

**ENVIRONMENTAL IMPACT STATEMENT  
ON  
IMPROVING THE REGULATORY PROCESS IN SOUTHWEST FLORIDA  
LEE AND COLLIER COUNTIES, FLORIDA**

**1. PROJECT PURPOSE AND NEED**

**1.1 PROJECT LOCATION**

The project area covers approximately 400,167 hectares (988,800 acres) in Lee County and portions of Collier County on the southwest coast of Florida (**Figure 1**). The geographic area is defined as follows: the north boundary being the south shore of the Caloosahatchee River from its mouth at San Carlos Bay to the Hendry County line, a distance of approximately 54 kilometers (km) (34 miles); the east boundary being the Hendry County line to the City of Immokalee, then south along State Road 29 to the Ten Thousand Islands Area at Chokoloskee Bay; the south boundary being the Ten Thousand Islands and Marco Island; the west boundary being the coastline along the Gulf of Mexico (USACE 1998).

This study area was further subdivided into four sub-areas (zooms) referred to as Zoom A, Zoom B (also referred to as the "Hub"), Zoom C, and Zoom D (**Figure 2**). Zoom A (798 square kilometers (sq. km) (308 square miles)) is bounded on the north by the Caloosahatchee River, on the west by the Gulf of Mexico, on the east by the Lee County-Hendry County line, and on the south by the northern boundary of the Estero-Imperial Integrated Watershed. Zoom B (the "Hub") is roughly defined as the Estero-Imperial Integrated Watershed as it occurs within Lee and Collier Counties. The Estero-Imperial Integrated Watershed does extend into Hendry County, but the Hendry County portion was not considered during this process. Zoom B covers approximately 795 sq. km (307 sq. mi.). Zoom C, which encompasses 1,194 sq. km (461 sq. mi.) is roughly defined as the western portion of the Faka-Union Watershed. The western boundary is the Gulf of Mexico while the Faka-Union Canal, Miller Boulevard (part of the eastern portion of Golden Gate Estates), Winchester Strand, and Big Corkscrew Island form the eastern limits. Zoom D is defined on the south by Chokoloskee Bay, on the east by State Road 29, on the north by State Road 846, and on the west by Zoom C. Zoom D is the largest of the four areas, covering 1,246 sq. km (481 sq. mi.).

**1.2 PROJECT NEED OR OPPORTUNITY**

The State of Florida, and the study area in particular, has undergone rapid growth and development over the last twenty years. With this increased development has come a concomitant increase in the number, the scope, and the complexity of development permit applications submitted to local, County, State and Federal regulatory agencies. This situation has led to difficulty on the part of the Corps and these other agencies in, on a case-by-case basis, addressing their responsibilities under Federal and State law. Permit processing is taking longer and the environment may be receiving less protection than required by law. The subject EIS is designed to offer regulatory and planning-based remedies to these shortcomings, by seeking an effective balance between natural systems and economic stability through the examination of natural and social interactions that occur in the study area.

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**FIGURE 1. VICINITY MAP**

**Insert Figure 2**

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**FIGURE 2. ZOOM AREAS**

### **1.3 AGENCY GOAL OR OBJECTIVE**

The purpose of this effort is to establish a better foundation of information and knowledge of existing conditions and identification of future alternatives for balancing the demands of growth and conservation. The goal of this effort is a more effective, timely, streamlined, cost-conscious, objective, productive, and predictable environmental permitting process for projects within the study area. The objective is to implement permit review criteria (keyed to a map) that provide specific questions to ask and answer during the review of an application. The purpose of these measures is to facilitate efficient, timely, and appropriate planning and permitting while affording an appropriate level of review to the cumulative effects on natural resources.

This document presents several potential future landscapes, each represent the potential outcomes of future decisions on permit applications. This document reports the impacts and benefits associated with the various future outcomes. The information presented in this EIS was used to develop the permit review criteria, and an accompanying landscape map, that will be used, on individual applications, to contribute to the evaluation of the cumulative effect of the individual decision from a regional landscape perspective.

