

[DATE CRITICAL]

LEE COUNTY BOARD OF COUNTY COMMISSIONERS
 AGENDA ITEM SUMMARY

BLUE SHEET NO: 20020247-DNR

1. REQUESTED MOTION:

ACTION REQUESTED:

Approve Lee County's portion of the fourth 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 Fourth 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: 8 - NAT. RESOURCES
 COMMISSION DISTRICT #: CW

C8A

3. MEETING DATE:

03-26-2002

4. AGENDA:

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

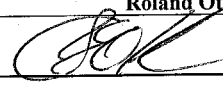
5. REQUIREMENT/PURPOSE:

(Specify)

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

6. REQUESTOR OF INFORMATION:

- A. COMMISSIONER: _____
- B. DEPARTMENT: Lee County-Public Works
- C. DIVISION/SECTION: Natural Resources Division
- BY: Roland Ottolini, Nat. Resources Dir.



DATE: 3/12/02

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, 2002, or six months after the end of fiscal (also permit) year of operation. It contains summaries of activities performed by Lee County, the reapplication for the next five-year permit, 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.

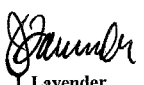
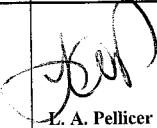



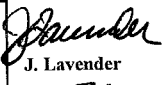
Activities associated with the permit are currently budgeted and funded. No additional funding is required.

Attachments: One (1) Copy of NPDES Executive Summary/Annual Report, including permit renewal
 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) PURCH. OR CONTRACTS	(C) HUMAN RESOURCES	(D) OTHER	(E) COUNTY ATTORNEY	(F) BUDGET SERVICES				(G) COUNTY MANAGER
					OA	OM	Risk	GC	
 J. Lavender Date: 9-12-02	N/A Date:	N/A Date:	 L. A. Pellicer Date:	 K. Kroslack Date: 3/12/02	P. Miller 3/13/02	 3/13/02	 3/13	F.M. 3/13/02	 J. Lavender Date: 3-12-02

10. COMMISSION ACTION:

- APPROVED
- DENIED
- DEFERRED
- OTHER

Rec. by CoAtty
 Date: 3/12/02
 Time: 3:45 pm
 Forwarded To:
 ADL
 3/12/02 4:30 PM

RECEIVED BY
 COUNTY ADMIN.
 3-12-02 4:27
 COUNTY ADMIN.
 FORWARDED TO:
 3/13-500

The attached is in final form, however all of the tabular data for the appendices has not been received and thusly not incorporated into this document. **The final complete document will be provided prior to BOCC distribution.**



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

ANNUAL REPORT

FOR

YEAR 4

PERIOD COVERING:

10/01/2000 TO

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



LEE COUNTY

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.

Robert Janes,

Chairman, Lee County Board of County Commissioners

Lee County

03/20/2002

Dated

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LEE COUNTY

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.

Robert Janes,

Chairman, Lee County Board of County Commissioners

Lee County

03/20/2002

Dated

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LEE COUNTY

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LEE COUNTY

Annual Report

Section 1 - List of Contacts for the Co-permittees

<h1>TABLE</h1> <p>OF</p> <h1>LEE COUNTY PERMITTEE CONTACTS</h1>

<p>Mr. Tony Pellicer Lee County Board of County Commissioners P.O. Box 398 Fort Myers, FL 33902</p> <p>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</p> <p>Phone: (941) 574-0745 Fax: (941) 574-0861 e-mail: cjarvis@capecoral.net</p>	<p>Mr. Joe Ortolona City of Fort Myers P.O. Drawer 2217 Fort Myers, FL 33902</p> <p>Phone: (941) 332-6318 Fax: (941) 332-6604 e-mail: jortolona@cityftmyers.com</p>
<p>Mr. Gates Castle City of Sanibel 800 Dunlop Road Sanibel, FL 33957</p> <p>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</p> <p>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</p> <p>Phone: (941) 390-1000 Fax: (941) 390-1004 e-mail: gary.price@cyberstreet.com</p>
<p>Mr. Chuck Adams Gateway Service District 985 Pelican Marsh Boulevard Naples, Florida 34108</p> <p>Phone: (941) 592-5181 Fax: (941) 592-9021 e-mail: cadams5702@aol.com</p>	<p>Mr. Thomas (TW) Hunt, P.G. NPDES Coordinator MS 1-7 P.O. Box 1249 Bartow, FL 33831</p> <p>Phone: (863) 519-2560 Fax: (863) 534-7045 e-mail: tw.hunt@dot.state.fl.us</p>	<p>Mr. Chuck Adams River Ridge Community Development District 985 Pelican Marsh Boulevard Naples, Florida 34108</p> <p>Phone: (941) 592-5181 Fax: (941) 592-9021 e-mail: cadams5702@aol.com</p>

<p>Mr. Chuck Adams Bayside Improvement Community Development District 985 Pelican Marsh Boulevard Naples, Florida 34108</p> <p>Phone: (941) 592-5181 Fax: (941) 592-9021 e-mail: <i>cadams5702@aol.com</i></p>	<p>Mr. David Lindsay East County Water Control District 601 East County Lane Lehigh Acres, FL 33936</p> <p>Phone: (941) 368-0044 Fax: (941) 368-3412 e-mail: <i>ecwcd@aol.com</i></p>	<p>Mr. Chuck Adams The Brooks Community Development District 985 Pelican Marsh Boulevard Naples, Florida 34108</p> <p>Phone: (941) 592-5181 Fax: (941) 592-9021 e-mail: <i>cadams5702@aol.com</i></p>
<p>Mr. Chuck Adams Bay Creek Community Development District 985 Pelican Marsh Boulevard Naples, Florida 34108</p> <p>Phone: (941) 592-5181 Fax: (941) 592-9021 e-mail: <i>cadams5702@aol.com</i></p>	<p>Mr. Mike Morris San Carlos Estates Drainage District 2216 Altamont Avenue Fort Myers, FL 33901</p> <p>Phone: (941)337-3993 Fax: (941)337-3994 e-mail: <i>mmorris@m-da.com</i></p>	<p>Mr. Allan Freeman East Mulloch Water Control District 19091 Tamiami Trail, S.E. Fort Myers, FL 33908</p> <p>Phone: (941) 267-7472 Fax: (941) 267-7622 e-mail: <i>freegroup@aol.com</i></p>

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Annual Report

Section 2 - Storm Water Management Program (SWMP) Evaluation

2.1 Objective of NPDES Program

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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Annual Report

Section 2 - Storm Water Management Program (SWMP) Evaluation 2.2 Major Findings

There are nine primary elements within the Storm Water Management Program. Each element contains numerous activities. During year four 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 and hazardous waste management, which are all related to NPDES permit activities. Combining their activities with the NPDES program efforts achieves substantial compliance with the permit conditions containing inspection, maintenance, enforcement, education and monitoring.

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Annual Report

Section 2 - Storm Water Management Program (SWMP) Evaluation

2.3 Major Accomplishments

Once again, increased pollution prevention awareness can be considered one of the major accomplishments since implementing Year Four of the NPDES permit. 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. On November 22, 2000, representatives from Lee County, East County Water Control District, City of Cape Coral, City of Fort Myers, City of Sanibel and South Florida Water Management District successfully completed both course work and examination for certification as Stormwater Inspectors under the "Florida Stormwater, Erosion, and Sedimentation Control Inspector Training and Certification Program". During the permit year, the municipal staff performed their duties using the "Stormwater Inspector" training as a guide for their decisions related to erosion and sedimentation. This education and experience has produced an awareness and a project by project improvement in performance. A brochure encouraging protection of waterways was 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 direct contact for illicit discharge reporting and direct access to forms and regulations.

The second major accomplishment was continuing 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.

