E-mail: blamb1234@aol.com</p>
<p>Mr. Brian Lamb Assistant Director of Operations Bayside Improvement Community Development District 985 Pelican Marsh Boulevard Naples, Florida 34108 Phone: (941) 592-5181 Fax: (941) 592-9021 E-mail: blamb1234@aol.com</p>	<p>Mr. David Lindsay East County Water Control District 601 East County Lane Lehigh Acres, FL 33936 Phone: (941) 368-0044 Fax: (941) 368-3412 E-mail: ecwcd@aol.com</p>	<p>Mr. Brian Lamb Assistant Director of Operations The Brooks Community Development District 985 Pelican Marsh Boulevard Naples, Florida 34108 Phone: (941) 592-5181 Fax: (941) 592-9021 E-mail: blamb1234@aol.com</p>
<p>Mr. Brian Lamb Assistant Director of Operations Bay Creek Community Development District 985 Pelican Marsh Boulevard Naples, Florida 34108 Phone: (941) 592-5181 Fax: (941) 592-9021 E-mail: blamb1234@aol.com</p>	<p>Mr. Mike Morris San Carlos Estates Drainage District 2216 Altamont Avenue Fort Myers, FL 33901 Phone: (941) 337-3993 Fax: (941) 337-3994 E-mail: mmorris@m-da.com</p>	<p>Mr. Allan Freeman East Mulloch Water Control District 19091 Tamiami Trail, S.E. Fort Myers, FL 33908 Phone: (941) 267-7472 Fax: (941) 267-7622 E-mail: Fregroup@aol.com</p>



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Section 2 – Storm Water Management Program (SWMP)
Evaluation

2.1 Objective of NPDES Program

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The National Pollutant Discharge Elimination System (NPDES) permit was implemented by Lee County and Co-Permittees in a joint effort to prevent and control the discharge of pollutants in the stormwater runoff to the maximum extent practicable. The NPDES permit program was developed by the Environmental Protection Agency (EPA), and empowered by Sections 301, 309 and 402 of the Clean Water Act (CWA).

In order to reduce adverse impacts from stormwater runoff to national waters, Lee County developed a Storm Water Management Program (SWMP). The SWMP is designed to improve and ensure stormwater quality by identifying and reducing discharges of pollutants to the Municipal Separate Stormwater Sewer System (MS4), from watersheds, point and non-point sources. The objectives of the Program will be achieved through education, regulation, inspection, proper maintenance, monitoring, watershed master planning, and capital improvement projects.

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2.2 Major Findings

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There are nine primary elements within the Storm Water Management Program. Each element contains numerous activities. During year five of the permit period, Lee County activities included: inspection and maintenance of structural controls, basin master planning, litter control, routine system maintenance, pesticide education, hazardous material response, hazardous waste control, construction site inspections, dry weather screening, illicit sanitary discharge investigation, illicit discharges investigation and elimination, identification of industrial sources, inspector training and contractor education. The aforementioned Program activities are considered essential and effective in maintaining water quality within Lee County.

In addition to carrying out many of the inspection, monitoring, and reporting activities associated with the permit, Lee County operates its NPDES program to function as the resource for NPDES permit related activity. Other County departments' normal functions include maintenance, litter control, flood management, education, solid waste management, and hazardous waste management, which are all related to NPDES permit activities. Combining their activities with the NPDES program efforts helps to achieve substantial compliance with the permit conditions of inspection, maintenance, enforcement, education, and monitoring.

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Section 2 – Storm Water Management Program (SWMP) Evaluation

2.3 Major Accomplishments

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Once again, increased pollution prevention awareness can be considered one of the *major accomplishments* since the implementation of the NPDES permit program. Professionals within Lee County keep expanding awareness regarding the potential adverse impacts of daily industrial and construction activities can have on water quality. We also believe the increased concern that County employees have gained from implementing the Program has had a positive impact on reducing the pollutant loads to the MS4. In June of 2002 Lee County in collaboration with the City of Fort Myers hosted classes on the "Florida Stormwater, Erosion, and Sedimentation Control Inspector Training and Certification Program". More than 45 County and Co-permittee staff, and private individuals have been certified by the FDEP as Erosion Control Inspectors since the beginning of the permit. Trained and certified municipal staff perform their duties using the "Stormwater Inspector" training as a guide for their decisions related to erosion and sedimentation control. This education and experience has produced an awareness and a project by project improvement in performance. A brochure encouraging protection of waterways is distributed at public facilities providing local contact information for illicit discharges reporting. A web page (<http://leegov.com/npdes>) provides public, construction, and industrial pollution prevention education, as well as a direct contact for illicit discharge reporting and direct access to forms and regulations.

Another *major accomplishment* was continuing the public dialogue related to funding of storm water issues. Flood control and water quality projects identified in the adopted Lee County Surface Water Management Plan are currently funded through *ad valorem* taxes and grant funds in the Lee County Capital Improvement Program. No user fees are currently collected to pay for capital improvements or maintenance services.

The passage of Lee County Land Development Code 14-471, Article VII (Clean Water Provisions) in 1998 typifies the direction and tone of the Storm Water Management Plan. It clearly relies upon existing rules, laws, ordinances, and enforcement mechanisms to assist in the administration of federally mandated activities. Construction site inspections and enforcement have brought the necessity of erosion and sedimentation controls to the attention of local contractors. NPDES field staff and LDOT

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inspectors received Stormwater Management Inspector training to better prepare them for field evaluations and inspections. NPDES Program staff has received Code Enforcement Training to be authorized to issue citations for violations of the Lee County Land Development Code 14-471, Article VII. This enforcement activity supplements the existing enforcement activities of South Florida Water Management District (SFWMD) and the Florida Department of Environmental Protection (FDEP).

The SWMP uses existing programs, rules, and laws to the maximum extent to achieve its goals without creating new rules, laws, or layers of bureaucracy. SFWMD and the FDEP are charged by the State of Florida with water management and water quality issues. Lee County relies upon these agencies to carry out their duties in the management and enforcement of State Water Policy. This includes their normal permitting functions for new developments and areas of significant redevelopment. As many areas of the County are under new construction, new water quality structures are being completed. Lee County reviews developments prior to the issuance of a Development Order. During this process, part of the checklist procedure requires developments greater than 5 acres to submit a Notice of Intent (NOI) to the FDEP for Construction Generic Permit coverage and submit a Storm Water Pollution Prevention Plan (SWP3) to Lee County for approval. Large projects also fall under the direct regulatory and permitting control of SFWMD. For smaller projects (less than five acres), the LDC requires a SWP3 must be written and submitted to Lee County. Violations of state water quality standards are referred to either SFWMD or FDEP for further enforcement. The LDC is being amended to reflect state and federal Phase II modifications.

In July 1999, the USACOE issued a draft Environmental Impact Statement (EIS) on improving the regulatory process in Southwest Florida, Lee and Collier Counties. The EIS contained many potential sweeping statements related to water quality and the future development of the area. Subsequently, Lee County has developed a working relationship with the USACOE, USEPA and SFWMD in making sure the modeling effort contains all available data. In the development of the Impaired Water Rule, the FDEP is using STORET data generated throughout all of Lee County. This data is being used to establish TMDLs where they are applicable and identify impaired water bodies and segments. This will allow Lee County to place more emphasis on specific watersheds to



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achieve water quality goals. During the latter part of the permit year the FDEP established the Impaired Water List for waters in south Lee County. Waters in the remainder of Lee County will be evaluated during the next permit year. This is done as part of the FDEP TMDL process.

Perhaps the greatest accomplishment is the team effort Lee County continues to demonstrate toward the NPDES program. Not only does this program bridge departmental boundaries to create a unified work effort, but it also has the acceptance of the "players", as demonstrated by the fact that funds have been set aside specifically for these related activities.

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2.4 Overall Program Strengths/Weaknesses

Lee County's program strength is in its comprehensive and technological approach in controlling the quality of stormwater runoff. Lee County is constantly *monitoring the various aspects of its program and is receptive to citizens' comments.* This is accomplished by allowing citizens to comment during the budgeting process and other Board of County Commissioners meetings. Through the Request for Action (RFA) hotline citizens are able to submit complaints and have their concerns addressed by the appropriate county staff. Lee County NPDES Program Web page (<http://leegov.com/npdes>) records the number of inquiries.

It is fully realized that improved water quality is the responsibility of federal, state, and local governmental efforts combined with the endeavors of an informed community. *The success of future SWMP activities is contingent upon the support of all governmental and community partners.* To this end, Lee County is very aggressive in seeking government grant funds to supplement major storm water infrastructure improvements, which are currently paid for by the local community. The leveraging of using local funds combined with grant money provides greater value than either could alone. This is demonstrated by several projects, including the Lakes Park Marsh-Flow-way project, where both federal and state funding is being sought to complete the design and construction. The project is currently named in the Central and Southern Florida Restudy, USACOE (the project is included under the 2000 Water Resources Development Act authorization). A recent cooperative working group, the Water Enhancement and Restoration Coalition (WERC), has been formed to develop water quality projects. *Currently, the Ten-mile Canal Filter Marsh improvement is being developed.* The project will use existing right of way property for the installation of a linear, shallow flow-way treating diverted flows from Ten-mile Canal.

Lee County is also working with EPA, USACOE and the SFWMD in developing various surface water models for the County. This will provide an evaluation of surfacewater management strategies including surface water master planning, flood management, and water quality. Lee County contracted with DHI Inc. (November, 2000) to use the SFWMD surfacewater flow model MIKE SHE in combination with the MIKE-11 model to determine water quality in the Estero Bay Basin. *The modeling effort ran*

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into some difficulties with calibration in one tributary. This was due to flow estimates provided by the USGS that were based upon an un-calibrated gated weir at ten-mile canal and US 41. The gate is manually opened during heavy flow events and using flow estimates during these periods for model calibration was not successful. In order to obtain good calibration, better estimates of flow during periods of gate openings will be required. Measurement methods are under consideration, including side-looking infrared flow devices.

During the early part of year five, the program lost both members of the staff to better job opportunities. They were replaced mid-year with one experienced and one inexperienced employee. This reduced the potential effectiveness of the program. Time spent in orientation and training of the new staff has reduced the total time available for both field and office activities. However, all staff members within the county's NPDES Storm Water Management Program have received training and are certified as Code Enforcement Officers. This allows the issuance of both warning and citation tickets for violations of the Lee County Land Development Code 14-471, Article VII (Clean Water Provisions) by the program staff.

Lee County uses community based outreach programs such as the Southwest Florida Watershed Council to promote clean water related activities. The watershed council provides an excellent grassroots vehicle to educate local citizens concerning issues and actions which impact the quality of local waters. County staff has actively participated in the education and natural resource committees as well as several community workshops on water related topics (such as pros and cons of a Stormwater Utility). This is helping local citizens become aware of potential problems and resolutions. The Council's web page provides a good overview of their activities and projects (<http://swfwc.org/>).

Lee County, as most local governments, has historically provided storm water management in the guise of flood protection. Activity documentation was limited to that required for budget purposes. Subsequently, Lee County implemented both a work order system and Request for Action (RFA) Hot Line. These are used to schedule and track work related activities, as well as record and track illicit discharge complaints. The RFA



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Hot Line provides data tracking with both written and pictorial documentation of illicit discharges and the resolutions thereof.

The Lee County GIS mapping was limited to planning, zoning, utility and transportation functions. Lee County is improving the GIS system creating documentation and databases to accommodate the MS4 permit and linking these databases to the new Arc GIS system. This provides up to date information related to the location, type, and other related facts of identified outfalls. Industrial sites and complaints will be in the system by the end of the permit period. The exact time will depend upon the date of new system availability to the NPDES Program.

The weakness of the existing program centers around limited funding resources and record keeping. Currently, major storm water projects must compete with other county projects and programs for limited funds. To date, the program has been quite successful in obtaining grant funds to supplement local tax revenue. However, grant awards are also competitive and cannot be counted upon as a dependable funding source. The level of effort expended to document activities in the database and in GIS is equal to the amount of time spent performing field tasks.

The second major weakness in the program is the reliance upon development standards currently in use by SWFWMD. These standards are applied throughout the district and may not be effective in maintaining the water quality in the receiving waters. Recently, all of the tributaries to Estero Bay have increased in at least one water quality impairment category, resulting in a change in status from un-impaired to impaired. One water treatment standard may not be appropriate for such a large and diverse area.

This is further compounded by the lack of appropriate water body classification (Chapter 302 F.S.) and water quality standards associated with the assigned classification. An example of this is the lack of estuarine standards that take into account the seasonal variation of water quality of an estuary. This results in a water body that is fresh during the rainy season having to meet a marine standard. This will almost always result in an impairment.

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2.5 Future Direction of Program

Defining the Program's direction is key in determining if desired goals are being achieved. To that end, the Program (for the purposes of the MS4 permit) has only been recently defined and continues to evolve. New ordinances, reporting requirements, inspections, terminology, definitions, and activities are all combined with pre-existing activities to become the new "Program". Historically, water was considered a common enemy to be drained away at any cost. It has since become a precious resource to be conserved and preserved for both current and future uses. Activities that were performed as a logical extension of getting a job done are now required to be counted and reported. Ways of doing business must be changed to properly manage the resource. Improved water quality is the responsibility of federal, state, and local governments combined with an informed community. The success of future SWMP activities is contingent upon the support of all governmental and community partners. The Program will use education, regulation, monitoring, and improved reporting measures to meet its goals.

The passage and subsequent revisions of Lee County Land Development Code 14-471, Article VII (Clean Water Provisions) typifies the direction and tone of the Storm Water Management Plan. It clearly relies upon existing rules, laws and ordinances to assist in the administration of federally mandated activities. South Florida Water Management District and the Florida Department of Environmental Protection are charged by the State of Florida with water management and water quality issues. Lee County relies upon these agencies to carry out their duties in assisting Lee County with the management and enforcement of State Water Policy. This includes their normal permitting functions for new developments and areas of significant redevelopment. To increase the effectiveness of the field inspection program, Lee County staff is recognized as Code Enforcement Officers and issues warnings and citations related to the NPDES MS4 permit.

The continued detection and elimination of illicit discharges to the MS4 are important tasks. Lee County recognizes that education, both public and industrial, is a

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key factor in assuring the future success of the SWMP. The County has developed an educational program for developers, contractors, the industrial community, and the general public in an effort to reduce the load of potential pollutant sources to federal waters. Brochures regarding illicit discharge recognition and reporting have been written. Additionally, Lee County Natural Resources developed a web site which provides Pollution Prevention information.

The monitoring program is designed to provide data for comparing the effectiveness of the SWMP on various land uses. The seventy-two monitoring stations provide uniform coverage by monitoring thirty-two of the forty-eight watersheds within the County, encompassing all major land uses. In this manner, trends in water quality from various land uses, development, and construction practices may be determined. The surfacewater quality model currently being contracted will use the data collected during the years of surfacewater monitoring to provide useful evaluations of changes in land use and water management practices. In addition, private development projects are now being required to monitor as a condition to rezoning request. Through these comparative evaluations, the effectiveness of efforts to provide adequate water quality improvements can be analyzed.

Lee County continues to improve the GIS mapping which will help to meet the requirements of MS4 permit documentation. Creating numerous databases and linking them to the GIS are accomplishing this. The MS4 is being defined, including physical dimensions, location of structures, size of structures, maintenance records, inspection records, monitoring data, etc. Field screening, construction site, industrial site, and high risk facility data are being entered into databases and will be linked with the GIS to their corresponding locations as mapped on Arc GIS. Currently, the field screening sites have been linked using Arc GIS to a base map. Staff continues to update the base map while linking new data.

When the database system is put into operation, information on a structure or ditch segment will be available to many Lee County departments. The dry weather screening data is to be linked as it is collected and entered into the database. This will become a vast improvement to the information historically available to the department users. The new system will allow multiple departments to view and analyze information

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for large areas of the County. It will also allow more accurate information and data to be incorporated in the MS4 Annual Report.

The EIS, authored by the USACOE and EPA, has placed a spotlight on the Southwest Florida area. Water quality trends have been placed in the forefront with development and growth considerations. Lee County has been working with SFWMD to incorporate water quality modeling into the MIKE SHE model to be performed in south Lee County (beginning November, 2000). In order to more completely understand the genesis of the south Lee County study and its relationship to the future of water quality and quantity in Lee County a discussion of modeling in southwest Florida is required.

The USACOE and SFWMD jointly generated the Central and South Florida Flood Control Project (CSFFCP) Restudy. This was as a result of both water quality and quantity problems resulting from the plan of action generated by the original CSFFCP, compounded by the tremendous growth in south Florida. Drainage and flood control were the primary goal of the original CSFFCP. Water use for agricultural, industrial, irrigation and potable purposes must be balanced against environmental and ecological needs. This generated the need for the CSFFCP Restudy commonly known as the "Restudy". Once completed, the Restudy plan of action became the Comprehensive Everglades Restoration Program (CERP).

As part of the Restudy, it was recognized by the SFWMD:

"(1) The Southwest Florida Feasibility Study is a component of CERP (Comprehensive Everglades Restoration Plan which is formerly known as the C&SF Comprehensive Review Study or "Restudy"). CERP is the implementation phase of the planning work that was done under the Restudy. The Southwest Florida Feasibility Study is being conducted under the authorizations associated with the Restudy/CERP but will result in an independent but integrated implementation plan that will then need to go to Congress for approval and funding.

The Restudy recognizes that there are additional water resource problems and opportunities within southwest Florida that were not considered as part of the Restudy.

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(2) The Southwest Florida Feasibility Study is being implemented to provide a framework in which to address the health of aquatic ecosystems; water flows; water quality (including appropriate pollution reduction targets); water supply; flood protection; wildlife and biological diversity; and habitat protection and restoration. The study area encompasses all of Lee County, most of Collier and Hendry counties, and portions of Charlotte, Glades and Monroe counties."

In 1995, the Bonita Springs area of Lee County was subjected to flooding due to unusually heavy rainfall. This prompted the SFWMD to conduct a study of the area to determine the surfacewater flow conditions in the watersheds connecting Corkscrew Swamp to Estero Bay, which included the Estero River, Imperial River, and Halfway Creek. The resulting effort is referred to as the South Lee County Watershed Plan. The model used for this evaluation was the Sheet 2-D model. As this model does not include groundwater impacts, it was decided to model the area with the MIKE SHE model to make the modeling effort compatible with the Caloosahatchee River Model.

Lee County requested water quality be included in the MIKE SHE modeling. Lee County and DHI, Inc. entered into a contract November 2000 to develop a water quality model component (MIKE-11) for use with the SFWMD's MIKE SHE flow model. The South Lee County water quality component was completed in 2001. The water quality component of MIKE SHE has not been able to consistently produce results for the county staff. A decision to use conventional methods (such as land use pollutant load estimates extrapolated from the most current GIS data) will be used to develop water quality impacts throughout the County.

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Section 3 – Summary Table for SWMP Activities

Lee County Stormwater Management Plan Activity Summary					
Program Element	Requirement	Activity Schedule			Comment
		Activity required by SWMP	Completed	Activities accomplished during permit year	
3.1 Maintenance of Structural Controls	Channel Control Structures	Inspect & maintain 14 structures annually	Yes	Inspected and Cleaned	Copies of maintenance records available on request
	Canals	Inspect and maintain 120 miles	Yes	Inspected, cleaned & mowed	Copies of maintenance records available on request
	Wet detention areas	Inspect and maintain 10 structures	Yes	Inspected, cleaned and mowed	Copies of maintenance records available on request
	Dry detention areas	Inspect and maintain 5 structures	Yes	Inspected and cleaned	Copies of maintenance records available on request
3.2 Areas of New Development and Significant Redevelopment	Permitting	Sites > 5 acres, NOI & SWP3	Yes	1,036 Development Orders issued	Copies of records available upon request
3.3 Roadway Maintenance	Erosion control	Annual maintenance & repair	Yes	495,336 linear feet cleaned	Copies of maintenance records available on request
	Road side cleaning	Annual maintenance & repair	Yes	342,989 linear feet cleaned	Copies of maintenance records available on request
	Inlet cleaning	Annual maintenance & repair	Yes	704 units cleaned	Copies of maintenance records available on request
	Culvert cleaning	Annual maintenance & repair	Yes	30,925 linear feet cleaned	Copies of maintenance records available on request
3.4 Flood Control	Public safety and protection of property	Annual maintenance and CIP projects	Yes	11 miles cleaned	Copies of maintenance records available on request

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Section 3 – Summary Table for SWMP Activities

Lee County Stormwater Management Plan Activity Summary (continued)					
Program Element	Requirement	Activity Schedule			Comment
		Activity required by SWMP	Completed	Activities accomplished during permit year	
3.5 Municipal Waste TSD Facilities	N/A	N/A	N/A	N/A	N/A
3.6 Pesticide, Herbicide & Fertilization Schedule	Contracted application	Certification required	Yes	As needed	Copies of Certification available upon request
	County employees	Certification required	Yes	As needed	Copies of Certification available upon request
3.7 Illicit Discharges and Connections	Dry weather screening	20% of outfalls annually	Yes	20% of County	Copies of records available upon request
	RFA investigations	Complaint driven	Yes	64 investigations	Copies of records available upon request
	Oil/haz waste collections	Collection points county wide	Yes	6 house-hold collections	Copies of records available upon request
	Enforcement	As necessary	Yes	6 verbal warnings & 1 stop work	Copies of records available upon request
	Ambient surfacewater monitoring	County-wide	Yes	70 sites on over 30 watersheds	Copies of records available upon request
3.8 Industrial facilities	Inspections	Ongoing	Yes	66 Facilities Inspected	Copies of records available upon request
	Hand Delivered NOIs	As needed	Yes	56 NOI blank forms delivered	Copies of records available upon request
	Enforcement	As required	Yes	58 verbal	Copies of records available upon request
3.9 Construction Sites	Site Inspections	Active Sites	Yes	129 sites	Copies of records available upon request
	Enforcement	As required	Yes	6 verbal warnings	Copies of records available upon request

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4.1 Maintenance of Structural Controls

Conduct scheduled inspections and maintenance of the structural controls identified in Table II.A.1.a on pages 4-6 of this permit within each permittee's jurisdictional area.