### **1.4 RELATED ENVIRONMENTAL DOCUMENTS**

The following is a list of related documents:

#### **1.4.1 NATIONWIDE PERMITS**

Certain minor activities requiring a permit from the Corps have been determined to qualify for authorization by one or more Nationwide Permits under the Corps regulatory permit program. The Nationwide Permits are issued for a period of 5 years in accordance with Section 404(e) of the Clean Water Act. In addition, activities requiring a permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 may be authorized by certain Nationwide Permits. The Nationwide Permits are issued by the Chief of Engineers for application throughout the United States.

Since the Nationwide Permits are valid for a period of 5 years, the Chief of Engineers must periodically reissue them. These actions are announced in the Federal Register (applicable announcement on December 13, 1996) and become part of the Code of Federal Regulations (33 CFR 330 and its Appendix A). The Nationwide Permit re-issuance is conducted in compliance with the National Environmental Policy Act (an Environmental Assessment is prepared by the Chief of Engineers). In addition, the Nationwide Permits comply with other applicable environmental requirements.

#### **1.4.2 INDIVIDUAL PERMITS**

Activities requiring an individual Department of the Army permit from the U.S. Army Corps of Engineers, would be evaluated on a case-by-case basis. These individual permit actions would normally require preparation of an Environmental Assessment or an Environmental Impact Statement (if there would be a significant impact on the human environment). A number of permit actions and associated environmental documents have been prepared for activities in the study area.

#### **1.4.3 SOUTHWEST FLORIDA FEASIBILITY STUDY**

The study area of the document you are reading is within the geographic boundary of two other documents in preparation, a Feasibility Report and EIS, to re-examine the Central and Southern Florida project and what might be done to mitigate the impacts or enhance the benefits of that project.

#### **1.4.4 CRITICAL PROJECTS**

Section 528 of the Water Resources Development Act of 1996 (WRDA 96) authorizes the Secretary of the Army to develop specific water quality related projects features which are essential to Everglades restoration. The section authorizes an appropriation of \$75 million over three fiscal years for the construction of projects determined by the Secretary to be critical to the restoration of the Everglades.

A number of these "critical projects" are being pursued by the Corps. At least three of which would occur in the study area: Southern Golden Gate Estates, Lake Trafford, and Southern Corkscrew Regional Ecosystem Watershed (CREW). An Environmental Assessment has been completed for Lake Trafford (September 1999) and CREW (August 1999). A final Fish and Wildlife Coordination Act Report (CAR) was completed for CREW in October 1998. An interim final CAR was prepared for Lake Trafford (September 1999). A supplemental CAR is being prepared by the U.S. Fish and Wildlife Service. The Southern Golden Gates Estates project is no longer a Critical Project but is being pursued under another authority (as part of the Comprehensive Everglades Restoration Plan).

#### **1.4.5 TIERED DOCUMENTS**

Based on the principle of "tiering" (40 CFR 1502.20 and 1508.28), this EIS takes a broader geographic or programmatic approach. Future and more specific actions would be evaluated by subsequent documents. This document does not complete evaluation of the following items which are not yet ripe for decision: any specific permit action by the Corps of Engineers (Sections 404(a) and 404(e) of the Clean Water Act); any specific determination of jeopardy or incidental take by the U.S. Fish and Wildlife Service on Federally listed species and designated critical habitat (Endangered Species Act); any denial or restriction for any specified area by the Environmental Protection Agency (Section 404(c) of the Clean Water Act); action under the Fish and Wildlife Coordination Act; or any other regulatory action. This document does disclose, in a general way, the potential future outcomes of such actions for the study area to better evaluate the cumulative impacts of such actions.

The information in this EIS will be used as a reference and background for future documents (EISs and Environmental Assessments) prepared pursuant to the National Environmental Policy Act for these more specific actions. We expect this EIS to be particularly useful for evaluating cumulative impacts on important resources in the study area.

### **1.5 DECISIONS TO BE MADE**

The information presented in this Environmental Impact Statement will result in specific questions to be used in the review of applications in Southwest Florida. This document does not directly lead to a permit decision on any specific application or for any particular property.