As this was the fourth year of the permit, there were a number of County processes which were either initiated or modified to conform to the permit. 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 inspections and enforcement have brought the necessity of erosion and sedimentation controls to the attention of local contractors. NPDES field staff and LDOT inspectors received Stormwater Management Inspector training to better prepare them for field evaluations and inspections. Lee County continues to issue citations for NPDES/water quality and permit violations. 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 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. As many areas of the County are under new construction, new water quality structures are being completed. Large projects (greater than five acres) fall under the direct regulatory and permitting control of SFWMD. For smaller projects (less than five acres) the LDC requires a storm water pollution prevention plan to be prepared and approved. Violations of state water quality standards are referred to either SFWMD or FDEP for further enforcement. 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 to the FDEP for a Construction MSGP. For developments between 1 and 5 acres, a Storm Water Pollution Prevention Plan must be written and submitted to Lee County.

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 waterbodies and segments. This will allow Lee County to place more emphasis on specific watersheds to achieve water quality goals.

Perhaps the greatest accomplishment is the team effort Lee County continues to demonstrate toward the NPDES program. Not only does this program cross departmental boundaries to create a unified work effort, it 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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Annual Report

Section 2 - Storm Water Management Program (SWMP) Evaluation

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 our program and is receptive to our citizens' comments. This is accomplished through citizens' comments during the budgeting process and to the Board of County Commissioners, the Request for Action (RFA) hotline or complaints received and recording the number of citizens that have accessed the Lee County NPDES Program Web page (<http://leegov.com/npdes>).

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 local funds to combine with grant moneys provides greater value than either could alone. This is being 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 WRDA authorization). A recent cooperative working group (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 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 is to contract with DHI (November, 2000) to use the SFWMD surfacewater flow model in

determining water quality from the water quality modeling component.

Staff members within the County's NPDES Storm Water Management Program receive 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).

The County has provided necessary storm water management for years as flood protection. Activity documentation was limited to that required for budget purposes. Lee County has implemented both a work order system and Request for Action (RFA) Hot Line. These are used to schedule work, track work related activities as well as record and track illicit discharge complaints. The RFA Hot Line data provides tracking of both written and pictorial evidence of illicit discharges.

The Lee County GIS system used 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 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 funding resources and activity documentation. 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 GIS and in database links is equal to the amount of time spent performing field tasks.

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Annual Report

Section 2 - Storm Water Management Program (SWMP) Evaluation 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 become a precious resource to be conserved and preserved for both current and future uses. Activities which 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 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 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 key factor in assuring the future

success of the SWMP. The County has developed an educational program for developers, contractors, the industrial community and general public in an effort to reduce the load of potential pollutants sources to federal waters. Brochures regarding illicit discharges 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 which will help to meet the requirements of MS4 permit documentation. This is being accomplished by creating numerous databases and links to the GIS. The MS4 is being defined, including physical dimensions, location of structures, size of structures, maintenance records, inspection records, monitoring data, etc. Field screening, industrial site, and high risk facility data are being entered into a database and gradually linking with the GIS. Currently, the field screening sites have been linked using ArcView to a temporary 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 multiple departments. The dry weather screening data is being linked as it is collected. 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 for large areas of the County. It will also allow more accurate data and information 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 combined to generate 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 or 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.

(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, including 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 has 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 modeling information will be used to obtain the pollutant loading for South Lee County as required in Part V.5.b.3 of the permit. The remainder of the County will be completed as part of the Southwest Florida Feasibility Study and this will allow the pollutant loading to be calculated for that area. This may be cause for Lee County requesting a Permit Modification to achieve compliance dates. The Permit specifies the pollutant loading is to be determined during the Year Four of the Permit and reported in the subsequent Annual Report. The information generated through the MIKE-11 model includes both the ground and surfacewater components and provides a better estimation than models using strictly surface based flow and runoff estimates. The Model was received by Lee County in early 2002. It provides a good evaluation of the study area and has been useful in developing site-specific loading rates for specific projects. However, the local EPA office has not accepted the use of the model or its results for project specific issues and continues to use basic spreadsheet models and written studies from other areas to guide water quality their water quality policy in the area.



LEE COUNTY

Annual Report

Section 3 - Summary Tables 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		
Structural Controls	channel control structures	inspect & maintain 14 structures annually	yes	inspected and cleaned	copies of maintenance records available upon request
	canals	inspect & maintain 120 miles	yes	inspected, cleaned & mowed	copies of maintenance records available upon request
	wet detention areas	inspect & maintain 10 structures	yes	inspected, cleaned & mowed	copies of maintenance records available upon request
	dry detention areas	inspect & maintain 5 structures	yes	inspected and cleaned	copies of maintenance records available upon request
	erosion control	annual maintenance & repair	yes	385,200 linear feet of repairs	copies of maintenance records available upon request
Roadway Maintenance	road side cleaning	annual maintenance & repair	yes	307,500 linear feet cleaned	copies of maintenance records available upon request
	inlet cleaning	annual maintenance & repair	yes	359 Units cleaned	copies of maintenance records available upon request
	culvert cleaning	annual maintenance & repair	yes	28,660 linear feet cleaned	copies of maintenance records available upon request
	contracted application	certification required	yes	as needed	Copies of certificates available upon request
	county employees	certification required	yes	as needed	Copies of certificates available upon request
Illicit Discharges and Connections	dry weather screening	20% of outfalls screened annually	yes	20% of County	copies of records available upon request
	RFA investigations	complaint driven	yes	35 Investigations	copies of records available upon request
	oil/haz-waste collection	collection points county wide	yes	6 Collections	copies of records available upon request
	enforcement	as required	yes	15 verbal Warnings & 6 written warnings	copies of records available upon request
	inspections	ongoing	yes	as needed	copies of records available upon request
Industrial Facilities	enforcement	as required	yes	none	copies of records available upon request
	inspections	active sites	yes	over 110 site inspections	copies of records available upon request
Construction Site Inspections	enforcement	as required	yes	18 written Warnings & 2 fines	copies of records available upon request
	surface water monitoring	county wide	yes	over 30 watersheds	copies of data available upon request



LEE COUNTY

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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 performs inspections and maintenance on structures on a complaint basis from sources both internal and external to the County.

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 maintains 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 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.

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 system. 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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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.

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 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 alleviate 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 Florida DEP 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 and are issuing warnings and 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. Road-side 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. Road-side 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 completed by Lee County during Year 4 of the permit..

Road Side Ditch Cleaning by Machine -	9,800 Linear Feet
Culvert Pipe Cleaning -	745 Linear Feet
New Culvert Pipe Installation and/or Replacement -	144 Linear Feet
Catch Basin and Pipe Repair -	5 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. to 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 4, the program recorded 135 groups with 2,119 volunteers logging 3,305.65 manhours on 68.84 miles of road as having collected 2,815 bags of trash in 136 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 4, 13 areas throughout the county were cleaned by about 959 volunteers, collecting 99,000 pounds of litter.

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 465 volunteers, resulting in 6,656 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 22 cleanups covering 21 miles of beach, with 14 groups totaling 254 volunteers collecting 3,666 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 475 volunteers collected over 15,000 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 22 schools and 3875 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 workorders logging the individual crews daily activity. The following table provides a summary of the reported quantities:

Erosion and Road Shoulder Repair	385,200 Linear Feet
Road Side Ditch Cleaning by Machine	301,500 Linear Feet
Catch Basin, Inlet Cleaning by Mach.	359 Each
Culvert Pipe Cleaning	28,660 Linear Feet
Catch Basin, Inlet Cleaning by Hand	223 Each
Mitered Ends New	none reported
Mitered Ends Replacements	none reported
Culvert Pipe, Miter Installation New	4,221 Linear Feet
Basin/Inlet New Construction and/or Reconstruction	25 Each
Pipe and Basin Repair	172 Each
Clean Pipe Ends by Hand	223 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.

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. Lee 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.

