GULF POWER

SMITH UNIT 3

Site Certification Application

Volume 3 **June 1999**

GULF POWER

A SOUTHERN COMPANY

ECT

Environmental Consulting & Technology, Inc.

HOPPING GREEN SAMS & SMITH
PROFESSIONAL ASSOCIATION
ATTORNEYS AND COUNSELORS

TABLE OF CONTENTS

TABLE OF CONTENTS
(Continued, Page 2 of 11)

TABLE OF CONTENTS
(Continued, Page 3 of 11)

TABLE OF CONTENTS
(Continued, Page 4 of 11)

TABLE OF CONTENTS
(Continued, Page 5 of 11)

TABLE OF CONTENTS
(Continued, Page 6 of 11)

TABLE OF CONTENTS
(Continued, Page 7 of 11)

TABLE OF CONTENTS
(Continued, Page 8 of 11)

TABLE OF CONTENTS
(Continued, Page 9 of 11)

TABLE OF CONTENTS
(Continued, Page 10 of 11)

TABLE OF CONTENTS
(Continued, Page 11 of 11)

Section Page

VOLUME IV

VOLUME V

10.2 PERMIT APPLICATIONS/APPROVALS

APPENDIX 10.2.1

LAND USE PLAN AMENDMENT

LARGE-SCALE
COMPREHENSIVE PLAN AMENDMENT
LANSING SMITH COMBINED CYCLE PROJECT
BAY COUNTY, FLORIDA

REQUESTED BY:

GULF POWER COMPANY
PENSACOLA, FLORIDA

990151-0600
April 1999

PLAN AMENDMENT SUMMARY SHEET

Applicant: Gulf Power Company
One Energy Place
Pensacola, Florida 32520-0328
Attn: Mr. Jim Vick, Manager of Environmental Affairs
(850) 444-6311

Location: Township 2 South, Range 15 West, Section 36

Reference Number: 26636-010-000

Tax Use Code: 5500 (Timberland)

Size of Property: 50 ± acres

Current FLUM Description: Agriculture

Character District: Suburban

Adjacent Properties FLUM Designation: Agriculture to the north, east, and west
Industrial to the south (existing Lansing Smith Plant)

Proposed FLUM Designation: Industrial

Current Use of Property: Silviculture

Plan Amendment Report Prepared By:

Environmental Consulting & Technology, Inc. (ECT)
Contact: Darren Stowe
(813) 289-9338

TABLE OF CONTENTS

TABLE OF CONTENTS
(Continued, Page 2 of 2)

LIST OF FIGURES

1. INTRODUCTION

Gulf Power Company requests an amendment of the Bay County Comprehensive Plan – Future Land Use Map (FLUM) for 50 ± acres of land located north of the Gulf Power Company's existing Lansing Smith electrical generating power plant (Smith Units 1 and 2) as depicted on Figure 1. This request is to change the current future land use designation for this parcel from "Agriculture" to "Industrial" on the FLUM in order to allow for the construction of a new electrical power generating unit, Smith Unit 3. Gulf Power Company is currently preparing an application for authorization to construct and operate the proposed project pursuant to the Florida Electrical Power Plant Siting Act (PPSA), Sections 403.501 - .518, Florida Statues. Figure 2 depicts the proposed site plan for Smith Unit 3.

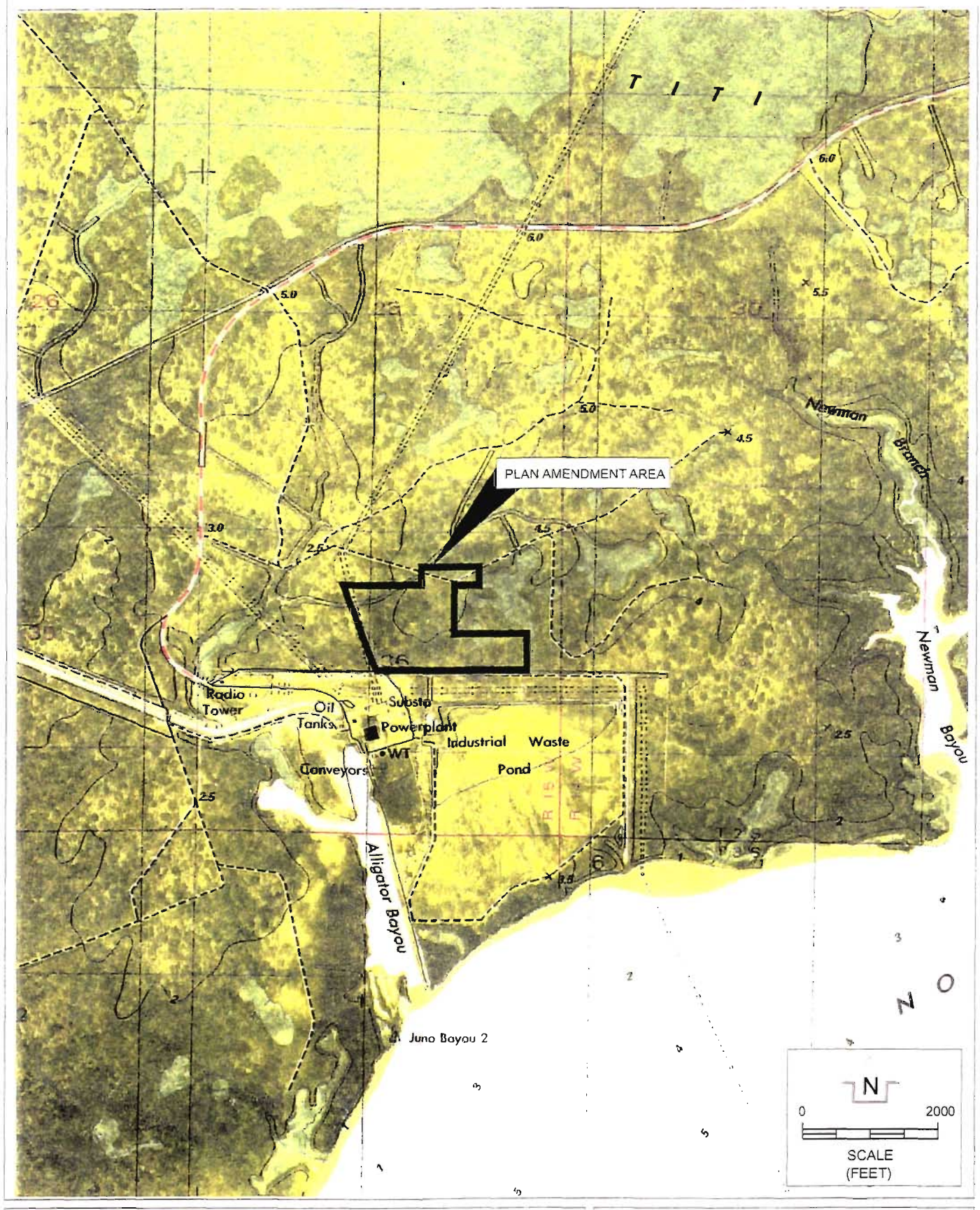
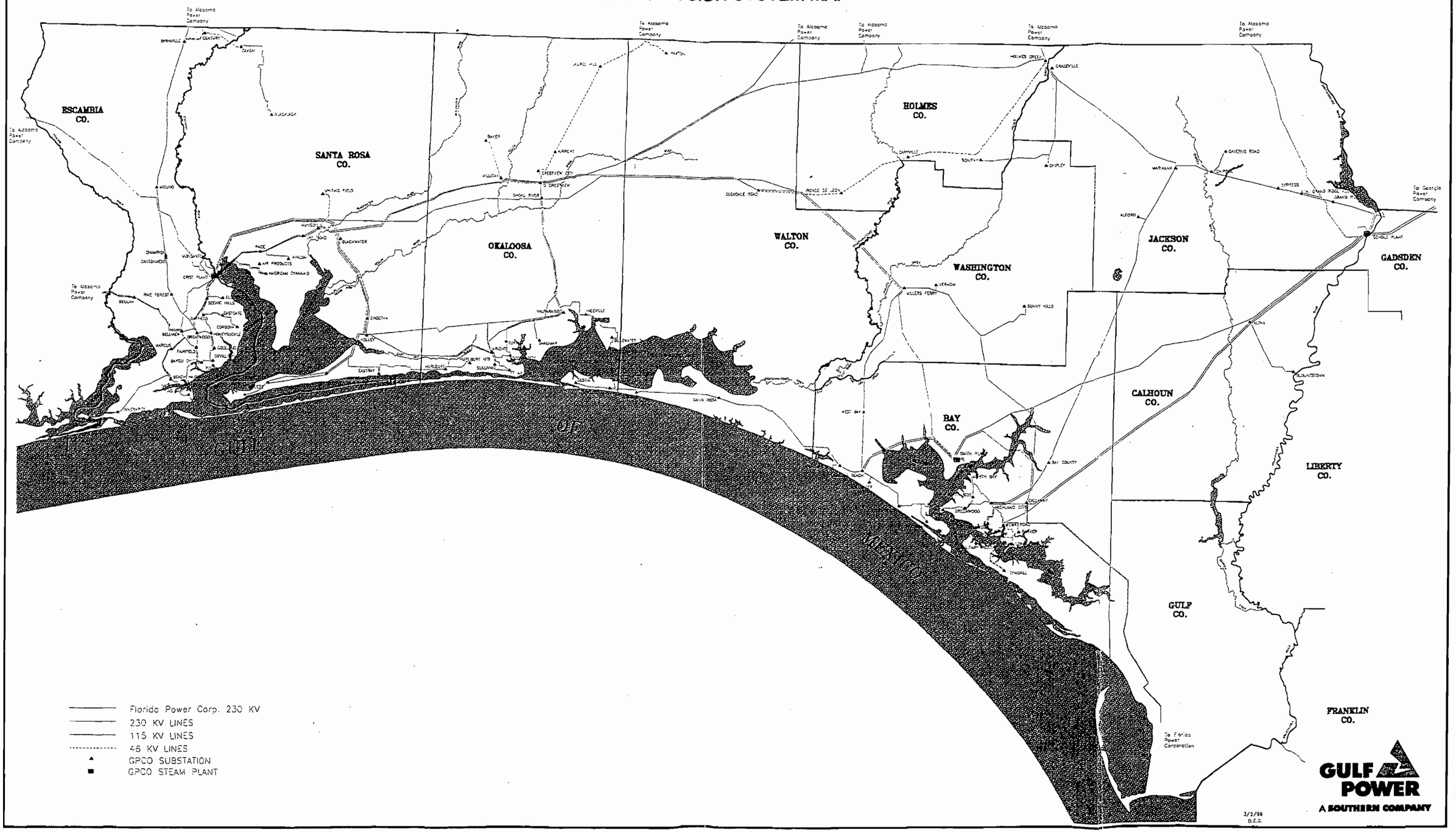


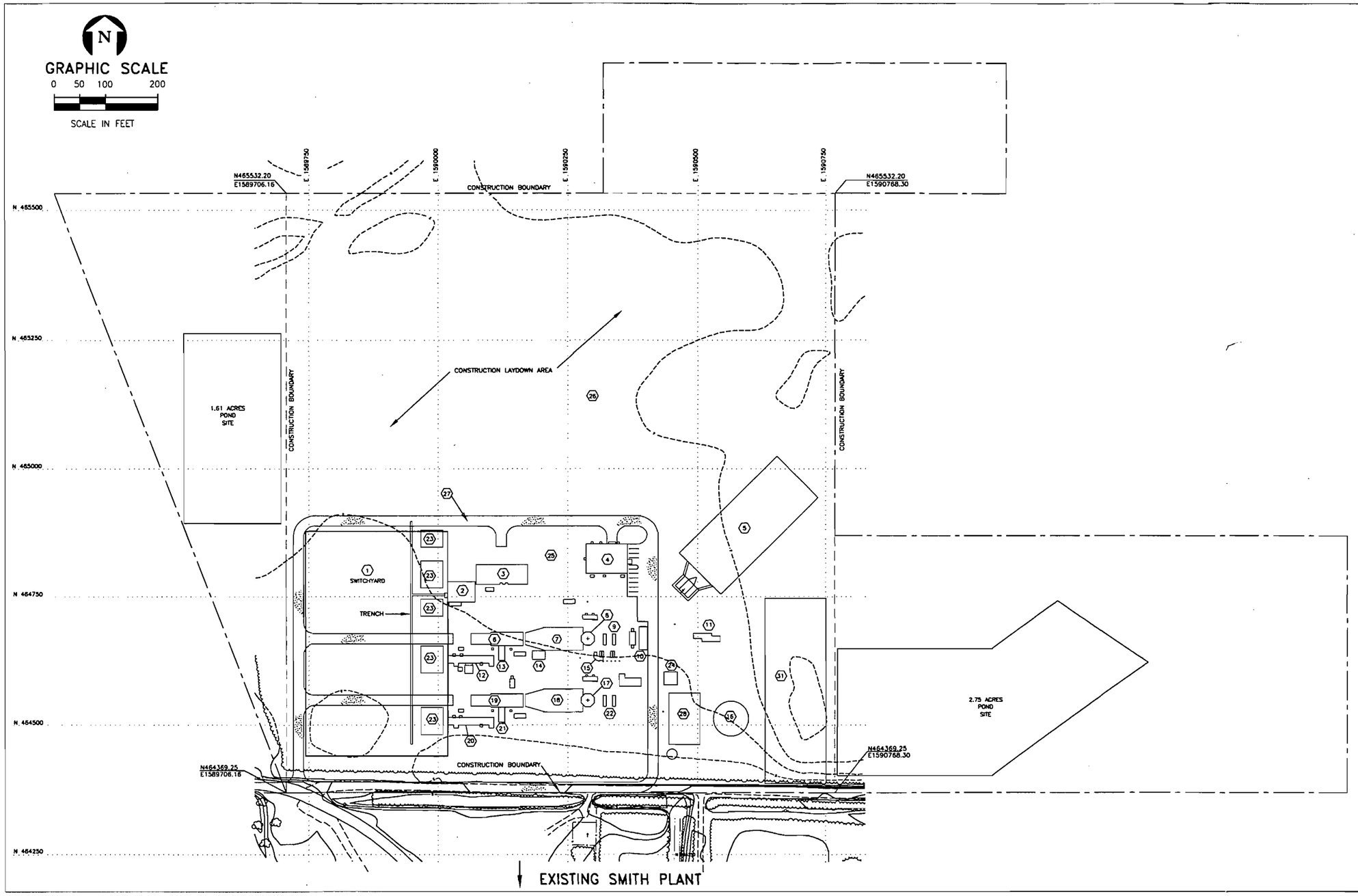
FIGURE 1.
SITE LOCATION MAP
SMITH UNIT 3 PLAN AMENDMENT
BAY COUNTY, FLORIDA

Sources: USGS Quad Map of Southport, Fl., 1992; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

GULF POWER COMPANY
TRANSMISSION SYSTEM MAP





AREA/STRUCTURE LEGEND

1. SWITCHYARD
2. ELECTRICAL BUILDING
3. STEAM TURBINE
4. ADMINISTRATION BUILDING
5. COOLING TOWER
6. NORTH GAS TURBINE
7. NORTH HEAT RECOVERY STEAM GENERATOR (HRSG)
8. NORTH STACK
9. NORTH BOILER FEED PUMP
10. FEEDWATER TRANSFORMER
11. 480 VOLT MCC AND TRANSFORMER
12. BAC/PEECC
13. ACCESSORY MODULE
14. PHOSPHATE FEED SKID
15. AMMONIA SUPPLY SYSTEM
16. CONDENSATE STORAGE TANK
17. SOUTH STACK
18. SOUTH HEAT RECOVERY STEAM GENERATOR (HRSG)
19. SOUTH GAS TURBINE
20. GEC/PEECC
21. ACCESSORY MODULE
22. SOUTH BOILER FEED PUMP
23. TRANSFORMERS
24. WASTE WATER SUMP
25. INTERIOR PLANT YARD (GRAVEL)
26. BALANCE OF SITE (GRAVEL)
27. ROADWAY (CONCRETE)
28. WATER TREATMENT BUILDING
29. GRASSED SLOPES
30. MISC. CONC. PADS (INTERIOR YARD)
31. GAS METERING AREA

FIGURE 1.

PLOT PLAN

Sources: Gulf Power, 1999; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

2. NEEDS AND JUSTIFICATION

Gulf Power Company has identified the proposed 50-acre parcel addressed by this application as the site for a new 540-megawatt (MW), natural gas-fired, "combined-cycle" electrical generating unit to be known as Smith Unit 3. The subject parcel is adjacent to Gulf Power Company's existing power plant consisting of Units 1 and 2 at the Lansing Smith Plant site, which have been in operation since the mid-1960s. Gulf Power Company currently operates 12 generating units in its service area between Pensacola, Florida and the Apalachicola River in Florida.

As part of its ongoing systemwide planning process, Gulf Power Company has determined its needs to construct and operate a new electrical power unit in the Bay County area in order to provide reliable and cost-effective electric service to the expected increase in new customers in Gulf Power Company's service area in the coming years. Gulf Power Company has recently filed a request with the Florida Public Service Commission for a determination that a need exists for the electricity to be supplied by this unit, and that the proposed Smith Unit 3 is the most cost-effective means to supply that electricity. The unit is needed to maintain an adequate reserve margin of electrical generating capacity within the Gulf Power Company service area beginning in the summer of 2002. The location of the unit in the Bay County area avoids the need to construct additional electrical transmission lines to tie the new unit into the Northwest Florida electrical transmission system because the new unit can be connected to the existing transmission lines serving the Lansing Smith plant site.

The new unit will utilize state-of-the-art electrical generating equipment, which is very efficient in its use of fuel. Air emissions will increase marginally. Total nitrogen oxide emissions will overall decrease from the combined Units 1, 2, and 3 as a result of the use of clean-burning natural gas and the installation of new emissions control systems on both the new unit and on the existing Smith Unit 1. The new unit will utilize a closed-cycle cooling system, which will minimize surface water withdrawals and discharges

while reducing overall impacts from warm water discharges from the combined Units 1, 2, and 3.

The new unit can utilize many of the existing facilities serving the Lansing Smith plant site in addition to the existing electrical transmission lines. The existing cooling water intake and discharge canal at the site will serve the new unit. Domestic and potable water facilities at the existing Lansing Smith plant site can serve the new unit. The existing site access road will be used and no offsite road improvements are needed for the unit and its 29 additional employees. The new unit will be a self-contained plant, making few demands on local public services.

The use of the proposed parcel, and its conversion from the current Agriculture to Industrial land use designation, represents a logical expansion of the site and its use for generating electricity. The site is immediately adjacent to the existing Gulf Power Company plant site, which is designated for Industrial uses. Other portions of the existing site are already committed to the existing electrical generating facilities or are not suitable for the proposed unit. The subject parcel allows connection of the new unit into existing facilities serving the site. Construction of this new unit at a different location would require the construction of new facilities that already exist at the Lansing Smith plant site. Therefore, the change in the FLUM designation from Agriculture to Industrial is entirely appropriate and justified.

3. SITE DESCRIPTION

3.1 SITE LOCATION AND DESCRIPTION

The site of the proposed land use plan amendment is located on approximately 50 acres in Township 2 South Range 15 West Section 36 (Figure 1). The subject property is owned by Gulf Power Company. The site is located directly north of the existing Lansing Smith electric generating plant property and approximately 3,000 feet (ft) east of the southern terminus of County Road (CR) 2300 at the Lansing Smith plant entrance. The closest residential development is located approximately 2 miles to the northeast (western portion of unincorporated Southport). Figure 3 depicts the subject property's location relative to the surrounding street and thoroughfare network. The current land use designations of the subject property and abutting properties are depicted on Figure 4. The abutting properties are designated Agriculture to the east, west, and north and Industrial to the south (existing Lansing Smith plant). The property is currently planted in pine for silvicultural purposes as are the surrounding properties to the east, north, and west. The abutting property to the south is the existing site of Smith Units 1 and 2, both coal powered electrical generating units. The existing Lansing Smith unit occupies approximately 700 acres. Facilities at the existing site include Smith Units 1 and 2; coal storage and unloading area; ash pond; ash landfill; substation; and ancillary buildings.

3.2 ANALYSIS OF FACILITIES AND SERVICES

The proposed amendment area is a 50 $\pm$ acre tract located immediately north of the existing Lansing Smith plant (Units 1 and 2). The applicant, Gulf Power Company, intends to construct and operate a 540-MW combined cycle generating unit (Smith Unit 3) to be fueled by natural gas. The location of the proposed plan amendment area is adjacent to a power line transmission corridor to the west and to the existing power plant units to the south. The proposed Smith Unit 3 will share facilities with the existing units, including the discharge canal, water wells, domestic wastewater treatment plant, and transmission lines. Gulf Power Company is preparing a submittal under the Florida Electrical PPSA, known as a Site Certification Application (SCA), that will seek approval

FIGURE 3.
SURROUNDING ROADWAY NETWORK
SMITH UNIT 3 PLAN AMENDMENT
BAY COUNTY, FLORIDA

Sources: DOT, 1993; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

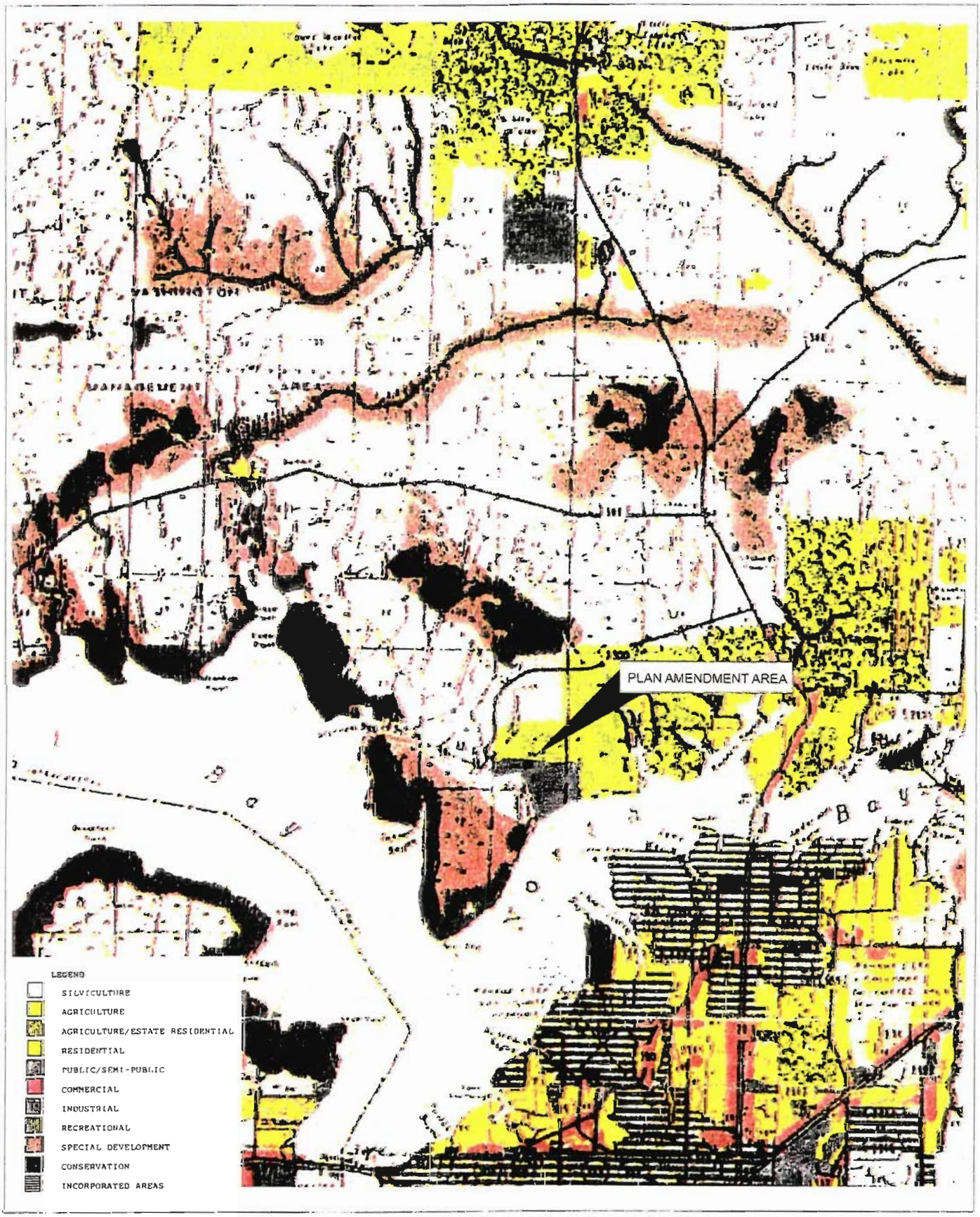


FIGURE 4.
LAND USE DESIGNATIONS
SMITH UNIT 3 PLAN AMENDMENT
BAY COUNTY, FLORIDA

Sources: Bay County Planning Dept., 1991; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

for the construction and operation of the proposed unit. The SCA will contain extensive data and analysis of the subject property and the proposed electrical generation facility. The SCA also is the primary process for permitting of the facility, including air permits, industrial wastewater permits, etc. Because of the specific nature of the proposed use of the plan amendment area, the following analysis of facilities and services and natural resources is based on the proposed development of a combined cycle electrical generating unit.

3.2.1 SANITARY SEWER

Domestic wastewater generated from the permanent employees at Smith Unit 3 will be routed to the existing wastewater treatment plant at the adjacent Lansing Smith plant. The estimated number of additional full-time employees is 29. The existing wastewater treatment plant has a maximum capacity of 3,000 gallons per day (gpd) and currently operates at an average of approximately 800 to 1,200 gpd. Based on the actual usage of the existing treatment plant, the total estimated domestic wastewater generation is estimated to be 377 gpd. Adequate domestic wastewater treatment service capacity is available to serve the proposed development. There will be no demand on public sewerage facilities.

3.2.2 POTABLE WATER

Potable water demand from the additional permanent employees at Smith Unit 3 will be supplied by permitted wells and an onsite potable water treatment system located at the Lansing Smith plant. Potable water is a portion of the overall total process water withdrawals and there is not a separate well used to meet potable water demand. The total permitted maximum withdrawal is 2,880,000 gpd and the permitted average daily withdrawal is 700,000 gpd. The 29 additional full-time employees are expected to require a maximum of 4,640 gpd. The average daily withdrawal from the permitted wells is currently approximately 500,000 to 600,000 gpd. Adequate potable water supply and treatment is available to serve the proposed development. There will be no demand on public potable water facilities.

3.2.3 SOLID WASTE

The estimated amount of solid waste to be generated per day by the 29 permanent employees at Smith Unit 3, based on the adopted per capita generation of 5.5 pounds, is 159.5 pounds. The solid waste currently generated by the existing Lansing Smith plant is transported by Waste Management to the Steelfield Landfill. Estimates by the Bay County Solid Waste Division indicate that at current landfilling rates, the landfill has an anticipated life that will last until 2032 and 80 percent capacity (the level of service [LOS] standard) will not be met until approximately 2022. The solid waste generated by the proposed plan amendment will have very limited impact on public solid waste disposal facilities.

3.2.4 DRAINAGE

The proposed plan amendment area includes area for storm water retention ponds. The size and location of the pond(s) will be addressed in the SCA. The pond(s) will be designed to meet or exceed the adopted LOS standard described in policies 1.2.3 and 1.2.4 of the drainage subelement of the Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Ground Water Aquifer Recharge Element of the adopted Comprehensive Plan. The Florida Department of Environmental Protection (FDEP) and the Bay County Engineering Division will review and approve the construction, design, and maintenance criteria of the drainage and storm water controls.

3.2.5 TRAFFIC CIRCULATION

All of the traffic to be generated by the proposed development will access and leave the project site from CR 2300. For a "worst-case" scenario, all of the expected new trips to be generated are assigned to the road segment from State Road (SR) 77/CR 2300 to the south approach to Bailey Bridge. The estimated number of new trips is based on an observed trip generation rate for power plants of 2.35 trips per employee. The proposed development will generate approximately 68 new daily trips. The existing, projected, and acceptable average daily traffic (ADT) and LOS are as follows:

SR 77	Existing ADT/LOS (1997)	Projected ADT/LOS (2002)	Acceptable ADT/LOS
CR 2300 South to Bailey Bridge	11,000 (B)	15,300(C) *	20,000(D)

*From CR 388 South to Bailey Bridge

The impact of the proposed amendment on the state and county road system will not degrade the existing LOS of B on this roadway segment. If the proposed Smith Unit 3 is approved, the plant is anticipated to be operational in June 2002. The anticipated ADT on SR 77 from south of CR 388 to Bailey Bridge in 2002 is approximately 15,300 and with the project traffic would be 15,368, well below the maximum acceptable LOS.

According to the Florida Department of Transportation (FDOT) District 3 personnel, the SR 77 segment from Bailey Bridge to CR 2300 is scheduled to begin project development and engineering (PD&E) studies in 2000 with right-of-way acquisition to also begin in 2000. The 4-laning of this road segment is scheduled to begin in 2005 (not in the current FDOT 5-year plan through 2004).

3.2.6 NATURAL GROUND WATER AQUIFER RECHARGE

The subject property is located within an area identified as "virtually no recharge potential" as identified by the Bay County Comprehensive Plan (Figure 5). In addition, the Northwest Florida Water Management District, as stated on page 6-63 of the adopted Comprehensive Plan, has not identified any areas in Bay County as prime ground water recharge areas. The Natural Ground Water Aquifer Recharge Element of the adopted Comprehensive Plan addresses only areas of the county with high recharge potential. The proposed project will not impact any high natural ground water aquifer recharge areas.

990151/ps

Figure 7

BAY COUNTY
Floridan Aquifer Recharge Areas

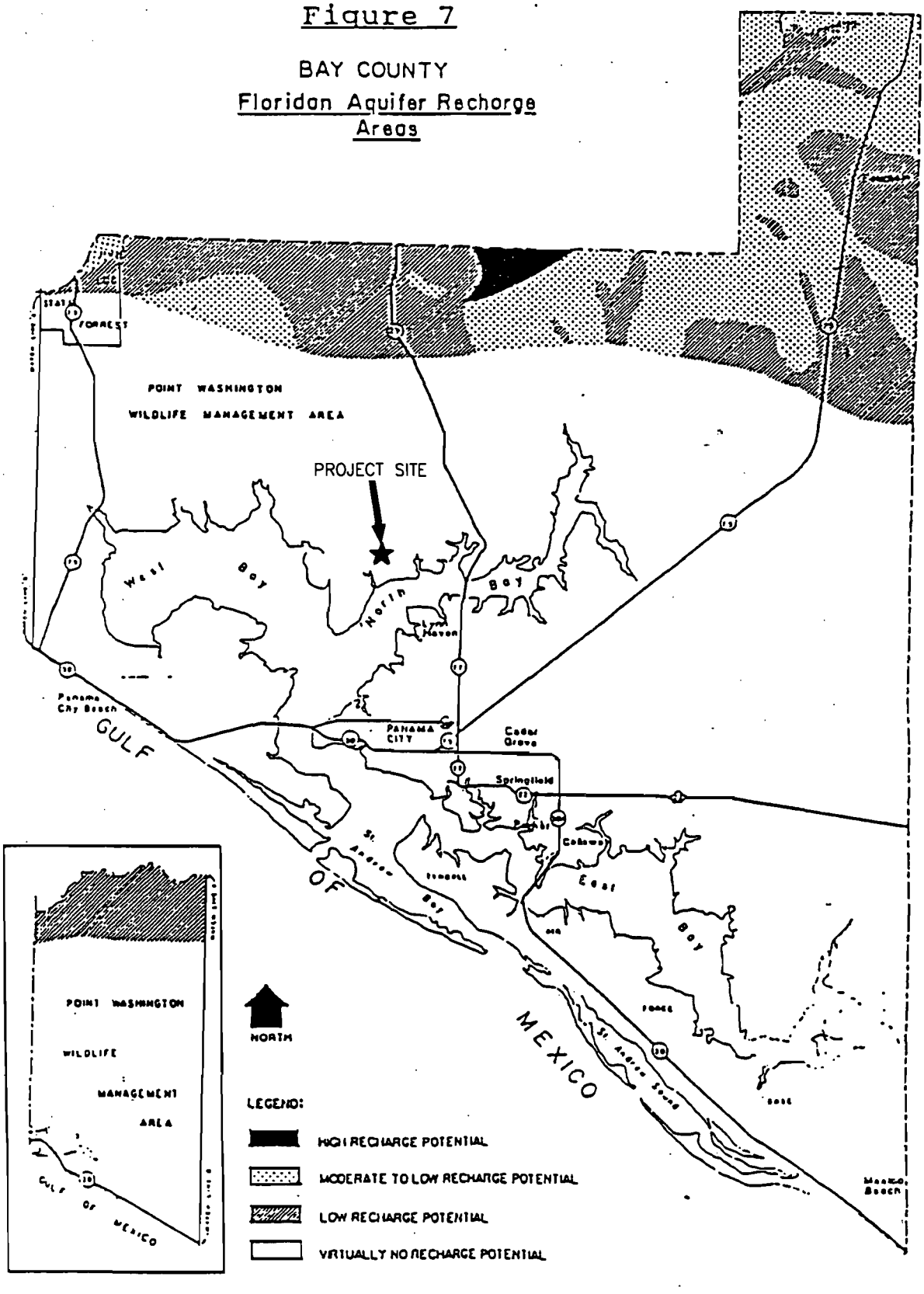


FIGURE 5.

AQUIFER RECHARGE AREAS
SMITH UNIT 3 PLAN AMENDMENT, BAY COUNTY

Source: Bay County 1990 Adopted Comprehensive Plan; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

3.2.7 RECREATION AND OPEN SPACE

The proposed project site is not located in an area currently accessible to the public for recreation or open space opportunities. The proposed project will have no impact upon the demand for recreation and open space as it will not generate demand for such facilities nor will it reduce available recreational areas.

3.3 NATURAL RESOURCES

3.3.1 WATER WELLS AND CONES OF INFLUENCES

There are no existing water wells on the subject property. The closest water wells are located on the existing Lansing Smith plant property. Process and potable water for Smith Unit 3 will be provided from the four permitted wells. (Cooling water for the operation of the plant will be obtained from permitted surface water withdrawals). The proposed project will not adversely impact any public or private water wells.

3.3.2 BEACHES AND SHORES, INCLUDING ESTUARINE SYSTEMS

The subject property is not located on a beach or shoreline and is located approximately 1,500 ft north of Alligator Bayou and 1 mile north of North Bay. As shown on Figure 6, the property is located within the coastal zone. Figure 7 indicates that the subject property is not located in the Coastal High Hazard Area (CHHA) (defined as land lying within the Category 1 hurricane evacuation zone).

The proposed development of the plan amendment area is an electrical power generating unit, which is defined as a water-dependent use. In accordance with policy 1.8.2 of the Coastal Element of the 1990 Comprehensive Plan, water-dependent commercial/industrial uses are prioritized as follows:

1. Public use marinas;
2. Water-dependent utilities;
3. Water-dependent industries and docking facilities; and
4. Docks for water-dependent industry.

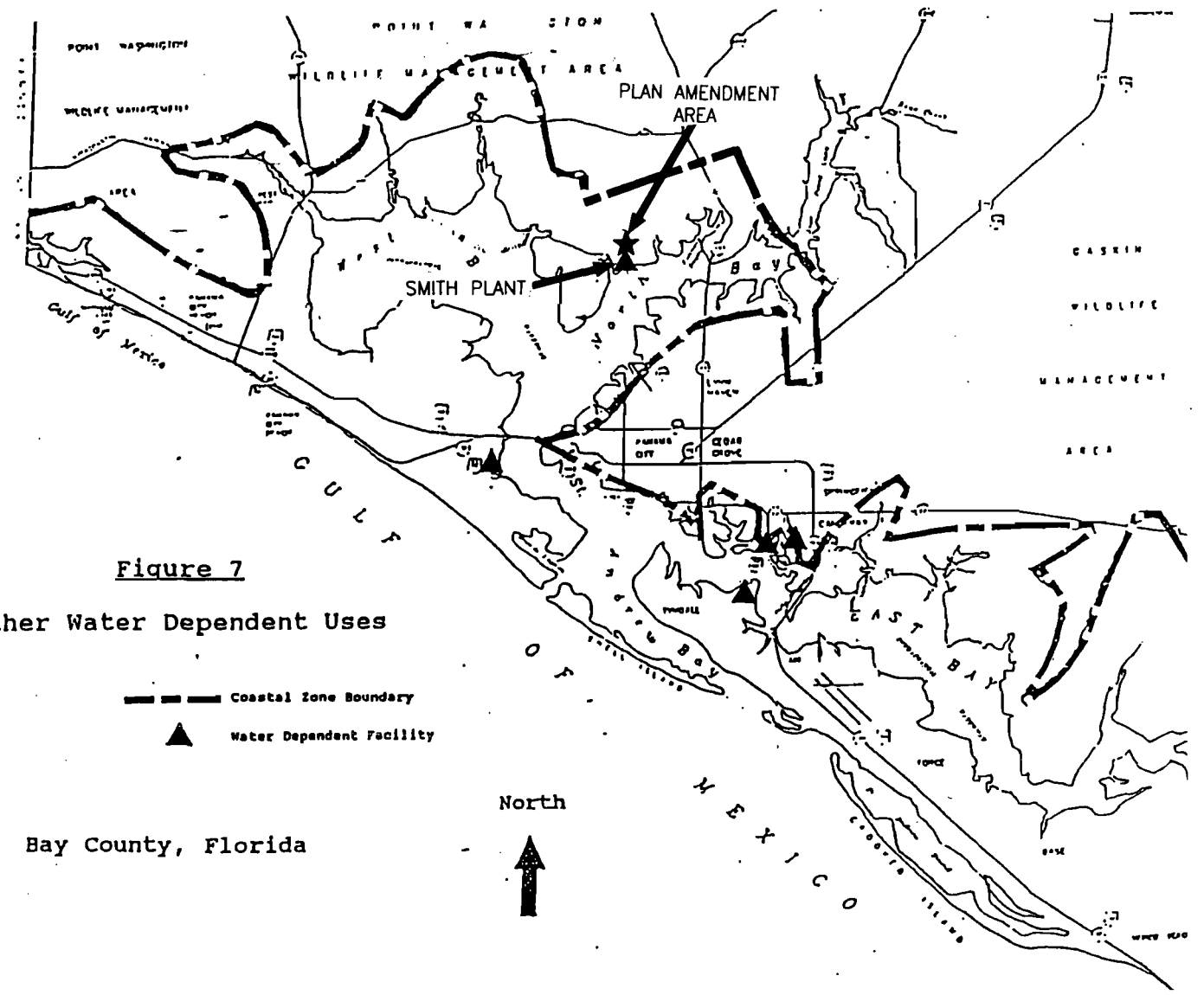


FIGURE 6.

COASTAL ZONE BOUNDARY
SMITH UNIT 3 PLAN AMENDMENT, BAY COUNTY

Source: Bay County 1990 Adopted Comprehensive Plan; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

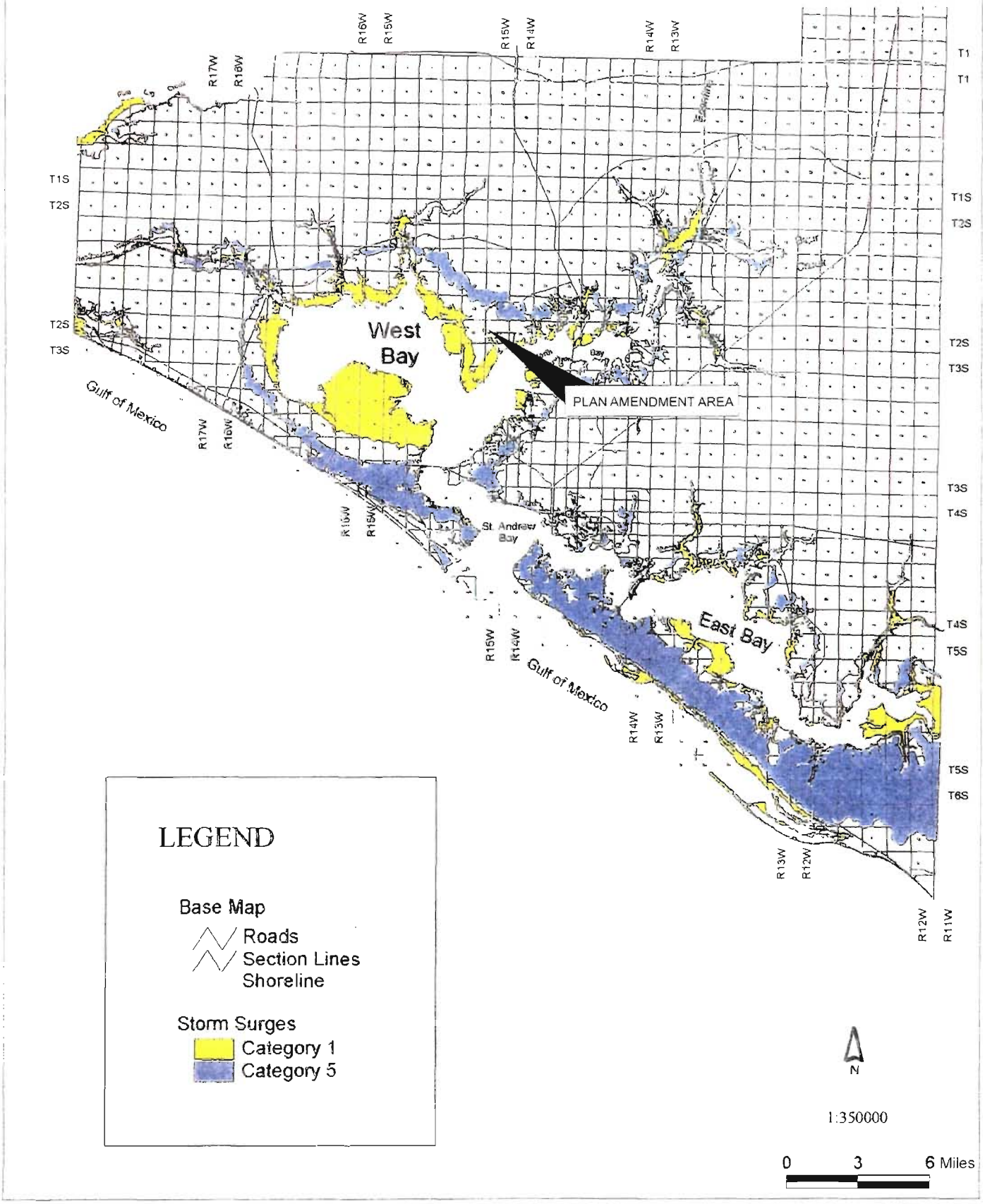


FIGURE 7.
COASTAL HIGH HAZARD AREA
SMITH UNIT 3 PLAN AMENDMENT
BAY COUNTY, FLORIDA

Sources: Bay County Comprehensive Plan, 1998; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

The proposed construction will not:

- Be built within unaltered natural habitats (the property is currently planted pine silviculture);
- Involve dredge and fill activities that disturb seagrass beds, oyster reefs, or other marine nursery areas (the nearest estuarine/marine habitat is 1,500 ft from the property);
- Discharge untreated storm water (storm water runoff will be treated in accordance with FDEP regulations);
- Involve the use of septic tanks (domestic wastewater will be treated at the existing Lansing Smith plant wastewater treatment plant);
- Impact primary dunes (there are no dunes on or within 1 mile of the proposed site);
- Involve shoreline land (the northern shore of North Bay is located approximately one mile south of the subject property); or
- Impact existing LOS for sanitary sewer, solid waste, drainage, potable water, and traffic below acceptable standards (see Section 3.2 of this report).

The operation of the unit will involve the diversion of approximately 7.5 million gallons per day (MGD) of the currently permitted 274 MGD surface water withdrawal for cooling water. After evaporation through the cooling tower, approximately 3.7 MGD will be returned to the existing discharge canal. The location of the new unit's discharge will be within the existing plant's discharge canal. Given the volume of the cooling tower blowdown (3.7 MGD) mixing with the permitted plant discharge volumes (274 MGD), the anticipated impacts to receiving water will be *de minimus*. Development of the proposed Smith Unit 3 will not adversely impact beaches, shorelines, or estuarine systems.

3.3.3 RIVER, BAYS, LAKES, FLOODPLAINS, AND HARBORS

The plan amendment area does not include any rivers, bays, lakes (surface water bodies), or harbors. As shown in Figure 8, the subject property lies completely within Flood Zone C, defined as areas of minimal flooding. The closest surface water body is Alligator

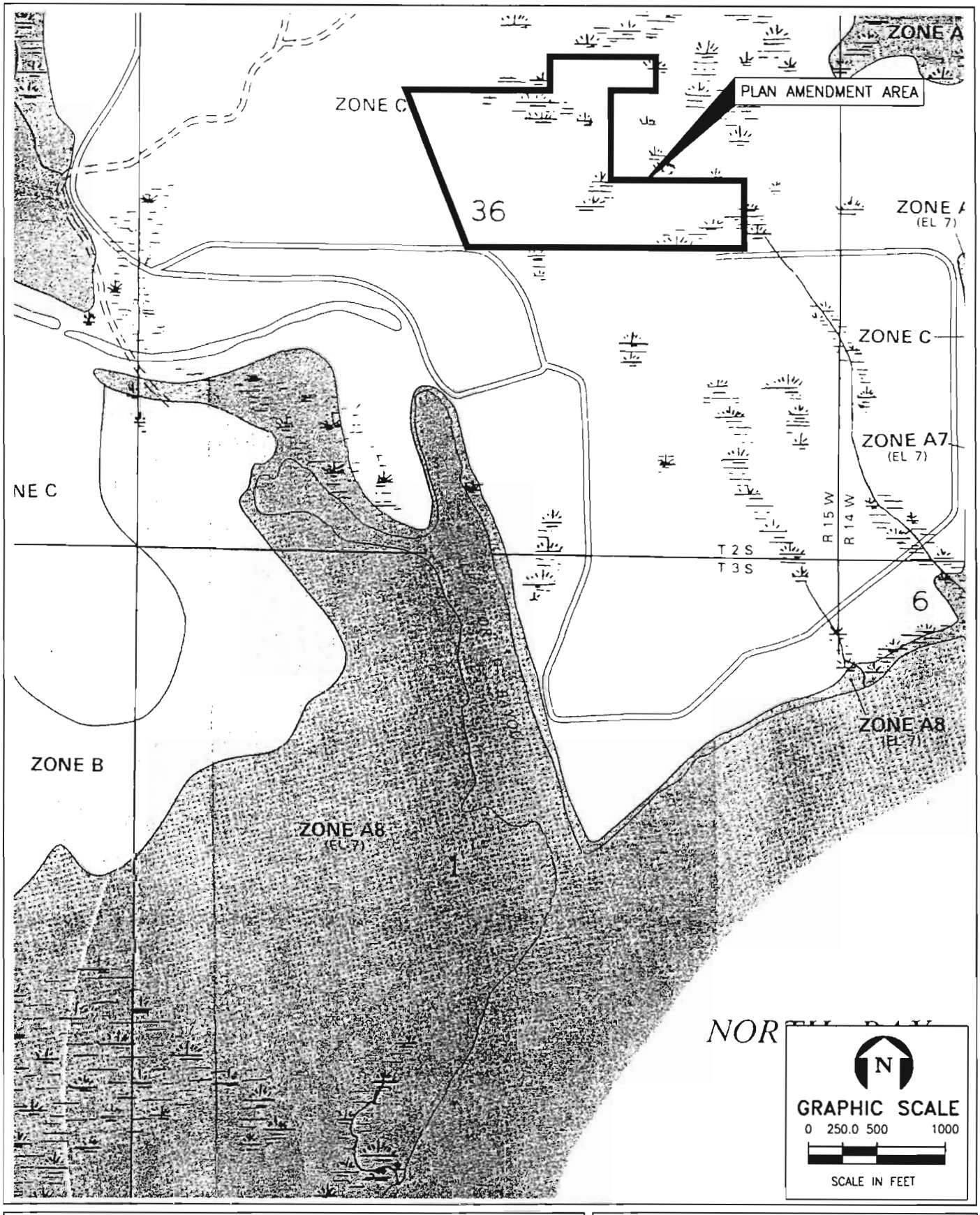


FIGURE 8.
FLOODPLAINS MAP
SMITH UNIT 3 PLAN AMENDMENT
BAY COUNTY, FLORIDA

Sources: Federal Emergency Management Agency; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

Bayou, located approximately 1,500 ft to the south;and the closest bay is North Bay, located approximately 1 mile to the south. There will be no direct construction impacts to surface water bodies or North Bay. All storm water runoff will be treated to applicable FDEP regulations, domestic wastewater will be treated at the existing wastewater treatment plant, and cooling water will be thoroughly mixed with the existing discharge from Smith Units 1 and 2.

3.3.4 WETLANDS

The applicant has initiated a delineation of the wetland limits on the subject property. A qualified wetlands biologist has conducted a preliminary jurisdictional delineation of the landward extent of onsite jurisdictional wetlands by evaluating the wetland/upland vegetation, the hydrology, and the extent of hydric soils. A formal jurisdictional delineation with FDEP personnel will be completed prior to the submittal of the SCA. Figure 9 depicts the results of the initial wetland delineation, indicating approximately 12.1 acres within the portion of the site to be occupied by power generation facilities.

Gulf Power Company will prepare a dredge and fill permit application as part of the PPSA SCA. The dredge and fill application will contain a description of efforts to minimize wetland impacts and, where wetland acreage will be impacted, a mitigation plan will be proposed. Suitable lands will be identified for preservation, enhancement, and/or creation.

3.3.5 MINERALS

The 1990 adopted Conservation Element of the Comprehensive Plan indicates that large-scale development of mineral commodities has not occurred in Bay County. Figure 10 depicts the general location of mining sites in Bay County as of April 1990. No mining sites or commercially significant mineral deposits are depicted or known to occur near the subject property.

FIGURE 9.
PRELIMINARY WETLAND BOUNDARIES
SMITH UNIT 3 PLAN AMENDMENT
BAY COUNTY, FLORIDA

Sources: Bay County Aerial Photograph, Fl., 1997; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

990151/ps

Figure 11

Location of Mines

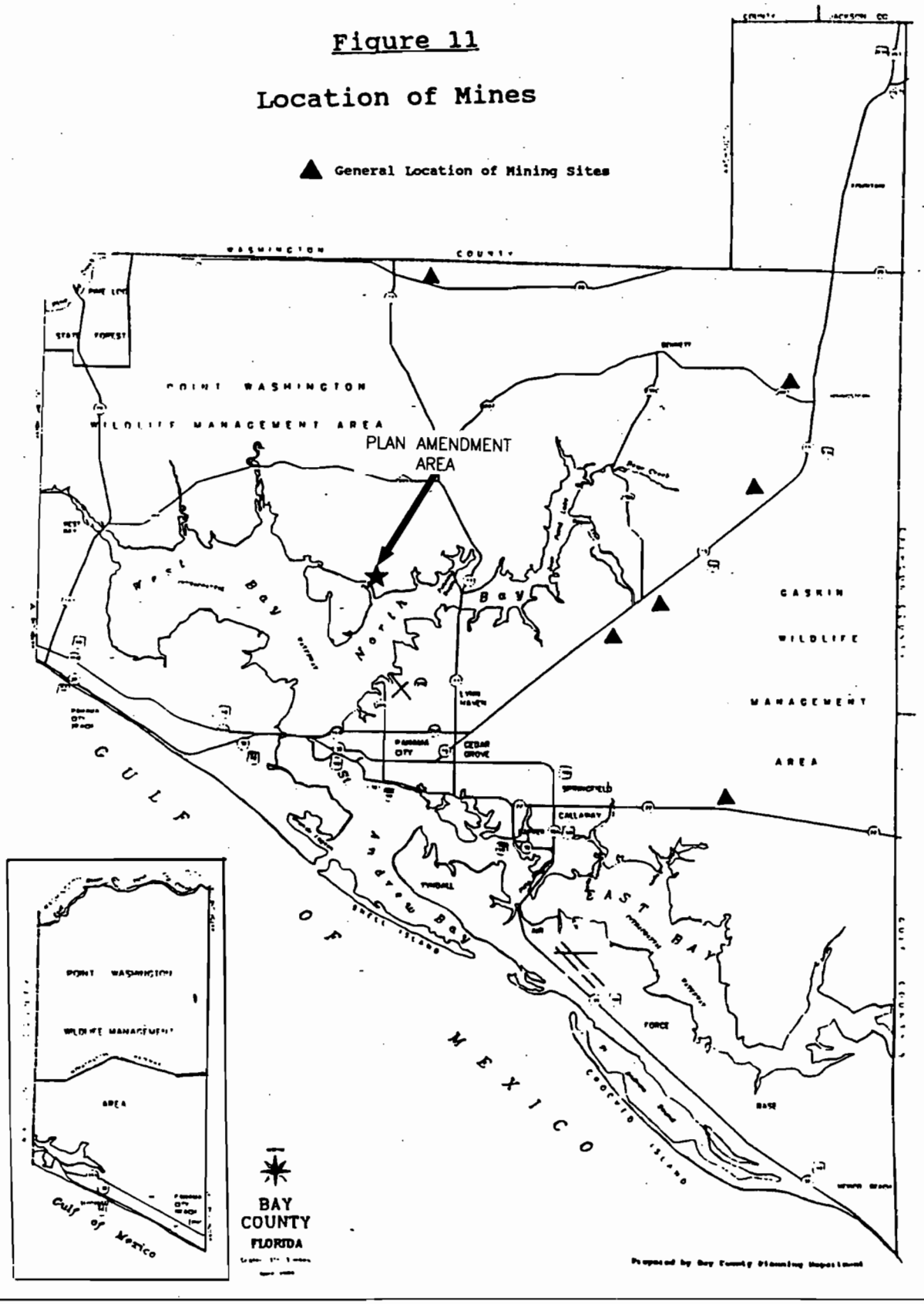


FIGURE 10.

MINING SITES
SMITH UNIT 3 PLAN AMENDMENT, BAY COUNTY

Source: Bay County 1990 Adopted Comprehensive Plan; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

3.3.6 SOILS

Figure 11 is a portion of Sheet 37 of the Soil Survey of Bay County, US Geological Survey, 1984. The soil types underlying the subject property are Leon sand, Rutlege sand, and Pottsburg sand. The majority of the property is underlain by Leon sand. Limitations on development, as described in Tables 3, 10, and 11 of the soil survey are as follows:

Limitation	Leon Sand	Rutlege Sand	Pottsburg Sand
Building sites	Severe wetness	Severe wetness, Severe flooding	Severe wetness
Roads	Severe wetness	Severe ponding	Severe wetness
Shallow excavations	Severe cutbanks cave, Severe wetness	Severe cutbanks cave, Severe ponding	Severe cutbanks cave, Severe wetness

The development of Smith Unit 3 will require raising the elevation of the site to approximately match the elevation of the existing Lansing Smith plant. The backfill material brought in to raise the elevation of the site will overcome the limitations of the native soils. No septic tanks will be installed to serve the proposed development.

3.3.7 TOPOGRAPHY

Figure 1 is a portion of the USGS 7.5 minute, Southport quadrangle map. The elevations onsite and in the surrounding area are nearly level at approximately 5 ft above mean sea level. The existing topography will not present a limitation to the proposed development of the subject property.