The Lee County Department of Transportation Operations (LCDOT) performs inspections and maintenance on structures on a complaint basis from sources both internal and external to the County. This is also done on a contractual basis within the city of Bonita Springs and the Town of Fort Myers Beach.

Update Table II.A.1.a in each ANNUAL REPORT. Maintain an internal record keeping system to track inspections and maintenance activities performed on structural controls during the permit term. Annually, assess the effectiveness of your inspection and maintenance activities and provide a summary of the assessment.

Table II.A.1.a is updated to reflect currently known information (Appendix A.6). This information has been updated over that submitted in the permit application. The information submitted in the application was the "best estimate" by staff at that time. Subsequently, Lee County began preparations to enter this type of information on the GIS. A detailed inventory has been prepared as the GIS database. In preparation of the database, totals have been developed that more accurately reflect existing conditions. It does not reflect roadside ditches or swales.

LCDOT operations maintain a log of structural controls that need to be further inspected as reported by crews during routine maintenance. The county provides ROW mowing along county maintained roadside on a six to eight week cycle during the growing season and along county maintained canals on a three to four month cycle. Canal cleaning is performed on a 12 to 18 month cycle, or as needed. Additionally, the citizen's Request For Action (RFA) system provides LCDOT with a tracking and reporting tool. This improves maintenance effectiveness by providing an efficient mechanism for the distribution of work assignments and tasks to the proper work group. There is a category of "illicit discharge" which allows the County to track and respond to reports of potential illicit discharges effectively. The RFA system is made even more effective through the use of electronic photographs attached to the files, thus allowing the responding crew or County staff to pre-assess the situation before arriving on site.



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Continue to ensure the proper operation and maintenance of all canals, major swale systems and structural controls within unincorporated Lee County and Lee County rights-of-way.

LCDOT performs the operation and maintenance of the MS4. There are sufficient funds budgeted to maintain it in proper working order. The budgetary figures are expanded upon in Section 7.

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Section 4 - Narrative Reports for SWMP Activities

4.2 Development Planning Procedures

Continue to adhere to the County's planning procedures as described by the Lee County Comprehensive Plan and its Land Development Code which regulate the impact of storm water runoff caused by new development and significant redevelopment and provide controls for areas of new development and significant redevelopment.

Local Stormwater Quality Ordinances - No new ordinances were passed during year four of the permit. However, the Lee County LDC (Chapter 14, Ordinance 98-11) will be amended during year six of the permit to more accurately reflect modifications of Phase II.

Storm Water Master Planning - The *Lee County Surface Water Management Plan* is an in-depth study of the individual watersheds within the county. The scope of the *SWMP* includes determining watershed boundaries, evaluation of existing drainage structures and facilities, and recommendations for improving deficiencies identified. To date, 36 watershed studies have been completed. The "four corners" area of northeast Lee County was completed by SFWMD due to its multi-jurisdictional coverage. In addition, SFWMD recently completed a detailed study of the South Lee County Watersheds in response to the floods of 1995. SFWMD has provided grant funding to "clear" and "snag" several tributaries throughout the county to prevent local flooding.

For areas of new development and significant redevelopment, adhere to the treatment performance standards set forth in the State Water Policy.

SFWMD and the FDEP are charged by the State of Florida with water management and water quality issues. Lee County relies upon their management and enforcement of State Water Policy. This includes their normal permitting functions for new developments, areas of significant redevelopment, and public infrastructure. Lee County NPDES field staff have completed Code Enforcement Officer training to obtain the authority to issue citations for practices which may represent a violation of the Ordinance 98-11, Section VII: Clean Water Act Provisions.

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4.3 Roadway Maintenance

Perform scheduled maintenance on storm water structures (i.e. catch basins, drainage inlets, etc.) and roadside ditches within jurisdictional limits and properly dispose of accumulated sediments.

Lee County maintains roads and road rights-of-way, including catch basins and drainage inlets. Catch basin sediments are stockpiled for consolidation and taken to a lined landfill for disposal. Roadside ditch cleanings are recycled in such a manner to reduce further erosion on the road shoulders.

Maintain an internal log documenting all maintenance activities on storm water structures and roadside ditches.

All maintenance activities are logged in the "work order system". This is a computer database to track work performed.

Perform scheduled maintenance on storm water structures (i.e. catch basins, drainage inlets, etc.) and roadside ditches within the East County Water Control District, East Mulloch Water Control District, and properly dispose of accumulated sediments.

Lee County maintains roads and road rights-of-way in these districts only. Catch basin sediments are stockpiled then transported to a lined landfill. Roadside ditch cleanings are reused, in areas or origin, to restore eroded road shoulders.

Perform scheduled maintenance on storm water structures (i.e. catch basins, drainage inlets, etc.) and roadside ditches within the Town of Fort Myers Beach.

This requirement may be fulfilled through cooperative efforts with Lee County, other permittees, public agencies, or private entities.

Lee County performs structure and ditch maintenance for the Town of Fort Myers Beach, through an interlocal agreement, when requested by the Town of Fort Myers Beach. The following quantities of maintenance were requested by the Town of Ft. Myers Beach and the City of Bonita Springs and completed by Lee County during year five of the permit.

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Fort Myers Beach

Road Side Ditch Cleaning by Machine	25	Linear Feet
Culvert Pipe Cleaning	615	Linear Feet
New Culvert Pipe Installation and/or Replacement	88	Linear Feet
Catch Basin and Pipe Repair	4	Each

City of Bonita Springs

Road Side Ditch Cleaning by Machine	5,459	Linear Feet
Culvert Pipe Cleaning	1,065	Linear Feet
New Culvert Pipe Installation/or Replacement	88	Linear Feet
Catch Basin and Pipe Repair	1	Each

Continue to maintain the Lee County Transportation Division (LCTD) 24-hour Request for Action (RFA) service for public reporting of roadway and drainage problems.

Department of Transportation has a 24-hour Request for Action line for receiving requests for maintenance. The line is monitored 7:00 A.M. 5:30 p.m. on regular work days with the balance of the calls going to voice mail. During the year, approximately 4,000 requests were logged, inspected, and turned over for appropriate action.

Continue the litter control program conducted by the Operations Section of the LCDOT to maintain the public streets, roads and highways within Lee County.

The Department of Transportation Operations manages an Adopt-a-Road program for collection of litter. In year five, the program recorded 94 groups with 2,593 volunteers logging 4,668 man-hours on 108 miles of road as having collected 3,337 bags of trash in 355 pick-up outings. In addition, the Lee County Sheriff's Office (LCSO) provides prisoner details to collect litter and debris. This activity is managed by the LCDOT under an agreement between the BOCC and the LCSO.

Actively support and promote on a regular basis, public participation in the "Adopt-a-Shore" litter pick-up program and the "Keep Lee County Beautiful, Inc." litter control program.

Litter control is handled through agreements with Keep Lee County Beautiful (KLCB), a non-profit organization. Each year, KLCB sponsors a Trash Bash litter clean up for Earth Day, as part of the statewide cleanup effort. In year five, about 1557 volunteers, who collected 82,542 pounds of litter, cleaned 13 areas throughout the county.

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Each fall, KLCB sponsors a Coastal Cleanup in conjunction with the annual international cleanup. Volunteers collect trash and record material types and weights. Area diving groups clean up submerged litter that can endanger marine life. This year, 47.5 miles of coastline were cleaned by 649 volunteers, resulting in 8,411 pounds of trash removed.

KLCB oversees an Adopt-A-Shore program for groups to commit to cleaning designated portions of shoreline at least four times each year. This year they had 24 cleanups covering 23 miles of beach, with 13 groups totaling 235 volunteers collecting 3,982 pounds of trash.

The annual Marine Cleanup removes litter from local waters focusing on monofilament fishing line and educates the public about environmentally harmful debris. Volunteers are taught how to remove monofilament line, netting, and litter, and how to properly traverse environmentally sensitive mangrove areas. There were three staging locations for the program; about 450 volunteers collected over 8,700 pounds of trash.

KLCB and Lee County Schools Environmental Education (COOL Schools Program) teamed up to promote cleanup in area schools. The hands-on learning project included 23 schools and 3,935 volunteers and resulted in removal and proper disposal of hundreds of pounds of litter. This program is designed to promote long-lasting improvements to school grounds, landscaping butterfly gardens, vegetable gardens, tree planting, etc.

Continue the maintenance of roadway drainage infrastructure for the County's public roadways by the Operations Section of the LCDOT.

Lee County Department of Transportation performs routine maintenance for the roadway drainage infrastructure. The routine maintenance is tracked using work orders, which log the individual crew's daily activity. The following table provides a summary of the reported quantities:



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All Lee County DOT Operations work including Bonita and FMB		Bonita Springs	Fort Myers Beach	Lee County	Units
Erosion and Road Shoulder Repair	511518	15950	232	495336	Linear Feet
Road Side Ditch Cleaning by Machine	348473	5459	25	342989	Linear Feet
Catch Basin Inlet Cleaning by Machine	269	5		264	Each
Culvert Pipe Cleaning Machine	32513	1065	615	30833	Linear Feet
Catch Basin Inlet Cleaning by Hand	440			440	Each
Culvert Pipe, Installation New/Replace	5043	88	88	4867	Linear Feet
Mitered Ends New/Replace	26		1	25	Each
Culvert Pipe Repair In place	74	2		72	Each
Basin/Inlet New Construction and/or Reconstruction	146	1		145	Each
Pipe and Basin Repair	175		4	171	Each
Clean Pipe Ends By Hand	95	2	1	92	Each

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4.4 Flood Management

Implement the Lee County Comprehensive Plan, which establishes goals to correct existing system problems and deficiencies for various watersheds within - unincorporated Lee County.

Local Stormwater Quality Ordinances - Lee County enacted an amendment to the Land Development Code (LDC) June 30, 1998. The amendment Section VII of the LDC addresses Water Quality Issues. This includes Section 14, which specifically addresses the Surface Water Discharges relating to NPDES. Please see first ANNUAL REPORT. This will be amended during year six to reflect changes related to Phase II.

Storm Water Master Planning - The *Lee County Surface Water Management Plan* is an in-depth study of the individual watersheds. The scope of the *SWMP* includes determining watershed boundaries, evaluation of existing drainage structures and facilities and recommendations for improving deficiencies identified. To date, 36 watershed studies have been completed. The "four corners" area of northeast Lee County has been completed by SFWMD due to its multi-jurisdictional coverage. Lec County is also working with EPA, USACOE and the SFWMD in developing various water models for the County. This will provide an evaluation of surfacewater management strategies including surface water master planning, flood management and water quality.

To satisfy this requirement, Lee County may utilize the studies conducted for the Storm Water Master Plan, which analyze the feasibility of retrofitting watersheds to provide flood protection and improve water quality of the discharged storm water runoff by the implementation of BMPs.

To date, 36 watershed studies have been completed. The "four corners" area of northeast Lee County has been completed by the SFWMD due to its multi-jurisdictional coverage.

Provide a list of the retrofitting watersheds along with a projected construction schedule.

Gator Slough – Channel Improvements: Extend channel from US 41 to the old railroad grade. The use of recently acquired property to the east for conveyance is pending environmental reviews. Phase I complete, Phase II & III are under design and all land acquisition is complete. Maintenance of the existing channel is to be completed

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by June 2003. Construction start is pending permit approval and is tentatively set to start in 2004.

Lakes Park-Flow way Improvement: A design agreement (DA) between the US Army Corps of Engineers and Lee County for the design of a marsh flow-way was signed in February 2003. This project is designed to enhance the treatment of storm water runoff from approximately 1800 acres of an intensely developed area in South Fort Myers. This project is located at the headwaters of Hendry Creek, an Outstanding Florida Water (OFW) body. Construction is pending the completion of design and permitting of the design.

Ten Mile Canal – Linear Filter Marsh: The design for a linear filter marsh is underway. The marsh will be approximately 4,000 linear feet or a total of 10 acres once complete. The SFWMD, FDEP, and WERC has committed to cosponsoring this project. Contributions from other stakeholders in public and private sectors are being solicited as well. Construction of this project is targeted to begin in late 2003.

Spanish Creek - Hydrologic Restoration: Re-establish some of the pre-existing hydrological drainage patterns in this area to what they were before being altered by agricultural activity. The proposed design includes diverting flows from a constructed channel through a cypress strand wetland area for pollutant treatment/aquifer recharge and then to the historical creek bed (presently dry). This project is tentatively due to start in 2004 and is co-sponsored by SFWMD.

Fiddlesticks Canal - Alico Road Improvements: Provide adequate outfall for flood protection of important evacuation route. Construction start is delayed due to permitting issues.

Northwest Lee County Water Management Plan – A surface water assessment of northwest region of Lee County. The study area covers the following watersheds: Yucca Pen Creek, Durden Creek, Greenwell Branch, and Longview Run. The project scope includes watershed delineation, as well as, identification of potential Stormwater improvement projects. Currently, this project is out to bid with several environmental consulting firms.

Orange River/ Hickey Creek/ Bedman Creek – East Lee County Aquifer Recharge Project (ELCARP): raise weirs and create flow diversions within East County Water Control District (Lehigh Acres) to maximize groundwater recharge and to increase

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retention for flood control and water quality benefits. This project was completed in 2001.

Halfway Creek – Reconnect: Remove berm to restore natural sheet flow conveyance of storm water. This is part of an overall plan to recreate historic basin boundaries in the Imperial River, Estero River and Halfway Creek watersheds. This was funded by a State grant and managed by Lee County Natural Resources. This project was completed in June 2002.

Kehl Canal – Acquisition: Purchase land along flow-way corridor for floodplain protection. Will also help restore remnant historic route of Imperial River. Schedule: the acquisition of several properties under negotiation. The project was completed in November 2002.

Six Mile Cypress - Berm Extension: extend berm along cypress slough to help restore wetland hydroperiod and provide enhanced flood protection to the Briarcliff area. This project was completed in 2001. The county has committed to a long-term monitoring and control plan of exotic/nuisance vegetation in the project area.

Begin retrofitting priority projects as per the approved construction schedule.

See above.

Ensure maintenance of infrastructure for flood maintenance projects within public rights-of-way, which convey storm water to canals.

See above.

Ensure the maintenance of canals for flood management projects.

The Department of Transportation retains a staff dedicated for routine maintenance of county maintained canals. The routine maintenance is tracked using work orders logging the individual crew's daily activity. The following table provides a summary of the reported quantities:

Activity	Quantity	Activity	Quantity
Spoil Site Handling	not available at this time	Canal Cleaning	18.8 Miles
Spyder Canal Mowing	18.9 Acres	Tractor Mowing with Bush Hog	1227 Acres
Spyder Canal Cleaning	2.2 Miles	Slope Mowing Canals	649.2 Miles



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Ensure that new flood control projects adhere to the treatment performance standards set forth in the State Water Policy.

South Florida Water Management District and the Florida Department of Environmental Protection are charged by the State of Florida with water management and water quality issues. Lee County relies upon these agencies to carry out their duties in assisting Lee County with the management and enforcement of State Water Policy. This includes their normal permitting functions and over-sight activities for new developments, areas of significant redevelopment and new public infrastructure projects.

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4.5 Municipal Facilities

Provide a description of the applicable portions of Lee County's integrated solid waste program which describe any inspection and/or monitoring activities for municipal waste treatment, storage and disposal facilities which are not covered by NPDES permit(s).

Lee County's only active landfill, the Gulf Coast Landfill, (owned and operated by Waste Management, Inc.) is currently operating under National Pollution Discharge Elimination System Industrial Permit #FLR00B297. The permit requires procedures to reduce pollutant discharges from the site. In the event that a discharge does occur, the permit specifies that the discharge be documented and reported to FDEP. The permit and testing documents are located at the Gulf Coast Landfill.

The Lee County Waste-to-Energy plant is covered under NPDES permit number FLR05B588. The permit and testing documents are located in the Lee County Solid Waste Division's files at that facility. The Household Hazardous Waste Collection Facility is covered under the Lee County Port Authority's NPDES permit for Page Field, # FLR05A516. The Lee County Recovered Materials Facility processes household recyclables for shipment to remanufacturers.

Provide a description of the program implemented to identify, monitor or control pollutants in storm water runoff from the closed Harlem Heights landfill.

Please see first ANNUAL REPORT.

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4.6 Pesticides/Herbicides/Fertilizer

Require evidence of proper certification for all applicators contracted by the permittee(s) to apply pesticides and herbicides on municipal and FDOT property.

Lee County works jointly with the University of Florida Lee County Cooperative Extension Service to certify all employees whose duties include the application of pesticides and herbicides to meet State licensing requirements. Florida Statue 205.1967 requires pesticide applicators to present proof of State FDACS certification prior to receiving a local Occupational License.

Lee County Department of Transportation, Operations has full-time licensed pesticide applicators:

Table of Lee County DOT Licensed Applicators					
First Name	Last Name	Training Description	Date Taken	Expires	Certificate No.
James	Bogenrieder	Pesticide Handler Safety Training	12/15/99		
Douglas	Busbee, Jr.	Pesticide Handler Safety Training	12/15/99		
Douglas	Busbee, Jr.	Restricted Use Pesticides - Right-of-Ways	5/9/02		CEU 2
Douglas	Busbee, Jr.	Restricted Use Pesticides - Right-of-Ways	11/13/01	11/30/05	PB7255
Walter	Butler	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		
William	Byrd	Pesticide Handler Safety Training	12/15/99		
William	Byrd	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		
Noe	Cisneros	Pesticide Handler Safety Training	12/15/99		
Chris	Davis	Pesticide Handler Safety Training	12/15/99		
Chris	Davis	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		
Chris	Davis	Restricted Use Pesticides - Right-of-Ways	5/31/00	5/31/04	006896
Sheryle	Dell	Restricted Use Pesticides - Limited L & O	2/1/00	1/31/04	LL90965
Sheryle	Dell	Restricted Use Pesticides - Ornamental & Turfgrass		4/30/00	005873
Sheryle	Dell	Restricted Use Pesticides - Right-of-Ways		4/30/00	005873
William	Drew	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		
Bobby	Faust	Erosion Control	12/9/99		
Bobby	Faust	Pesticide Handler Safety Training	12/15/99		
Bobby	Faust	Restricted Use Pesticides - CORE Applicator Exam	11/4/00		CEU 4
Bobby	Faust	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		



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Table of Lee County DOT Licensed applicators (continued)					
Bobby	Faust	Restricted Use Pesticides - Limited L & O	11/4/00		CEU 4
Bobby	Faust	Restricted Use Pesticides - Right-of-Ways	8/1/00	8/31/04	006961
Bobby	Faust	Restricted Use Pesticides - Right-of-Ways	5/9/02		CEU 2
Thom	Filbert	Erosion Control	12/9/99		
Rufus	Finister	Pesticide Handler Safety Training	12/15/99		
Victor	Flynn	Pesticide Handler Safety Training	12/15/99		
Chad	Frahm	Pesticide Handler Safety Training	12/15/99		
Chad	Frahm	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		
Chad	Frahm	Restricted Use Pesticides - Right-of-Ways	3/14/02		CEU 4
Chad	Frahm	Restricted Use Pesticides - Right-of-Ways	5/9/02		CEU 2
Chad	Frahm	Restricted Use Pesticides - Right-of-Ways	8/17/00	8/31/04	006968
Albert	Gogel	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		
Ruben	Gonzalez	Pesticide Handler Safety Training	12/15/99		
Bobby	Guinn	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		
Ben	Guy	Erosion Control	12/9/99		
Ben	Guy	Pesticide Handler Safety Training	12/15/99		
William	Harris	Pesticide Handler Safety Training	12/15/99		
William	Harris	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		
William	Harris	Restricted Use Pesticides - Right-of-Ways	6/7/00	6/30/04	006915
Randy	Hart	Restricted Use Pesticides - Right-of-Ways	8/3/00	10/31/04	007004
Martin	Hegel	Erosion Control	12/9/99		
James	Howe	Pesticide Handler Safety Training	12/15/99		
James	Howe	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		
James	Howe	Restricted Use Pesticides - Right-of-Ways	9/22/00	10/31/04	007000
Jonathan	Joseph, Sr.	Erosion Control	12/9/99		
Jonathan	Joseph, Sr.	Pesticide Handler Safety Training	12/15/99		
Jonathan	Joseph, Sr.	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		
Sherral	Keel	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		
Timothy	Kiser	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		
Dan	Latorella	Erosion Control	12/9/99		
Robert	Marquis	Pesticide Handler Safety Training	12/15/99		
David	Mason	Pesticide Handler Safety Training	12/15/99		
David	Mason	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		
Suzette	Million	Erosion Control	12/9/99		
George	Mocko	Pesticide Handler Safety Training	12/15/99		
George	Mocko	Restricted Use Pesticides - Limited L & O	2/1/00	1/31/04	LL90966
John	Murphy	Pesticide Handler Safety Training	12/15/99		
Richard	Pakosky	Pesticide Handler Safety Training	12/15/99		