- **Ten Mile Canal – Linear Filter Marsh:** The conceptual design for a linear filter marsh is underway. The marsh will be approximately 3800 linear or a total of 10 acres once complete. The SFWMD has committed to cosponsoring this project. Contributions from other stake holders in public and private sectors are being solicited as well. Construction of this project is targeted to begin in 2003.
- **Fiddlesticks Canal - Alico Road Improvements:** provide adequate outfall for flood protection of important evacuation route. Schedule: Construction start, delayed due to permitting issues.
- **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 retention for flood control and water quality benefits. This project was completed in 2001.
- **Gator Slough – Channel Improvements:** Extend channel from US 41 to the old rail road grade. Possible use of recently acquired property to the northeast for storage recharge pending environmental reviews. Phase I complete, Phase II under design and land acquisition started. Construction start is pending permit approval and is tentatively set to start in 2003.
- **Halfway Creek – Reconnect:** Remove berm to restore natural sheet flow-way conveyance of stormwater. Part of overall plan to recreate historic basin boundaries in the Imperial River, Estero River and Halfway Creek watersheds. This is funded by a State grant and managed by County personnel. Schedule: design is complete, construction is pending permit approval by the SFWMD.
- **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. Expected project completion is 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.
- **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 conceptual 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.
- **Lakes Park-Flow way Improvement:** The County is currently negotiating a design agreement (DA) with the US Army Corps of Engineers for the design of a marsh flow-way to

enhance the treatment of storm water runoff from approximately 1800 acres of an intensely developed area in South Fort Myers. This project also is at the head waters of Hendry Creek an Outstanding Florida Water (OFW) body. Construction is pending the completion of design and permitting of the design.

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 workorders 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 @ 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

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 the United States Environmental Protection Agency (USEPA.) and Lee County Department of Environmental Services. The permit and testing documents are located in the Lee County Solid Waste Division's files, IIIA209.

The Lee/Hendry County landfill was completed but never opened and does not receive waste. Lee County will apply for an operating permit before the Gulf Coast Landfill is closed and the Lee/Hendry landfill is needed for disposal capacity.

The Lee/Hendry 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, IIE110.

The Household Hazardous Waste Collection Facility is covered under the Lee County Port Authority's NPDES permit for Page Field, #FLR05A516.

During Year 3 of the permit period, Solid Waste stopped processing yard waste at the Lee County Landfill. Yard waste is currently being processed by the City of Fort Myers Yard Waste Recycling Facility.

The Lee County Materials Recycling Facility processes household recyclables for shipment to remanufacturers. All processing and storage is indoors or under cover, so there is no direct contact between storm water and recyclables.

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 Statute 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:

First Name	Last Name	Certification/license or Training	License Number
Sheryle	Dell	Ornamental and Turf Right-Of-Way Control	005873
Thomas	Goerner	Restricted Use Pesticides - Aquatic Applications	006769
Thomas	Goerner	Restricted Use Pesticides - Forest Applications	006769
Thomas	Goerner	Restricted Use Pesticides - Rights-of-Way	006769
Thomas	Goerner	Pesticide Worker Safety - Safety Trainers Course	N/A

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 as well as the Town

of Fort Myers Beach.

A class concerning the CORE Exam as part of obtaining a pesticide license was held August 8, 2002 with testing the first Thursday of each month, 9:00 a.m.-12 noon:

**GENERAL CERTIFICATION STANDARDS (CORE)
EXAM PREPARATION**

Wednesday, August 8, 2001
Lee County Extension Service
3406 Palm Beach Blvd.
Ft. Myers, Florida

The General Standards, otherwise known as the CORE exam, is a co-requirement for those intending to obtain one or more of the following pesticide license; Ornamental & Turf, Aquatic, Right-of-Way, Agricultural Row Crop, Agricultural Tree Crop, and Forest Pest Control.

August 8: Training:
1:30 p.m. Registration
2:00 p.m. Pesticide Laws and Regulations, Personal Protective Equipment and Handling Decisions, Environmental Considerations
2:30 p.m. Harmful Effects
3:30 p.m. Break
3:40 p.m. The Pesticide Label, Transportation, Storage & Spill Clean-up
4:05 p.m. Break
4:15 p.m. Mixing, Loading, & Application, Formulations, Applying the Correct Amount
4:50 p.m. Adjourn

September 6: Testing:
9:00 a.m. - 12: 00 p.m. All Exams

CEUs: 2 CORE CEUs have been approved to count toward recertification of your Limited Landscape Maintenance, Limited L & O, O & T, Right-of-Way and other pesticide licenses.

Cost: The cost for either class is \$8.00. 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.-12 noon at the Lee County Extension Service, 3406 Palm Beach Blvd., Fort Myers.

R.S.V.P.: To R.S.V.P., call Letha at (941) 461-7514, or simply fax names to (941) 461-7501 by Monday, August 6.

Stephen H. Brown, Lee County Horticulture Agent

A class was given on August 20, 2001, for those making pesticide applications on golf courses, in parks, cemeteries, and for nursery operations. The exam was given on September 6, 2001.

ORNAMENTAL & TURF EXAM PREPARATION

Monday, August 20, 2001
Lee County Extension Service
3406 Palm Beach Blvd.
Ft. Myers, Florida

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

August 20: 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

September 6: Testing:
 9:00 a.m. - 12: 00 p.m. All Exams

CEUs: 2 CEUs have been approved to count toward recertification of the following licenses; Private Applicator, Demo/Research, O & T, Right-of-Way, Commercial L & O, Limited L & O, Limited Landscape Maintenance.

Cost: The cost for either class is \$8.00. 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.-12 noon at the Lee County Extension Service, 3406 Palm Beach Blvd., Fort Myers. (941) 461-7514.

R.S.V.P.: To R.S.V.P., call Letha at (941) 461-7514, or simply fax names to (941) 461-7501 by Monday, August 6.

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.

Letha Giacinti
Lee County Extension Service

Courses related to liscense recertification:

RIGHT-OF-WAY EXAM PREPARATION

Friday, August 10, 2001

Lee County Extension Service
3406 Palm Beach Blvd.
Ft. Myers

August 10: Training:
 1:30 p.m. Registration
 2:00 p.m. Types of Vegetation
 2:30 p.m. Types of Herbicides
 2:50 p.m. Break
 3:00 p.m. Application & Drift Control
 3:30 p.m. Label Interpretation
 3:50 p.m. Adjourn

September 6: Testing:
 9:00 a.m. - 12: 00 p.m. All Exams

CEUs: 2 CEUs have been approved to count toward recertification of the following licenses; Private Applicator, Demo/Research, Forestry, O & T, Right-of-Way, Commercial L & O, Limited L & O, Limited Landscape Maintenance.

Cost: The cost for either class is \$8.00. 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.-12 noon at the Lee County Extension Service, 3406 Palm Beach Blvd., Fort Myers. (941) 461-7514.

R.S.V.P.: To R.S.V.P., call Letha at (941) 461-7514, or simply fax names to (941) 461-7501 by Monday, August 6.

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.

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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
Lee County Extension Service

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 Illicits 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 refined to maximize the effectiveness in addressing these concerns. Lee County DOT staff responsible for maintaining the MS4 have 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 thirty-seven illicit RFAs were investigated. Fifteen verbal and six written warnings were issued by NPDES Program staff. Four cases were referred to the SFWMD and two cases were referred to the FDEP.

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 three effort to detect illicit connections and discharges to the MS4, the Natural Resources Division NPDES program identified and localized 227 outfalls. Table A.2.1 summarizes 00/01 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 00/01 field screening requirement the geographical areas of T46 and T47 were chosen due to the significant amount development that has occurred in that area over the past few years. Areas of new development close to environmentally sensitive surface waters such as Estero Bay were prioritized during Year Four.

The area was reviewed through the use of aerial photographs, maps and land-based site assessment. All open canals in this area were visually inspected (when accessible) in order to update the current list of outfalls and to identify illicit connections into the MS4. Of the 227 outfalls screened, 32 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 four.

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.

More than an estimated 80% of the County's geographical area has been dry weather screened during the first four 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.

Description of the implemented Dry Weather Field Screening program 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 Four screened area was in the Estero Bay Watershed 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.

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.