3.3.8 NATURAL RESOURCES

The subject property supports a North Florida pine flatwoods terrestrial community (Figure 12). This community, in Bay County in general, and the subject property specifically, have been extensively logged, resulting in a low diversity of plants and a limited amount and diversity of wildlife. The planted slash pines on the subject property

FIGURE 11.
BAY COUNTY SOIL SURVEY
SMITH UNIT 3 PLAN AMENDMENT
BAY COUNTY, FLORIDA

Sources: Bay County Soil Survey, USGS 1984; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

990151/ps

Figure 9

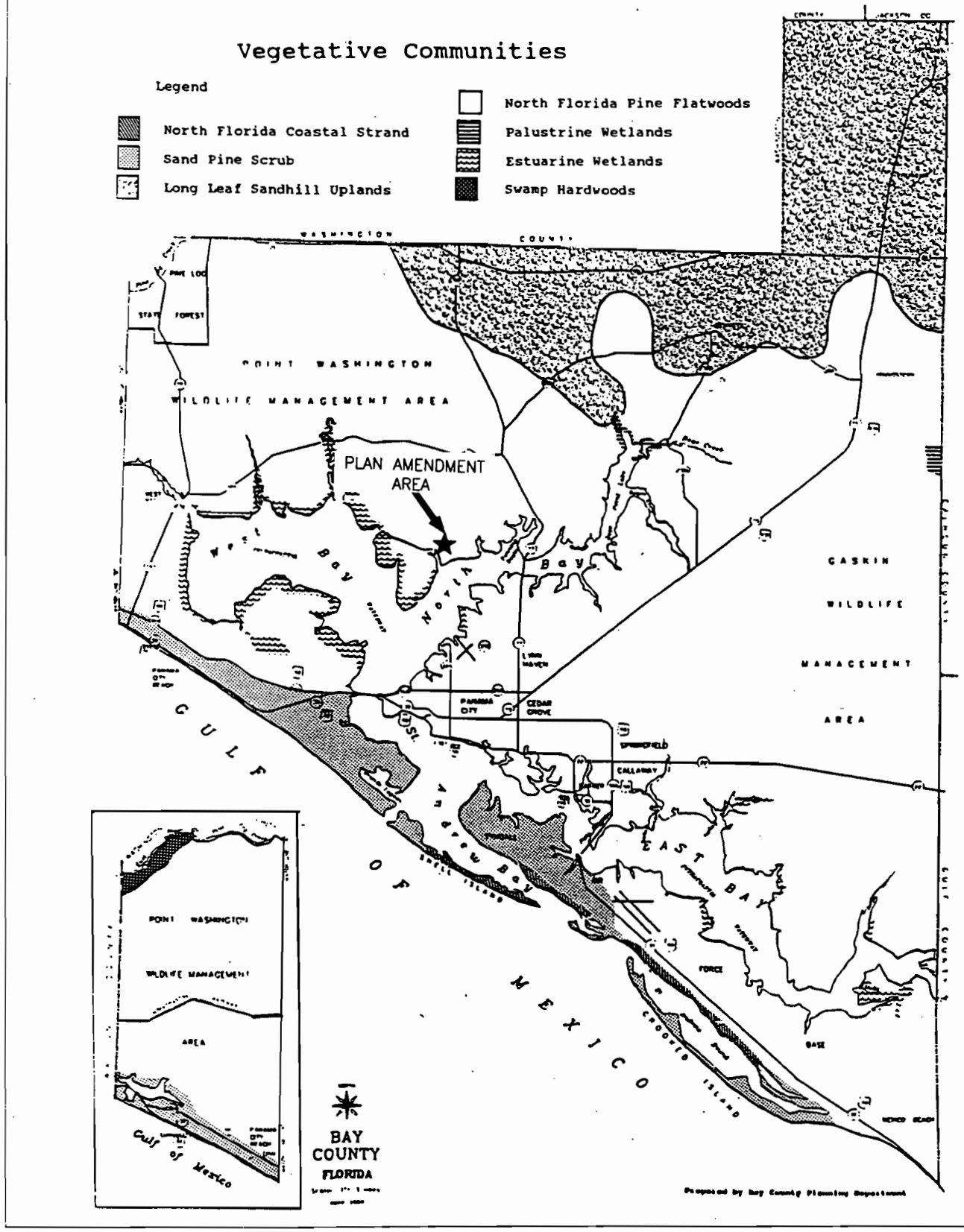


FIGURE 12.

VEGETATIVE COMMUNITIES
SMITH UNIT 3 PLAN AMENDMENT, BAY COUNTY

Source: Bay County 1990 Adopted Comprehensive Plan; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

are approximately 20 years old, as indicated on Figure 11, depicting the onsite soil types, which is based on 1978 aerial photography and which depicts the subject property and surrounding area as cleared of trees, at that time.

Figure 1 of the Conservation Element (provided as Figure 13) indicates that the subject property has not been identified as a major fish or wildlife habitat and Figure 2 of the Conservation Element (provided as Figure 14) indicates that no critical habitat areas are located on or near the property. The Strategic Regional Policy Plan (SRPP) prepared by the West Florida Regional Planning Council contains graphic locations of significant regional natural resources, including:

- Water resources;
- Planning and management areas;
- Wetlands;
- Significant transportation facilities;
- Natural systems (natural communities);
- Natural systems (locations of endangered, threatened, special concern and rare species of plants and animals and significant wildlife aggregation areas); and
- Strategic habitat conservation areas.

A set of these graphics is provided as Appendix A. The natural resources involvement of the subject property is identified only on the wetlands graphic. The involvement of the proposed development with wetlands is described in Section 3.4.4 of this report.

The February 1998 Draft Comprehensive Plan does indicate that the subject property is located in the proposed North Bay Ecological Management Area (EMA) and within a proposed Conservation Zone (Appendix A). EMAs are considered "Special Treatment Zones" in which extraordinary regulatory standards may be applied to protect natural resources. The proposed Conservation designation is intended to provide for conservation with appropriate use through regulations that will minimize damage to natural resources. As discussed in this section, wetlands are the only identified onsite natural resource. Wetland involvement will be minimized to the extent practicable and mitigation will be provided for unavoidable wetland impact.

990151/ps

Figure 1

BAY COUNTY

Fish and Wildlife Habitats

SCALE: 1" = 3.3 miles

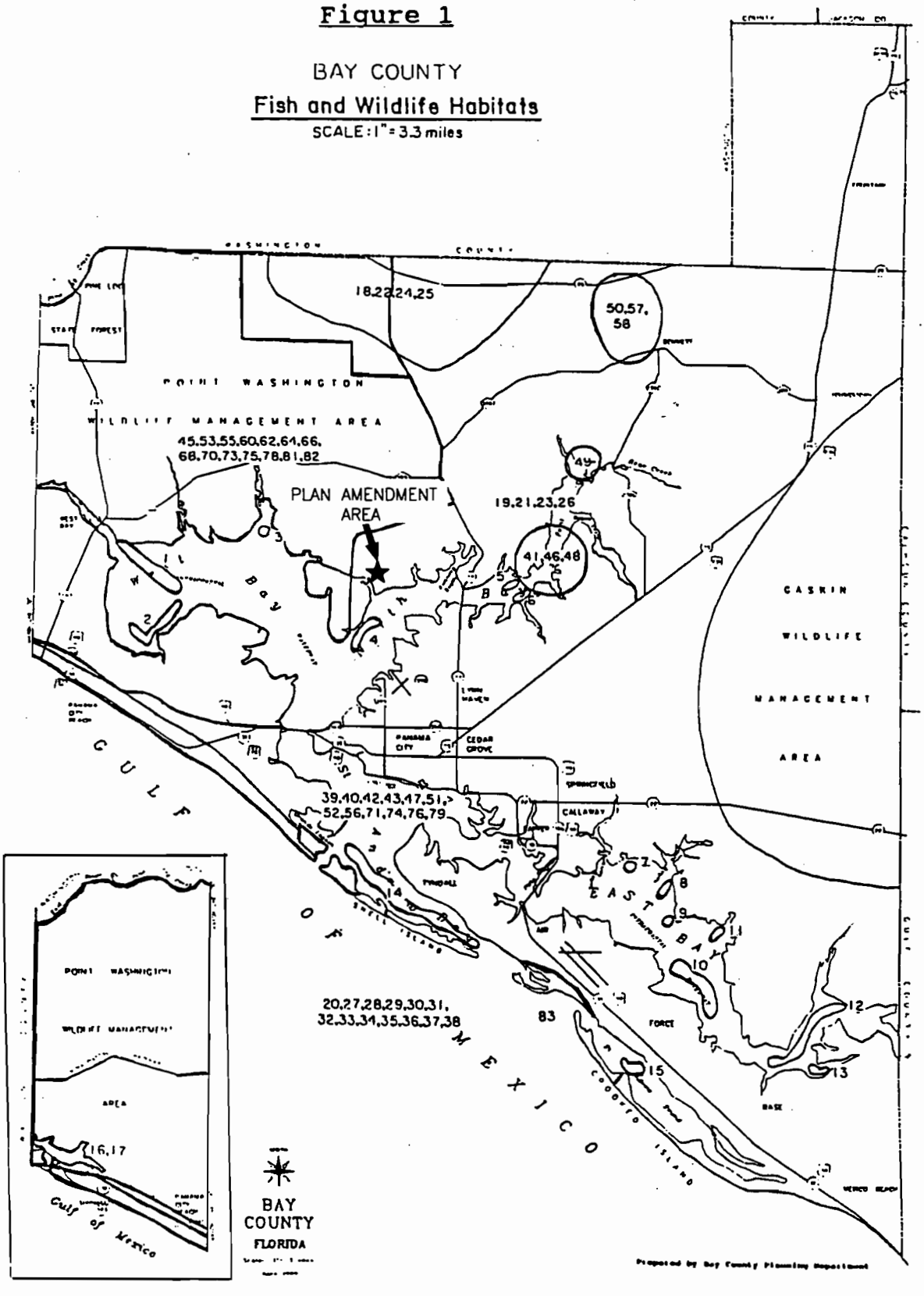


FIGURE 13.

MAJOR FISH AND WILDLIFE HABITATS
SMITH UNIT 3 PLAN AMENDMENT, BAY COUNTY

Source: Bay County 1990 Adopted Comprehensive Plan; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

990151/ps

Figure 2

Critical Habitat Areas in Bay County

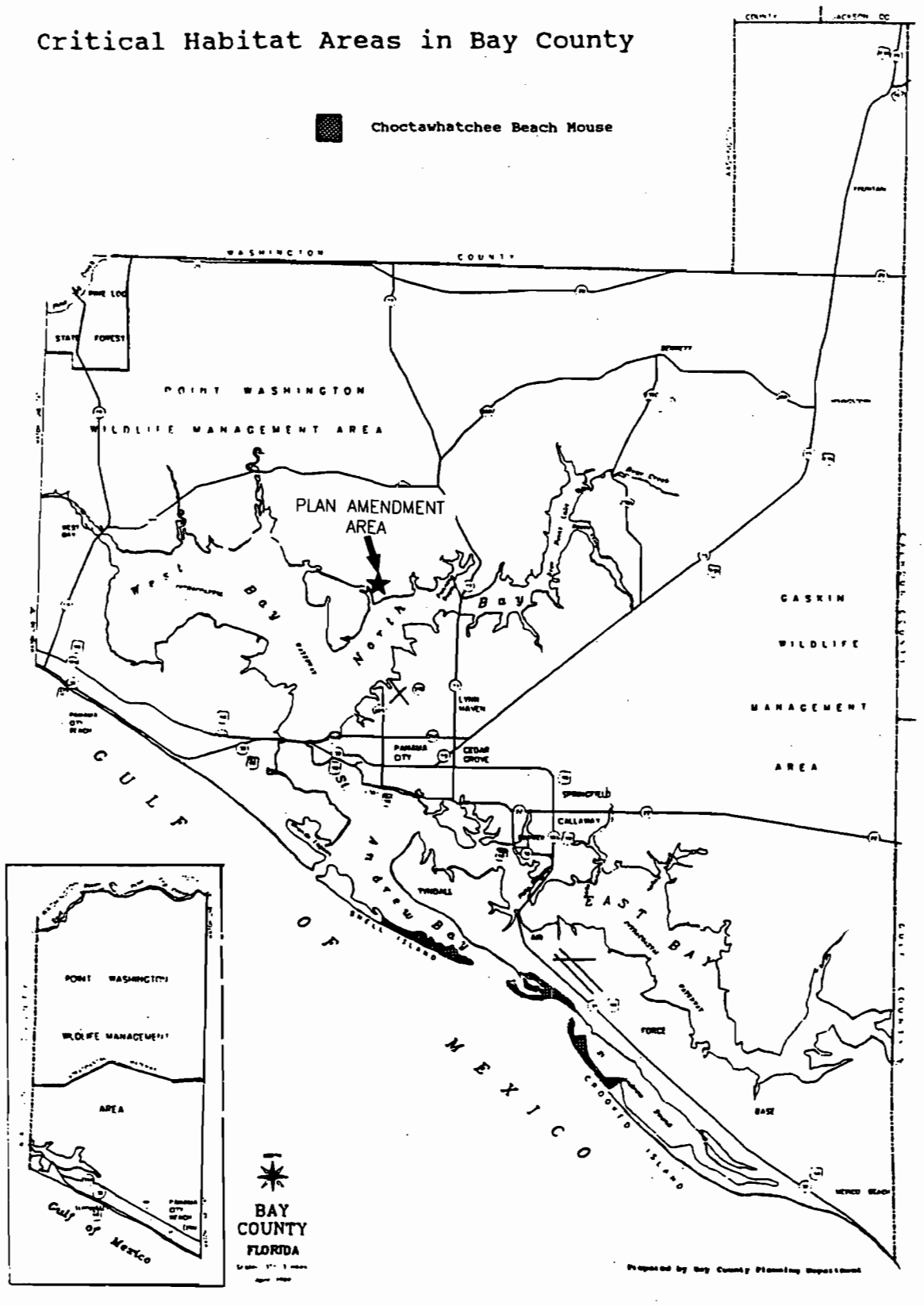


FIGURE 14.

CRITICAL HABITAT AREAS
SMITH UNIT 3 PLAN AMENDMENT, BAY COUNTY

Source: Bay County 1990 Adopted Comprehensive Plan; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

3.3.9 HISTORIC RESOURCES

A letter has been submitted to the State Historic Preservation Officer (SHPO) for a site-specific review of the State Division of Historic Resources Florida Master Site File for archaeological and historic resources. Figure 3 from the Future Land Use Element 1990 adopted Comprehensive Plan (provided as Figure 15) is a depiction of the generalized location of historic resources in Bay County. This figure indicates that historic resources may be located offsite near the property to the south. If required by the results of the Master Site File review, a site-specific survey of the potential for historical and archaeological resources will be undertaken. Since the subject site has been logged and replanted in pine, it is unlikely that significant historical and archaeological resources remain onsite.

3.3.10 DEER POINT LAKE WATERSHED

The proposed plan amendment area is not located within the Deer Point Lake watershed as depicted on Figure 16. The subject property is located approximately 5.5 miles southwest of the nearest boundary of the watershed. The subject property is not included in the Deer Point Lake watershed or protection zone and is located downgradient of all tributaries to the watershed.

990151/ps

Figure 3

Generalized Location of Historic Resources In Bay County

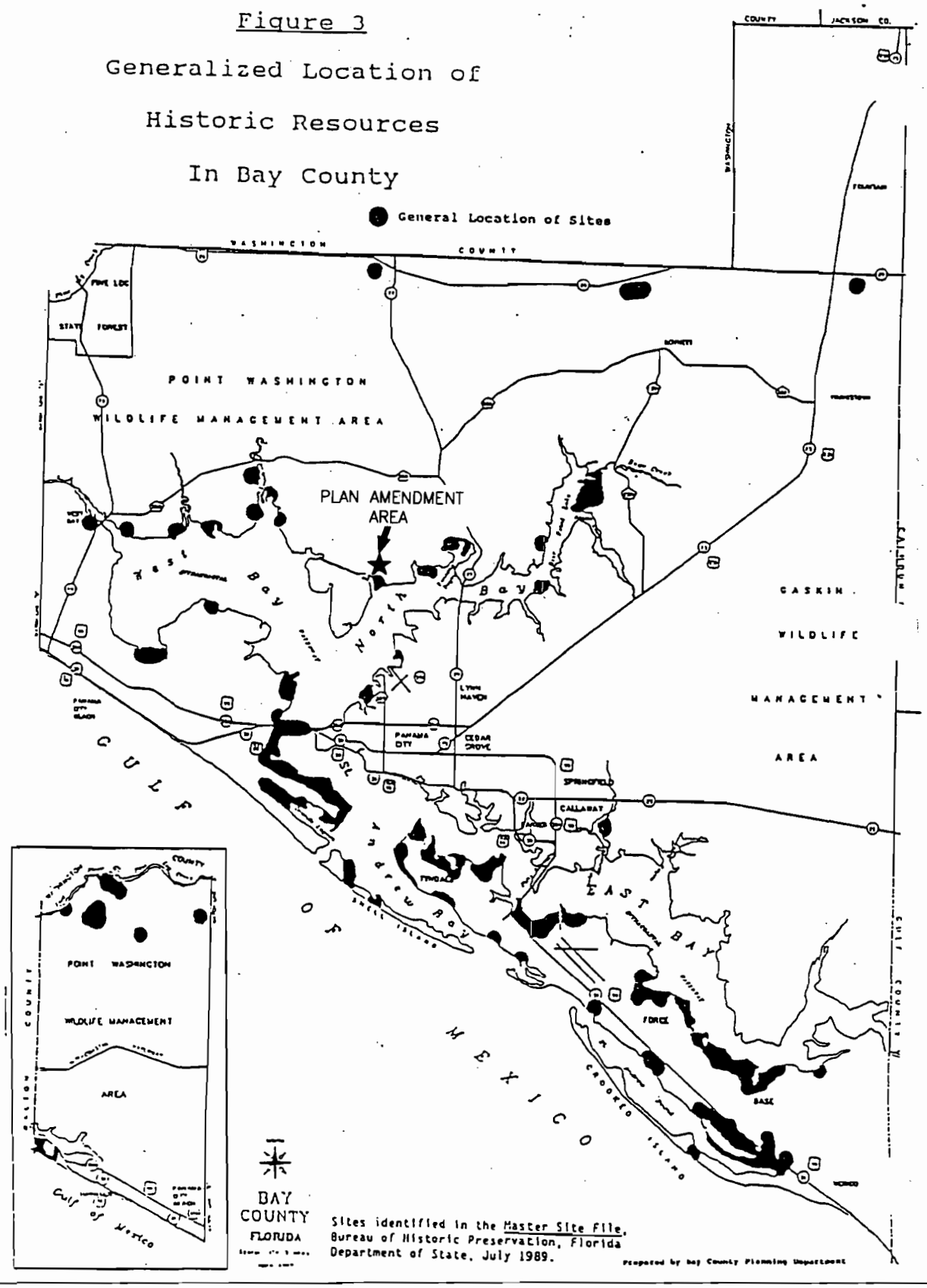


FIGURE 15.

HISTORIC RESOURCES
SMITH UNIT 3 PLAN AMENDMENT, BAY COUNTY

Source: Bay County 1990 Adopted Comprehensive Plan; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

990151/ps

Figure 16

DEER POINT LAKE WATERSHED

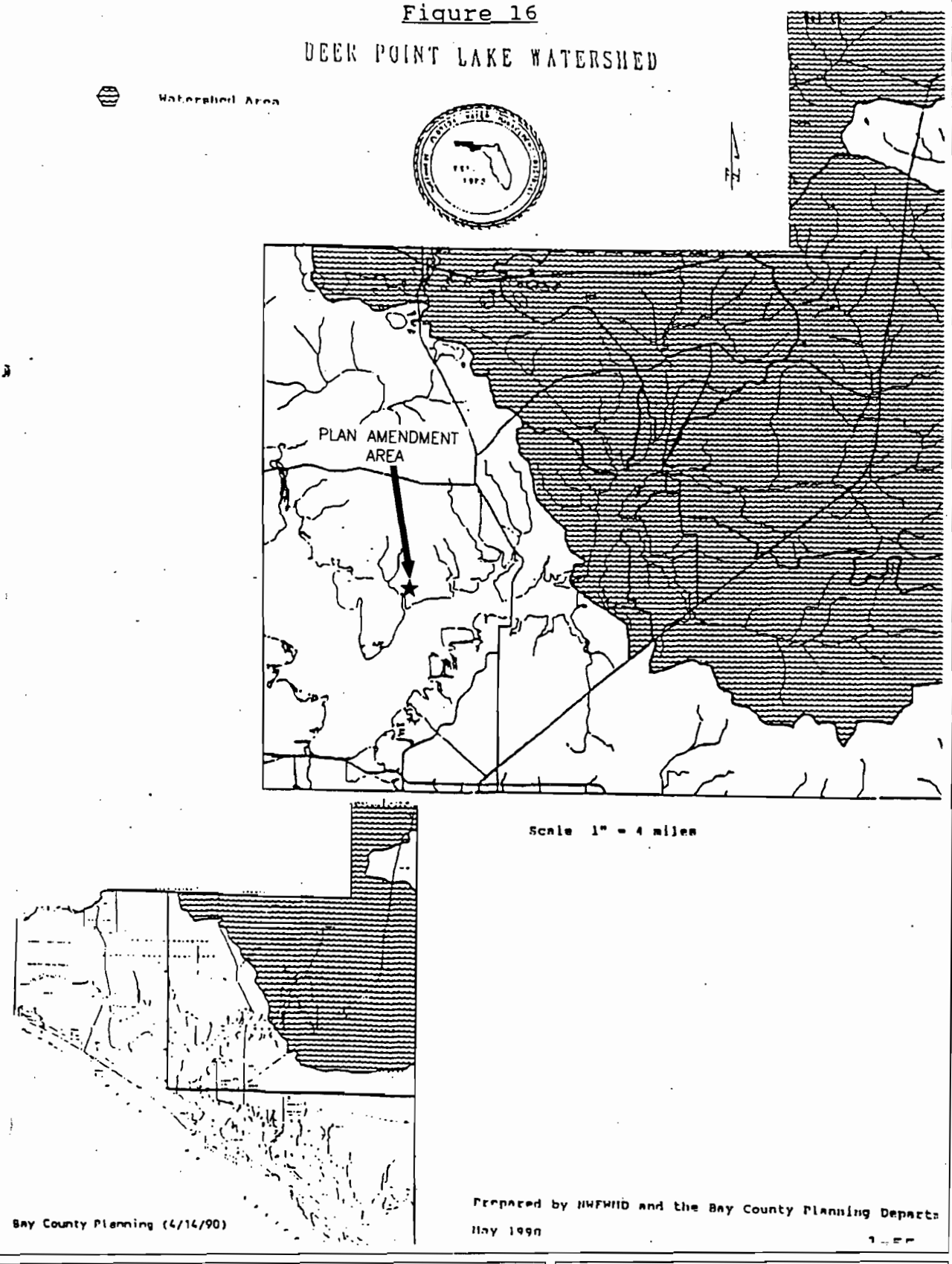


FIGURE 16.

DEER POINT LAKE WATERSHED
SMITH UNIT 3 PLAN AMENDMENT, BAY COUNTY

Source: Bay County 1990 Adopted Comprehensive Plan; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

4. ANALYSIS OF SUITABILITY FOR PROPOSED USE

4.1 GROSS LAND AREA

The subject property is currently undeveloped and planted in pine for silvicultural purposes. Development of the property would remove 50 acres from the county's inventory of silvicultural land. According to Table 19 in the Future Land Use Element of the adopted 1990 Comprehensive Plan, the total existing silvicultural acreage in 1990 was 259,426, representing 55 percent of Bay County's land utilization, and no additional acreage was shown as being needed in 1995 or 2000. According to the same table, 813 acres were identified as industrial use in 1990 (0.18 percent of Bay County's land utilization) with a need for 195 additional acres by 1995 and 242 additional acres between 1995 and 2000.

The projected need for additional industrial acreage was based on the Bay County Chamber of Commerce's efforts to promote Bay County as an attractive location for new industry in order to help combat high unemployment rates experienced in the 1980s. With county government participation, the coordinated public/private sector activity has been successful in attracting new industry. The future (1995 and 2000) industrial acreage requirement of 437 was based on the assumptions that firms seeking industrially designated land will be distributed within the county in much the same pattern as has existed in the past and that acreage requirements for industrial firms will not significantly change. The expansion of the Lansing Smith plant was not foreseen in 1990, although the expansion of the plant is consistent with the assumptions and expectations for additional industrial land uses within the adopted Future Land Use Element (similar pattern of distribution and acreage requirements).

4.2 SOILS

The existing soil types and their limitations are described in Section 3.3.6. In order to develop the proposed combined cycle electrical generating unit, the elevation of the property will be raised approximately to the elevation of the existing Lansing Smith plant site. The plant structures and generating units will be built on backfill. The use of backfill will overcome the limitation of native soils.

4.3 TOPOGRAPHY

The current site is nearly level as described in Section 3.3.7. As described in Section 4.2, the proposed development will require raising the existing elevation from the present elevation to approximately match the level of the existing plant site. The rise in elevation is required to minimize the likelihood of damage from storms and to provide a stable foundation for the new unit's facilities. There are no known topographic conditions, such as sinks, that would limit development of the proposed project.

4.4 NATURAL RESOURCES

Section 3.3.8 contains a discussion of the onsite natural resources. The discussion indicates that wetlands are the only natural resource currently identified onsite or anticipated to be onsite as a result of the current and historic silvicultural activity on the subject property and within the surrounding area. A preliminary jurisdictional delineation has identified approximately 12.1 acres of FDEP jurisdictional wetlands within the area proposed for electrical generating facilities. Where practicable, impact to existing wetland areas will be avoided or minimized. Where impacts are unavoidable, the loss of wetland acreage will be mitigated through preservation, enhancement, and/or creation.

4.5 HISTORIC RESOURCES

The applicant is awaiting a response from the SHPO regarding a site-specific review of the Florida Master Site File for the presence of archaeological and historic resources. If required, a survey of the property will be conducted to evaluate the presence/absence of significant archaeological/historical resources. It is not expected that any such sites will be identified since the subject property has been disturbed and replanted.

5. ANALYSIS OF NEED FOR REDEVELOPMENT

The need for redevelopment of areas of the county is described within the Future Land Use Element of the adopted 1990 Comprehensive Plan. The areas of substandard housing were identified as the target of redevelopment. Redevelopment needs can also be indicated by the presence of nonconforming land uses. The subject property has not been identified as an area in need of redevelopment nor are there existing nonconforming land uses in proximity to the subject property.

6. ANALYSIS OF FLOOD-PRONE AREAS

The subject property is located entirely in Flood Zone C, defined as an area of minimal flooding, as shown on Flood Insurance Rate Map, Panel Number 120004 0215, as published by the Federal Emergency Management Agency (Figure 8). The proposed plan amendment area is located within the coastal zone as shown on Figure 6, although the site is not located within the CHHA. In order to minimize the likelihood of damage from coastal flooding, the existing elevation of the subject property will be raised to approximately match that of the existing Lansing Smith plant site.

7. COMPATIBILITY WITH SURROUNDING LAND USES AND THE COMPREHENSIVE PLAN

7.1 COMPATIBILITY WITH SURROUNDING LAND USES

The proposed plan amendment to the FLUM is a change from the existing "Agriculture" designation to "Industrial". An "Industrial" land use designation is located immediately south of the subject property where the existing Lansing Smith plant is located. To the east, north and west, the existing land use designation on the FLUM is "Agriculture". Except for the existing Lansing Smith plant, the surrounding area is used for silvicultural activity. No residential development is located within two miles of the proposed plan amendment area. The proposed development of the subject property is an expansion of the electrical power generating capacity of the Lansing Smith plant through the addition of Unit 3. The presence of the existing plant was part of the pattern for industrial development at the adoption of the Comprehensive Plan. The projected need for additional industrial acreage was based on the assumption of a similar future pattern of industrial development with similar acreage requirements for industrial entities. The proposed development of Smith Unit 3 is consistent with this assumption. The development of additional electrical generating capacity at the proposed site is a logical location for sharing available, existing infrastructure and as the location for meeting the projected additional acreage for industrial use. Due to the unoccupied nature of the surrounding "Agriculture" land use designation and the abundance of land used for silviculture (no additional acreage is projected to be required), the proposed change in land use to "Industrial" is compatible with existing development patterns.

7.2 COMPATIBILITY WITH THE 1990 ADOPTED COMPREHENSIVE PLAN

Future Land Use Element

Goal	**1**	**Provide for economic growth and development while maintaining adopted levels of services (LOS) and providing protection for the environment.**
Objective	**1.1**	**All new and existing land uses shall be adequately served by facilities and service at the LOS established in the Comprehensive Plan.**

Policy 1.1.1 All development orders shall be conditioned upon the availability of public service facilities at the adopted LOS.

The proposed development of the plan amendment area is not expected to require upgrades or improvements to existing public services or facilities. The proposed Smith Unit 3 will utilize non-public sanitary sewer and potable water infrastructure already available or permitted for the existing Lansing Smith plant. The number of full-time employees at Smith Unit 3 will not generate vehicle trips or solid waste that would adversely impact existing facilities. Drainage facilities to address water quality and water quantity requirements will be provided onsite. The project will not increase the demand for parks or recreation lands.

Objective 1.2 Ensure the availability of suitable land for utility facilities necessary to support proposed development by designating 3000 acres in land use categories on the FLUM on which utility facilities may be located.

Policy 1.2.3 Region-serving facilities shall be located in areas designated as "industrial" or "public/semi-public" on the FLUM.

Smith Unit 3 is being proposed for construction in order to provide reliable electric service to the expected increase in new customers within the service area of the Gulf Power Company. Smith Unit 3 will be a region-serving facility. Since the existing Lansing Smith plant with Units Nos. 1 and 2 is designated Industrial on the FLUM, it is logical that Smith Unit 3 would be designated as Industrial.

Objective 1.7 By 1995, achieve an increase in employment as compared to 1985 levels.

Policy 1.7.1 The County shall prepare an Economic Element for this Plan by 1991, which shall include an economic analysis of the county in order to determine additional commercial and industrial land requirements.

Please refer to comments contained in the economic element (p.7-14).

Goal 2 Identify and protect the archaeological and historic resources of Bay County, including structures of architectural significance.

Objective 2.2 By 1992, Bay County shall develop and implement procedures for protection of historically and archaeologically significant sites and structures within its jurisdiction.

Policy 2.2.5 Coordinate with review and compliance procedures for environment altering projects, such as Developments of Regional Impact, to identify and protect historical and archaeological resources.

The applicant has submitted a letter to the SHPO requesting a review of the Florida Master Site File. In the event that a site-specific survey is recommended, such a survey will be conducted to identify any significant historical or archaeological resources. The disturbed and replanted nature of the subject property suggests that significant archaeological or historical resources will not be found onsite.

Goal 3 Protect and conserve Bay County's natural resources as described in Bay County's Comprehensive Growth Management Plan.

Objective 3.1 Provide a framework for protecting Bay County's natural resources form negative consequences of growth and development meeting the standards in this Plan.

Policy 3.1.2 Develop and implement a process for land development permitting to ensure that all required state and land permits are applied for and received prior to start of construction.

The proposed development of the plan amendment area requires review through the Florida Electrical PPSA. Both the planning and permitting requirements for the electrical power generating unit will be thoroughly reviewed by federal, state, and local agencies. All permits will be approved prior to the initiation of construction.

Objective 3.2 Land development regulations adopted in 1990 will include restrictions for development in areas of steep-sided sinks or other topographical constraints and areas with soils that have limitations for development.

Policy 3.2.1 Development permit applications for sites in areas identified on the soils map included as part of the FLUM series as belonging to a soil association that poses moderate to severe limitations to development shall provide a detailed soils analysis that indicates the soils suitability for use of septic tanks and absorption fields and building and road construction. Development shall be clustered on portions of the site posing the fewest restrictions and specific construction considerations, based on the requirements of the soils found on the site, shall be utilized.

Policy 3.2.3 Coordinate with the Soil Conservation Service to consider soil and topographic suitability of land when developing land use ordinances and when reviewing request for variances of adopted land use ordinance.

The proposed development of the plan amendment area will not be undertaken until sufficient geotechnical investigations are conducted to provide information for site design. It is anticipated that backfill will be added to portions of the subject property to an elevation similar to that of the existing Lansing Smith plant. There are no known topographical constraints to development of the subject site and the addition of fill will overcome the limitations of the native soils. No septic tanks will be installed to serve the proposed development.

Traffic Circulation Element

Goal 1 Provide a safe and efficient transportation system to accommodate current and future land use patterns and to maintain adopted traffic circulation LOS standards.

Objective 1.1 Maintain the LOS standards contained in Policy 1.1.1.

Policy 1.1.1 The following peak hour minimum acceptable operating LOS standards are adopted for the Bay County road system, consistent with the Florida Department of Transportation (FDOT) policy.

Peak Hour
LOS Standards

Roadway Type	Transportation Planning Areas		
	Existing Urbanized Areas	Transitioning Urbanized Areas	Rural Areas
Principal arterials	D	C	C
Minor arterial and other	E	D	D

The proposed Smith Unit 3 traffic generated by 29 full-time employees, 18 on the day shift, will access the property from County Road (CR) 2300. This road provides access and egress to the Lansing Smith plant, to a branch of the Gulf Coast Community College, and to several residences. It is not anticipated that the additional traffic generated by the operation of Smith Unit 3 will result in unacceptable LOS standards on CR 2300 or SR 77. Both roads currently operate at an acceptable LOS.

SANITARY SEWER SUBELEMENT

Goal	**1**	**Sanitary sewer facilities shall be provided in a manner that protects ground and surface water quality and promotes orderly and compact growth.**
Objective	**1.2**	**Sanitary sewer facilities shall not be provided outside of the existing and potential service areas...**
Policy	**1.2.5**	**By 1990, land development regulations will include provisions for adequate operation and maintenance of package plants consistent with the requirements of Chapter 17-6, Florida Administrative Code (F.A.C.).**

The proposed development of the plan amendment area will utilize the existing, permitted domestic wastewater treatment plant at the Lansing Smith plant to treat the domestic wastewater generated by the additional employees. The existing treatment plant is in compliance with the provisions of Chapter 62-600, F.A.C. (formerly Chapter 17-6, F.A.C.).

DRAINAGE SUBELEMENT

Goal	**1**	**Provide adequate storm water management including reasonable protection from flooding, protection of the quality of receiving waters, and protection of investments in existing facilities.**
Policy	**1.2.3**	**The county hereby adopts a minimum countywide water quality LOS standard.**
Policy	**1.2.4**	**The county hereby adopts a minimum countywide water quality LOS standard.**
Policy	**1.2.5**	**No approvals for development shall be issued for new development, which would not comply with the adopted LOS.**

Development of the plan amendment area will include the provision of onsite drainage ponds that will provide both storm water runoff water quality treatment and water quantity storage/retention. The onsite drainage facilities will meet adopted LOS standards, including the water quality standards.

Objective	**1.3**	**By 1991, storm water management regulations will be incorporated into the Bay County land development regulations.**

Policy 1.3.1 Storm water management regulations will prohibit the alterations of existing drainage features unless such alterations will not create adverse impact in the form of decreased performance for upstream and downstream areas. The evaluation of adverse impacts shall be by acceptable engineering methodologies and shall consider storage volume, conveyance, water quality, and maintenance. Storm water management regulations shall require that future development utilize the storm water master plan as a basis for design.

There are no existing surface water bodies, rivers, or tributary creeks located within the plan amendment area. The onsite drainage improvements, i.e., storm water ponds, to be constructed onsite will not adversely impact upstream or downstream drainage features. The design of the storm water ponds will meet all applicable federal, state and local requirements. Offsite areas will be allowed drainage around the site through existing conveyance systems.

Policy 1.3.2 Storm water management regulations will:

(a) Require that new developments provide storm water management systems that meet quality and quantity levels of service defined in drainage policies 1.2.3 and 1.2.4. . . .

(b) Require that appropriate storm water engineering, design and construction standards for onsite systems are provided and utilized;

(c) Require that erosion and sediment controls are used during development;

(d) Require that periodic inspection and maintenance of onsite systems is provided by the owner, unless the system is accepted by the county for maintenance;

(e) Require that buffer zone requirements for areas adjacent to natural drainage features are developed;

(f) Provide for new commercial, industrial, public, and residential developments to integrate their storm water management systems into their project's landscaping, open space, or recreational areas and to require the maintenance of 10% of the building lot's native vegetation in order to absorb storm water runoff; and

(g) Include provisions to prevent the creation of breeding areas for disease-carrying vectors, such as mosquitoes.

The development of storm water ponds within the plan amendment area will meet water quality and water quantity LOS standards. Erosion and sediment controls will be used during construction activities to protect wetlands and downstream receiving waters. Maintenance of the completed ponds will be the responsibility of Gulf Power Company. A majority of the subject property is planted slash pine with natural vegetation restricted to isolated wetlands. The storm water ponds will be incorporated into open spaces and/or landscaped areas and may be located adjacent to wetlands to ensure maintenance of hydroperiods. To the extent practicable, native vegetation will be retained. Design of the storm water ponds will be such that provisions to prevent the creation of breeding areas can be incorporated.

POTABLE WATER SUBELEMENT

Goal 1 **To provide high quality potable water in adequate quantity to meet the adopted level of service in such a manner that encourages orderly and compact growth.**

Objective 1.1 **By 1991, Bay County will implement procedures to ensure that potable water will be provided as needed and where needed to correct existing deficiencies and to serve future development occurring within potable water service areas. Adopted potable water service areas will be shown on the Future Land Use Map Series.**

The proposed development of the plan amendment area will utilize potable water from permitted wells at the Lansing Smith plant. There will be sufficient permitted ground water withdrawal to supply the proposed Smith Unit 3 with potable water. The development of Smith Unit 3 will not use public potable water service.

Objective 1.2 **Bay County shall implement measures to conserve and to protect potable water resources and to reduce the per capita consumption rate of potable water by 15 percent by the year 1995.**

Policy 1.2.2 **Bay County shall require use of water conservation devices in all new development. Water conservation devices shall include water saving water closets and flow restricting shower heads and faucets.**

The proposed development of the plan amendment area will utilize water conservation devices and techniques.

AQUIFER RECHARGE SUBELEMENT

Goal	**1**	**To provide protection to those areas of Bay County with high recharge potential to the Floridan aquifer.**
Objective	**1.1**	**By 1991, Bay County will restrict land uses in the area of high recharge potential in order to preserve the quality of water which may recharge the Floridan aquifer.**
Policy	**1.1.1**	**Land development regulations adopted by the county shall prohibit land uses that may discharge substances that could infiltrate and degrade the ground water in the area of high recharge potential.**

As depicted on Figure 5, the plan amendment area is not located in an area of high recharge potential to the Floridan aquifer.

COASTAL MANAGEMENT ELEMENT

Goal	**1**	**Protect, conserve, and restore coastal area resources and plan for development activities.**
Objective	**1.1**	**Prohibit development of unaltered natural habitats in the coastal area unless a portion of the development site is left in its original condition.**
Policy	**1.1.2**	**Areas containing endangered or threatened species habitat and unique national areas such as those designated in the Florida Natural Areas Inventory shall not be developed for any use that would cause loss of viability of the community or habitat.**

The majority of the plan amendment area has been altered for silvicultural activities (planted pine). The only unaltered natural areas onsite are isolated wetlands. No habitat for endangered or threatened plant or animal species has been found onsite.

Objective	**1.3**	**Reduce discharge of untreated storm water from all sources into surface waters, including wetlands and estuaries.**
Policy	**1.3.4.**	**The storm water management plan shall prohibit use of wetlands and other waterbodies as sediment traps during development. Sediment traps shall be constructed onsite to prevent escape of sediments to waterbodies.**

There currently are no surface water bodies located onsite. The onsite wetlands will not be used as sediment traps during or after development. The storm water ponds will be designed to prevent downstream migration of sediments.

Policy 1.3.6 Require all new sewage treatment plants, industries and other facilities that discharge waste products to dispose of effluent via land spreading, spray irrigation, recycling or other means that avoid direct discharge into surface waters without advanced treatment.

The domestic wastewater generated from the proposed Smith Unit 3 will be treated by the existing domestic wastewater treatment plant at the Lansing Smith plant. The effluent from the treatment plant is routed to the existing ash pond which discharges intermittently in response to a design storm event. Industrial wastewater for the new plant will be recycled into the closed-loop cooling system. The cooling towers associated with Smith Unit 3 will use 7.5 million gallons per day (MGD) of surface water from the existing Lansing Smith plant discharge canal, which has a permitted surface water withdrawal of 274 MGD for the two existing units. The cooling system blowdown water, approximately 3.7 MGD, will be routed back to the discharge canal where it will mix with the discharge water from the existing Smith Units 1 and 2. The impact of the blowdown water volume to downstream surface waters will be negligible and in compliance with applicable water quality standards.

Objective 1.9 Development or redevelopment in the coastal area shall occur only if adequate infrastructure to maintain the adopted level of service is in place by the time of project completion to serve the proposed development.

Policy 1.9.1 Coastal area levels of service shall be consistent with those adopted in the sanitary sewer, solid waste, drainage, potable water, and natural ground water aquifer recharge element; the traffic circulation element; and the capital improvements element.

Development of Smith Unit 3 will meet all LOS standards as determined by a concurrency review at the time that an application for developmental approval is submitted. Sanitary sewer and potable water service will be provided by permitted onsite facilities at the Lansing Smith plant. Solid waste generation and traffic generation will not adversely impact existing LOS standards. The development of the subject property will include the provision of storm water ponds that will meet water quality and water quantity LOS standards. The plan amendment is not located in a high natural ground water aquifer recharge area.

Policy 1.9.4 Development approvals for projects for which adequate sewer capacity is not available prior to development completion shall be conditioned upon provision of domestic waste treatment facilities that meet Florida Department of Environmental Regulation standards. The development shall be required to connect to central sewer service within 1 year of availability.

The existing wastewater treatment plant at the Smith Plant meets FDEP regulatory requirements. This plant will provide treatment for the domestic wastewater generated at Smith Unit 3.

1.9.7 Development approvals, including those in the coastal area, shall be reviewed by the Panama City Urban Area Metropolitan Planning Organization and/or the Department of Transportation for their impact on the level of service of the existing roadway network. Developments that will generate sufficient additional traffic to cause the adopted level of service standard for that roadway to be exceeded shall be denied until improvements required to maintain the adopted level of service standard are complete.

The additional employment from the development of Smith Unit 3 will not generate sufficient additional traffic to impact the existing LOS on CR 2300 or SR 77. Traffic impacts will be evaluated during the state site certification process.

Policy 1.9.10 Storm water facilities shall be constructed to meet or exceed the standards set forth by the Florida Department of Environmental Regulation and the comprehensive storm water management plan.

The storm water ponds to be constructed as part of the Smith Unit 3 will meet the LOS standards established by the Comprehensive Plan and the requirements of FDEP.

Objective 1.12 Protect historically significant resources in the coastal area of Bay County, including structures that are significant examples of the architectural design of their period.

The SHPO has been sent a letter requesting a site-specific review of the Florida Master Site File for the presence of significant historical and archaeological resources. If recommended, a survey of the plan amendment area will be conducted. The disturbed and replanted nature of the subject property suggest that significant archeological or historical resources will not be found onsite.

CONSERVATION ELEMENT

Goal 1 **Protect, manage, and conserve the natural resources of Bay County to achieve their continued best use for the current and future citizens of the county.**

Objective 1.1 **Prevent degradation of surface water quality below water quality classifications designated by the Department of Natural Resources and the Department of Environmental Regulation.**

The storm water runoff generated by development of the plan amendment area will be treated to the LOS standards established by the Comprehensive Plan and will meet the requirements of FDEP. The only other surface water discharge from Smith Unit 3 will be the blowdown water from the cooling tower. This 3.7 MGD discharge will co-mingle with approximately 274 MGD of cooling water discharged from Smith Units 1 and 2. The treated storm water and the co-mingled blowdown discharge will not significantly degrade the surface water quality of downstream receiving waters to below the existing water quality classifications.

Objective 1.4 **Meet or exceed minimum air quality standards established by regulatory agencies.**

Policy 1.4.3 **Require industrial land uses to be located where the impacts on air quality in residential and conservation land use areas do not cause or contribute to an ambient concentration that exceeds the standards established in Chapter 17-2, F.A.C.**

The location of Smith Unit 3 is at least 2 miles from existing residential development. The design of the unit, the cleaner burning natural gas fuel, and the air pollution prevention equipment will prevent exceedances of current air quality standards.

Objective 1.9 **Protect plant and animal species designated as endangered, threatened, and species of special concern and unique vegetative communities in the county.**

Policy 1.9.2 Endangered or threatened species habitats and unique natural areas, as identified by the Florida Natural Areas Inventory, shall be considered environmentally sensitive. Prior to development in these sections, the development site shall be inventoried for the presence of environmentally sensitive habitats. The results of this survey, as well as mitigation measures for protection of these features if found, shall be submitted as part of land development permit applications submitted for the project.

No endangered or threatened plant or animal habitats have been found onsite. The majority of the property has been used for silvicultural purposes. Only isolated wetlands have been left relatively undisturbed. It is not anticipated that environmentally sensitive habitats will be found onsite.

Objective 1.10 Maintain the current complement of fisheries, wildlife, wildlife habitat, marine habitat, and vegetative communities through conservation of diverse and viable habitats.

Policy 1.10.7 All development other than individual single-family residential construction that is not part of a larger common plan of development shall preserve a minimum of 10 percent of its area as open space landscaped with native species in accordance with a County Landscape Ordinance. Land development regulations shall provide incentives, such as density bonuses or increased lot coverage ratios, for the use of native species in required plantings.

To the extent practicable, the onsite isolated wetlands will be incorporated into the development of Smith Unit 3. These wetlands are the only areas of unaltered native species. Landscaping will use native species to meet county landscape ordinance requirements.

CAPITAL IMPROVEMENTS ELEMENT

Goal 1 Provide public facilities to meet existing deficiencies and maintain adopted LOS standards as identified in the Comprehensive Plan.

Objective 1.5 Development orders or permits shall be issued consistent with the provision of needed capital improvements and adopted LOS standards.

Policy 1.5.1 No later than December 1, 1990, the county shall not issue a development order or permit that results in the reduction in the

LOS adopted in the Bay County Comprehensive Plan.

The proposed development of Smith Unit 3 will be reviewed for concurrency with adopted LOS standards when an application for development approval is submitted. The proposed development will meet LOS standards.

ECONOMIC ELEMENT

Goal 1 **Provide a diversified and stable economy that is compatible with planned growth and quality of life objectives and that provides maximum legitimate employment opportunities for all segments of the Bay County population.**

Objective 1.1 **Increase employment opportunities for Bay County residents.**

The construction of Smith Unit 3 will provide up to 325 construction-related jobs and will provide 29 full-time jobs when the unit is operational.

Objective 1.3 **Ensure that sufficient developable land is allocated for future agricultural, commercial, industrial, and recreational land uses to meet the needs projected for future growth in all sectors of the county's economy on the FLUM adopted by the County.**

Policy 1.3.1 **In identifying suitable lands for commercial and industrial growth, the following factors shall be utilized:**

Close proximity to principal arterials;

Access to required utilities, including water, sewer, electricity, gas, and telephone. Provisions for the extension of these utilities required by new commercial or industrial development by the private sector shall be made in the Future Land Use Element of this Plan;

Access to rail facilities, if appropriate;

Minimizing negative impacts to the natural environment and adjacent land uses through the use of buffers, such as natural vegetation.

The plan amendment area is located approximately 5 miles from SR 77, a principal arterial directly accessed by CR 2300. Access to required utilities is primarily from the existing Lansing Smith plant. Rail access is not applicable to Smith Unit 3, which is a water-dependent utility accessible to Alligator Bayou through the existing Lansing Smith plant. Surrounding land uses are silvicultural activities to the east, north, and west, and the existing Lansing Smith plant to the south. The applicant controls 571 additional acres located east, north, and west of the property and no development is proposed for this area, now in planted pine. To the extent practicable, impacts to the onsite wetlands, the remaining natural environment within the plan amendment area, will be minimized.

7.3 COMPATIBILITY WITH THE PROPOSED BAY COUNTY COMPREHENSIVE PLAN (FEBRUARY 1998 VERSION)

ECONOMIC DEVELOPMENT

Objective 2.1 Ensure an adequate supply of land designated for commercial and industrial use on the FLUM.

Policy 2.1.1. The County will designate land for commercial and industrial uses on the FLUM.

Policy 2.1.2 General criteria for the designation of industrial land uses on the FLUM include:

1. Existing industrial or commerce parks;

The subject property is located adjacent to an existing Industrial designation (existing Lansing Smith plant).

2. Availability of public or private utilities;

Proposed development of the subject property will utilize the existing domestic wastewater treatment plant at the Lansing Smith plant and will use potable water from the existing and permitted water wells. Neither public sewer service nor public water supply will be used to serve the plan amendment area.

3. Proximity to major highway access and/or rail access;

The plan amendment area is located approximately 5 miles from SR 77, a major arterial roadway. Access to SR 77 is by CR 2300, which primarily is used by employees, visitors and vendors of the existing Lansing Smith plant.

4. Potential to create nuisances such as fumes, noise, odor, dust, traffic, etc;

The proposed development will not create a nuisance to surrounding land uses, which are silviculture, undeveloped land, and the existing Lansing Smith plant. The closest residential development is located over 2 miles northeast of the plan amendment area.

5. For water dependent industry, access to deep water channels; and

The proposed electrical power generating development (Smith Unit 3) is a water dependent use. Access to a deep-water channel is available from Alligator Bayou.

6. Minimal impact on locally significant environmental resources.

The majority of the plan amendment area is planted pine and the only locally significant environmental resource identified onsite is the presence of wetlands. The site planning process will avoid wetland impacts to the extent practicable and any unavoidable wetland impacts will be mitigated through preservation, enhancement or creation.

Policy 2.1.4 Industrial or commerce parks may be located in urban, suburban, or rural service areas when level of service standards are met.

The plan amendment area is identified as within a suburban planning area. The proposed development of the subject site will meet level of service standards for sanitary sewer and potable water by using private permitted facilities at the Lansing Smith plant; for drainage, by constructing storm water ponds for water quality and quantity in accordance with FDEP regulations; and for solid waste and transportation, due to the minimal impact to the existing Steelfield landfill and on the existing LOS of SR 77.

Objective 2.4 Promote the growth and development of existing industrial and commerce parks.

Policy 2.4.1 **New industrial growth shall be encouraged to use existing or underutilized industrial or commerce parks unless circumstances exist that would preclude such location.**

Policy 2.4.2 **Where possible, new industrial growth should occur in publicly funded industrial or commerce parks in order to recapture public investment.**

Policy 2.4.3 **The Board shall not approve amendments to the FLUM that will create industrial land outside of existing industrial or commerce parks unless it can be demonstrated that a bonafide need exists for such industrial land use.**

Section 2 of this plan amendment application addresses the need and justification for constructing Smith Unit 3. Siting this additional electrical power generating unit adjacent to the existing Lansing Smith plant is an efficient and logical planning choice due to the ability to use existing infrastructure such as wastewater treatment, ground water withdrawal wells, transmission lines, cooling water withdrawal and shared discharge points. The proposed use of the plan amendment area is located within a suburban area and is an expansion of an existing industrial use, following a pattern of existing industrial development.

Objective 2.11 **Establish a procedure to "fast track" large-scale land use plan amendments to this plan that will be instrumental to the attraction, retention or expansion of business enterprise.**

Policy 2.11.1 **The attraction, expansion, or retention of businesses that create new jobs is hereby declared to be in the public interest of Bay County. As means of furthering this interest the Board will participate in the "expedited permitting" process as described in Chapter 97-28, Laws of Florida.**

The proposed expansion of the existing Lansing Smith plant is in the public interest of Bay County. Approximately 29 new jobs will be created once the unit is operational and up to 325 temporary jobs will be created during construction of Smith Unit 3.

FUTURE LAND USE ELEMENT

Objective 3.3 **Establish and maintain criteria for the designation of land use categories identified in Policy 3.2.4.**

Policy 3.3.1 **Criteria for designating land use categories on the FLUM and attendant standards for development shall be as shown on Table 3A.**
Agriculture = Allowable use – self-contained industrial.

Intensity – no more that 25% impervious area

Industrial = Designation criteria: Existing industrial or commerce parks, proximity to major highway access and/or rail access, availability of public or private utilities, potential to create for water dependent industry access to deep water channels, minimal impact on locally significant environmental resources.

Allowable uses = DOR Property Use Code Table 4000 through 4900

Intensity = No more than 80% impervious area

Development restrictions = Should not be located near residential areas. New industrial development to be located in existing industrial or commerce parks unless otherwise determined necessary by the Board.

The existing Agriculture designation (1990 adopted Comprehensive Plan) does not accommodate the proposed industrial use. It is possible that text changes in the allowable uses incorporated in the draft 1998 Comprehensive Plan would allow for the development of Smith Unit 3 as a self-contained industrial use. The site plan provided as Figure 2 depicts an intensity of less than 25 percent impervious area. Due to the proposed timing of the approval of the construction and operation of Smith Unit 3 this separate plan amendment application has been prepared. The existing Lansing Smith plant is designated industrial and its Department of Revenue (DOR) property code is 9100. The appropriate Standard Industrial Code (SIC) is 4911, power generation, (a subset of SIC code 4900). The proposed use of the plan amendment area is an expansion of the existing electrical power generating facility within the existing Industrial land use designation. The extension of this designation to the plan amendment area is consistent with prior Bay County interpretations of land use and property use codes. The plan amendment area is located at least 2 miles from the nearest residential area.

TRANSPORTATION ELEMENT

Objective 4.4 Establish access control corridors to provide safe and convenient movement to and from Urban Service Area so as to enhance managed growth and the overall development of commerce in Bay County.

Policy 4.4.1 The following arterial roads are hereby designated as "Access Control Corridors".

2. State Road 77, Washington County line to the intersection of State Road 77 and County Road 2300. LOS D

The majority of the permanent employees at Smith Unit 3 are anticipated to live within the Panama City/Panama City Beach area and will, therefore, access CR 2300 from SR 77 from the south.

INFRASTRUCTURE ELEMENT

Objective 5B.8 Establish wastewater LOS standards for purposes of estimating future needs and issuing development orders.

Policy 5B.8.1 For areas where central sewer service is not available concurrency requirements may be met by the issuance of an "Onsite Sewage Disposal" (septic tank) permit pursuant to Chapter 10D-6, F.A.C.

The proposed Smith Unit 3 will utilize the domestic wastewater treatment capability at the existing Lansing Smith plant. The proposed use within the plan amendment area will meet concurrency requirements relative to wastewater treatment.

Objective 5C.2 Provide potable water from Deer Point Reservoir using the County's systems to replace existing community service level water wells. (Public Purpose: Reduce consumption of limited ground water resources).

Potable water will be provided to the proposed development form four existing and permitted wells at the Lansing Smith plant site.

Objective 5E.10 Establish specific provisions in the Land Use Code for the regulation of storm water runoff.

Policy 5E.10.1 *Ecosystem Management Zones:* Treatment to OFW standards may be required for areas within designated EMAs.

Objective 5E.12 Ensure that State water quality standards are maintained or improved as a result of the County's storm water management programs.

Policy 5E.12.1 The County will not permit any new development that will cause degradation of State water quality standards.

The storm water ponds will be designed in accordance with FDEP regulations. Both stormwater treatment (water quality) and storm water storage (water quantity) will be provided onsite. State water quality standards will be met.

CONSERVATION ELEMENT

Objective 6.2 Identify and designate locally significant natural resources.

Policy 6.2.1 Locally significant natural resources are as follows:

4. Designated Ecosystem Management Areas (EMAs).
5. Designated habitat conservation areas.
7. Ground water resources
8. Wetlands.
9. Flood zones.
12. Selected trees and vegetation.
13. Threatened and endangered species.

The plan amendment area is located within the proposed North Bay EMA. The other onsite locally significant natural resource is the presence of wetlands. The plan amendment area is not a designated habitat conservation area, is located outside of Zone A, is not characterized by an unaltered natural state and is not unique habitat for threatened and endangered species. No new ground water withdrawal wells will be located onsite. Any ground water withdrawal requirements will be from permitted wells.

Objective 6.5 Maintain or improve estuarine water quality consistent with state water quality standards.

Policy 6.5.1 The County will maintain or improve estuarine water quality by:

5. Restricting development in designated EMAs.

The plan amendment area is located within the proposed North Bay EMA. Storm water treatment will be provided onsite and blowdown water from the cooling tower will be thoroughly mixed with the existing discharge from Smith Units 1 and 2. Estuarine water quality should not be adversely impacted by the proposed development.

Policy 5C.2.1 The Board will strive to make potable water available from the county system on a wholesale basis to areas currently served by community level water wells when determined to be financially feasible.

Objective	**5C.6**	**Make certain that all water distribution systems are designed and constructed in conformance with professionally accepted standards.**
Policy	**5C.6.4**	**In areas where central water service is not available private potable water wells may be installed consistent with applicable regulations.**

Central water service is not available to the plan amendment area. The proposed Smith Unit 3 will utilize potable water from permitted wells serving the existing Lansing Smith plant site.

Objective	**5C.10**	**Protect ground water resources from contamination and/or overuse.**
Policy	**5C.10.3**	**All community level potable water wells will be evaluated to determine possible effects on ground water resources.**

The proposed development of Smith Unit 3 will use water from permitted wells serving the existing Lansing Smith plant.

Objective	**5C.11**	**Establish level of service standards for purposes of estimating consumptive demands and issuing development orders.**
Policy	**5C.11.1**	**3. For areas where central water service is not available concurrency requirements can be satisfied by private, individual water wells.**

The proposed development of the subject property will meet the concurrency requirements through use of permitted wells.

Objective	**5E.9**	**Ensure that storm water runoff is no greater after a development project than before the project.**
Objective	**5E.10**	**Establish specific provisions in the Land Use Code for the regulation of storm water runoff.**
Policy	**5E.10.1**	**6. Require evaluation of flooding that may be caused by the development of vacant land adjacent to existing developed areas...**
		7. Require that best available engineering practices be used for the design and construction of storm water control facilities based on the following level of service standards:

The onsite drainage improvements (storm water treatment and storage ponds) will be designed, permitted and constructed in accordance with applicable federal, state and local regulations.

Objective 6.7 Conserve and manage natural resources on a systemwide basis rather than piecemeal.

Policy 6.7.1 The County will use designated EMAs as a means for the conservation of natural systems.

The plan amendment area has been altered through its use for silviculture. Nearly the entire site was logged as depicted in the aerial photograph that serves as the base map for the Soil Survey (Figure 11).

Policy 6.7.2 EMAs are considered "Special Treatment Zones" in which extraordinary regulatory standards may be applied to protect natural resources.

Policy 6.7.4 The following development standards will apply in designated EMAs:

1. **The requirements of this policy shall apply unless: (1) it can be demonstrated that no locally significant resources exist on a parcel of land subject to development, or; (2) a developer can design and construct a development project such that locally significant environmental resources are preserved, or impact minimized.**
2. **All storm water runoff will be treated to OFW standards or greater**
3. **Any new point source discharges of sewage effluent are prohibited.**
5. **Development will be undertaken so as to avoid activities that would destroy wetlands or the natural functions of wetlands.**
6. **No building or structure can be located closer than 30 feet from any DEP wetland jurisdictional line. All native vegetation, if any exists, will be preserved within the 30-foot setback area.**
7. **No development will be permitted that can reasonably be expected to cause short or long term violations of state water quality standards.**

The plan amendment area is currently used for silviculture (planted slash pine). The onsite wetlands are isolated systems without connection to larger regional wetland systems such as Jacksons Titi or Newman Bayou. To the extent practicable, development of Smith Unit 3 will minimize impact to the onsite wetlands. There will be no new point source discharges of sewage effluent since domestic wastewater will be treated at the existing treatment plant at the Lansing Smith plant. The proposed project would not be expected to produce wastewater streams that could cause violations of state water quality standards.