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Richard	Pakosky	Restricted Use Pesticides - Right-of-Ways	5/9/02		CEU 2
Table of Lee County DOT Licensed applicators (continued)					
Richard	Pakosky	Restricted Use Pesticides - Right-of-Ways	8/8/01		CEU 2
Richard	Pakosky	Restricted Use Pesticides - Right-of-Ways	3/14/02		CEU 4
Ronald	Pappas	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		
Robert	Rainey	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		
Charles	Robinson	Erosion Control	12/9/99		
Charles	Robinson	Pesticide Handler Safety Training	12/15/99		
Charles	Robinson	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		
Michael	Rotondo	Pesticide Handler Safety Training	12/15/99		
Michael	Rotondo	Restricted Use Pesticides - CORE Applicator Exam	2/23/00	11/30/04	
Michael	Rotondo	Restricted Use Pesticides - Right-of-Ways	2/23/00	11/30/04	007015
Anibal	Sanchez	Pesticide Handler Safety Training	2/7/02		LL105006
Anibal	Sanchez	Pesticide Handler Safety Training	12/15/99		
Anibal	Sanchez	Pesticide Handler Safety Training	3/7/02	3/31/06	PB7358
Anibal	Sanchez	Restricted Use Pesticides - Limited L & O	11/30/01	11/30/05	LL105006
Joseph	Sasso	Pesticide Handler Safety Training	12/15/99		
Glynn	Sears	Pesticide Handler Safety Training	12/15/99		
Glynn	Sears	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		
Feliciano	Sepulveda	Pesticide Handler Safety Training	12/15/99		
Steven	Sherman	Pesticide Handler Safety Training	12/15/99		
Charles	Speake	Pesticide Handler Safety Training	12/15/99		
Charles	Speake	Restricted Use Pesticides - CORE Applicator Exam	2/23/00		
Charles	Speake	Restricted Use Pesticides - Right-of-Ways	5/2/00	5/31/04	006876
Steven	Thorp	Pesticide Handler Safety Training	12/15/99		
Kevin	Troyer	Restricted Use Pesticides - Right-of-Ways	3/14/02		CEU 4
Kevin	Troyer	Restricted Use Pesticides - Right-of-Ways	5/9/02		CEU 2

Continue to educate the public and municipal staff on proper pesticide, herbicide and fertilizer use through the University of Florida - Lee County Cooperative Extension Services.

The University of Florida Lee County Cooperative Extension Service provides information on pesticides, herbicides and fertilizer use and management through handouts, pamphlets and educational programs. Two main programs are: pesticide use and certification for agricultural activities, and continuing education about pesticide use for homeowners and landscapers. Programs offered by the Extension Service are available to any citizen of the County including residents of the cities of Sanibel, Fort Myers, Bonita Spring and Cape Coral, the Town of Fort Myers Beach, as well as the

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remainder of the co-permittees. The training made available by the Lee County Cooperative Extension Services should be considered as being available to all Lee County Co-permittees.

Typical examples of training notifications are provided on the following pages:

AQUATIC PEST CONTROL TRAINING

Thursday, July 11, 2002
Lee County Extension Service
3406 Palm Beach Blvd.
Ft. Myers

July 11 1:00 p.m. Registration
 1:30 p.m. Weed Identification
 2:30 p.m. Break
 2:45 p.m. Herbicide Technology
 3:15 p.m. Label Interpretation
 3:40 p.m. Break
 3:55 p.m. Calibration
 4:30 p.m. Adjourn

August 1: Testing: 9:00 a.m. - 12: 00 p.m. All Exams

Required text for training: SM 3, Aquatic Pest Control Applicator Training Manual. Manuals are available for sale at the Lee County Extension Office.

CEUs: 3 CEUs have been requested to count toward recertification of your current Aquatic license..

Cost: The cost for the class is \$10.00. Please pay at the door. If paying by check, please make payable to: 'Lee County Overall Extension Advisory Board,' or L.C.O.E.A.B. For more information, call Letha at (941) 461-7514.

Stephen H. Brown, Lee County Horticulture Agent

In compliance with ADA requirements, participants with special needs can be reasonably accommodated by contacting the Lee County Extension Service at least 10 working days prior to the meeting. We can be reached by phone at 941/461-7514, or by fax 941/461-7501.

3406 Palm Beach Boulevard - Fort Myers, Florida 33916 - Phone: (941) 461-7500 - Fax: (941) 461-7501

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COOPERATIVE EXTENSION WORK IN AGRICULTURE, HOME ECONOMICS, STATE OF FLORIDA, IFAS, UNIVERSITY OF FLORIDA, U.S. DEPARTMENT OF AGRICULTURE AND BOARDS OF COUNTY COMMISSIONERS COOPERATING.

Letha Giacinti
Administrative Assistant - Horticulture
Lee County Extension Service
3406 Palm Beach Blvd.
Fort Myers, FL 33916
Phone (941) 461-7514



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E-mail giacinnl@leegov.com

PESTICIDE LICENSE EXAM REVIEW CLASSES

At

The Lee County Extension Service
3406 Palm Beach Blvd., Fort Myers

GENERAL STANDARDS

(CORE)

Date : June 21, 2002

Time: 1:00 p.m. - 4:00 p.m.

LIMITED LANDSCAPE MAINTENANCE

(Businesses (self-employed) providing service to private residences, condominiums, etc.)

July 18, 2002

8:00 a.m. - 5:00 p.m. AQUATIC

July 11, 2002

1:30 p.m. - 4:30 p.m.

1:00 p.m. - 4:00 p.m.

Cost: \$10.00/person/per class, except \$15/person on 7/18/2002. Please pay at the door with cash, or a check made payable to: Lee County Overall Extension Advisory (L.C.O.E.A.B.). Please arrive half-hour before the start of your session so that we may have you registered in a timely manner.

R.S.V.P. Call Letha at (239) 461-7514, or fax names to (239) 461-7501.

CEUs: CEUs have been requested for all classes.

NOTE: No other notice will be sent regarding these classes.

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Letha Giacinti

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Landscape/Nurseries Fertilizer and Plant Nutrition Symposium

October 21, 2002
Lee County Extension Service
3406 Palm Beach Blvd.
Fort Myers

What are the best fertilizers for lawns, woody ornamentals, and container production? How can you tell what essential nutrients are deficient in your plants? Where is fertilizer technology heading? To answer your questions, we are bringing the experts together to tackle issues of fertilizers and plant nutrition.

- 12:15 Registration
1:00 **Soils, Fertilizers and Plant Nutrients**
Thomas Obreza, Ph.D., Soil Fertility Specialist, University of Florida, Research and Education Center, Immokalee
1:50 Break
2:05 **Diagnosing Nutrient Deficiencies: How to Read Plant Leaves.**
Stephen Brown, Lee County Horticulture Agent, Fort Myers
2:35 **Fertilizer Technology: New formulations for Landscape and Nursery Needs**
Jerry Sartain, Ph.D., Fertilizer Specialist, University of Florida, Gainesville
3:25 Break
3:40 **New Turf and St. Augustinegrass Fertilization Recommendations from the University of Florida**
Laurie Trenholm, Turfgrass Specialist, University of Florida, Gainesville
4:25 Adjourn

Registration: R.S.V.P. by October 17th by calling Letha at (239) 461-7514 or faxing names of attendees and name of company to (239) 461-7501. Cost of training is \$8 per person. Make check payable to Lee County Overall Extension Advisory Board (LCOEAB) or pay at the door.

Stephen H. Brown
Lee County Horticulture Agent

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Additional activities performed under this section.

The **Lee County Mosquito Control District** is the entity responsible for controlling the mosquito population within incorporated and unincorporated Lee County, with the exception of the Town of Fort Myers Beach. Duties of the District require the use and management of pesticides. Aware of the potential negative impact to the environment involved in the usage of pesticides, pesticide applicators in the mosquito control program are required to obtain State certification within six months of employment. Certification is maintained by acquiring continuing education credits as specified by the Department of Agriculture. Additional training is provided to employees during monthly in-house workshops. These workshops allow individual employees to attend training, which addresses such facets as calibration of spray equipment, staying current on pesticide label directions and use and maintenance of safety equipment. The District constantly evaluates pesticide and equipment incorporating the least toxic *alternative pesticide and technology*. In addition, the District provides education to the citizens of Lee County by funding two full-time teachers. They teach aquatic biology and pesticide stewardship to 5th, 7th and 12th grade classes in the public school system as well as most private schools. Through a partnership with the Nature Center, the District sponsors a program to the general public on the proper disposal of waste tires and other waste that could lead to mosquito reproduction. The proactive measures used by the District are a parallel to the **pollution prevention** measures used in industry to reduce hazardous or toxic waste. The funds to educate the public in reducing mosquito breeding sites is recovered by reducing chemical usage and excess insecticide to surface waters.

The Lee County Hyacinth Control District is instituted to control aquatic plants in areas that support permanent pools of water. The Hyacinth Control District herbicide applicators are also required to obtain State certification maintained through continuing education. The District provides in-house workshops to allow applicators to stay current on herbicide label directions, exotic plants update and use and maintenance of safety equipment. Alternate methods of controlling pests and unwanted vegetation are deemed equally effective with less environmental and health hazards. Use of aerators and the introduction of triploid grass carp have resulted as a good herbicide alternative in controlling some aquatic plants in County maintained lakes.



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4.7 Illicit Discharge Inspections & Enforcement

The Natural Resources NPDES Program is the entity within Lee County responsible for the investigation and enforcement of illicit discharges/connections going to the MS4. A method was been refined to maximize the effectiveness in addressing these concerns. Lee County DOT staff responsible for maintaining the MS4 has received training to recognize and report illicit discharges/connections. Citizen reporting of illegal dumping and illicit discharges is facilitated as well. Either source is routed to a central coordinator that logs a complaint and generates a Request For Action form that is then routed to the appropriate county staff for corrective action. The RFA triggers a file that remains open until a report is generated verifying that the appropriate corrective measures for that case have been taken.

All RFAs of illicit discharges are routed to the NPDES Program. These RFAs are investigated ASAP by trained environmental specialist. The investigation includes a site inspection to verify that there is an illicit discharge and /or connection. If a verification is made then the illicit discharge is documented with photographs, sampling (if warranted) and a report the investigator then attempts to verify the source of the discharge. Once the source is found action is taken by the investigator to stop the discharge. A notice is given either verbally or in writing to the responsible party to stop the discharge. Further enforcement is taken if necessary till the problem is corrected. If the illicit discharge/or connection is determined to be outside of the County's jurisdiction the RFA is forwarded to the appropriate jurisdiction or agency. All cases are followed up until the problem has been resolved.

Over the last permit year, 64 illicit RFAs were investigated. The NPDES Program staff issued twenty-six verbal, two written warnings, and one stop work-order. Four cases were referred to the SFWMD and six cases were referred to the FDEP. Six cases were referred to co-permitties, three to the City of Fort Myers, two to ECWMD, and one to the City of Bonita Springs. Three were referred to other departments in the county, one was referred to the Haz-mat response team, and one was referred to the EOC.

The dry weather field screening effort covered 20% of the geographical area of the county. This method was less effective and did not identify any illicit discharges/connections to the MS4.

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4.8 Field Screening

Conduct field screenings within jurisdictional limits, in accordance with Part II.A.7.b on page 14 of the permit, to detect the presence of improper disposal and illicit connections to the MS4s throughout the term of the permit.

During the year five, effort to detect illicit connections and discharges to the MS4, the Natural Resources Division NPDES program identified and localized 161 outfalls. Table A.2.1 summarizes 2001-2002 field screening efforts. A County outline showing outfall locations is also provided in Appendix A.2.1

Provide, in the first ANNUAL REPORT, a schedule of the on-going field screenings to be performed throughout the term of the permit.

Provided in first ANNUAL REPORT.

Maintain an internal log documenting the results of all field screening performed.

A database for field screening is maintained, which contains information regarding location, type of outfall and field analysis results.

Collect inventory information on outfalls and on portions of the MS4 not mapped and update municipal mapping data on an on-going basis.

To fulfill the 2001-2002 field-screening requirement, the geographical areas of T45 and T46 were chosen due to new road construction (Daniels Parkway Extension and Three Oaks Parkway Extension) and to cover the areas yet to be screened. This included the industrial areas north of and along Alico Rd, and the industrial and agricultural areas surrounding Florida Gulf Coast University. Screening was also conducted in T43 on the island of Boca Grande. As new road construction and development areas are completed the inventory will continue to be updated and mapped.

These areas were reviewed through the use of aerial photographs, GIS maps and land-based site assessment. All open canals in these areas were visually inspected (when accessible) in order to update the current list of outfalls and to identify illicit connections into the MS4. Of the 161 outfalls screened, 14 had dry weather flows. Investigations of the origins of these flows determined that all flows were of ground water and/or surficial impoundments. No illicit discharges were discovered during the dry weather field screening for year five.

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Conduct field screenings within the East County Water Control District, East Mulloch Water Control District, Bay Creek Community Development District, Bayside Improvement Community Development District, River Ridge Community Development District, San Carlos Estates Drainage District and within the Gateway Services District that falls within the authority of unincorporated Lee County, in accordance with Part II.A.7.b on page 14 of the permit, to detect the presence of improper disposal and illicit connections to the MS4 throughout the term of the permit.

An estimated 100% of the County's developed geographical area has been dry weather screened during the five years of the permit. Field Screening within any privately maintained system is not currently performed but the interconnections of these systems to Lee County's portion of the MS4 are inspected, this includes non-county maintained districts. The issue of County activity within the special districts is resolved with first ANNUAL REPORT requested permit modification.

Continue to implement the investigative procedure, as described in the SWMP within the Part 2 permit application, to identify and terminate any sources of illicit connections or discharges to the MS4.

A description of the implemented Dry Weather Field Screening program is provided in Section 4.17 of this report. Illicit connections or discharges discovered during routine MS4 inspections, or citizens' complaints, are to be investigated by the Lee County NPDES program staff and reported to the appropriate agency for resolution and/or enforcement.

Based on the results from the field screening, inspections or citizen reports establish a schedule to begin inspections.

Lee County NPDES program staff is mainly concentrating in areas of new construction, paralleling Dry Weather Screening activities. The year five screening was done in areas where 2 new county roads were constructed in addition to an environmentally sensitive area. The procedures developed for this activity have proven to be efficient. Interagency cooperation has been a key element in this success.

For those illicit discharges resulting in violations of water quality standards in waters of the U.S., the discharge will be reported to FDEP and EPA for further investigation and proper corrective action.

Maintain a log of violations along with the enforcement action taken.

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If a violation of water quality standards is found, a complaint is filed in the Lee County RFA complaint database where actions taken are recorded. Issues that are in the jurisdictional realm of the FDEP or EPA are reported to those agencies.

4.9 Spill Response

Implement the various municipal procedures, as described within the SWMP in the Part 2 permit application, for handling and disposing of chemical spills that are not handled by FDEP. Include notifying emergency response personnel to provide technical support or remediation assistance for hazardous materials or chemical spills.

**LEE COUNTY EMERGENCY MANAGEMENT
2001 / 2002 NPDES REPORT****OVERVIEW:**

Lee County Emergency Management monitors all incidents that either occurred or that maybe threatening the citizens of Lee County. Lee County Emergency Management is governed by the following:

1. Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288), Federal Emergency Management Agency (FEMA).
2. Emergency Planning and Community Right - To - Know Act (Public Law 99 - 499) United States Department of Environmental Protection Agency (EPA).
3. State of Florida Statute 252 addresses activities performed by state, county, and city emergency management personnel.
4. State of Florida, Comprehensive Emergency Management Plan.
5. State of Florida, Chapter 9G-6 (Review of Local Emergency Management Plans).
6. State of Florida, Chapter 9G-7 (Local Emergency Management Plans).
7. State of Florida, Chapter 62 - 150 (Hazardous Substance Release Notifications).
8. State of Florida, Mutual Aid Agreement.
9. State of Florida, Emergency Planning and Community Right - To - Know Act (Also Known as Sara Title III).

**PLANNING AND OPERATIONAL ACTIVITIES BY LEE COUNTY
EMERGENCY MANAGEMENT IN SUPPORT OF SARA TITLE III:**

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The guidelines found within the Emergency Planning and Community Right - to - Know Act outlines the requirements for agencies within the federal, state, and local governments along with private industry to better meet their responsibilities in regard to potential chemical emergencies.

The four- (4) sections within Sara Title III that outline activities supported by emergency management are:

- a. Section 301 - 303 (Emergency Planning)
- b. Section 304 (Emergency Release Notification)
- c. Section 311 - 312 (Community Right-To-Know Reporting Requirements)
- d. Section 313 (Toxic Chemical Release Inventory)

PROCEDURES FOR REPORTING AND MANAGING HAZARDOUS MATERIAL SPILLS / INCIDENTS WITHIN LEE COUNTY:

Regulated facilities that fall under requirements of the Florida Department of Environmental Protection who have knowledge of any release of hazardous materials must notify the Florida Department of Environmental Protection within 24 hours of the release as required by Florida Chapter 62-150 (Hazardous Substance Release Notification). Under Section 304 of this act, EPCRA requires certain releases of chemicals to be reported.

- a. Extremely Hazardous Substances (EHSs); and
- b. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) hazardous substances.

Both the EHSs and the CERCLA hazardous substances are found in the " SaraTitle III, Consolidated List of Chemicals."

The release of a hazardous substance in areas that are within both a regulated facility or in other areas of the community (roadways, waterways, businesses, and private property). If public safety is a concern, the first call received by 911 operators (Lee Control). Lee County Fire, EMS, and Law Enforcement would be dispatched to the incident and command would be established. In dealing with a hazardous substance release, the fire department that is responsible for that location would establish Incident

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Command. Additional county resources would then be requested by the incident commander. The Emergency Operations Center / Emergency Management would assist by reporting the incident to the State Warning Point, notify residents in the area by use of the Lee County Communicator Telephone Alert Program, and respond with a mobile

command post if requested or if the County Haz-Mat is deployed to the incident as outlined under the county's response plans. Depending on the size of the incident, Emergency Management may also make mission requests to the State Emergency Operations Center for statewide resources.

Lee County Public Safety / Emergency Management has under contract the Hazardous Materials Team of the City of Ft. Myers Fire Department to respond to hazardous substance spills, if requested by the on scene incident commander.

Depending on the type substance and size of the incident, Emergency Management may become involved if:

1. There is a need to require evacuation of persons working or living in the area of the release.
2. The on scene commander requests a response by the Lee County Hazardous Materials Team (City of Ft. Myers Fire Department).
3. The activation of the Lee County Emergency Operations Center is required to manage additional resources.
4. Prepare and maintain the Incident Situation Report and submit updated information to the State Warning Point.
5. Track the cost of overall incident and seek reimbursement from the responsible party as allowed by law.

LEVEL OF TRAINING WITHIN LEE COUNTY PUBLIC SAFETY TO INCLUDE EMERGENCY MANAGEMENT, EMERGENCY MEDICAL SERVICES:

Lee County Public Safety staff receives the level of training as required to perform their assigned tasks. For example, Emergency Management Staff are not first responders and do fall under a high-risk category. Emergency Management staff has received basic awareness training on the subject of hazardous materials.

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The staff of Lee County Emergency Medical Services are considered first responders and are considered high-risk employees and so receive a much higher level of training. Fire Department personnel throughout Lee County receive basic to advanced training in hazardous materials and are responsible for controlling the incident until clean up begins.