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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's Hazardous Materials Plan (Haz Mat Plan) provides the procedures for response to contaminants and hazardous materials spills. A copy of the Haz Mat Plan is located in the NPDES files. The Lee County Fire Districts are designated as the first response mechanism for hazardous material spill incidents involving leaks, explosion, injury or the potential of immediate threat to life, the environment or property. The various Fire Districts maintain training suited to handle and contain some contaminants and other minor hazardous material spills. The Districts are required to document every spill/leak incident to which they respond. A summary of incidents is provided in Appendix A.4.

If the incident exceeds the capability of the responding district, the incident commander makes a decision to call in additional resources. In the event of a serious hazardous materials spill, the Hazardous Materials Response Team is activated. The Fort Myers Fire Department constitute the Hazardous Materials Response Level A Team (HMRT), operational since March 1995. The Fort Myers Fire District HMRT serves both incorporated and unincorporated Lee County under contractual agreement with Lee County and other municipalities. The specialized training and equipment allow the team to identify, monitor, contain and stabilize a spill or leak, including personnel and equipment decontamination after the conclusion of the incident. The Lee County Board of County Commissioners also plays a role in the funding and providing training and equipment grants. The HMRT can also be activated through the local emergency number "911".



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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. During Year 3, Solid Waste 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 taken to terminate same.

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. 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 E-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:

LEE COUNTY: AREA CODE (941)	
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	332-6966
GAME AND FRESH WATER FISH COMMISSION	(800)282-8002
ENVIRONMENTAL PROTECTION AGENCY	(800)535-0202
HEALTH DEPARTMENT	332-9501
SOLID WASTE/ENVIRONMENTAL CRIMES	338-3106
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 3, 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).

The cost of providing time and location information on used motor oil, lead acid batteries and household hazardous waste collections to the public in Year 4 through the 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 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 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



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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 leakage.

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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 need submit an NOI to the FDEP for MSGP coverage (if they haven't done so already) and to develop and implement a SWP3.

The existing MSGP coverage timeline is from Oct. 30, 2000 through 2005. High Risk Industrial Facilities, which have already been identified and informed of their EPA/FDEP requirements and that, are required to conduct analytical monitoring, will be re-inspected. High Risk Industrial Facilities of MSGP Sectors; A, B, D, E, F, G, H, J, K, L, M N, O, Q, S, U, Y & AA will be targeted to determine whether or not they are complying with their permit requirements for analytical monitoring. This analytical data will be scrutinized by the County to determine if the parameters being analyzed are breaching benchmark values set forth by the EPA/FDEP. Facilities with average pollutant concentrations exceeding the benchmark values will be noticed of their need to review and revise their SWP3 and to continue analytical monitoring of their discharges on a quarterly basis during the fourth year of permit year. Facilities not meeting these requirements will be issued a written notice and referred to the FDEP for further enforcement.

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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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 Code (LDC) on June 23, 1998. The amended code requires proper filing of the Federal NOI for sites under construction 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.



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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 a NOI with EPA and Lee County along with a SWP3 certification of preparation. The SWP3 is to be maintained on-site during construction activity for review and inspection by Lee County, EPA or the State of Florida.

A construction site inspection database has been developed to maintain a record of inspection and enforcement activities. Lee County NPDES field staff have completed Code Enforcement Officer training and now have the capability of issuing warnings and citations for practices which may represent a violation of the recently approved LDC 14-71 (Clean Water Act Provisions).

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4.16 Education Activities

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". The classes were taught through 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 class-room facilities. Lee County is presently planning similar training sessions for the current permit year.

During the past permit year Lee County in cooperation with the City of Fort Myers presented class room 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.

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). LCNRCS programs 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. Solid Waste 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, Solid Waste 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.

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.

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 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 same 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 has at least one station monitored monthly, with some of the major tributaries having more than one sample 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 4 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 is working with the Charlotte Harbor National Estuary Program to establish and operate an ambient air monitoring stations to evaluate the atmospheric deposition in and near Estero Bay with grant funding from EPA.

The location of the station is being 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 being 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 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 is hereby requesting 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.

CONSERVE 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.
- 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 over **7,400 acres** at a cost of over **\$45,600,000.00** 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, 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 to:

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 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 a 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 land owners to receive financial incentives to enhance wetlands in exchange for retiring marginal agricultural land. Land owners who choose to participate in WRP may sell a conservation easement or enter in to 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 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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Section 5 - Monitoring Program Report

5.1 Monitoring Objectives

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 monitored surface water quality at 72 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 information is being entered into STORET and will be available to anyone with access to that database. There have been difficulties in electronically entering data into STORET from the laboratory LIMS system as the SIM program has not been released and manual input of data has been limited to station information.

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Annual Report

Section 5 - Monitoring Program Report **5.2 Status of Program/Schedule Compliance**

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. It was conceived eight years prior to the permit and the modeling and trend analyses started in November 2000 which will use 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 will 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 a ten year period of record at over seventy sites provides well over 100,000 records for unincorporated Lee County.

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LEE COUNTY

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Section 5 - Monitoring Program Report 5.3 Program Revisions

At this juncture, there are no modifications or changes planned to the Lee County Monitoring Plan with the exception of the addition of Arsenic to the metals being tested. This has been added and is currently being performed.

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Section 5 - Monitoring Program Report 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, it is planned to establish a Theme on the GIS to include all of the known outfalls. 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 five year 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 four 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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LEE COUNTY

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Section 6 - Permit Modifications

6.1 SWMP Modifications

The County is formally requesting that the 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 is described below.

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 being 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 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 is hereby requesting 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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LEE COUNTY

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Section 6 - Permit Modifications

6.2 Monitoring Program Modifications

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Arsenic has been added to the suite of analyses, collection of flow/stage data began during the summer rainy season. However, the typical summer rains did not manifest and attempts to collect flow and stage data were not as successful as hoped.

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Annual Report

Section 6 - Permit Modifications

6.3 Other Permit Modifications

Modifications were requested in the prior Annual Reports to more accurately reflect the responsibilities of Lee County and co-permittees. This appropriately relates to the special districts. They were created to provide a funding mechanism (taxing district) for the activities associated with storm water and drainage. Funds are collected and used by districts to provide storm water related activities within each district. There is no transfer of funds to Lee County to perform these tasks. Discussions with EPA permit writing staff have led Lee County to the understanding that these modifications are drafted and waiting EPA internal comment. At the date of this Annual Report, requested modifications to the Permit have not been received.

*For CDDs that are within the unincorporated boundaries of the County the County does provide monitoring, construction inspection and enforcement services. The maintenance, repair and retrofitting of the drainage systems (within those CDDs) are the responsibility of the respective CDDs.

Other permit modifications were submitted in prior annual reports. In the year one a request was made to add The Brooks Community Development District to the list of co-permittees and in years two and three requests were made to add the City of Bonita Springs. All documentation requested by the FDEP for that purpose has already been submitted.

Lee County has requested water quality be included in the Mike-SHE modeling effort being conducted by the DHI, Inc. for SFWMD. Lee County and DHI, Inc. entered into a contract in November 2000 to develop a water quality model component (MIKE-11) for use with the district's MIKE-SHE flow model. The South Lee County water quality component was completed in 2001. The water quality modeling information will be used to obtain the pollutant loading for South Lee County as required in Part V.5.b.3 of the Permit. The remainder of the County will be completed with the South West Florida model in the "mini-Restudy" and this will allow the pollutant loading to be calculated for that area. The information generated through the

MIKE-11 model includes both the ground and surfacewater components and provides a better estimation than models using strictly surface based flow and runoff estimates. The loading determinations will not be completed for the entire County as specified in Part V.5.b.3 of the Permit during Year Four of the Permit using the MIKE-11 model. Lee County requested that this Permit task be linked to the future MIKE-SHE flow modeling work of SFWMD and the accompanying MIKE-11 water quality module (funded by Lee County). The SFWMD MIKE-SHE Model is slated for completion (County-wide coverage) mid-2001 and the water quality component could be finished by the end of Year 5 of the Permit.