Policy 6.7.6 The County will encourage and support the preservation and acquisition of lands within EMAs for mitigation or mitigation banking purposes.

For unavoidable impacts to wetlands, the applicant will provide mitigation through preservation, enhancement and/or creation.

Objective 6.11 Protect and conserve wetlands and the natural functions of wetlands

Policy 6.11.1 For purpose of this plan the term "wetlands" means the same as defined at s. 376.016(17), F.S.

Policy 6.11.2 Dredge and fill activities in wetlands will be governed by applicable federal and state regulatory requirements.

Policy 6.11.3 The County will employ the following measures to protect and conserve wetlands:

1. **Wetlands will be delineated and depicted on all site plans included in Applications for Development Approval.**
2. **Developers will design and construct development projects so as to avoid activities that would destroy wetlands or the natural functions of wetlands.**
3. **Wetland setbacks will be required by EMAs as specified in policy 6.7.4.**
4. **Wetland crossings that connect dry upland areas are permissible provided the natural water flow between wetlands is not interrupted.**
5. **In the event that a lot or parcel of property is rendered totally undevelopable by avoidance of wetlands the property may be developed when: (1) disturbance of wetland is the minimum necessary to build an allowable use, and (2) mitigation is provided as allowed by applicable law.**

Development of the plan amendment area will be designed to minimize the amount of wetlands impacts to the extent practicable. Unavoidable wetland impacts will be mitigated through preservation, enhancement and/or creation. The development of the property will require the preparation, submittal and approval of a dredge and fill permit to be reviewed jointly by FDEP and the US Army Corps of Engineers (USACE).

Objective 6.13 Reduce the potential risk to lives and property from flooding by using hazard mitigation strategies and special building construction practices.

The plan amendment area is not located in the flood zone.

Objective 6.16 Protect and conserve selected trees and important vegetative communities.

Policy 6.16.3 Developers of land within Critical Habitat Areas will be required to preserve those vegetative communities that are critical to continuation of the habitat.

The plan amendment area is not located in a Critical Habitat Area. The natural state of the subject property has been altered by silvicultural practices.

Objective 6.17 Identify and classify areas to be designated for conservation purposes on the FLUM.

Policy 6.17.3 The Conservation designation is intended to provide for conservation with appropriate use through regulations that will minimize damage to natural resources. Areas or resources to be designated as Conservation include:

1. EMAs

The plan amendment area is located within the proposed North Bay EMA. The subject property is depicted as a proposed Conservation area (Appendix A). The only locally significant natural resource identified onsite is isolated wetlands. To the extent practicable, impact to these wetlands will be minimized.

Objective 6.18 Provide landowners with beneficial use of their property when environmental restrictions cause the loss of full development potential through use of innovative and flexible development strategies.

Policy 6.18.1 On lots or parcels where locally significant environmental resources exist and resulting development restrictions apply, owners or developers may use, or be required to use, the following innovative land development techniques.

4. Clustering.
5. Density transfers.
6. Mitigation.

Where impacts to wetlands, the only locally significant environmental resource identified onsite, are unavoidable, mitigation will be used. Mitigation might consist of preservation, enhancement and/or creation.

COASTAL MANAGEMENT ELEMENT

Objective 7.1 Define and establish the "Coastal Planning Area".

Policy 7.1.1 The "Coastal Planning Area" will be all land and water areas seaward of the landward section line of those sections of land which contain the Category 5 hurricane evacuation zone (Map 7A).

The plan amendment area is located within the Coastal Planning Area.

Objective 7.3 Maintain or improve estuarine water quality by identifying potential sources of pollution, regulating such sources of pollution, and constructing capital improvements to reduce or eliminate known pollution sources.

Policy 7.3.1 Major threats to estuarine water quality include the following:

1. Wastewater treatment plant point source discharge.
2. Uncontrolled and untreated storm water runoff.
3. Hazardous substance spills.
6. Unregulated dredge and fill activities.

Policy 7.3.2 The Board will maintain or improve estuarine water quality by:

4. Requiring treatment of storm water runoff and correcting existing storm water deficiencies
6. Coordinating with regulatory agencies having jurisdiction over dredge and fill activities toward ensuring that any such activities are conducted in an acceptable manner.

Development of the plan amendment area will require preparation, submittal and approval of permits for storm water facilities construction and operation (FDEP review and approval) and for dredge and fill activities (FDEP and USACE review). A new point source discharge for treatment of domestic wastewater will not be required since the wastewater treatment plant at the existing Lansing Smith plant will be used. The construction of Smith Unit 3 will include appropriate containment structures and containment areas at hazardous materials and hazardous waste storage/accumulation areas.

Objective	**7.5**	**Institute beachfront construction standards that will protect coastal resources and minimize the potential for damage caused by coastal storms.**
Policy	**7.5.1**	**...Other development undertaken within 1,500 feet of the Coastal Construction Control Line (CCCL) must be undertaken in compliance with the Coastal Zone Protection Act (s. 161.55, F.S.).**

The plan amendment is not located within 1,500 feet of the CCCL.

Objective	**7.6**	**Define and establish the "Coastal High-Hazard Area" (CHHA).**
Policy	**7.6.1**	**The CHHA will be all land area lying within the Category 1 hurricane evacuation zone (Map 7A).**
Objective	**7.11**	**Maintain development review procedure that will promote the protection of coastal historic resources.**

The plan amendment area is not located within the CHHA.

Policy	**7.11.1**	**The County will use the State Master Site File to identify those areas where historic resources may be present. Developers of property within these areas must either demonstrate that no such historic resources are present or provide a protection plan to show how historic resources will be preserved, protected or reused.**

A letter requesting a review of the State Master Site File has been sent to the SHPO. If required, a detailed survey of the property will be conducted to identify any significant historical or archaeological resources. The disturbed and replanted nature of the subject property suggest that significant archaeological or historical resources will not be found.

Objective 7.13 Development or redevelopment in the coastal area of Bay County shall occur only if adequate infrastructure to maintain the adopted LOS is in place by the time of project completion to serve the proposed development.

Policy 7.13.1 Coastal area LOSs shall be consistent with those adopted in the Capital Improvements Element.

Development of the plan amendment area will not impact the LOS standards for potable water or sanitary sewer due to the use of existing and permitted facilities at the Lansing Smith plant. Solid waste generation at Smith Unit 3 will have a negligible impact on the capacity of the Steelfield landfill. Water quality and water quantity LOS standards relative to storm water runoff will be met. The traffic generated by the anticipated number of employees (18 on the largest, daytime shift) will not adversely impact the LOS standard of SR 77. Adequate land for open space and recreation currently exist in Bay County and the proposed development will not impact the need for open space or recreational lands.

Policy 7.13.4 Development approvals for projects for which adequate sewer capacity is not available prior to development completion shall be conditioned upon provision of domestic waste treatment facilities, which meet FDEP standards. The development shall be required to connect to central sewer service within one year of availability.

Domestic wastewater treatment generated from Smith Unit 3 will be provided by the permitted treatment plant at the Lansing Smith plant. Should public sewer service become available, the applicant will connect during the applicable time period.

Objective 11.4 **Establish procedures for the coordination of land use decisions with the financial capability of the County to provide public facilities and services.**

Policy 11.4.2 **The Board will use the Future Land Use Element of this plan and attendant land use controls to direct growth into those areas where services and facilities can be provided in an efficient and effective manner.**

Policy 11.4.3 **All applications for development approval will be evaluated with regard to the availability of facilities and services required to accommodate the proposed development.**

The proposed development of the plan amendment area will not require the upgrade of public infrastructure including sanitary sewer or potable water treatment capacity, solid waste landfill capacity, land for parks or recreation or roads. Storm water treatment and storage will be provided onsite.

Objective 11.7 **Make certain that developers bear a proportionate cost of providing facilities or facility improvements for any infrastructure necessitated by their development projects.**

Policy 11.7.1 **Developers will be required to construct or install any infrastructure improvements such as roads, water and sewer lines, storm water retention, etc. that may be required as a result of their development project.**

Policy 11.7.2 **Developers will be required to pay for upgrades or improvements to existing offsite facilities such as roads, drainage, water and sewer lines, pump stations, etc. when such improvements are required to maintain LOS standards.**

The proposed development of the plan amendment area is not expected to require any upgrades or improvements to existing offsite public facilities. Onsite drainage to address water quality and water quantity requirements will be provided. All onsite facilities will be constructed, maintained and paid for by the Gulf Power Company.

Objective 11.9 **Establish and maintain a "Concurrency Management System" to make certain that public facilities and services needed to support development will be available concurrent with the impacts of such development.**

Policy 11.9.1 **The concurrency requirements of this element shall apply to roads, sanitary sewer, solid waste, drainage, potable water, and parks and recreation. All ADAs shall be reviewed to ensure that LOS standards are maintained and minimum concurrency requirements are met.**

The proposed development will meet all minimum concurrency requirements prior to development approval.

8. LAND NEEDED TO ACCOMMODATE PROJECTED INDUSTRIAL USE

The proposed amendment would add an additional 50± acres of industrially designated land to the FLUM. According to Table 19 in the Future Land Use Element of the adopted 1990 Comprehensive Plan, 813 acres were identified as industrial use in 1990. Between 1990 and 1995, Table 19 indicates a need for 195 additional acres of industrially designated land and between 1995 and 2000, another 242 acres will be required. The requested change to Industrial will meet approximately 20.7 percent of the projected need for industrial land use designations for the planning period 1995 to 2000.

The projected need for additional industrial acreage was based on the Bay County Chamber of Commerce's efforts to promote Bay County as an attractive location for new industry in order to help combat high unemployment rates experienced in the 1980s. With county government participation, the coordinated public/private sector activity has been successful in attracting new industry. The future (1995 and 2000) industrial acreage requirement of 437 was based on the assumption that firms seeking industrially designated land will be distributed within the county in much the same pattern as has existed in the past and that acreage requirements for industrial firms will not significantly change.

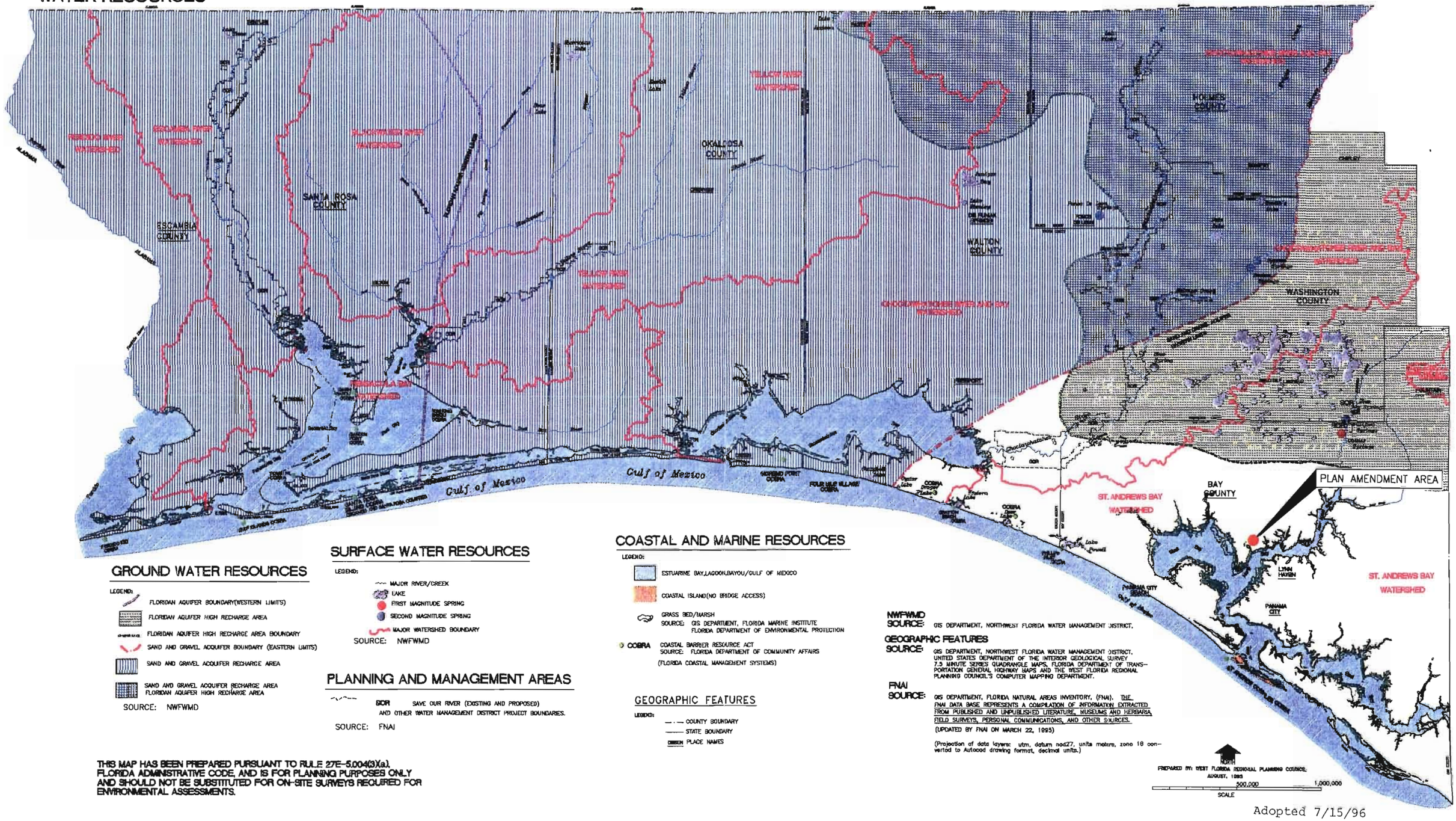
The proposed amendment of the FLUM from Agriculture to Industrial is requested to accommodate an expansion of the existing Lansing Smith plant. The proposed Smith Unit 3 cannot be sited on the existing plant property site because of existing electrical generating facilities and support buildings (warehouse and administration). The expansion of the Lansing Smith plant was not foreseen in 1990, although the expansion of the plant is consistent with the assumptions within the adopted Future Land Use Element (similar pattern of distribution and acreage requirements).

APPENDIX A

WEST FLORIDA REGIONAL PLANNING COUNCIL, STRATEGIC REGIONAL POLICY PLAN, AND BAY COUNTY 1990 ADOPTED COMPREHENSIVE PLAN FIGURES

WEST FLORIDA REGION
SIGNIFICANT NATURAL RESOURCES
WATER RESOURCES

MAP 1



GROUND WATER RESOURCES

LEGEND:

- FLORIDAN AQUIFER BOUNDARY(WESTERN LIMITS)
- ▤ FLORIDAN AQUIFER HIGH RECHARGE AREA
- FLORIDAN AQUIFER HIGH RECHARGE AREA BOUNDARY
- SAND AND GRAVEL ACQUIFER BOUNDARY (EASTERN LIMITS)
- ▥ SAND AND GRAVEL ACQUIFER RECHARGE AREA
- ▦ SAND AND GRAVEL ACQUIFER RECHARGE AREA FLORIDAN AQUIFER HIGH RECHARGE AREA

SOURCE: NWFWMD

SURFACE WATER RESOURCES

LEGEND:

- MAJOR RIVER/CREEK
- LAKE
- ● FIRST MAGNITUDE SPRING
- ● SECOND MAGNITUDE SPRING
- MAJOR WATERSHED BOUNDARY

SOURCE: NWFWMD

PLANNING AND MANAGEMENT AREAS

SOR SAVE OUR RIVER (EXISTING AND PROPOSED) AND OTHER WATER MANAGEMENT DISTRICT PROJECT BOUNDARIES.

SOURCE: FNAI

COASTAL AND MARINE RESOURCES

LEGEND:

- ▭ ESTUARINE BAY,LAGOON,BAYOU/GULF OF MEXICO
- ▨ COASTAL ISLAND(NO BRIDGE ACCESS)
- GRASS BED/MARSH
  SOURCE: GIS DEPARTMENT, FLORIDA MARINE INSTITUTE
  FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
- COBRA COASTAL BARRIER RESOURCE ACT
  SOURCE: FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS
  (FLORIDA COASTAL MANAGEMENT SYSTEMS)

GEOGRAPHIC FEATURES

LEGEND:

- COUNTY BOUNDARY
- STATE BOUNDARY
- PLACE NAMES

NWFWMD SOURCE: GIS DEPARTMENT, NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT.

GEOGRAPHIC FEATURES SOURCE: GIS DEPARTMENT, NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT. UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY 7.5 MINUTE SERIES QUADRANGLE MAPS, FLORIDA DEPARTMENT OF TRANSPORTATION GENERAL HIGHWAY MAPS AND THE WEST FLORIDA REGIONAL PLANNING COUNCIL'S COMPUTER MAPPING DEPARTMENT.

FNAI SOURCE: GIS DEPARTMENT, FLORIDA NATURAL AREAS INVENTORY, (FNAI). THE FNAI DATA BASE REPRESENTS A COMPILATION OF INFORMATION EXTRACTED FROM PUBLISHED AND UNPUBLISHED LITERATURE, MUSEUMS AND HERBARIA, FIELD SURVEYS, PERSONAL COMMUNICATIONS, AND OTHER SOURCES.
(UPDATED BY FNAI ON MARCH 22, 1995)

(Projection of data layers: utm, datum nad27, units meters, zone 16 converted to Autocad drawing format, decimal units.)

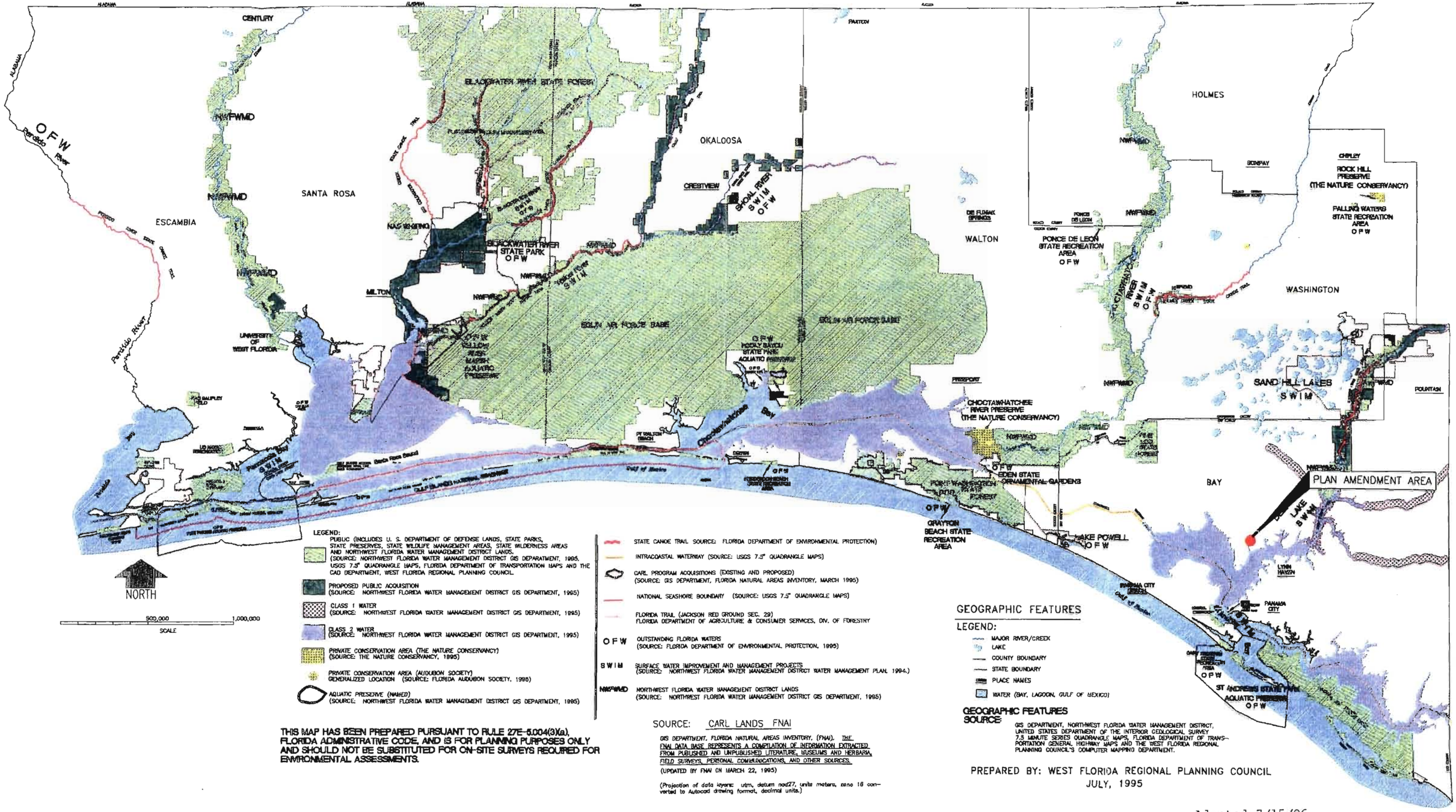
PREPARED BY: WEST FLORIDA REGIONAL PLANNING COUNCIL
AUGUST, 1995

500,000 1,000,000
SCALE

THIS MAP HAS BEEN PREPARED PURSUANT TO RULE 27E-5.004(3)(a), FLORIDA ADMINISTRATIVE CODE, AND IS FOR PLANNING PURPOSES ONLY AND SHOULD NOT BE SUBSTITUTED FOR ON-SITE SURVEYS REQUIRED FOR ENVIRONMENTAL ASSESSMENTS.

WEST FLORIDA REGION
SIGNIFICANT NATURAL RESOURCES
PLANNING AND MANAGEMENT AREAS

MAP 2



LEGEND:

- PUBLIC (INCLUDES U. S. DEPARTMENT OF DEFENSE LANDS, STATE PARKS, STATE PRESERVES, STATE WILDLIFE MANAGEMENT AREAS, STATE WILDERNESS AREAS AND NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT LANDS. (SOURCE: NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT GIS DEPARATMENT, 1995, USGS 7.5" QUADRANGLE MAPS, FLORIDA DEPARTMENT OF TRANSPORTATION MAPS AND THE CAD DEPARTMENT, WEST FLORIDA REGIONAL PLANNING COUNCIL.
- PROPOSED PUBLIC ACQUISITION (SOURCE: NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT GIS DEPARTMENT, 1995)
- CLASS 1 WATER (SOURCE: NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT GIS DEPARTMENT, 1995)
- CLASS 2 WATER (SOURCE: NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT GIS DEPARTMENT, 1995)
- PRIVATE CONSERVATION AREA (THE NATURE CONSERVANCY) (SOURCE: THE NATURE CONSERVANCY, 1995)
- PRIVATE CONSERVATION AREA (AUDUBON SOCIETY) GENERALIZED LOCATION (SOURCE: FLORIDA AUDUBON SOCIETY, 1995)
- AQUATIC PRESERVE (NAMED) (SOURCE: NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT GIS DEPARTMENT, 1995)

- STATE CANOE TRAIL SOURCE: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION)
- INTRACOASTAL WATERWAY (SOURCE: USGS 7.5" QUADRANGLE MAPS)
- CARL PROGRAM ACQUISITIONS (EXISTING AND PROPOSED) (SOURCE: GIS DEPARTMENT, FLORIDA NATURAL AREAS INVENTORY, MARCH 1995)
- NATIONAL SEASHORE BOUNDARY (SOURCE: USGS 7.5" QUADRANGLE MAPS)
- FLORIDA TRAIL (JACKSON RED GROUND SEC. 29) FLORIDA DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES, DIV. OF FORESTRY
- OFW OUTSTANDING FLORIDA WATERS (SOURCE: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, 1995)
- SWIM SURFACE WATER IMPROVEMENT AND MANAGEMENT PROJECTS (SOURCE: NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT WATER MANAGEMENT PLAN, 1994.)
- NWFWMD NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT LANDS (SOURCE: NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT GIS DEPARTMENT, 1995)

THIS MAP HAS BEEN PREPARED PURSUANT TO RULE 27E-5.004(3)(a), FLORIDA ADMINISTRATIVE CODE, AND IS FOR PLANNING PURPOSES ONLY AND SHOULD NOT BE SUBSTITUTED FOR ON-SITE SURVEYS REQUIRED FOR ENVIRONMENTAL ASSESSMENTS.

SOURCE: CARL LANDS FNAI

GIS DEPARTMENT, FLORIDA NATURAL AREAS INVENTORY, (FNAI). THE FNAI DATA BASE REPRESENTS A COMPILATION OF INFORMATION EXTRACTED FROM PUBLISHED AND UNPUBLISHED LITERATURE, MUSEUMS AND HERBARIA, FIELD SURVEYS, PERSONAL COMMUNICATIONS, AND OTHER SOURCES.

(UPDATED BY FNAI ON MARCH 22, 1995)

(Projection of data layers: utm, datum nad27, units meters, zone 16 converted to Autocad drawing format, decimal units.)

GEOGRAPHIC FEATURES

LEGEND:

- MAJOR RIVER/CREEK
- LAKE
- COUNTY BOUNDARY
- STATE BOUNDARY
- PLACE NAMES
- WATER (BAY, LAGOON, GULF OF MEXICO)

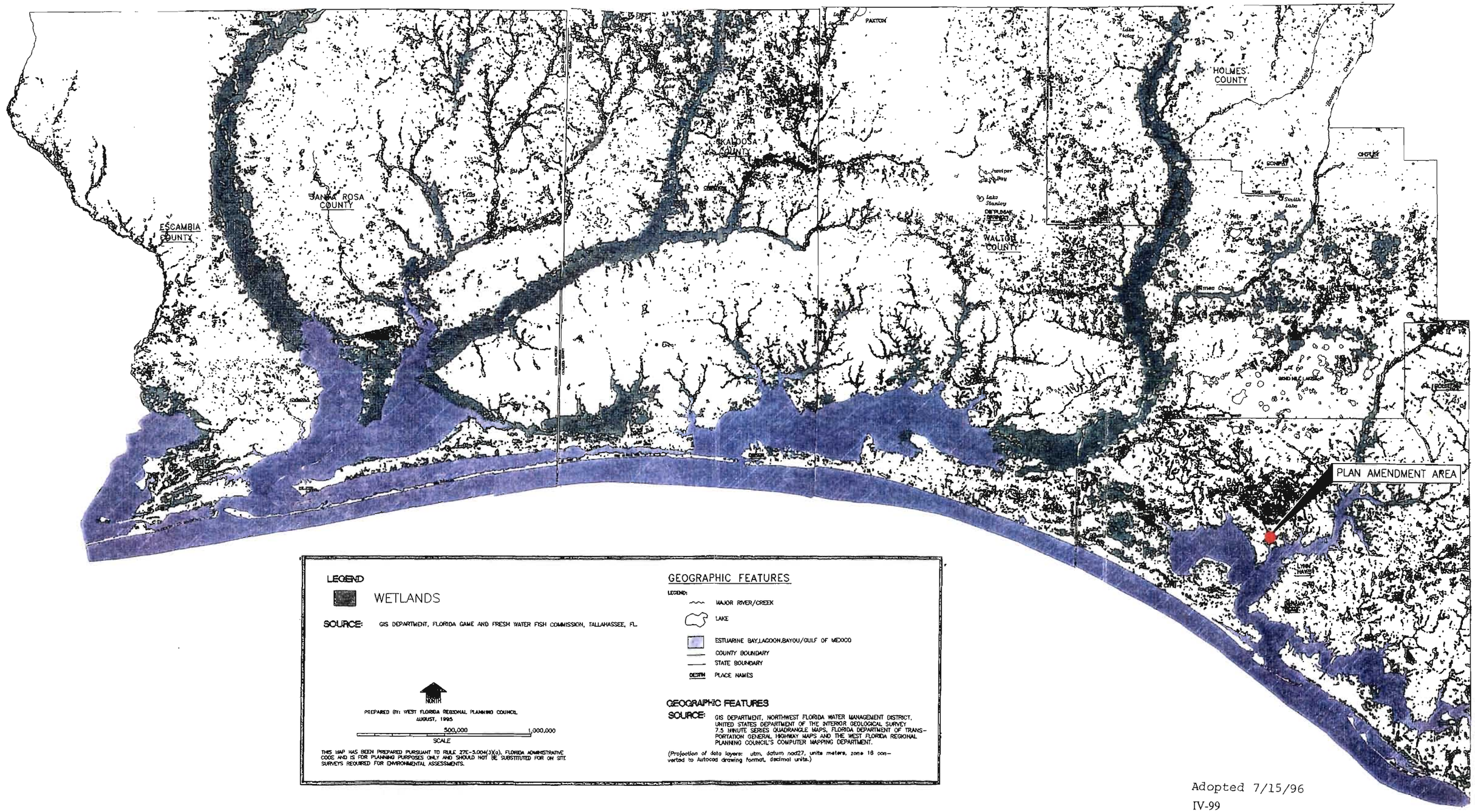
GEOGRAPHIC FEATURES SOURCE:

GIS DEPARTMENT, NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT, UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY 7.5 MINUTE SERIES QUADRANGLE MAPS, FLORIDA DEPARTMENT OF TRANSPORTATION GENERAL HIGHWAY MAPS AND THE WEST FLORIDA REGIONAL PLANNING COUNCIL'S COMPUTER MAPPING DEPARTMENT.

PREPARED BY: WEST FLORIDA REGIONAL PLANNING COUNCIL
JULY, 1995

WEST FLORIDA REGION
SIGNIFICANT NATURAL RESOURCES
WETLANDS

MAP 3



LEGEND

WETLANDS

SOURCE: GIS DEPARTMENT, FLORIDA GAME AND FRESH WATER FISH COMMISSION, TALLAHASSEE, FL.

NORTH

PREPARED BY: WEST FLORIDA REGIONAL PLANNING COUNCIL
AUGUST, 1995

500,000 1,000,000
SCALE

THIS MAP HAS BEEN PREPARED PURSUANT TO RULE 27E-5.004(3)(a), FLORIDA ADMINISTRATIVE CODE AND IS FOR PLANNING PURPOSES ONLY AND SHOULD NOT BE SUBSTITUTED FOR ON SITE SURVEYS REQUIRED FOR ENVIRONMENTAL ASSESSMENTS.

GEOGRAPHIC FEATURES

LEGEND:

- MAJOR RIVER/CREEK
- LAKE
- ESTUARINE BAY,LAGOON,BAYOU/GULF OF MEXICO
- COUNTY BOUNDARY
- STATE BOUNDARY
- DEFUNIAK PLACE NAMES

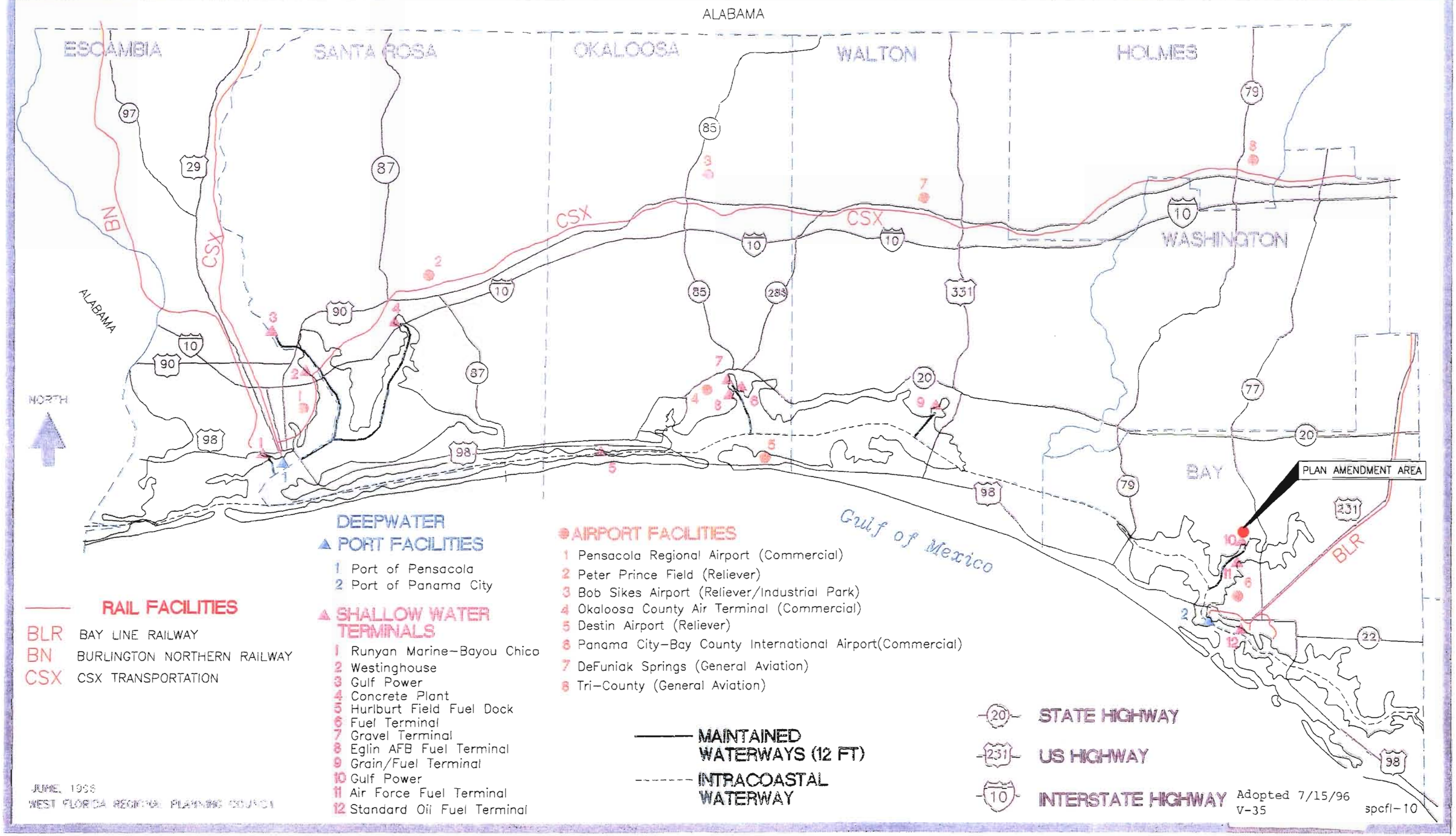
GEOGRAPHIC FEATURES

SOURCE: GIS DEPARTMENT, NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT, UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY 7.5 MINUTE SERIES QUADRANGLE MAPS, FLORIDA DEPARTMENT OF TRANSPORTATION GENERAL HIGHWAY MAPS AND THE WEST FLORIDA REGIONAL PLANNING COUNCIL'S COMPUTER MAPPING DEPARTMENT.

(Projection of data layers: utm, datum nad27, units meters, zone 16 converted to Autocad drawing format, decimal units.)

WEST FLORIDA REGION
SIGNIFICANT TRANSPORTATION FACILITIES

MAP 4



RAIL FACILITIES

- BLR BAY LINE RAILWAY
- BN BURLINGTON NORTHERN RAILWAY
- CSX CSX TRANSPORTATION

DEEPWATER ▲ PORT FACILITIES

1. Port of Pensacola
2. Port of Panama City

▲ SHALLOW WATER TERMINALS

1. Runyan Marine–Bayou Chico
2. Westinghouse
3. Gulf Power
4. Concrete Plant
5. Hurlburt Field Fuel Dock
6. Fuel Terminal
7. Gravel Terminal
8. Eglin AFB Fuel Terminal
9. Grain/Fuel Terminal
10. Gulf Power
11. Air Force Fuel Terminal
12. Standard Oil Fuel Terminal

● AIRPORT FACILITIES

1. Pensacola Regional Airport (Commercial)
2. Peter Prince Field (Reliever)
3. Bob Sikes Airport (Reliever/Industrial Park)
4. Okaloosa County Air Terminal (Commercial)
5. Destin Airport (Reliever)
6. Panama City–Bay County International Airport(Commercial)
7. DeFuniak Springs (General Aviation)
8. Tri–County (General Aviation)

——— MAINTAINED WATERWAYS (12 FT)

- - - - - - - INTRACOASTAL WATERWAY

(20) STATE HIGHWAY

(231) US HIGHWAY

(10) INTERSTATE HIGHWAY

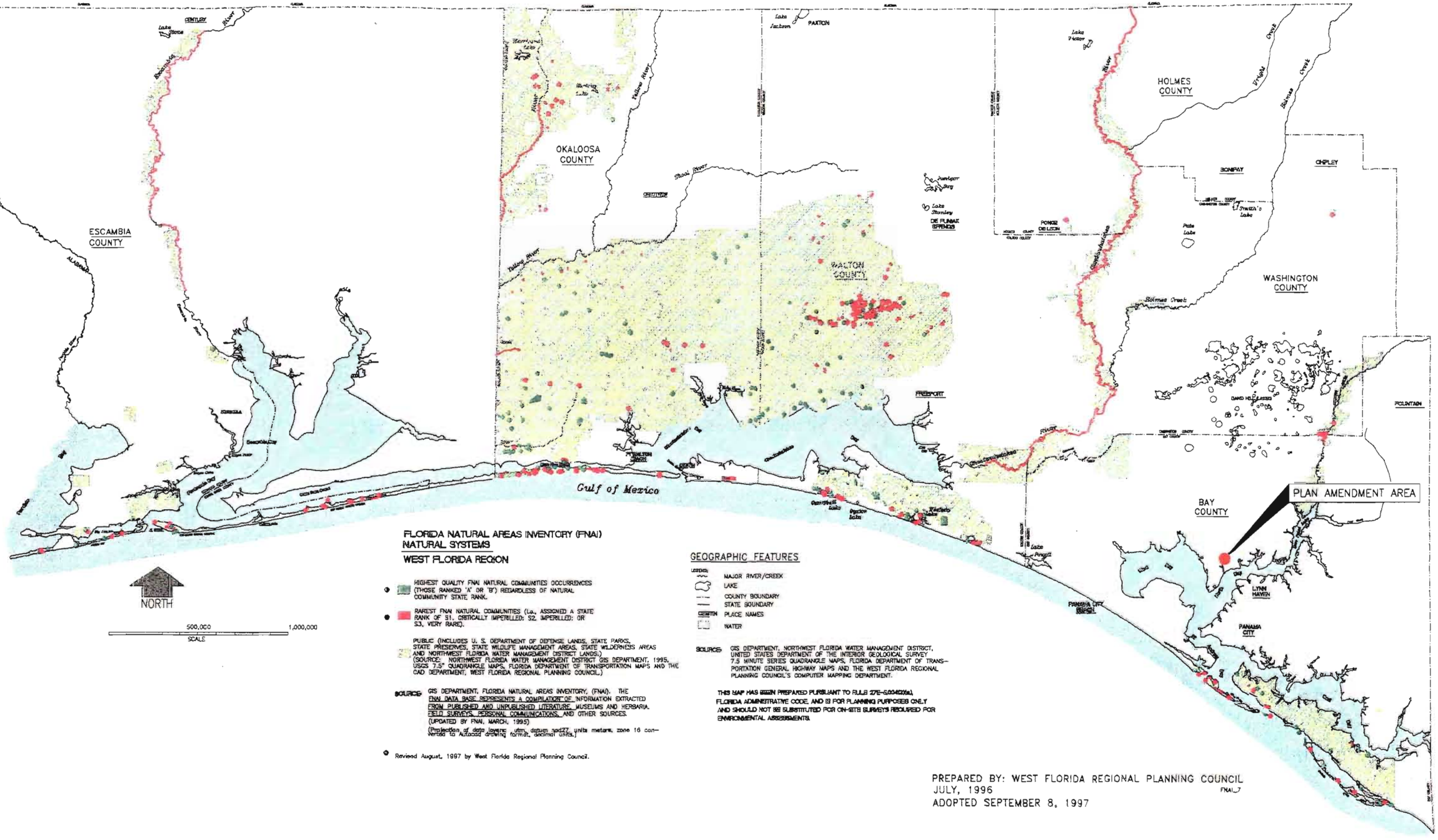
JUNE, 1995
WEST FLORIDA REGIONAL PLANNING COUNCIL

Adopted 7/15/96
V-35

spcfl-10

FLORIDA NATURAL AREAS INVENTORY (FNAI)
NATURAL SYSTEMS
WEST FLORIDA REGION

MAP 5



FLORIDA NATURAL AREAS INVENTORY (FNAI)
NATURAL SYSTEMS
WEST FLORIDA REGION

- ◐ 🟩 HIGHEST QUALITY FNAI NATURAL COMMUNITIES OCCURRENCES (THOSE RANKED 'A' OR 'B') REGARDLESS OF NATURAL COMMUNITY STATE RANK.
- ● 🟥 RAREST FNAI NATURAL COMMUNITIES (I.e., ASSIGNED A STATE RANK OF S1, CRITICALLY IMPERILLED; S2, IMPERILLED; OR S3, VERY RARE).
- 🟨 PUBLIC (INCLUDES U. S. DEPARTMENT OF DEFENSE LANDS, STATE PARKS, STATE PRESERVES, STATE WILDLIFE MANAGEMENT AREAS, STATE WILDERNESS AREAS AND NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT LANDS.) (SOURCE: NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT GIS DEPARTMENT, 1995, USGS 7.5" QUADRANGLE MAPS, FLORIDA DEPARTMENT OF TRANSPORTATION MAPS AND THE CAD DEPARTMENT, WEST FLORIDA REGIONAL PLANNING COUNCIL.)

SOURCE: GIS DEPARTMENT, FLORIDA NATURAL AREAS INVENTORY, (FNAI). THE FNAI DATA BASE REPRESENTS A COMPILATION OF INFORMATION EXTRACTED FROM PUBLISHED AND UNPUBLISHED LITERATURE, MUSEUMS AND HERBARIA, FIELD SURVEYS, PERSONAL COMMUNICATIONS, AND OTHER SOURCES. (UPDATED BY FNAI, MARCH, 1995)
(Projection of data layers: utm, datum nad27, units meters, zone 16 converted to Autocad drawing format, decimal units.)

◐ Revised August, 1997 by West Florida Regional Planning Council.

GEOGRAPHIC FEATURES

LEGEND:

〰	MAJOR RIVER/CREEK
◯	LAKE
—·—	COUNTY BOUNDARY
——	STATE BOUNDARY
CRESTVIEW	PLACE NAMES
▭	WATER

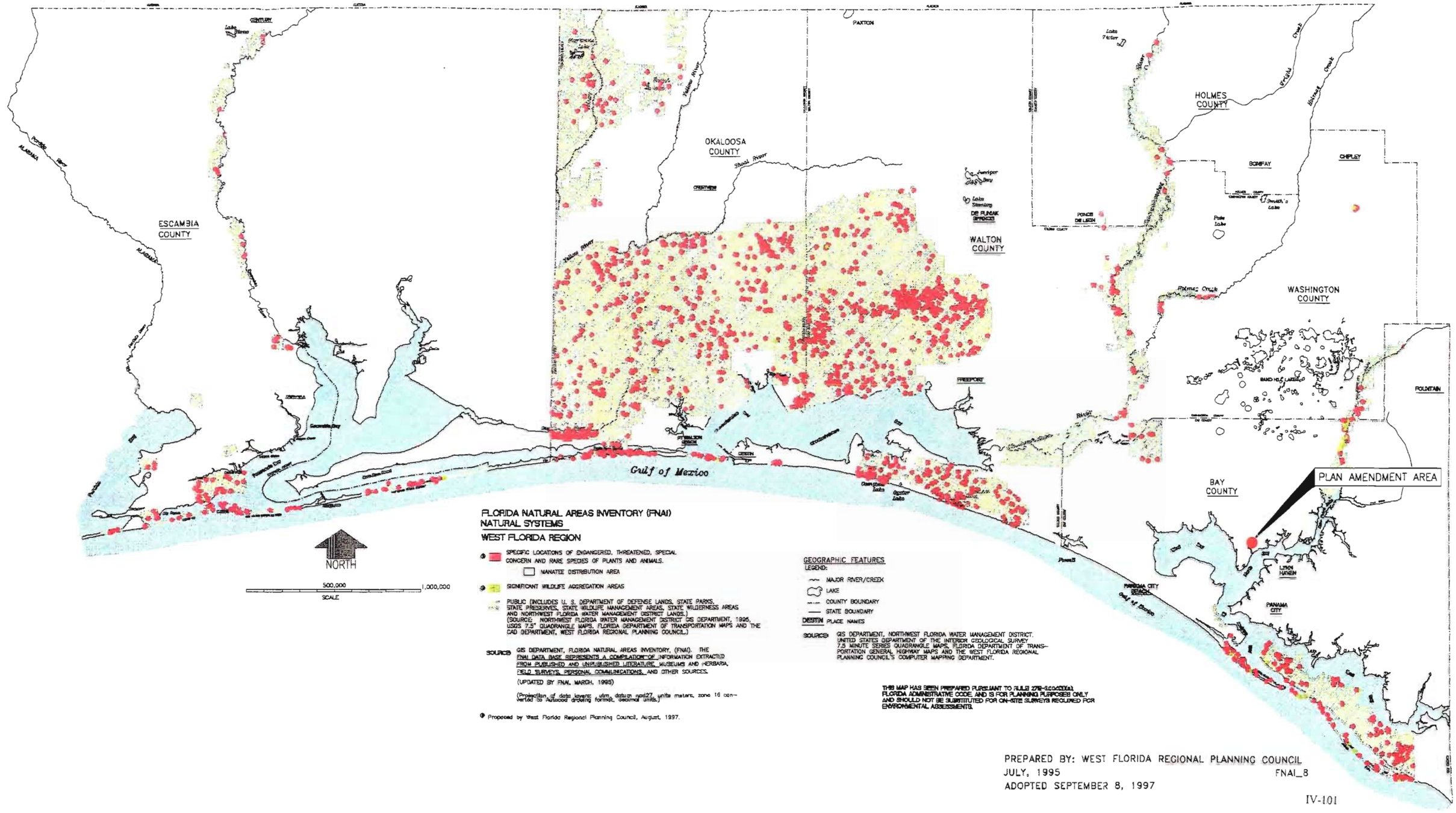
SOURCE: GIS DEPARTMENT, NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT, UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY 7.5 MINUTE SERIES QUADRANGLE MAPS, FLORIDA DEPARTMENT OF TRANSPORTATION GENERAL HIGHWAY MAPS AND THE WEST FLORIDA REGIONAL PLANNING COUNCIL'S COMPUTER MAPPING DEPARTMENT.

THIS MAP HAS BEEN PREPARED PURSUANT TO RULE 27E-5.004(2)(a), FLORIDA ADMINISTRATIVE CODE, AND IS FOR PLANNING PURPOSES ONLY AND SHOULD NOT BE SUBSTITUTED FOR ON-SITE SURVEYS REQUIRED FOR ENVIRONMENTAL ASSESSMENTS.

PREPARED BY: WEST FLORIDA REGIONAL PLANNING COUNCIL
JULY, 1996
ADOPTED SEPTEMBER 8, 1997
FNAI_7

FLORIDA NATURAL AREAS INVENTORY (FNAI)
NATURAL SYSTEMS
WEST FLORIDA REGION

MAP 6



FLORIDA NATURAL AREAS INVENTORY (FNAI)
NATURAL SYSTEMS
WEST FLORIDA REGION

- SPECIFIC LOCATIONS OF ENDANGERED, THREATENED, SPECIAL CONCERN AND RARE SPECIES OF PLANTS AND ANIMALS.
- MANATEE DISTRIBUTION AREA
- SIGNIFICANT WILDLIFE AGGREGATION AREAS
- PUBLIC (INCLUDES U. S. DEPARTMENT OF DEFENSE LANDS, STATE PARKS, STATE PRESERVES, STATE WILDLIFE MANAGEMENT AREAS, STATE WILDERNESS AREAS AND NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT LANDS.) (SOURCE: NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT GIS DEPARTMENT, 1995, USGS 7.5" QUADRANGLE MAPS, FLORIDA DEPARTMENT OF TRANSPORTATION MAPS AND THE CAD DEPARTMENT, WEST FLORIDA REGIONAL PLANNING COUNCIL.)

SOURCE: GIS DEPARTMENT, FLORIDA NATURAL AREAS INVENTORY, (FNAI). THE FNAI DATA BASE REPRESENTS A COMPILATION OF INFORMATION EXTRACTED FROM PUBLISHED AND UNPUBLISHED LITERATURE, MUSEUMS AND HERBARIA, FIELD SURVEYS, PERSONAL COMMUNICATIONS, AND OTHER SOURCES.

(UPDATED BY FNAI, MARCH, 1995)

(Projection of data layers: utm, datum nad27, units meters, zone 16 converted to Autocad drafting format, decimal units.)

Proposed by West Florida Regional Planning Council, August, 1997.

GEOGRAPHIC FEATURES
LEGEND:
- MAJOR RIVER/CREEK
- LAKE
- COUNTY BOUNDARY
- STATE BOUNDARY

DESTIN PLACE NAMES

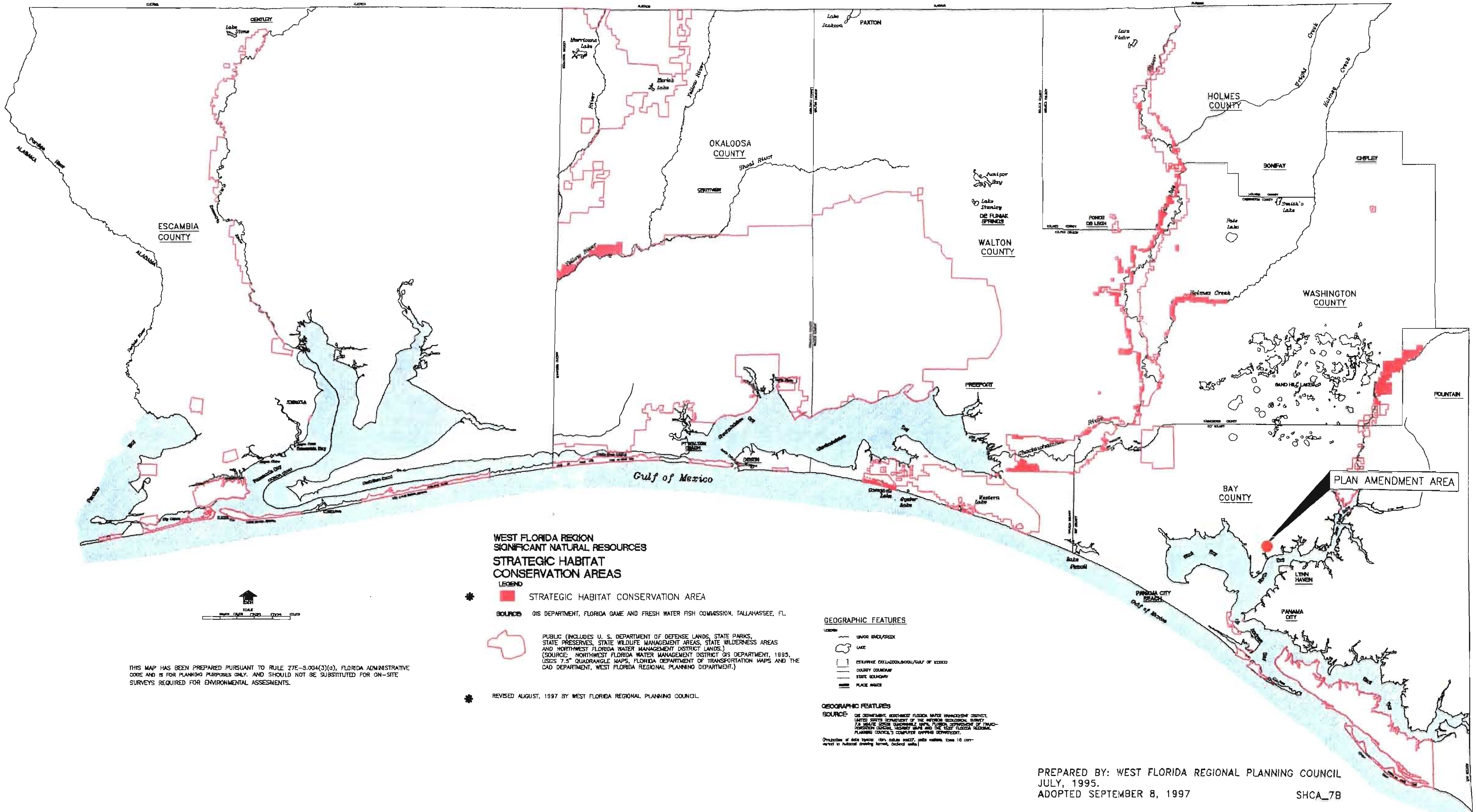
SOURCES: GIS DEPARTMENT, NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT. UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY 7.5 MINUTE SERIES QUADRANGLE MAPS, FLORIDA DEPARTMENT OF TRANSPORTATION GENERAL HIGHWAY MAPS AND THE WEST FLORIDA REGIONAL PLANNING COUNCIL'S COMPUTER MAPPING DEPARTMENT.

THIS MAP HAS BEEN PREPARED PURSUANT TO RULE 27B-8.004(3)(a), FLORIDA ADMINISTRATIVE CODE, AND IS FOR PLANNING PURPOSES ONLY AND SHOULD NOT BE SUBSTITUTED FOR ON-SITE SURVEYS REQUIRED FOR ENVIRONMENTAL ASSESSMENTS.

PREPARED BY: WEST FLORIDA REGIONAL PLANNING COUNCIL
JULY, 1995 FNAI_8
ADOPTED SEPTEMBER 8, 1997

STRATEGIC HABITAT CONSERVATION AREAS
WEST FLORIDA REGION

MAP 7



WEST FLORIDA REGION
SIGNIFICANT NATURAL RESOURCES
STRATEGIC HABITAT CONSERVATION AREAS
LEGEND

STRATEGIC HABITAT CONSERVATION AREA

SOURCE: GIS DEPARTMENT, FLORIDA GAME AND FRESH WATER FISH COMMISSION, TALLAHASSEE, FL.

PUBLIC (INCLUDES U. S. DEPARTMENT OF DEFENSE LANDS, STATE PARKS, STATE PRESERVES, STATE WILDLIFE MANAGEMENT AREAS, STATE WILDERNESS AREAS AND NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT LANDS.)
(SOURCE: NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT GIS DEPARTMENT, 1995. USGS 7.5" QUADRANGLE MAPS, FLORIDA DEPARTMENT OF TRANSPORTATION MAPS AND THE CAD DEPARTMENT, WEST FLORIDA REGIONAL PLANNING DEPARTMENT.)

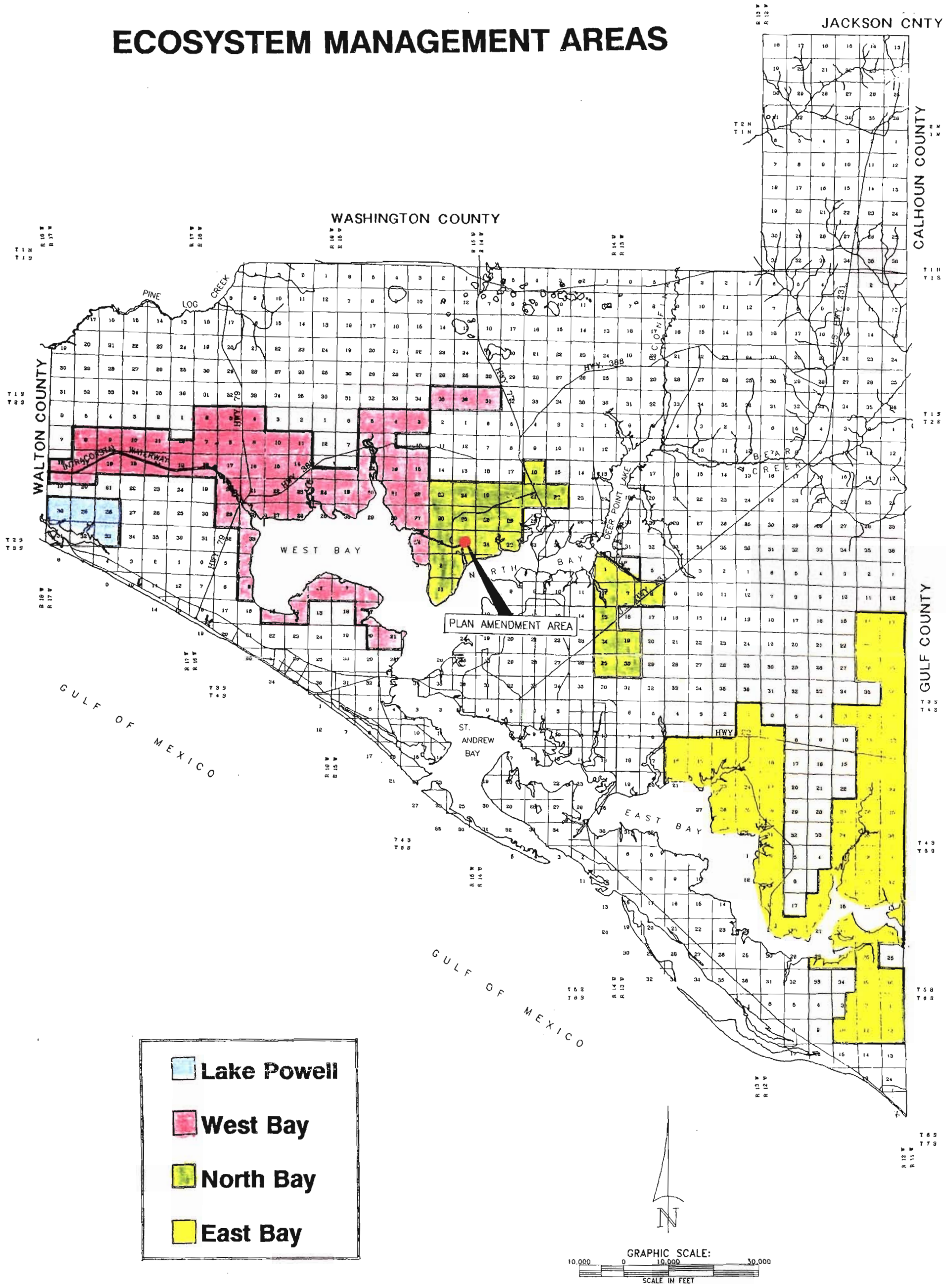
THIS MAP HAS BEEN PREPARED PURSUANT TO RULE 27E-5.004(3)(a), FLORIDA ADMINISTRATIVE CODE AND IS FOR PLANNING PURPOSES ONLY, AND SHOULD NOT BE SUBSTITUTED FOR ON-SITE SURVEYS REQUIRED FOR ENVIRONMENTAL ASSESMENTS.