The Lee County Hazardous Materials Team (City of Ft. Myers Fire Department) are trained as Haz Mat / Level A Technicians. The following are the names of the Lee County Hazardous Materials Team:

Haz Mat Technicians:	
1. Sam Bissell	18. Scott Stein
2. Randy Jordan	19. Shannon Daniels
3. Paul DeArmond	20. Matt Galewski
4. Trenton Bowen	21. Charles Houser
5. Danny Duncan	22. Joe Washburn
6. Paul Phillips	
7. Mark Sudol	Haz Mat Level A Technicians:
8. Greg Trammell	
9. George Camargo	23. Rodger Schadt
10. Ed Campbell	24. Dave Tilton
11. David Foster	25. Isherwood
12. Paul Griffin	26. Welton Wilkson
13. Tom Higginbotham	27. Mike Jacobs
14. Tim Keith	28. Lee Rucker
15. Valerie Leitschuh	29. Dick Iler
16. Tony Overbee	30. Walt Stevens
17. Paul Stanch	31. Randy Eck

SUMMARY OF INCIDENTS WITHIN LEE COUNTY:

Review of calls to the State Warning Point, indicated that there were 110 incidents, which released 12,715,685 gallons of known hazardous materials within Lee County from October 1, 2001 to September 30, 2002.

The following is a breakdown of known hazardous substances released in Lee County:

Wastewater	10,898,800	Gallons
Diesel / Gasoline	11,635	Gallons
Other Miscellaneous Hazardous Substances	1,805,250	Gallons

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Total Reported: 12,715,685 Gallons

Note: There were additional calls made to the State Warning Point that had no known amounts or known substance identified.

4.10 Public Reporting of Illicit Discharges

Develop a public awareness program to promote, publicize, and facilitate public reporting of the presence of illicit discharges and improper disposal of materials into the MS4. The program should inform the public what to look for, how to report incidents, and the problems associated with illicit discharges and improper dumping.

Include making available at public offices, literature informing the public about problems associated with illicit connections or discharges to the MS4, how to spot them, how to report incidents, and the phone numbers to call to report illicit discharges and/or improper disposal to the MS4.

After development, include a summary of the public program in the subsequent ANNUAL REPORT.

The Lee County Solid Waste Division actively educates residents on recycling and proper waste disposal. The Solid Waste Department has mailed over 110,000 "One World One Chance" brochures to single and multi-family residences in Lee County. These explain proper disposal of waste motor oil, household hazardous waste, waste tires, white goods, and lead acid batteries. In order to facilitate public reporting, Lee County NPDES Program developed and distributed the "Be The Solution" brochure. The brochure contains guidelines in how to identify an illicit discharge and provide the phone numbers for reporting of illicit discharges in the City of Cape Coral, City of Fort Myers, City of Sanibel, Town of Fort Myers Beach, East County Water Control District (Lehigh), and Unincorporated Lee County (RFA Hot Line). A Copy of this document has been provided in Appendix A.4. Currently, illicit discharges are being reported as such and actions are taken to terminate the same. It may be noted that all co-permittees receive the same service.

Additionally, Lee County currently maintains a web site for the NPDES Program. The web site provides information on: Industrial and Construction activities, Best Management Practices, General Permit Forms, NOI forms, Public Outreach and multiple direct links to EPA and FDEP sites. Public reporting of illicit discharges is also facilitated through the web site for both unincorporated Lee County and co-permittees.



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The public reporting is accomplished through an electronic reporting form, which is submitted to the reporting authority at the permitted entity. The web site was finalized and available during year three of the permit for use by the general public and co-permittees (<http://leegov.com/npdes>).

The Lee County Department of Transportation provides the Request for Action (RFA) Hot Line. The RFA Hot Line is a 24-hour publicly accessible mechanism designed to provide assistance with maintenance of public access and canals, including illicit dumping and discharges. The line is monitored 7:00 a.m. to 5:30 p.m. on regular work days. After hours, weekends and holidays the line forwards to voice mail. The voice mail calls are checked by the staff on-call for that time period. The RFA also extends its services via the internet to report problems and requests at http://lee-county.com/public_works/oper7.htm or via e-mail at rfa@leegov.com. These communications are received by Lee County DOT Operations Center and are logged for inspection. The RFA Hot Line program maintains an electronic database where complaints are logged as well as the action taken. Illicit discharges are referred directly to the NPDES Program for investigation and enforcement.

Additionally, all Lee County (including the incorporated areas) is served by the 911 Emergency phone number system. This number may be used in case of emergency, which would include a hazardous spill. The local telephone directories publish a "Blue Page" section with phone numbers for various Lee County, state, and federal government departments by name and phone number. This section includes, in particular, the following departments having responsibility for public reporting of illicit discharges, dumping, and/or general environmental emergencies:

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LEE COUNTY: AREA CODE (239)	
TOXIC AND CHEMICAL SPILL	(800)424-8802
NATURAL RESOURCES MANAGEMENT	479-8181
SHERIFF'S DEPARTMENT	477-1200
DIVISION OF EMERGENCY MANAGEMENT	477-3600
FLORIDA MARINE PATROL	332-6971
FL FISH & WILDLIFE CONSERVATION COMMISSION	(800)282-8002
ENVIRONMENTAL PROTECTION AGENCY	(800)535-0202
HEALTH DEPARTMENT	332-9501
SOLID WASTE/ENVIRONMENTAL CRIMES	338-3302
SOUTH FLORIDA WATER MANAGEMENT DISTRICT	338-2929
FDOT MAINTENANCE OFFICE-FORT MYERS	656-7727
FDEP	332-6975
LEE COUNTY DOT RFA HOTLINE (24 HOUR COMPLAINT NUMBER)	335-2852

***Maintain a citizen complaint log documenting all reports of illicit discharges and what actions were taken to investigate and resolve the problem.
Include a summary of this log in each ANNUAL REPORT.
This requirement may be achieved via a cooperative agreement with Lee County and/or other permittees.***

The RFA Hot Line program maintains an electronic database where complaints are logged as well as the action taken. During year five, approximately 4,400 requests were logged, inspected, and forwarded for appropriate action. Illicit discharges are referred directly to the NPDES Program for investigation and enforcement.



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4.11 Oil & Hazardous Waste

Continue to make available to the public information (by means of brochures, flyers, and radio and newspaper advertisements) on the proper disposal of used motor oil, hazardous household waste materials, used vehicle tires, white goods, and lead acid batteries.

Lee County Solid Waste Division informs the public by means of brochures, flyers, radio, newspaper and television ads, on the proper disposal of used motor oil, hazardous household waste materials, used vehicle tires, white goods, and lead acid batteries (Appendix A.4).

In year five, the cost of providing time and location information on used motor oil, lead acid batteries, and household hazardous waste collections to the public was as follows: newspaper - \$42,160, radio - \$14,040, and TV - \$6,427, for a total information budget of \$62,427.

Continue to include information informing the public of the locations of the Lee County recycling facilities, and collection sites for used motor oil, white goods, hazardous household waste, used vehicle tires, and lead acid batteries.

Lee County Solid Waste Division informs the public of the locations of the Lee County recycling facilities, and collection sites for used motor oil, white goods, hazardous household waste, used vehicle tires, and lead acid batteries. This is done

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through flyers passed out at Household Hazardous Waste collections, mailings, and through telephone calls and the environmental hotline. Lee County Solid Waste Division holds six Household Hazardous waste collections each year. The costs and program summary is presented in the Table below. In addition unincorporated Lee County has 42 used motor oil drop-off sites for residents to use every day and by appointment one day per week.

SUMMARY TABLE OF THE HOUSEHOLD HAZARDOUS WASTE PROGRAM							
Permit Year	# Of Events	Pounds Collected	Cost per Pound	# Of Participants	Cost per Participant	Annual Cost	% Recycled
Year 5	6	451,025	\$0.66	6,467	\$46.01	\$297,592	65

4.12 Sanitary Sewer Seepage

Advise appropriate utility owners, County and/or State Agency of violation if constituents common to wastewater contamination are discovered in the MS4 during dry weather field screening, routine inspections, regular maintenance or public reporting.

Advise appropriate agency of violation if constituents common to wastewater contamination due to malfunctioning septic tank systems are discovered in the MS4 during dry weather field screening.

Illicit discharges, including suspected sewer infiltration or leaks reported to the LCNRD are investigated and logged. The sewer lines adjacent to the suspected discharge are dye tested to confirm the presence of sewer leaks. The receiving water body is tested for coliform bacteria and BOD to aid in determining infiltration potential. At this time, no impact has been determined to be directly attributable to septic tank seepage or as a result of sanitary sewer system overflows or leakance.

Annual Report**Section 4 - Narrative Reports for SWMP Activities****4.13 High Risk Industrial Facility Inspections**
.....

The County established an industrial facilities inspection program (IFIP) during the first year of the permit. It became evident early on in the implementation phase of the IFIP that a significant amount of the industrial facilities in Lee County were not aware of their EPA NPDES storm water discharge requirements or that they were required to apply for coverage [preferably under the EPA NPDES Multi-Sector General Permit (MSGP)].

In an effort to resolve this issue the County's IFIP focused its efforts on identifying candidates for the EPA MSGP coverage, inspecting, informing and educating these industrial facilities of their EPA & FDEP NPDES storm water permit requirements. These newly identified facilities are being informed of their to need submit an NOI to the FDEP for MSGP coverage (if they haven't done so already) and to develop and implement a SWP3.

During the year five of the permit, sixty-six industrial facilities were inspected to determine their status with FDEP MSGP Permitting Program. Of these sixty-six facilities, fifty-six had not submitted an NOI to the FDEP for coverage in that program (at the time of inspection). A copy of the FDEP brochure and NOI were hand delivered at these sites. Additionally a thorough explanation of the program and requirements of the NPDES



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regulations were given at the time of inspection. Instructions were given to the facilities operators to make contact with the FDEP NPDES Stormwater Section/Notices Center (by any means allowed in the FDEP brochure) ASAP. Instructions were also given on the need to develop a SWP3 for their respective sites and to commence the required monitoring ASAP.

Ten of the facilities have permit coverage with the FDEP MSGP Permitting Program. Three of these, auto salvage yards, were instructed to conduct analytical monitoring in the confirmation of coverage notices they received from the FDEP. Of these three one site has records of analytical monitoring and associated DMRs. One has records indicating no discharge. This facility is completely surrounded by a deep retention system. Instructions were given to submit a no discharge report to the FDEP. The third facility is required to conduct analytical monitoring this year (2002) and submit the DMRs to the FDEP by March 2003.

Two facilities, a steel pipe manufacturer and a concrete products manufacturer, did not have monitoring logs or a SWP3 available at the time of this inspection. The operators of these facilities were warned of this violation and that a follow-up could result in formal enforcement procedures if these critical issues were not addressed properly and promptly.

The remaining five facilities were of sectors P & R or applied as a "Light Industrial" category and were not instructed to conduct analytical monitoring in the permit coverage confirmation notices received from the FDEP.

The analytical data collected and the list of facilities not yet covered under the FDEP MSGP Permitting Program (as of 2002) are presented in the appendices of this report.

Records of the County owned incinerator are maintained by the County's Solid Waste Department and readily accessibly to the NPDES Program for review. This facility has coverage under the current MSGP. The Land Fill Facility used by Lee County is privately owned and operated and this facility does have permit coverage under the current MSGP. Copies of the DMRs for this facility will be submitted to the County for review.

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As a note, mining operations not discharging off-site may call Tallahassee to verify their status. These facilities are not NPDES regulated and there is neither record of the conversations nor documentation of the discharge status provided to this office. These facilities typically may have significant carryout of materials to the local roadways, which find their way to the MS4. The non-coverage status of these facilities put an enforcement burden on local governments with respect to the “carryout” activity.

4.14 Construction Planning Procedures

.....
New storm water management systems owned or operated by permittees shall adhere to the treatment performance standards set forth in the State Water Policy.

Continue to ensure proper storm water management and erosion & sediment controls during construction to reduce pollutants from areas of new development and redevelopment by requiring receipt of an FDEP or South Florida Water Management District permit, on applicable projects, before issuance of a local building, clearing or grading permit.

Construction projects within South Florida Water Management District and Lee County jurisdiction are required to have erosion and sediment controls implemented to reduce the negative impact to receiving waters. This is generally a "limiting condition" of SFWMD surface water management permits. SFWMD has prepared two design manuals for implementing Best Management Practices during construction entitled: *Stormwater and Erosion and Sediment Control, Best Management Practices for Development Areas, Chapter 6*, and *Best Management Practices and Construction Standards for Local Government Stormwater Management*.

To ensure the proper development practices, reducing the amount of sediment deposits entering the MS4, Lee County enacted a modification to the Land Development

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Code (LDC) on June 23, 1998. The amended code requires filing of a NOI for sites under construction over (5 acres) and the certification of a Professional Engineer as to the completion of a Storm Water Pollution Prevention Plan (SWP3). Additionally, all new developments are required to transmit a copy of the South Florida Water Management District (SFWMD) permit prior to issuance of a Lee County Development Order. All developments disturbing greater than one acre are required to prepare a SWP3 to be followed by the site contractor/developer.

Violations of the ordinance are subject to County enforcement and violations of State and/or Federal water quality criteria are subject to enforcement by SFWMD or the Florida DEP.

As a matter of record, the USEPA is using section 404 criteria to deny permits after state and district approval has been granted. This may further point to the need for revised development standards by the SFWMD.

4.15 Construction Inspections

Implement the inspection program, as described in the SWMP within the Part 2 permit application, at construction sites to maintain compliance with local storm water ordinances and permits.

Include verification that construction site(s), subject to the NPDES Storm Water Regulations, within County jurisdictional limits, have a Storm Water Pollution Prevention Plan on site.

Maintain a log documenting the inspections conducted.

An inspection responsibility protocol was implemented for construction sites. NPDES program staff members attended and successfully completed an erosion and sediment control course. *The Florida Stormwater Erosion, and Sedimentation Control, Inspector Training and Certification Program* course was provided and instructed by the Lee County and the City of Fort Myers. Additionally, staff is trained to identify violations, illicit discharges and educated in the appropriate steps required for violation documentation, reporting and enforcement activities.

In accordance with Lee County Development Code 14-471, Article VII, developments disturbing more than one acre are required to file an NOI along with a SWP3 certification of preparation with Lee County. The SWP3 is to be maintained on-

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site during construction activity for review and inspection by Lee County, EPA or the State of Florida. This is being updated in the LDC to reflect Phase II changes.

A construction site inspection database has been developed to maintain a record of inspection and enforcement activities. Recently hired Lee County NPDES field staff has been schedule for Code Enforcement Officer training so that they may issue citations for violations of LDC 14-71 (Clean Water Act Provisions).

4.16 Education Activities

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Continue to work with the Lee County Soil and Water Conservation District and the South Florida Water Management District, as described in the SWMP within the Part 2 permit application to educate municipal site contractors and inspectors on measures to reduce pollutant loading from construction sites, awareness of the NPDES program for construction site activities, erosion & sediment control BMPs for construction sites, and construction site enforcement techniques.

The Lee County NPDES program performs NPDES Permit compliance workshops, which are oriented to construction activities for engineers and contractors related to the proper implementation of BMPs for effective erosion and sediment control. Class training for county and other local government staff members has been provided in the "Florida Stormwater, Erosion, and Sedimentation Control Inspector Training and Certification Program". During years 2, 4, & 5, classes were taught though a cooperative effort between Lee County and the City of Fort Myers and hosted at Lee County facilities. Lee County printed and distributed all educational materials and provided classroom facilities. Lee County is presently planning similar training sessions for the next reporting year.

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Lee County in cooperation with the City of Fort Myers has presented classroom training hosted by Edison Community College. This training was for continuing education credits for contractors, engineers and other professionals involved in land development. Subject content included using Best Management Practices, how and where to file NOIs and other items related to the NPDES regulatory requirements for construction activity. These classes are designed to provide the target audience with the tools necessary to submit NOIs and to have, implement and maintain a SWP3 as per the regulatory requirements. Lee County is currently working with the Edison Community College on a similar program targeted at minority contractors.

Additional Educational Efforts

In its effort to increase public awareness in natural resources conservation, Lee County Government is committed to work with local organizations including Lee County Natural Resources, Lee County Solid Waste Division and Lee County Extension Service.

Lee County Natural Resources Conservation Service program (the old Soil and Water Conservation program) plays an important role in the implementation of the SWMP in rural and agricultural communities. The LCNRCS program mission is ecosystem conservation and resource management through environmental education, environmental monitoring and scientific research. Program mission goals are to reduce erosion, improve soil and water quality, improve and conserve wetlands, enhance fish and wildlife habitat, improve air quality, improve pasture and range condition, reduce upstream flooding, and improve woodlands. (See detailed information in Section 4-18). The LCNRCS program has produced several handouts and pamphlets on natural resources conservation.

Lee County Solid Waste Division also actively educates residents on recycling and proper waste disposal. The Solid Waste Department distributes flyers at each Hazardous Waste Collection Day, with information about proper disposal of waste oil and hazardous waste. Approximately 10,000 flyers listing waste oil drop-off sites and a schedule of future household hazardous waste collection days were distributed to the public. Newspaper and radio advertisements informed the public on used motor oil, lead acid battery and household hazardous waste disposal. In addition, The Solid Waste Department mailed over 110,000 "One World One Chance" brochures to single and multi-family residences in Lee County. These explain proper disposal of waste motor oil, household hazardous waste, waste tires, white goods, and lead acid batteries.

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The Lee County Extension Service is a publicly funded countywide educational program. The Board of County Commissioners also plays a role in the funding and providing support offices in both Fort Myers and Cape Coral. The Extension Service is dedicated to serve to the educational and research needs of the County citizens linking experience and knowledge of federal, state and local resources. Extension Services provides information in various medium handouts, pamphlets, and educational programs. Educational programs include:

- Selection and placement of plant materials for energy and water management.
- Safe and efficient use of chemicals and fertilizers for the homeowner.
- Mulching and composting practices that reduce, reuse and recycle yard trash.
- Pesticide use and certification.
- Pesticides and the Environment.
- Natural Resources Conservation.

An example of the type of training session produced by LCES to educate citizens in Ornamental and Turf Management for certification purposes. Listed below is the announcement for one training session:

ORNAMENTAL & TURF EXAM PREPARATION

December 12, 2002
Lee County Extension Service
3406 Palm Beach Blvd.
Ft. Myers

Ornamental & Turf, (O&T) is a required license for those making pesticide applications on golf courses, in parks, cemeteries, and for nursery operations.

December 12: Training:

1:30 p.m.	Registration
2:00 p.m.	Weed Control, Plant Disease Control, Nematode Control
3:00 p.m.	Break
3:15 p.m.	Application equipment, Pesticide Arithmetic
4:05 p.m.	Adjourn

January 2: Testing:
9:00 a.m. - Noon All Exams

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CEUs: Two (2) CEUs have been approved to count toward re-certification of the following licenses; Private Applicator, O & T, Right-of-Way, Commercial L & O, Limited L & O.

Cost: The cost for class is \$10. Please pay at the door. If paying by check, please make payable to:

'Lee County Overall Extension Advisory Board.' For more information, call Letha at (941) 461-7514.

Testing: First Thursday of each month, 9:00 a.m.- Noon at the Lee County Extension Service, 3406 Palm Beach Blvd., Fort Myers. (941) 461-7514.

RSVP: Call Letha at (941) 461-7514, or simply fax names to (941) 461-7501, or e-mail names to giacini@leegov.com.

Stephen H. Brown, Lee County Horticulture Agent

In compliance with ADA requirements, participants with special needs can be reasonably accommodated by contacting the Lee County Extension Service at least 10 working days prior to the meeting. We can be reached by phone at 941/461-7514, or by fax 941/461-7501.

3406 Palm Beach Boulevard - Fort Myers, Florida 33916 - Phone: (941) 461-7500 - Fax: (941) 461-7501

The Extension Service is part of a publicly funded statewide educational network that provides information and scientific knowledge to area residents, businesses and government leaders. The University of Florida, Extension Service offers the latest research and technology in more than 200 subjects related to horticulture, energy/conservation, agriculture, youth development and family and consumer sciences. Last year, the Lee County Extension Service provided assistance to more than 70,000 people and provided 463 classes and workshops on everything from family financial planning to pesticide training.

The Lee County Extension Service is an Equal Employment Opportunity - Affirmative Action Employer that provides research, educational information and other services without regard to race, color, sex, age, handicap or national origin.

COOPERATIVE EXTENSION WORK IN AGRICULTURE, HOME ECONOMICS, STATE OF FLORIDA, IFAS, UNIVERSITY OF FLORIDA, U.S. DEPARTMENT OF AGRICULTURE AND BOARDS OF COUNTY COMMISSIONERS COOPERATING.

Lee County Natural Resources Division continues to develop public and industrial education programs oriented toward water quality. Pollution prevention education and water quality awareness literature are constantly under development for use by the general public and industrial community. These activities supplement the current P2 educational efforts of the SQG Program. Local NPDES permit information will also be available through the Internet. The new Lee County Web page will incorporate storm water (AKA NPDES) items, such as NOI, SWP3 links to EPA or FDEP Web pages, BMPs and other related topics. It is also designed to provide engineers and contractors with exposure to the items required for compliance with Clean Water Provisions of the Lee County Land Development Code (LDC 14-471). The web page also identifies illicit discharges and provides a mechanism for reporting of them to the appropriate MS4 operator. Lee County plans the continued use and development of a multimedia education approach toward improved water quality.