Therefore, Lee County requested that the loading calculation requirement as specified in Part V.5.b.3 of the Permit be reported in the Year 5 Annual Report instead of the Year 4 Annual Report.

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Annual Report

Section 8 - Permit Renewal

8.1 Statement of Intent

NPDES Permit Renewal Application
MS4 permit # FLS000035

(1) *Required information for a re-applications*

(a) Name and mailing address of permittee

Lee County
Board of County Commissioners
P.O. Box 398
Ft. Myers, Fl 33902

(b) Names and titles of co-permittee's:

Please reference the list and titles of co-permittee's presented in the Year Four Annual Report (preceeding this document).

(c) Identification number of existing MS4 permit

NPDES MS4 Permit # FLS000035

(d) Retrofitting the existing MS4 to reduce the pollutants set forth in local SWMP

A list of the water quality retrofitting watersheds along with a projected construction schedule:

- **Ten Mile Canal - Linear Filter Marsh:** The conceptual design for a linear filter marsh is underway. The marsh will be approximately 3800 linear or a total of 10 acres once complete. The SFWMD has committed to cosponsoring this project. Contributions from other stake holders in public and private sectors are being solicited as well. Construction of this project is targeted to begin in 2003.
- **Fiddlesticks Canal - Alico Road Improvements:** provide adequate outfall for flood protection of important evacuation route. Schedule: Construction start, delayed due to permitting issues.
- **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 retention for flood control and water quality benefits. This project was completed in 2001.
- **Gator Slough - Channel Improvements:** Extend channel from US 41 to the old rail road grade. Possible use of recently acquired property to the northeast for storage recharge pending environmental reviews. Phase I complete, Phase II under design and land acquisition started. Construction start is pending permit approval and is tentatively set to start in 2003.
- **Halfway Creek - Reconnect:** Remove berm to restore natural sheet flow-way conveyance of stormwater. Part of overall plan to recreate historic basin boundaries in the Imperial River, Estero River and Halfway Creek watersheds. This is funded by a State grant and managed by County personnel. Schedule: design is complete, construction is pending permit approval by the SFWMD.
- **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. Expected project completion is 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.

- **Spanish Creek - Hydrolic 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 conceptual design includes diverting flows from a constructed channel through a cypress strand wetland area, for pollutant treatment/aquifer recharge, and then draining to the historical creek bed (presently dry). This project is tentatively due to start in 2004.
- **Lakes Park-Flow way Improvement:** The County is currently negotiating a design agreement (DA) with the US Army Corps of Engineers for the design of a marsh flow-way to enhance the treatment of storm water runoff from approximately 1800 acres of an intensely developed area in South Fort Myers. This project also is at the head waters of Hendry Creek an Outstanding Florida Water (OFW) body. Construction is pending the completion of design and permitting of the design.

(e) Identification of any previously unidentified water bodies that receive discharges from the MS4;

There are **no previously unidentified water bodies** receiving discharges from the MS4.

(f) A summary of any known water quality impacts on the newly identified receiving waters from the MS4 discharge;

None.

(g) Pollutant Loading Estimates.

Lee County submitted a request to the FDEP "that the loading calculation requirement as specified in part V.5.b.3 of the Permit be reported in the Year 5 Annual Report." This request was has been granted by the FDEP (reference FDEP correspondence dated 11/30/01 and signed by the Administrator of the NPDES Storm Water Section of the FDEP).

(2) Storm Water Management Program components of the previously permitted SWMP that are found to be effective shall be continued and made an ongoing part of the proposed SWMP.

(a) Public Education Programs

- Continue to coordinate workshops with the Edison Community College to provide training (for developers, contractors, engineer's etc) on state and federal NPDES requirements for construction activities and how to achieve compliance with those requirements.
- Continue to host classes for county and municipal employees as well as for the private sector on the *Florida Storm water, Erosion and Sedimentation Control Inspector Training and Certification Program*.
- Continue the Lee County Natural Resources Conservation Service program to inform the general public on ecosystem conservation and resource management. This is accomplished with monitoring, research and education. Program Mission goals are to reduce erosion, improve soil and water quality, improve and conserve wetlands,
- Continue the public education efforts by the Lee County Solid Waste Division to inform the public about proper disposal of used oil and haz-waste. This will continue to be accomplished by circulating flyers and brochures as well as with newspaper and radio advertisement.
- Continue to sponsor and co-ordinate with the Lee County Extension Service efforts to promote education programs such as:
 - Proper and safe use of pesticides and fertilizers
 - Energy and water management in gardening and landscaping
 - Recycling of yard waste
 - Natural resources conservation
 - Pesticide/herbicide certification
- Continue the P2/SQG Program throughout the county to educate commercial and industrial facilities on how to properly manage their waste stream.
- Continue to make information on NPDES, pollution prevention and other pertinent environmental information available on the Lee County web page.

(b) Continue programs to reduce erosion and sediment from construction activities

- Continue to require in the Lee Land Development Code that new developments and significant re-developments properly file an NPDES NOI with the FDEP and the US EPA.
- Continue to require all new developments to have a South Florida Water Management District (SFWMD) permit prior to issuance of a Lee County Development Order.
- Continue to train Lee County staff, responsible for inspecting active construction, in the Florida Stormwater Erosion, and Sediment Control Inspector Training and Certification Program as well as in the Lee County Code Enforcement Officer Training.
- Continue the inspection program of active construction sites within the unincorporated areas of Lee County to assure compliance with the applicable state and federal NPDES regulations.
- Continue the established compliance and enforcement program to assure active construction sites are complying with the current NPDES regulations.

(c) Continue effective program to reduce pollution and other adverse ecological effects from storm water associated with new development and significant redevelopment

- Continue to require that new development and significant redevelopment projects, within unincorporated areas, submit plans to the County for review and approval before clearing, grading and building.
- Continue to require that new development and significant redevelopment projects, within unincorporated areas, have a SFWMD or FDEP permit (when applicable) before issuing a Lee County Development Order for clearing, grading and building.
- Continue to require in the Lee County Land Development Code that all new developments incorporate storm water BMPs that treat pollutants in storm water, slow the flow of run-off and recharge the ground water.
- Continue to require in the Lee County Land Development Code that new development projects, which are of the applicable size (as stated in the federal and state regulations), submit a NOI to the FDEP and the US EPA. Amend that requirement to comply with the most current federal and state NPDES non-point source regulations.
- Continue the inspection, compliance and enforcement program of active development sites to assure compliance with the federal and state NPDES non-point source regulations.

(d) Retrofitting the existing MS4 permit to reduce pollutants as set forth in the county SWMP

- Continue to work with the EPA, US ACOE, and the SFWMD in developing various water models for the County to provide an evaluation of surface water management strategies including surface water master planning, flood management and water quality.
- Proceed with planned projects such as; Hendry Creek-Lakes Park Marsh Flow-way, Ten Mile Canal-linear Filter Marsh, Fiddle Sticks Canal-Alico Road Improvements, Gator Slough-Channel Improvements, Halfway Creek-Reconnect, Spanish Creek-Hydrological Restoration, that will improve water quality and drainage.

(e) Continue effective inspections and maintenance of storm water management system

- Continue to inspect and maintain the current inventory of fourteen (14) channel control structures, one-hundred & twenty (120) miles of canals, ten (10) wet detention areas and five (5) dry detention areas. Continue to update this inventory and to properly inspect and maintain the updated inventory.
- Continue to properly inspect and maintain roadside drainage systems. Continue to clean, clear and repair the roadside ditches, culverts, catch basin/inlets as needed. Continue road shoulder/erosion repair as needed.
- Continue to require that staff and contractors responsible for the control of exotic/nuisance vegetation have current state certification for the application of pesticides and herbicides.
- Continue to co-sponsor and to co-ordinate efforts with the SFWMD to remove debris and exotic vegetation from natural waterways.