REVISED AUGUST, 1997 BY WEST FLORIDA REGIONAL PLANNING COUNCIL.

PREPARED BY: WEST FLORIDA REGIONAL PLANNING COUNCIL
JULY, 1995.
ADOPTED SEPTEMBER 8, 1997

SHCA_7B

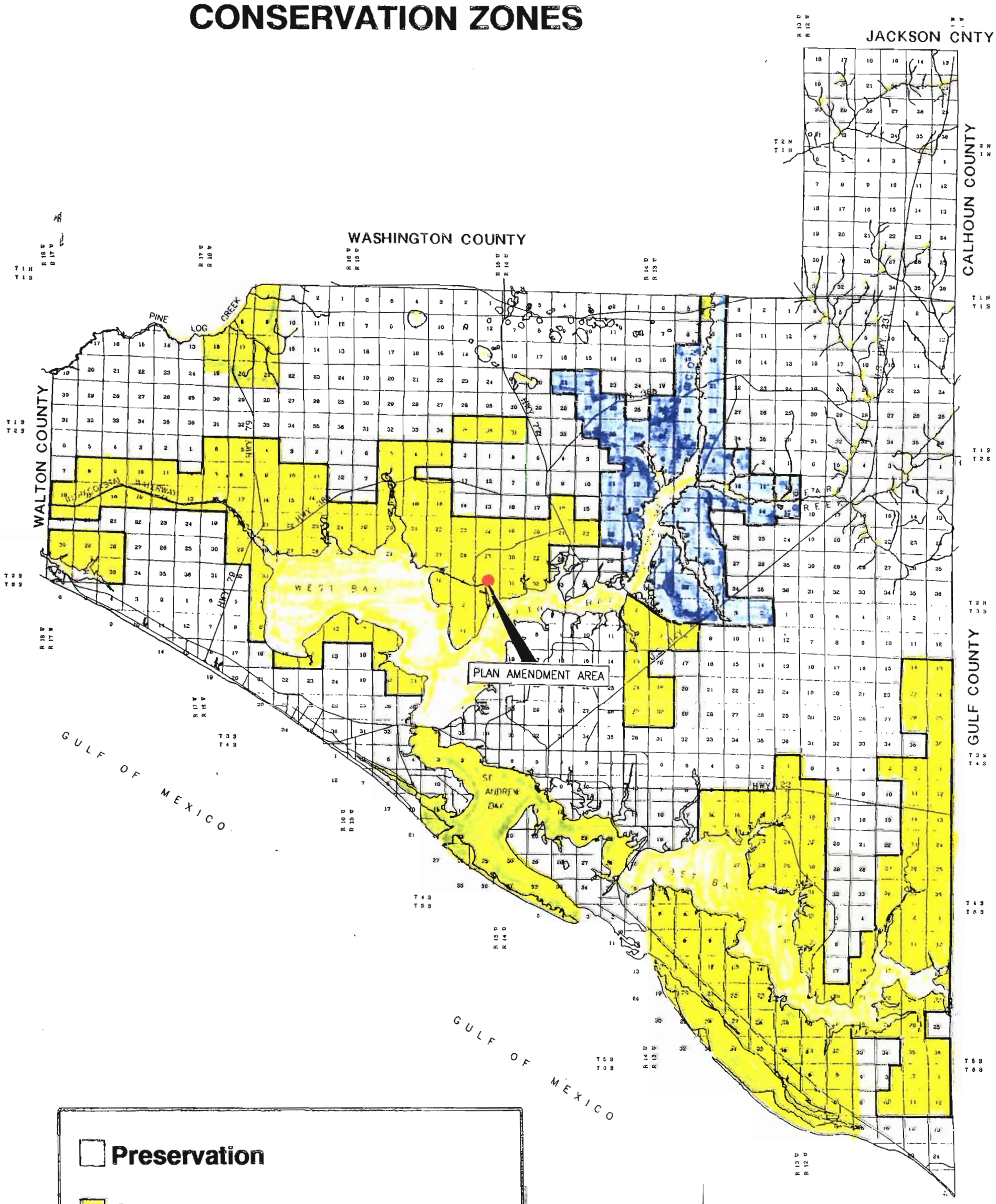
ECOSYSTEM MANAGEMENT AREAS



HEADING 2010: CHARTING OUR COURSE
BAY COUNTY COMPREHENSIVE PLAN

Prepared by Department of Development Services
Planning Division
January, 1998
Base Map by Bay County GIS

CONSERVATION ZONES



- Preservation
- Conservation
- Conservation/Recreation
- Deer Point Lake Protection Zone

HEADING 2010: CHARTING OUR COURSE
BAY COUNTY COMPREHENSIVE PLAN

Prepared by Department of Development Services
Planning Division
January, 1998
Base Map by Bay County GIS

APPENDIX 10.2.2

STORM WATER MANAGEMENT PLAN

STORM WATER MANAGEMENT PLAN

Prepared for:

GULF POWER COMPANY
Pensacola, Florida

Prepared by:

ECT
Environmental Consulting & Technology, Inc.
3701 Northwest 98th Street
Gainesville, Florida 32606

ECT No. 990151-0500

June 1999

TABLE OF CONTENTS

LIST OF FIGURES

1.0 INTRODUCTION

This storm water management plan (SWMP) describes measures that will be implemented to control storm water runoff on the site of the Gulf Power Smith Unit 3 Project located in Bay County, Florida (Figure 1). The SWMP includes storm water control measures that will be implemented during both construction and operation periods.

1.1 PROJECT DESCRIPTION

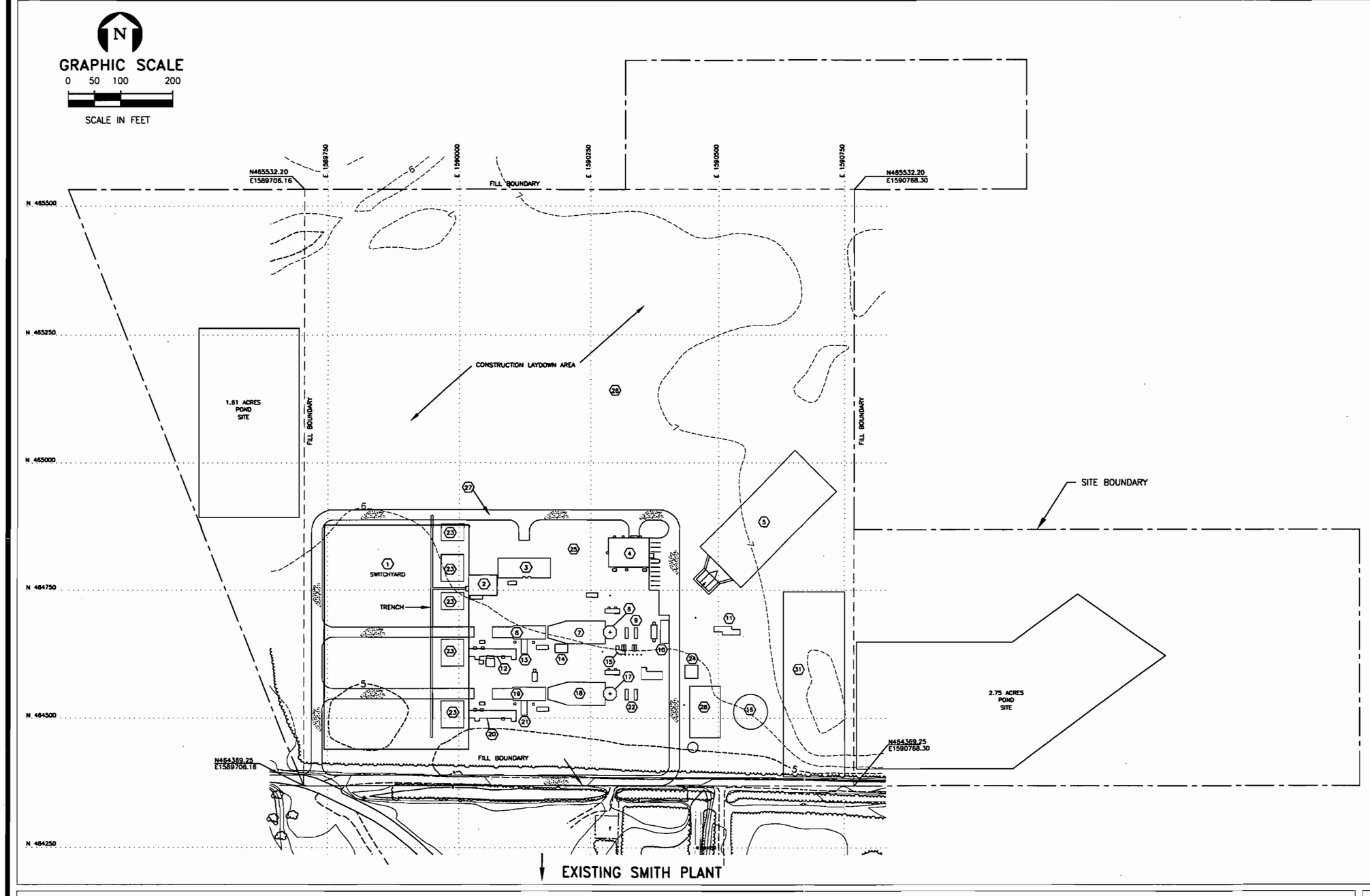
The Smith Unit 3 Plant will be a natural gas-fired combined cycle, electric generating facility with an operating capacity of 574 megawatts. The plant will be constructed on a 50.1-acre site located within the property boundary of the existing Lansing Smith Generating Plant in Bay County, Florida. The Project site is at the end of County Road 2300, west of State Road 77 and northwest of Panama City (see Figure 2).

1.2 SITE DESCRIPTION

The 50.1-acre site has an approximate ground surface elevation of 5 to 8 feet National Geodetic Vertical Datum (ft-NGVD) as shown in Figure 1. This undeveloped site is located north of the existing facility and will utilize some of the existing infrastructure, such as transmission lines and roads. Approximately 32.7 acres of the site area will be cleared for the new plant construction.

Portions of the site consist of poorly drained soils with standing water and wetland systems. Upland areas have been modified by silvicultural practices with rills and planted pines. The site generally drains to the southwest to natural wetland systems.

The site will be elevated by fill material to achieve surface drainage and to prevent flooding in the facility area. Two storm water management ponds will be located in the northwest and southeast portions of the site. The ponds will be further described within the SWMP.



AREA/STRUCTURE LEGEND

1. SWITCHYARD
2. ELECTRICAL BUILDING
3. STEAM TURBINE
4. ADMINISTRATION BUILDING
5. COOLING TOWER
6. NORTH GAS TURBINE
7. NORTH HEAT RECOVERY STEAM GENERATOR (HRSG)
8. NORTH STACK
9. NORTH BOILER FEED PUMP
10. FEEDWATER TRANSFORMER
11. 480 VOLT MCC AND TRANSFORMER
12. BAC/PEECC
13. ACCESSORY MODULE
14. PHOSPHATE FEED SKID
15. AMMONIA SUPPLY SYSTEM
16. CONDENSATE STORAGE TANK
17. SOUTH STACK
18. SOUTH HEAT RECOVERY STEAM GENERATOR (HRSG)
19. SOUTH GAS TURBINE
20. GEC/PEECC
21. ACCESSORY MODULE
22. SOUTH BOILER FEED PUMP
23. TRANSFORMERS
24. WASTE WATER SUMP
25. INTERIOR PLANT YARD (GRAVEL)
26. BALANCE OF SITE (GRAVEL)
27. ROADWAY (CONCRETE)
28. WATER TREATMENT BUILDING
29. GRASSED SLOPES
30. MISC. CONC. PADS (INTERIOR YARD)
31. GAS METERING AREA

FIGURE 1.

PLOT PLAN

Sources: Gulf Power, 1999; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

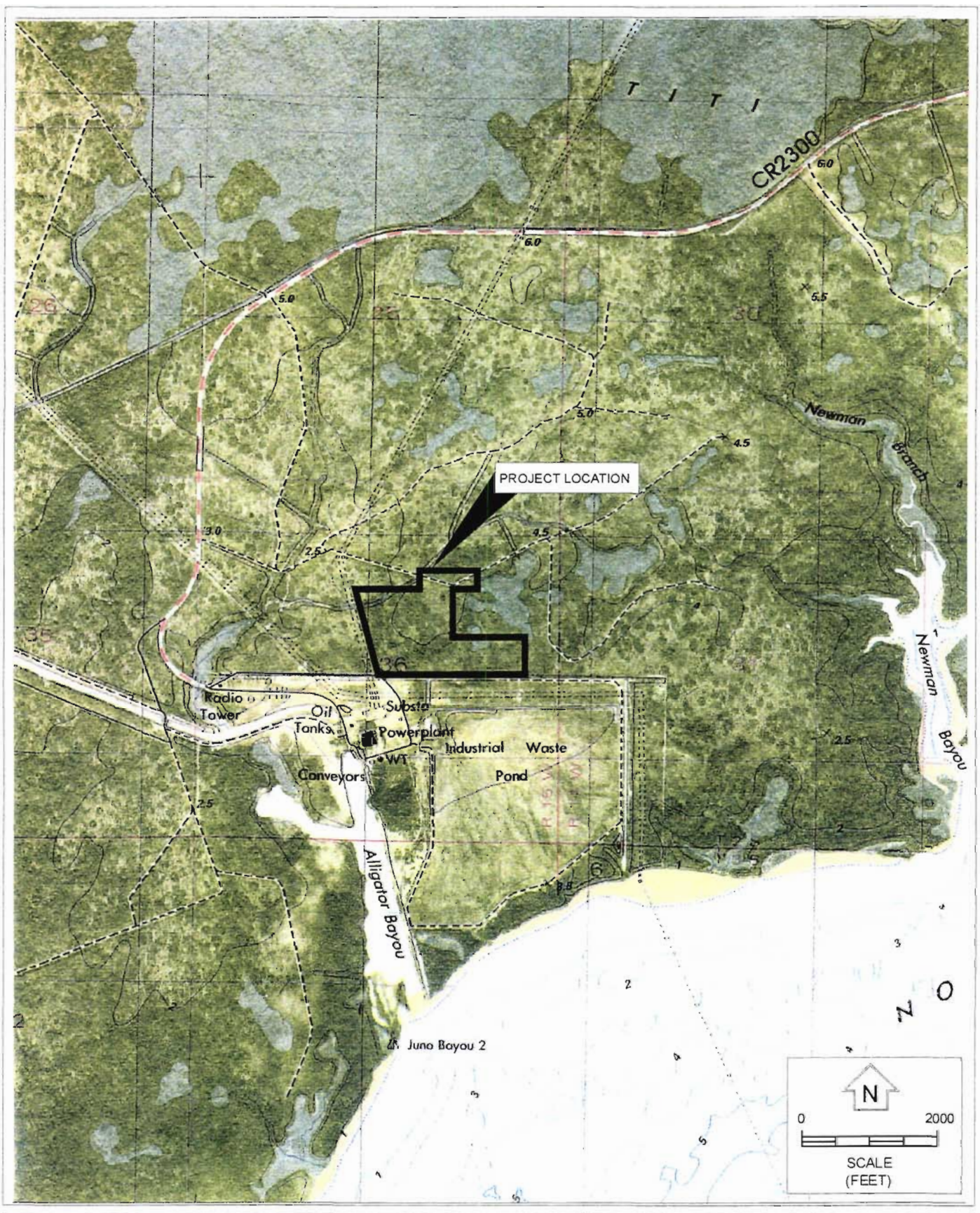


FIGURE 2.

SITE LOCATION MAP

Sources: USGS topo map of Southport, Fl., 1992; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

2.0 DESIGN CRITERIA

Storm water control measures used on the new plant are designed to comply with requirements of local, state, and federal regulations. Storm water runoff calculations, runoff volumes, peak discharges, and control structures were determined or designed using methods described in Chapter 62-25, Florida Administrative Code, and Section 7.03.00 of the Bay County regulations.

2.1 SITE GRADING

The site will be filled and graded to provide a finished surface for construction of structures and associated facilities, including roadways, parking areas, construction laydown areas, storm water detention basins, and conveyances. The grading will provide adequate drainage for all buildings, structures, and working areas.

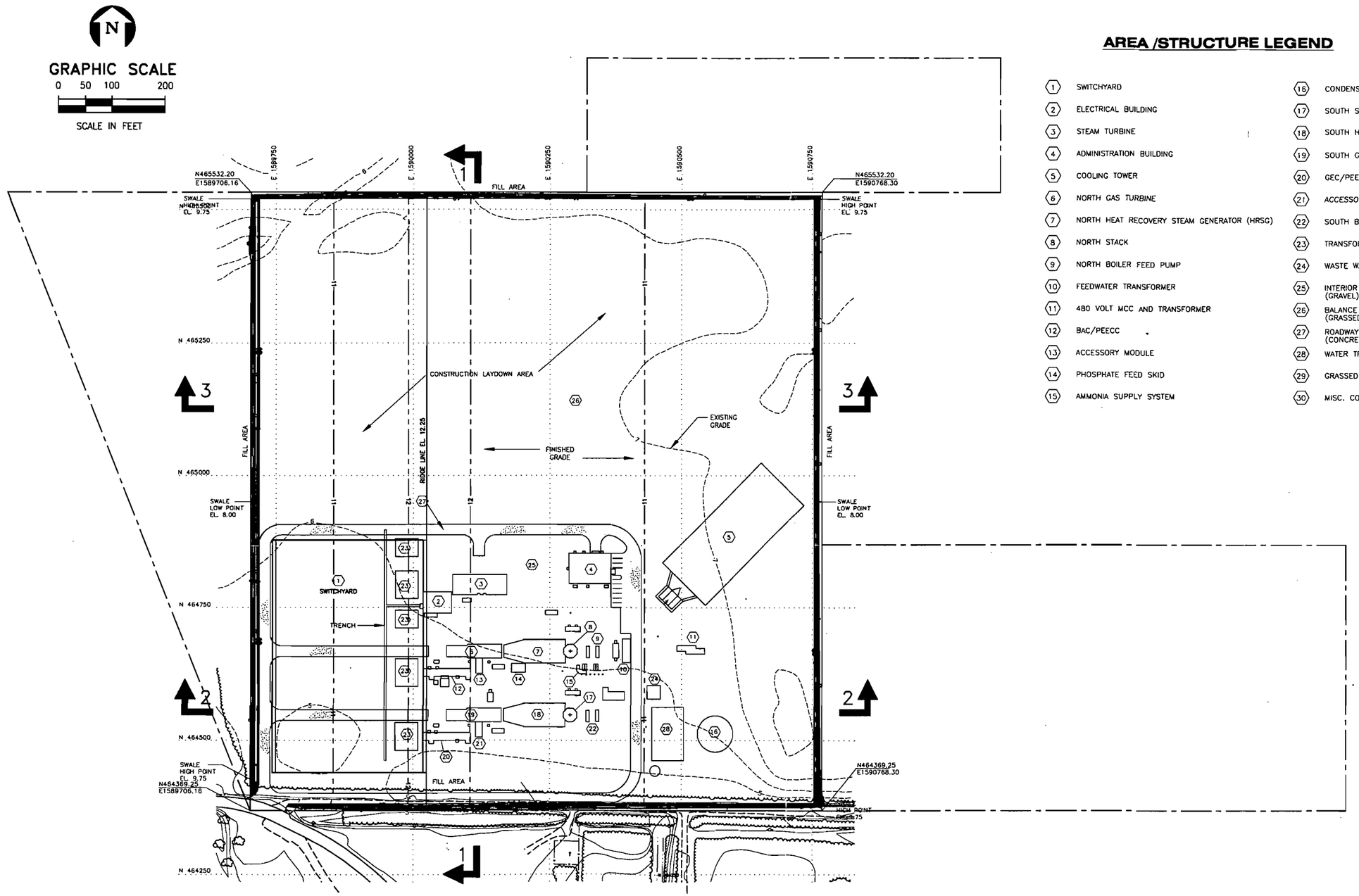
Site drainage will be accomplished by gravity flow, utilizing a surface drainage system consisting of mild surface slopes, drainage ditches, swales, and culverts. First floor elevations will be above the 100-year flood elevation of 7 ft-NGVD. The site will generally be graded to elevations of 10 ft-NGVD or higher. Figure 3 shows the site grading plan and Figure 4 shows the cross sections of the site according to the site grading.

2.2 ROADS AND PARKING AREAS

A roadway system will provide access to various portions of the site. It includes permanent, paved roads or driveways with minimum 20-ft-wide paved surfaces. During construction, roadways will be surfaced with aggregate.

Parking will be provided adjacent to the administration building in addition to the existing lots in the Smith Plant site.

Approximately 87,680 square feet (ft^2) of impervious surface will be used for roads and parking. These surfaces will be sloped to collect and drain storm water to one of the two wet detention ponds.



AREA /STRUCTURE LEGEND

1. SWITCHYARD
2. ELECTRICAL BUILDING
3. STEAM TURBINE
4. ADMINISTRATION BUILDING
5. COOLING TOWER
6. NORTH GAS TURBINE
7. NORTH HEAT RECOVERY STEAM GENERATOR (HRSG)
8. NORTH STACK
9. NORTH BOILER FEED PUMP
10. FEEDWATER TRANSFORMER
11. 480 VOLT MCC AND TRANSFORMER
12. BAC/PEECC
13. ACCESSORY MODULE
14. PHOSPHATE FEED SKID
15. AMMONIA SUPPLY SYSTEM
16. CONDENSATE STORAGE TANK
17. SOUTH STACK
18. SOUTH HEAT RECOVERY STEAM GENERATOR (HRSG)
19. SOUTH GAS TURBINE
20. GEC/PEECC
21. ACCESSORY MODULE
22. SOUTH BOILER FEED PUMP
23. TRANSFORMERS
24. WASTE WATER SUMP
25. INTERIOR PLANT YARD (GRAVEL)
26. BALANCE OF SITE (GRASSED)
27. ROADWAY (CONCRETE)
28. WATER TREATMENT BUILDING
29. GRASSED SLOPES
30. MISC. CONC. PADS (INTERIOR YARD)

FIGURE 3.

PLOT PLAN AND GRADING PLAN

Sources: SCS, 1999; ECT, 1999.

ECT
Environmental Consulting & Technology, Inc.

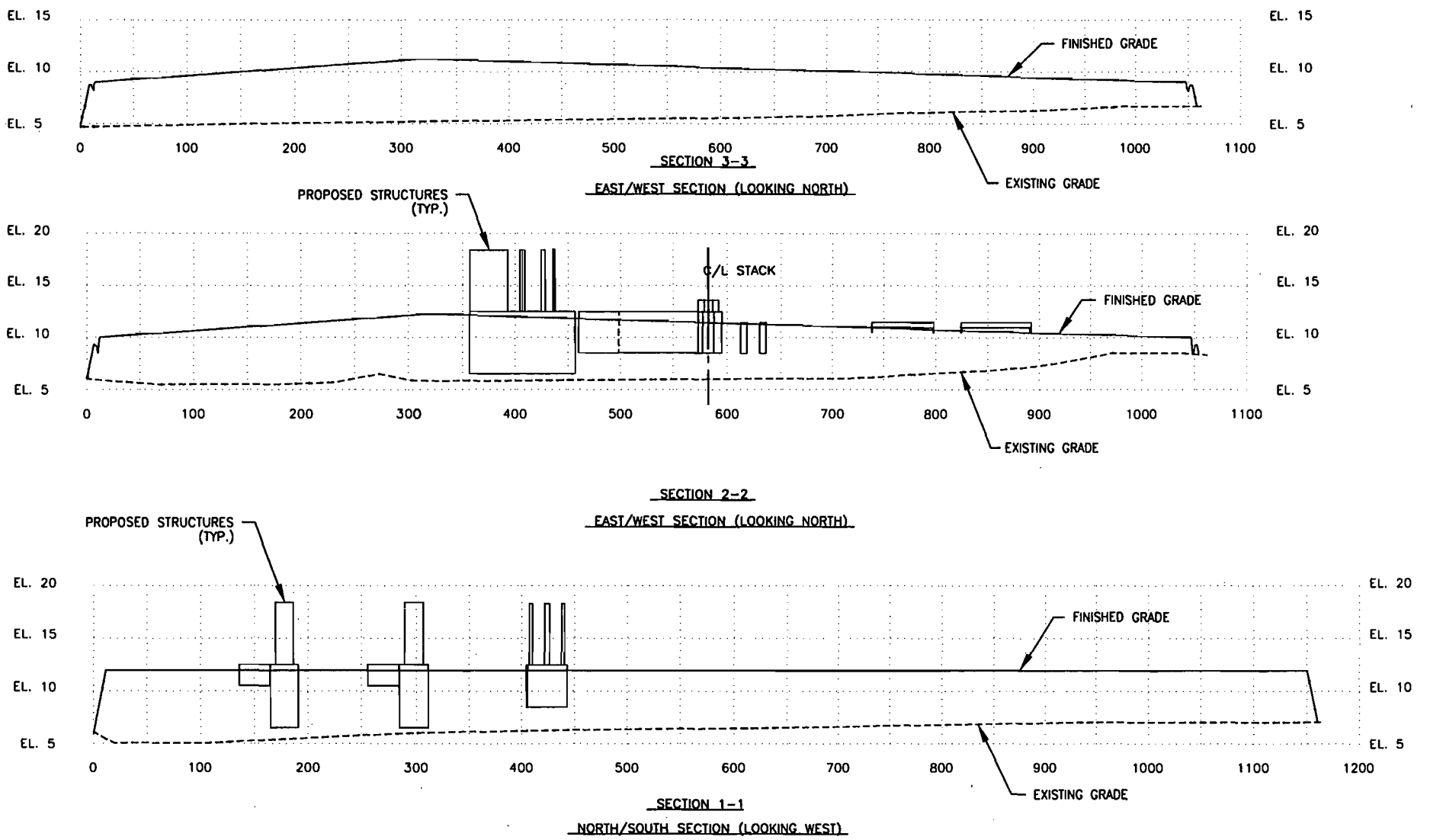


FIGURE 4.

GRADING PLAN PROFILES

Source: SCS, 1999.

ECT

Environmental Consulting & Technology, Inc.

2.3 OTHER PERVIOUS AND IMPERVIOUS AREAS

As calculated from the site layout plan, approximately 10.33 acres of the site will be impervious surface, inclusive of the normal pool wet area of the ponds. These surfaces include transformers, concrete pads, buildings, and associated facilities. Pervious areas that will be part of the improved area (approximately 22.37 acres) will either be grassed or landscaped.

2.4 DRAINAGE DITCHES AND SWALES

Collection systems which will convey runoff to the wet detention ponds are designed for the 100-year, 24-hour capacity. Side slopes will be a maximum of 3 horizontal to 1 vertical, and longitudinal slopes of 0.3 percent or greater. Since the site will be elevated with well drained fill material, ditch elevations will be above water table elevations. Ditches and swales will be grassed and included in the plant's normal maintenance program.

2.5 CULVERTS

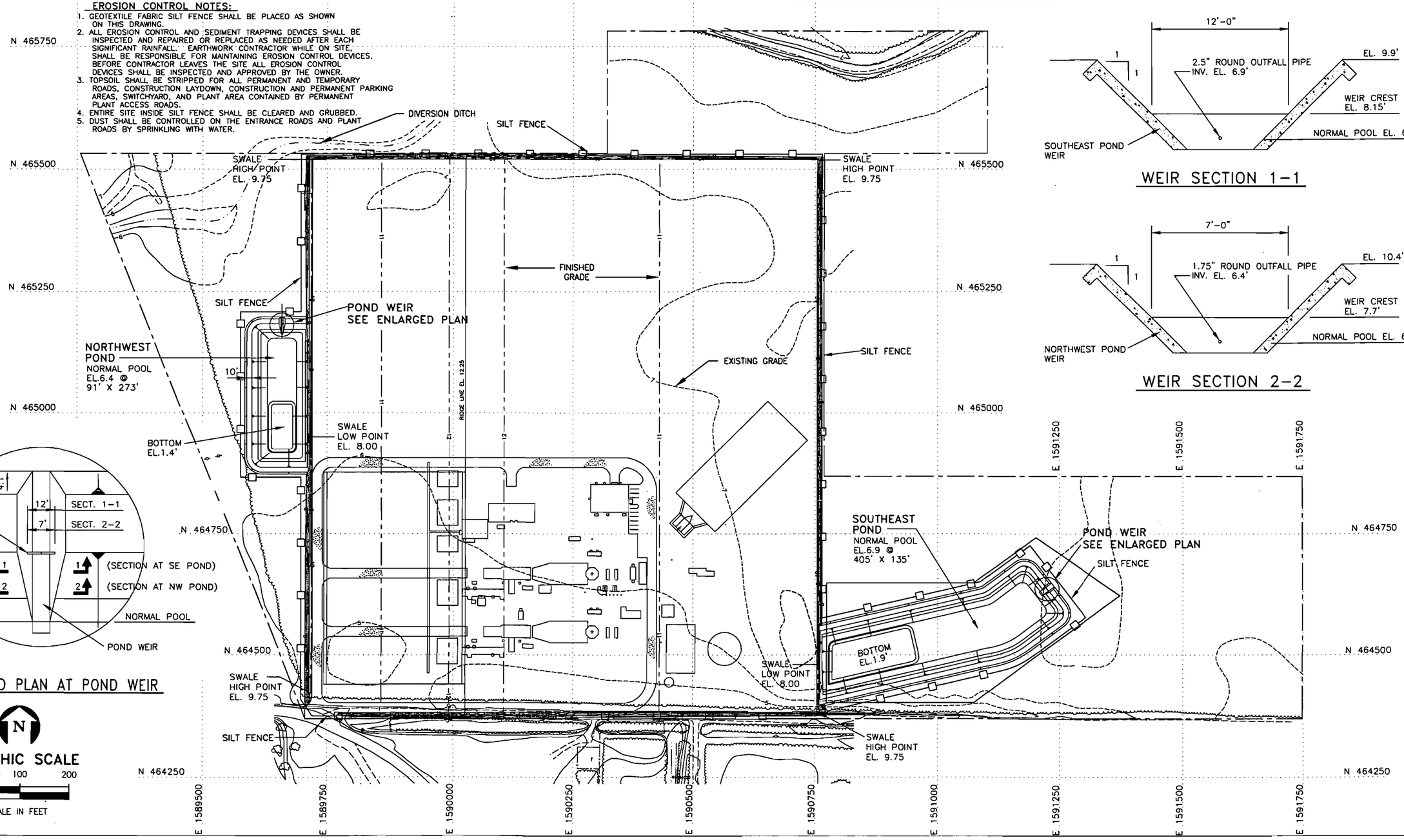
Drainage culverts will be installed at road crossings and embankments. Culverts will be either reinforced concrete or high-density polyethylene pipe or equivalent. Culverts within the collection system for the wet detention ponds will be designed for the 100-year, 24-hour storm capacity for a headwater elevation below the roadway base course. All culverts will be designed to support AASHTO HS20 and construction equipment traffic loads.

2.6 DETENTION BASIN

Two wet detention basins will be constructed to provide water quality treatment and attenuation of site storm water runoff. A 1.25-acre pond (as measured at the normal pool elevation) will be located in the southeast section of the site, collecting runoff from approximately 22.56 acres. Another 0.56-acre pond will be located in the northwest section of the site, collecting runoff from approximately 10.14 acres of site area. The locations and configurations of the detention ponds are shown in Figure 5.

EROSION CONTROL NOTES:

1. GEOTEXTILE FABRIC SILT FENCE SHALL BE PLACEO AS SHOWN ON THIS DRAWING.
2. ALL EROSION CONTROL AND SEDIMENT TRAPPING DEVICES SHALL BE INSPECTED AND REPAIRED OR REPLACED AS NEEDED AFTER EACH SIGNIFICANT RAINFALL. EARTHWORK CONTRACTOR WHILE ON SITE, SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL DEVICES. BEFORE CONTRACTOR LEAVES THE SITE ALL EROSION CONTROL DEVICES SHALL BE INSPECTED AND APPROVED BY THE OWNER.
3. TOPSOIL SHALL BE STRIPPED FOR ALL PERMANENT AND TEMPORARY ROADS, CONSTRUCTION LAYDOWN, CONSTRUCTION AND PERMANENT PARKING AREAS, SWITCHYARD, AND PLANT AREA CONTAINED BY PERMANENT PLANT ACCESS ROADS.
4. ENTIRE SITE INSIDE SILT FENCE SHALL BE CLEARED AND GRUBBED.
5. DUST SHALL BE CONTROLLED ON THE ENTRANCE ROADS AND PLANT ROADS BY SPRINKLING WITH WATER.



ENLARGED PLAN AT POND WEIR

GRAPHIC SCALE

0 50 100 200

SCALE IN FEET

WEIR SECTION 1-1

WEIR SECTION 2-2

FIGURE 5.

MASTER DRAINAGE PLAN

Sources: SCS, 1999; ECT, 1999.

ECT

Environmental Consulting & Technology, Inc.

The detention basins will be excavated to have a permanent pool volume in excess of the 14-day residence time during the wet season (June through October) to assure adequate sedimentation and water quality treatment of storm water runoff. Under normal conditions, the permanent pool elevations of the ponds will be 6.4 and 6.9 ft-NGVD for the northwest and southeast ponds, respectively. A small orifice in the outlet structure of the ponds will be used as a bleed down device to recover detention and water quality treatment volume. The bleed down device will recover 50 percent of the detention volume within the first 60 hours following the rainfall event. The bleed down orifice at the southeast pond will be 2.5 inches in diameter with an invert elevation of 6.9 ft-NGVD. The bleed down orifice at the northwest pond will be 1.75 inches in diameter with an invert elevation of 6.4 ft-NGVD.

For the 25-year, 24-hour storm, the ponds will attenuate the peak flows to below the predevelopment rates through the outlet control structures. Discharges will be directed to the existing wetland systems adjacent to the site. The following table summarizes the predevelopment and postdevelopment runoff calculations:

Parameters	Predevelopment	Postdevelopment
Northwest pond peak flow	58 cfs	46 cfs
Southeast pond peak flow	128 cfs	68 cfs
Northwest pond peak water level	—	8.54 ft-NGVD
Southeast pond peak water level	—	8.98 ft-NGVD

Note: cfs = cubic feet per second.

The storm water detention ponds will serve as sedimentation basins during construction. The detention ponds will be constructed to allow suspended solids or loose sediments to be settled to the bottom. They will be maintained for proper operation following construction.

Supporting calculations for the wet detention systems are located in the attachment to this SWMP.

2.7 DIVERSION OF OFFSITE DRAINAGE

There is an existing small, intermittent drainage that cuts through the northwestern corner of the construction site. The proposed grading plan will potentially impede the existing drainage pattern in this area. To provide conveyance of the storm water drainage previously carried by this system, a diversion ditch will be excavated around the northwestern corner of the construction site. The diversion ditch, shown in Figure 5, will be of similar width and depth as the existing channel, in order to minimize the alteration of discharge hydrograph.

2.8 EROSION CONTROL

During construction, site erosion will be controlled by maintaining finished surface slopes to less than 1 percent. Silt fencing and straw bale barriers will be used to prevent sedimentation along the perimeter of the site. Surfaces will be vegetated to prevent sediment loss and ditches will be stabilized, as necessary. These generalized measures are shown on Figure 5.

3.0 STORM WATER MANAGEMENT PLAN AND PRACTICES

The storm water management plan for the Smith Unit 3 Project is shown in Figure 5, including site layout, general arrangement of equipment and facilities, arrangement and locations of storm water runoff control structures, locations of storm water runoff outfall structures, and offsite storm water runoff receiving areas. Control practices for storm water during both construction and operational periods are described below.

3.1 CONSTRUCTION PHASE STORM WATER CONTROL MEASURES AND PRACTICES

During construction of the Smith Unit 3, a combination of silt fencing, straw bale sediment barriers, and the storm water detention basins will be used to control erosion on the site and to reduce the potential for transport of eroded sediment offsite. All grading will be accomplished in phases, with each graded area seeded and mulched after construction of the Smith Unit 3 Project is complete.

A portion of the storm water detention basins will be constructed in the initial phase of site preparation to serve as sedimentation basins. Subsequently, the drainage ditch system will be constructed to convey storm water to the detention/sedimentation basins to remove suspended solids from runoff.

Movement of sediment off graded areas will initially be controlled by the use of silt fences that will provide continuous silt barriers on the downgradient sides of all actively graded areas. Interception of runoff by drainage ditches established early in the construction phase will allow removal of sediment by straw bale fences, with subsequent conveyance of runoff to the storm water detention basins.

To isolate runoff from materials storage areas, appropriate containment such as earth berms will be provided. Runoff from these areas will be treated by onsite wastewater treatment facilities.

Site dewatering flows during construction are expected to be minimal, and they will be routed through the drainage ditch system to the detention basins for treatment before off-site discharge. A silt fence/straw bale barrier will be used for initial removal of sediment from dewatering flows as they enter the drainage ditch system to minimize sedimentation impacts on detention basin storage volume during construction. Available capacity of the detention pond will be monitored during dewatering activity to assure that adequate capacity remains available to provide detention for the 25-year, 24-hour design storm event.

Sediment collected in ditches, secondary detention/sedimentation basins, and the primary detention basin will be monitored and removed periodically as needed to maintain ditch and basin capacity. Sediment removed from these facilities will be disposed onsite for landscaping applications.

3.2 OPERATING PHASE STORM WATER CONTROL MEASURES AND PRACTICES

The Smith Unit 3 drainage ditch system will be constructed to intercept all onsite runoff from the developed site area under design storm conditions and convey it to the storm water detention basins. The detention basins will be sized to retain and treat the runoff volume that results from 1.0 inch of runoff from the site area. In addition, the basin will be sized to serve as a detention basin to control rate of runoff from a 25-year, 24-hour storm event in accordance with design requirements of Bay County. Storm water runoff will be drained by gravity to the wet detention basins.

ATTACHMENT

SMITH UNIT 3 PLANT STORM WATER CALCULATIONS

Pond Sizing/Treatment Volumes

Southeast Pond: Treatment required for 1 inch of runoff from the contributing area

$$Area_{SE} = \left(\frac{742.14' \times 1{,}162.95'}{43{,}560 \frac{ft^2}{ac}} \right) + 2.75\ acres = 22.56\ acres$$

Note: 2.75 acres allowed for the pond site.

$$Volume_{SE} = 22.56\ acres \times \frac{43{,}560\ ft^2}{acre} \times 1''\ runoff \times \frac{1'}{12''}$$

$$Volume_{SE} = 81{,}893\ ft^3$$

Treatment volume may be stored in 1.5-ft depth above the normal pool. Therefore, minimum pond size required at the normal pool is:

$$Area_{SE} = \frac{81{,}893\ ft^3}{1.5'\ max.\ depth} = 54{,}595\ ft^2\ or\ 1.25\ acres$$

Maintaining a 3:1 length to width ratio will make the pond the following dimensions at the normal pool:

$x = width$

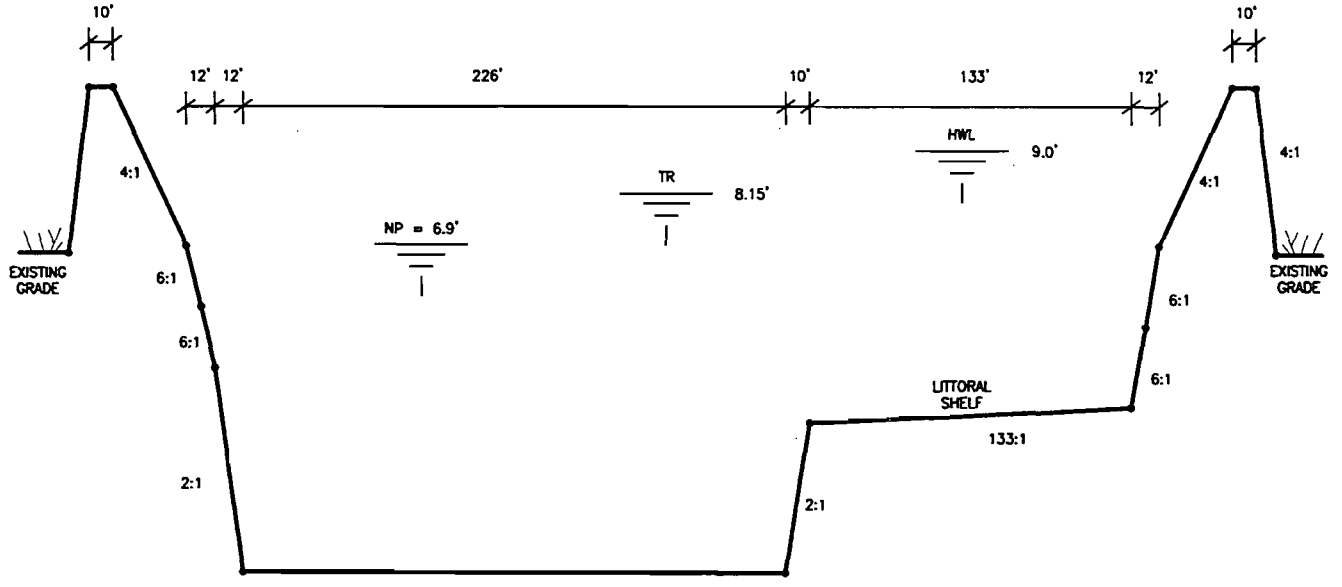
$Area = 3\,(x)\,(x) = 3x^2$

$54{,}595 = 3x^2$

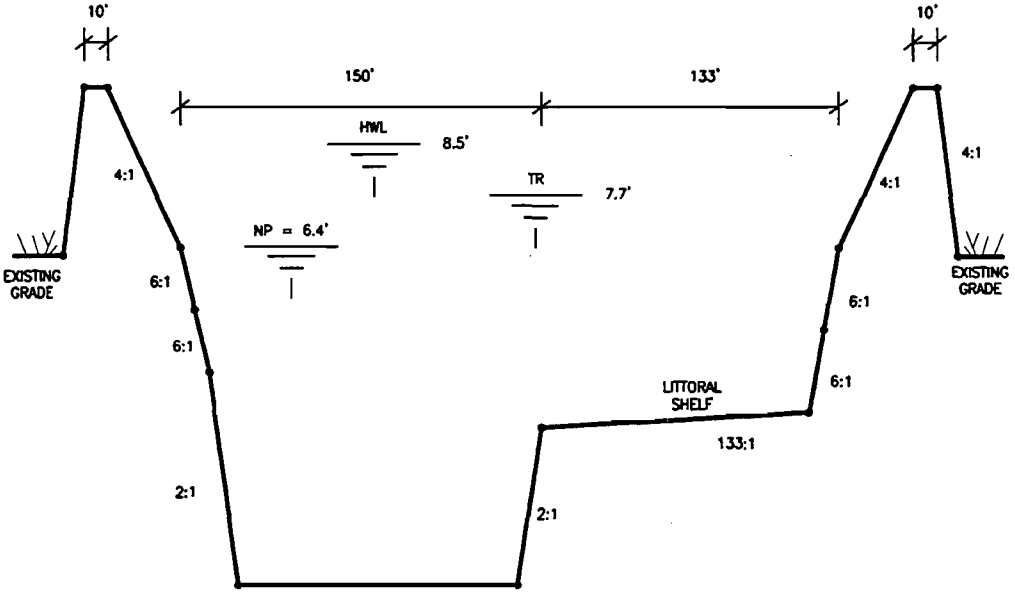
$x = 135\ feet$

$length = 405\ feet$

See (A) of Figure A-1.



(A) SOUTHEAST POND



(B) NORTHWEST POND

FIGURE A-1.

TYPICAL POND SECTIONS

Source: ECT, 1999.

ECT

Environmental Consulting & Technology, Inc.

Northwest Pond:

$$Area_{NW} = \left(\frac{320' \times 1{,}162.95'}{43{,}560 \frac{ft^2}{ac}} \right) + 1.60\ acres = 10.14\ acres$$

Note: 1.60 acres allowed for the northeast pond site.

$$Volume_{NW} = 10.14\ acres \times \frac{43{,}560\ ft^2}{acre} \times 1''\ runoff \times \frac{1'}{12''}$$

$$Volume_{NW} = 36{,}808\ ft^3$$

$$Area_{NW\ @\ normal\ pool} = \frac{36{,}808\ ft^3}{1.5'\ max.\ depth} = 24{,}539\ ft^2\ or\ 0.56\ acres$$

$$Area = 3\,(width)^2 = 24{,}539\ ft^2$$
$$width = 91\ feet$$
$$length = 273\ feet$$

See (B) of Figure A-1.

Normal Water Level Determination

Seven monitoring wells were installed to measure the surficial aquifer system. Fluctuations were observed through measurements of the well. Normal pool elevations for the ponds are estimated to be approximately 0.4 feet below the ground surface for the pond locations. This would result in normal pool elevations of 6.4 ft (northwest pond) and 6.9 ft (southeast pond) (refer to SCA Section 2.3.2).

Permanent Pool Volumes:

Method I: 3.83 percent of annual average runoff.

Rainfall = 65.81 inches (Source: NCDC, 1999[1]).

$$Runoff = \frac{(P - 0.2[S])^2}{(P + 0.8[S])}$$

$$S = \frac{1{,}000}{CN} - 10$$

P = rainf all (inches).

S = Potential max *retention (inches).*

CN = curve number.

CN Estimation:

Pervious surface—grass cover, imported fill	CN = 61
Impervious—concrete, building, gravel, road	CN = 98

Southeast Pond:

	Area (ac)	CN	A × CN
Pond at NP	1.25	100	125.00
Impervious	4.80	98	470.40
Pervious	16.51	61	1,007.11
	22.56		1,602.51

$$CN = \frac{1{,}602.51}{22.56} = 71$$

$$S = \frac{1{,}000}{71} - 10 = 4.1$$

Northwest Pond:

	Area (ac)	CN	A × CN
Pond at NP	0.56	100	56.00
Impervious	3.72	98	364.56
Pervious	5.86	61	357.46
	10.14		778.02

[1] National Climatic Data Center (NCDC). 1999. Meteorological data on Apalachicola and Pensacola, Florida. Online. www.epa.gov.

$$CN = \frac{778.02}{10.14} = 78$$

$$S = \frac{1{,}000}{78} - 10 = 2.8$$

$$Runoff_{SE} = \frac{(65.81 - 0.2[4.1])^2}{(65.81 + 0.8[4.1])} = 61.1''$$

$$PPV_{SE} = (0.0383)(61.1'')(3{,}630) = 8{,}495\ ft^3$$

$$Runoff_{NW} = \frac{(65.81 - 0.2[2.8])^2}{(65.81 + 0.8[2.8])} = 62.6''$$

$$PPV_{SE} = (0.0383)(62.6'')(3{,}630) = 8{,}703\ ft^3$$

Method II = (2" [impervious area] + 0.5" [pervious area]) (3,680)

PPV_{SE} = (2" [6.05 acres] + 0.5" [16.51]) (3,630) = 73,889 ft^3

PPV_{NW} = (2" [4.28 acres] + 0.5" [5.86 acres]) (3,680) = 41,709 ft^3

Method III = 14-day residence time (wet season June to October)

$$PPV = \frac{(DA)(C)(R)(RT)}{(WS)(CF)}$$

DA = drainage area.

WS = wet season.

R = wet season rainfall (32.64").

RT = residence time (14 days).

$$CF = \left(\frac{12\ inches}{1\ ft}\right).$$

C = 0.95 impervious; 0.15 pervious.

$$PPV_{SE} = \frac{(6.05)(0.95)(32.64'')(14)}{(153)(12)} + \frac{(16.51)(0.15)(32.64'')(14)}{(153)(12)}$$

$$PPV_{SE} = 1.43 + 0.62 = 2.05\ acre - foot \rightarrow 89{,}298\ ft^3$$

$$PPV_{NW} = \frac{(4.28)(0.95)(32.64")(14)}{(153)(12)} + \frac{(5.86)(0.15)(32.64")(14)}{(153)(12)}$$

$$PPV_{SE} = 1.01 + 0.22 = 1.23\ acre - foot \rightarrow 53{,}614\ ft^3$$

Therefore, use:

PPV_{SE} = 89,298 ft^3 or 2.05 ac-ft

PPV_{NW} = 53,614 ft^3 or 1.23 ac-ft

Existing conditions

********** Basin Summary - PRE **********

***

Basin Name:	NW	SE
Group Name:	BASE	BASE
Node Name:	NWPOND	SEPOND
Hydrograph Type:	UH	UH
Unit Hydrograph:	UH256	UH256
Peaking Factor:	256.00	256.00
Spec Time Inc (min):	1.33	1.33
Comp Time Inc (min):	1.33	1.33
Rainfall File:	SCSIII	SCSIII
Rainfall Amount (in):	11.00	11.00
Storm Duration (hr):	24.00	24.00
Status:	ONSITE	ONSITE
Time of Conc. (min):	10.00	10.00
Lag Time (hr):	0.00	0.00
Area (acres):	10.14	22.56
Vol of Unit Hyd (in):	1.00	1.00
Curve Number:	77.00	77.00
DCIA (%):	0.00	0.00
Time Max (hrs):	12.27	12.27
Flow Max (cfs):	57.70	128.37
Runoff Volume (in):	8.08	8.08
Runoff Volume (cf):	297382	661631

□□ Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [1]

Stormwater analysis of the two wet detention ponds

********** Node Maximum Conditions - 25YR
****

□(Time units - hours)

Node Name	Group Name	Max Time Conditions	Max Stage (ft)	Warning Stage (ft)	Max Delta Stage (ft)	Max Surface Area (sf)	Max Time Inflow	Max Inflow (cfs)	Max Time Outflow	Max Outflow (cfs)
NWPOND	BASE	12.37	8.54	10.00	0.0126	33110.94	12.33	49.84	12.37	46.27
OUTFALL	BASE	0.00	6.00	0.00	0.0000	0.00	12.48	109.62	0.00	0.00
SEPOND	BASE	12.56	8.98	10.00	0.0176	66303.85	12.42	77.09	12.56	68.12

□□ Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [1]

Stormwater analysis of the two wet detention ponds

********** Link Maximum Conditions - 25YR
****

□(Time units - hours)

Link Name	Group Name	Max Time Flow	Max Flow (cfs)	Max Delta Q (cfs)	Max Time U/S Stage	Max US Stage (ft)	Max Time D/S Stage	Max DS Stage (ft)
O-NW	BASE	12.37	0.12	0.00	12.37	8.54	0.00	6.00
O-SE	BASE	12.56	0.24	0.00	12.56	8.98	0.00	6.00
W-NW	BASE	12.37	46.15	0.83	12.37	8.54	0.00	6.00
W-SE	BASE	12.56	67.89	1.49	12.56	8.98	0.00	6.00

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [4]

GP Smith Plant

********** Input Report **********
--------Class: Weir----------
Name: W-SE From Node: SEPOND
Group: BASE To Node: OUTFALL
Count: 1

Type: Horiz Flow: Both Geometry: Rectangular

Span(in): 144
Rise(in): 36
Invert(ft): 8.15
Control Elev(ft): 8.15
TABLE
Bottom Clip(in): 0
Top Clip(in): 0
Weir Discharge Coef: 3
Orifice Discharge Coef: 0.6

--------Class: Simulation----------
C:\ICPR2\GP\25YR
Execution: Both
Header: Stormwater analysis of the two wet detention ponds

--------HYDRAULICS----------HYDROLOGY----------
Max Delta Z (ft): 1
Delta Z Factor: 0.01 Override Defaults: No
Time Step Optimizer: 0
Drop Structure Optimizer: 0
Sim Start Time(hrs): 0
Sim End Time(hrs): 100
Min Calc Time(sec): 30
Max Calc Time(sec): 300

To Hour:	PInc(min):	To Hour:	PInc(min):
9	15	9	15
22	5	30	5
200	15	50	30

--------GROUP SELECTIONS----------
+ BASE [05/24/99]

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [3]

GP Smith Plant

********** Input Report **********
--------Class: Weir----------
Name: O-SE From Node: SEPOND
Group: BASE To Node: OUTFALL
Count: 1

Type: Horiz Flow: Both Geometry: Circular

Span(in): 2.5
Rise(in): 2.5
Invert(ft): 6.9
Control Elev(ft): 6.9
TABLE
Bottom Clip(in): 0
Top Clip(in): 0
Weir Discharge Coef: 3
Orifice Discharge Coef: 0.6

--------Class: Weir----------
Name: W-NW From Node: NWPOND
Group: BASE To Node: OUTFALL
Count: 1

Type: Horiz Flow: Both Geometry: Rectangular

Span(in): 84
Rise(in): 36
Invert(ft): 7.7
Control Elev(ft): 7.7
TABLE
Bottom Clip(in): 0
Top Clip(in): 0
Weir Discharge Coef: 3
Orifice Discharge Coef: 0.6

Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [2]

GP Smith Plant

********** Input Report **********
--------Class: Basin----------
Basin: SE Node: SEPOND Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSIII Storm Duration(hrs): 24
Rainfall Amount(in): 11
Area(ac): 22.56 Concentration Time(min): 26
Curve #: 71 Lag Time(hrs): 0
DCIA(%): 0

--------Class: Weir----------
Name: O-NW From Node: NWPOND
Group: BASE To Node: OUTFALL
Count: 1

Type: Horiz Flow: Both Geometry: Circular

Span(in): 1.75
Rise(in): 1.75
Invert(ft): 6.4
Control Elev(ft): 6.4
TABLE
Bottom Clip(in): 0
Top Clip(in): 0
Weir Discharge Coef: 3
Orifice Discharge Coef: 0.6

□□ Advanced Interconnected Channel & Pond Routing (ICPR Ver 2.11) [1]

GP Smith Plant

********** Input Report **********
--------Class: Node----------
Name: NWPOND Base Flow(cfs): 0 Init Stage(ft): 6.4
Group: BASE Length(ft): 0 Warn Stage(ft): 10
Comment:

Stage(ft)	Area(ac)
4.4	0.383
6.4	0.5703
7.4	0.6739
10.4	0.9009

--------Class: Node----------
Name: OUTFALL Base Flow(cfs): 0 Init Stage(ft): 6
Group: BASE Length(ft): 0 Warn Stage(ft): 0
Comment:

Time(hrs)	Stage(ft)
0	6
200	6

--------Class: Node----------
Name: SEPOND Base Flow(cfs): 0 Init Stage(ft): 6.9
Group: BASE Length(ft): 0 Warn Stage(ft): 10
Comment:

Stage(ft)	Area(ac)
4.9	0.9709
6.9	1.2552
7.9	1.4072
9.9	1.6203
10.9	1.7312

--------Class: Basin----------
Basin: NW Node: NWPOND Status: On Site Type: SCS Unit Hydr
Group: BASE
Unit Hydrograph: UH256 Peak Factor: 256
Rainfall File: SCSIII Storm Duration(hrs): 24
Rainfall Amount(in): 11
Area(ac): 10.14 Concentration Time(min): 15
Curve #: 78 Lag Time(hrs): 0
DCIA(%): 0

Stormwater analysis of the two wet detention ponds

********** Node Time Series by Time - 25YR **********

Node Name	Stage (ft)	Surface Ar.(ac)	Inflow Base Q (cfs)	Inflow Onsite Q (cfs)	Inflow Offsite Q (cfs)	Inflow Bndry Q (cfs)	Link Q (cfs)	Outflow (cfs)
*** Group: BASE	Time 83.647:	3 days	11 hours	38 minutes	49 seconds			
NWPOND	7.14	0.65	0.00	0.00	0.00	0.00	0.00	0.07
OUTFALL	6.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
SEPOND	7.62	1.36	0.00	0.00	0.00	0.00	0.00	0.14
*** Group: BASE	Time 83.897:	3 days	11 hours	53 minutes	49 seconds			
NWPOND	7.13	0.65	0.00	0.00	0.00	0.00	0.00	0.07
OUTFALL	6.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
SEPOND	7.62	1.36	0.00	0.00	0.00	0.00	0.00	0.14
*** Group: BASE	Time 84.147:	3 days	12 hours	8 minutes	49 seconds			
NWPOND	7.13	0.65	0.00	0.00	0.00	0.00	0.00	0.07
OUTFALL	6.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
SEPOND	7.62	1.36	0.00	0.00	0.00	0.00	0.00	0.14
*** Group: BASE	Time 84.397:	3 days	12 hours	23 minutes	49 seconds			
NWPOND	7.13	0.65	0.00	0.00	0.00	0.00	0.00	0.07
OUTFALL	6.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
SEPOND	7.61	1.36	0.00	0.00	0.00	0.00	0.00	0.14
*** Group: BASE	Time 84.647:	3 days	12 hours	38 minutes	49 seconds			
NWPOND	7.13	0.65	0.00	0.00	0.00	0.00	0.00	0.07
OUTFALL	6.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
SEPOND	7.61	1.36	0.00	0.00	0.00	0.00	0.00	0.14
*** Group: BASE	Time 84.897:	3 days	12 hours	53 minutes	49 seconds			
NWPOND	7.13	0.65	0.00	0.00	0.00	0.00	0.00	0.07
OUTFALL	6.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
SEPOND	7.61	1.36	0.00	0.00	0.00	0.00	0.00	0.14
*** Group: BASE	Time 85.147:	3 days	13 hours	8 minutes	49 seconds			
NWPOND	7.12	0.65	0.00	0.00	0.00	0.00	0.00	0.07
OUTFALL	6.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
SEPOND	7.61	1.36	0.00	0.00	0.00	0.00	0.00	0.14
*** Group: BASE	Time 85.397:	3 days	13 hours	23 minutes	49 seconds			
NWPOND	7.12	0.65	0.00	0.00	0.00	0.00	0.00	0.07
OUTFALL	6.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
SEPOND	7.60	1.36	0.00	0.00	0.00	0.00	0.00	0.14

APPENDIX 10.2.3

BEST MANAGEMENT PRACTICES

DRAFT

STORM WATER POLLUTION PREVENTION PLAN
&
BEST MANAGEMENT PRACTICES
POLLUTION PREVENTION (BMP3) PLAN

GULF POWER COMPANY
LANSING SMITH ELECTRIC GENERATING PLANT
BAY COUNTY, FLORIDA

REVISED
MARCH 1999

CURRENT REVISION DATE

This SWPPP/BMP3 Plan will be revised periodically if there have been changes in design, construction, operations, or maintenance which has a significant effect on the potential for the discharge of pollutants to surface water of the State or if the plan proves to be ineffective in achieving the general objectives of reducing pollutants in wastewater or storm water discharges. In addition, modifications to the SWPPP/BMP3 Plan incorporated to improve the effectiveness of the plan will also be included. The table below is to be used in order to document any changes or updates made to the SWPPP/BMP3 Plan.