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4.17 Monitoring Activities

Ambient Water Quality Monitoring:

The purpose of the Lee County Ambient Water Quality Monitoring Plan is to provide long-term ambient monitoring of Lee County surface waters. Each of the major watersheds and some of the minor watersheds are sampled on a monthly basis. This long-term monitoring has led to a good definition of the water quality throughout Lee County.

There are 48 named watersheds within Lee County. 32 of the watersheds have at least one station monitored monthly, with some of the major tributaries having more than one sampling event per month. Each of the sampling stations was established to allow maximum coverage with optimum access. None of the sample stations were established to monitor specific land use types, however within the monitoring network there are sample locations with predominately one land use in the upstream area. Most of the watersheds within Lee County are monitored. However, some of the minor watersheds are not monitored, yet all of the major watersheds have at least one ambient monitoring site.

The focus of the ambient monitoring program has been one of monitoring to determine the concentration of pollutants. During year four of the permit period, Lee County purchased water flow devices. Two Son-Tec sonar flow detection devices have been purchased and will soon be deployed at or near ambient surface water monitoring stations. In addition a "River-Cat" portable sonar based device was purchased to measure flows at streams without the need of expensive surveying. The River-Cat can also be used to calibrate and verify the calibration of existing flow measurement devices. The combination of quantitative analyses from the Ambient Monitoring and flow measurements can assist Lee County in determining annual loading. Additional flow measuring devices are planned for the future to allow for more fixed flow monitoring stations.

Atmospheric Deposition/Air Monitoring:

The Lee County Environmental Laboratory worked with the Charlotte Harbor National Estuary Program to establish and operate an ambient air monitoring station to evaluate the atmospheric deposition near Estero Bay with grant funding from EPA. That

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station has been designed and a site has been selected, the construction of that monitoring site is pending permit approval.

The location of the station has been selected to provide information on the actual pollutant loading of atmospheric origin to Estero Bay. This station is one in a series from Tampa Bay south to Estero Bay.

Atmospheric deposition going to Estero Bay is the primary target for this monitoring program. Data gathered in this effort is to be used with any related study on pollutant loading of Estero Bay.

Dry Weather Field Screening:

During the first permit term the entire County was to be dry weather field screened. Lee County chose to perform dry weather screening on all outfalls as opposed to quarter mile grids. In this effort, the County thoroughly updated the inventory of its outfalls (1/5 of the County each permit year). The existing inventory is very near complete. Any new outfalls to be added to that list in the future will be from new development areas. This inventory will be updated as these areas of new development are completed.

Although this effort was effective in updating the outfall inventory, it has been much less effective in identifying illicit connections/discharges for the following reasons:

- The vast majority of the county's drainage system is comprised of open canals and ditches.
- The probability an illicit connection or industrial waste stream being intentionally routed to the MS4 in plain view is highly remote. The notable exceptions are swimming pool and water softener drains.
- The County's Canal maintenance crew has been trained to report any such suspicious activity to the NPDES Program.
- Citizen reporting of any such type of suspicious activity is facilitated through the County's citizen complaint (RFA) hotline. These complaints are routed to the NPDES Program as a Request for Action Form (RFA) for illicit discharges. All RFAs of illicit discharges are investigated ASAP. Illicit discharges that are verified at the time of investigation result in either enforcement action being taken by NPDES Program staff or the

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case being referred to another agency (if the discharge is out of Lee County's jurisdiction). Follow-ups are conducted in all cases until the problem has been properly addressed.

- The topography of the County is flat with the highest elevations of the uplands being a few feet above sea level. Furthermore, the underground water tables are, in most areas, two to four feet below the land surface. Because of these factors, the majority of the drainage systems in the County may have flowing water year around including the dry season. Testing these systems has proven to be fruitless over the past three years. The County requested that the Dry Weather Field Screening requirement be dropped from new permit period. The County proposes to focus its efforts on identifying and eliminating illicit connections/discharges by using the methods described in the second paragraph above.

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4.18 Additional Activities

Conserve 2020 program and the Natural Resources Conservation Service are two additional activities, which directly or indirectly contribute to the common goal of protecting surface water in Lee County. Conserve 2020 is a land acquisition program adopted in 1997 in response to successful voter referendum held in November 3, 1996. The program provides approximately \$12 million per year for the acquisition of environmentally sensitive lands throughout Lee County. Potential sites are ranked in accordance to natural resource, habitat and other environmental value. Water resource value is based on the sites ability to provide flood protection, enhance water quality and conserve nature.

CONSERVATION 2020

The Conservation Land Acquisition and Stewardship Advisory Committee was established by Lee County Ordinance 96-12 to develop and implement a conservation land acquisition and stewardship program (known as the Conservation 2020 Program). The objectives of the Conservation 2020 Program are to acquire and to protect lands that provide the following public benefits:

1. Lands that are important to sustain native plant and animal populations;
2. Lands that help protect people and property from flooding;
3. Lands that help replenish our underground drinking water supply;
4. Lands that help to improve or sustain the water quality of our coastal bays, inlets, and sounds; and
5. Lands that can provide eco-tourism opportunities and local environmentally-oriented recreational and educational opportunities.

Greater significance is given to size, contiguity, and percentage of native cover. Staff will also be allowed to expedite superior nominations directly to secondary review.

ENVIRONMENTAL GOALS: The Conservation 2020 Program acquired thousands of acres of environmentally sensitive lands since the inception of the program. The acquisition of these lands has achieved the following objectives of the program:

- Preservation of fresh and salt water wetlands
- Protection of uplands including pine flatwoods, oak hammocks, scrub and other endangered plant communities.

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- Protection of strategic to flood management including critical land within the Coastal High Hazard Area.
- Protection of high productivity groundwater recharge areas that are critical to the drinking water supply.
- Preservation of land that serve or can serve as a flow-way for surface water.

CLASAC strives to acquire lands that will provide environmental recreation and education opportunities so that as many people as possible can benefit from the green spaces being protected. To date **7,985 acres** at a cost of over **\$50,283,428.00** have been acquired through this program.

USDA, Natural Resources Conservation Service

Lee County also supports the Natural Resources Conservation Service through a contractual agreement with cost share assistance for staffing and operating costs. The program offers the County a variety of services. The three activities recently being promoted are **EQIP**, **WRP** and **FIP** programs (described below). These are voluntary cost-share programs offering incentives to property owners for improvements including wildlife habitat and wetland restoration. The programs provide incentive payments and cost sharing for conservation practices called for in a site specific conservation plan developed by the agricultural industry and NRCS.

The purpose of the program is to assist land-users, communities, and units of state and local government, and other Federal agencies in planning and implementing conservation systems. The purpose of the conservation systems are to reduce erosion, improve soil and water quality, improve and conserve wetlands, enhance fish and wildlife habitat, improve air quality, improve pasture and range conditions, reduce upstream flooding, and improve woodlands.

Objectives of the program are:

Assist individual land users, communities, conservation districts, and other units of State and local government and Federal agencies to meet their goals for resource stewardship and assist individuals to comply with State and local requirements. NRCS assistance to individuals is provided through conservation districts in accordance with the memorandum of understanding signed by the Secretary of Agriculture, the governor of the state, and the conservation district. Assistance is provided to land users voluntarily applying conservation and to those who must comply with local or State laws and regulations.

Assist agricultural producers to comply with the highly erodible land (HEL) and wetland (Swampbuster) provisions of the 1985 Food Security Act as amended by the Food, Agriculture, Conservation and Trade Act of 1990 (16 U.S.C. 3801 et. seq.) and the Federal Agriculture

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Improvement and Reform Act of 1996 and wetlands requirements of Section 404 of the Clean Water Act. NRCS makes HEL and wetland determinations and helps land users develop and implement conservation plans to comply with the law. Provide technical assistance to participants in USDA cost-share and conservation incentive programs. (Assistance is funded on an reimbursable basis from the CCC.) Collect, analyze, interpret, display, and disseminate information about the condition and trends of the Nation's soil and other natural resources so that people can make good decisions about resource use and about public policies for resource conservation. Develop effective science-based technologies for natural resource assessment, management, and conservation.

Environmental Quality Incentives Program (EQIP)

The Environmental Quality Incentives Program provides technical, educational, and financial assistance to eligible farmers and ranchers to address soil, water, and related natural resource concerns on their lands in an environmentally beneficial and cost-effective manner. The program provides assistance to farmers and ranchers in complying with Federal, State, and Tribal environmental laws, and encourages environmental enhancement. The program is funded through the Commodity Credit Corporation. The purposes of the program are achieved through the implementation of a conservation plan, which includes structural, vegetative, and land management practices on eligible land. Five- to ten-year contracts are made with eligible producers. Cost-share payments may be made to implement one or more eligible structural or vegetative practices, such as animal waste management facilities, terraces, filter strips, tree planting, and permanent wildlife habitat. Incentive payments can be made to implement one or more land management practices, such as nutrient management, pest management, and grazing land management.

Fifty percent of the funding available for the program will be targeted at natural resource concerns relating to livestock production. The program is carried-out primarily in priority areas that may be watersheds, regions, or multi-state areas, and for significant statewide natural resource concerns that are outside of geographic priority areas.

Wetlands Reserve Program (WRP)

The Wetlands Reserve Program provides an opportunity for landowners to receive financial incentives to enhance wetlands in exchange for retiring marginal agricultural land. Landowners who choose to participate in WRP may sell a conservation easement or enter into a Cost-share Restoration Agreement to restore and protect wetlands. The program offers three options: permanent easement, 30-year easement and restoration cost-share agreements of a minimum

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10-year duration. Cost-share for restoration are 100% for permanent easement, 75% for 30-year easements and 75% for restoration cost-share agreements. To be eligible for WRP, the landowner must have owned the lands for at least one year and the land must be restorable and suitable for wildlife benefits.

Forestry Incentives Program (FIP)

The Forestry Incentive Program pays up to 55% of the cost of tree planting, timber stand improvement and related practices on non-industrial private forest land. Areas to be treated under FIP are those with a minimum of 10 acres with total ownership of no more than 1,000 acres of eligible forestland. Eligible land is determined to have a potential for producing at least 50 cubic feet of growth per acre per year. FIP's forest maintenance and reforestation provides numerous natural resources benefits, including reduced wind and soil erosion and enhanced water quality and wildlife habitat as well as helping to assure a reliable future supply of saw timber, pulpwood and quality hardwood.



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5.1 Monitoring Objectives

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Currently, Lee County participates in the Florida Surface Water Ambient Monitoring Program (SWAMP) program under contract with the Florida DEP. There is one station for the SWAMP located in Lee County. In addition, Lee County (via the Lee County Environmental Laboratory) conducts an ambient surface water quality-monitoring program. Lee County has maintained approximately 72 surface water-monitoring sites monthly for over ten years. At least one sample station is in each of the major watersheds. The data generated from these sites is of vital interest to Lee County, the USEPA, USCOE, SFWMD, Charlotte Harbor National Estuaries Program and the Estero Bay Agency for Bay Management. The fact that this data has been collected over several years provides increased value for its use in modeling and trend analysis, which can be an extremely useful tool in decision-making. Lee County provided surface water monitoring data to both USEPA and FDEP for use in the EIS modeling effort and 305b report respectively.

The Lee County monitoring data is being entered into STORET and is available to anyone with access to that database. Lee County data has recently been used by the FDEP in the development of local Impaired Waters List.



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5.2 Status of Program/Schedule Compliance

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The Lee County Monitoring Program is ongoing and the trend information generated is to be used by Lee County, USCOE, South Florida Water Management District, Charlotte Harbor National Estuaries Program, as well as the Agency on (Estero) Bay Management. The Lee County Monitoring Program covers all major watersheds within the County. The DHI MIKESHE water quality-modeling contract started in November 2000 and used this data for calibration.

The Lee County Surface Water Monitoring Plan is designed to collect data on both organic and inorganic constituents in the water column. This information may be used to generate trend analyses by the referenced agencies. There are 72 grab samples collected monthly at fixed sites, representing the major watersheds in Lee County. Surface water data collected for over a ten-year period of record at over seventy sites provides well over 100,000 water quality records for unincorporated Lee County.



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5.3 Program Revisions

Periodically there are sample locations or test parameters added to the Lee County ambient water quality-monitoring program to generate project specific information. There is a concerted effort to improve the measurement of flows at surfacewater monitoring sites. This will be accomplished by the use of sonar type devices and hand held mechanical meters in conjunction with surveyed sections at the measurement points.

Lee County also conducts an estuarine monitoring program, which assesses samples from Lee County estuaries, bays and harbors. The results of this program are not included in this report.

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5.4 Inventory of Major Outfalls

As required by the permit, Lee County is maintaining an inventory of all known outfalls in the unincorporated area of the County. This is being accomplished primarily during Dry Weather Field Screening. Each site visited during the screening process is listed in a Field Screening Database. The location (GPS), description and associated conveyance of each outfall is recorded and subsequently entered into the database. Currently, there is a Theme on the GIS, which shows all of the known outfalls (data gathered during field screening). Using the GIS to graphically depict the location of outfalls and to manage data is one way Lee County is making this information available to a broader spectrum of users.

This approach is designed to capture all of the existing outfalls, including major outfalls, during the term of the permit. All outfalls are entered into the database as they are screened. Accordingly, the size and service area of each may be queried in the GIS, and using the land use overlay combined with the size of the outfall we can classify the outfall (major or minor). However, the information reported to date uses a combination of field verification and previously recorded information.

Listed in Appendix A.2 are the Major Outfalls discovered during the year five dry weather screening. The outfalls are cross-referenced to previously identified outfalls to allow ease of differentiation between "new outfalls" and "outfalls reported previously".

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Section 5.5 Seasonal Loadings and Event Mean Concentrations

The Seasonal Loadings and Event Mean Concentrations are reported in this section as specified in Part V.A.1 of the permit.

Area of Coverage: The included in this evaluation includes all of unincorporated Lee County as well as the City of Bonita Springs. This includes the land use and discharges from the City of Bonita Springs and the co-permittees therein.

Calculation of Pollutant Loadings

Storm flow pollutant loadings were calculated using The Simple Method originally described by Schueler and Ray (1987) and later applied by Frithsen et.al. (1994) and Herr (1995). The method has been used to estimate pollutant loadings from urban runoff to Chesapeake Bay and Tampa Bay. The following is the basic equation for the Simple Method.

$$L = ((P)(P_j)(R_v)/12)(C)(A)(2.72)$$

Where

- L = Load (pounds)
- P = Rainfall depth (inches) over the desired time period.
- P_j = A factor that corrects P for storms that produce no runoff (value assigned is 0.9)
- R_v = Runoff coefficient that expresses the fraction of runoff that is converted into runoff.
Calculated as $0.05 + 0.009(PI)$, where PI is the Percent Impervious for specific land uses
- C = Mean pollutant concentration (mg/L)
- A = Total area of concern (acres)
- 12 = Conversion factor to convert inches of rain to feet of rain
- 2.72 = Conversion factor to convert result to pounds

Rainfall data was downloaded from several USGS and SFWMD gauging stations within Lee County. One rain gauge was selected as representative of rainfall patterns across the County. The data from this station (05922 ALVA FAR_) was subsequently used in all Simple Method calculations. The total rainfall from this station equaled 53.25 inches from October 1, 2000 through September 30, 2001.



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Section 5.5 Seasonal Loadings and Event Mean Concentrations

Each of the 30 watersheds covered by the NPDES permit were analyzed using Arcview GIS to calculate the area of land use within each of the 30 designated watershed areas in Lee County. Land use categories were grouped to form 10 primary groupings. The Percent Impervious factors for each land use were taken from DHI Tidal Caloosahatchee report and are presented below:

Land Use	Percent Impervious
Public	30
MD Residential	16
Open/Vacant	5
LD Residential	5
Agriculture	5
HD Residential	40
Recreational	5
Commercial	40
Wetlands	10
Industrial	70

The Total Annual Load (tons) for each of the constituent of concern is listed by land use in the following table.

Land Use	Oxygen Demand		Solids		Nutrients				Metals			
	BOD	COD ¹	TSS	TDS ²	TP	DP	TKN	NOX	Pb	Cu	Zn	Cd ³
Public	312.9	1323.4	970.7	650.4	15.0	5.9	103.7	7.2	0.171	0.220	0.757	0.249
MD Residential	354.8	1500.7	1079.9	723.5	16.2	7.8	113.4	8.6	0.369	0.191	0.899	0.279
Open/Vacant	370.9	1569.0	1248.0	836.2	16.5	7.1	110.8	14.0	0.274	0.205	1.005	0.328
LD Residential	98.4	416.3	352.3	236.1	5.4	2.9	32.5	3.1	0.047	0.091	0.263	0.083
Agriculture	312.1	1320.0	1089.6	730.0	15.0	7.2	101.9	10.1	0.220	0.133	0.859	0.252
HD Residential	347.7	1470.6	1277.4	855.9	18.0	11.1	110.8	9.5	0.164	0.237	0.873	0.277
Recreational	26.0	109.9	93.4	62.6	1.3	0.5	8.3	0.8	0.010	0.016	0.070	0.021
Commercial	157.6	666.7	513.3	343.9	7.8	3.8	49.7	4.2	0.069	0.294	0.421	0.130
Wetlands	100.7	425.8	387.1	259.4	3.4	1.3	26.4	2.5	0.089	0.043	0.240	0.074
Industrial	92.3	390.2	258.9	173.4	5.2	2.5	33.7	2.6	0.025	0.061	0.227	0.076
Annual Load	2173.4	9192.6	7270.6	4871.4	103.8	50.1	691.2	62.6	1.438	1.491	5.614	1.769

- 1) TDS is calculated as 67 percent of the measured TSS concentration.
- 2) COD is calculated as 4.23 the measured BOD concentration (calculated as ratio of COD and BOD analytical results from the Tampa station in the 1983 NURP report (USEPA 1983).
- 3) Loading estimated using Geometric Mean Concentration of 1.183 ug/L as determined from NURP data for eastern seaboard states (USEPA 1983)

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Section 5.5 Seasonal Loadings and Event Mean Concentrations

Calculating Event Mean Concentrations

Data from specific storms was not available for the 2001 water year. Therefore, specific “Event” Mean Concentrations could not be calculated. However, a comparable flow weighted annual mean concentration could be calculated for each constituent. The methodology used to calculate the flow-weighted annual mean concentration is described below.

- 1) The monthly average concentration for each constituent was calculated.
- 2) The monthly flow for each watershed was calculated.
- 3) The Flow Weighted Annual Mean Concentration was calculated using the following equation:

$$AMC = \text{Sum}_{(1-12)} (C_i * Q_i) / \text{Annual}(Q_i)$$

Where:

- C_i = Monthly average concentration for the constituent of interest
 Q_i = Monthly flow for the watershed of interest

- 4) TDS is calculated as 67 percent of the measured TSS concentration.
- 5) COD is calculated as 4.23 the measured BOD concentration (calculated as ratio of COD and BOD analytical results from the Tampa station in the 1983 NURP report (USEPA 1983).
- 6) Calculated using Geometric Mean Concentration of 1.183 ug/L as determined from NURP data for eastern seaboard states (USEPA 1983)

A flow-weighted annual mean concentration was calculated for the constituents of concern in each of the 30 watersheds in Lee County. The calculated results are presented in the following table.