- Continue to investigate and respond to citizen complaints of poor drainage and illegal dumping or of illicit connections.
- Continue to actively sponsor and promote public participation and awareness of litter control with programs such as Adopt a Shore and Keep Lee County Beautiful.

(f) Continue the co-ordination and participation with co-permittees, the Department, Water Management Districts, or other groups in monitoring the effects of storm water discharges or the effectiveness of storm water management programs.

- Continue the Lee County Water Monitoring Program designed to be a comprehensive evaluation of Lee County surface waters by watersheds.
- Continue to co-ordinate and co-sponsor hydrological/pollutant load modeling projects with SFWMD to determine the effectiveness of storm water management systems in areas of new developments. These modeling projects should also provide guidance for capital improvement projects for retrofitting existing drainage systems to better treat pollutants in storm water runoff.
- Continue efforts to better quantify flows from Lee County into state and federal waters.
- Continue to co-ordinate wet season monitoring with SFWMD in the Estero Bay watersheds to determine the impact of new development and to assess the effectiveness of the structural BMPs associated with these new developments.
- Continue involvement and support in the Charlotte Harbor National Estuary Program which provides funding for monitoring projects that have been designed to assess the chemical, biological, physical health and integrity of the estuary and its watersheds.

(g) Continue coordinating and participating with the Department, Water Management District, or other groups that are developing a watershed approach to reduce the adverse effects of storm water discharges;

- Continue coordinating projects with the SFWMD intended to assess the impact of new development areas on sensitive surface water bodies.
- Continue coordination and sponsorship of the Southwest Regional Watershed Council (SWRC) education efforts to inform the general public on the source and effect of non-point source pollution.
- Continue coordination and dissemination of information about SWRC to encourage participation from stakeholders from all sectors of the Southwest Florida Watershed community.
- Continue to coordinate monthly co-permittee meetings to share information on NPDES and other environmental topics.
- Continue participation and sponsorship in the CHNEP to promote public awareness and involvement in maintaining the health and integrity of the Greater Charlotte Harbor Estuary.

(h) Detecting and eliminating non-storm water discharges to the MS4

- Continue to respond to citizen complaints of illicit discharges and illegal dumping to the MS4.
- Continue the industrial and SQG inspection programs designed to inform industrial and commercial facilities on proper waste management and compliance with applicable environmental regulations.
- Continue training appropriate MS4 maintenance staff on recognizing and reporting non-storm water discharges to the MS4.
- Continue the construction activity inspection program designed to properly address non-storm water discharges from these sites.
- Continue the compliance and enforcement program designed to address illicit connections/discharges to the MS4. Conduct follow-ups on these cases until the problem is corrected.

(i) Continue inspecting high-risk industrial storm water discharges to the MS4 to assure that they have implemented pollution prevention plans that minimize the discharge of pollutants to the MS4

- Continue the industrial facilities inspection program (IFIP) established in the first year of the permit.
- Continue to inform, through the IFIP, operators of "high risk industrial facilities" of their NPDES non-point source regulatory requirements.
- Proceed with the IFIP to determine if "high risk industrial facilities" have submitted an NOI to the FDEP and have developed a SWP3 for their site as required.
- Proceed with the collection and review of analytical monitoring data from permitted "high risk industrial facilities" to determine if any of these facilities are breaching benchmark values for the constituents they are required to monitor. Assure that facilities breaching benchmark values modify their SWP3 to reduce the discharge of pollutants of concern and that they conduct analytical monitoring in the fourth year of their permit.
- Report those "high risk industrial facilities" that have not applied for a NPDES non-point source permit to the FDEP.
- Continue with the compliance and enforcement program to address non-storm water/illicit discharges from industrial and commercial facilities.

(3) *Evaluation of the accumulated annual report information (SWMP)*

SWMP Evaluation

Objectives:

The goal of the Lee County SWMP is to reduce pollutants, in storm water, discharging to state and federal waters to the maximum extent practical. This is to be achieved through cooperation with the USEPA, FDEP, SFWMD and co-permittees and the continued efforts of the SWMP already in place.

Major findings:

It became evident during the first years of implementing the County's SWMP that educating the public of NPDES and the regulatory requirements would be one of the most significant challenges of implementing the program. Most operators of construction sites and of industrial facilities had little or no knowledge of the NPDES storm water regulatory requirements that govern their respective activities. Early on the County focused a large part of the SWMP efforts on disseminating information to the public on these regulatory requirements and will continue those efforts in the foreseeable future. This will be accomplished by trained staff interacting with construction site and industrial facilities operators on a daily basis. Additionally, the County will continue its proactive educational classroom settings/work shops designed to train in-house staff, other local government staff as well as the private sector to increase awareness of NPDES regulations. These efforts will continue to improve the manner in which these types of activity are conducted within the county. It has become obvious that the more information these operators have about their NPDES requirements the better they operate in an environmentally sound manner and minimize the pollutant runoff from these areas.

The cooperation of the co-permittees has been very good. It is the typical relationship that makes the Lee County program effective.

Major Accomplishments:

During the first permit term, the County has successfully established and implemented a SWMP that is effective in reducing pollutants being discharging to state and federal waters. This is being accomplished by the implementation and continuation of an inspection, compliance and enforcement program to better manage construction and industrial activity in the County.

The Lee County education program is designed to:

- disseminate NPDES regulatory information to and educate the public sector involved in the activities of concern,
- provide information to and educate of the general public on illicit discharges and their impact,
- facilitate public reporting of illicit discharges to the MS4,
- investigate and proceed with enforcement of illicit discharges verified and
- continue to train in-house staff to recognize and report illicit discharges.

The County wrote and codified an ordinance to ensure compliance, with the state and federal NPDES non-point source regulations, within the County. The county codes require all new developments comply with the current FDEP and SFWMD storm water treatment requirements. The County established and coordinates monthly

co-permittee meetings to better coordinate activity, disseminate information and for problem resolution. The County has completed design and construction of drainage retrofit projects to existing drainage systems to improve pollutant removal and reduce flooding. Other projects that are in various stages of design and permitting will be completed in the future as funding allows. The County coordinates and co-sponsors projects with the SFWMD to restore natural stream channels and reduce flooding. The County's household hazardous waste collection program removes more than 4,000 lbs. of potential pollutants Countywide annually. The County's ambient water quality monitoring of over 32 watersheds provides a large data base on constituents of concern of both dry and wet seasonal flows county wide (discharging to state and federal waters). This database provides valuable data to assess current surface water conditions and will provide information for the future direction of the SWMP.

Overall Program Strengths and Weakness:

The strength of the program lies within the various elements of the SWMP implemented and that have been in progress throughout the first term of the permit. As structured and carried out, the County's SWMP is addressing and will continue to effectively address storm water pollutant runoff to state and federal waters. This is evidenced by the visible use of BMPs in construction activities, the amount of solid waste removed from the environment by County programs, such as the Household Hazardous Waste Collection program. Without the aforementioned programs, Lee County would have incurred a significant increase on pollutants in storm water runoff due to the tremendous increase in population and construction in the area.

A weakness of the program is the lack of a dedicated funding source for storm water related activities. Currently the program is supported from the County's general fund, competing with other General Fund activities. The anticipated additional NPDES requirements that will be induced by TMDL development could undoubtedly strain this current funding source and add additional challenges to this program. Another weakness of the program is staffing. The program has not been fully staffed since the beginning of the permit. As of the writing of this section, the program is fully staffed and looks forward to the challenge of permit compliance.

Future Direction of Program:

The County will continue the SWMP (as described in "Major Accomplishments" above) implemented during the first permit term. The County will continue cooperative efforts with the FDEP, US ACOE and the SFWMD to develop strategies for future major drainage improvement projects that will improve water quality and reduce flooding. Necessary changes to the SWMP will be made as best professional judgement and/or regulatory changes dictate.

(4) Evaluation of the Monitoring Program and proposed changes to make the program more appropriate and useful

Monitoring Program Evaluation

Ambient Water Quality Monitoring:

Lee County began an Ambient Monitoring Program in the early 1990's. It represents samples collected monthly for a host of variables and continues to be periodically updated. The first samples were collected in the Six Mile Cypress watershed. As additional watersheds were studied under the Lee County Surface Water Master Plan, new monitoring sites were added to provide supplemental coverage.