REVISION NUMBER	DATE	PURPOSE
0	March 1999	Initial Version of Joint Plan

TABLE OF CONTENTS

TABLES OF CONTENTS - Continued

LIST OF TABLES

Table

LIST OF FIGURES

Figure

CERTIFICATION

Owner's Certification

I certify under penalty of law that this document and all appendices, attachments and enclosures were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly 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 fines and imprisonment for knowing of violations.

Signature:_____

Title:_____

Certification Date:_____

1.0 INTRODUCTION

1.1 Background

All facilities covered by the National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activities issued by the U.S. Environmental Protection Agency (USEPA) must develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The requirements of the Final NPDES Multi-Sector Permit for Storm Water Discharges Associated with Industrial Activity, were first published by the USEPA in the *Federal Register* on September 29, 1995 (60 FR 50804) under authorization of the Code of Federal Regulations (CFR) at 40 CFR 122.28. In addition, FDEP Rule 62-620, Florida Administrative Code, requires facilities covered by NPDES permits to develop and implement a Best Management Pollution Prevention Plan (BMP3), incorporating the requirements of 40 CFR § 125, Subpart K. Both requirements are applicable for Florida facilities including Gulf Power Company's (GPC) electric generating plants. The intent of the SWPPP/BMP3 Plan is to evaluate potential pollution sources at the site and to select and implement appropriate measures known as Best Management Practices (BMPs) to prevent or control the discharge of pollutants in storm water runoff.

NPDES Permit Number FL0002267 was issued to GPC on April 17, 1998 for operation of Units 1 and 2 of the Lansing Smith Electric Generating Plant, under Section 403.0885, Florida Statutes and FDEP Rule 62-620, Florida Administrative Code. Under this permit the facility is required to develop and implement a Best Management Practices Pollution Prevention (BMP3) Plan directed toward reducing pollutants of concern which discharge or could discharge, to surface waters. The BMP3 Plan will address all activities which could or do contribute pollutants, as defined in the permit, to the surface water discharge, including storm water, water and waste treatment, and plant ancillary activities.

Due to the similarity of components required for the NPDES permits as described above, GPC has incorporated the requirements for both the SWPPP and BMP3 Plan into this joint document for the Lansing Smith Electric Generating Plant.

Information used to prepare this joint document was received from GPC and Lansing Smith Electric Generating Plant (Plant Smith) personnel and from Plants Smith's existing Storm Water Pollution Prevention Plan dated March 1993. Detailed site observations were conducted by representatives of Gulf Coast Environmental & Engineering, Inc. (GCE&E) accompanied by GPC personnel. This joint document has been prepared pursuant to the requirements and provisions of GPC's NPDES Permit No. FL0002267, Part VII, Section C and the facility's NPDES Multi-Sector Storm Water General Permit No. FLR05C162. Copies of both permits issued to Lansing Smith Electric Generating Plant are included in this plan as Appendix A.

1.2 Objectives

The pollution prevention approach adopted in the general permit focuses on two major objectives associated with industrial activities from the facility: 1) identifying sources of pollution potentially affecting the quality of storm water, water and waste treatment, and plant ancillary activities; and 2) describing and ensuring implementation of practices to minimize and control pollutants in storm water and wastewater discharges and providing a mechanism for compliance with the terms and conditions of the NPDES General Permit. To meet these objectives and the permit requirements, this joint document will:

- Present a Pollution Prevention Team of qualified personnel who will be responsible for assisting in the development, implementation, maintenance, and revision of the SWPPP/BMP3 Plan (Section 2.0)
- Summarize findings from the initial assessment of potential on-site storm water pollution sources (Section 3.0)
- Identify the appropriate BMPs and controls (Section 4.0)

- Implement the BMPs and controls (Section 5.0)

- Institute evaluation and monitoring of the SWPPP/BMP3 Plan to verify that it is properly implemented in accordance with the terms and conditions of the permit (Section 6.0)

1.3 Storm Water Pollution Prevention Plan/BMP3 Plan Format

In general, this joint plan format is organized to correspond to the multi-sector permit requirements in the order addressed in the USEPA Manual entitled "Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices" (Manual). The reader is encouraged to review the Plant Smith SWPPP/BMP3 Plan jointly with the Manual. The Manual may assist the reader in understanding and implementing the SWPPP/BMP3 Plan. The SWPPP/BMP3 Plan is meant to be a foundation for GPC and Plant Smith personnel to build upon to create an effective storm water pollution prevention program. As conditions and practices at Plant Smith change to accommodate pollution prevention activities, sections of this document shall be revised accordingly. The format for this SWPPP/BMP3 Plan is designed to easily accommodate these changes. Details on implementation and evaluation activities required for the SWPPP/BMP3 Plan are included in Sections 5.0 and 6.0, respectively.

1.4 Impacts to Endangered Species

The NPDES Multi-Sector General Permit requires a certification regarding the presence and assessment of potential impacts to endangered species (as listed pursuant to the Federal Endangered Species Act (ESA) in areas receiving storm water discharges authorized under the NPDES Multi-Sector General Permit. A list of species and their locations which are contained in Addendum H of the NPDES Multi-Sector General Permit was reviewed. A determination was made whether the species listed are in proximity to the storm water discharges at the site and if so, whether there is any likely adverse effect upon the species.

Addendum H of the NPDES Multi-Sector Permit lists several species as potentially being found in Bay County, Florida. An endangered species survey was conducted which included a review of information on the relative abundance and distribution of the species and an on-site field survey to determine the presence or absence of the species and/or their habitat. The conclusion of the survey indicated that no known endangered or threatened species are located within a one-mile radius of the site and therefore, the discharge of storm water runoff that will be within the NPDES permit limitations and monitoring requirements established for these wastewaters will have no adverse impacts to endangered or threatened species or their habitat.

1.5 Impacts to Historic Sites

The NPDES Multi-Sector General Permit requires an indication concerning the applicability of and compliance with a written historic preservation agreement that may exist with respect to any historic sites listed on the National Historic Register that may be subject to adverse impacts from storm water discharges.

A review of historic sites in the area was conducted. The conclusion of the review indicated that no historical sites are located within a one-mile radius of the site and therefore, the discharge of storm water runoff that will be within NPDES permit limitations and monitoring requirements established for these wastewaters will have no adverse impacts to historic sites.

1.6 Statement of Company Policy

Gulf Power Company is committed to the goals of this SWPPP/BMP3 Plan program in order to prevent or minimize the potential for the discharge or release of pollutants to waters of the state. The primary objective of this joint plan is to ensure that preventative measures and procedures are in place to prevent any spill of oil or other regulated substances from reaching navigable

waters or adjoining shorelines. An assessment of operations of the facility is included herein as they have the potential for discharge of oil or other regulated substances. Where such a potential exists: (a) employees will be adequately trained to reduce the number of human errors that often causes spills; (b) inspection procedures will be implemented; (c) when appropriate, pollution prevention equipment will be installed and maintained; and (d) secondary containment, if practicable, will be provided to contain any material that may be spilled. The joint SWPPP/BMP3 Plan contained herein is designed to familiarize plant personnel with areas of potential spills, the procedures used to report a spill, and the methods and procedures used to inspect equipment so that the risk of an accidental spill is reduced.

2.0 PLANNING AND ORGANIZATION

2.1 Pollution Prevention Team/Best Management Practices Committee

As part of the development and implementation of the Plant Smith SWPPP/BMP3 Plan, a Pollution Prevention Team has been formed. A member roster listing the individuals, their phone numbers, and responsibilities, has been prepared and is included as Table 1.

The Pollution Prevention Team includes a corporate representative and the on-site team leader. The corporate representative is Ms. Rachel Terry, Environmental Affairs Specialist, with Gulf Power Company. The on-site team leader will be the plant Environmental Coordinator.

As delineated in the USEPA Manual, the Pollution Prevention Team is responsible for the following:

- Implementing all Multi-Sector General permit and pollution prevention plan requirements
- Defining and agreeing upon an appropriate set of goals for the facility's storm water management program
- Being aware of any changes that are made in plant operations to determine whether any changes must be made to the SWPPP/BMP3 Plan
- Maintaining a clear line of communication with plant management to ensure a cooperative partnership

The Pollution Prevention Team will gather at regularly scheduled meetings. If Plant Smith personnel notice potential sources of pollutants or have ideas to help reduce storm water

pollution, they should discuss them with any team member. The active participation of all Plant Smith personnel in helping identify and eliminate potential storm water pollution sources is vital to the success of this SWPPP/BMP3 Plan.

2.2 Existing Environmental Management Programs

Provisions of existing environmental management plans for Plant Smith should be coordinated to improve consistency between plans. Applicable plans which should be reviewed may include the following:

- Oil Spill Prevention Control and Countermeasures Plan
- Oil Spill Contingency Plan
- OSHA Emergency Action Plan

The SWPPP/BMP3 Plan has been prepared to be a comprehensive stand-alone document, but coordination of relevant portions of these plans should be considered. Revisions to the SWPPP/BMP3 Plan should be considered as other plans are reviewed and revised.

3.0 POLLUTANT SOURCE ASSESSMENT

3.1 Site Location

The Lansing Smith Electric Generating Plant is located on County Road 2300 in Bay County, Florida, west of the City of Southport on the peninsula between North Bay and West Bay, on the east bank of Alligator Bayou. The plant is accessed from State Highway 77 and thence from County Road 2300 to the Lansing Smith entrance gate. The plant address is 6804 Highway 2300, Southport, Florida 32409. The plant mailing address is P.O. Box 1210, Lynn Haven, Florida 32444. A site location map showing Plant Smith and the surrounding areas is presented as Figure 1. The plant is surrounded by undeveloped planted pine plantation dotted with small lakes and wetlands.

3.2 Site Description

Plant Smith encompasses approximately 1,230 acres and employs about 90 people. On this plant site there are three generating units that have a combined generating capacity of 390 megawatts (mw). The generating units are supported by a number of facilities which are described below.

Plant Smith started operation in May 1965. The plant consists of two coal-fired steam driven generating units and a peaking unit powered by an oil fired combustion turbine. The following is a table summarizing the characteristics of the generating units:

Unit	Capacity (mw)	Fuel	Commercial In-service Date
1	163	Coal	June 1965
2	192	Coal	June 1967
A	35	Oil	May 1971
Net-System Peak Hour Capacity	**390**		

The two primary generating units use electrostatic precipitators for air emission control and are cooled by a once-through cooling water system. Non-contact, once-through cooling water is

withdrawn from Alligator Bayou and discharged through a canal to Warren Bayou (West Bay of St. Andrew Bay). The peaking unit has no air emission control system and is internally cooled.

Other significant facilities supporting the electric generating units on the Plant Smith site include the following:

- Coal unloading and storage facilities
- Ash-handling and disposal facilities
- Bulk liquid storage facilities
- Storm water management system
- Wastewater management systems

Other facilities that support power generation at Plant Smith include the following:

- Three warehouse buildings
- Switchyard
- Contractor staging area
- Maintenance and storage shops
- Fire training area
- Parking lots
- Domestic water and wastewater facilities
- Demineralizer facilities and
- Miscellaneous other facilities

A SWPPP/BMP3 Plan pollutant source assessment for these facilities was conducted on May 10, 1999 by representatives of GCE&E accompanied by GPC personnel. Figure 2 has been prepared to satisfy U.S. EPA's permit requirements outlined in the plan named above. The above facilities and the following additional information are presented on Figure 2:

- All USEPA and FDEP permitted outfalls and storm water discharges
- Drainage areas of each storm water outfall
- Significant structural storm water pollution control measures
- Names of receiving waters
- Locations of exposed significant materials
- Location of past spills and leaks

- Locations of high-risk, waste-generating areas and activities

The topography of Plant Smith does not significantly impact storm water management. The plant is located east of Alligator Bayou on the banks of North Bay slightly above sea level on relatively level ground.

On-site storm water runoff is controlled using a variety of structural methods. These methods include: storm drain systems, concrete swales, curbed roadways, ditches, roof drains, and pump stations. The individual drainage basins for Plant Smith are shown on Figure 2. In general, storm water that is not diverted to the Plant's ash pond and recycled to the ash sluice system is discharged through the outfalls shown on Figure 2, and ultimately, to West Bay. Storm water management practices associated with the facility operations are discussed below in Section 3.3.

All treated and untreated wastewater (except once-through cooling water and emergency overflow from the main yard sump) from the operation of Units 1 and 2 is discharged to the ash pond. Wastewater streams that discharge to the ash pond include boiler blowdown, water treatment filter backwash, air preheater wash, ash and pyrite sluice, coal pile runoff, yard runoff, treated metal cleaning waste, treated demineralizer regeneration waste, treated domestic wastewater, and other minor process and non-process waste streams.

Demineralizer regeneration waste is neutralized and allowed to settle in a retention pond prior to discharge to the ash pond. Metal cleaning waste is neutralized in pipe and is chemically precipitated and allowed to settle in a retention pond prior to discharge to the ash pond. Domestic wastewater receives secondary treatment in an extended aeration package treatment plant prior to discharge to the ash pond.

3.3 Materials Inventory

In accordance with permit requirements, an inventory of materials that may have been or are exposed to rain water was conducted. The following items have been prepared to satisfy the permit requirements:

- A list of significant materials that have been exposed to storm water in the past three years with a focus on areas where materials are stored, processed, transported, or transferred
- A summary of methods and locations of on-site storage and disposal
- A description of materials management practices employed to minimize contact of the materials with storm water runoff
- A discussion of existing structural and non-structural control measures used to reduce pollutants in storm water runoff
- A discussion of existing treatment for storm water runoff

Some significant materials which have been exposed to storm water in the past three years are listed on Table 2. The locations of these exposed significant materials which may be potential pollutant sources are shown on Figure 2. Appendix A contains a list of on-site chemicals, which, if exposed to precipitation, could potentially pollute storm water.

Methods and locations of on-site storage and the associated materials management practices (loading and unloading) employed to minimize the contact of these materials with storm water is presented in the following subsections. A narrative description of the associated existing storm water structural and non-structural control measures, as well as treatment of the associated storm water runoff, is also included in the same subsections.

3.3.1 Outdoor Material Storage Areas

There are five types of outdoor material storage areas at Plant Smith including: coal storage area, ash storage ponds and landfill, bulk liquid storage facilities, solid waste storage areas, and a construction materials storage area. Four of these five types of material storage areas are exposed to direct storm water contact. The materials in the bulk liquid storage facilities are generally unexposed. The location of outdoor material storage areas is shown on Figure 2.

The following text describes the methods of material storage and management and the associated storm water control and treatment measures for each type of storage area. Best management practices for these areas are discussed in Section 4.0.

3.3.1.1 Coal Storage Area

Approximately 18 acres of the Plant Smith site are occupied by facilities and equipment for unloading and storage of coal. The coal unloading facility is located adjacent to the coal barge docks in Alligator Bayou. The coal storage area (coal pile) is located immediately east of the coal unloading facility. The locations of these facilities are shown on Figure 2.

Storm water contacting the coal pile drains to the perimeter of the storage area. In general, runoff is controlled by concrete swales and coal berms. On the north side of the coal unloader, runoff drains to a concrete swale on the eastern side of the plant road. This swale drains to a sump which discharges to the ash pond and is treated as wastewater. Runoff to the north is intercepted by a coal berm where it appears to percolate to groundwater. Runoff from the east side of the coal pile drains to a concrete perimeter swale back to a pump station located in the southeast corner of the coal storage area. Runoff from the south and southwest also appears to drain towards this pump station as well. This pump station discharges to the ash pond.

3.3.1.2 Ash Storage Ponds and Landfill

Ash storage and disposal facilities for Plant Smith include the ash storage pond and an ash landfill. The ash storage pond and the associated discharge to the recycle canal are covered by a NPDES permit. Currently, use of the ash pond for disposal is alternated between several diked areas within the pond. After an area is filled, the ash is removed and placed in the on-site landfill. Clean runoff from the capped and grassed landfill drains to perimeter swales and then to a culvert located in the southeast corner of the landfill area. Additionally, there is a stormwater detention pond located in the southwest corner of the landfill. Water in this pond is pumped to the ash storage pond. An

emergency overflow structure was observed during the site visit. There were no indications that the water level in the pond has ever reached the spillway on this structure. The ash pond and landfill are shown on Figure 2.

3.3.1.3 Bulk Liquid Storage Facilities

Plant Smith stores almost all liquid chemicals and petroleum products used at the Plant site in above ground storage tanks (AST). There are 9 outdoor ASTs located across the site. In general, ASTs contain petroleum products for fuel and lubrication, and chemicals for water treatment. The locations and contents of these ASTs are shown on Figure 2.

All AST areas have secondary containment systems which, if properly maintained, will isolate the stored material and any storm water within the containment area from the surrounding areas and ultimately from surface waters. Storm waters collected in the containment areas are generally allowed to evaporate, or are drained by operations personnel. The liquid sodium hydroxide (caustic) and sulfuric acid installation south of the demineralization facility are stored in horizontal ASTs with secondary containment. Laboratory personnel have the responsibility for testing and draining storm water from these containments. In that same area, adjacent to the vehicle maintenance facility, a diesel fuel dispensing station also has secondary containment.

Secondary containment has been installed at the combustion turbine oil unloading area. Plant Smith also has a Spill Prevention and Countermeasure Plan and the associated equipment to reduce risk associated with spills and leaks.

3.3.1.4 Solid Waste Storage Areas

Solid waste generated from the Plant is placed into solid waste containers located around the plant site at locations shown on Figure 2. Some containers are uncovered and therefore storm water does come in contact with the refuse placed in them. Drainage from each of these dumpsters could flow

towards local catch basins or other storm water management structures for conveyance to a storm water outfall.

During the site reconnaissance, there did not appear to be evidence that dumpster drainage affects storm water quality. Further evaluation will be completed as part of the implementation of baseline BMPs. Recommendations will be based on the findings of the evaluation.

3.3.1.5 Construction Material Storage Areas

Scrap metal and construction materials appear to be stored in the contractor lay down area behind the main plant building. Scrap metal generated on-site is either placed on the ground or into roll off storage containers located around the site as shown in Figure 2.

During the site reconnaissance, there did not appear to be evidence that construction materials and scrap metal storage area drainage affects storm water quality. Further evaluation will be completed as part of the implementation of baseline BMPs. Recommendations will be based on the findings of the evaluation.

3.3.2 Indoor Material Storage Areas

There are a number of buildings where materials are stored indoors at Plant Smith. These areas include the main building, three warehouses, maintenance building, and oil house. These storage areas shelter materials from storm water exposure. The materials in these four locations generally appear to be stored in a manner to reduce the risk associated with spills and leaks. More detailed inspections will be conducted to assess conditions of each area as part of the BMP implementation program. The greatest risk associated with management of the materials stored indoors is initial loading and unloading or transfer of materials between storage and use locations. Additionally, there is a risk of non-stormwater discharge from building sumps if material spills or leaks occur.

A detailed inventory of materials used and stored on site will be developed as part of the BMP implementation program. Development of BMPs associated with management of individual materials stored indoors will be included in Section 4.0.

3.3.3 Loading and Unloading Areas

The loading and unloading of materials between vehicles and facilities discussed in Sections 3.3.1 (Outdoor Material Storage Areas) and 3.3.2 (Indoor Material Storage Areas) occurs at multiple locations. The loading and unloading areas are grouped as follows:

- Coal unloading dock
- Ash handling and disposal facilities
- Outdoor bulk liquid storage facilities
- Outdoor solid waste metal storage areas
- Contractor staging area
- Packaged goods storage areas

The following sections describe materials management for these areas. The locations where these activities occur are shown on Figure 2. Best management practices for these areas are discussed in Section 4.0.

3.3.3.1 Coal Unloading Dock

Coal delivered to Plant Smith arrives in open-top barges which are docked in Alligator Bayou for unloading. Unloading is accomplished by one stationary crane located adjacent to the bayou. Buckets of coal are transferred between the barges and a feed hopper by this manually operated crane. Coal is then conveyed either to the coal pile or to the plant. Given the nature of the operation, some coal may be lost from the bucket between the barge and the hopper, and distributed around the unloader or in Alligator Bayou between the barge and the seawall. However, current practices and equipment are designed to minimize these occurrences.

3.3.3.2 Ash Handling and Disposal Facilities

Ash is transferred from the plant using a sluice piping system. Exposure of ash materials to storm water is minimized due to the method of transfer between the point of generation and the ash storage pond.

3.3.3.3 Outdoor Bulk Liquid Storage Facilities

Liquid chemicals and petroleum products are stored outdoors predominantly in ASTs. There are five unloading areas on the Plant site where these products are transferred to ASTs; or in the case of the chlorination plant, placed in the storage area in one-ton pressurized cylinders. These five locations are identified on Figure 2 and described as follows:

- Diesel fuel unloading and sludge and waste oil loading adjacent to the ASTs west of the switch yard
- Chlorine cylinder unloading at the chlorination plant
- Chemical product unloading south of the main building on the southeast corner of the plant road. Chemicals unloaded at this facility include sulfuric acid, 50-percent sodium hydroxide (caustic)
- Petroleum product unloading, including diesel fuel, adjacent to the chemical unloading area
- Diesel fuel unloading behind the fire pump house south of the main building

The condition of these unloading areas varies from location to location. General materials management practices require that the contractor unloading the material be accompanied by Plant personnel who will witness the entire unloading operation. The contractor is responsible for providing equipment associated with their delivery vehicles to eliminate exposure of the materials

to storm water on the Plant site. Truck to Plant offloading equipment varies from location to location. Again, the unloading area for combustion turbine diesel fuel has secondary containment in place.

3.3.3.4 Outdoor Solid Waste/Scrap Metal Storage Areas

Transfer of solid waste and recoverable materials between the point of generation and temporary storage locations is done predominantly for refuse and scrap metal. Generally there is one location on site where materials are transferred. This area is east of the main building near the contractor staging area and the Number 3 Warehouse.

Good housekeeping is typically practiced for transfer of trash and scrap metal placed in containers to minimize exposure to storm water.

3.3.3.5 Contractor Staging Area

During the site visit, significant contractor activity was observed on the plant site. A concentration of construction trailers and material storage, both new and used, was present east of the main building. Loading and unloading, as well as storage of materials in this area, could expose the materials to storm water. Runoff from this area appears to drain east to the road and then north beyond the perimeter fence to a drainage ditch. Although these contractors are only temporarily on site, improved materials practices and temporary structural BMPs should be considered to reduce material exposure to runoff. Further evaluation of these measures is included as a BMP for Plant Smith.

3.3.3.6 Packaged Goods Storage Areas

A variety of materials delivered to the Plant are covered in this category. Packaged goods are defined as any material which is delivered from the manufacturer pre-packaged and stored on-site in that package. Locations where packaged goods may be stored include the following:

- Three warehouses
- Vehicle maintenance building
- Chlorination plant
- Main building

There is limited risk associated with exposure of materials to storm water during loading or unloading of these materials from these particular areas.

3.3.4 Other Support Areas

Other support areas, such as the fire training area, car wash, and parking lots, were visited during the site reconnaissance. At this time, no additional BMPs are required for these areas.

3.4 History of Past Spills and Leaks

This SWPPP/BMP3 Plan must list any significant spills and/or leaks that may have occurred at the Plant over the past three years. "Significant spills" have been identified by the U.S. EPA as the release within a 24-hour period of toxic or hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act and/or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Reportable quantities are predefined amounts of substances in pounds, gallons, or other units and are listed in 40 CRF 117 and 40 CFR 302. Releases are defined to include any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing of a substance into the environment.

The NPDES Multi-Sector General Permit requires that any significant spills/leaks that have occurred during the three-year period prior to the date of the submittal of the NOI to be covered by this permit be identified in the SWPPP. Table 3 is included in this Plan to summarize spills and/or leaks which occurred during this three-year period. One spill occurred on July 31, 1995, when an underground fiberglass pipeline associated with the plant's used oil storage tank ruptured spilling approximately 853 gallons of used oil. The spill was properly managed and reported to FDEP. An Initial Remedial Action (IRA) Report was filed with FDEP. A Site Rehabilitation Completion Order for the spill incident was approved and final from FDEP on 2-26-96.

3.5 Non-Storm Water Discharges

The Multi-Sector General Permit requires that the Storm Water Pollution Prevention Plan list any non-storm water discharges that may exist at the Plant. On May 10, 1999, two representatives of GPC and GCE&E conducted a field investigation of the plant site in order to evaluate each storm water outfall and/or drainage area for the presence of non-stormwater discharges. The method used to make this determination was a visual inspection of the site. The results of this evaluation are supported by Plant Smith personnel who conduct daily inspections of the facility site. Table 4 is included in this SWPPP/BMP3 Plan to summarize non-storm water discharges at Plant Smith, and/or to act as an official certification that non-storm water discharges that may have existed have been eliminated. One storm water outfall has been identified. No non-storm water discharges were observed to occur at this outfall. Table 4 of this SWPPP/BMP3 Plan contains GPC's certification that non-storm water discharges, which are not otherwise identified above and/or duly authorized by the NPDES Multi-Sector General Permit, are not present at the facility.

There are five permitted wastewater discharges covered by the NPDES Wastewater Permit. Wastewater discharges include condenser cooling water, boiler blowdown, air preheater washwater, fly and bottom ash sluice, miscellaneous minor process streams, and emergency overflows from the main plant sump and the recycle canal. Outfalls associated with these discharges are shown on Figure 2. These outfalls are regularly tested as required by the NPDES permits.

Presented is a summary of the outfalls listed in the state and federal permits:

Outfall Number	Outfall Name
D001	Main Plant Discharge Canal
D015	Metal Cleaning Wastes
D01C	Ash Recycle System
D00D	Main Yard Sump Overflow
D01A	Treated Domestic Wastewater

Sanitary wastewater generated at the plant site is treated in the domestic wastewater treatment plant. Septic tanks are in use for the Administrative Building and the Coal Unloading facility. These septic tanks each have their own drainfields for disposal of effluent via percolation to groundwater.

3.6 Existing Storm Water Monitoring Data

Sampling has been conducted at Plant Smith. Details of the sampling events, sampling procedures, and copies of laboratory test results will be added to the SWPPP/BMP3 Plan.

3.7 Storm Water Sampling and Analysis Plan

In accordance with the storm water discharge monitoring requirements for steam electric power generating facilities contained in the NPDES Multi-Sector General Permit, Plant Smith is required to collect quarterly grab samples for total recoverable iron during the second and fourth years of permit coverage. However, since year two has already passed, monitoring will only be required in year four (October 1, 1998, through September 30, 1999). Quantative analytical data for total recoverable iron must be collected and submitted within three months of the conclusion of each year to the U.S. EPA as required by the NPDES Multi-Sector General Permit.

Sampling Locations and Schedule

Plant Smith personnel will collect a storm water sample at the outfall location on a quarterly basis during the fourth year of permit coverage.

Sample Types and Sampling Protocol

The storm water samples will be collected in accordance with the storm water sampling requirements of the NPDES Multi-Sector General Permit. Specifically, the representative samples must be collected as grab samples for total recoverable iron during the first 30 minutes of storm water discharge through a designated outfall.

Representative Storm Event

The storm water samples will be collected from the discharge at the designated outfalls that results from a regulatory-defined storm event. The storm water sampling regulations of the NPDES Multi-Sector General Permit require that storm water samples be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours following the most recent, previously measurable storm event that had a rainfall magnitude greater than 0.1 inches.

Storm Water Sample Containers

All containers for sample collection (grab samples) will be provided by the contract laboratory. All containers must be prepared in accordance with good laboratory practice and made chemically clean pursuant to the sample collection and sample container requirements of the applicable U.S. EPA-approved analytical methods for the respective analyses to be conducted. Any required preservatives will be added to the designated sample containers by the laboratory prior to the sampling event. Additional or redundant sample containers should be considered as a contingency for breakage or inadvertent contamination prior to/during sample collection. Only containers provided by the laboratory for each respective type of analysis should be substituted in the field.

Storm Water Sample Labels

Proper labeling of all sampling containers is required. The following information will be included on each sample label:

- Sample identification label
- Date

- Time
- Location (Outfall #)
- Facility (Lansing-Smith)
- Full name of sample collector
- Contract laboratory
- Analysis to be performed

Marking of labels and containers should be performed in a dry area prior to the onset of sampling during a "wet weather" event to prevent loss of legibility due to smearing. Labels and containers should be marked using permanent, indelible ink.

Sample Handling, Transport, and Chain-of-Custody Documentation

Following collection, the storm water grab samples must be placed and stored on wet ice in ice chests to maintain a temperature of 4°C during transport of samples to the contract laboratory.

Designated personnel will be responsible for the storm water samples throughout the sampling period and will coordinate transportation of the samples to the contract laboratory for analyses. An appropriate chain-of-custody form detailing the analytical requirements must be filled out by the designated responsible personnel and must accompany the samples to the contract laboratory.

When transferring possession of samples, for each change of possession, the transferor and the recipient must sign and record the date and time on the chain-of-custody form. In general, custody transfers can be made for individual samples or samples as a group. The number of custody transfers should be kept to a minimum. A standardized chain-of-custody form will be used that is designated to "prompt" the user(s) to complete all required sample collection and transport information including the following:

- Sample type and number of containers
- Sample source location description
- Full name of person collecting the samples
- Date and time of collection for each sample
- Laboratory analysis required/requested, and
- Full name and signature of each transferor and recipient, along with date and time for every custody transfer from sample collection through receipt by the contract laboratory.

Observing proper chain-of-custody procedures, designated personnel will provide oversight of transportation of all samples to the analytical laboratory. All samples must be properly labeled and packaged in ice chests (on wet ice at a temperature of 4°C) and delivered to the contract laboratory office for transfer of custody and sample "log-in".

Laboratory Analysis

GPC will contract with a commercial analytical laboratory with demonstrated experience and expertise with environmental media for the analyses of the storm water samples. The contracted laboratory will receive custody of the samples following transport to the laboratory by designated, responsible personnel. The laboratory will "log-in" and account for all collected and transported samples and will retain custody through sample analyses, data validation, and reporting of analytical results. The contract laboratory must perform all analyses in accordance with the applicable U.S. EPA-approved analytical method for each parameter for which testing is required by the NPDES Multi-Sector General Permit for the Plant Smith storm water discharges.

The laboratory analytical methods to be used must be in accordance with the requirements of the NPDES program as specified at 40 CFR 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants. The contract laboratory must implement and adhere to all applicable and appropriate laboratory quality assurance/quality control (QA/QC) procedures in accordance with good laboratory practice and with the specific requirements of the respective U.S. EPA-approved analytical methods (approved pursuant to 40 CFR 136).

Quarterly Visual Examinations of Storm Water Quality

All facilities must conduct and document quarterly visual examinations of storm water discharges. Examinations will be conducted in each of the following periods for the purpose of visually inspecting storm water quality associated with storm water runoff from the facility: *January through March; April through June; July through September; and October through December.*

Examinations are to be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples are to be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event.

Visual examination reports must be maintained onsite in the SWPPP/BMP3 Plan. The report must include the examination date and time, examination personnel, the nature of the discharge (i.e, runoff), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination. An example Storm Water Sampling Report is included in Table 9.

If Plant Smith personnel are unable to collect samples over the course of the monitoring period as a result of adverse climatic conditions, Plant Smith personnel must document the reason for not performing the visual examination and retain this documentation onsite with the records of the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of samples impracticable (drought).

3.8 Site Assessment Summary

The Multi-Sector General Permit requires that a narrative description of the potential pollutant sources associated with the assessment be presented with a discussion of the pollutants of concern. The previous subsections in Section 3.0 satisfy the permit requirements. These subsections addressed site characteristics, facility characteristics, and the Plant Smith materials which may be exposed to rainwater. Furthermore, discussions concerning materials storage and existing management practices which reduce material exposure to rainwater, direct storm water away from contaminated areas, and/or collect it for on-site treatment were presented. The conditions described in the previous subsections are representative of information reviewed and field observations made during preparation of this revised SWPPP/BMP3 Plan. A discussion of BMPs for the plant areas and pollutants of concern are addressed in Section 4.0.

4.0 BEST MANAGEMENT PRACTICES

This section describes recommended storm water management controls to be carried out under this SWPPP/BMP3 Plan. Several general recommendations to reduce storm water contact with materials present at the Plant were formulated based on observations and information collected during the Plant visit. The general recommendations are presented for the eight baseline BMP categories required by the permit. Priority BMPs for identified potential sources of pollutants will be developed from site observations. The priority BMPs will be included as Section 4.2. The following recommendations are intended to augment the best management practices already being practiced at the Plant.

4.1 Baseline BMPs

The baseline BMPs include: good housekeeping, preventive maintenance, spill prevention response, sediment and erosion control, management of runoff, visual inspections, employee training, recordkeeping and reporting. Discussions concerning employee training, recordkeeping, reporting, plan review, and modifications are presented in Sections 5.0 and 6.0.

4.1.1 Good Housekeeping

Potential storm water pollution can be limited if everyone helps by practicing good housekeeping. This will be a Plant-wide effort to maintain a clean site. General housekeeping methods and practices are described below:

- Improve operation and maintenance of equipment and processes
- Implement careful material storage practices
- Maintain up-to-date material inventory
    - Identify all chemical substances present in the workplace
    - Label all containers showing name and type of substance, stock number, etc.
- Schedule routine cleanup operations

- Maintain well-organized work areas
- Train employees about good housekeeping practices

4.1.2 Preventive Maintenance

Facilities and equipment at Plant Smith need to be maintained in good working condition to prevent storm water pollution. The catch basin and drop inlet grates, culvert entrances, concrete ditches, and other storm water control features should be periodically inspected. Accumulated sediment or debris such as paper and leaves should be removed. Obvious signs of potential pollution, e.g., oil on the water surface, should be reported. Storm water facilities should be cleaned as needed to remove possible accumulations of oil, fuels, and solid debris. All pumping and other mechanical equipment should be tested and maintained routinely. The water and cleaning materials used for this should be disposed of properly and not allowed to flow off-site.

All Plant preventative maintenance activities should be documented, including the following information:

- The date the maintenance was performed
- An estimate of the quantity of pollutant materials removed from the site
- Solid and liquid waste recycling, reduction, or disposal methods
- Locations of disposal facilities
- Any further action required

Disposal manifests must be kept on file if a hazardous waste was involved. Records of work performed under the Preventative Maintenance Program should be documented and placed in Appendix D.

4.1.3 Spill Prevention and Response

Spills may occur anywhere on the property indoors or outdoors, especially at the outdoor AST areas or at loading or unloading areas around the Plant. If a spill occurs anywhere on the plant

site, it can potentially enter the storm drain system and pollute storm water runoff. The best way to handle a spill is to prevent it from happening. This can be accomplished by doing the following:

- Keeping all containment vessels of hazardous materials in secondary spill containment structures
- Clearly marking the hazardous materials that require special handling, storage, use, and disposal
- Training personnel in the proper procedures for handling hazardous materials and the location of Material Safety Data Sheet (MSDS)
- Inspecting all chemical and petroleum related storage areas to be sure there are no signs of leaks or the potential of a leak to occur because of a corroded containment vessel
- Using proper filling procedures for tanks and equipment that minimize spills
- Substituting less or non-toxic materials for toxic materials.

If a spill of a reportable quantity of hazardous material is released, the Plant personnel should respond in accordance with the Plant Smith Emergency Action Plan (EAP). The "reportable quantity" varies for different hazardous materials. A complete list of the quantities can be found in the USEPA Title III, List of Lists, January 1992. If the quantity or type of material is unknown or not listed, but the quantity is estimated to be at least one pound, the release should be reported. If a spill of hazardous materials occurs, the EAP outlines the specific procedures to follow and the people to be notified during such an event.

4.1.4 Sediment and Erosion Control

The Plant's land surface is relatively stable. The grassed, graveled, fabriform covered areas, and paved areas appear to be in good condition and do not appear to produce excessive eroded sediments which can pollute storm water. Existing vegetated areas will be maintained along the intake canal area to prevent erosion and facilitate natural filtration of suspended solids in storm

water runoff. However, should erosion affecting storm water management systems occur on the property, remedial action to stop the erosion should be taken. This could involve planting new grass, adding more gravel to an exposed soil surface, or patching or repaving deteriorated fabriform covered or paved surfaces. If construction activity occurs on site, sediment and erosion control must be implemented and monitored.

4.1.5 Management of Runoff

Runoff at Plant Smith is generally well managed using a number of stormwater management techniques. Improved management at the source to reduce pollutant exposure, as well as traditional methods to divert runoff from surface water outfalls should be routinely evaluated. Visual inspections of material storage areas and loading and unloading facilities during rain events should be conducted with the intent of identifying exposed materials and potential improvements for management of runoff.

4.1.6 Visual Inspections

In addition to preventive maintenance inspections, visual inspections will be conducted regularly of all areas which contain potential pollutant sources. Routine visual inspections are to verify and ensure that key elements of the SWPPP/BMP3 Plan are in place and are effective. Although the visual inspections are not intended to be exhaustive, they will be used on a quarterly basis by the plant Environmental Coordinator or a designated representative to observe and verify the effectiveness of the selected management practices in preventing the contamination of storm water from the site.

All secondary containment structures for outdoor storage of significant materials (e.g. C.T. diesel fuel storage tanks) will be inspected for damage to structural integrity and for any evidence of leakage or residual contamination to storm water. All storm water conveyances and drains will be inspected for evidence of any malfunction or damage that may interfere with the conveyance of storm water. The entire site will be inspected for evidence of spills.

Visual inspections will be thoroughly documented by a designated Plant Smith representative. A checklist designed to facilitate quarterly inspections is included in Table 8 (Record of Quarterly BMP Inspections) of the SWPPP/BMP3 Plan. Deficiencies noted during the inspections should be corrected using Plant Smith's Work Order System. A listing of the completed Work Orders should be kept on file in Appendix C. Inspection forms and Work Orders are required to be kept for three years. Section 6.1 Annual Site Compliance Evaluation describes inspection requirements in greater detail. These requirements should be considered while conducting quarterly inspections.

4.2 Priority BMPs

This section of the Plan identifies areas and practices that have a high potential for polluting storm water runoff. Based on the initial work for the SWPPP/BMP3 Plan, BMPs have been outlined for the coal unloading and storage area, bulk liquid storage facilities, solid waste storage areas, contractor staging area, packaged goods storage areas, and the fire training area. Table 5 contains BMPs to address these potential sources. Additional BMPs and schedules for implementation will be added as the SWPPP/BMP3 Plan is implemented. Prioritization of BMPs will also be undertaken by the Pollution Prevention Team. An extra column to note dates of completed work is included in Table 5 to record actual implementation.

5.0 POLLUTION PREVENTION PLAN IMPLEMENTATION

5.1 Implementing Appropriate Controls

Based on the assessment of the potential pollutant sources at the plant, this SWPPP/BMP3 Plan includes in Section 4.0 a summary of appropriate storm water management measures (BMPs) which will be implemented and maintained. Implementation of the approved BMPs should be scheduled by GPC as determined appropriate. These schedules will be developed following prioritization of the storm water management BMPs considering the hierarchy of the classifications included in the Manual. This hierarchy is shown below with example BMPs.

Storm Water Management Hierarchy	**Example BMPs**
Source Reduction	Preventive maintenance Spill prevention Chemical substitution Housekeeping Training Materials management practices
Containment/Diversion	Segregating the activity of concern Covering the activity Berming the activity Diverting flow to grassed area Dust control
Recycling	Enhanced recycling
Treatment	Oil/water separator Vegetated swale Storm water detention pond Re-vegetation of intake canal to prevent erosion

To implement the plan, specific individuals, including representatives from the Pollution Prevention Team, will be delegated the responsibility for implementing and/or monitoring implementation of BMPs. Performing non-structural BMPs, like good housekeeping, will be everybody's responsibility. As with other activities, appropriate approvals should be obtained based on the implementation schedule and strategy prior to implementation.

Reporting progress of implementation for the individual BMPs or the overall BMP program is discussed in Section 6.2. Additional BMPs and progress with existing BMPs should be added to this plan by revising Table 5 Best Management Practices Log.

5.2 Employee Training

In accordance with permit requirements, an employee training program is necessary to inform all personnel about prevention of storm water pollution. The training topics should address health and safety, hazard communications, spill and leak response, good housekeeping, and materials management practices. Specific ideas included in EPA's Manual, and presented below should be a guideline to develop the employee training program. A preliminary training program is outlined in Table 6.

The goals of the training program are to teach personnel, at all levels of responsibility, the components and goals of the SWPPP/BMP3 Plan. Furthermore, it should create an overall sensitivity to pollution prevention concerns. Open discussions should be encouraged to further the importance and enhance the training program. In addition, the effectiveness of the training program should be evaluated routinely to verify that information has been communicated effectively to the employees.

5.2.1 Spill Prevention Response

Discuss spill prevention and response procedures or plans in the training program in order to ensure that all plant employees, not just those on the spill response teams, are aware of what to do if a spill occurs. Specifically, all employees involved in the industrial activities of your facility should be trained about the following measures:

- Identifying potential spill areas and drainage routes, including information on past spills and causes
- Reporting spills to appropriate individuals, without penalty (e.g., employees should be provided "amnesty" when they report such instances)
- Specify material handling procedures and storage requirements
- Implementing spill response procedures

On-site contractors and temporary personnel should also be informed of the plant operations and design features in order to help prevent accidental discharges or spills from occurring.

5.2.2 Good Housekeeping

Teach facility personnel how to maintain a clean and orderly work environment. Emphasize these points in the good housekeeping portion of your training program:

- Require regular vacuuming and/or sweeping
- Promptly clean up spilled materials to prevent polluted runoff
- Identify places where brooms, vacuums, sorbents, foams, neutralizing agents, and other good housekeeping and spill response equipment are located
- Display signs reminding employees of the importance and procedures of good housekeeping

- Discuss updated procedures and report on the progress of practicing good housekeeping at every meeting

- Provide instruction on securing drums and containers and frequently checking for leaks and spills

- Outline a regular schedule for housekeeping activities to allow you to determine that the job is being done

5.2.3 Materials Management Practices

The following items should be emphasized regarding materials management practices:

- Neatly organize materials for storage
- Identify all toxic and hazardous substances stored, handled, and produced on site
- Discuss handling procedures for these materials

5.2.4 Tools for a Successful Training Program

Training tools that can be included in the facility's training program include:

- Employee handbooks
- Videos and slide presentations
- Drills
- Routine employee meetings (mandatory attendance)
- Bulletin boards
- Suggestion boxes
- Newsletters
- Environmental excellence awards or other employee incentive programs

5.2.5 Training Frequency

Frequency of training should take into account the complexity of the plant's operations and the nature of the staff. The pollution prevention team will determine the frequency and who should

attend. Documentation of attendance should be placed in Appendix B of this plan. Table 7 is a sample copy of an attendance sheet.

6.0 POLLUTION PREVENTION PLAN EVALUATION

6.1 Annual Site Compliance Evaluation

The permit requires that qualified personnel conduct site compliance evaluations at least once a year. The annual site compliance evaluations are comprehensive inspections beyond the scope of the periodic inspections discussed above. These inspections will be performed by the Pollution Prevention Team. They should be accompanied by other employees who are familiar with Plant Smith's industrial operations and the goals and requirements of the SWPPP/BMP3 Plan. This annual evaluation will provide a basis for evaluating the overall effectiveness of the SWPPP/BMP3 Plan.

As part of the compliance evaluation, the general permit requires the following activities to be carried out:

- Inspect storm water drainage areas for evidence of pollutants entering the drainage system
- Evaluate the effectiveness of BMPs to reduce pollutant loadings and whether additional measures are needed
- Observe structural measures, sediment controls, and other storm water BMPs to ensure proper operation
- Revise the plan as needed within two weeks of inspection and implement any necessary changes within 12 weeks of the inspection
- Prepare a report summarizing inspection results and follow-up actions, identifying the date of inspection and who conducted the inspection
- Identify any incidence of non-compliance or certify that the facility is in compliance with the plan
- Have the report signed by the plant Environmental Coordinator or a duly authorized representative responsible for the environmental matters of Plant Smith

In order to carry out the above outlined activities, the following site-specific activities will be completed:

- Review the Plant Smith SWPPP/BMP3 Plan and outline a list of those items which are part of material handling, storage, and transfer areas covered by the Plan. These areas are described in Section 3.3
- List all equipment and containment of these areas covered in the plan
- Review the plant's operations for the past year to determine if any more areas should be included in the original plan, or if any existing areas were modified so as to require plan modification
- Conduct an inspection to determine if all storm water pollution prevention measures are accurately identified in the plan and if they are in place and working properly
- Document findings as described above and in Sections 5.3. Any incidents of non-compliance must be documented in an inspection report using the Inspection Report Form included as Table 8. Signed, completed reports shall be filed in Appendix C with the monthly inspection reports
- Modify the Plant Smith SWPPP/BMP3 Plan as necessary. Plan Revision procedures are described below in Section 6.3

6.2 Recordkeeping and Reporting

Plant Smith will record and maintain records of spills, leaks, inspections, and maintenance activities for at least one year after the permit expires in accordance with the Multi-Sector General permit requirements. Recordkeeping and internal reporting represents good operating practices because they can increase the efficiency of the facility and the effectiveness of BMPs.

The records should include the following as appropriate:

- The date and time of the incident, the weather conditions, duration, cause, environmental problems, response procedures, parties notified; recommended revisions of the BMPs program; Operating procedures and/or equipment needed to prevent reoccurrence.

- Formal written reports using forms presented as Tables 8 and 9 or other appropriate format. Reports similar to those required by Plant Smith Oil Spill Prevention Control and Countermeasures Plan (SPCCP) may be used. Reporting of spills and other discharges shall be done in accordance with 40 CFR 117.3 and 40 CFR 302.4. If a spill or leak occurs, the Oil Spill Contingency Plan outlined in the oil SPCCP should be used to notify the appropriate plant personnel.

- Recordkeeping and reporting of maintenance activities. As described above in Section 5.3, the Plant's Work Order System should be used for correcting deficiencies including maintenance activities. A log of all maintenance activities should be included in Appendix D of the SWPPP/BMP3 Plan.,

6.3 Plan Review and Modifications

The permit requires that the SWPPP/BMP3 Plan be amended if there have been changes in construction, operations, or maintenance. In addition, modifications to the SWPPP/BPM3 Plan incorporated to improve the effectiveness of the plan should also be included. The SWPPP/BMP3 Plan should be revised where needed, and revisions should be noted on the Inspection Report Form, following the month of the revision.

Ms. Rachel Terry, corporate representative, or a designated GPC employee, will have the responsibility for revising the plan so that it reflects current conditions at the Plant, and for documenting these revisions to reflect the Plant's efforts to control pollution from storm water runoff. Pages of the SWPPP/BMP3 Plan which are superseded by revised pages should be filed in Appendix E.

With these objectives in mind, the following steps should be taken when revising this Plan:

- All new material should be typed on a new page and inserted in the appropriate location in this Plan. Each new page should be typed in the same format as other SWPPP/BMP3 Plan pages and be signed and dated by the Plan designated representative in the footer at the bottom of the page entitled:

  "Implemented by: _____"
  Name Date

- When pages of the plan are revised due to changes in existing conditions at the Plant, the entire page should be replaced. New pages must be typed in the same format as other SWPPP/BMP3 Plan pages and be signed and dated by the Plan designated representative in the footer at the bottom of the page entitled:

  "Implemented by: _____"
  Name Date

- Those pages that are being replaced must be signed and dated by the SWPPP/BMP3 Plan designated representative in the footer at the bottom of the page entitled:

  "Revised by: _____"
  Name Date

  and placed in Appendix F of this Plan. These will serve as the historical record of efforts made to reduce storm water pollution at the Plant.

- The Annual Site Compliance Report must note all Plan revisions which have taken place during the preceding year.

TABLES

Table 1: Pollution Prevention Team Member Roster - Plant Smith

Corporate Representative: Rachel Terry	Title: Environmental Affairs Specialist Office Phone: (850) 444-6127
Responsibilities: Coordinate all stage of plan development and implementation; attend team meetings; participate in employee training program; review Inspection Reports and Site Compliance Evaluation Annual Report; ensure reports are submitted; and update storm water pollution prevention plan.	
On-Site Team Leader: Tracy Reeder	Title: Plant Smith Environmental Coordinator Office Phone:
Responsibilities: Implement SWAP; conduct/oversee inspections and prepare reports; spill prevention and accountability; attend team meetings; coordinate employee training program; keep all records.	
Members:	
(1) Chris Alexander	Title: Assistant Laboratoryman Office Phone: (850) 265-2185
(2) Bobby Brock	Title: Control Center Supervisor Office Phone: (850)) 265-2185
(3) _____	Title: Office Phone:
Responsibilities: Carry out existing and proposed best management practices; attend team meetings; participate in employee training programs.	

Implemented by: _____ *Revised by:* _____

Name *Date* *Name* *Date*

Table 2: Description of Exposed Significant Material - Plant Smith

Instruction: Describe significant materials that were exposed to storm water during the past three years and/or are currently exposed.					
Description of Exposed Significant Material	**Periods of Exposure**	**Quantity Exposed (Units)**	**Location (as indicated on site map)**	**Method of Storage or Disposal (e.g., pile, drum, tank)**	**Description of Material Management Practice (e.g., pile covered, drum sealed)**
Scrap Metal - aluminum - copper wire - iron and steel	Every rain	Unknown; varies	Contractor staging area	Varies	Varies
Trash	Every rain	Unknown; varies	East of main building	Box containers	Box containers without covers
Construction Materials	Every rain	Unknown; varies	Coal Pile Area	Varies	Varies

Implemented by: _____
Name *Date*

Revised by: *Stan Houston* *09/26/96*
Name *Date*

Table 3: List of Significant Spills and Leaks - Plant Smith

Instruction: Record below all significant spills and significant leaks of toxic or hazardous pollutants that have occurred at the facility in the three years prior to coverage of the permit.						
Date (Month/Day/Year)	**Spill or Leak (S/L)**	**Location (as indicated on site map)**	**Type of Material**	**Amount of Material Recovered**	**Material Exposed to Storm Water (Y/N)**	**Preventive Measures Taken (add additional sheets if necessary)**
07/31/95	S/L	East Hyd. House (850 GAL.)	Used Oil	Est. 400 GAL.	N	RAP submitted and approved by DEP
						NFA requested and approved.
						Spill containment catch basins and
						removed by Contractor with vacuum
						trucks. IRA submitted Sept. 21, 1995.
						Notice of successful remediation
						received Feb. 26, 1996.

Implemented by: _____
Name *Date*

Revised by: *Stan Houston* *09/26/96*
Name *Date*

Table 4: Non-Storm Water Discharge Evaluation and Certification - Plant Smith

Outfall No.	Date of Evaluation	Method Used to Test or Evaluate Discharge	If Evaluation is Impossible Give Reason	Is Non-Storm Water Being Discharged?	List Likely Sources of Non-Storm Water Discharges	Person(s) Who Conducted the Test or Evaluation

CERTIFICATION

I, _____, (responsible corporate official), 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 properly gather and evaluate 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.

Name & Official Title (type or print)	Area Code and Telephone No.
Signature	Date Signed

Implemented by: _____
Name *Date*

Revised by: _____
Name *Date*

Table 5: Best Management Practices Log - Plant Smith

Instructions: List all identified actual and potential storm water pollution sources and describe exiting management practices and proposed BMPs with implementation schedule.			
Potential Pollution Sources	**Best Management Practice**	**Implementation Schedule**	**Date Work Completed**
Coal unloading and storage area	Dock area - evaluated area drainage; developed BMPs to eliminate storm water related discharge to Alligator Bayou	Concrete curb added from seawall	1st Quarter 1995 Completed 04/95
	Coal pile - evaluate storm water management; develop BMPs to eliminate potential for discharge to surface water	Inspected 09/26/96	Completed
Bulk liquid storage and unloading areas	Sulfuric acid/caustic storage area - evaluate improved storage method including containment; develop structural BMPs	Covered by state required monthly AST inspections	Secondary containment completed 02/95
	All AST facilities - 1) perform condition survey of ASTs, containment structures, unloading facilities, and ancillary equipment. 2) inspect surrounding areas for evidence of material exposure to runoff. 3) develop structural BMPs		
Solid waste storage areas	Scrap metal storage - inspect containers and surrounding areas for evidence of material exposure to run off; develop BMPs as necessary	Inspected 09/26/96	No runoff
	Dumpster - inspect containers and surrounding areas for evidence of material exposure to runoff; develop BMPs as necessary	Inspected 09/26/96	No runoff
Packaged goods storage areas	All areas - evaluate materials management practice-loading/unloading and material transfer; develop BMPs as necessary.	Inspected 09/26/96	No runoff
Fire training area	Evaluate impact of training activity and drainage from area on storm water runoff quality; develop BMPs as necessary	Inspected 09/26/96	No further evaluation
Contractor staging area	Evaluate impact of materials management and storage practices; develop BMPs as necessary		New catch basins installed 11-94
Car wash facility	Evaluate car wash area drainage and material exposure to storm water; develop BMPs as necessary	Inspected 09/26/96	No runoff problem
Main building sumps	Evaluate main building operations and materials management practices	TBD	
	Identify all materials which may be included as unauthorized non-storm water discharges in building sumps which discharge to surface waters		All sumps discharge to ash pond

Implemented by: _____
Name *Date*

Revised by: _____
Name *Date*

Table 5: Best Management Practices Log - Plant Smith - Continued

Instructions: List all identified actual and potential storm water pollution sources and describe exiting management practices and proposed BMPs with implementation schedule.			
Potential Pollution Sources	**Best Management Practice**	**Implementation Schedule**	**Date Work Completed**
General	Inventory - all materials on site Update SWPPP/BMP3 Plan by adding material inventory		

Note:

(1) TBD - To be determined

Implemented by: _____
Name *Date*

Revised by: _____
Name *Date*

Table 5: Best Management Practices Log -Plant Smith - Continued

Instructions: List all identified actual and potential storm water pollution sources and describe exiting management practices and proposed BMPs with implementation schedule.			
Potential Pollution Sources	**Best Management Practice**	**Implementation Schedule**	**Date Work Completed**
General	Building sumps which discharge to surface waters inventory - all materials on site Update SWPPP by adding material inventory		
Sludge Tank	Added concrete floor and a "Piggy Back Sump" for additional containment.	Done	Feb. 1997
Coal Pipe Containment	Re-contoured the existing slopes and stabilized to prevent erosion with grass seed and erosion control matting.	Done	April 1997
Recycle Structure	Added soil and spray seeded areas of high traffic.	Done	April 1997
Coal Pile Sump	Converting controls to sonic level sensor and added a visual red flash high level alarm light.	Done	Nov. 1997

Note:

(1) TBD - To be determined

Implemented by: _____
Name *Date*

Revised by: _____
Name *Date*

Table 6: Employee Training Program - Plant Smith

Instructions: Describe the employee training program for your facility below. The program should, at a minimum, address spill prevention and response, good housekeeping, and material management practices. Provide a schedule for the training program and list the employees who will attend training sessions.			
Training Topics	**Brief Description of Scheduled Training Program/Materials (e.g., film, seminar, staff meeting)**	**Proposed Frequency of Training (e.g., once per quarter)**	**Attendees**
Spill Prevention and Response and Hazardous Communications	Discuss and/or review the procedures in the Emergency Action Plan and SPCCP. Distribute copies of the SWPPP	TBD[1]	TBD
Good Housekeeping	Discuss new procedures and/or review present plans to maintain good housekeeping practices	TBD	TBD
Material Management Practices	Discuss new procedures and/or review present plans to maintain good material management practices	TBD	TBD
Health and Safety	Discuss new procedures and/or review present Health and Safety procedures.	TBD	TBD
Other Topics			
Best Practices Video	Professionally developed film on stormwater BMPS's and regulation	Annually	All employees

Note:

[1] TBD - To be determined

Implemented by: _____
Name *Date*

Revised by: *Stan Houston* *09/26/96*
Name *Date*

Table 7: Attendance Sheet for Employee Training Program - Plant Smith

Date of Session: _____ Time: _____

Location: _____

Topic: _____

Speaker: _____

EMPLOYEE'S NAME	JOB TITLE

Implemented by: _____ *Revised by:* _____

Name *Date* *Name* *Date*

Table 8: Inspection Report Form - Plant Smith

Purpose: Other	Date of Inspection: 09/26/96	Inspection By: Stan Houston
Explanation: *Annual Site Compliance Inspection*		
Weather Conditions: Cloudy - Light Rain		

Inspection Comments:

1. Review Smith SWPP and modified to incorporate changes, operations and maintenance. Updated appropriate sections to reflect changes in responsible personnel.