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Section 5 – Monitoring Program Report
Section 5.5 Seasonal Loadings and Event Mean Concentrations

Annual EMC (mg/L)

Watershed	Watershed ID	Oxygen Demand		Solids		Nutrients				Metals			
		BOD (mg/L)	COD (mg/L)	TSS (mg/L)	TDS (mg/L)	TP (mg/L)	DP (mg/L)	TKN (mg/L)	NOX (mg/L)	Pb (mg/L)	Cu (mg/L)	Zn (mg/L)	Cd (mg/L)
Gator Slough	5	1.44	0.97	2.67	11.30	0.042	0.018	0.508	0.015	0.0006	0.0006	0.0060	0.0011
Hancock/Yellow Fever	16	4.08	2.73	13.95	59.01	0.396	0.337	1.264	0.222	0.0008	0.0008	0.0124	0.0011
Powell Creek	17	0.89	0.60	2.93	12.37	0.157	0.041	0.727	0.048	0.0005	0.0006	0.0050	0.0011
Marsh Point	18	1.44	0.97	6.56	27.73	0.230	0.179	0.730	0.208	0.0029	0.0019	0.0075	0.0011
Daughtery Creek	20	1.91	1.28	2.92	12.37	0.207	0.069	0.917	0.048	0.0005	0.0005	0.0052	0.0011
Daughtery Creek (East)	20A	1.15	0.77	12.45	52.65	0.143	0.130	0.921	0.028	0.0004	0.0006	0.0042	0.0011
Chapel Branch	21	1.55	1.04	2.32	9.80	0.078	0.057	0.746	0.064	0.0004	0.0004	0.0043	0.0011
Bayshore Creek	22	2.67	1.79	5.56	23.53	0.256	0.110	0.918	0.044	0.0005	0.0005	0.0051	0.0011
Popash Creek	23	2.61	1.75	4.83	20.44	0.033	0.008	1.077	0.011	0.0005	0.0026	0.0050	0.0011
Stroud Creek	24	3.30	2.21	1.64	6.94	0.093	0.045	1.394	0.032	0.0007	0.0007	0.0068	0.0011
Palm Creek	25	2.00	1.34	6.31	26.68	0.185	0.143	1.246	0.084	0.0006	0.0006	0.0068	0.0011
Kickapoo Creek	26	2.68	1.80	2.84	12.00	0.383	0.372	1.433	0.196	0.0006	0.0006	0.0067	0.0011
Trout Creek	27	1.96	1.32	2.60	10.98	0.232	0.118	0.987	0.170	0.0006	0.0006	0.0060	0.0011
Oak Creek	27	2.42	1.62	6.11	25.84	0.293	0.181	1.479	0.072	0.0007	0.0007	0.0071	0.0011
Otter Creek	28	1.74	1.16	15.35	64.92	0.474	0.379	0.969	0.010	0.0005	0.0006	0.0118	0.0011
Telegraph Creek	29	1.76	1.18	3.20	13.54	0.220	0.082	1.299	0.021	0.0007	0.0007	0.0076	0.0011
Bedman Creek	37	0.89	0.60	4.78	20.21	0.052	0.016	0.136	0.154	0.0005	0.0012	0.0052	0.0011
Hickey Creek	38	1.16	0.78	1.54	6.53	0.079	0.026	0.272	0.039	0.0005	0.0005	0.0051	0.0011
Olga Creek	39	2.29	1.54	9.28	39.25	0.308	0.305	0.882	0.035	0.0006	0.0007	0.0066	0.0011
Orange River	40	1.75	1.17	12.50	52.87	0.074	0.025	0.588	0.133	0.0008	0.0014	0.0069	0.0011
Billy Creek	41	2.22	1.49	4.76	20.14	0.323	0.316	1.112	0.174	0.0012	0.0008	0.0045	0.0011
Whiskey Creek	42	3.56	2.38	6.17	26.09	0.164	0.066	1.095	0.231	0.0020	0.0063	0.0168	0.0011
Deep Lagoon	43	5.63	3.78	12.03	50.88	0.219	0.267	1.878	0.148	0.0009	0.0018	0.0102	0.0011
Hendry Creek	45	2.95	1.97	3.98	16.84	0.075	0.048	0.952	0.071	0.0009	0.0018	0.0101	0.0011
Mullock Creek	46B	7.13	4.78	21.10	89.27	0.491	0.208	1.916	0.276	0.0009	0.0081	0.0160	0.0011
Ten Mile Canal	46C	2.83	1.90	2.78	11.74	0.401	0.051	1.907	0.088	0.0008	0.0014	0.0087	0.0011
Estero River	47A	3.58	2.40	14.68	62.11	0.141	0.062	1.130	0.138	0.0009	0.0012	0.0102	0.0011
Halfway Creek	47B	3.37	2.26	6.23	26.34	0.115	0.012	1.152	0.083	0.0009	0.0090	0.0097	0.0011
Spring Creek	48	3.99	2.67	8.05	34.07	0.115	0.085	1.042	0.130	0.0009	0.0095	0.0116	0.0011
Imperial River	49	6.42	4.30	9.59	40.56	0.215	0.050	2.231	0.113	0.0013	0.0027	0.0155	0.0011



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Section 6 - Permit Modifications

6.1 SWMP Modifications

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The County requested Dry Weather Field Screening requirement be dropped from the new permit term. The County has developed an alternative and more effective method of identifying and addressing illicit discharges/connections to the MS4. That Method was described in section six of the year 4 Annual Report. However, as this report covers activities listed in the first five-year permit, dry weather field screening for year five are reported.



LEE COUNTY
SOUTHWEST FLORIDA

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Section 6 - Permit Modifications

6.2 Monitoring Program Modifications

N/A

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Information listed below is indicative of individual department/program past reporting year budgets:

Lee County DOT Operations' budget forecast FY 01/02 reflects the cost of performing maintenance and operational functions in Lee County ditches, canals and roadside ditches. Where several of our programs are focusing on avoiding a potential problem, this is the active side of the program, the tasks that keep the MS4 operating.

LCDOT Operations Budget	
ACTIVITY NAME	Summary of: 2001-2002 Exp
CANAL MAINTENANCE	\$2,770,108
ROADWAY MAINTENANCE	\$9,097,559
LANDSCAPE MAINTENANCE	\$1,040,918
BRIDGE OPERATIONS/MAINT.	\$907,705
TOTAL LCDOT OPERATIONS BUDGET	\$13,863,005

Conservation 2020 is an environmentally sensitive land acquisition program adopted in 1997. Potential sites are ranked in accordance to natural resource, habitat and other environmental value.

Conservation 2020	
Expenditures to date:	\$50,283,428

* Cash available may change subject to new revenue earning and/or expenditures or land purchases.

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Natural Resources Conservation Service			
Fiscal Year 01/02			
PROGRAM	CONSERVATION PLANS	ACRES	NRCS COST SHARE PAYMENTS
EQIP	6	287	Unknown
WHIP			Unknown if it will be funded
SWCA			Unknown if it will be funded
FIP			No applications at this time – sign-up period ends on 04/05/02

Lee County Natural Resources Division

The Lee County Natural Resources Division performs engineering and management functions over various projects. Listed below are projects related to structure, wetland and conveyance improvements. Much of the activity is grant funded through the SFWMD, however a substantial portion of the funds is derived from general County revenue funds.

Lee County Division of Natural Resources		
Capital Improvement Projects		
Project Name	2001-2002 Budget	Activity
Halfway Creek Maintenance	\$90,133	Environmental restoration of flow way
Halfway Creek Stormwater Mgmt.	\$232,007	Hydrological restoration of historic flow way
Hendry Creek-Lakes Park Marsh Flow-way	\$2,173,541	Design and construction of flow way
Ten-Mile Canal-Filter Marsh	\$2,511,027	Design and construct filter-marsh
Ten Mile Canal-Alico Road Improvements	\$1,084,000	Design, construct flood protection for evacuation route.
Ten Mile Canal Pump Facility	\$50,000	Hydroperic restoration
Imperial River Maintenance	\$133,225	Exotic vegetation removal
Estero River Improvements	\$239,640	Environmental restoration of flow way
Gator Slough-Channel Improvements	\$3,631,064	Hydrological improvements to slough and wetlands.
Briarcliff Channel Weirs	\$247,249	Flood protection
Daughtrey/Stroud Creek Improvements	\$405,414	Environmental restoration of the flow ways

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Spanish Creek Restoration	\$250,000	Hydrological restoration of historical flow
Popash Creek Improvements	\$90,000	Environmental restoration of flow way
Powell Creek Improvements	\$62,401	Environmental restoration of flow way

The **NPDES Program** activities are carried out and coordinated with the funding of the Surface Water program of the Natural Resources Division. The activities of the program relate directly to MS4 permit activity such as, dry weather screening, educational activities, public speaking and annual report preparation.

Natural Resources NPDES Program 2001-2002	
Description	Operating Cost
Personnel services	146,723
Equipment and supplies	101,462
Total Budget	248,185

The **Lee County Environmental Laboratory** is a program of the Natural Resources Division. Activities under the program include monitoring surface waters and sediments in the greater Lee County area. Tabulated below are some key projects for the FY 01/02. The Laboratory is funded through the General Fund.

Lee County Natural Resources Surface Water Monitoring 2001-2002		
Monitoring Project	Number of Sample Locations	Program Operating Costs
Ambient Surface Water Quality	72 sites	
Estuarine Water Quality	3 water bodies	
	Total	\$424,517

The **Lee County Small Quantity Generator Program** is an educational program helping businesses comply with hazardous waste management regulations. The budget listed below is for FY 2002. It includes the number of businesses participating in the program. Each business receives a quarterly newsletter outlining major rule changes and local opportunities for recycling, as well as, BMP ideas.

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Lee County Natural Resources SQG Program 2001-2002				
Verification Type	Number	% Verification rate	Program Operating Costs	Total Businesses
Total	17,438	34.2	\$291,567	17,438

Lee County Solid Waste Division

The **Solid Waste Division** promotes the Hazardous Waste Collection days for household hazardous waste. It's anticipated that over 400,000 pounds of hazardous waste will be collected, FY 01/02 that would otherwise gone to the incinerator, landfill or been illegally disposed. Taking into consideration the potential impact of these materials on water quality, this is the most cost-effective program available. Lee County Solid Waste contract all litter control programs out to the local Keep America Beautiful chapter, Keep Lee County Beautiful (KLCB), providing them with approximately \$80,000 each year.

Lee County Solid Waste educates residents about proper disposal motor oil, household hazardous waste, tires, white goods, and batteries.

SUMMARY TABLE OF THE HOUSEHOLD HAZARDOUS WASTE PROGRAM							
Permit Year	# of Collections	Pounds Collected	Cost per Pound	# of Participants	Cost per Participant	Annual Cost	% Recycled
Year 5	6	451,025	\$.66	6,467	\$46.01	\$297,592	65

Lee County Solid Waste Advertising 2000-2001	
Media	Dollars
Newspaper Ads	\$42,160
Radio Ads	\$14,040
TV Ads	0
Brochures	\$6,427



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Listed below are the FY 00/01 approved budgets for:

Lee County DOT Operations' budget for Permit Year 4 to keep the MS4 operating is:

LCDOT Operations Budget	
ACTIVITY NAME	Summary of: 2000-2001 Budget
CANAL MAINTENANCE	\$1,840,475
ROADWAY MAINTENANCE	\$8,317,254
LANDSCAPE MAINTENANCE	\$644,207
BRIDGE OPERATIONS/MAINT.	\$1,236,035
TOTAL LCDOT OPERATIONS BUDGET	\$12,037,971

Lee County Natural Resources Division

The Lee County Natural Resources Division performs engineering and management functions over various projects. Listed below are projects related to structure, wetland and conveyance improvements. Much of the activity is grant funded through the SFWMD, however a substantial portion of the funds is derived from general County revenue funds.

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Lee County Division of Natural Resources Capital Improvement Projects 2000-2001		
Project Name	2000-2001 Expenditures	Activity
Hendry Creek-Lakes Park Marsh Flow- way	\$3,484	Design and construct Flow way
Ten-Mile Canal- Canal Excavation	\$5,973	Excavate channel in 3 locations, flood prevention and water quality improvements where possible
Ten Mile Canal- Alico Road Improvements	0	Design, construct flood protection for evacuation route.
Orange River/Hickey Creek/Bedman Creek-ELCARP (East Lee County Aquifer Storage and Recharge Project)	\$264,660	Study, design and construct water retention and quality improvements.
Gator Slough- Channel Improvements	\$108,514	Phased project to make flow and wetland supply improvements.
Halfway Creek- Reconnect	\$34,693	Restore historic flow by partial berm removal.
Kehl Canal- Acquisition	0	Land purchase for flow way corridor to restore historic flow.
Daughtrey's/Stroud Creek Restoration	\$91,676	Environmental restoration of flow way
Powell Creek Project	\$87,599	Environmental restoration of flow way
Imperial River Maintenance	\$66,775	Exotic vegetation removal
Six Mile Cypress - (Briarcliff Channel)	\$165,997	Extend berm to restore historic hydroperiod.

The **NPDES Program** activities are carried out and coordinated with the funding of the Surface Water program of the Natural resources division. The activities of the program relate directly to MS4 permit activity such as, dry weather screening, educational activities, public speaking and annual report preparation.

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NPDES Program Worksheet 2000-2001	
Description	2000-2001 Budget
Total Personnel Operating Services	\$112,917
Total Operating Services	\$74,780
Program Total	\$187,697

The **Small Quantity Generator Program (SQG)** is an educational program designed to provide guidance to businesses generating or having the potential to generate hazardous waste. The current focus of the program is the use of **pollution prevention (P2)** as a mechanism to reduce the hazardous waste stream while improving the management of the remaining hazardous waste.

Lee County Natural Resources SQG Program 2000-2001				
Verification Type	Number	% Verification rate	Program Operating Costs	Total Businesses
Total	4,700	34.8	\$264,181	13,500

The **Lee County Environmental Laboratory** is a program of the Natural Resources Division. Activities under the program include monitoring surface waters and sediments in the greater Lee County area. Tabulated below are some key projects for the Year 4 of the permit. The Laboratory is funded through the General Fund.

Lee County Natural Resources Surface Water Monitoring 2000-2001		
Monitoring Project	Number of Sample Location	Program Operating Costs
Ambient Surface Water Quality	72 sites	
Estuarine Water Quality	3 water bodies	
Total		\$424,517

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Section 7.2 Last Reporting Year

Natural Resources Conservation Service is a joint Federal and local program. The activities funded below are Federally sponsored.

NATURAL RESOURCES CONSERVATION SERVICE			
FISCAL YEAR 00/01			
PROGRAM	CONSERVATION PLANS	ACRES	NRCS COST SHARE PAYMENTS
EQIP	-0-	-0-	-0-
WHIP	1	163	\$9,362.00
SWCA	2	45	\$4,279.00
FIP	1	66	\$2,322.00

EQIP -Lee County was not in a priority area -no interest in competing for cost share payments on a statewide basis.

SWCA- Soil and Water Conservation Assistance

Solid Waste conducts 6 residential hazardous waste collections each year. Costs are projected to decrease due to reductions in the household battery program.

SUMMARY TABLE of the HOUSEHOLD HAZARDOUS WASTE PROGRAM							
Permit Year	# of Collections	Pounds Collected	Cost per Pound	# of Participants	Cost per Participant	Annual Cost	% Recycled
Year 4	6	451,025	\$0.66	6,467	\$46.01	\$297,592	65

Solid Waste informs and educates the public on proper disposal of hazardous waste, tires, batteries, motor oil, and white goods.

Lee County Solid Waste Advertising 2000-2001	
Media	Dollars
Newspaper Ads	\$42,160
Radio Ads	\$14,040
TV Ads	0
Brochures	\$6,427

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Lee County Lands Division

Conservation 2020 is an environmentally sensitive land acquisition program adopted in 1997. Potential sites are ranked in accordance to natural resource, habitat and other environmental value.

Conservation 2020	
Expenditures	\$32,857,427

* Cash Flow Statement as of 02/28/01. Cash available may change subject to new revenue earning and/or expenditures or land purchases.

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Section 7.3 Next Reporting Year

Information listed below is indicative of individual department/program past reporting year budgets:

Lee County DOT Operations' budget forecast FY 02/03 reflects the cost of performing maintenance and operational functions in Lee County ditches, canals and roadside ditches. Where several of our programs are focusing on avoiding a potential problem, this is the active side of the program, the tasks that keep the MS4 operating.

LCDOT Operations Budget	
ACTIVITY NAME	Summary of: 2002-2003 Exp
CANAL MAINTENANCE	\$2,588,730
ROADWAY MAINTENANCE	\$10,517,321
LANDSCAPE MAINTENANCE	\$1,818,106
BRIDGE OPERATIONS / MAINT.	\$992,473
TOTAL LCDOT OPERATIONS BUDGET	\$15,916,630

Conservation 2020 is an environmentally sensitive land acquisition program adopted in 1997. Potential sites are ranked in accordance to natural resource, habitat and other environmental value.

Conservation 2020	
Expenditures to date:	\$50,283,428.24

* Cash available may change subject to new revenue earning and/or expenditures or land purchases.

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Natural Resources Conservation Service			
Fiscal Year 02/03			
PROGRAM	CONSERVATION PLANS	ACRES	NRCS COST SHARE PAYMENTS
EQIP	6	287	Unknown
WHIP			Unknown if it will be funded
SWCA			Unknown if it will be funded
FIP			No applications at this time – sign-up period ends on 04/05/02

Lee County Natural Resources Division

The Lee County Natural Resources Division performs engineering and management functions over various projects. Listed below are projects related to structure, wetland and conveyance improvements. Much of the activity is grant funded through the SFWMD, however a substantial portion of the funds is derived from general County revenue funds.

Lee County Division of Natural Resources		
Capital Improvement Projects		
Project Name	2002-2003 Budget	Activity
Halfway Creek Maintenance	\$55,000	Environmental restoration of flow way
Halfway Creek Stormwater Mgmt.	\$85,927	Hydrological restoration of historic flow way
Hendry Creek-Lakes Park Marsh Flow way	\$2,168,074	Design and construction of flow way
Ten-Mile Canal-Filter Marsh	\$2,170,694	Design and construct filter-marsh
Ten Mile Canal-Alico Road Improvements	\$1,005,994	Design, construct flood protection for evacuation route.
Ten Mile Canal Pump Facility	\$250,000	Hydroperic restoration
Imperial River Maintenance	\$74,178	Exotic vegetation removal
Estero River Improvements	\$82,159	Environmental restoration of flow way
Gator Slough-Channel Improvements	\$4,196,052	Hydrological improvements to slough and wetlands.
Briarcliff Channel Weirs	\$208,444	Flood protection
Spanish Creek Restoration	\$436,458	Hydrological restoration of historical flow
Powell Creek Improvements	\$56,752	Environmental restoration of flow way

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Section 7.3 Next Reporting Year

The **NPDES Program** activities are carried out and coordinated with the funding of the Surface Water program of the Natural Resources Division. The activities of the program relate directly to MS4 permit activity such as, dry weather screening, educational activities, public speaking, inspections, compliance & enforcement and annual report preparation.

Natural Resources NPDES Program 2002-2003	
Description	Operating Cost
Personnel services	169,548
Equipment and supplies	101,013
Total Budget	270,561

The **Lee County Environmental Laboratory** is a program of the Natural Resources Division. Activities under the program include monitoring surface waters and sediments in the greater Lee County area. Tabulated below are some key projects for the FY 01/02. The Laboratory is funded through the General Fund.

Lee County Natural Resources Surface Water Monitoring 2002-2003		
Monitoring Project	Number of Sample Location	Program Operating Costs
Ambient Surface Water Quality	72 sites	
Estuarine Water Quality	3 water bodies	
Total		\$670,066

The **Lee County Small Quantity Generator Program** is an educational program helping businesses comply with hazardous waste management regulations. The budget listed below is for FY 2002. It includes the number of businesses participating in the program. Each business receives a quarterly newsletter outlining major rule changes and local opportunities for recycling as well as BMP ideas.

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Section 7.3 Next Reporting Year

Lee County Natural Resources SQG Program 2002-2003				
Verification Type	Number	% Verification rate	Program Operating Costs	Total Businesses
Total	17,438	34.2	368,914	12,900

The **Solid Waste Division** promotes the Hazardous Waste Collection days for household hazardous waste. It's anticipated that over 400,000 pounds of hazardous waste will be collected, FY 02/03 that would otherwise have gone to the incinerator, landfill or been illegally disposed. Taking into consideration the potential impact of these materials on water quality, this is the most cost-effective program available. Lee County Solid Waste contract all litter control programs out to the local Keep America Beautiful chapter, Keep Lee County Beautiful (KLCB), providing them with approximately \$80,000 each year.

Lee County Solid Waste educates residents about proper disposal motor oil, household hazardous waste, tires, white goods, and batteries.

SUMMARY TABLE OF THE HOUSEHOLD HAZARDOUS WASTE PROGRAM							
Fiscal Year	# of Collections	Pounds Collected	Cost per Pound	# of Participants	Cost per Participant	Annual Cost	% Recycled
01/02	6	451,025	\$.66	6,467	\$46.01	\$297,592	65

Lee County Solid Waste educates residents about proper disposal motor oil, household hazardous waste, tires, white goods, and batteries.

Lee County Solid Waste Advertising 2002-2003	
Media	Dollars
Newspaper Ads	\$42,160
Radio Ads	\$14,040
TV Ads	0
Brochures	\$6,427



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APPENDICES

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A.3.....	Legal Authority-Interlocal Agreements
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A.5.....	Inspection and Enforcement
A.6.....	O&M of Structural Controls



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A.1 Analytical Monitoring Data

Monitoring data reported in first ANNUAL REPORT. Lee County actively continues with its ambient water quality monitoring program. This data is annually uploaded to STORET with the latest monitoring data available upon request.

Appendices

A.2 Illicit/Dry Weather Screening Data

A.2.1 Lee County Dry Weather Field Screening Summary

For the unincorporated Lee County Dry Weather Field Screening requirement more than 20% of outfalls were screened. The county is divided north to south by four townships T43, T44, T45, T46 & a small portion of T47 at its southern border.

Of the 161 outfalls screened, 32 had dry weather flows. These flows were determined to be of ground water and/or from permitted surfacewater impoundments.