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 32 named watersheds within Lee County. Each of the watersheds has at least one station monitored monthly, with some of the major tributaries having more than one sample 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 4 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.

Data collected as part of the Lee County Ambient Monitoring Plan has not been uploaded into STORET, however at this writing, Lee County is using SIM to stream data into STORET. This will provide users access to Lee County data. The Lee County data has been provided to FDEP and EPA in an Access database format for their use in water quality modeling. Lee County also used the data in the calibration of a water quality model for South Lee County developed by the Danish Hydraulic Institute. The model allows for scenarios of land use modification, as well as BMP location and effectiveness assessment.

Atmospheric Deposition/Air Monitoring:

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

The location of the station is being 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 being swimming pool and water softener drains.
- The County’s Canal maintenance crew has been trained to report any such suspicions 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 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 is hereby requesting 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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LEE COUNTY

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Appendices

A.1 Analytical Monitoring Data

Monitoring data reported in first ANNUAL REPORT. Lee County actively continues with monitoring program. Latest monitoring data available upon request.

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LEE COUNTY

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Appendices

A.2 Illicit/Dry Weather Screening Data

A.2.1 Lee County Dry Weather Field Screening Summary

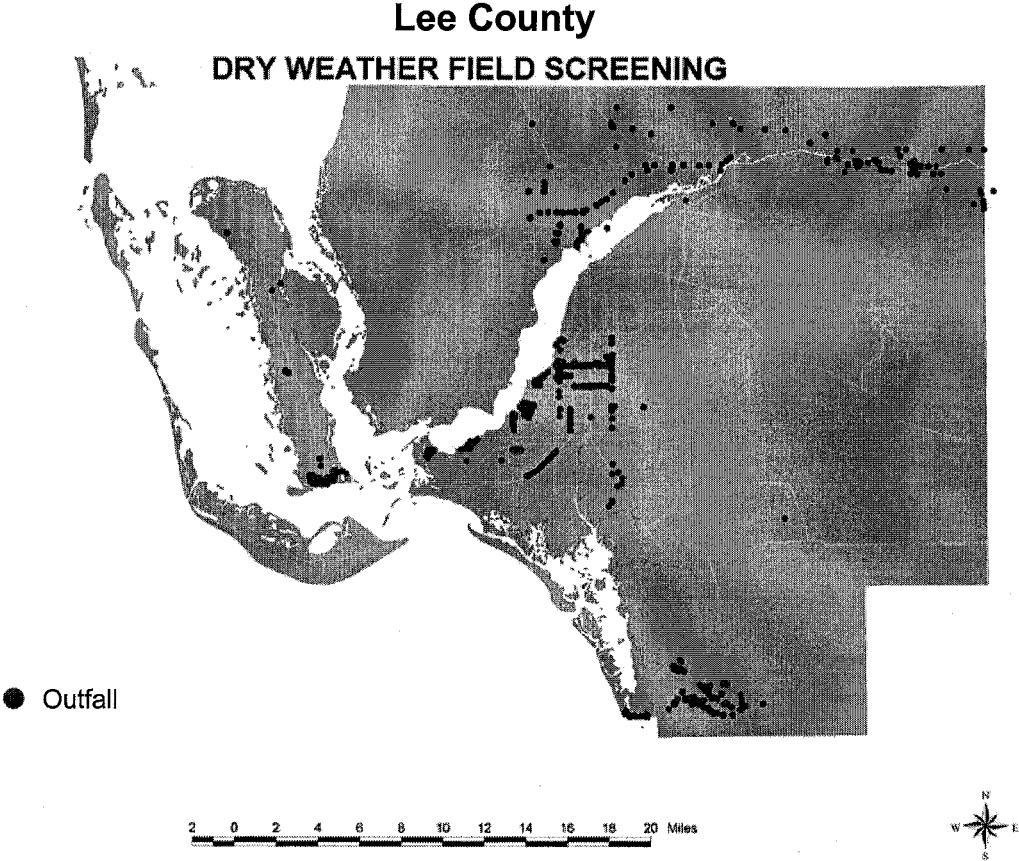
For the unincorporated Lee County Dry Weather Field Screening requirement more than 20% of outfalls were screened. The county is divided north to south by four townships T43, T44, T45, T46 & a small portion of T47 at its southern border.

Of the 227 outfalls screened, 32 had dry weather flows. These flows were detemind to be of ground water and/or from surficial impoundments.

Field Screening 4th Year Annual Report

TYPE OF OUTFALL	# OUTFALLS	# DRY FLOWS	ILLICIT CONNECTIONS
Canal	7	3	0
Creek	3	2	0
Culvert	86	20	0
Ditch	17	2	0
Grassed	5	0	0
Pipe	35	0	0
Swale	49	2	0
Weir	23	3	0
Other	2	0	1
TOTAL	227	32	1

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



A.2.2 Lee County Major Outfalls Discovered in Year 3

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 4 Major Outfalls Discovered

OUTFALL #	DATE	TYPE	LAND USE	RECEIVING WATERS
47215	5/23/01	swale	residential	ESTERO BAY
47219	5/23/01	swale	residential	ESTERO BAY
47224	5/30/01	swale	residential	MS4
47225	5/30/01	pipe	residential	ESTERO RIVER
47226	6/8/01	swale	residential	IMPERIAL RIVER
47227	6/8/01	culvert	residential	MS4
47228	6/8/01	swale	residential	IMPERIAL RIVER
47229	5/23/01	swale	agricultural	MS4
47257	5/15/01	grassed	residential	ESTERO RIVER
47271	5/23/01	swale	residential	ESTERO RIVER
47279	5/23/01	swale	residential	ESTERO RIVER
47282	5/23/01	culvert	residential	ESTERO RIVER
47283	5/22/01	swale	residential	ESTERO BAY
47285	5/22/01	swale	residential	ESTERO BAY
47286	5/22/01	swale	residential	ESTERO BAY
47287	5/22/01	swale	residential	ESTERO BAY
47288	5/22/01	swale	residential	ESTERO BAY
47290	5/22/01	swale	agricultural	ESTERO BAY
47292	5/22/01	culvert	residential	ESTERO BAY
47293	5/22/01	culvert	vacant	ESTERO RIVER
47295	5/11/01	creek	residential	ESTERO RIVER
47305	5/11/01	swale	residential	ESTERO RIVER
47306	5/11/01	swale	residential	ESTERO RIVER
47315	5/11/01	pipe	residential	ESTERO RIVER
47323	5/11/01	swale	residential	MS4
47333	5/11/01	swale	residential	ESTERO RIVER
47334	5/10/01	weir	residential	ESTERO RIVER
47336	5/10/01	culvert	residential	ESTERO RIVER

Total of New Major Outfalls

28



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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

This 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.