2. Inspected stormwater drainage.
   - Main Yard Sump
   - Coal Pile Perimeter (run off ditches)
   - Coal Pile East & West Sumps
   - Unloading Wharf Area
   - Unloader Cable lay-down area
   - Contractor Staging Area
   - Fire Fighting Training Area
   - Recycle Structure
   - Warehouse #2
   - Switchyard
   - Trash Dumpsters
   - Caustic/Acid, Lighter Oil Unloading Area

3. BMP Review

- Confirmed that stormwater runoff point has been corrected at coal unloading dock area - concrete curbing installed.
- All above ground tanks, except CT oil storage tanks have secondary containment.
- Noted that scrap metal is now stored in dumpster in coal pile area - not in contractor staging area.
- Catch basins in contractor staging area appears to be handling collection of stormwater properly - no problems noted.
- Inspected car wash - no need for development of BMP at this time - runoff not a problem.

Items for evaluation:

1. Erosion of coal and dirt into Alligator Bayou on west side of coal pile area -- need to determine proper remedy.

2. Fire training area -- evaluate if additional containment area needed around training pit.

As a result of this inspection, changes in the storm water pollution prevention plan will _____ will not _____ be undertaken

Implemented by: _____ *Revised by* _____

Name *Date* *Name* *Date*

Table 8: Inspection Report Form - Plant Smith

Purpose: Monthly/Other	Date of Inspection: 12/17/97	Inspection By: Stan Houston Rachel Allen
Explanation: Annual Storm Water Inspection		
Weather Conditions: Sunny 45°		

Inspection Comments:

- Reviewed any significant spills or leaks. None noted, no reportable spills for 1997.
- Reviewed plan for any changes.
- Updated table with storm water BMP's for 1997.
- Performed plant inspection and walk-arounds and noted the following items for 1998:
    - Removed coal that was pushed past pile boundary road and re-grade and seed.
    - Investigate possible repair alternatives for repairs of the west slope of the discharge canal due to erosion.
    - Investiage potential solutions to containing oil/water spray during fire training activities. Clean any contaminated material currently present.

As a result of this inspection, changes in the storm water pollution prevention plan will _____ will not _____ be undertaken

*Implemented by:*_____ *Revised by*_____

Name *Date* *Name* *Date*

STORM WATER SAMPLING REPORT

Facility Name:_____ Facility Location:_____
Sample Collected By:_____ Date Sample Collected:_____
Sample Analyzed By:_____

Time Storm Began:_____am/pm Time Storm Ended:_____am/pm
Time Sample Collected:_____am/pm
Total Rainfall Measurement for Storm: _____ inches
Duration from the end of the previous measurable storm and this storm: _____days/hours
Total volume of rainfall during storm event [a]:_____gallons

Outfall _____: Location:_____

Parameter	Units	Analytical Results	
		Grab	Composite

[a] *can be estimated by:*
Drainage area (acres) x Rainfall Depth (inches) x % Imperviousness of Outfall Drainage Area x 27,150.

FIGURES

APPENDIX A
FACILITY INFORMATION SUMMARY

APPENDIX B
EMPLOYEE TRAINING - COMPLETED FORMS

APPENDIX C
COMPLETED INSPECTION FORMS

APPENDIX D
MAINTENANCE ACTIVITY LOG

APPENDIX E
LETTERS OF CONCURRENCE FROM REGULATORY AGENCIES

APPENDIX 10.2.4

USACE 404/FDEP WETLANDS

PERMIT APPLICATION

This joint permit application will be distributed later.

APPENDIX 10.2.5

NPDES PERMIT MODIFICATION APPLICATION

WASTEWATER PERMIT APPLICATION FORM 1 GENERAL INFORMATION

DESCRIPTION OF PERMIT APPLICATION FORMS

Form 1 - General information. This booklet includes general information on applying for a permit to operate a domestic or industrial wastewater facility. **Form 1 is required for all permit applications.**

Form 2 - Specific information. This group of forms includes the specific information required for the type of wastewater facility for which a permit is needed. Select the appropriate form(s) to be submitted with Form 1.

Form 2A - Domestic Wastewater Facilities.
Form 2B - Concentrated Animal Feeding Operations and Aquatic Animal Production Facilities.
Form 2CS -Industrial Wastewater Facilities (discharging process wastewater to surface waters).
Form 2CG -Industrial Wastewater Facilities (discharging process wastewater to ground water).
Form 2ES -Industrial Wastewater Facilities (discharging non-process wastewater to surface waters).
Form 2EG -Industrial Facilities (discharging non-process wastewater to ground water).
Form 2F - Stormwater Discharges to Surface Waters from Industrial or Domestic Facilities
Form 2CR -Non-Discharging/Closed Loop Recycle System.

SECTION A - GENERAL INSTRUCTIONS

Who Must Apply:

Persons who are or are going to discharge wastewater to waters of Florida or the United States must file for and be granted a permit under Sections 403.087, 403.088, or 403.0885, Florida Statutes (F.S.). There are severe penalties for discharging without a permit.

There are some exceptions to this requirement. Discharges of domestic sewage from vessels and discharges from properly operating marine engines are not required to have a permit under the laws listed above. However, discharges of rubbish, trash, garbage or other such materials discharged overboard do require permits. Vessels operated in a capacity other than as a means of transportation are required to have a permit if they are discharging to waters. These types include vessels used as an energy or mining facility, a storage facility, a seafood processing facility, or a anchored facility for the purpose of mineral or oil exploration or development.

The introduction of sewage, industrial wastes, or other pollutants into a domestic wastewater treatment facility does not need a permit under Sections 403.087, 403.088 or 403.0885, F.S. Persons discharging to permitted wastewater treatment facilities must comply all applicable pretreatment standards. If a person has a plan or an agreement to switch from direct discharge into waters of the state to discharge to a domestic treatment facility, it does not relieve the person from obtaining a permit for the discharge until such time as the connection is made and the discharge is stopped.

Most discharges from agricultural and silvicultural activities to waters of the state do not require a permit under Sections 403.087, 403.088, or 403.0885, F.S. However, permits under those sections are required for discharges from concentrated animal feeding operations, concentrated aquatic animal production facilities, activities associated with approved aquaculture projects, and silvicultural point sources.

Where to Apply:

Permit applications must be filed with the Department of Environmental Protection (DEP) district office shown in Figure 1 for the county in which the wastewater facility is located, except for permit applications for steam electrical generating power plants which are filed with the DEP office in Tallahassee. DEP offices are located at

Figure 1. State Map Showing DEP District Offices

NORTHWEST DISTRICT
160 Government Center, Ste 308
Pensacola, Florida 32501-5794
Phone No. (850) 444-8300

Northwest District Branch Office
2353 Jenks Avenue
Panama City, Florida 32405
Phone No. (850) 872-4375

Northwest District Branch Office
2815 Remington Green Circle
Tallahassee, Florida 32308
Phone No. (850) 488-3704

NORTHEAST DISTRICT
7825 Baymeadows Way, Suite 200B
Jacksonville, Florida 32256-7577
Phone No. (904) 448-4300

Northeast District Branch Office
5700 Southwest 34 Street, Suite 1204
Gainesville, Florida 32608
Phone No. (352) 955-2095

SOUTHWEST DISTRICT
3804 Coconut Palm Drive
Tampa, Florida 33618-8318
Phone No. (813) 744-6100

SOUTH DISTRICT OFFICE
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901
Phone No. (941) 332-6975

South District Branch Office
11400 Overseas Highway, Suite 123
Marathon, Florida 33050
Phone No. (305) 289-2310

CENTRAL DISTRICT
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767
Phone No. (407) 894-7555

SOUTHEAST DISTRICT
400 North Congress Avenue
West Palm Beach, Florida 33401
Phone No. (561) 681-6600

Southeast District Branch Office
1801 Southeast Hillmoor Drive, Suite C-204
Port St. Lucie, Florida 34952
Phone No. (561) 871-7662

When to Apply:

Applications must be filed with the appropriate DEP office 180 days before your current permit expires or 180 days before startup of a new or modified facility. If the submitted application is for a new facility or for a modification of an existing facility, the information required for describing the construction must be filed at least 90 days before construction begins. The DEP encourages applicants to file the materials describing the construction of a new facility or the modification of an existing facility as early as possible to avoid problems with delays in startup or facility redesign to achieve effluent limitations.

Federal regulations provide that a new source in the NPDES program may not be constructed or started to be constructed before the issuance of an operation permit. Because of this regulation, a permit application for a new source may need to be submitted well in advance of the required 180 days.

Fees:

Application fees are listed in Section 62-4.050, Florida Administrative Code (F.A.C.). An application will not be processed until the application fee has been paid. If the DEP determines that a permit should be issued for less than five years duration, the application fee will be pro rated.

If a permit is issued for a surface water discharge, the permittee will be assessed a regulatory and surveillance program fee annually. Those fees are listed in Section 62-4.052, F.A.C. Failure to pay the annual fee may result in revocation of the permit.

Availability of Information to the Public:

Information contained in these applications forms will, upon request, be made available to the public for inspection and copying. However, you may request confidential treatment for certain information which you may submit to supplement the information requested on these forms. Section 620.302, F.A.C., and 40 CFR 2 provide set forth the procedures for making the claim. No information on Forms 1 and 2A through 2EG may be claimed as confidential.

Completion of Forms:

Unless otherwise specified in instructions to the forms, each item in each form must be answered. To indicate that each item has been considered, enter "NA", for not applicable, if a particular item does not fit the circumstances or characteristics of your facility or activity.

If you have previously submitted information to the DEP which answers a question, you may either repeat the information in the space provided or attach a copy of the previous submission. DO NOT WRITE "ON FILE". Some items in the form require narrative explanation. If more space is necessary to answer a question, attach a separate sheet entitled "Additional Information."

SECTION B - FORM 1 LINE-BY-LINE INSTRUCTIONS

This form must be completed by all applicants.

Completing This Form:

Please type or print in the underlined areas only. Some items have a limited number of spaces or characters so that your response may be entered into a computer program. Please do not exceed this maximum number with your response. Abbreviate if necessary to stay within the number of characters allowed for each item. Use one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response.

Item I

Space is provided at the upper right hand corner of Form 1 for insertion of your Facility Identification Number. If you have an existing facility, enter your identification number. If you don't know your identification number, please contact the appropriate DEP office which will provide you with your number. If your facility is new (not yet constructed), leave this item blank.

Item II

Answer each question to determine which supplementary forms you need to fill out. Be sure to check the glossary in Section C of these instructions for the legal definitions of any words you are not certain of their meaning.

If you answer "no" to every question, then you may not need a permit. However, you should call the appropriate district office to determine if you have made a correct determination. If you answer "yes" to any question, then you must complete and file the supplementary form by the deadline listed in Section A along with this form.

Item III

Enter the facility's official or legal name. Do not use a colloquial name.

Item IV

Give the name, title, and work telephone number of a person who is thoroughly familiar with the operation of the facility, with the facts reported in this application, and who can be contacted by reviewing offices if necessary.

Item V

Give the complete mailing address of the office where correspondence should be sent. This often is not the address used to designate the location of the facility or activity.

Item VI

Give the address or location of the facility identified in Item III of this form. If the facility lacks a street name or route number, give the most accurate alternative geographic information (for example, section number or quarter section number from county records or at intersection of Rts 426 and 22).

Item VII

List four, in descending order of significance, 4-digit standard industrial classification (SIC) codes which best describe your facility in terms of the principal products or services you produce or provide. Also, specify each classification in words. These classifications may differ from the SIC codes describing the operation generating the discharge from the facility.

SIC code numbers are descriptions which may be found in the "Standard Industrial Classification Manual" prepared by the Executive Office of the President, Office of Management and Budget, which is available from the Government Printing Office, Washington, D.C. Your local library may have a copy of this publication which you may use. Use the current edition of the manual. If you have any questions concerning the appropriate SIC code for your facility, please contact the appropriate DEP district office.

Item VIII-A

Give the name, as it is legally referred to, of the person, firm, public organization, or any other entity which operates the facility described in this application. This may or may not be the same name as the facility. The operator of the facility is the legal entity which controls the facility's operation rather than the plant or site manager. Do not use a colloquial name.

Item VIII-B

Indicate whether the entity which operates the facility also owns it by marking the appropriate box.

Item VIII-C

Enter the appropriate letter to indicate the legal status of the operator of the facility. Indicate "public" for a facility solely owned by a local government, such as a city, town, county, etc.

Items VIII-D through H

Enter the telephone number and address of the operator identified in Item VIII-A.

Item IX

Indicate whether the facility is located on Indian Lands.

Item X

Give the number of each presently effective wastewater permit issued to the facility listed in this application. List relevant federal, state, and local permits. DO NOT LIST ALL YOUR PERMITS. LIST ONLY CURRENT ENVIRONMENTAL PERMITS RELATING TO THIS PROJECT.

Item XI

Provide a topographic map or maps of the area extending at least to one mile beyond the property boundaries of the facility which clearly show the following:

The legal boundaries of the facility;

The location and serial number of each of your existing and proposed intake and discharge structures;

All hazardous waste management facilities;

Each well where you inject fluids underground; and

All springs and surface water bodies in the area, plus all drinking water wells within 1/4 mile of the facility which are identified in the public record or otherwise known to you.

If an intake or discharge structure, hazardous waste disposal site, or injection well associated with the facility is located more than one mile from the plant, include it on the map, if possible. If not, attach additional sheets describing the location of the structure, disposal site, or well, and identify the U.S. Geological Survey (or other) map corresponding to the location.

On each map, include the map scale, a meridian arrow showing north, and latitude and longitude at the nearest whole second. On all maps of rivers, show the direction of the current, and in tidal waters, show the directions of the ebb and flow tides. Use a 7-1/2 minute series map published by the U.S. Geological Survey. If a 7-1/2 minute series map has not been published for your facility site, then you may use a 15 minute series map from the U.S. Geological Survey. If neither a 7-1/2 nor 15 minute series map has been published for your facility site, use a plat map or other appropriate map, including all the requested information; in this case, briefly describe land uses in the map area (for example, residential, commercial).

You may trace your map from a geological survey chart, or other map meeting the above specifications. If you do, your map should bear a note showing the number or title of the map or chart from which it was traced. Include the names of nearby towns, water bodies, and other prominent points.

You may obtain a topographic map from:

Eastern Mapping Center
National Cartographic Information Center
U.S. Geological Survey
536 National Center
Reston, VA 22092

Item XII

Briefly describe the nature of your business (for example, products produced or services provided).

Item XIII

Section 403.161, F.S., provides severe penalties for submitting false information on this application form or any reports or records required by a permit, if issued. There are both civil and criminal penalties, in addition to the revocation of the permit.

Rule 62-620.305, F.A.C., requires that the application and any reports required by the permit, if issued, to be signed as follows:

A. For a corporation, by a responsible corporate officer as described in Rule 62-620.305, F.A.C.;
B. For partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
C. For a municipality, state, federal or other public facility, by a principal executive officer or elected official.

SECTION C - GLOSSARY

NOTE: This Glossary includes terms used in the instructions and in Forms 1, 2A through 2EG. If you have any questions concerning the meaning of any of these terms, please contact your DEP district office.

Aliquot means a sample of specified volume used to make up a total composite sample.

Animal Feeding Operation means a lot or facility (other than an aquatic animal production facility) where the following conditions are met:

A. Animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12 month period; and

B. Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

Two or more animal feeding operations under common ownership are a single animal feeding operation if they adjoin each other or if they use a common area or system for the disposal of wastes.

Animal Unit means a unit of measurement for any animal feeding operation calculated by adding the following number: The number of slaughter and feeder cattle multiplied by 1.0; plus the number of mature dairy cattle multiplied by 1.4; plus the number of swine weighing over 25 kilograms (approximately 55 pounds)multiplied by 0.4; plus the number of sheep multiplied by 0.1; plus the number of horses multiplied by 2.0.

Application means the approved DEP standard forms for applying for a permit, including any approved additions, revisions, or modifications to the forms. Approved forms are numbered, Form 62-620.910, and have an effective date of October 1, 1994, or later.

Aquifer means a geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.

Best Management Practices (BMP) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs include treatment requirements, operation procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Biological Monitoring Test means any test which include the use of aquatic algal, invertebrate, or vertebrate species to measure acute or chronic toxicity, and any biological or chemical measure of bioaccumulation.

Bypass means the intentional diversion of wastes from any portion of a treatment facility.

Concentrated Animal Feeding Operation means an animal feeding operation which meets the criteria set forth in Chapter 62-670, F.A.C.

Concentrated Aquatic Animal Production Facility means a hatchery, fish farm, or other facility which contains, grows or hold aquatic animals as set forth in Chapter 62-660, F.A.C.

Contact Cooling Water means water used to reduce temperature which comes into contact with a raw material, intermediate product, waste product other than heat, or finished product.

CWA means the Clean Water Act as amended, 33 U.S.C. 1251 et seq.

Dike means any embankment or ridge of either natural or manmade materials used to prevent the movement of liquids, sludges, solids, or other materials.

Discharge (of a Pollutant) means any addition of any pollutant or combination of pollutants to waters of the State from any point source; or any addition of any pollutant or combination of pollutants to the marine waters of the State from any point source other than a vessel or other floating craft which is being used as a means of transportation.

This definition includes discharges into waters of the State from surface runoff which is collected or channelled by man; discharges through pipes, sewers, or other conveyances owned by the State, a municipality, or other person which do not lead to POTWs; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. This term does not include an addition of pollutants by any indirect discharge.

Effluent Limitation mean any restriction imposed by the DEP on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into waters of the State.

Effluent Limitation Guideline means a regulation published under Section 304(b) of the Clean Water Act to adopt or revise effluent limitations.

EPA means the United States Environmental Protection Agency.

Existing Source or Existing Discharger means any source which is not a new source or a new discharger.

Facility or wastewater facility means any facility which can reasonably be expected to be a source of pollution and includes any or all of the following: a collection and transmission system, a wastewater treatment works, a reuse or disposal system, and a residuals management facility.

Ground Water means water below the land surface in a zone of saturation.

Indirect Discharger means an industrial discharger introducing pollutants to a publicly owned treatment works.

Injection Well mean a well into which fluids are injected.

MGD means millions of gallons per day.

Municipality means a city, village, town, borough, county, district, association, or other public body created by or under State law and have jurisdiction over disposal of sewage, industrial wastes, or other wastes.

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking and reissuing, termination, monitoring and enforcing permits and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the CWA. The term includes a State program which has been authorized by EPA under 40 CFR Part 123.

New Discharger mean any building, structure, facility, or installation: (A) from which there is or may be a new or additional discharge of pollutants at a site at which on October 18, 1972, it had never discharged pollutants; (B) which has never received a finally effective NPDES permit for discharges at that site; and (C) which is not a "new source." This definition includes an indirect discharger which commences discharging into water of the State. It also includes any existing mobile point source, such as an offshore oil drilling rig, seafood processing vessel, or aggregate plant that begins discharging at a location for which it does not have an existing permit.

New Source means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced: (A) after promulgation of standards of performance under Section 306 of the CWA which are applicable to such source; or (B) after proposal of standards of performance in accordance with Section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal.

Non-Contact Cooling Water means water used to reduce temperature which does not come into direct contact with any raw material, intermediate produce, waste product (other than heat), or finished product.

Off-Site means any site which is not "on-site."

On-Site means on the same or geographically contiguous property which may be divided by public or private right(s)-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along, the right(s)-of-way. Non-contiguous properties owned by the same person, but connected by a right-of-way which the person controls and to which the public does not have access, is also considered on-site property.

Operator means the person responsible for the overall operation of a facility.

Outfall means a point source.

Owner means the person who owns a facility or part of a facility.

Permit means an authorization, license, or equivalent control document issued by the State to implement the requirements of 40 CFR 122, 123, and 124 and Chapter 403, F.S.

Point Source means any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

Pollutant means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical waste, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended), heat, wrecked or discarded equipment, rocks, sand, cellar dirt and industrial, municipal, and agriculture waste discharged into water. It does NOT mean: (A) sewage from vessels; or (B) water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well used either to facilitate production or for disposal purposes is approved by authority of the State in which the well is located, and if the State determines that the injection or disposal will not result in the degradation of ground or surface water resources.

Privately Owned Treatment Works means any device or system which is used to treat domestic wastewater from any facility which is not a POTW.

Process Wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Publicly Owned Treatment Works (POTW) means any device or system used in the treatment (including recycling and reclamation) of domestic sewage or industrial wastes of a liquid nature which is owned by a State or municipality. This definition includes any sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

Residuals means the solid, semisolid, or liquid residue generated during the treatment of domestic wastewater. Not included are solids removed from pump stations and lift stations, and screenings and grit removed from the headworks of domestic wastewater treatment facilities. Also not included are other solids removed prior to treatment of the residuals to meet the stabilization standards of Chapter 62-640, F.A.C., or ash generated during the incineration of residuals.

Sewage From Vessels means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes that are discharged from vessels and regulated under Section 312 of the CWA.

Sewage Sludge means residuals.

Silvicultural Point Source means any discernable, confined and discrete conveyance related to rock crushing, gravel washing, log sorting, or log storage facilities which are operated in connection with silvicultural activities and from which pollutants are discharged into water of the State.

Storm Water Runoff means water discharged as a result of rain, snow, or other precipitation.

Surface Impoundment or Impoundment means a facility or part of a facility which is a natural topographic depression, manmade excavation, or diked area formed primarily of earthen materials (although it may be lined with manmade materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons.

Toxic Pollutant means any pollutant listed as toxic under Section 307(a)(1) of the CWA.

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Waters of the State means the waters defined in Section 403.031, F.S., and including waters of the United States to the seaward boundaries of the State.

WASTEWATER PERMIT APPLICATION FORM 1 GENERAL INFORMATION

I IDENTIFICATION NUMBER:

Facility ID FL0002267

II CHARACTERISTICS:

INSTRUCTIONS: Complete the questions below to determine whether you need to submit any permit application forms to the Department of Environmental Protection. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the blank in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if you activity is excluded from permit requirements. See Section B of the instructions. See also, Section C of the instructions for definitions of the terms used here.

SPECIFIC QUESTIONS	YES	NO	FORM ATTACHED
A. Is this facility a domestic wastewater facility which results in a discharge to surface or ground waters?		X	
B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters?		X	
C. Does or will this facility (other than those describe in A. or B.) discharge process wastewater, or non-process wastewater regulated by effluent guidelines or new source performance standards, to surface waters?	X		X
D. Does or will this facility (other than those described in A. or B.) discharge process wastewater to ground waters?		*X	
E. Does or will this facility discharge non-process wastewater, not regulated by effluent guidelines or new source performance standards, to surface waters?		X	
F. Does or will this facility discharge non-process wastewater to ground waters?		X	
G. Does or will this facility discharge stormwater to surface waters?		X	
H. Is this facility a non-discharging/closed loop recycle system?		X	

III NAME OF FACILITY: (40 characters and spaces)

Smith Electric Generating Plant

*NOTE: This application is for a modification to existing permit FL0002267. The modification involves Smith 3, a new generating unit to be added to the Plant Smith site. The modification does not involve a discharge to groundwater.

DEP Form 62-620.910(1)
(Effective November 29, 1994)

Facility ID FL0002267

IV FACILITY CONTACT: (A. 30 characters and spaces)

A. Name and Title (Last, first, & title)	B. Phone (area code & no.)
Terry, Rachel A. Env. Affairs Spec.	850.444.6127

V FACILITY MAILING ADDRESS: (A. 30 characters and spaces; B. 25 characters and spaces)

A. Street or P.O. Box: One Energy Place		
B. City or Town: Pensacola	State: FL	Zip Code: 32520

VI FACILITY LOCATION: (A. 30 characters and spaces; B. 24 characters and spaces; C. 3 spaces (if known); D. 25 characters and spaces; E. 2 spaces; F. 9 spaces)

A. Street, Route or Other Specific Identifier:		
B. County Name: Bay	C. County Code (if known): 03	
D. City or Town: Southport	E. State: FL	F. Zip Code: 32409

VII SIC CODES: (4-digit, in order of priority)

1. Code #: 4911	(Specify) Elec Gen Plt	2. Code #: NA	(Specify) NA
3. Code #: NA	(Specify) NA	4. Code #: NA	(Specify) NA

VIII OPERATOR INFORMATION: (A. 40 characters and spaces; B. 1 character; C. 1 character (if other, specify); D. 12 characters; E. 30 characters and spaces; F. 25 characters and spaces; G. 2 characters; H. 9 characters)

A. Name: Gulf Power Company		B. Is the name in VIII A. the owner? ☒Yes ☐No	
C. Status of Operator: F = Federal; S = State; P = Private; O = Other; M = Public (other than F or S)	(code) P	(specify) Electric Util	D. Phone No.: 850.444.6311
E. Street or P. O. Box: One Energy Place			
F. City or Town: Pensacola		G. State: FL	H. Zip Code: 32520

IX INDIAN LAND: Is the facility located on Indian lands? ☐ Yes ☒ No

Facility ID FL0002267

X EXISTING ENVIRONMENTAL PERMITS:

A. NPDES Permit No.	B. UIC Permit No.	C. Other (specify)	D. Other (specify)
FL0002267	NA	NA	NA

XI MAP: Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements. See attached site map.

XII NATURE OF BUSINESS (provide a brief description)

See Attached description.

XIII CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Robert G. Moore
A. Name (type or print)

Robert G. Moore
B. Signature

Vice President of Power Generation and Transmission
Official Title (type or print)

5/27/99
C. Date Signed

DEP Form 62-620.910(1)
(Effective November 29, 1994)

XII. NATURE OF BUSINESS

Gulf Power Company currently generates electricity with 2 coal fired units and an oil-fired combustion turbine at the Lansing Smith facility. A third unit is planned to be added to the facility that will be a natural gas-fired combined cycle unit with a maximum generating capacity of 574 MW (Smith Unit 3). Unit 3 will utilize a cooling tower that will withdraw makeup water from the once through cooling water in the existing discharge canal currently used for Units 1 and 2.

The cooling tower will operate at 2 cycles of concentration prior to the water being returned to the discharge canal. The blowdown from the cooling tower will be discharged from the cold side of the cooling tower such that the cooling tower blowdown temperature will be lower than the water in the Units 1 and 2 discharge canal. As a result, there will be a slight reduction in the total heat rejection rate of the existing once-through system. Domestic waste from Smith Unit 3 will be routed to an existing on-site permitted domestic treatment facility which already has adequate capacity. Therefore, this modification will not require modifications to existing permit limits for that internal outfall.

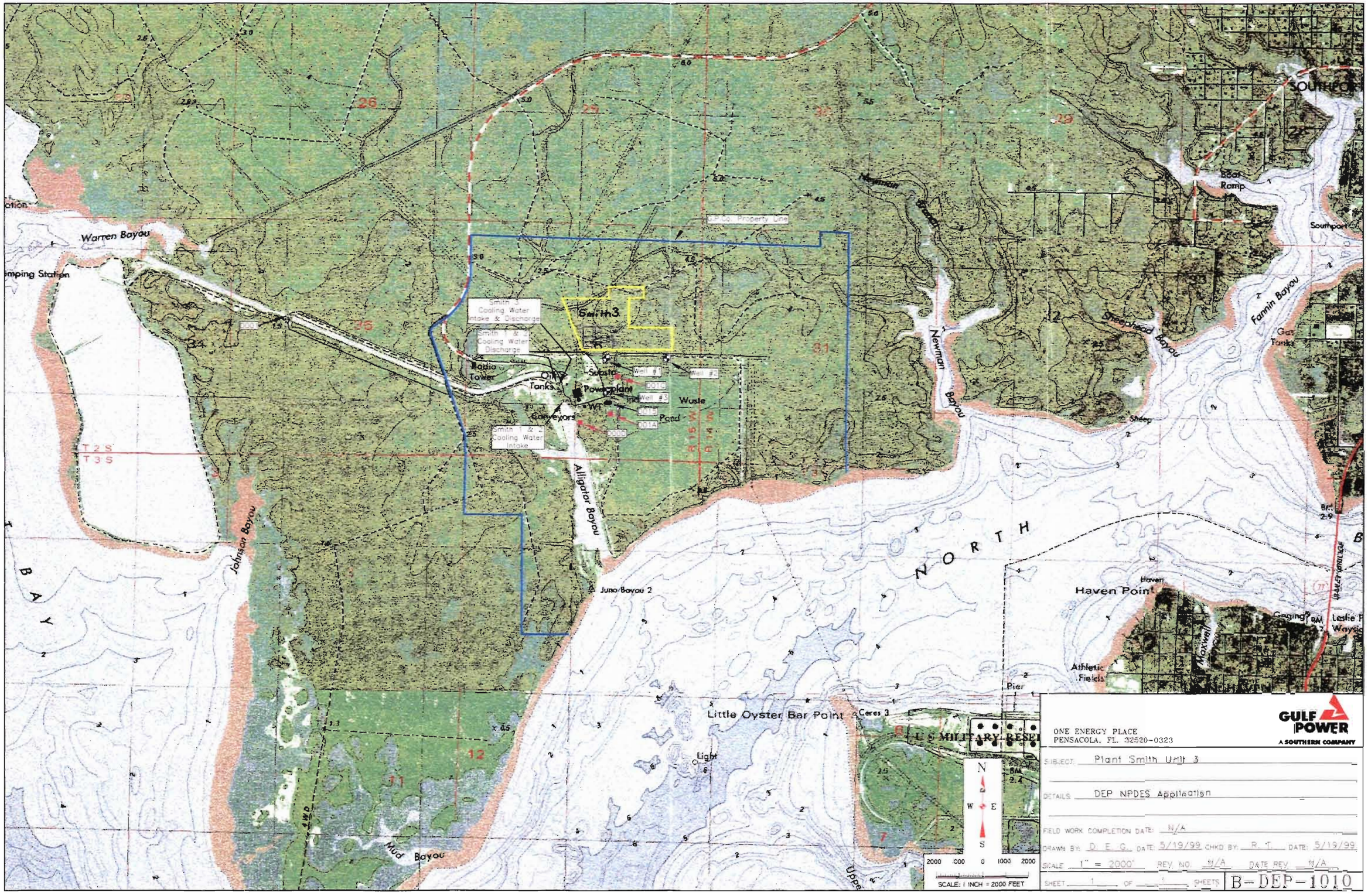
Gulf is submitting this NPDES modification request to include the addition of the new unit. The application addresses only those outfalls that will be modified as a result of the expansion. These include:

- Addition of a new internal discharge (D017 - the cooling tower blowdown that will discharge to the existing Smith Units 1 and 2 discharge tunnel).

- Modifications to discharge D001 when Unit 3 is operating at 100-percent capacity that include flow reduction because of cooling tower makeup water withdrawal and water quality changes because of cooling tower blowdown recycling to the discharge canal.

Please note that Smith Units 1 and 2 outfalls that will not be modified by the Smith Unit 3 expansion and are already permitted under NPDES Permit Number Fl0002267 have not been repeated in this application.

SMITH NPDES MODIFICATION
FORM 1 :ITEM XI - SITE TOPOGRAPHIC MAP


Warren Bayou
Smith Property Line
Smith 3
Smith Cooling Water Intake & Discharge
Smith 1 & 2 Cooling Water Discharge
Radio Tower
Oil Tanks
Substa
Powerplant
WH
Conveyors
Well #1
Well #2
Well #3
Waste Pond
001A
Smith 1 & 2 Cooling Water Intake
Alligator Bayou
Juno Bayou 2
Johnson Bayou
Mud Bayou
Newman Bayou
Sheepshead Bayou
Fannin Bayou
Boat Ramp
Southport
Gas Tanks
Haven
Haven Point
Athletic Fields
Pier
Little Oyster Bar Point
Cores 3
U.S. MILITARY RESERVE
Light
BAY
NORTH
T2S
T3S
R15W
R14W
SCALE: 1 INCH = 2000 FEET
ONE ENERGY PLACE
PENSACOLA, FL 32520-0323
GULF POWER
A SOUTHERN COMPANY
SUBJECT: Plant Smith Unit 3
DETAILS: DEP NPDES Application
FIELD WORK COMPLETION DATE: N/A
DRAWN BY: D. E. G. DATE: 5/19/99 CHKD BY: R. T. DATE: 5/19/99
SCALE 1" = 2000' REV. NO. N/A DATE REV. N/A
SHEET 1 OF 1 SHEETS
B-DEP-1010

ATTACHMENT TO NPDES PERMIT APPLICATION

ANTIDEGRADATION DEMONSTRATION

The expansion of Gulf Power's Lansing Plant by the addition of Unit 3 will result in a modification to the water balance and effluent discharge currently permitted for the facility (Permit FL0002267). The expansion will include the addition of a cooling tower that will withdraw makeup water from the existing once-through cooling discharge effluent for Units 1 and 2. Approximately 5,200 gallons per minute (gpm) will be withdrawn from the existing 190,000-gpm cooling water discharge and approximately 2,600 gpm of cooling tower blowdown (two cycles of concentration) will be returned to the existing discharge canal. The cooling tower blowdown will be discharged from the cold side of the cooling tower such that the temperature of the blowdown will be lower than the temperature of the existing once-through cooling water. Since less water will be ultimately discharged through the discharge canal to West Bay (approximately 2,500 gpm will be lost to evaporation from the Smith 3 cooling tower), there will be a net reduction of the total heat rejection rate of approximately 1.3 percent.

In addition to makeup water from the existing discharge, some of the plant process water will be routed to the cooling tower for reuse. This includes demineralizer (17 gpm [89 gpm during power augmentation]), condensate polisher (2.2 gpm), evaporative coolers (9.0 gpm), and clean building drains (78 gpm). The water quality at Outfall D001, including the addition of the cooling tower blowdown to the existing discharge, is projected to either meet water quality standards or will be below method detection limits for those parameters that have numeric water quality standards.

A site certification application (SCA) has been submitted to the state that addresses the impacts of the modification to the discharge as well as all other potential impacts of construction and operation of Unit 3. Details addressing the need for the project and benefits are also provided in the SCA. However, to comply with Chapter 62-4.242, Florida Administrative Code (F.A.C.), the following summary is provided to address the factors

identified in determining whether the proposed discharge is necessary or desirable under federal standards and under circumstances that are clearly in the public interest:

- As determined in the policies set forth in Rules 62-302.100 and 62-302.300, the power plant is important and beneficial to the public health, safety, and welfare of the region by providing electric power to a growing region. Gulf has determined that, to provide reliable, cost-effective service to its customers, it must add at least 427 megawatts (MW) of generating resources to its system by the summer of 2002. The most cost-effective way for Gulf to meet this need is to construct a 574-MW natural gas-fired combined cycle (CC) unit at its existing Lansing Smith Electric Generating Plant north of Panama City, Bay County, Florida. Smith Unit 3 is subject to the Florida Electrical Power Plant Siting Act (FEPPSA), Chapter 403, Part II, Florida Statutes. On March 15, 1999, Gulf filed a petition with the Florida Public Service Commission (FPSC) for a Determination of Need for this Project under Section 403.519, Florida Statutes.
- The effects of the existing thermal discharges from the Smith facility have been studied extensively over the last two decades, including an extensive study by Law Environmental, Inc. (1993), that concluded ". . . substantial damage to the aquatic life and/or vegetation of Warren Bayou and West Bay was not evidenced by this study and that beneficial uses assigned to these waters were maintained." Also, a continuing monitoring program being conducted by SCS (1998) that began in 1993 concluded that, based on ". . . Biological Integrity Test and Laboratory Effluent Toxicity Tests . . . no toxicity problems have been indicated to exist, and the biological integrity of West Bay appears to remain intact." Since the heat rejection rate will be reduced by up to 1.3 percent and the water quality is projected to comply with water quality standards (or will be below the method detection limit), the effluent will not adversely affect conservation of fish and wildlife, including endangered or threatened species or their habitats.
- Since the proposed modification will slightly reduce the temperature effects of the existing Units 1 and 2 discharge, it will not adversely affect the fish-

ing or water-based recreational values or marine productivity in the vicinity of the proposed discharge.

- The proposed modification to the discharge is not inconsistent with any applicable surface water improvement and management plan.

In addition to the factors previously listed, the following alternatives for the discharge from the proposed facility modification were considered and rejected as not economically or technically feasible:

- Reuse of domestic reclaimed water is not feasible since a source of reuse water is not available or planned. The cooling tower makeup water will use the existing thermal effluent, and internal process streams will be routed to the cooling tower for reuse to the extent practical.
- The use of another discharge location and the use of land application or reuse of the cooling tower blowdown are not practical. The use of the existing discharge canal, which requires no modification, will result in the least disturbance and best source for receiving, diluting, and discharging the effluent.

In addition to the information provided that specifically address the antidegradation permitting requirements details in Chapter 62-4.242, Table 1 is presented to provide the water quality characteristics of the makeup water, the blowdown, and the combined effluent at the point of discharge (Outfall D001) for both normal operating conditions and under power augmentation. The table illustrates that there will be a negligible increase in some of the water quality parameters caused by concentration because of evaporation in the cooling tower (approximately 1.3 percent) and all applicable water quality standards or permit limits will continue to be met in the receiving waters.

For the reasons stated herein that show no significant impacts to water quality and because all requirements of Chapter 62-4.242 have been addressed, an antidegradation determination is appropriate.

Table 1. Water Quality Parameters of the Gulf Smith Unit 3 Cooling Water

Parameter	Makeup Water (Normal)	Makeup Water (Augmentation)	Blowdown (Normal)	Blowdown (Augmentation)	POD (D001) (Normal)	POD (D001) (Augmentation)	Class II Marine Standards†
Flow (gpm)	5,120	5,048	2,587	2,587	187,467	187,539	—
Calcium (mg/L)	172	172	343	346	174	174	—
Magnesium (mg/L)	583	583	1,154	1,139	591	591	—
Sodium (mg/L)	5,416	5,416	10,955	10,809	5,493	5,491	—
Total cations (mg/L)	6,171	6,171	12,452	12,294	6,258	6,256	—
Biocarbonate (mg/L)	65	65	135	152	66	66	—
Sulfate (mg/L)	2,801	2,801	5,544	5,470	2,839	2,838	—
Chloride (mg/L)	8,730	8,730	17,275	17,043	8,848	8,845	—
Phosphate (mg/L)	0	0	0.09	0.09	<0.01	<0.01	—
Total anions (mg/L)	11,596	11,596	22,954	22,665	11,755	11,751	—
pH (units)	7.98	7.98	7.97	7.91	7.98	7.98	6.5 to 8.5
Silica (mg/L)	0.00	0.00	0.5	1.9	0.007	0.026	—
TSS (mg/L)	6.5	6.5	13.8	13.7	6.6	6.6	—
Temperature (°F)	86	86	86	86	86	86	—
Oil and grease (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	≤5.0
Antimony (mg/L)*	<0.02	<0.02	<0.04	<0.04	<0.02	<0.02	≤4.3
Arsenic (mg/L)*	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.05
Beryllium (mg/L)*	<0.04	<0.04	<0.08	<0.08	<0.04	<0.04	≤0.00013
Cadmium (mg/L)*	<0.005	<0.005	<0.01	<0.01	<0.005	<0.005	≤0.0093
Chromium (mg/L)*	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	≤0.05
Lead (mg/L)*	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	≤0.0056
Nickel (mg/L)*	<0.04	<0.04	<0.08	<0.08	<0.04	<0.04	≤0.0083

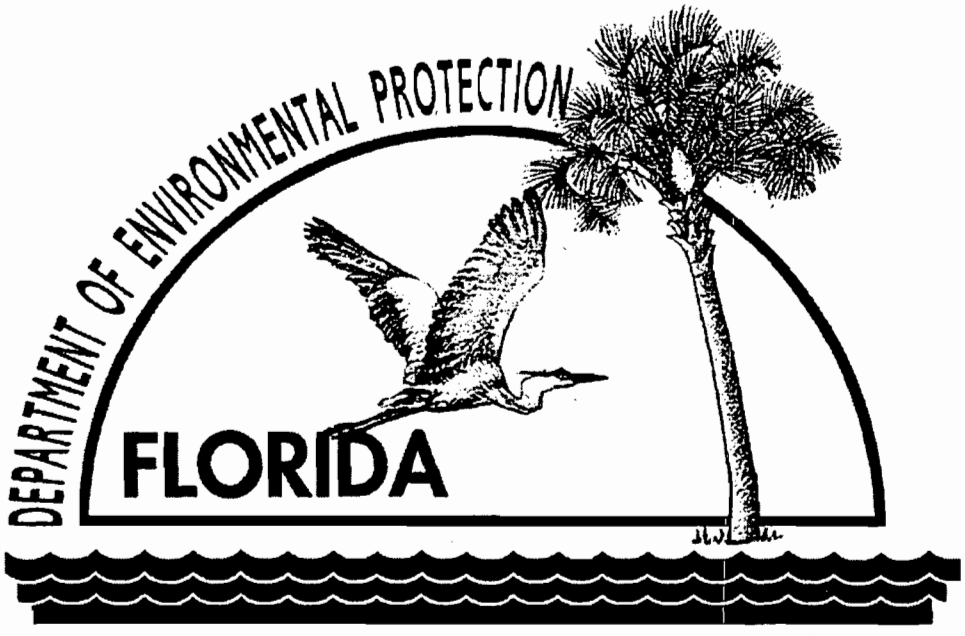
Table 1. Water Quality Parameters of the Gulf Smith Unit 3 Cooling Water (Continued, Page 2 of 2)

Parameter	Makeup Water (Normal)	Makeup Water (Augmentation)	Blowdown (Normal)	Blowdown (Augmentation)	POD (D001) (Normal)	POD (D001) (Augmentation)	Class II Marine Standards
Selenium (mg/L)*	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	≤0.071
Silver (mg/L)*	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	—
Thallium (mg/L)*	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	≤0.0063
Zinc (mg/L)*	<0.02	<0.02	<0.04	<0.04	<0.02	<0.02	≤0.086
Mercury (mg/L)*	<0.0002	<0.0002	<0.0004	<0.0004	<0.000	<0.0002	<0.000025
Copper (mg/L)*	<0.002	<0.002	<0.04	<0.04	<0.02	<0.02	<.0029
Cyanide (mg/L)*	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	≤1.0

* Because of two cycles of concentration, the concentration will approximately double in the blowdown. Input from process streams to the cooling tower are expected to be below detection limits for these parameters. Values shown as less than ("<") are below the detection limits.

† Pursuant to the facility's NPDES permit, "the actual limit shall be the water quality standard set forth in F.A.C. 62-302.530 for Class II waters...or the concentration of the intake cooling water, whichever is greater."

Sources: Gulf, 1999.
ECT, 1999.



WASTEWATER APPLICATION FORM 2CS

PERMIT TO DISCHARGE PROCESS WASTEWATER
FROM NEW OR EXISTING
INDUSTRIAL WASTEWATER FACILITIES
TO SURFACE WATER

INSTRUCTIONS - FORM 2CS

This form must be completed by all applicants who check "yes" to Item II-C in DEP Form 62-620.910(1).

Public Availability of Submitted Information.

You may not claim as confidential any information required by this form or DEP Form 62-620.910(1), whether the information is reported on the forms or in an attachment. This information will be made available to the public upon request. Any information you submit to the Department which goes beyond that required by this form or DEP Form 62-620.910(1) you may claim as confidential, but claims for information which is effluent data will be denied. If you do not assert a claim of confidentiality at the time of submitting the information, the Department may make the information public without further notice to you. Claims of confidentiality must be in accordance with Rule 62-620.302, Florida Administrative Code.

Completeness

Your application will not be considered complete unless you answer every question on this form (DEP Form 62-620.910(5))and on Form 1 (DEP Form 62-620.910(1)). If an item does not apply to you, enter "NA" (for "not applicable") to show that you considered the question. Also, you may need a Plan of Study (POS) to develop Water Quality Effluent Limitations (WQBEL) required by Rule 62-650, F.A.C. Please contact the Department for information.

Follow-up Requirements (for New or Substantially Modified Facilities)

Although you are now required to submit estimated data on this form, please note that no later than six months after you begin discharging from the proposed or substantially modified facility, you must complete and submit items VII and VIII of this Form 2CS (DEP Form 62-620.910(5)). However, you need not complete those portions of Item V requiring test which you have already performed under the discharge monitoring requirements of your permit.

Definitions

All significant terms used in these instructions and in the form are defined in the glossary found in the General Instructions which accompany Form 1.

DEP ID Number

If you are applying for a renewal of an existing permit or for a substantial revision to an existing permit, fill in your DEP Identification Number at the top of each page of Form 2CS. You may copy this number directly from Item 1 of Form 1. If you are applying for a permit for a proposed facility, leave the DEP Identification Number blank. The Department will assign a number.

Item I

You may use the map you provided for Item XI of Form 1 to determine the latitude and longitude of each of your discharge locations.

Item II

Describe the design of each outfall, including construction materials used or to be used.

Item III

Describe the surface water body which will be or is receiving effluent from the wastewater facility.

Item IV

A. The line drawing should show generally the route taken by water in your facility from intake to discharge. Show all operations contributing wastewater, including process and production areas, sanitary flows, cooling water, and stormwater runoff. You may group similar operations into a single unit, labeled to correspond to the more detailed listing in Item III B. The water balance should show average flows. Show all significant losses of water to products, atmosphere, and discharge. You should use actual measurements whenever available; otherwise, use your best estimate.

B. List all sources of wastewater to each discharge point. Operations may be described in general terms (for example, "dye-making reactor" or "distillation tower"). You may estimate the flow contributed by each source if no data are available. For stormwater discharges you may estimate the average flow, but you must indicate the rainfall event upon which the estimate is based and the method of estimation. For each treatment unit, indicate its size, flow rate, and retention time, and describe the ultimate disposal of any solid or liquid wastes not discharged. Treatment units should be listed in order and you should select the proper code from Table 2CS-1 to fill in column 3-b for each treatment unit. Insert "XX" into column 3-b if no code corresponds to a treatment unit you list.

C. A discharge is intermittent unless it occurs without interruption during the operating hours of the facility, except for infrequent shut-downs for maintenance, process changes, or other similar activities. A discharge is seasonal if it occurs only during certain parts of the year. Fill in every applicable column in this item for each source of intermittent or seasonal discharges. Base your answers on actual data whenever available; otherwise, provide your best estimate. Report the highest daily value for flow rate and total volume in the "Max. Daily" columns (columns 4-a and 4-b). Report the average of all daily values measured during days when the discharge occurred within the last year in the "Long Term Avg." columns (columns 4-a and 4-b).

Item V

"Production" in this question refers to those goods which the proposed, substantially modified, or existing facility will produce or is producing, not to "wastewater" production. This information is only necessary where production-based new source performance standards (NSPS) or effluent guidelines apply to your facility. Your estimated production figures should be based on a realistic projection of actual daily production level (not design capacity) for each of the first three operating years of the facility. This estimate must be a long-term-average estimate (e.g., average production on an annual basis). If production will vary depending on long-term shifts in operating schedule or capacity, you may report alternate production estimates and the basis for the alternate estimates.

A. All NSPS and effluent guidelines promulgated by EPA appear in the Federal Register and are published annually in 40 CFR Subchapter N. A guideline applies to you if you have any operations contributing process wastewater in any subcategory covered by a BPT, BCT, or BAT guideline. If you are unsure whether you are covered by a promulgated NSPS or effluent guideline, check with your DEP district office (*Figure 1 in the Form 1 instructions*). You must check "yes" if an applicable NSPS or effluent guideline has been promulgated, even if the guideline limitations are being contested in court. If you believe that a promulgated NSPS or effluent guideline has been remanded for reconsideration by a court and does not apply to your operations, you may check "no."

B. An NSPS or effluent guideline is expressed in terms of production (*or other measure of operation*) if the limitation is expressed as mass of pollutant per operational parameter: for example, "pounds of BOD per cubic foot of logs from which bark is removed," or "pounds of TSS per megawatt hour of electrical energy consumed by smelting furnace." An example of a guideline not expressed in terms of a measure of operation is one which limits the concentration of pollutants.

C. This item must be completed only if you checked "yes" to Item V-B. The production information requested here is necessary to apply effluent guidelines to your facility and you cannot claim it as confidential. However, you do not have to indicate how the reported information was calculated. Report quantities in the units of measurement used in the applicable NSPS or effluent guideline. The production figures provided must be based on actual daily production and not on design capacity or on predictions of future operations. To obtain alternate limits under Rule 62-620.620(2)(b)3., F.A.C., you must define your maximum production capability and demonstrate to the Department that your actual production is substantially below maximum production capability and that there is a reasonable potential for an increase above actual production during the duration of the permit.

Item VI

A. If you check "yes" to this question, complete all parts of the chart, or attach a copy of any previous submission you have made to the Department containing the same information.

B. You are not required to submit a description of future pollution control projects if you do not wish to or if none is planned.

Item VII (*A, B, C, and D, including Tables VII-A, VII-B, and VII-C*)

This item requires you to collect and report data on the pollutants discharged from each of your discharge points. Each part of this item addresses a different set of pollutants and must be completed in accordance with the specific instructions for that part. The following general instructions apply to the entire item.

General Instructions

Part A requires you to report at least one analysis for each pollutant listed. Parts B and C require you to report analytical data in two ways. For some pollutants, you may be required to mark "X" in the "Testing Required" column (*column 2-a, Part C*), and test (*sample and analyze*) and report the levels of the pollutants in your discharge whether or not you expect them to be present in your discharge. For all other, you must mark "X" in either the "Believe Present" column or the "Believe Absent" column (*columns 2-a or 2-b, Part B, and Columns 2-b or 2-c, Part C*) based on your best estimate, and test for those which you believe to be present. (*See specific instructions on the form and below for Parts A through D.*) Base your determination that a pollutant is present in or absent from your discharge on your knowledge of your raw materials, maintenance chemicals, intermediate and final products and by-products, and any previous analyses known to you of your effluent or similar effluent. (*For example, if you manufacture pesticides, you should expect those pesticides to be present in contaminated stormwater runoff.*) If you would expect a pollutant to be present solely as a result of its presence in your intake water, you must mark "Believe Present" but you are not required to analyze for that pollutant. Instead, mark an "X" in the "Intake" column.

A. Reporting

All levels must be reported as concentration and as total mass. You may report some or all of the required data by attaching separate sheets of paper instead of filling out pages *VII*-1 to *VII*-10 if the separate sheets contain all the required information in a format which is consistent with pages *VII*-1 to *VII*-10 in spacing and in identification of pollutants and columns. (*For example, the data systems used in your GC/MS analysis may be able to print data in the proper format.*) Use the following abbreviations in the columns headed "Units" (*column 3, Part A, and Column 4, Parts B and C*).

Concentration
ppm - parts per million
mg/l - milligrams per liter
ppb - parts per billion
µg/l - micrograms per liter

Mass
lbs - pounds
ton - tons (English tons)
mg - milligrams
g - grams
kg - kilograms
T - tonnes (metric tons)

All reporting of values for metals must be in terms of "total recoverable metal," unless (1) an applicable, promulgated effluent limitation or standard specifies the limitation for the metal in dissolved, valent, or total form; or (2) all approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium). If you measure only one daily value, complete only "Max. Daily Values" columns and insert "1" into the "Number of Analyses" column (*columns 2-a and 2-d, Part A, and column 3-a, 3-d, Parts B and C*). The Department may require you to conduct additional analyses to further characterize your discharges. For composite sample, the daily value is the total mass or average concentration found in a composite sample taken over the operating hours of the facility during a 24-hour period; for grab samples, the daily value is the arithmetic or flow-weighted total mass or average concentration found in a series of at least four grab samples taken over the operating hours of the facility during a 24-hour period. If you measure more than one daily value for a pollutant and those values are representative of your waste stream, you must report them. You must describe your method of testing and data analysis. You also must determine the average of all values within the last year and report the concentration and mass under the "Long Term Avg. Values" columns (*column 2-c, Part A, and column 3-c, Parts B and C*), and the total number of daily values under the "Number of Analyses" columns (*column 2-d, Part A, and columns 3-d, Parts B and C*). Also determine the average of all daily values taken during each calendar month, and report the highest average under the "Max. 30-day Values" columns (*column 2-c, Part A, and column 3-b, Parts B and C*).

B. Sampling

The collection of the samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater. Any specific requirements contained in the applicable analytical methods should be followed for sample containers, sample preservation, holding times, the collection of duplicate samples, etc. The time when you sample should be representative of your normal operation, to the extent feasible, with all processes which contribute wastewater in normal operation, and with your treatment system operating properly with no system upsets. Samples should be collected from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present permit, or at any site adequate for the collection of a representative sample. Sampling for metals that are hardness-dependent shall also include sampling for hardness.

For pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform, grab samples must be used. For all other pollutants 24-hour composite samples must be used. However, a minimum of one grab sample may be taken for effluents from holding ponds, or other impoundments with a retention period of greater than 24 hours. For stormwater discharges a minimum of one to four grab samples may be taken, depending on the duration of the discharge. One grab must be taken in the first hour (*or less*) of discharge, with one additional grab (*up to a minimum of four*) taken in each succeeding hour of discharge for discharges lasting four or more hours. The Department may waive composite sampling for any discharge point for which you demonstrate that use of an automatic sampler is infeasible and that a minimum of four grab samples will be representative of your discharge.

Grab and composite samples[1] are defined as follows:

> Grab sample: An individual sample or at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes.

[1]Sampling requirements are periodically reviewed in light of recent research on testing methods. Upon completion of the review, changes to sampling requirements may be made. Before starting any required sampling or submitting past sampling to the Department, be sure that you have a current copy of 40 CFR Part 136 or Chapter 160, Florida Administrative Code.

Composite sample: A combination of at least 8 sample aliquots of a least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically. For GC/MS Volatile Organic Analysis (VOA), aliquots must be combined in the laboratory immediately before analysis. Four (4) (*rather than eight*) aliquots or grab samples should be collected for VOA. These four samples should be collected during actual hours of discharge over a 24-hour period and need not be flow proportioned. Only one analysis is required.

Data from samples taken in the past may be used if all data requirement are met; sampling was done no more than three years before submission; and all data are representative of the present discharge. Among the factors which would cause the data to be unrepresentative are significant changes in production level; changes in raw materials, processes, or final products; and changes in wastewater treatment. When EPA promulgates new analytical methods in 40 CFR Part 136, EPA will provide information as to when you should use the new methods to generate data on your discharges. The Department may promulgate new methods in Chapter 160, Florida Administrative Code, with the date when the new methods are to be used. Always be sure you have current copies of these two documents before you take samples or submit sampling data to the Department. If you have submitted data from past sampling, the Department may request additional information, including current quantitative data, if it is determined to be necessary to assess your discharges.

C. Analysis

You must use test methods promulgated in 40 CFR Part 136 or Chapter 160, Florida Administrative Code; however, if none has been promulgated for a particular pollutant, you may use any suitable method for measuring the level of the pollutant in your discharge if you submit a description of the method or a reference to a published method. Your description should include the sample holding time, preservation techniques, and the quality control measures which you used. If you have two or more substantially identical discharge points, you may request permission from the Department to sample and analyze only one point and submit the results of the analysis for other substantially identical points. If your request is granted by the Department, or a separate sheet attached to the application form identify which point you did test, and describe why the other points you did not test are substantially identical to the point which you did test.

D. Reporting of Intake Data

You are not required to report data under the "Intake" columns unless you wish to demonstrate your eligibility for a "net" effluent limitation for one or more pollutants, that is, an effluent limitation adjusted by subtracting the average level of the pollutant(s) present in your intake water. To demonstrate your eligibility, under the "Intake" columns report the average of the results of analyses on your intake water (*If your water is treated before use, test the water after it is treated.*), and discuss the requirements for a new limitation with the appropriate district office.

Part VII-A

Part VII-A must be completed by all applicants for all discharge points including discharges of non-contact cooling water or storm runoff. However, at your request, the Department may waive the requirement to test for one or more of these pollutants, upon a determination that available information is adequate to support issuance of the permit with less stringent reporting requirements for these pollutants. Use composite samples for all pollutants in this Part, except use grab samples for pH and temperature. See the discussion in General Instructions to item *VII* for definitions of the columns in Part A. The "Long Term Avg. Values" column (*column 2-c*) and "Max. 30-day Values" column (*column 2-b*) are not compulsory but should be filled out if data are available.