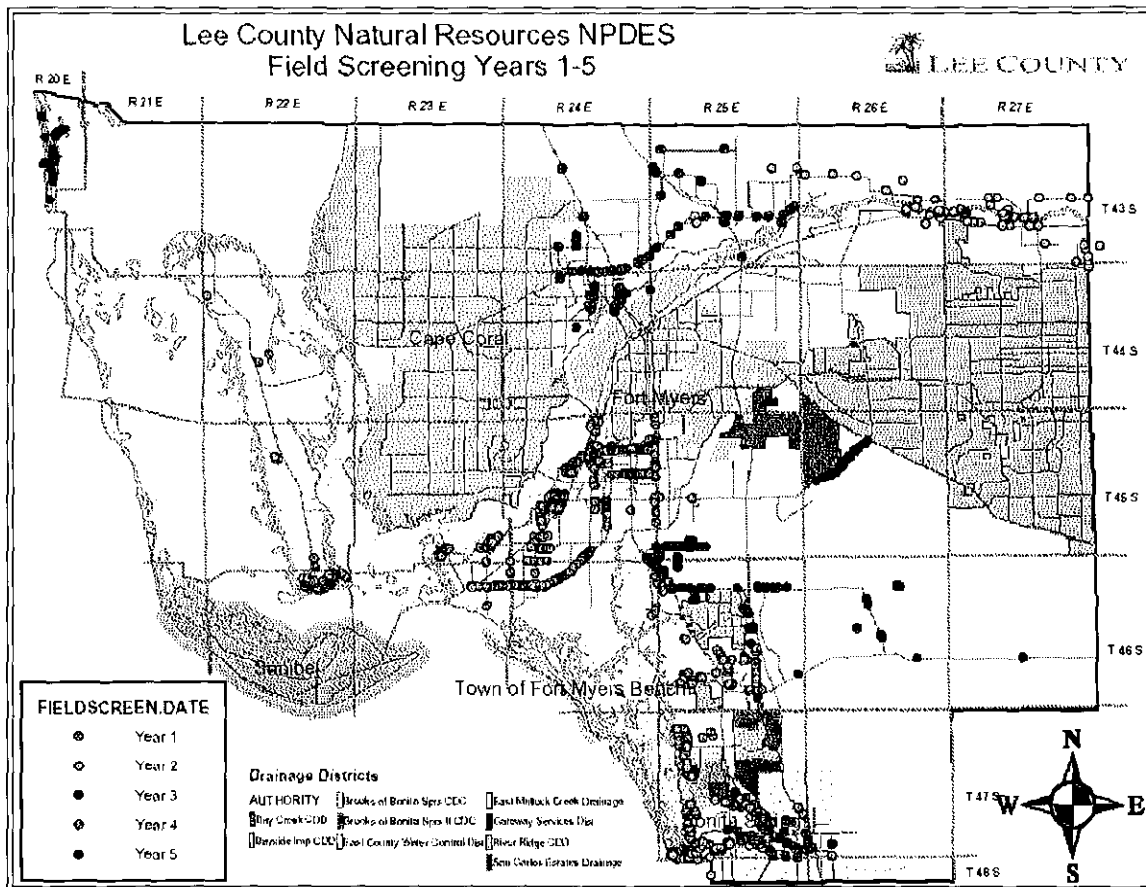
Field Screening		5th Year Annual Report	
Type of Outfall	# of Outfalls	Dry Flows	Illicit Connections
canal	1	0	0
checkdam	17	0	0
culvert	65	11	0
ditch	11	0	0
flume	1	0	0
pipe	21	3	0
swale	43	0	0
other	2	0	0
TOTAL	161	14	0

Appendices

A.2 Illicit/Dry Weather Screening Data

A.2.1 Lee County Dry Weather Field Screening Summary

Lee County map outline showing approximate outfall locations, as determined during Dry Weather Screening:





LEE COUNTY

Appendicies

A.2 Illicit/Dry Weather Screening Data

A.2.2 Lee County Major Outfalls Discovered in Year 5

This year's field screening efforts added 28 additional major outfalls. The field assessment information was collected and stored in a database which links to the MS4-GIS information.

Year 5 Major Outfalls Inventoried				
Outfall #	Date	Type	Land Use	Receiving Waters
43302	4/17/02	culvert	residential	Charlotte Harbor/Gasparilla Sound
43303	4/17/02	culvert	residential	Charlotte Harbor/Gasparilla Sound
43304	4/17/02	culvert	residential	Charlotte Harbor/Gasparilla Sound
43312	4/30/02	pipe	residential	Gulf of Mexico
43314	4/30/02	swale	residential	Charlotte Harbor/Gasparilla Sound
43316	4/30/02	culvert	residential	Charlotte Harbor/Gasparilla Sound
45305	5/31/02	culvert	industrial	Youngquist Rd ditch to Hendry Creek
45306	5/31/02	swale	industrial	Youngquist Rd ditch to Hendry Creek
45307	5/31/02	swale	industrial	Youngquist Rd ditch to Hendry Creek
45308	5/31/02	swale	industrial	Youngquist Rd ditch to Hendry Creek
45309	5/31/02	swale	industrial	Youngquist Rd ditch to Hendry Creek
45310	5/31/02	culvert	industrial	Youngquist Rd ditch to Hendry Creek
45311	5/31/02	swale	industrial	Youngquist Rd ditch to Hendry Creek
45312	5/31/02	pipe	industrial	Woodlands to Hendry Creek
45313	5/31/02	swale	industrial	Youngquist Rd ditch to Hendry Creek
45314	5/31/02	culvert	industrial	Youngquist Rd ditch to Hendry Creek
45315	5/31/02	swale	industrial	Youngquist Rd ditch to Hendry Creek
45317	5/31/02	swale	residential	RR easement to Ten Mile Canal
45318	5/31/02	swale	residential	E Anderson Ln ditch to Six Mile Cypress
45319	5/31/02	swale	residential	E Anderson Ln ditch to Six Mile Cypress
45321	5/31/02	swale	residential	S Briarcliff Rd ditch to Six Mile Cypress
45334	6/3/02	swale	residential	W S Pebble Ln ditch to Six Mile Cypress
45340	6/3/02	ditch	residential	Six Mile Cypress
45341	6/3/02	swale	residential	Six Mile Cypress
45344	6/3/02	ditch	residential	S Briarcliff Canal/Six Mile Cypress/Ten Mile Canal
45345	6/4/02	checkdam	commercial	SWFIA wetlands to Six Mile Cypress
45353	6/4/02	culvert	agricultural	Wetlands to Six Mile Cypress



Appendicies

A.2 Illicit/Dry Weather Screening Data

A.2.2 Lee County Major Outfalls Discovered in Year 5

Year 5 Major Outfalls Continued

Year 5 Major Outfalls Inventoried				
Outfall #	Date	Type	Land Use	Receiving Waters
45354	6/4/02	checkdam	commercial	wetlands to Six Mile Cypress
45355	6/4/02	culvert	agricultural	Ag lands/wetlands to Six Mile Cypress
45357	6/4/02	checkdam	commercial	Ag lands/wetlands to Six Mile Cypress
45361	6/4/02	checkdam	commercial	Ag lands to Six Mile Cypress
45362	6/4/02	checkdam	commercial	Ag lands to Six Mile Cypress
45365	6/4/02	swale	commercial	Ag lands/wetlands to Six Mile Cypress
45366	6/4/02	checkdam	commercial	wetlands to Six Mile Cypress
45370	6/4/02	checkdam	commercial	wetlands to Six Mile Cypress
45371	6/4/02	checkdam	commercial	wetlands to Six Mile Cypress
46200	5/8/02	culvert	industrial	Alico Rd ditch/MS4
46202	5/8/02	pipe	commercial	Alico Rd ditch/MS4
46204	5/8/02	pipe	commercial	Alico Rd ditch/MS4
46207	5/8/02	pipe	industrial	Alico Rd ditch/MS4
46208	5/8/02	culvert	industrial	Alico Rd ditch/MS4
46209	5/8/02	culvert	industrial	Alico Rd ditch/MS4
46210	5/8/02	culvert	industrial	Alico Rd ditch/MS4
46211	5/8/02	pipe	industrial	Alico Rd ditch/MS4
46213	5/20/02	ditch	agricultural	East Alico Rd Ditch/MS4
46214	5/20/02	ditch	undeveloped	East Alico Rd Ditch/MS4
46215	5/20/02	pipe	industrial	East Alico Rd Ditch/MS4
46216	5/20/02	other	industrial	East Alico Rd Ditch/MS4
46217	5/20/02	other	industrial	East Alico Rd Ditch/MS4
46221	5/20/02	ditch	undeveloped	N Corkscrew Rd Ditch/MS4
46223	5/28/02	ditch	commercial	South fork of Estero River
46224	5/28/02	swale	commercial	South fork of Estero River
46227	5/28/02	swale	commercial	Ditch south of Winn Dixie on 3 Oaks Pkwy/MS4
46234	5/28/02	swale	commercial	South Alico Rd ditch/MS4
46235	5/28/02	swale	commercial	South Alico Rd ditchMS4
46237	5/29/02	culvert	industrial	North Alico Rd ditch to Six Mile Cypress
46238	5/29/02	culvert	industrial	North Alico Rd ditch to Six Mile Cypress



Appendicies

A.2 Illicit/Dry Weather Screening Data

A.2.2 Lee County Major Outfalls Discovered in Year 5

Year 5 Major Outfalls Continued

Year 5 Major Outfalls Inventoried				
Outfall #	Date	Type	Land Use	Receiving Waters
46239	5/29/02	culvert	industrial	North Alico Rd ditch to Six Mile Cypress
46240	5/29/02	pipe	industrial	North Alico Rd ditch to Six Mile Cypress
46241	5/29/02	culvert	industrial	EMCDD Canal to Mullock Creek
46242	5/29/02	culvert	industrial	West Jean St ditch to EMCDD canal
46243	5/29/02	culvert	industrial	West Jean St ditch to EMCDD canal
46244	5/29/02	culvert	industrial	North Alico Rd ditch to Six Mile Cypress
46245	5/29/02	culvert	industrial	North Alico Rd ditch to Six Mile Cypress
46246	5/29/02	pipe	industrial	North Alico Rd ditch to Six Mile Cypress
46251	5/29/02	culvert	industrial	Ten Mile Canal
46252	5/29/02	pipe	industrial	Ten Mile Canal
46253	5/29/02	culvert	industrial	Thomas Rd ditch to Ten Mile Canal
46254	5/29/02	ditch	industrial	Thomas Rd ditch to Ten Mile Canal
46255	5/29/02	pipe	industrial	Thomas Rd ditch to Ten Mile Canal
46256	5/29/02	pipe	industrial	Thomas Rd ditch to Ten Mile Canal
46257	5/29/02	ditch	industrial	Thomas Rd ditch to Ten Mile Canal
46260	5/29/02	swale	mmercial	Wetlands to Six Mile Cypress
46261	5/29/02	swale	mmercial	Wetlands to Six Mile Cypress
46262	5/31/02	culvert	industrial	North EMCDD Canal
46263	5/31/02	swale	industrial	West Old US 41 ditch to Hendry Creek Watershed
46264	5/31/02	swale	industrial	East Old US 41 ditch to Hendry Creek Watershed
46265	5/31/02	swale	industrial	East Old US 41 ditch to Hendry Creek Watershed
46266	5/31/02	swale	industrial	West Old US 41 ditch to Hendry Creek Watershed
46267	5/31/02	culvert	industrial	East Old US 41 ditch to Hendry Creek Watershed
46270	6/3/02	canal	residential	S Briarcliff canal/Six Mile Cypress/Ten Mile Canal

Total of New Major Outfalls

81



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Appendices

A.3 Legal Authority-Interlocal Agreements

There are no new interlocal agreements to report. All applicable interlocal agreements have been submitted with previous reports.

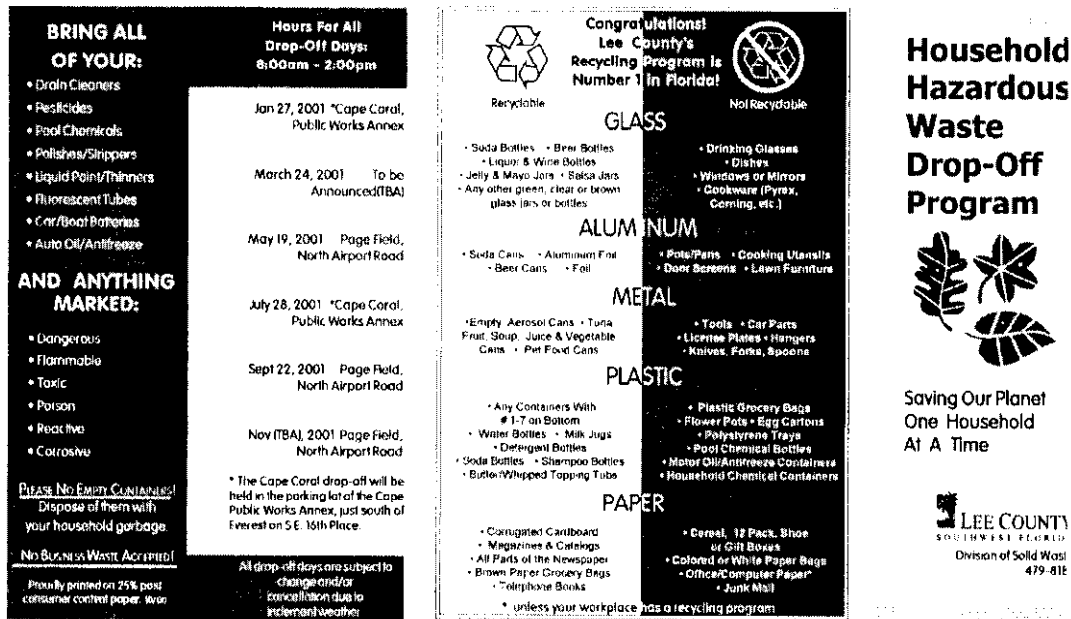
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A.4 Control of Discharges

A.4.1 Lee County Household Hazardous Waste Program

Below is a copy of the Lee County Solid Waste Division brochure informing the public of household hazardous waste disposal collection days, and collection sites for used motor oil, white goods, hazardous household waste, used vehicle tires, and lead acid batteries.



BRING ALL OF YOUR:

- Drain Cleaners
- Pesticides
- Pool Chemicals
- Polishes/Strippers
- Liquid Paint/Thinners
- Fluorescent Tubes
- Car/Boat Batteries
- Auto Oil/Antifreeze

AND ANYTHING MARKED:

- Dangerous
- Flammable
- Toxic
- Poison
- Reactive
- Corrosive

PLEASE NO EMPTY CONTAINERS!
Dispose of them with your household garbage.

No BUSINESS WASTE ACCEPTED!
Printed on 25% post consumer recycled paper. WWS

Hours For All Drop-Off Days: 8:00am - 2:00pm

Jan 27, 2001	*Cape Coral, Public Works Annex
March 24, 2001	To be Announced(TBA)
May 19, 2001	Page Field, North Airport Road
July 28, 2001	*Cape Coral, Public Works Annex
Sept 22, 2001	Page Field, North Airport Road
Nov (TBA), 2001	Page Field, North Airport Road

* The Cape Coral drop-off will be held in the parking lot of the Cape Public Works Annex, just south of Forest on S.E. 16th Place.

All drop-off days are subject to change and/or cancellation due to inclement weather.

Congratulations! Lee County's Recycling Program is Number 1 In Florida!

Recyclable

GLASS

- Soda Bottles • Beer Bottles
- Liquor & Wine Bottles
- Jelly & Mayo Jars • Salsa Jars
- Any other green, clear or brown glass jars or bottles

ALUMINUM

- Soda Cans • Aluminum Foil
- Beer Cans • Foil

METAL

- Empty Aerosol Cans • Tuna
- Fruit, Soup, Juice & Vegetable Cans • Pet Food Cans

PLASTIC

- Any Containers With # 1-7 on Bottom
- Water Bottles • Milk Jugs
- Detergent Bottles
- Soda Bottles • Shampoo Bottles
- Butyl-Whipped Topping Tube

PAPER

- Corrugated Cardboard
- Magazines & Catalogs
- All Parts of the Newspapers
- Brown Paper Grocery Bags
- Telephone Books

Not Recyclable

- Drinking Glasses
- Dishes
- Windows or Mirrors
- Cookware (Pyrex, Corning, etc.)
- Pots/Pans • Cooking Utensils
- Door Screens • Lawn Furniture
- Tools • Car Parts
- Licorice Plates • Hammers
- Knives, Forks, Spoons
- Plastic Grocery Bags
- Flower Pots • Egg Cartons
- Polystyrene Trays
- Pool Chemical Bottles
- Motor Oil/Antifreeze Containers
- Household Chemical Containers
- Cereal, 32 Pack, Shoe or Gift Boxes
- Colored or White Paper Bags
- Office/Computer Paper
- Junk Mail

* unless your workplace has a recycling program

Household Hazardous Waste Drop-Off Program

Saving Our Planet One Household At A Time

LEE COUNTY
SOUTHWEST FLORIDA
Division of Solid Waste
479-818

Front Panel of the Lee County Solid Waste Division brochure informing the public of household hazardous waste disposal collection days, etc.



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A.4 Control of Discharges

A.4.1 Lee County Household Hazardous Waste Program

Hazardous Waste Recycling Locations

Legend - Materials accepted at the individual locations.

O = OIL
T = TRANSMISSION FLUID
A = ANTIFREEZE
G = GAS
D = DIESEL FUEL
B = AUTO/BOAT BATTERIES

HOUSEHOLD BATTERY COLLECTION

Alkaline batteries purchased after 1993 are non-hazardous and should be thrown into your normal garbage. Please use the orange battery bags to collect all of your Ni-Cd, lithium button cell and 1993 and prior alkaline batteries. Place the full bags next to your recycling bin. If you are not on the county recycling program, bring your bags to the next Household Hazardous Waste Drop-Off Day.

Additional bags are available at all county libraries and tax offices.

ONLY FACILITY TAKING STALE GASOLINE & DIESEL
Fl. Myers Yacht Basin
1300 Lee St
332-8888
O-T-G-D

FORT MYERS

Grease Monkey
4050 Fowler St
936-8007
O-T

Valvoline Instant Oil
3018 Cleveland Ave
334-4450
O-T

Discount Auto Parts
3871 Cleveland Ave
936-9115
O-T-B (5 Gal. Limit)

Valvoline Instant Oil Change
2887 Colonial Blvd
939-3776
O-T

Auto Zone
4105 Fowler St.
277-9829
O

Honey's Custom Cycles
5200 Arc Way
278-0484
O (2 Gal. Limit)

N. FT. MYERS

Grease Monkey
14950 N. Cleveland
997-8007
O-T

North Shore Service
13960 N. Cleveland
658-1220
O-T-A

Maggi's Texaco
13821 N. Cleveland
995-8282
O-T-B

Wal-Mart
545 Pine Island Rd
997-9916
O

Discount Auto Parts
50 Pine Island Rd
997-8900
O-T-B (5 Gal. Limit)

Auto Zone
5080 Bayside Rd
567-0294
O-T-B

S. FT. MYERS

Pep Boys
4767 S. Cleveland Ave
939-5447
O-T-B

Wal-Mart
1481 So. Mile Cypress Rd
437-1837
O-T-A-B

Fast Oil & Lube
15140 S. Tamiami Tr
481-3778
O-T

Hurricane Cycles
17420 Tamiami Tr
432-9611
O (2 Gal. Limit)

Advanced Auto Parts
5050 S. Cleveland Ave
275-1927
O-T (5 Gal. Limit)

Discount Auto Parts
19099 Tamiami Tr
437-5525
O-T

Roscoe Automotive
15580 McGregor Blvd
437-6669
O-T-A-B

Valvoline Instant Oil
15289 McGregor Blvd
939-3776
O-T

Discount Auto Parts
11591 Gladiolus Dr.
437-7085
O (5 Gal. Limit)

B - (on exchange only)

Valvoline Instant Oil
13740 Tamiami Tr
432-9611
O (2 Gal. Limit)

E. FT. MYERS

Auto Zone
3743 Palm Beach Blvd
694-0640
O-T-B

Discount Auto Parts
3842 Palm Beach Blvd
693-0073
O-T-B (5 Gal. Limit)

CAPE CORAL

Discount Auto Parts
16 Pine Island Rd
772-4333
O-T-B

Discount Auto Parts
821 Cape Coral Pkwy. E
1318 Del Prado Blvd
541-0911
O-T-B (5 Gal. Limit)

Discount Auto Parts
1318 Del Prado Blvd
574-1010
O-T-B (5 Gal. Limit)

Paradise Car Wash
677 Cape Coral Pkwy. E
542-5823
O (5 Gal. Limit)

Auto Zone
1023 Del Prado Blvd
573-0606
O-T-B

Wal-Mart
1819 Del Prado Blvd
772-9924
O-A-B

Advanced Auto Parts
2023 Del Prado Blvd
574-4544
O-T (5 Gal. Limit)

Pep Boys
1528 Del Prado Blvd
573-0707
O-T-B

LEHIGH

Wal-Mart
2523 Lee Blvd
368-7888
O-A-B

Discount Auto Parts
403 Sunshine Ave
368-2401
O-T-B (5 Gal. Limit)

Auto Zone
2903 Lee Blvd
360-4900
O-T

FT. MYERS BEACH AREA

Gavin's Ace Hardware
16065 San Carlos Blvd
486-7777
O (2 Gal. Limit)

AFA Texaco
6231 Estero Blvd
483-6843
O-T-A-B

BONITA

Bonita Mobile
3855 Bonita Beach Rd
947-1555
O-T

Discount Auto Parts
6951 Bonita Beach Rd
495-1818
O-T-B

SANIBEL

Sanibel Shell
2435 Fernwick Way
472-2012
O-T-B

PINE ISLAND

Bob & Annie's Boat Ya
4320 Stringfellow
283-3962
O

Auto Zone
4807 Chester St
540-1280
O-T-B

Rear panel of the Lee County Solid Waste Division brochure informing the public of household hazardous waste disposal collection days, etc.