<p>BRING ALL OF YOUR:</p> <ul style="list-style-type: none"> • Drain Cleaners • Pesticides • Pool Chemicals • Polishes/Wax/Polers • Liquid Palm/Thinners • Fluorescent Tubes • Car/Bat Batteries • Auto Oil/Antifreeze <p>AND ANYTHING MARKED:</p> <ul style="list-style-type: none"> • Dangerous • Flammable • Toxic • Poison • Reactive • Corrosive <p>Printed No Entry Containers: Dispose of them with your household garbage.</p> <p>No Business Waste Accepted: Partially printed on 8 1/2" x 11" computer copier paper.</p>	<p>Hours For All Drop-Off Days: 8:00am - 2:00pm</p> <p>Jan 27, 2001 *Cape Coral, Public Works Annex</p> <p>March 24, 2001 To be Announced (TBA)</p> <p>May 19, 2001 Page Field, North Airport Road</p> <p>July 28, 2001 *Cape Coral, Public Works Annex</p> <p>Sept 22, 2001 Page Field, North Airport Road</p> <p>Nov (TBA), 2001 Page Field, North Airport Road</p> <p>* The Cape Coral drop-off will be held in the parking lot of the Cape Public Works Annex, just south of Everest on S.E. 16th Place.</p> <p>All drop-off days are subject to change and/or cancellations due to inclement weather.</p>	<p>Congratulations! Lee County's Recycling Program is Number 1 in Florida!</p> <p>Recyclable Not Recyclable </p> <p>GLASS</p> <ul style="list-style-type: none"> • Soda Bottles • Beer Bottles • Liquor & Wine Bottles • Jelly & Mayo Jars • Sauce Jars • Any other green, clear or brown glass jars or bottles <p>ALUMINUM</p> <ul style="list-style-type: none"> • Soda Cans • Aluminum Foil • Beer Cans • Foil <p>METAL</p> <ul style="list-style-type: none"> • Empty Aerosol Cans • Tuna • Fruit, Soup, Juice & Vegetable Cans • Pet Food Cans <p>PLASTIC</p> <ul style="list-style-type: none"> • Any Containers With # 1-7 on Bottom • Water Bottles • Milk Jugs • Detergent Bottles • Soda Bottles • Shampoo Bottles • Butter/Whipped Topping Tubs <p>PAPER</p> <ul style="list-style-type: none"> • Corrugated Cardboard • Magazines & Catalogs • All Parts of the Newspaper • Brown Paper Grocery Bags • Telephone Books <p>* unless your workplace has a recycling program</p> <p>Not Recyclable:</p> <ul style="list-style-type: none"> • Drinking Glasses • Dishes • Windows or Mirrors • Cookware (Pans, Skillets, etc.) • Petri Dishes • Grobking Lids • Door Screens • Lawn Furniture • Tools • Car Parts • License Plates • Hangers • Knives, Forks, Spoons • Plastic Grocery Bags • Flower Pots • Egg Cartons • Polystyrene Trays • Pool Chemical Bottles • Motor Oil/Antifreeze Containers • Household Chemical Containers • Cereal, 12 Pack, Shoe or Gift Boxes • Colored or White Paper Bags • Office/Computer Paper • Junk Mail 	<p>Household Hazardous Waste Drop-Off Program</p> <p>Saving Our Planet One Household At A Time</p> <p>LEE COUNTY SOUTHWEST FLORIDA Division of Solid Waste 479-818</p>
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**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 or 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.
332-6898
O-T-G-D

FORT MYERS

Grease Monkey
4050 Fowler St.
938-8007
O-T

Valvoline Instant Oil
3018 Cleveland Ave.
334-4460
O-T

Discount Auto Parts
3571 Cleveland Ave.
936-9115
O-T-B (5 Gal. Limit)

Valvoline Instant
Oil Change
2667 Colonial Blvd.
939-3779
O-T

Auto Zone
4105 Fowler St.
277-8829
O

Homey's Custom Cycles
8203 Arc Way
278-0484
O (2 Gal. Limit)

N. FT. MYERS

Grease Monkey
14850 N. Cleveland
997-8007
O-T

North Shore Service
13890 N. Cleveland
656-1220
O-T-A

Mogler's Texaco
13621 N. Cleveland
995-6282
O-T-B

Wal-Mart
545 Pine Island Rd.
997-6916
O

Discount Auto Parts
50 Pine Island Rd.
997-6900
O-T-B (5 Gal. Limit)

Auto Zone
5080 Bayshore Rd.
567-0294
O-T-B

S. FT. MYERS

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

Wal-Mart
1481 Six Mile Cypress Rd.
437-1687
O-T-A-B

Fast Oil & Lube
15140 S. Tamiami Tr.
481-3278
O-T

Hurricane Cycles
17420 Tamiami Tr.
432-9511
O (2 Gal. Limit)

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

Discount Auto Parts
19098 Tamiami Tr.
437-5525
O-T

Roscoe Automotive
15580 McGregor Blvd.
437-6868
O-T-A-B

Valvoline Instant Oil
13289 McGregor Blvd.
939-3778
O-T

Discount Auto Parts
11591 Gladinkus Dr.
437-7065
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.
694-0840
O-T-B

Discount Auto Parts
3942 Palm Beach Blvd.
693-0973
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
877 Cape Coral Pkwy. E.
542-5623
O (5 Gal. Limit)

Auto Zone
1023 Del Prado Blvd.
573-0806
O-T-B

Wal-Mart
1618 Del Prado Blvd.
772-9924
O-A-B

Advanced Auto Parts
2023 Del Prado Blvd.
574-4944
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.
386-4900
O-T

FT. MYERS

BEACH AREA

Gavin's Ace Hardware
18066 San Carlos Blvd
488-7777
O (2 Gal. Limit)

AFA Texaco
6231 Estero Blvd.
463-6843
O-T-A-B

BONITA

Bonita Mobile
3306 Bonita Beach Rd
947-1555
O-T

Discount Auto Parts
8961 Bonita Beach Rd
495-1818
O-T-B

SANIBEL

Sanibel Shell
2435 Periwinkle 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

A.4.2 Lee County Spill Response Data Summary

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

Lee County Spill Response Data

Period: from 10/01/00 to 09/30/01

Table 1 of 1

Fire District	Spill Type	Quantity (in gallons)	Incidents Responded	Incidents Referred
Lehigh Acres	Gasoline	3	3	0
	Gasoline	2	1	0
	Gasoline	1	2	0
	Unknown substance	unknown	1	Responsible party cleaned
San Carlos Park	Gasoline	5	1	0
	Diesel	Unknown	1	0
	Hydraulic oil	25-50	1	FDOT
	Ammonia nitrate	25	1	CFM Haz MAt
	Muriatic Acid	1	1	0
	Propane gas	unknown	1	0
	Unknown substance	30	1	FDEP
Port Authority	AvGas	1	1	0
	AvGas	2	1	0
	Jet A Fuel	15	3	0
	Jet A Fuel	5	1	0
	Jet A Fuel	1	1	0
	Jet A Fuel	2	2	0
	Jet A Fuel	10	1	0
	Jet A Fuel	6	1	0
	Gasoline	1	1	0
	Hydraulic Fluid	2	1	0
	Motor Oil	3.5	1	0
Bayshore	Diesel	4	1	NFMFD
	Septic Waste	800	1	0
North Fort Myers	Ammonia	Unknown	1	CFM HazMat
Estero	Ammonia	Unknown	1	CFM Haz Mat

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.

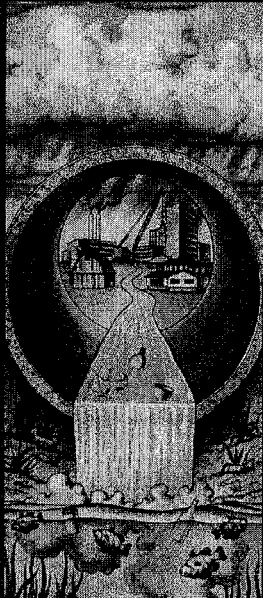
THIS EDUCATIONAL DOCUMENT WAS PRODUCED BY LEE COUNTY AS PART OF NPDES PERMIT # FL5000035 REQUIREMENTS.

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

Brochure Back Page

The Effects



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.

SOME OF THE EFFECTS:

- 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.

The Solution

There are many seemingly harmless household activities that actually wreak havoc with our water system.



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.



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.



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.

Other common practices that can cause severe problems to our waterways include, but are not limited to:

- draining swimming pools into ditches or directly onto lawns.
- draining household wastewater from washing machines, dishwashers or water softening devices into ditches.

Take Action

If we don't stop the pollution, one of our most valuable resources - our recreational waterways - will be lost forever.

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.

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.

We must all take responsibility for keeping pollutants out of Lee County's waters.

If you see any polluting activities taking place, please call the number listed below for your area.

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



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Appendices

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			
Evcar 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 ACTIVIES 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	

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.

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

Photos

[Top of Page](#)

[HOME](#)