Part VII-B

Part VII-B must be completed by all applicants for all discharge points, including points containing only non-contact cooling water or storm runoff. You must report quantitative data if the pollutant(s) in question is limited in an effluent limitation either directly or indirectly but expressly through a limitation on an indicator (*e.g., use of TSS as an indicator to control the discharge of iron and aluminum*). For other discharged pollutants you must provide quantitative data or explain their presence in your discharge. The Department will consider a request to eliminate the requirement to test for pollutants for an industrial category or subcategory. Your request must be supported by data representative of the industrial category or subcategory in question. The data must demonstrate that individual testing for each applicant is unnecessary, because the facilities in the category or subcategory discharge substantially identical levels of the pollutant or discharge the pollutant uniformly at sufficiently low levels. Use composite samples for all pollutants you analyze for in this part, except use grab samples for residual chlorine, oil and grease, and fecal coliform. The "Long Term Avg. Values" column (*column 2-c*) and "Max. 30-day Values" column (*column 2-b*) are not compulsory but should be filled out if data are available.

Part VII-C

Table 2CS-2 at the end of these instructions lists 34 primary industry categories. For each discharge point, if any of your processes which contribute wastewater falls into one of those categories, you must mark "X" in "Testing Required" column (*column 2-a)* and test for (1) all of the toxic metals, cyanide, and total phenols; and (2) the organic toxic pollutants contained in Table 2CS-3 as applicable to your category. The organic toxic pollutants are listed by GC/MS fractions on pages *VII*-4 to *VII*-10 in Part *VII*-C. The inclusion of total phenols in Part VII-C is not intended to classify total phenols as a toxic pollutant. When you determine which industry category you are in to find your testing requirements, you are not determining your category for any other purpose and you are not giving up your right to challenge your inclusion in that category before your permit is issued. For all other cases (*secondary industries, non-process wastewater discharge points, and GC/MS fractions that are not required*), you must mark "X" in either the "Believed Present" column or the "Believed Absent" column for each pollutant.

You must report quantitative data as follows:

For every pollutant you know or have reason to believe is present in your discharge in concentrations of 10 ppb or greater;

For acrolein; acrylonitrile; 2,4 dinitrophenol; and 2-methyl-4,6 dinitrophenol where you expect these four pollutants to be discharged in concentrations of 100 ppb or greater; and

For every pollutant expected to be discharged in concentrations less that the thresholds specified above. For pollutants in this last category, in lieu of quantitative data, you may briefly describe the reasons the pollutant is expected to be discharged.

You are required to mark "Testing Required" for dioxin if you use or manufacture one of the following compounds:

(a) 2,4,5-trichlorophenoxy acetic acid, (2,4,5-T);
(b) 2-(2,4,5-trichlorophenoxy) propanoic acid, (Silvex, 2,4,5-TP);
(c) 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate, (Erbon);
(d) 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate, (Ronnel);
(e) 2,4,5-trichlorophenol, (TCP); or
(f) hexachlorophene, (HCP).

If you mark "testing Required" or "Believed Present," you must perform a screening analysis for dioxin, using gas chromatography with an electron capture detector. A TCDD standard for quantitation is not required. Describe the results of this analysis in the space provided: for example, "no measurable baseline deflection at the retention time of TCDD" or "a measurable peak within the tolerances of the retention time of TCDD." The Department may require you to perform a quantitative analysis if you report a quantitative analysis if you report a positive result.

Part VII-D

List any pollutants in Table 2CS-3 that you believe to be present and explain why you believe them to be present. No analysis is required, but if you have analytical data, you must report it. For discharges of the hazardous substances listed in Table 2CS-4, you may be exempt from the reporting requirements of section 311 of the Clean Water Act. Please contact the Department for information.

Item VIII

This requirement applies to current use or manufacture of a toxic pollutant as an intermediate or final product or by-product. The Department may waive or modify the requirement if you demonstrate that it would be unduly burdensome to identify each toxic pollutant and the Department has adequate information to issue your permit. You may not claim this information as confidential; however, you do not have to distinguish between use or production of the pollutants or list the amounts.

Item IX

This item is self explanatory.

Item X

This item is self explanatory.

Item XI

This item is self explanatory.

Item XII

There are severe penalties for submitting false information on this application form. Chapter 62-620, Florida Administrative Code, requires, in addition to the certification provided by a professional engineer, a certification from the owner or responsible authority of the facility as follows:

A. For a corporation: by a responsible corporate official. For purposes of this section, a responsible corporate official means (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 person or have gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

B. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

C. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. A principal executive officer includes the chief executive officer of the agency or a senior executive officer having the responsibility for the overall operations of a principal geographic unit of the agency, for example, a regional or district administrator.

TABLE 2CS-1
CODES FOR TREATMENT UNITS

PHYSICAL TREATMENT PROCESSES			
1-A	Ammonia Stripping	1-N	Microstraining
1-B	Dialysis	1-O	Mixing
1-C	Diatomaceous Earth Filtration	1-P	Moving Bed Filters
1-D	Distillation	1-Q	Multimedia Filtration
1-E	Electrodialysis	1-R	Rapid Sand Filtration
1-F	Evaporation	1-S	Reverse Osmosis (Hyperfiltration)
1-G	Flocculation	1-T	Screening
1-H	Flotation	1-U	Sedimentation (Settling)
1-I	Foam Fractionation	1-V	Slow Sand Filtration
1-J	Freezing	1-W	Solvent Extraction
1-K	Gas-Phase Separation	1-X	Sorption
1-L	Grinding (Comminutors)	1-Y	Percolation Pond
1-M	Grit Removal		
CHEMICAL TREATMENT PROCESSES			
2-A	Carbon Adsorption	2-G	Disinfection (*Ozone*)
2-B	Chemical Oxidation	2-H	Disinfection (*Other*)
2-C	Chemical Precipitation	2-I	Electrochemical Treatment
2-D	Coagulation	2-J	Ion Exchange
2-E	Dechlorination	2-K	Neutralization
2-F	Disinfection (*Chlorine*)	2-L	Reduction
BIOLOGICAL TREATMENT PROCESSES			
3-A	Activated Sludge	3-E	Pre-Aeration
3-B	Aerated Lagoons	3-F	Spray Irrigation/Land Application

Table 2CS-1, Codes for Treatment Units contd.

3-C	Anaerobic Treatment	3-G	Stabilization Ponds
3-D	Nitrification-Denitrification	3-H	Trickling Filter
OTHER PROCESSES			
4-A	Discharge to Surface Water	4-C	Reuse/Recycle of Treated Effluent
4-B	Ocean Discharge Through Outfall	4-D	Underground Injection
SLUDGE TREATMENT AND DISPOSAL PROCESSES			
5-A	Aerobic Digestion	5-M	Heat Drying
5-B	Anaerobic Digestion	5-N	Heat Treatment
5-C	Belt Filtration	5-O	Incineration
5-D	Centrifugation	5-P	Land Application
5-E	Chemical Conditioning	5-Q	Landfill
5-F	Chlorine Treatment	5-R	Pressure Filtration
5-G	Composting	5-S	Pyrolysis
5-H	Drying Beds	5-T	Sludge Lagoons
5-I	Elutriation	5-U	Vacuum Filtration
5-J	Flotation Thickening	5-V	Vibration
5-K	Freezing	5-W	Wet Oxidation
5-L	Gravity Thickening		

TABLE 2CS-2
TESTING REQUIREMENTS FOR ORGANIC TOXIC POLLUTANTS INDUSTRY CATEGORY

INDUSTRY CATEGORY	GC/MS FRACTION[1]			
	Volatile	Acid	Base/Neutral	Pesticide
Adhesives and sealants	X	X	X	
Aluminum forming	X	X	X	
Auto and other laundries	X	X	X	X
Battery manufacturing	X		X	
Coal mining	X	X	X	X

Table 2CS-2, Testing Requirements for Organic Toxic Pollutants Industry Category contd.

Coil coating	X	X	X	
Copper forming	X	X	X	
Electric and electronic compounds	X	X	X	X
Electroplating	X	X	X	
Explosives manufacturing		X	X	
Foundries	X	X	X	
Gum and wood chemicals	X	X	X	X
Inorganic chemicals manufacturing	X	X	X	
Iron and steel manufacturing	X	X	X	
Leather tanning and finishing	X	X	X	X
Mechanical products manufacturing	X	X	X	
Nonferrous metals manufacturing	X	X	X	X
Ore mining	X	X	X	X
Organic chemicals manufacturing	X	X	X	X
Paint and ink formulation	X	X	X	X
Pesticides	X	X	X	X
Petroleum refining	X	X	X	X
Pharmaceutical preparations	X	X	X	
Photographic equipment and supplies	X	X	X	X
Plastic and synthetic materials manufacturing	X	X	X	X
Plastic processing	X			
Porcelain enameling	X		X	X
Printing and publishing	X	X	X	X
Pulp and paperboard mills	X	X	X	X
Rubber processing	X	X	X	
Soap and detergent manufacturing	X	X	X	
Steam electric power plants	X	X	X	
Textile mills	X	X	X	X
Timber products processing	X	X	X	X

[1]The pollutants in each fraction are listed in Item VII-C . X = Testing required.

TABLE 2CS-3
TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES
REQUIRED TO BE IDENTIFIED BY APPLICANTS
IF EXPECTED TO BE PRESENT

Toxic Pollutant

Asbestos

Hazardous Substances

Acetaldehyde
Allyl alcohol
Allylchloride
Amyl acetate
Aniline
Benzonitrile
Benzyl chloride
Butyl acetate
Butylamine
Captan
Carbaryl
Carbofuran
Carbon disulfide
Chlopyrifos
Coumpahos
Cresol
Crotonaldehyde
Cyclohexane
2,4-D (2,4-Dichlorophinoxyacetic acid)
Diazinon
Dicamba
Dichlobenil
Dichlone

Hazardous Substances

2,2 Dichloropropionic acid
Dichlorvos
Diethyl amine
Dimethyl amine
Dintrobenzene
Diquat
Disulfoton
Diuron
Epichlorohydrin
Ethion
Ethylene diamine
Formaldehyde
Furfural
Guthion
Isoprene
Isopropanolamine
dodecylbenzenesulfonate
Kelthane
Kepone
Malathion
Mercaptodimethur
Methoxychlor
Methyl mercaptan
Methyl methacrylate
Methyl parathion
Mevinphos
Mexacarbate
Monoethyl amiine

Hazardous Substances

Monomethyl amine
Naled
Naphthenic acid
Nitrotoluene
Parathion
Phenolsulfonate
Phosgene
Propargite
Propylene oxide
Pyrethrins
Quinoline
Resorcinol
Strontium
Strychnine
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)
TDE (Terochlorodiphenyl ethane)
2,4,5-TP [2-(2,4,5-Trichlorophenoxyl)propanic acide]
Trichlorofon
Triethanolamine dodecylbenzenesulfonate
Triethylamine
Uranium
Vanadium
Vinyl acetate
Xylene
Xylenol
Zirconium

TABLE 2CS-4
HAZARDOUS SUBSTANCES

1. Acetaldehyde
2. Acetic acid
3. Acetic anhydride
4. Acetone cyanohydrin
5. Acetyl bromide
6. Acetyl chloride
7. Acrolein
8. Acrylonitrile
9. Adipic acid
10. Aldrin
11. Allyl alcohol
12. Alyll chloride
13. Aluminum sulfate
14. Ammonia
15. Ammonium acetate
16. Ammonium benzoate
17. Ammonium bicarbonate
18. Ammonium bichromate
19. Ammonium bifluoride
20. Ammonium bisulfite
21. Ammonium carbamate
22. Ammonium carbonate
23. Ammonium chloride
24. Ammonium chromate
25. Ammonium citrate
26. Ammonium fluoroborate
27. Ammonium fluoride
28. Ammonium hydroxide
29. Ammonium oxalate
30. Ammonium silicofluoride
31. Ammonium sulfamate
32. Ammonium sulfide
33. Ammonium sulfite
34. Ammonium tartrate
35. Ammonium thiocyanate
36. Ammonium thiosulfate
37. Amyl acetate
38. Aniline
39. Antimony pentachloride
40. Antimony potassium tartrate
41. Antimony tribromide
42. Antimony trichloride
43. Antimony trifluoride
44. Antimony trioxide
45. Arsenic disulfide
46. Arsenic pentoxide
47. Arsenic trichloride
48. Arsenic trioxide
49. Arsenic trisulfide
50. Barium cyanide
51. Benzene
52. Benzoic acid
53. Benzonitrile
54. Benzoyl chloride
55. Benzyl chloride
56. Beryllium chloride
57. Beryllium fluoride
58. Beryllium nitrate
59. Butylacetate
60. n-Butylphthalate
61. Butylamine
62. Butyric acid
63. Cadmium acetate
64. Cadmium bromide
65. Cadmium chloride
66. Calcium arsenate
67. Calcium arsenite
68. Calcium carbide
69. Calcium chromate
70. Calcium cyanide
71. Calcium dodecylbenzenesulfonate
72. Calcium hypochlorite
73. Captan
74. Carbaryl
75. Carbofuran
76. Carbon disulfide
77. Carbon tetrachloride
78. Chlordane
79. Chlorine
80. Chlorobenzene
81. Chloroform
82. Chloropyrifos
83. Chlorosulfonic acid
84. Chromic acetate
85. Chromic acid
86. Chromic sulfate
87. Chromous chloride
88. Cobaltous bromide
89. Cobaltous formate
90. Cobaltous sulfamate
91. Coumaphos
92. Cresol
93. Crotonaldehyde
94. Cupric acetate
95. Cupric acetoarsenite
96. Cupric chloride
97. Cupric nitrate
98. Cupric oxalate
99. Cupric sulfate
100. Cupric sulfate ammoniated
101. Cupric tartrate
102. Cyanogen chloride
103. Cyclohexane
104. 2,4-D acid (2,4-Dichlorophenoxyacetic acid)
105. 2,4-D esters (2,4-Dichlorophenoxyacetic acid esters)
106. DDT
107. Diazinon
108. Dicamba
109. Dichlobenil
110. Dichlone
111. Dichlorobenzene
112. Dichloropropane
113. Dichloropropene
114. Dichloropropene-Dichloropropane mix
115. 2,2-Dichloropropionic acid
116. Dichlorvos
117. Dieldrin
118. Diethylamine
119. Dimethylamine
120. Dinitrobenzene
121. Dinitrophenol
122. Dinitrotoluene
123. Diquat
124. Disulfoton
125. Diuron
126. Dodecylbenzesulfonic acid
127. Endosulfan
128. Endrin
129. Epichlorohydrin
130. Ethion
131. Ethylbenzene
132. Ethylenediamine
133. Ethylene dibromide
134. Ethylene dichloride
135. Ethylene Diaminetetracetic acid (EDTA)
136. Ferric ammonium citrate
137. Ferric ammonium oxalate
138. Ferric chloride
139. Ferric fluoride
140. Ferric nitrate

141. Ferric sulfate
142. Ferrous ammonium sulfate
143. Ferrous chloride
144. Ferrous sulfate
145. Formaldehyde
146. Formic acid
147. Fumaric acid
148. Furfural
149. Guthion
150. Heptachlor
151. Hexachlorocyclopentadiene
152. Hydrochloric acid
153. Hydrofluoric acid
154. Hydrogen cyanide
155. Hydrogen sulfide
156. Isoprene
157. Isopropanolamine dodecylbenzenesulfonate
158. Kelthane
159. Kepone
160. Lead acetate
161. Lead arsenate
162. Lead chloride
163. Lead fluoborate
164. Lead fluorite
165. Lead iodide
166. Lead nitrate
167. Lead stearate
168. Lead sulfate
169. Lead sulfide
170. Lead thiocyanate
171. Lindane
172. Lithium chromate
173. Malathion
174. Maleic acid
175. Maleic anhydride
176. Mercaptodimethur
177. Mercuric cyanide
178. Mercuric nitrate
179. Mercuric sulfate
180. Mercuric thiocyanate
181. Mercurous nitrate
182. Methoxychlor
183. Methyl mercaptan
184. Methyl methacrylate
185. Methyl parathion
186. Mevinphos
187. Mexacarbate
188. Monoethylamine
189. Monomethylamine
190. Naled
191. Naphthalene
192. Naphthenic acid
193. Nickel ammonium sulfate
194. Nickel chloride
195. Nickel hydroxide
196. Nickel nitrate
197. Nickel sulfate
198. Nitric acid
199. Nitrobenzene
200. Nitrogen dioxide
201. Nitrophenil
202. Nitrotoluene
203. Paraformaldehyde
204. Parathion
205. Pentachlorophenol
206. Phenol
207. Phosoene
208. Phosphoric acid
209. Phosphorus
210. Phosphorus oxychloride
211. Phosphorus pentasulfide
212. Phosphorus trichloride
213. Polychlorinated biphenyls (PCB)
214. Potassium arsenate
215. Potassium arsenite
216. Potassium bichromate
217. Potassium chromate
218. Potassium cyanide
219. Potassium hydroxide
220. Potassium permanganate
221. Propargite
222. Propionic acid
223. Propionic anhydride
224. Propylene oxide
225. Pyrethrins
226. Quinoline
227. Resorcinol
228. Selenium oxide
229. Silver nitrate
230. Sodium
231. Sodium arsenate
232. Sodium arsenite
233. Sodium bichromate
234. Sodium bifluoride
235. Sodium bisulfite
236. Sodium chromate
237. Sodium cyanide
238. Sodium dodecylbenzensulfonate
239. Sodium fluoride
240. Sodium hydrosulfide
241. Sodium hydroxide
242. Sodium hypochlorite
243. Sodium methylate
244. Sodium nitrate
245. Sodium phospate (dibasic)
246. Sodium phosphate (tribasic)
247. Sodium selenite
248. Strontium chromate
249. Strychnine
250. Styrene
251. Sulfuric acid
252. Sulfur monochloride
253. 2,4,5-T acid (2,4,5-Trichlorophenoxy acetic acid)
254. 2,4,5-T amines (2,4,5-Trichlorophenoxy acetic cid amines)
255. 2,4,5-T esters (2,4,5-Trichlorophenoxy acetic cid esters)
256. 2,4,5-T salts (2,4,5-Trichlorophenoxy acetic acid salts)
257. 2,4,5-TP acid (2,4,5-Trichlorophenoxy propanoic acid)
258. 2,4,5-TP acid esters (2,4,5-Trichlorophenoxy propanoic acid esters)
259. TDE (Tetrachlorodiphenyl ethane)
260. Tetraethyl lead
261. Tetraethyl pyrophosphate
262. Thallium sulfate
263. Toluene
264. Toxaphene
265. Trichlorofon
266. Trichloroethylene
267. Trichlorophenol
268. Triethanolamine dodecylbenzenesulfonate
269. Triethylamine
270. Trimethylamine
271. Uranyl acetate
272. Uranyl nitrate
273. Vanadium pentoxide
274. Vanadyl sulfate
275. Vinyl acetate
276. Vinylidene chloride
277. Xylene
278. Xylenol
279. Zinc acetate
280. Zinc ammonium chloride

281. Zinc borate
282. Zinc bromide
283. Zinc carbonate
284. Zinc chloride
285. Zinc cyanide
286. Zinc fluoride
287. Zinc formate
288. Zinc hydrosulfite
289. Zinc nitrate
290. Zinc phenolsulfonate
291. Zinc phosphide
292. Zinc silcofluoride
293. Zinc sulfate
294. Zirconium nitrate
295. Zirconium potassium fluoride
296. Zirconium sulfate
297. Zirconium tetrachloride

FORM
2CS

WASTEWATER APPLICATION FOR PERMIT TO DISCHARGE PROCESS WASTEWATER FROM NEW OR EXISTING INDUSTRIAL WASTEWATER FACILITIES TO SURFACE WATERS

Facility I.D. Number: FL0002267

Please print or type information in the appropriate areas.

I OUTFALL LOCATION For each outfall, list the X,Y coordinates and the name of the receiving water.
(latitude/longitude to the nearest 15 seconds)

A. Outfall	B. Latitude			C. Longitude			D. Name of Receiving Water
No. (List)	Deg.	Min.	Sec.	Deg.	Min.	Sec.	
D001	30	16	23.87	85	43	15.52	West Bay
D015	30	16	04.47	85	41	49.61	Internal Outfall
D01C	30	16	12.34	85	41	53.16	Internal Outfall
D00D	30	16	04.42	85	42	03.11	Alligator Bayou
D01A	30	16	01.34	85	41	49.09	Internal Outfall
*D017	30	16	09.76	85	42	06.28	Internal Outfall to existing dischargecanal

II OUTFALL DESIGN

A. Outfall No. (List)	B. Design Configuration and Construction Materials	C. Distance from shore	D. Diameter	E. Elevation of Discharge Invert (MSL)	F. Receiving Water Depth at POD (MSL)
D001	Man made canal	NA	200' wide	NA	NA
D015	Metal cleaning waste treatment pond	Internal	Outfall	to Ash Pond	
D01C	Parshall Flume / Concrete	Internal	Outfall	to D001	
D00D	Main Yard Sump		12"		6'
D01A	Domestic Waste Plant	Internal	Outfall	to Ash Pond	
*D017	Metal Pipe	NA	24"	to be determined	about 6'

*NOTE: D017 is the number for proposed new internal outfall for Smith 3.

III RECEIVING WATER INFORMATION

For each surface water that will receive effluent, supply the following information:

A. Name of Receiving Water	B. Check One		C. Classification (See Ch. 62-302, F.A.C.)	D. Type of Receiving Water (canal, river, lake, etc.)
	Fresh	Salt or Brackish		
West Bay		X	Class II	Bay

E. Minimum 7-day 10-year low flow of the receiving water at each outfall (if appropriate). **NA**

F. Identify and describe the flow of effluent from each outfall to a major body of water. A suitably marked map or aerial photograph may be used. **The new proposed internal Outfall D017 will discharge to the existing canal. D001 will continue to discharge as previously permitted through the discharge canal to West Bay (see Figure in Form 1).**

G. Do you request a mixing zone under Rule 62-4.244, F.A.C.? If yes, for what parameters or pollutants? **No**

FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

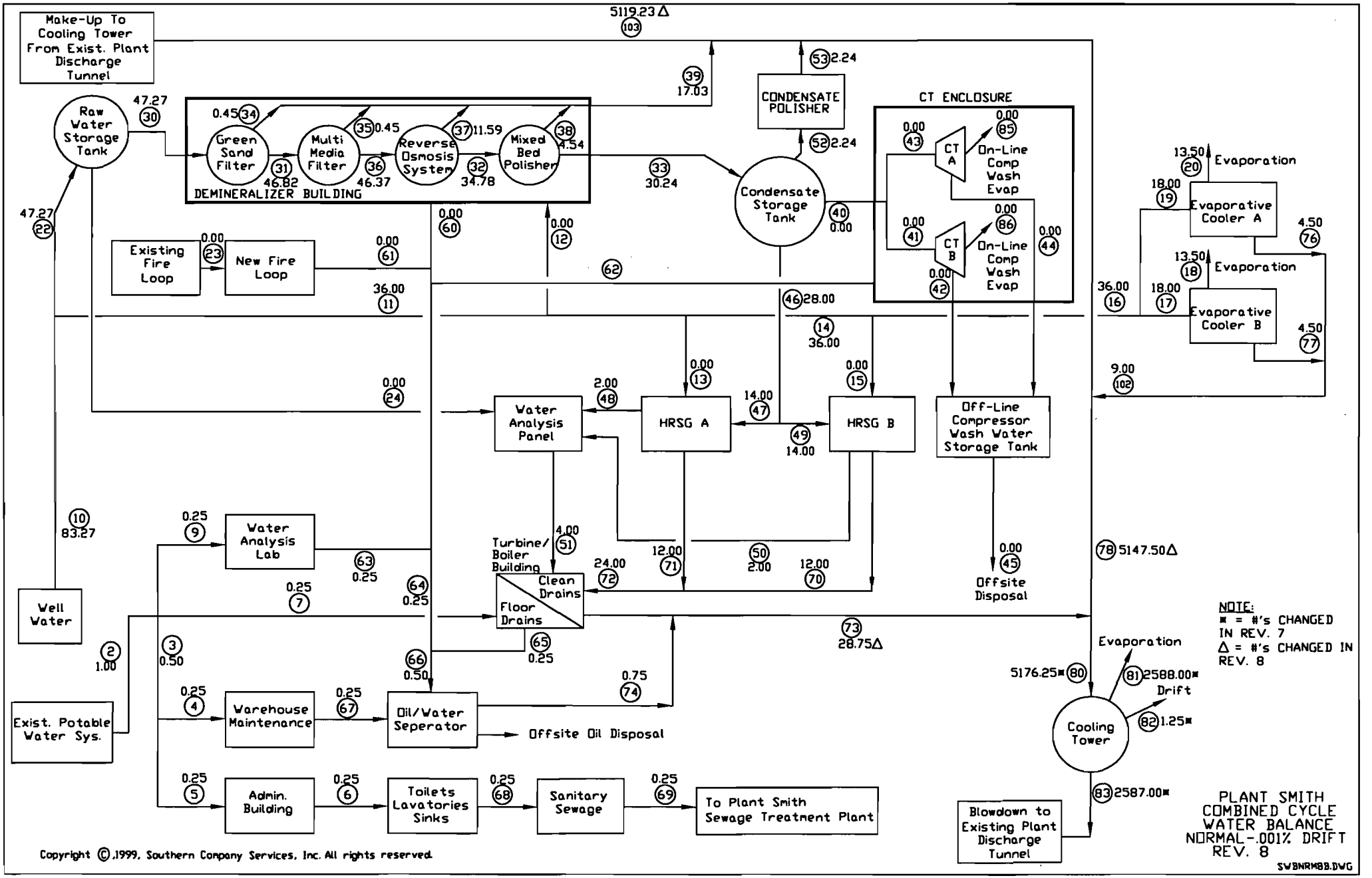
B. For each outfall, provide a description of:

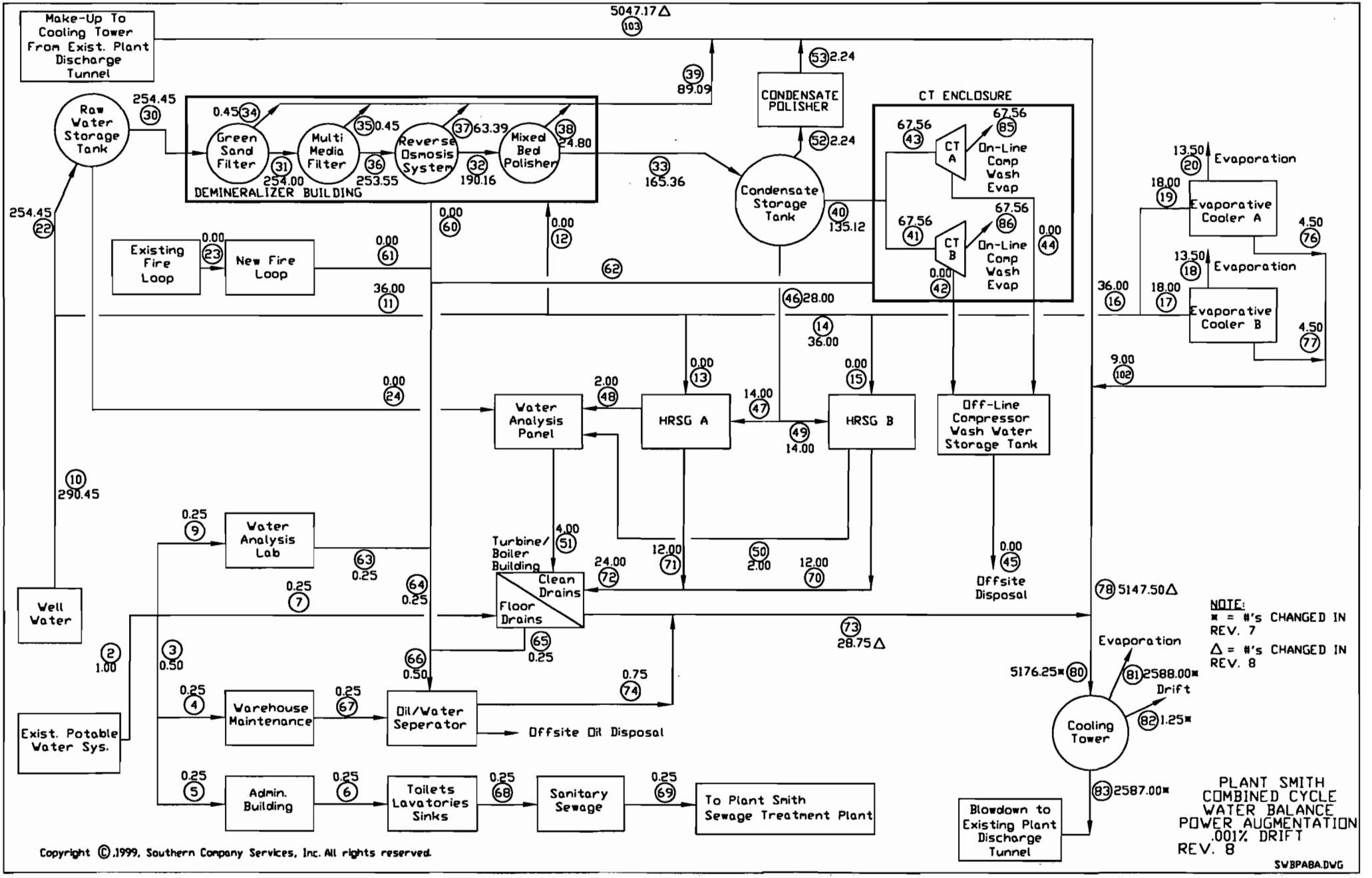
1. All operations contributing wastewater to the effluent; including process wastewater, sanitary wastewater, cooling water, and stormwater runoff;

2. The average flow contributed by each operation; and

3. The treatment received by the wastewater.

Use the space on the next page. Continue on additional sheets, if necessary.





(1) Outfall # (List)	(2) Operation(s) Contributing Flow		(3) Treatment		
	(a) Operation (list)	(b) Avg. Flow & Units	(a) Description	(b) List Code from Table 2CS-1	
D001	Once-through cooling water	274 MGD*	Discharge to surface water	4-A	
	Ash pond over flow	Intermittent	Sedimentation	1-U	
	D017 cooling tower blowdown	3.7 MGD	Mixes with once-through cooling water	1-O	4-A
			in the Smith 1&2 discharge canal		
D017	Cooling tower blowdown includes	3.7 MGD	Mixes with once-through cooling water	1-O	4-A
	internal discharges:		in the discharge canal		
	• Demineralizer waste	17 gpm†	Mixes with cooling tower makeup water	1-O	
	• Evaporative cooler blowdown	9 gpm	Mixes with cooling tower makeup water	1-O	
	• Condensate polisher	2.2 gpm	Mixes with cooling tower makeup water	1-O	
	• Drains from turbine/boiler building	28 gpm	Mixes with cooling tower makeup water	1-O	

General Notes: Includes only those outfalls that will be modified by the addition of Smith 3.
***As described in the existing Smith NPDES permit, once-through cooling water flow for Units 1 and 2 is 274 MGD. Cooling tower evaporation for Smith Unit 3 will reduce the final discharge at D001 to approximately 270 MGD.**
†Demineralizer flow increases to 89 gpm during power augmentation.

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?
_ Yes (complete the following table) X No (go to D. below)

(1) Outfall # (List)	(2) Operation(s) Contributing Flow (List)	(3) Frequency		(4) Flow				
		(a) Days per Week (specify avg.)	(b) Months per Yr. (specify avg.)	(a) Flow Rate (in mgd)		(b) Total Volume (specify with units)		(c) Duration (in days)
				Long Term Avg.	Max. Daily	Long Term Avg.	Max. Daily	

D. Describe practices to be followed to ensure adequate wastewater treatment during emergencies such as power loss and equipment failures causing shutdown of pollution abatement equipment of the proposed/permitted facilities. **See attached description.**

E. List the method(s) and location(s) of flow measurement. **Pump logs for the once-through cooling water and the cooling tower blowdown discharge.**

V PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

X Yes (complete Item V-B) _ No (go to Section VI)

B. Are the limitations in the applicable guideline expressed in terms of production (or other measure of operation)?

_ Yes (complete Item V-C) X No (go to Section VI)

C. If you answered "yes" to Item V-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. Affected Outfalls (list outfall nos.)
a. Quantity per Day	b. Units of Measure	c. Operation, Product, Materials, Etc. (specify)	

SECTION IV-D (page 2CS-19): Describe practices to be followed to ensure adequate wastewater treatment during emergencies such as power loss and equipment failures causing shutdown of pollution equipment of the proposed/permitted facilities.

The only wastewater treatment process associated with the requested NPDES modification will be the mixing of the cooling tower blowdown (D017) with the existing once-through cooling water from Smith Units 1 and 2. Should Unit 3 go off-line, there will be discharge from internal Outfall D017. All other internal waste streams will stop should the plant go off-line.

VI IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement order, enforcement compliance schedule letter, stipulations, court orders, and grant or loan conditions.

☐ Yes (complete the following table) ☒ No (go to Item VI-B)

1. Identification of Condition, Agreement, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	a. No.	b. Source of Discharge		a. Required	B. Projected

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

☐ Mark "X" if description of additional control programs is attached.

VII INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding--Complete one set of tables for each outfall -- Annotate the outfall number in the space provided. NOTE: Tables VII-A, VII-B, and VII-C are included on separate sheets number VII-1 through VII-9.

D. Use the space below to list any of the pollutants listed in Table 2CS-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. Pollutant	2. Source	1. Pollutant	2. Source
None			

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. SEE INSTRUCTIONS.

VII INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent							3. Units		4. Intake (optional)		
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
a. Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	<2.0	<4,600					1	mg/L	lb/day	<2.0	<4600	1
b. Chemical Oxygen Demand (COD)	NA for salt water	NA for salt water										
c. Total Organic Carbon (TOC)	6.7	15,000					1	mg/L	lb/day	6.8	16000	1
d. Total Suspended Solids (TSS)	6.6	14,900					1	mg/L	lb/day	7.7	18000	1
e. Total Nitrogen (as N)	0.15	340					1	mg/L	lb/day	0.11	250	1
f. Total Phosphorus (as P)	<0.05	<113					1	mg/L	lb/day	<0.050	<110	1
e. Ammonia (as N)	<0.05	<113					1	mg/L	lb/day	<0.050	<110	1
f. Flow - actual or projected	Value 270*		Value		Value		12	MGD	NA	Value 254.4		12
g. Flow - design	Value		Value		Value					Value		
h. Specific Conductivity	Value 39,000		Value		Value			µmhos/cm		Value 38000		
i. Temperature (winter)	Value 30.8		Value		Value		6	°C		Value 18.0		
j. Temperature (summer)	Value 38.9		Value		Value		6	°C		Value 27.7		
k. pH	Min. 7.5	Max.8.0	Min.	Max.			12	STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additonal details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent							4. Units		5. Intake (optional)		
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-Day Value (if available)		c. Long Term Avrg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
a. Bromide (24959-67-9)	X		49	110,000					1	mg/L	lb/day	48	110,000	1
b. Chlorine, Total Residual		X	<0.05	<113					12	mg/L	lb/day	<.05	<113	12
c. Color	X		20	NA					1	mg/L	lb/day	25	NA	1
d. Fecal Coliform	X		300	NA					1	mg/L	lb/day	90	NA	1
e. Fluoride (16984-48-8)	X		0.72	1,600					1	mg/L	lb/day	0.69	1600	1
f. Nitrate-Nitrite (as N)		X	<0.50	<110					1	mg/L	lb/day	<.05	<110	1

Note: The values in Parts A and B (plus dioxin) for this requested modification are based on discharge values provided in the original NPDES application. Values for Part C are provided from a sample of the existing discharge taken on March 25, 1999. The values incorporate the addition of the cooling tower blowdown (internal discharge D017) to provide the estimated values at the POD (Outfall D001).

*The discharge flow for full operation of Units 1, 2, and 3 will be 270 MGD. If Unit 3 is off-line with the cooling tower shutdown discharge flow for Units 1 and 2 will revert to the original discharge flow of 274 MGD.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						d. No. of Analyses	4. Units		5. Intake (optional)		
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-day Value (if available)		c. Long Term Avrg. Value (if available)			a. Concentration	b. Mass	a. Long Term Average Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
g. Nitrogen, Total Organic (as N)	X		0.15	340					1	mg/L	lb/day	0.11	250	1
h. Oil and Grease		X	<1.0	<2,300					1	mg/L	lb/day	<1.0	<2300	1
i. Phosphorus, Total (as P) (7723-14-0)		X	<0.05	<110					1	mg/L	lb/day	<0.05	<110	1
j. Radioactivity														
(1) Alpha, Total		X	<2.0	NA					1	pCi/L	NA	250+/-130	NA	1
(2) Beta, Total		X	150 ±370	NA					1	pCi/L	NA	430+/-200	NA	1
(3) Radium, Total		X	<3.4	NA					1	pCi/L	NA	<3.4	NA	1
(4) Radium 226, Total		X	<0.6	NA					1	pCi/L	NA	<0.6	NA	1
k. Sulfate (as SO_4) (14808-79-8)	X		2,812	6,335,000					1	mg/L	lb/day	2000	4600000	1
l. Sulfide (as S)		X	<0.04	<91					1	mg/L	lb/day	<0.040	<91	1
m. Sulfite (as SO_3) 14265-45-3)	X		1.5	3,380					1	mg/L	lb/day	2.2	5000	1
n. Surfactants		X	<0.10	<225					1	mg/L	lb/day	<0.10	<230	1
o. Aluminum, Total (7429-90-5)	X		0.23	518					1	mg/L	lb/day	0.14	320	1
p. Barium, Total (7440-39-3)		X	<0.01	<23					1	mg/L	lb/day	<0.010	<23	1
q. Boron, Total (7440-42-8)	X		3.1	6,984					1	mg/L	lb/day	3.0	6800	1
r. Cobalt, Total (7440-48-4)		X	<0.01	<23					1	mg/L	lb/day	<0.01	<23	1
s. Iron, Total (7439-89-6)	X		0.17	383					1	mg/L	lb/day	0.24	550	1
t. Magnesium, Total (7439-95-4)	X		960	2,160,000					1	mg/L	lb/day	900	2000000	1
u. Molybdenum, Total (7439-98-7)		X	<0.01	<23					1	mg/L	lb/day	<0.010	<23	1
v. Manganese, Total (7439-96-5)		X	<0.01	<23					1	mg/L	lb/day	<0.010	<23	1
w. Tin, Total (7440-31-5)		X	<0.25	<563					1	mg/L	lb/day	<0.25	<570	1
x. Titanium, Total (7440-32-6)		X	<0.10	<225					1	mg/L	lb/day	<0.10	<230	1

Facility I.D. No. FL[redacted]67 Outfall No. D001

PART C - If you [redacted] primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instru[redacted]s to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for a[redacted]MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one anlysis for that pollutnat if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4,dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS Number (if available)	2. Mark "X"			3. Effluent						4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value (1) Concentration	a. Maximum Daily Value (2) Mass	b. Max. 30-day Value (if available) (1) Concentration	b. Max. 30-day Value (if available) (2) Mass	c. Long Term Avrg. Value (if available) (1) Concentration	c. Long Term Avrg. Value (if available) (2) Mass	d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Average Value (1) Concentration	a. Long Term Average Value (2) Mass	b. No. of Analyses
METALS, CYANIDE, AND TOTAL PHENOLS														
1M. Antimony, Total (7440-36-0)	X			<0.02	<45					1	mg/L	lb/day	<0.02	<45	1
2M. Arsenic, Total (7723-14-0)	X			<0.01	<23					1	mg/L	lb/day	<0.01	<23	1
3M. Beryllium, Total (7440-41-7)	X			<0.004	<9					1	mg/L	lb/day	<0.004	<9	1
4M. Cadmium, Total (7440-43-9)	X			<0.005	<11					1	mg/L	lb/day	<0.0050	<11	1
5M. Chromium, Total (7440-47-3)	X			<0.01	<23					1	mg/L	lb/day	<0.010	<23	1
6M. Copper, Total (7440-50-8)	X			<0.002	<4.5					1	mg/L	lb/day	0.004	45	1
7M. Lead, Total (7439-92-1)	X			<0.01	<23					1	mg/L	lb/day	<0.01	<23	1
8M. Mercury, Total (7439-97-6)	X			<0.0002	<0.45					1	mg/L	lb/day	<0.00020	<0.46	1
9M. Nichel, Total (7440-02-0)	X			<0.04	<90					1	mg/L	lb/day	0.025	57	1
10M. Selenium, Total (7782-49-2)	X			<0.01	<23					1	mg/L	lb/day	<0.01	<23	1
11M. Silver, Total (7440-22-4)	X			<0.01	<23					1	mg/L	lb/day	<0.010	<23	1
12M. Thallium, Total (7440-28-0)	X			<0.01	<23					1	mg/L	lb/day	<0.010	<23	1
13M. Zinc, Total (7440-66-6)	X			<0.02	<45					1	mg/L	lb/day	<0.020	<46	1
14M. Cyanide, Total (57-12-5)	X			<0.01	<23					1	mg/L	lb/day	<0.010	<23	1
15M. Phenols, Total	X			<0.10	<225					1	mg/L	lb/day	<0.010	<23	1
DIOXIN														
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)	X			<0.005	<11					1	mg/L	lb/day	<0.0050	<0.011	1

1. Pollutant and CAS Number (if available)	2. Mark "X"			3. Effluent						d. No. of Analyses	4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value (1) Concentration	a. Maximum Daily Value (2) Mass	b. Max. 30-day Value (if available) (1) Concentration	b. Max. 30-day Value (if available) (2) Mass	c. Long Term Avrg. Value (if available) (1) Concentration	c. Long Term Avrg. Value (if available) (2) Mass		a. Concentration	b. Mass	a. Long Term Average Value (1) Concentration	a. Long Term Average Value (2) Mass	b. No. of Analyses
GC/MS FRACTION - VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)	X			<100	<225					1	µg/L	lb/day	<100	<230	1
2V. Acrylonitrile (107-13-1)	X			<100	<225					1	µg/L	lb/day	<100	<230	1
3V. Benzene (71-43-2)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
4V. Bis (Chloromethyl) Ether (542-88-1)			X	NA						1	µg/L	lb/day	NA		1
5V. Bromoform (75-25-2)	X			78	176					1	µg/L	lb/day	110	248	1
6V. Carbon Tetrachloride (56-23-5)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
7V. Chlorobenzene (108-90-7)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
8V. Chlorodi-bromomethane (124-48-1)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
9V. Chloroethane (75-00-3)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	X			<50	<113					1	µg/L	lb/day	<50	<110	1
11V. Chloroform (67-66-3)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
12V. Dichloro-bromomethane (75-27-4)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
13V. Dichloro-difluoromethane (75-71-8)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
14V. 1,1-Dichloroethane (75-34-3)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
15V. 1,2-Dichloroethane (107-06-2)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
16V. 1,1-Dichloroethylene (75-35-4)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
17V. 1,2-Dichloropropane (78-87-5)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
18V. 1,3-Dichloropropylene (542-75-6)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
19V. Ethylbenzene (100-41-4)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
20V. Methyl Bromide (74-83-9)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
21V. Methyl Chloride (74-87-3)	X			<10	<23					1	µg/L	lb/day	<10	<23	1

1. Pollutant and CAS Number (if available)	2. Mark "X"			3. Effluent							4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value (1) Concentration	a. Maximum Daily Value (2) Mass	b. Max. 30-day Value (if available) (1) Concentration	b. Max. 30-day Value (if available) (2) Mass	c. Long Term Avrg. Value (if available) (1) Concentration	c. Long Term Avrg. Value (if available) (2) Mass	d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Average Value (1) Concentration	a. Long Term Average Value (2) Mass	b. No. of Analyses
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-98-2)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
24V. Tetrachloroethylene (127-18-4)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
25V. Toluene (108-88-3)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
26V. 1,2-Trans-Dichloroethylene (156-60-5)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
27V. 1,1,1-Trichloroethane (71-55-6)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
28V. 1,1,2-Trichloroethane (79-00-5)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
29V. Trichloroethylene (79-01-6)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
30V. Trichloro-fluoromethane (75-69-4)	X			<5.0	<11.3					1	µg/L	lb/day	<5.0	<11	1
31V. Vinyl Chloride (75-01-4)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
2A. 2,4-Dichlorophenol (120-83-2)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
3A. 2,4-Dimethylphenol (105-67-9)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
4A. 4,6-Dinitro-O-Cresol (534-52-1)	X			<50	<113					1	µg/L	lb/day	<50	<110	1
5A. 2,4-Dinitrophenol (51-28-5)	X			<50	<113					1	µg/L	lb/day	<50	<110	1
6A. 2-Nitrophenol (88-75-5)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
7A. 4-Nitrophenol (100-02-7)	X			<50	<113					1	µg/L	lb/day	<50	<110	1

1. Pollutant and CAS Number (if available)	2. Mark "X"			3. Effluent							4. Units		5. Intake (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. Maximum Daily Value		b. Max. 30-Day Value (if available)		c. Long Term Avrg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avrg. Value		b. No of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS Fraction - Acid Compounds Contd.															
8A. P-Chloro-M-Cresol (59-50-7)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
9A. Pentachlorophenol (87-86-5)	X			<50	<113					1	µg/L	lb/day	<50	<110	1
10A. Phenol (108-95-2)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
11A. 2,4,5-Trichloro-phenol (88-06-2)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
GC/MS Fraction - Base/Neutral Compounds															
1B. Acenaphthene (83-32-9)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
2B. Acenaphtylene (208-96-8)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
3B. Anthracene (120-12-7)	X			<10	<225					1	µg/L	lb/day	<10	<23	1
4B. Benzidine (92-87-5)	X			<80	<180					1	µg/L	lb/day	<80	<180	1
5B. Benzo *(a)* Anthracene (56-55-3)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
6B. Benzo *(a)* Pyrene (50-32-8)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
7B. 3,4-Benzo-fluoranthene (205-99-2)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
8B. Benzo *(ghi)* Perylene (191-24-2)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
9B. Benzo *(k)* Fluoranthene (207-08-9)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
10B. Bis *(2-Chloroethoxy)* Methane (111-91-1)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
11B. Bis *(2-Chloroethyl)* Ether (111-44-4)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
12B. Bis *(2_Chloroisopropyl)* Ether (102-60-1)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
13B. Bis *(2-Ethylhexyl)* Phthalate (117-81-7)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1

1. Pollutant and CAS Number (if available)	2. Mark "X"			3. Effluent							4. Units		5. Intake (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. Maximum Daily Value		b. Max. 30-Day Value (if available)		c. Long Term Avrg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avrg. Value		b. No of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS Fraction - Base/Neutral Compounds Contd.															
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
15B Butyl Benzyl Phthalate (85-68-7)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
16B. 2-Chloronaphthalene (91-58-7)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
18B. Chrysene (218-01-9)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
19B. Dibenzo *(a,h)* Anthracene (53-70-3)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
20B. 1,2-Dichlorobenzene (95-50-1)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
21B. 1,3-Dichlorobenzene (541-73-1)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
22B. 1,4-Dichlorobenzene (106-46-7)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
23B. 3,3'-Dichlorobenzidine (92-94-1)	X			<20	<45					1	µg/L	lb/day	<20	<46	1
24B. Diethyl Phthalate (84-66-2)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
25B. Dimethyl Phthalate (131-11-3)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
26B. Di-N-Butyl Phthalate (84-74-2)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
27B. 2,4-Dinitrotoluene (121-14-2)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
28B. 2,6-Dinitrotoluene (606-20-2)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
29B. Di-N-Octyl Phthalate (117-84-0)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1

1. Pollutant and CAS Number (if available)	2. Mark "X"			3. Effluent							4. Units		5. Intake (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. Maximum Daily Value		b. Max. 30-Day Value (if available)		c. Long Term Avrg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avrg. Value		b. No of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS Fraction - Acid Compounds Contd.															
30B. 1,2-Diphenylhydrazine *(as Azobenzene)* (122-66-7)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
31B. Fluoranthene (206-44-0)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
32B. Fluorene (86-73-7)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
33B. Hexachlorobenzene (118-74-1)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
34B. Hexachlorobutadiene (87-68-3)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
35B. Hexachlorocyclopentadiene (77-47-4)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
36B. Hexachloroethane (67-72-1)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
37B. Indeno *(1,2,3-cd)* Pyrene (193-39-5)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
38B. Isophorone (78-59-1)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
39B. Naphthalene (91-20-3)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
40B. Nitrobenzene (98-95-9)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
41B. N-Nitrosodimethylamine (62-75-9)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
42B. N-Nitrosodi-N-Propylamine (621-64-7)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
43B. N-Nitro-sodiphenylamine (86-30-6)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
44B. Phenanthrene (85-01-8)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
45B. Pyrene (129-00-0)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1
46B. 1,2,4-Trichlorobenzene (120-82-1)	X			<10	<22.5					1	µg/L	lb/day	<10	<23	1

1. Pollutant and CAS Number (if available)	2. Mark "X"			3. Effluent							4. Units		5. Intake (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. Maximum Daily Value		b. Max. 30-Day Value (if available)		c. Long Term Avrg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avrg. Value		b. No of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS Fraction - Pesticides															
1P. Aldrin (309-00-2)			X												
2P. -BHC (319-84-6)			X												
3P. -BHC (319-85-7)			X												
4P. -BHC (58-89-9)			X												
5P. -BHC (319-86-8)			X												
6P. Chlordane (57-74-9)			X												
7P. 4,4'-DDT (50-29-3)			X												
8P. 4,4'-DDE (72-55-9)			X												
9P. 4,4'-DDD (72-54-8)			X												
10P. Dieldrin (60-57-1)			X												
11P. -Endosulfan (115-29-7)			X												
12P. -Endosulfan (115-29-7)			X												
13P. Endosulfan Sulfate (1031-07-8)			X												
14P. Endrin (72-20-8)			X												
15P. Endrin Aldehyde (7421-92-4)			X												
16P. Heptachlor (76-44-8)			X												
17P. Heptachlor Epoxide (1024-57-3)			X												
18P. PCB-1242 (53469-21-9)			X												
19P. PCB-1254 (11097-69-1)			X												
20P. PCB-1221 (11104-28-2)			X												
21P. PCB-1232 (11141-16-5)			X												
22P. PCB-1248 (12672-29-6)			X												
23P. PCB-1260 (11096-82-5)			X												

1. Pollutant and CAS Number (if available)	2. Mark "X"			3. Effluent							4. Units		5. Intake (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. Maximum Daily Value		b. Max. 30-Day Value (if available)		c. Long Term Avrg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avrg. Value		b. No of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS Fraction - Pesticides															
24P. PCB-1016 (12674-11-2)			X												
25P. Toxaphene (8001-35-2)			X												

PLEASE PRINT OR TYPE ONLY: You may report some or all of this information on separate sheets (use the same format) instead of ompleting these pages. SEE INSTRUCTIONS.

VII INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. Pollutant	2. Effluent							3. Units		4. Intake (optional)		
	a. Max. Daily Value		b. Max. 30-day Value		c. Annual Avg. Value		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
a. Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	<5	<156					1	mg/L	lb/day			
b. Chemical Oxygen Demand (COD)	NA	—						mg/L	lb/day			
c. Total Organic Carbon (TOC)	13.4	418					1	mg/L	lb/day			
d. Total Suspended Solids (TSS)	13.7	427					1	mg/L	lb/day			
e. Total Nitrogen (as N)	0.30	9.5					1	mg/L	lb/day			
f. Total Phosphorus (as P)	<0.13	<4.1					1	mg/L	lb/day			
e. Ammonia (as N)	<0.10	<3.2					1	mg/L	lb/day			
f. Flow - actual or projected	Value 3.7		Value		Value		projected	MGD	NA	Value		
g. Flow - design	Value		Value		Value					Value		
h. Specific Conductivity	Value 44,466		Value		Value			µmhos/cm		Value		
i. Temperature (winter)	Value		Value		Value			°C		Value		
j. Temperature (summer)	Value		Value		Value 30		Projected	°C		Value		
k. pH	Min. 7	Max.8.5	Min.	Max.			12	STANDARD UNITS				

PART B - Mark "X" in column 2a for each pollutant you know or have reason to believe is present. Mark "X" in column 2b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additonal details and requirements.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						d. No. of Analyses	4. Units		5. Intake (optional)		
	a. believed present	b. believed absent	a. Maximum Daily Value		b. Max. 30-Day Value (if available)		c. Long Term Avrg. Value (if available)			a. Concentration	b. Mass	a. Long Term Avg. Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
a. Bromide (24959-67-9)	X		98	3,057					1	mg/L	lb/day	See intake	data for	D001.
b. Chlorine, Total Residual*		X	<0.05	<1.56					12	mg/L	lb/day	See intake	data for	D001.
c. Color	X		NA	NA					1	mg/L	lb/day	See intake	data for	D001.
d. Fecal Coliform	X		300	NA					1	mg/L	lb/day	See intake	data for	D001.
e. Fluoride (16984-48-8)	X		1.44	44.9					1	mg/L	lb/day	See intake	data for	D001.
f. Nitrate-Nitrite (as N)	X		<1.0	<31					I	mg/L	lb/day	See intake	data for	D001.

*During chlorination, the cooling tower blowdown valve will remain closed until the chlorine has been allowed to dissipate.

Note: The water quality values provided were calculated by doubling the concentrations of the D017 intake water (which is taken from Smith discharge canal) because of the two cycles of concentration in the cooling tower and adding the contribution from operation of the combined cycle unit. The added contributions from operation of the combined cycle have been estimated to be: total nitrogen (0.14 lb/day), total phosphorus (0.94 lb/day), ammonia (0.14 lb/day), sulfate (143 lb/day), sulfite (0.54 lb/day), and iron (0.0022 lb/day). Total suspended solids and conductivity values are engineering estimates of the cooling tower blowdown quality.
See the table of data submitted for D001 for column 5 intake values.

1. Pollutant and CAS No. (if available)	2. Mark "X"		3. Effluent						d. No. of Analyses	4. Units		5. Intake (optional)		
	a. believed present	b. believed absent	a. Maximum Daily Value (1) Concentration	a. Maximum Daily Value (2) Mass	b. Max. 30-day Value (if available) (1) Concentration	b. Max. 30-day Value (if available) (2) Mass	c. Long Term Avrg. Value (if available) (1) Concentration	c. Long Term Avrg. Value (if available) (2) Mass		a. Concentration	b. Mass	a. Long Term Average Value (1) Concentration	a. Long Term Average Value (2) Mass	b. No. of Analyses
g. Nitrogen, Total Organic (as N)	X		0.304	9.5					1	mg/L	lb/day	See intake	data for	D001.
h. Oil and Grease		X	<2.0	<6.2					1	mg/L	lb/day	See intake	data for	D001.
i. Phosphorus, Total (as P) (7723-14-0)	X		<0.13	<4.05					1	mg/L	lb/day	See intake	data for	D001.
j. Radioactivity														
(1) Alpha, Total		X	<2.0	NA					1	pCi/L	NA	See intake	data for	D001.
(2) Beta, Total		X	150 ±370	NA					1	pCi/L	NA	See intake	data for	D001.
(3) Radium, Total		X	<3.4	NA					1	pCi/L	NA	See intake	data for	D001.
(4) Radium 226, Total		X	<0.6	NA					1	pCi/L	NA	See intake	data for	D001.
k. Sulfate (as SO_4) (14808-79-8)	X		5,544	172,917					1	mg/L	lb/day	See intake	data for	D001.
l. Sulfide (as S)		X	<0.08	<2.5					1	mg/L	lb/day	See intake	data for	D001.
m. Sulfite (as SO_3) 14265-45-3)	X		1.517	47.3					1	mg/L	lb/day	See intake	data for	D001.
n. Surfactants		X	<0.20	<6.23					1	mg/L	lb/day	See intake	data for	D001.
o. Aluminum, Total (7429-90-5)	X		0.46	14.3					1	mg/L	lb/day	See intake	data for	D001.
p. Barium, Total (7440-39-3)		X	<0.02	<0.62					1	mg/L	lb/day	See intake	data for	D001.
q. Boron, Total (7440-42-8)	X		6.2	193					1	mg/L	lb/day	See intake	data for	D001.
r. Cobalt, Total (7440-48-4)		X	<0.02	<0.62					1	mg/L	lb/day	See intake	data for	D001.
s. Iron, Total (7439-89-6)	X		0.34	10.6					1	mg/L	lb/day	See intake	data for	D001.
t. Magnesium, Total (7439-95-4)	X		960	29,942					1	mg/L	lb/day	See intake	data for	D001.
u. Molybdenum, Total (7439-98-7)		X	<0.02	<0.62					1	mg/L	lb/day	See intake	data for	D001.
v. Manganese, Total (7439-96-5)		X	<0.02	<0.62					1	mg/L	lb/day	See intake	data for	D001.
w. Tin, Total (7440-31-5)		X	<0.50	<15.6					1	mg/L	lb/day	See intake	data for	D001.
x. Titanium, Total (7440-32-6)		X	<0.10	<3.1					1	mg/L	lb/day	See intake	data for	D001.