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A.4.2 Lee County Spill Response Data Summary By Month

Spill Response data from Fire Departments is summarized below. If needed, cases are forwarded to the appropriate agencies for enforcement or investigation.

MAJOR AND MINOR EMERGENCY SPILLS / INCIDENTS FOR 2001 - 2002 TYPE INCIDENTS IN THIS REPORT: FUEL, PESTICIDES, HERBICIDES, OIL, SOLVENTS etc.

DATE:	TYPE INCIDENT:	LOCATION:	QUANTITY:	DISPOSAL METHODS:
10/1/02	Diesel Spill	East Lee County	335 Gallons	Mosquito Control
10/3/02	Wastewater	Cape Coral	1,000 Gallons	By Utilities
10/6/02	Hazardous Materials	St. James City	Unknown	Unknown
10/11/02	Wastewater	Bonita Springs	3,000 Gallons	By Utilities
10/16/02	Diesel Spill	Bonita Springs	Unknown	Unknown
10/21/02	Hazardous Materials	Cape Coral	15 Gallons	Unknown
10/23/01	Wastewater	Bonita Springs	Unknown	By Utilities
10/24/01	Wastewater	Sanibel	1,000 Gallons	By Utilities
10/25/01	Natural Gas	Bass Road - Ft Myers	Unknown	TECO Gas
10/27/01	Wastewater	Bonita Springs	8,000,000 Gallons	By Utilities
10/29/01	Wastewater	Cape Coral	5,000 Gallons	By Utilities
10/30/02	Wastewater	Cape Coral	150,000 Gallons	By Utilities
TOTAL GALLONS REPORTED SPILLED:			8,160,350	
11/5/01	Wastewater	Ft. Myers	100,000 Gallons	By Utilities
11/7/01	Wastewater	Cape Coral	1,000 Gallons	By Utilities
11/8/01	Wastewater	Sanibel	1,000 Gallons	By Utilities
11/9/01	Chlorine	San Carlos	30 Pounds	By Utilities
11/27/01	Sodium hypochlorite	Cape Coral	Unknown	By Utilities
TOTAL GALLONS REPORTED SPILLED:			102,000	
12/1/01	Wastewater	Ft. Myers Beach	200 Gallons	By Utilities
12/3/01	Wastewater	Ft. Myers	1,500 Gallons	By Utilities
12/7/01	Diesel Spill	Lehigh Acres	90 Gallons	By Utilities
12/19/01	Wastewater	Ft. Myers	1,000 Gallons	By Utilities
12/26/01	Wastewater	Cape Coral	800,000 Gallons	By Utilities
12/31/01	Wastewater	Useppa Island	1,500 Gallons	By Utilities
MONTHLY GALLONS REPORTED SPILLED:			804,290	




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A.4.2 Lee County Spill Response Data Summary By Month

DATE:	TYPE INCIDENT:	LOCATION:	QUANTITY:	DISPOSAL METHODS:
1/1/02	Wastewater	Ft. Myers	1,500 Gallons	By Utilities
1/4/02	Diesel Spill	Ft. Myers	100 Gallons	By Utilities
1/4/02	Wastewater	Ft. Myers	1,000 Gallons	By Utilities
1/5/02	Wastewater	Bonita Springs	5,000 Gallons	By Utilities
1/6/02	Diesel Spill	Pine Island	100 Gallons	Unknown
1/14/02	Wastewater	South County	30,000 Gallons	Unknown
1/18/02	Wastewater	South Ft. Myers	3,500 Gallons	By Utilities
1/21/02	Diesel Spill	Harbor Point Drive	25 Gallons	D.O.T
1/23/02	Wastewater	Ft. Myers	3,000 Gallons	By Utilities
1/25/02	Wastewater	Cape Coral	1,500 Gallons	By Utilities
1/25/02	Wastewater	Bonita Springs	20,000 Gallons	
1/28/02	Petroleum Product	Cape Coral	55 Gallons	
1/29/02	Diesel Spill	Ft. Myers Beach	100 Gallons	
MONTHLY GALLONS REPORTED SPILLED:			655,380	
2/5/02	Asphalt Sealer	I-75 / Colonial Blvd	500 Gallons	Contractor
2/5/02	Diesel Spill	I-75 / Colonial Blvd	200 Gallons	Contractor
2/6/02	Diesel Spill	Ft. Myers Beach	25 Gallons	Unknown
2/7/02	Diesel Spill	Ft. Myers Beach	100 Gallons	Unknown
2/16/02	Wastewater	Ft. Myers	1,000 Gallons	Contractor
2/27/02	Wastewater	Ft. Myers	2,500 Gallons	By Utilities
MONTHLY GALLONS REPORTED SPILLED:			4,325	
3/1/02	Diesel Spill	Ft. Myers	1,000 Gallons	Unknown
3/11/02	Wastewater	Ft. Myers	1,000 Gallons	By Utilities
3/15/02	Wastewater	Fountain Lakes - Estero	1,000 Gallons	By Utilities
3/15/02	Wastewater	Cape Coral	50,000 Gallons	By Utilities
3/22/02	Diesel Spill	Cape Coral	25 Gallons	Contractor
3/27/02	Petroleum Product	Sanibel	25 Gallons	Contractor
3/27/02	Petroleum Product	Lehigh Acres	20 Gallons	Unknown
3/28/02	Diesel Spill	San Carlos Park	100 Gallons	Contractor
3/29/02	Wastewater	Estero	10,000 Gallons	By Utilities
3/29/02	Diesel Spill	North Ft. Myers	25 Gallons	Unknown
3/30/02	Diesel Spill	Ft. Myers Shores	50 Gallons	Unknown
MONTHLY GALLONS REPORTED SPILLED:			621,245	
4/1/02	Diesel Spill	Cape Coral	50 gallons	Unknown
4/14/02	Wastewater	Cape Coral	200,000 Gallons	Utilities
4/17/02	Ammonia Release	Ft. Myers	Unknown	Contractor
4/26/02	Ethylene Glycol Release	Ft. Myers	4000 Gallons	Contractor
MONTHLY GALLONS REPORTED SPILLED			204,050	



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A.4.2 Lee County Spill Response Data Summary By Month

DATE:	TYPE INCIDENT:	LOCATION:	QUANTITY:	DISPOSAL METHODS:
5/2/02	Wastewater	Sanibel	1,000 Gallons	By Utilities
5/4/02	Petroleum Product	Ft. Myers Beach	1,000 Gallons	Unknown
5/7/02	Natural Gas Leak	North Ft. Myers	Unknown	TECO Gas
5/12/02	Petroleum Product	Ft. Myers Beach	1,000 Gallons	Unknown
5/13/02	Petroleum Product	Ft. Myers Shores	3,000 Gallons	FP&L
5/16/02	Diesel Spill	Ft. Myers	50 Gallons	Contractor
5/20/02	Hydraulic Spill	Ft. Myers	30 Gallons	Contractor
5/20/02	Wastewater	Ft. Myers	1,500 Gallons	Contractor
5/22/02	Wastewater	Lehigh Acres	49,000 Gallons	By Utilities
5/28/02	Wastewater	Bonita Springs	20,000 Gallons	By Utilities
5/29/02	Wastewater	Sanibel	1,000 Gallons	By Utilities
MONTHLY GALLONS REPORTED SPILLED			729,080	
6/2/02	Diesel Spill	Marina Town ,NFM	Unknown	Unknown
6/4/02	Wastewater	North Ft. Myers	57,000 Gallons	Utilities
6/5/02	Diesel Spill	Cape Coral	30 Gallons	Unknown
6/5/02	Diesel Spill	I-75 / Corkscrew	25 Gallons	Florida DOT
6/7/02	Wastewater	City of Ft. Myers	15,000 Gallons	Utilities
6/7/02	Sludge	Pine Island	500 Gallons	Contractor
6/10/02	Wastewater	Lehigh Acres	12,000 Gallons	Utilities
6/12/02	Wastewater	Lehigh Acres	6,000 Gallons	Utilities
6/18/02	Sludge	Sanibel	1,000 Gallons	Contractor
6/19/02	Wastewater	Fountain Lakes	615,000 Gallons	Utilities
6/21/02	Gasoline Spill	I-75 / Colonial Blvd	30 Gallons	Florida DOT
6/25/02	Wastewater	Bonita Springs	5,000 Gallons	Utilities
6/28/02	Wastewater	Ft. Myers	131,000 Gallons	Utilities
6/29/02	Diesel Spill	Cape Coral	1,000 Gallons	Contractor
MONTHLY GALLONS REPORTED SPILLED			843,585	
7/3/02	Wastewater	Cape Coral	1,000 Gallons	Utilities
7/6/02	Wastewater	Estero	1,000 Gallons	Utilities
7/9/02	Diesel Spill	Ft. Myers Beach	2,000 Gallons	Contractor
7/14/02	Diesel Spill	San Carlos	Unknown	Unknown
7/15/02	Wastewater	South Lee County	100 Gallons	Utilities
7/25/02	Wastewater	Cape Coral	30,000 Gallons	Utilities
7/26/02	Hypo Chloride	Cape Coral	Unknown	Utilities
7/26/02	Wastewater	Cape Coral	30,000 Gallons	Utilities
7/29/02	Transformer Oil	City of Ft. Myers	1 Quart	FP&L
MONTHLY GALLONS REPORTED SPILLED			64,100	



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A.4.2 Lee County Spill Response Data Summary By Month

DATE:	TYPE INCIDENT:	LOCATION:	QUANTITY:	DISPOSAL METHODS:
8/5/02	Wastewater	South Lee County	3000 Gallons	Utilities
8/7/02	Natural Gas	Estero	Unknown	TECO Gas
8/14/02	Diesel Spill	Ft. Myers Beach	200 Gallons	Contractor
8/18/02	Diesel Spill	Caloosahatchee Riv.	Unknown	Unknown
8/25/02	Oil	Cape Coral	Unknown	Contractor
8/28/02	Wastewater	1667 Inlet Dr. N.F.M	15,000 Gallons	Utilities
8/29/02	Natural Gas	Bonita Springs	Unknown	TECO Gas
8/29/02	Wastewater	Pine Lakes, N.F.M	1,000 Gallons	Utilities
MONTHLY GALLONS REPORTED SPILLED:			19,200	
9/4/02	Insecticide Spill	I-75 / Daniels Road	150 Gallons	Contractor
9/5/02	Wastewater	Captiva	5,000 Gallons	Utilities
9/6/02	Wastewater	Briar Crest Subdivision	1,000 Gallons	Utilities
9/6/02	Natural Gas	Shell Point Apartments	Unknown	TECO Gas
9/6/02	Diesel Spill	Cape Coral	25 Gallons	Unknown
9/6/02	Wastewater	Fountain Lakes -Estero	500,000 Gallons	Utilities
9/7/02	Diesel Spill	13900 Airport Haul Rd	500 Gallons	Contractor
9/12/02	Diesel Spill	28070 Quail Nest Lane	200 Gallons	Contractor
9/18/02	Petroleum Spill	State Road 82	55 Gallons	Florida D.O.T
9/20/02	Freon Release	City of Ft. Myers	Unknown	Contractor
9/21/02	Diesel Spill	Lee Blvd, Lehigh	150 Gallons	Contractor
9/27/02	Wastewater	Bonita Springs	1000 Gallons	Utilities
MONTHLY GALLONS REPORTED SPILLED:			508,080	
Annual Reported Spills (gallons)			12,715,685	

Appendices

A.4.3 Lee County Public Education on Identifying Illicit Discharges


This is a copy of the Lee County NPDES Program brochure which provides guidelines in identifying illicit discharges and the phone numbers for reporting of illicit discharges within unincorporated Lee County and several of the co-permittees.

Brochure Front Page:

The Problem

Lee County is one of the fastest growing areas in the country. With that growth comes an added burden on our water supply and recreational waterways.

Lee County citizens must do their part to ensure that our area's growth doesn't spell doom for our precious, yet fragile environment.



The major contributor to contamination of our waterways is polluted stormwater. Stormwater is rain that has fallen and then flows across the ground and pavement. This stormwater flows into ditches and storm sewers (drains at street corners or low points on the sides of streets). This water then flows directly into streams, rivers, bays and eventually the Gulf of Mexico.


As the stormwater flows across pavement, lawns and fields, it picks up pollution (fertilizers, solvents, pesticides, auto fluids) and carries it directly into our waterways.

Once there,
it can have devastating effects...

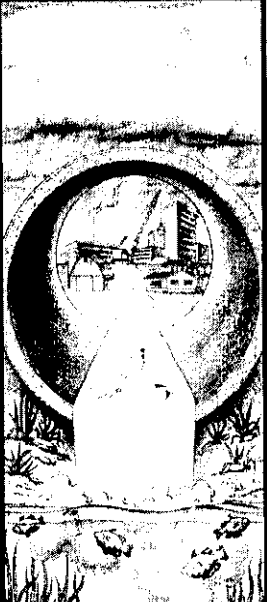
THIS EDUCATIONAL DOCUMENT WAS PRODUCED BY LEE COUNTY AS PART OF NPDES PERMIT # FLS000035 REQUIREMENTS.

ALL ARTWORK FOR THIS BROCHURE WAS PROVIDED BY THE ENVIRONMENTAL PROTECTION AGENCY.

PRINTED ON POST-CONSUMER RECYCLED PAPER



Be The Solution



Help Keep Our Waterways Clean

Common household practices that contaminate our water and poison our environment







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A.4.3 Lee County Public Education on Identifying Illicit Discharges

Brochure Back Page

The Effects	The Solution	Take Action
 <p>When polluted stormwater reaches our waterways, it has many long-lasting, negative effects on aquatic plant and animal life. This pollution also impacts other wildlife that uses the water or eats the contaminated seafood. This includes humans.</p> <p>SOME OF THE EFFECTS:</p> <ul style="list-style-type: none"> ■ Sediment and other debris clog fish gills, damage fish habitat and block light needed for aquatic plants to survive. ■ Stormwater picks up debris, such as plastic, that can suffocate or disable manatees, dolphins, turtles and other marine life. ■ Shellfish become contaminated with pollutants that settle to the bottom of our waterways. They eventually become inedible. ■ Stormwater can contaminate our rivers, streams and the Gulf so much that we would not be able to use them as recreational areas. 	<p>There are many seemingly harmless household activities that actually wreak havoc with our water system.</p>  <p>Don't overuse fertilizers, pesticides or herbicides. This is a major cause of stormwater pollution. Remember that what you put on your lawn eventually winds up in area rivers, bays and beaches.</p>  <p>When changing automotive fluids (such as motor oil, antifreeze, transmission and brake fluid), make sure they are contained and disposed of properly. Don't let them drain onto your driveway or lawn.</p>  <p>Collected grass clippings, leaves and other yard waste should not be dumped into ditches or other drainage areas. These items will be collected by your garbage hauler on the proper collection day.</p> <p>Other common practices that can cause severe problems to our waterways include, but are not limited to:</p> <ul style="list-style-type: none"> ■ draining swimming pools into ditches or directly onto lawns. ■ draining household wastewater from washing machines, dishwashers or water softening devices into ditches. 	<p>If we don't stop the pollution, one of our most valuable resources - our recreational waterways - will be lost forever.</p> <p>Please remember, ditches and storm drains are not connected to the sewer system. They flow directly into streams, lakes, rivers, estuaries, bays and the Gulf of Mexico.</p> <p>This means that stormwater is not cleaned or decontaminated before it flows into our waterways. Whatever you put in ditches, street drains and even your lawn, goes immediately into our recreational waters whenever there is a significant rain.</p> <p>We must all take responsibility for keeping pollutants out of Lee County's waters.</p> <p>If you see any polluting activities taking place, please call the number listed below for your area.</p> <p>City of Bonita Springs - 335-2852 City of Cape Coral - 574-0425 City of Ft. Myers - 332-6344 City of Sanibel - 472-6397 Town of Ft. Myers Beach - 765-0202 Lehigh Acres - 368-0044 Unincorporated Lee County - 335-2852</p>

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A.5 Inspection and Enforcement Summary

A.5.1 Lee County Facility Inspection Summary

The following table is an illustrative summary of the industrial facility inspection database. The database was created to track permit related inspections and enforcement activities and does not contain the facilities listed as potential discharges submitted on the Part 2 of the permit application.

Facility Name	Facility Type	(1)	(2)	(3)	(4)	(5)	(6)	Receiving Water(S)	(7)	(8)
cabinet shop	cabinet shop					X	X			
Dieter Shaw Design	cabinet shop					X	X			
Evcara Auto Elec.						X	X			
Show-Me Motors	Auto sales					X	X			
Beach Sewer Plant		X	X	X	X	X				
Action Craft	Boat Manufacturer	X	X			X	X	City MS4		
Atlas Boat Lift Enterprises, Inc.	Boat Lift Sales		X					North Colonial Waterway		X
Old Castle Precast East Inc.			X	X	X			County MS4		
Schwab Ready-Mix	Batch Plant		X	X	X			Lee County MS4		
Prof. Automotive Diagnostic, Inc.	Automotive repair					X	X	Lee County MS4		
Larue Pest Management, Inc.	Pest Control					X	X	ECWCD MS4		
Flo. Rock Industries	Batch Plant			X	X			County MS4		
Wayne's Muffler Center	Muffler repair		X				X	Lee County MS4		X
Tiger Muffler	Muffler repairs						X	Lee County MS4		
Pondella auto and custom exhaust	Mech. Shop					X	X	Lee County MS4		
Uncle Bob's Self Storage	Storage		X			X	X	County MS4		
Carl's Auto body	Mech. Shop					X	X	Lee County MS4		

(1) HI RISK FACILITY	(6) ALL ACTIVITIES UNDER ROOF
(2) POINT SOURCE	(7) ILLICIT CONNECTIONS OR DISCHARGES
(3) NPDES PERMIT	(8) NOI HAND DELIVERED
(4) SWP3 ON-SITE?	
(5) STORAGE UNDER ROOF	



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A.5 Inspection and Enforcement Summary

A.5.2 Lee County Citizens RFA Complaint System

The following is an example of the illicit discharge complaints responded by the Natural Resources Division. The citizens complaint log is maintained by LCDOT (RFA). Shown below is a typical RFA as viewed by NPDES staff. Detailed records of all Requests for Action (RFAs) are available upon request.

Lee County DOT RFA Tracking - Microsoft Internet Explorer


File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Size Print Edit

Address S:\NATRES\NPDES\ANNUAL\Annual04\Lee County DOT RFA Tracking.htm

Request Type		
XX01	Illicit Discharge	
Request Notes		
new golf course is being built. Ditch is filled in, blocking the flow of water. they are using it for a driveway. Strap # 03-45-24-00-00001.0010 Crown Colony Sent to Luis Molina		
Action Type		
RQ30	Natural Resources	Natural Resources
Action Notes		
No evidence of flooding found at the site. However, N.O.V. and County warning issued 7/31/00 to Centex Homes requiring to improve roadside ditch protection. No evidence of flooding found at the site. However, N.O.V. and County warning issued 7/31/00 to Centex Homes requiring to improve roadside ditch protection. Site re-visited on 10/27/00 and found sedimentation controls in good condition. No further action required.		
200002344		

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A.6 O&M of Structural Controls

A.6.1 Table II.A.1.a - Lee County Maintained Structural Controls

Table II.A.1.a below is updated to reflect currently known information. This information has been updated over that submitted in the permit application. The information submitted in the application was the "best estimate" of staff at that time. Subsequently, Lee County began preparations to enter this type of information on the GIS. A detailed inventory has been prepared as the GIS database. In preparation of the database, totals have been developed more accurately reflecting the existing conditions. It does not reflect roadside ditches, swales nor does it accurately reflect wet and dry detention areas. A database is under construction to accurately reflect the "work orders" and is to include a designation for conveyance location.

TABLE II.A.1.a.			
PERMITTEE (LABOR SOURCE)	STRUCTURAL CONTROL	TOTAL NO. TO BE MAINTAINED IN PERMIT	TOTAL ACTUALLY MAINTAINED
Lee County Transportation Division Operations Section	Channel Control Structures	17 units	14 Structures
	Canals	201 units	120 Miles
	Wet Detention Areas	29 units	10 units*
	Dry Detention Areas	23 units	5 units*

* These are estimates taken from the mitigation area data. Detention areas are being listed in a SQL database.