PART C - If you [redacted] primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instr[redacted]s to determine which of the GC/MS fractions you must test for. Mark "X" in column 2a for a[redacted]MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2b for each pollutant you know or have reason to believe is present. Mark "X" in column 2c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one anlysis for that pollutnat if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4,dinitrophenol, or 2-methyl-4,6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. Pollutant and CAS Number (if available)	2. Mark "X"			3. Effluent							4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value (1) Concentration	a. Maximum Daily Value (2) Mass	b. Max. 30-day Value (if available) (1) Concentration	b. Max. 30-day Value (if available) (2) Mass	c. Long Term Avrg. Value (if available) (1) Concentration	c. Long Term Avrg. Value (if available) (2) Mass	d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Average Value (1) Concentration	a. Long Term Average Value (2) Mass	b. No. of Analyses
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	X			<0.04	<1.25					1	mg/L	lb/day	See intake	data for	D001.
2M. Arsenic, Total (7723-14-0)	X			<0.02	<0.62					1	mg/L	lb/day	See intake	data for	D001.
3M. Beryllium, Total (7440-41-7)	X			<0.008	<0.25					1	mg/L	lb/day	See intake	data for	D001.
4M. Cadmium, Total (7440-43-9)	X			<0.01	<0.31					1	mg/L	lb/day	See intake	data for	D001.
5M. Chromium, Total (7440-47-3)	X			<0.02	<0.62					1	mg/L	lb/day	See intake	data for	D001.
6M. Copper, Total (7440-50-8)	X			<0.004	<0.12					1	mg/L	lb/day	See intake	data for	D001.
7M. Lead, Total (7439-92-1)	X			<0.02	<0.62					1	mg/L	lb/day	See intake	data for	D001.
8M. Mercury, Total (7439-97-6)	X			<0.0004	<0.012					1	mg/L	lb/day	See intake	data for	D001.
9M. Nichel, Total (7440-02-0)	X			<0.04	<1.25					1	mg/L	lb/day	See intake	data for	D001.
10M. Selenium, Total (7782-49-2)	X			<0.02	<0.62					1	mg/L	lb/day	See intake	data for	D001.
11M. Silver, Total (7440-22-4)	X			<0.02	<0.62					1	mg/L	lb/day	See intake	data for	D001.
12M. Thallium, Total (7440-28-0)	X			<0.02	<0.62					1	mg/L	lb/day	See intake	data for	D001.
13M. Zinc, Total (7440-66-6)	X			<0.04	<1.25					1	mg/L	lb/day	See intake	data for	D001.
14M. Cyanide, Total (57-12-5)	X			<0.02	<0.62					1	mg/L	lb/day	See intake	data for	D001.
15M. Phenols, Total	X			<0.20	<6.2					1	mg/L	lb/day	See intake	data for	D001.
DIOXIN															
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)	X			<0.01	<0.31					1	mg/L	lb/day	See intake	data for	D001.

1. Pollutant and CAS Number (if available)	2. Mark "X"			3. Effluent							4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value (1) Concentration	a. Maximum Daily Value (2) Mass	b. Max. 30-day Value (if available) (1) Concentration	b. Max. 30-day Value (if available) (2) Mass	c. Long Term Avrg. Value (if available) (1) Concentration	c. Long Term Avrg. Value (if available) (2) Mass	d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Average Value (1) Concentration	a. Long Term Average Value (2) Mass	b. No. of Analyses
GC/MS FRACTION - VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)	X			<200	<6.23					1	µg/L	lb/day	See intake	data for	D001.
2V. Acrylonitrile (107-13-1)	X			<200	<6.23					1	µg/L	lb/day	See intake	data for	D001.
3V. Benzene (71-43-2)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
4V. Bis (Chloromethyl) Ether (542-88-1)	X			NA	—					1	µg/L	lb/day	See intake	data for	D001.
5V. Bromoform (75-25-2)	X			156	4.87					1	µg/L	lb/day	See intake	data for	D001.
6V. Carbon Tetrachloride (56-23-5)	X			<10	<0.31					1	µg/L	lb/day	See intake	data for	D001.
7V. Chlorobenzene (108-90-7)	X			<10	<0.31					1	µg/L	lb/day	See intake	data for	D001.
8V. Chlorodi-bromomethane (124-48-1)	X			<10	<0.31					1	µg/L	lb/day	See intake	data for	D001.
9V. Chloroethane (75-00-3)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	X			<100	<3.1					1	µg/L	lb/day	See intake	data for	D001.
11V. Chloroform (67-66-3)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
12V. Dichloro-bromomethane (75-27-4)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
13V. Dichloro-difluoromethane (75-71-8)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
14V. 1,1-Dichloroethane (75-34-3)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
15V. 1,2-Dichloroethane (107-06-2)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
16V. 1,1-Dichloroethylene (75-35-4)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
17V. 1,2-Dichloropropane (78-87-5)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
18V. 1,3-Dichloropropylene (542-75-6)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
19V. Ethylbenzene (100-41-4)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
20V. Methyl Bromide (74-83-9)	X			<20.0	<0.62					1	µg/L	lb/day	See intake	data for	D001.
21V. Methyl Chloride (74-87-3)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.

1. Pollutant and CAS Number (if available)	2. Mark "X"			3. Effluent							4. Units		5. Intake (optional)		
	a. testing required	b. believed present	c. believed absent	a. Maximum Daily Value (1) Concentration	a. Maximum Daily Value (2) Mass	b. Max. 30-day Value (if available) (1) Concentration	b. Max. 30-day Value (if available) (2) Mass	c. Long Term Avrg. Value (if available) (1) Concentration	c. Long Term Avrg. Value (if available) (2) Mass	d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Average Value (1) Concentration	a. Long Term Average Value (2) Mass	b. No. of Analyses
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-98-2)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
24V. Tetrachloroethylene (127-18-4)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
25V. Toluene (108-88-3)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
26V. 1,2-Trans-Dichloroethylene (156-60-5)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
27V. 1,1,1-Trichloroethane (71-55-6)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
28V. 1,1,2-Trichloroethane (79-00-5)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
29V. Trichloroethylene (79-01-6)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
30V. Trichloro-fluoromethane (75-69-4)	X			<10.0	<0.31					1	µg/L	lb/day	See intake	data for	D001.
31V. Vinyl Chloride (75-01-4)	X			<20.0	<0.62					1	µg/L	lb/day	See intake	data for	D001.
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	X			<20.0	<0.62					1	µg/L	lb/day	See intake	data for	D001.
2A. 2,4-Dichlorophenol (120-83-2)	X			<20.0	<0.62					1	µg/L	lb/day	See intake	data for	D001.
3A. 2,4-Dimethylphenol (105-67-9)	X			<20.0	<0.62					1	µg/L	lb/day	See intake	data for	D001.
4A. 4,6-Dinitro-O-Cresol (534-52-1)	X			<100	<3.1					1	µg/L	lb/day	See intake	data for	D001.
5A. 2,4-Dinitrophenol (51-28-5)	X			<100	<3.1					1	µg/L	lb/day	See intake	data for	D001.
6A. 2-Nitrophenol (88-75-5)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
7A. 4-Nitrophenol (100-02-7)	X			<100	<3.1					1	µg/L	lb/day	See intake	data for	D001.

1. Pollutant and CAS Number (if available)	2. Mark "X"			3. Effluent							4. Units		5. Intake (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. Maximum Daily Value		b. Max. 30-Day Value (if available)		c. Long Term Avrg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avrg. Value		b. No of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS Fraction - Acid Compounds Contd.															
8A. P-Chloro-M-Cresol (59-50-7)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
9A. Pentachlorophenol (87-86-5)	X			<100	<3.1					1	µg/L	lb/day	See intake	data for	D001.
10A. Phenol (108-95-2)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
11A. 2,4,5-Trichloro-phenol (88-06-2)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
GC/MS Fraction - Base/Neutral Compounds															
1B. Acenaphthene (83-32-9)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
2B. Acenaphtylene (208-96-8)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
3B. Anthracene (120-12-7)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
4B. Benzidine (92-87-5)	X			<160	<5.0					1	µg/L	lb/day	See intake	data for	D001.
5B. Benzo *(a)* Anthracene (56-55-3)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
6B. Benzo *(a)* Pyrene (50-32-8)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
7B. 3,4-Benzo-fluoranthene (205-99-2)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
8B. Benzo *(ghi)* Perylene (191-24-2)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
9B. Benzo *(k)* Fluoranthene (207-08-9)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
10B. Bis *(2-Chloroethoxy)* Methane (111-91-1)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
11B. Bis *(2-Chloroethyl)* Ether (111-44-4)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
12B. Bis *(2_Chloroisopropyl)* Ether (102-60-1)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
13B. Bis *(2-Ethylhexyl)* Phthalate (117-81-7)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.

1. Pollutant and CAS Number (if available)	2. Mark "X"			3. Effluent							4. Units		5. Intake (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. Maximum Daily Value		b. Max. 30-Day Value (if available)		c. Long Term Avrg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avrg. Value		b. No of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS Fraction - Base/Neutral Compounds Contd.															
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
15B Butyl Benzyl Phthalate (85-68-7)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
16B. 2-Chloronaphthalene (91-58-7)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
18B. Chrysene (218-01-9)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
19B. Dibenzo *(a,h)* Anthracene (53-70-3)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
20B. 1,2-Dichlorobenzene (95-50-1)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
21B. 1,3-Dichlorobenzene (541-73-1)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
22B. 1,4-Dichlorobenzene (106-46-7)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
23B. 3,3'-Dichlorobenzidine (92-94-1)	X			<40	<1.25					1	µg/L	lb/day	See intake	data for	D001.
24B. Diethyl Phthalate (84-66-2)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
25B. Dimethyl Phthalate (131-11-3)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
26B. Di-N-Butyl Phthalate (84-74-2)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
27B. 2,4-Dinitrotoluene (121-14-2)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
28B. 2,6-Dinitrotoluene (606-20-2)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
29B. Di-N-Octyl Phthalate (117-84-0)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.

1. Pollutant and CAS Number (if available)	2. Mark "X"			3. Effluent							4. Units		5. Intake (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. Maximum Daily Value		b. Max. 30-Day Value (if available)		c. Long Term Avrg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avrg. Value		b. No of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS Fraction - Acid Compounds Contd.															
30B. 1,2-Diphenylhydrazine *(as Azobenzene)* (122-66-7)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
31B. Fluoranthene (206-44-0)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
32B. Fluorene (86-73-7)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
33B. Hexachlorobenzene (118-74-1)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
34B. Hexachlorobutadiene (87-68-3)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
35B. Hexachlorocyclopentadiene (77-47-4)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
36B. Hexachloroethane (67-72-1)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
37B. Indeno *(1,2,3-cd)* Pyrene (193-39-5)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
38B. Isophorone (78-59-1)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
39B. Naphthalene (91-20-3)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
40B. Nitrobenzene (98-95-9)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
41B. N-Nitrosodimethylamine (62-75-9)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
42B. N-Nitrosodi-N-Propylamine (621-64-7)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
43B. N-Nitro-sodiphenylamine (86-30-6)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
44B. Phenanthrene (85-01-8)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
45B. Pyrene (129-00-0)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.
46B. 1,2,4-Trichlorobenzene (120-82-1)	X			<20	<0.62					1	µg/L	lb/day	See intake	data for	D001.

1. Pollutant and CAS Number (if available)	2. Mark "X"			3. Effluent							4. Units		5. Intake (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. Maximum Daily Value		b. Max. 30-Day Value (if available)		c. Long Term Avrg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avrg. Value		b. No of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS Fraction - Pesticides															
1P. Aldrin (309-00-2)			X												
2P. -BHC (319-84-6)			X												
3P. -BHC (319-85-7)			X												
4P. -BHC (58-89-9)			X												
5P. -BHC (319-86-8)			X												
6P. Chlordane (57-74-9)			X												
7P. 4,4'-DDT (50-29-3)			X												
8P. 4,4'-DDE (72-55-9)			X												
9P. 4,4'-DDD (72-54-8)			X												
10P. Dieldrin (60-57-1)			X												
11P. -Endosulfan (115-29-7)			X												
12P. -Endosulfan (115-29-7)			X												
13P. Endosulfan Sulfate (1031-07-8)			X												
14P. Endrin (72-20-8)			X												
15P. Endrin Aldehyde (7421-92-4)			X												
16P. Heptachlor (76-44-8)			X												
17P. Heptachlor Epoxide (1024-57-3)			X												
18P. PCB-1242 (53469-21-9)			X												
19P. PCB-1254 (11097-69-1)			X												
20P. PCB-1221 (11104-28-2)			X												
21P. PCB-1232 (11141-16-5)			X												
22P. PCB-1248 (12672-29-6)			X												
23P. PCB-1260 (11096-82-5)			X												

1. Pollutant and CAS Number (if available)	2. Mark "X"			3. Effluent							4. Units		5. Intake (optional)		
	a. Testing Required	b. Believed Present	c. Believed Absent	a. Maximum Daily Value		b. Max. 30-Day Value (if available)		c. Long Term Avrg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long Term Avrg. Value		b. No of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
GC/MS Fraction - Pesticides															
24P. PCB-1016 (12674-11-2)			X												
25P. Toxaphene (8001-35-2)			X												

VIII POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item VII-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or by-product?

__ YES (list all such pollutants below) X NO (go to IX)

IX BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

X YES (identify the test(s) and describe their purposes below) __ NO (go to Section X)

Each summer (beginning in 1993), Gulf conducts a 96-hour static screening toxicity test on effluent from Plant Smith. The testing, which has been for informational purposes only, has shown no evidence of toxicity.

X CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?

X YES (list the name, address, telephone number, and certification number of, and pollutants analyzed by each such laboratory or firm below)

__ NO (go to Section XI)

A. Name	B. Address	C. Telephone (area code & no.)	D. Pollutants Analyzed (list)
Savannah Laboratories & Environmental Services, Inc. Florida DHRS Certification Nos. E87089, E81055, DEP CQAP No. 890142G	900 Lakeside Drive Mobile, Alabama 36693	334-666-6633	All parameters analyzed by Savannah except for pH, TRC, and temperature. pH and TRC and temperature based on historical data. NOTE: For this modification application, some 1995 data were used.

Facility I.D. Number: FL0002267

XI CONNECTION TO REGIONAL POTW

A. Indicate the relationship between this project and area regional planning for wastewater treatment. List steps to be taken for this industrial wastewater facility to become part of an area-wide wastewater treatment system.

Wastewater treatment is done on-site. Since Plant Smith is in a remote, rural area and there are no POTW's in the area to connect to.

XII-A CERTIFICATIONS FOR NEW OR MODIFIED FACILITIES

This is to certify the engineering features of this pollution control project have been designed by me and found to be in conformity with sound engineering principles, applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules of the Department. It is also agreed that the undersigned, if authorized by the owner, will furnish the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Gregory N. Terry
Signature

Gregory N. Terry
Name (please type)

(Affix Seal)

Gulf Power Company
Company Name

Address Gulf Power Company
One Energy Place
Pensacola, Florida 32520-0328

Florida Registration No.: PE 52786

Telephone No:: (850) 429-2381

Date 05/28/1999

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 properly gather and evaluate 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 G. Moore Vice President of Power Generation and Transmission
Name & Official Title (Please type or print)

Robert G. Moore
Signature

(850) 444-6383
Telephone No. (area code & No.)

5/27/99
Date Signed

XII-B CERTIFICATIONS FOR PERMIT RENEWALS

This is to certify the engineering features of this pollution control project have been examined by me and found to be in conformity with sound engineering principles, applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules of the Department.

Signature	Company Name
	Address
Name (please type)	
(Affix Seal)	Florida Registration No.:
	Telephone No::
	Date

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 properly gather and evaluate 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.

Name & Official Title (Please type or print)	Signature
Telephone No. (area code & No.)	Date Signed

DEP Form 62-620.910(5)
Effective November 29, 1994

APPENDIX 10.2.6

WATER USE PERMIT

MODIFICATION APPLICATION

One Energy Place
Pensacola, Florida 32520
850 444 6111

GULF POWER
A SOUTHERN COMPANY

May 27, 1999

Mr. Lawrence A. Gordon, P.G.
Associate Hydrologist
ATTN: Consumptive Use - Division of Resource Regulation
Northwest Florida Water Management District
81 Water Management Drive
Havana, Florida 32333

RE: Consumptive Use Permit Modification for Plant Lansing Smith, Southport, Florida

Dear Mr. Gordon:

Enclosed please find the application for a modification to the existing consumptive use permit number S850073-System, for surface water (North Bay) and groundwater (Floridan Aquifer) at Plant Lansing Smith. This document includes extensive groundwater modeling utilizing two models entitled MODFLOW and SHARP. The calibration of the MODFLOW model was previously discussed with the District at our last meeting.

The current permitted amount that is allowed to be withdrawn from the Floridan Aquifer is 0.7 million gallons per day (MGD). We are currently proposing to increase consumptive uses of groundwater to a total of 1.2 MGD. As illustrated in our modeling report, this consumptive rate does not adversely affect adjacent well operators and does not cause a significant impact to the Floridan Aquifer.

In a previous submittal on March 22, 1999 we submitted slug test results and also pump test results for the surficial aquifer at Plant Smith. As illustrated by that data, the surficial aquifer is unsuitable for our water needs at this plant.

Well #4, which is currently included in our existing permit, is scheduled to be installed in October 1999. The proposed location of the new well, as indicated on the enclosed well location map, approximately 8000 feet north of the existing plant site. The new well site will be on our transmission corridor and adjacent to County road 2300. We have provided notification to the adjacent property owner, St. Joe Paper Company (Arvida), and they did not have any objections to the installation and operation of this well. As discussed in the modeling report (enclosed), and as discussed in our meetings, the installation and operation of this well will help Gulf Power Company (Gulf) meet the future demand for power in Northwest Florida.

In reference to surface water withdrawals, the permit application includes no increases for the next five years. We are currently permitting a new combined cycle generating unit which will utilize once-through cooling water already covered by our consumptive use permit. This is one of the conservation measures that we have undertaken at Gulf. In addition, we currently re-circulate water from our on-site ash pond to reduce consumptive usage of groundwater.

If you should have any questions regarding this permit application, please feel free to give me a call at (850) 444-6573.

Sincerely,

Richard "Mike" Markey, P.G.
Environmental Affairs

Enclosures

Cc: Gulf Power Company
Rachel Allen Terry
John Chappell
Kim Flowers
Doug Helms
Stan Houston, P.E.
Joe Neese
Tom Turk
Jim Vick

SCS - Birmingham
Steve Bearce, P.G.

NWFWMD
Alan Baker

C:\nw\cuppermi.doc

CONSUMPTIVE USE PERMIT
Application for Other Uses

District Use Only

CUPA #: _____
Color: White

Northwest Florida Water Management District
Route 1, Box 3099, Havana, FL 32333-9700 (850) 539-5999 (Suncom) 771-2080

SECTION I - *INSTRUCTIONS TO THE APPLICANT*

1. Type or print in INK.
2. Please submit TWO (2) COPIES of this application and all other submitted materials (letters, etc.).
3. A checklist is provided on page 6.

SECTION II - *GENERAL INFORMATION*

1. **TYPE OF APPLICATION:**

   ☐ New (Proposed) ☐ Unpermitted (Existing) ☒ Modification ☒ Renewal

2. **WATER USE PERMIT NUMBER** (if application is for renewal or modification): S850072

3. **APPLICANT** (Complete legal name in which permit should be issued)

   NAME: Gulf Power Company - Plant Lansing Smith

   ADDRESS: One Energy Place

   CITY, STATE, ZIP: Pensacola, FL 32520-0328

   DAY PHONE: 850.444.6127 NIGHT PHONE: 850.887.7680 (emergency pager)

   Applicant is: ☒ Owner ☐ Lessee ☐ Other (explain) _____

4. **AGENT OR CONSULTANT** Address all correspondence to the person below? ☒ Yes ☐ No

   NAME: Rachel A. Terry / Gulf Power Company

   ADDRESS: One Energy Place

   CITY, STATE, ZIP: Pensacola, FL 32520-0328

   DAY PHONE: 850.444.6127 NIGHT PHONE: 850.887.7480 (emergency pager)

5. **OWNER** (IF OTHER THAN APPLICANT)

   NAME: _____

   ADDRESS: _____

   CITY, STATE, ZIP: _____

   DAY PHONE: _____ NIGHT PHONE: _____

SECTION III - *PROPERTY CONTROL*

Is the PROPERTY AT THE WITHDRAWAL POINT(S) owned or leased?
☒ Owned ☐ Leased

If leased, specify expiration date and whether it is renewable.

Lease Expiration Date: _____ Renewable? ☐ Yes ☐ No

If requested, a copy of the current lease (signed by the property owner) detailing the lease arrangement and the duration of the lease must be submitted.

SECTION IV - *CLASSIFICATION*

Check applicable classification:

- ☐ Aesthetic Use
- ☐ Aquifer Remediation
- ☐ Commercial
- ☐ Dewatering
- ☐ Diversion and Impoundment (into Non-District Facilities)
- ☐ Domestic Use
- ☐ Essential Use
- ☐ Heating and/or Cooling
- ☐ Industrial Use
- ☐ Mining
- ☐ Navigation
- ☐ Other Outside Use
- ☐ Perishable Food Processing
- ☒ Power Production
- ☐ Sanitation Use
- ☐ Soil Flooding
- ☐ Water Based Recreation Use
- ☐ Other (explain): _____

Power production includes minor domestic and drinking water uses.

SECTION V - *CONSUMPTIVE WATER USE INFORMATION*

1. **ANNUAL WATER USE**

WATER USAGE	PRESENT (GPD)	PROJECTED 5 YEARS (GPD)	PROJECTED 7 YEARS (GPD)	PROJECTED 10 YEARS (GPD)
AVERAGE DAILY RATE (ADR)	700,000	1,200,000	1,250,000	1,440,000
MAXIMUM DAILY RATE (MDR)	2,880,000	2,880,000	3,600,000	3,600,000
MAXIMUM MONTHLY RATE (MMR)	21,700,000	37,200,000	38,750,000	44,640,000

MGPD = Million Gallons Per Day

2. **USE OF RECYCLED AND/OR RECLAIMED WATER**

A. Is **RECYCLED RUNOFF WATER** (e.g., rainfall runoff) being utilized? ☒ Yes ☐ No
If yes, please describe use, including average daily, maximum daily, and maximum monthly volumes.

See Attachment A

B. Is **RECLAIMED WATER** (treated wastewater) being utilized? ☒ Yes ☐ No
If yes, complete Items 1 - 3 below.

1. Has approval been received from the Department of Environmental Protection for all existing and proposed reuse projects? ☒ Yes ☐ No

2. Volumes of any **RECLAIMED WATER** storage ponds on site:

Pond ID	Storage Volume (gal)
Ash Pond	43,837,000*

* As of December 1998. This volume can decrease as ash is deposited in the pond.
* See Attachment A.

3. **RECLAIMED WATER** sources and volumes provided (attach additional sheets if necessary).

VOLUME OF RECLAIMED WATER PROVIDED (MGD)	RECLAIMED WATER SOURCES		
	WASTEWATER UTILITY NAME:	WASTEWATER UTILITY NAME:	WASTEWATER UTILITY NAME:
	1. N/A (on-site domestic plant)	2.	3.
PRESENT AVERAGE	Approx. 3,000 GPD		
5YEAR AVERAGE	Approx. 3,000 GPD		
7YEAR AVERAGE			
10YEAR AVERAGE			
LEVEL OF TREATMENT	Secondary Treatment		

N/A = Not Applicable

SECTION VI - *REQUESTED WITHDRAWAL AMOUNTS*

1. **APPLYING FOR GROUND WATER?** ☒ Yes ☐ No

   A. Total GROUND WATER amount requested (APPLY FOR TOTAL SYSTEM USAGE):

   (1) Average Daily Rate of Withdrawal (ADR) 1,200,000 Gallons Per Day*

   (2) Maximum Daily Rate of Withdrawal (MDR) 2,880,000 Gallons Per Day**

   (3) Maximum Monthly Rate of Withdrawal (MMR) 37,200,000 Gallons Per Month

   (4) Number of **Consecutive** Days MDR is to be pumped. 3 Days (Typically 3 days) per week

   * Total yearly water use divided by 365 days.
   ** Maximum amount of water requested per 24 hours - cannot exceed system pump capacity.

   B. WITHDRAWAL FACILITY

   (1) Total Number of Existing Wells in Use: 3

   (2) Total Number of Existing Wells not in Use: 0

   (3) Total Number of Proposed Wells: 1 (well to be installed prior to 12/1/99)
   NOTE: This well is already covered by the existing Consumptive Use Permit.

2. **APPLYING FOR SURFACE WATER?** ☒ Yes ☐ No

   A. Total SURFACE WATER amount requested (APPLY FOR TOTAL SYSTEM USAGE):

   (1) Average Daily Rate of Withdrawal (ADR) 274,000,000 Gallons Per Day*

   (2) Maximum Daily Rate of Withdrawal (MDR) 274,000,000 Gallons Per Day**

   (3) Maximum Monthly Rate of Withdrawal (MMR) 8,494,000,000 Gallons Per Month

   (4) Number of **Consecutive** Days MDR is to be pumped. 7 Days (Typically 3 days) per week

   * Total yearly water use divided by 365 days.
   ** Maximum amount of water requested per 24 hours - cannot exceed system pump capacity.

   B. WITHDRAWAL FACILITY

   (1) Total Number of Existing Withdrawal Facilities: 4

   (2) Total Number of Proposed Withdrawal Facilities: 0

   (3) Name of Creek, Stream, River, Lake, or Impoundment: North Bay via Alligator Bayou

3. Provide calculations that support the requested average daily rate (ADR), maximum daily rate (MDR), and maximum monthly rate (MMR) of withdrawals (site references, metered reports, attach additional sheets if necessary):

   (ADR): Groundwater: current needs = 0.7MGPD (annual average daily). Groundwater needs in 2001 will be 1MGD, with an increase 1.2MGD by 2003 through the end of the permit. Existing and new requirements = 1.2MGD. Surface Water: 47,400 GPM X 1440 min/day = 273,024,000 (assume 274MGD).

   (MDR): Groundwater: 4 wells X 500 gal/min. X 1440 min./day = 2,880,000GPD
   Surface Water: 4 intake pumps X 47,400 gal./min. X 1440 min./day = 273,024MGD (assume 274MGD).

   (MMR): Groundwater: 1,200,000GPD X 31 days/month = 37.2MGD
   Surface Water: 274MGD X 31 = 8494MGD.

SECTION VII - *FACILITY INFORMATION*

1. GROUND WATER WITHDRAWAL TABLE (Please complete each item)

I. D. NUMBER	FLORIDA UNIQUE I. D NUMBER *	DIAMETER (INCHES)	TOTAL DEPTH	CASED DEPTH	PUMP GPM	PUMP H. P.	PROPOSED EXISTING?	AQUIFER SYSTEM	FLOW METER YES/NO?	SECTION AND 1/4 SECTION	TOWNSHIP	RANGE
LSGP #1	N/A	18"	370'	(1) 148'	500	50	E	FL	N	SE/4 S 36	25	15W
LSGP #2	N/A	18"	307	(2) 95'	500	50	E	FL	N	SE/4 S 36	25	15W
LSGP #3	N/A	14"	400	(3) 150'	500	50	E	FL	N	SE/4 S 36	25	15W
LSGP #4	N/A	18"	300'	100'	500	50	P**	FL	N	NE/4 S 25	25	15W

* If available. FL = Floridan Aquifer (1) open hole 148-370' (2) open hole 95-307'
(3) open hole 150-400' **Well #4 already covered by existing permit.

2. SURFACE WATER WITHDRAWAL TABLE (Please complete each item) N/A=Not Available.

I. D. NUMBER	INTAKE DIAMETER	PUMP GPM	PUMP H. P.	PROPOSED EXISTING?	WATER SOURCE?	VOLUME (AC/FT) OF POND/LAKE	FLOW METER YES/NO?	SECTION AND 1/4 SECTION	TOWNSHIP	RANGE	LATITUDE	LONGITUDE
LSGP 1A/NB	11'8"	47400	50	Exist.	North Bay	86426	No	SW/4 S 36	2S	15W	30°16' 05"	85° 42'05"
LSGP 1B/NB	11'8"	47400	50	Exist.	North Bay	86426	No	SW/4 S 36	2S	15W	30°16' 05"	85° 42'05"
LSGP 2A/NB	11'8"	47400	50	Exist.	North Bay	86426	No	SW/4 S 36	2S	15W	30°16' 05"	85° 42'05"
LSGP 2B/NB	11'8"	47400	50	Exist.	North Bay	86426	No	SW/4 S 36	2S	15W	30°16' 05"	85° 42'05"
NB = North Bay												

SECTION VIII - *SITE WITHDRAWAL INFORMATION*

1. WITHDRAWAL LOCATION Lansing Smith Electric Generating Plant
   4300 County Road 2300, Southport, FL 32409

   ADDRESS: _____

   COUNTY, UNIT, BLOCK, LOT: Bay

2. Number of acres: 1383.47 Owned _____ Leased

3. Describe the facility(ies) to which water is supplied: Electric generating plant

4. If the application is for a multiple well system, a well 4 inches or larger in diameter, or a surface water withdrawal, then submit a United States Geological Survey 7 - 1/2 minute topographic quad map (or copy) that delineates the following items:

   A. Name of the quad map used (Example: QUINCY QUAD). Southport Quad.

   B. Property boundaries. See attached map

SECTION VIII - *SITE WITHDRAWAL INFORMATION* (CONTINUED)

C. Approximate location of all existing AND proposed wells and/or surface water withdrawal pumps - with identification numbers (e.g. Well #1, Pump #1, etc.).

D. Surface water management ponds used for withdrawal.

E. Potential impacts to wetlands MAY require the submittal of a recent aerial map having a minimum scale of 1" = 2,000 feet.

5. Provide the dimensions and volumes (acre-feet) of all surface water ponds/lakes used for withdrawal purposes (e.g. surface acreage x average pond depth = acre-feet).

SECTION IX - *MODIFICATION AND PERMIT COMPLIANCE*

If this application is for a modification, please describe the modification requested and the reason the modification is necessary. For modification and renewal requests, describe the applicant's compliance with **EACH** of the conditions of the existing permit:

MODIFICATION DESCRIPTION: Gulf Power Company proposes to increase water use from 0.7 MGD to 1.2MGD by the end of the anticipated permit period (5 years).

PERMIT CONDITION COMPLIANCE: Gulf Power Company has been in compliance with (1) all permitted water usage requirements/limitations and, (2) significant saline water intrusion has not occurred at the site. Usage requirements for the current permit are: average/maximum groundwater use of 700,000/2,880,000GPD and surface water withdrawals of less than the permit average and maximum of 264,600,000GPD and 274,000,000GPD.

SECTION X - *IMPACTS*

Please attach a detailed description of the anticipated impacts on the resource and on existing legal users which could be impacted by the proposed use. The District shall require any other necessary information in accordance with the provisions of Section 40A-2.101(3), Florida Administrative Code and Chapter 373.223, Florida Statutes. See attached modeling and report (Attachment B)

SECTION XI - *CONSERVATION*

Provide a description of present and planned activities undertaken to conserve water and minimize off-site surface water runoff (attach additional sheets if necessary): Water is recycled from the on-site ash pond for a variety of uses such as: washing precipitators, backup water supply for the fire protection system, sluicing ash from the plant to the ash pond, controlling fugitive emissions (dust control) on plant roads, equipment seal water, and for general equipment wash down water. See Attachment C.

SECTION XII - *APPLICANT CERTIFICATION*

I hereby certify that the information contained herein is true and accurate and that I have legal authority to undertake the activities described herein and execute this application.

Further, I authorize Rachel A. Terry to act as my agent for permit application coordination.

SECTION XII - *APPLICANT CERTIFICATION* (CONTINUED)

James O Vick — APPLICANT SIGNATURE

5/27/99 — DATE

I hereby certify that I am the authorized agent of the applicant.

Rachel Terry — AGENT SIGNATURE

5-27-99 — DATE

I hereby certify that the applicant has sufficient legal control of the property described in this application.

James O Vick — PROPERTY OWNER SIGNATURE

5/27/99 — DATE

APPLICANT CHECKLIST

1.	Appropriate permit processing fee (check only)	☒ Attached*		
2.	Complete legal name was provided in Section II	☒ Provided		
3.	Copy of legal description (deed, lease) **See Attachment D**	☒ Attached	☐ N/A	
4.	S. C. S. conservation plan	☐ Attached	☐ Pending	☒ N/A
5.	S. C. S. irrigation and water management plan	☐ Attached	☐ Pending	☒ N/A
6.	U. S. G. S. 7 - 1/2 minute topographic map	☒ Attached		
7.	Description of anticipated impact(s)	☒ Attached		
8.	For aquifer remediation projects, enclose the summary of the remedial action plan	☐ Attached	☒ N/A	
9.	Two (2) copies of all materials	☒ Attached		

* All permit processing fees are non-refundable and are based upon the average daily withdrawal rate (ADR). To determine one's permit processing fee - compare the requested ADR amount(s) of Section VI to the matrix below:

AVERAGE DAILY WITHDRAWAL RATES (ADR) GALLONS	PROCESSING FEE
Less than 25,000 gallons per day, average	$ 100.00
25,000 to 99,999 gallons per day, average	$ 250.00
100,000 to 499,999 gallons per day, average	$ 500.00
500,000 to 999,999 gallons per day, average	$ 1,000.00
1,000,000 to 1,999,999 gallons per day, average	$ 2,000.00
2,000,000 gallons or more per day, average	$ 3,000.00
Permit Transfer	$ 50.00
Temporary Permit (in addition to the fees identified above)	$ 50.00

Please address all correspondence to the following address:

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT
ATTN: Consumptive Use - Division of Resource Regulation
Route 1, Box 3099
Havana, Florida 32333-9700
Telephone: (850) 539-5999
Suncom: (850) 771-2080


Warren Bayou
Pumping Station
Well #4
G.P.Co. Property Line
Newman Branch
Smith 3 Cooling Water Intake & Discharge
Smith 1 & 2 Cooling Water Discharge
Radio Tower
Oil Tanks
Substa
Well #1
Well #2
Powerplant
Well #3
Waste Pond
Conveyors
Smith 1 & 2 Cooling Water Intake
Alligator Bayou
Johnson Bayou
Juno Bayou 2
Newman Bayou
Sheephead Bayou
Fannin Bayou
Boat Ramp
Southport
Sheep
NORTH
Haven Point
Athletic Fields
Pier
Little Oyster Bar Point
U S MILITARY RESE
Light
Mud Bayou
T 2 S
T 3 S
R 15 W
R 14 W
BAY
N
W
E
S
2000 1000 0 1000 2000
SCALE: 1 INCH = 2000 FEET
ONE ENERGY PLACE
PENSACOLA, FL. 32520-0323
GULF POWER
A SOUTHERN COMPANY
SUBJECT: Plant Smith
DETAILS: Vicinity Map for Consumptive Use Permit from Northwest Florida Water Management District
FIELD WORK COMPLETION DATE: N/A
DRAWN BY: G. E. G. DATE: 5/24/99 CHKD BY: M. M. DATE: 5/24/99
SCALE: 1" = 2000' REV. NO. N/A DATE REV. N/A
SHEET 1 OF 1 SHEETS
B-WMD-1001

ATTACHMENT A
DESCRIPTION OF RECYCLED STORMWATER AND RECLAIMED WATER USAGE

SECTION V – CONSUMPTIVE WATER USE INFORMATION

2. USE OF RECYCLE AND/OR RECLAIMED WATER

A. Is RECYCLED RUNOFF WATER (e.g. rainfall runoff) being utilized? YES

Rainfall runoff from the Smith Plant site is collected in a series of stormwater sumps and transferred to an on-site ash pond. This pond is used for the storage of ash generated from the combustion of coal in the power plant. Water from the ash pond is utilized in a recycle system which sluices ash from the plant to the pond.

B. Is RECLAIMED WATER being utilized? YES

Treated effluent from an on-site 3,000 GPD capacity domestic wastewater treatment plant is discharged into the same ash pond mentioned in paragraph 2.A above. This domestic plant is permitted as internal Outfall D01A in the Smith NPDES Permit FL0002267. The ash pond is permitted as Outfall D01C.

ATTACHMENT B
MODFLOW AND SHARP
MODELING REPORT

REPORT ATTACHED IN
ATTACHMENT 10.5-G, APPENDIX 10.5

ATTACHMENT C
FURTHER DESCRIPTION OF
WATER CONSERVATION EFFORTS

SECTION XI (Continued):

As described in Section V (and Attachment A), stormwater from the industrial portions of our site is collected and sent to the ash pond. This water is then used in a recycle system which transfers ash from the plant to the ash pond. Water from the ash pond is also used for a variety of plant operation tasks as described previously in this section. In addition, water drained from the boilers is routed to the ash pond for re-use.

The proposed combined cycle electric generating unit at Plant Smith is designed to conserve water. It will utilize non-contact cooling water which is already covered in our existing consumptive use permit. As a result, there will not be a need for any additional surface water withdrawal from North Bay. The proposed combined cycle unit will involve collecting approximately 5,150 gallons per minute from the existing discharge canal for Smith Units 1 and 2. This water will be utitlized as makeup cooling water for the combined cycle operation.

ATTACHMENT D
COPY OF LEGAL DESCRIPTION
WARRANTY DEED

File No. 3497

OFFICIAL RECORDS BOOK 44 PAGE 282

QUITCLAIM WARRANTY DEED

THIS INDENTURE, Made this 6th day of July A. D. 1961, between ST. JOE PAPER COMPANY, a corporation created and existing under the laws of the State of Florida, with principal office at Jacksonville, Florida, party of the first part, and GULF POWER COMPANY, a corporation created and existing under the laws of the State of Maine, with principal office at Pensacola, Florida, party of the second part:

WITNESSETH: That the said party of the first part, for and in consideration of the sum of Ten Dollars and other valuable considerations to it in hand paid, the receipt whereof is hereby acknowledged, has granted, bargained, sold, aliened, remised, released, conveyed and confirmed, and by these presents doth grant, bargain, sell, alien, remise, release, convey and confirm unto the said party of the second part, and its successors and assigns, forever; subject to letter dated June 30, 1961, from Gulf Power Company to St. Joe Paper Company. RCP

A. (300-foot strip of land)

A strip of land three hundred feet (300') wide, being one hundred fifty feet (150') on each side of a centerline and a continuation thereof, through, over and across the following lands in Bay County, Florida, to-wit:

The South Half ($S\frac{1}{2}$) of the Northwest Quarter ($NW\frac{1}{4}$), and the Northeast Quarter ($NE\frac{1}{4}$) of the Northwest Quarter ($NW\frac{1}{4}$) of Section Thirty-six (36); the Southeast Quarter ($SE\frac{1}{4}$) of the Southwest Quarter ($SW\frac{1}{4}$), the West Half ($W\frac{1}{2}$) of the Southeast Quarter ($SE\frac{1}{4}$), the South Half ($S\frac{1}{2}$) of the Northeast Quarter ($NE\frac{1}{4}$), and the Northeast Quarter ($NE\frac{1}{4}$) of the Northeast Quarter ($NE\frac{1}{4}$) of Section Twenty-five (25); the Southeast Quarter ($SE\frac{1}{4}$) of the Southeast Quarter ($SE\frac{1}{4}$) of Section Twenty-four (24), all being in Township Two (2) South, Range Fifteen (15) West; the West Half ($W\frac{1}{2}$) of the Southwest Quarter ($SW\frac{1}{4}$), the Northeast Quarter ($NE\frac{1}{4}$) of the Southwest Quarter ($SW\frac{1}{4}$), the South Half ($S\frac{1}{2}$) of the Northwest Quarter ($NW\frac{1}{4}$), the Northeast Quarter ($NE\frac{1}{4}$) of the Northwest Quarter ($NW\frac{1}{4}$), and the Northwest Quarter ($NW\frac{1}{4}$) of the Northeast Quarter ($NE\frac{1}{4}$) of Section Nineteen (19); the Southeast Quarter ($SE\frac{1}{4}$) of the Southwest Quarter ($SW\frac{1}{4}$), the South Half ($S\frac{1}{2}$) of the Southeast Quarter ($SE\frac{1}{4}$), and the Northeast Quarter ($NE\frac{1}{4}$) of the Southeast Quarter ($SE\frac{1}{4}$) of Section Eighteen (18); the West Half ($W\frac{1}{2}$) of the Southwest Quarter ($SW\frac{1}{4}$), the Northeast Quarter ($NE\frac{1}{4}$) of the Southwest Quarter ($SW\frac{1}{4}$), the Northwest Quarter ($NW\frac{1}{4}$) of the Southeast Quarter ($SE\frac{1}{4}$), the Southwest Quarter ($SW\frac{1}{4}$) of the Southwest Quarter ($SW\frac{1}{4}$) of Northeast Quarter ($NE\frac{1}{4}$), the East Half ($E\frac{1}{2}$) of the Southwest Quarter ($SW\frac{1}{4}$) of the Northeast Quarter ($NE\frac{1}{4}$), and the Southeast Quarter ($SE\frac{1}{4}$) of the Northeast Quarter ($NE\frac{1}{4}$) of Section Seventeen (17); that part of the Southwest Quarter ($SW\frac{1}{4}$) of the Northwest Quarter ($NW\frac{1}{4}$) lying West of State Highway No. 77 in Section Sixteen (16), all being in Township Two (2) South, Range Fourteen (14) West.

FILED
1961 JUL 14 PM 4:19
BRUCE COLLINS
CLERK CIRCUIT COURT
BAY COUNTY, FLORIDA

Said centerline across the above described land being described as follows, to-wit:

Begin at a point on the South boundary of the South Half ($S\frac{1}{2}$) of the Northwest Quarter ($NW\frac{1}{4}$) of Section Thirty-six (36), Township Two (2) South, Range Fifteen (15) West, determined as follows: From the Southwest Corner of the Northwest Quarter ($NW\frac{1}{4}$) of said Section Thirty-six (36), run East along the South boundary thereof a distance of One Thousand Eight Hundred Fifty-four and Twenty-eight One Hundredths feet (1854.28'), to POINT OF BEGINNING of said centerline; from said point of beginning run North 46 degrees 04 minutes West a distance of Seven Hundred Forty and Two Tenths feet (740.2') to an angle point in said South Half ($S\frac{1}{2}$) of the Northwest Quarter ($NW\frac{1}{4}$) of said Section Thirty-six (36), from said angle point run North 27 degrees 20 minutes East across Sections Thirty-six, Twenty-five and Twenty-four (36, 25 & 24), Township Two (2) South, Range Fifteen (15) West, and Sections Nineteen and Eighteen (19 & 18), Township Two (2) South, Range Fourteen (14) West, a distance of Fourteen Thousand Four Hundred Forty-four and One Tenth feet (14,444.1') to an angle point in said Section Eighteen (18), from said angle point run North 64 degrees 08 minutes East across Sections Eighteen, Seventeen and Sixteen (18, 17 & 16), Township Two (2) South, Range Fourteen (14) West a distance of Eight Thousand Eight Hundred Forty-six and Two Tenths feet (8846.2') to State Highway No. 77 in said Section Sixteen (16).

This three hundred foot (300') wide right-of-way comprises one hundred sixty-five and five tenths (165.5) acres.

B. (100-foot strip of land)

A strip of land one hundred feet (100') wide, being fifty feet (50') on each side of a centerline and a continuation thereof, through, over and across the following lands in Bay County, Florida, to-wit:

The South Half ($S\frac{1}{2}$) of the Northwest Quarter ($NW\frac{1}{4}$) and the Northwest Quarter ($NW\frac{1}{4}$) of the Northwest Quarter ($NW\frac{1}{4}$) of Section Thirty-six (36); the Northeast Quarter ($NE\frac{1}{4}$) of the Northeast Quarter ($NE\frac{1}{4}$) of Section Thirty-five (35); the South Half ($S\frac{1}{2}$) of the Southeast Quarter ($SE\frac{1}{4}$), the North-West Quarter ($NW\frac{1}{4}$) of the Southeast Quarter ($SE\frac{1}{4}$), the North Half ($N\frac{1}{2}$) of the Southwest Quarter ($SW\frac{1}{4}$), the South Half ($S\frac{1}{2}$) of the Northwest Quarter ($NW\frac{1}{4}$) and the Northwest Quarter ($NW\frac{1}{4}$) of the Northwest Quarter ($NW\frac{1}{4}$) of Section Twenty-six (26); the East Half ($E\frac{1}{2}$) of the Northeast Quarter ($NE\frac{1}{4}$) and the Northwest Quarter ($NW\frac{1}{4}$) of the Northeast Quarter ($NE\frac{1}{4}$) of Section Twenty-seven (27); the South Half ($S\frac{1}{2}$) of the Southeast Quarter ($SE\frac{1}{4}$), the Northwest Quarter ($NW\frac{1}{4}$) of the Southeast Quarter ($SE\frac{1}{4}$), the East Half ($E\frac{1}{2}$) of the Southwest Quarter ($SW\frac{1}{4}$), the Northwest Quarter ($NW\frac{1}{4}$) of the Southwest Quarter ($SW\frac{1}{4}$), and the Southwest Quarter ($SW\frac{1}{4}$) of the Northwest Quarter ($NW\frac{1}{4}$) of Section Twenty-two (22); the East Half ($E\frac{1}{2}$) of the Northeast Quarter ($NE\frac{1}{4}$) and the Northwest Quarter ($NW\frac{1}{4}$) of the Northeast Quarter ($NE\frac{1}{4}$) of Section Twenty-one (21); the Southwest Quarter ($SW\frac{1}{4}$) of the Southeast Quarter ($SE\frac{1}{4}$) and the South Half ($S\frac{1}{2}$) of the Southwest Quarter ($SW\frac{1}{4}$) of Section Sixteen (16); the South Half ($S\frac{1}{2}$) of the Southeast Quarter ($SE\frac{1}{4}$) and the Southeast Quarter ($SE\frac{1}{4}$) of the Southwest Quarter ($SW\frac{1}{4}$) of Section Seventeen (17); the North Half ($N\frac{1}{2}$) of the Northwest Quarter ($NW\frac{1}{4}$) of Section Twenty (20); the North Half ($N\frac{1}{2}$) of the Northeast Quarter ($NE\frac{1}{4}$) and the Northwest Quarter ($NW\frac{1}{4}$) of Section

Nineteen (19), all being in Township Two (2) South, Range Fifteen (15) West; the South Half ($S\frac{1}{2}$) of the Northeast Quarter ($NE\frac{1}{4}$), the South Half ($S\frac{1}{2}$) of the Northwest Quarter ($NW\frac{1}{4}$) and the Northwest Quarter ($NW\frac{1}{4}$) of the Southwest Quarter ($SW\frac{1}{4}$) of Section Twenty-four (24); the Southeast Quarter ($SE\frac{1}{4}$) of the Northeast Quarter ($NE\frac{1}{4}$), the North Half ($N\frac{1}{2}$) of the Southeast Quarter ($SE\frac{1}{4}$), the East Half ($E\frac{1}{2}$) of the Southwest Quarter ($SW\frac{1}{4}$) and the Southwest Quarter ($SW\frac{1}{4}$) of the Southwest Quarter ($SW\frac{1}{4}$) of Section Twenty-three (23); the Southeast Quarter ($SE\frac{1}{4}$) of the Southeast Quarter ($SE\frac{1}{4}$) of Section Twenty-two (22); the North Half ($N\frac{1}{2}$) of the Northeast Quarter ($NE\frac{1}{4}$), the East Half ($E\frac{1}{2}$) of the Northwest Quarter ($NW\frac{1}{4}$) and the Southwest Quarter ($SW\frac{1}{4}$) of the Northwest Quarter ($NW\frac{1}{4}$) of Section Twenty-seven (27); the Original Government Lots 3 and 4 North of Bay, Lot 2 South of Bay and Fractional Southwest Quarter ($SW\frac{1}{4}$) of Section Twenty-eight (28); the East Half ($E\frac{1}{2}$) of the Southeast Quarter ($SE\frac{1}{4}$), the Southwest Quarter ($SW\frac{1}{4}$) of the Southeast Quarter ($SE\frac{1}{4}$) and the Southeast Quarter ($SE\frac{1}{4}$) of the Southwest Quarter ($SW\frac{1}{4}$) of Section Twenty-nine (29); the Northwest Quarter ($NW\frac{1}{4}$) of the Northeast Quarter ($NE\frac{1}{4}$), the North Half ($N\frac{1}{2}$) of the Northwest Quarter ($NW\frac{1}{4}$) and the Southwest Quarter ($SW\frac{1}{4}$) of the Northwest Quarter ($NW\frac{1}{4}$) of Section Thirty-two (32); the Southeast Quarter ($SE\frac{1}{4}$) of the Northeast Quarter ($NE\frac{1}{4}$), the East Half ($E\frac{1}{2}$) of the Southeast Quarter ($SE\frac{1}{4}$) and the Southwest Quarter ($SW\frac{1}{4}$) of the Southeast Quarter ($SE\frac{1}{4}$) of Section Thirty-one (31), all being in Township Two (2) South, Range Sixteen (16) West; the West Half ($W\frac{1}{2}$) of the Northeast Quarter ($NE\frac{1}{4}$), the East Half ($E\frac{1}{2}$) of the Northwest Quarter ($NW\frac{1}{4}$), the North Half ($N\frac{1}{2}$) of the Southwest Quarter ($SW\frac{1}{4}$) and the Southwest Quarter ($SW\frac{1}{4}$) of the Southwest Quarter ($SW\frac{1}{4}$) of Section Six (6); the Northwest Quarter ($NW\frac{1}{4}$) of the Northwest Quarter ($NW\frac{1}{4}$) of Section Seven (7), all being in Township Three (3) South, Range Sixteen (16) West.

Said centerline across the above described land being described as follows, to-wit:

Begin at a point on the South boundary of the South Half ($S\frac{1}{2}$) of the Northwest Quarter ($NW\frac{1}{4}$) of Section Thirty-six (36), Township Two (2) South, Range Fifteen (15) West, determined as follows: From the Southwest Corner of the Northwest Quarter ($NW\frac{1}{4}$) of said Section Thirty-six (36), run East along South boundary thereof a distance of One Thousand Five Hundred Seventy and Three One Hundredths feet (1570.03') to POINT OF BEGINNING of said centerline, from said point of beginning run North 46 degrees 04 minutes West across Sections Thirty-six, Thirty-five, Twenty-six, Twenty-seven, Twenty-two, Twenty-one, and Sixteen (36, 35, 26, 27, 22, 21 & 16) all being in Township Two (2) South, Range Fifteen (15) West a distance of Nineteen Thousand Four Hundred Forty-four feet (19,444') to an angle point in said Section Sixteen (16), from said angle point run North 88 degrees 07 minutes West across Sections Sixteen and Seventeen (16 & 17), Township Two (2) South, Range Fifteen (15) West a distance of Four Thousand Two Hundred Ninety-three and Nine Tenths feet (4293.9') to an angle point in said Section Seventeen (17), from said angle point run South 77 degrees 44 minutes West across Sections Seventeen, Twenty and Nineteen (17,20 & 19) all being in Township Two (2) South, Range Fifteen (15) West, and Sections Twenty-four and Twenty-three (24 & 23), Township Two (2) South, Range Sixteen (16) West, a distance of Seventeen Thousand One Hundred Sixty-five feet (17,165') to an angle point in said Section Twenty-three (23), from said angle point run South 64 degrees 42 minutes West across Sections Twenty-three, Twenty-two, Twenty-seven, Twenty-eight, Twenty-nine and Thirty-two (23, 22, 27, 28, 29 and 32), all

being in Township Two (2) South, Range Sixteen (16) West a distance of Twenty-one Thousand Five Hundred Ninety feet (21,590') to an angle point in said Section Thirty-two (32), from said angle point run South 30 degrees 18 minutes West across Sections Thirty-two and Thirty-one (32 & 31), Township Two (2) South, Range Sixteen (16) West and Sections Six and Seven (6 & 7), Township Three (3) South, Range Sixteen (16) West a distance of Eleven Thousand Twenty-nine and One Tenth feet (11,029.1') to the North boundary of the Laguna Beach Substation of Gulf Power Company in said Section Seven (7).

This one hundred foot (100') wide right-of-way comprises one hundred sixty-five and sixty-four hundredths (165.64) acres.

For use by the party of the second part, its successors and assigns, for the purpose of constructing, operating and maintaining electric transmission lines and all telegraph and telephone lines, towers, poles and appliances necessary or convenient in connection therewith from time to time upon, over and across the lands herein described, and for all counter-poise wires or other counter-poise conductors over, under and upon the lands herein described; for the transmission of electric energy over, upon and across the lands herein described, including specifically but without limiting the generality of the foregoing the right to set and maintain poles and anchors for electric transmission lines, and the necessary appurtenances for such lines over and across said lands; and with the right to install, maintain and use anchors and guy wires on land adjacent to said strips of land, only where necessary at the angle points.

TOGETHER with all the tenements, hereditaments and appurtenances, with every privilege, right, title, interest and estate, reversion, remainder and easement thereto belonging or in anywise appertaining; TO HAVE AND TO HOLD the same in fee simple, forever.

AND the said party of the first part does hereby specially warrant the title to said land and will defend the same against the lawful claims of all persons claiming by, through or under the party of the first part, but not otherwise.

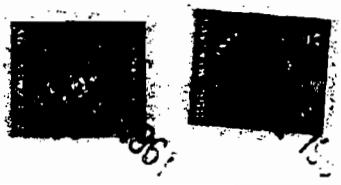
It is agreed between the parties hereto that the party of the first part shall have the right of ingress, egress and regress, over, across and upon the lands above described in carrying on forestry and silva-culture work on its lands adjoining the lands above described, so long as such passage over the lands above described by the servants, agents and employees of the party of the first part shall not interfere with the use of the lands by party of the second part in its business of constructing, maintaining and operating electric power lines upon and over said lands. The party of the first part reserves the right to construct and maintain fences on, over and across the lands herein conveyed. This right, however, shall not interfere with the rights of party of the second part as owner of the fee simple title of the lands herein conveyed or the use thereof by party of the second part, and all rights as the fee simple owner thereof, and for the purposes herein shown. This will give the party of the second part the right to cross and place gates in, as desired by party of the second part, any fences constructed by party of the first part across the lands herein conveyed.

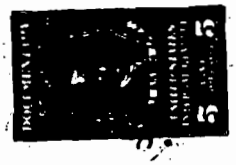
And the said party of the first part does hereby further reserve unto itself and its successors and assigns all of the oil, gas, sulphur and other minerals that might be in or under the lands hereinabove described and herein and hereby conveyed, together with the full right to explore for, mine, produce and remove said minerals from the said pieces or parcels of land in any manner not inconsistent with or that might interfere with the use by the party of the second part of the said pieces or parcels of land for the purposes conveyed. This shall not interfere with the right of the party of the second part to use the lands herein conveyed for the purposes herein set forth, that is to say, for all

purposes of its business of constructing, maintaining and operating electric power lines, and otherwise the uses as hereinbefore shown.

It is further agreed that the party of the second part shall not have the right to sell nor convey the lands above described nor any part thereof (except to an electric utility) until it shall have first offered the said land or such part thereof to the party of the first part, naming the terms of any proposed sale. The party of the first part shall have thirty days to accept or reject such terms. The sale price, however, shall not exceed the prevailing price of lands of similar character in the area where located. The offer of sale shall be by registered mail addressed to party of the first part at Tallahassee, Florida.

If, in falling, any part of a tree outside the rights of way could come within five (5) feet of any part of any electric transmission line on the lands above described, such tree is defined as a danger tree for the purposes of this instrument. It is agreed that from time to time the party of the second part, its successors or assigns, shall designate the trees which are or which may become danger trees as defined herein, and the party of the first part shall have the right to cut and remove said trees at its own cost under the supervision of the party of the second part, its successors or assigns, and trees so cut shall be the property of the party of the first part. The party of the first part shall cut and remove such danger trees within ninety (90) days after they shall have been designated as such by the party of the second part, its successors or assigns, and the party of the first part shall have been notified of such designation by written notice mailed by the party of the second part, its successors or assigns, addressed to party of the first part at Tallahassee, Florida. Upon failure of the party of the first part to cut and remove such trees within said period of time, the party of the second part, its successors or assigns, may proceed to cut the same.





IN WITNESS WHEREOF, the said party of the first part has caused these presents to be signed in its name by its Vice President, and its corporate seal to be affixed, attested by its Secretary the day and year first above written.

1961

ST. JOE PAPER COMPANY

By R. C. Brent Jr.
Vice President

Attest: Irene Walsh
Secretary

Signed, Sealed and Delivered in our Presence:

John Beall

C. L. Clark

* * * * *

STATE OF FLORIDA,

COUNTY OF DUVAL

I HEREBY CERTIFY, That on this 8th day of July, A. D. 1961, before me personally appeared R. C. Brent, Jr. and Irene Walsh, respectively Vice President and Secretary, of St. Joe Paper Company, a corporation under the laws of the State of Florida, to me known to be the individuals and officers described in and who executed the foregoing conveyance to Gulf Power Company, and severally acknowledged the execution thereof to be their free act and deed as such officers thereunto duly authorized; and that the official seal of said corporation is duly affixed thereto, and the said conveyance is the act and deed of said corporation.

WITNESS my hand and official seal, on this the day and year last aforesaid.

Juanita Driggers
Notary Public, State of Florida at Large.

My commission expires:

BAY COUNTY, FLORIDA JUL 14 1961
Filed for record at 4:19 o'clock and duly recorded. Book and page as noted above. Bruce Collins, Clerk, Circuit Court.
By [signature] D.C.