### **1.6 SCOPING AND ISSUES**

A Notice of Intent (NOI) to prepare a draft of this EIS appeared in the Federal Register on 12 January 1998. In addition, the NOI was mailed to interested and affected parties by letter dated 12 January 1998. A copy of the letter and NOI are in Appendix C. Two public meetings were held to receive comments. At public meetings held on 9 February 1998, more than 200 people (of whom 60 spoke) attended and provided comments regarding geographic area, specific issues, and the manner of the EIS process. The Corps also addressed a joint session of the Boards of County Commissioners of Lee and Collier Counties. In addition, there was a series of intensive working meetings by the ADG to help develop alternatives", evaluation factors, and assessment of the impacts.

### 1.6.1 ISSUES EVALUATED IN DETAIL

The following issues were identified during scoping, through the meetings of the Alternatives Development Group (ADG), and by the preparers of this Environmental Impact Statement to be relevant to the Proposed Action and appropriate for detailed evaluation:

- a. Property Rights
- b. Water Management
- c. Water Quality
- d. Ecosystem Function, Wildlife Habitat, and Listed Species
- e. Regulatory Efficiency and Effectiveness
- f. Economic Sustainability
- g. Local Land Use Policy
- h. Mitigation
- i. Cumulative/Secondary Impacts
- j. Restoration/Retrofit
- k. Avoidance of Wetland Impacts
- l. Public Lands Management/Use

The ADG is a group of resource experts, regulatory agency personnel, concerned citizens appointed by actions of the Lee County and Collier County Boards of County Commissioners as well as through actions of other agencies and entities, and development and business interests representing their respective industries/interests. Further detail regarding the ADG and its charge are discussed in Section 2 - Alternatives.

### 1.6.2 IMPACT MEASUREMENT

The following provides the factors that were considered in the evaluation of alternative futures that represent the cumulative effect of actions by landowners and city, County, State and Federal governments.

- a. Property Rights
  - 1. Fair Market Value
  - 2. Vested Rights
  - 3. Reasonable Expectation For Use of Land and Return on Investment
- b. Water Management
  - 1. Infrastructure Existence (Stormwater Utility/Maintain and Improve)
  - 2. Home Damage During Storm Events (Level of Flood Protection)
  - 3. Home Construction to Meet the One-Hundred Year Storm Event
  - 4. Flood Depth and Duration
  - 5. Historic Flow Patterns (Maintain and Improve)
  - 6. Adequate Water Storage (Balance Consumption with Hydroperiods)
  - 7. Groundwater Data Floors and Ceilings (Aquifer Zoning)
- c. Water Quality
  - 1. Pollution Loading
  - 2. Freshwater Pulses
  - 3. Habitat Loss
  - 4. Groundwater Impacts
- d. Ecosystem Function, Wildlife Habitat, and Listed Species
  - 1. Effects on Florida Game and Fresh Water Fish Commission's (FGFWFC) Strategic Habitat Conservation Area (SHCA) habitat planning objectives (GAPS)

2. Effects on the U.S. Fish and Wildlife Service's (USFWS) Priority I and II Florida Panther habitat (Florida Panther Habitat Preservation Plan).
  3. Effects on Southwest Florida Regional Planning Council (RPC) Resources of Regional Significance
  4. Effects on USFWS Multi-species Recovery Plans for South Florida and Recovery Plans for Federally listed species.
  5. Effects on Occurrences of Listed Species
  6. Effects on Occurrences of Rookeries
  7. Effects on Loss of Native Plant Communities (Common and Rare)
  8. Effects on Fragmentation and Connectivity of Plant and Animal Habitats
  9. Effects on Loss of Seasonal Wetlands
  10. Effects on Integrity of Flowways (Rivers, Sloughs, and Strands)
  11. Effects on Wetlands of Importance to Critical Wildlife
  12. Effects on Aquatic Resources
- e. Regulatory Efficiency and Effectiveness
1. Permit Review Time and Level of Effort
  2. Pre-identified Impact/Mitigation and Preserve Areas
  3. USFWS/FFWCC General Concerns Addressed
- f. Economic Sustainability
1. Job Creation
  2. Home Affordability
  3. Cost of Living
  4. Property Tax Base
  5. Cost to Implement
  6. Increased Taxes
  7. Environmental Justice
- g. Local Land Use Policy
1. Significance of Conflicts with Local Land Use Plans and Regulations
  2. Hurricane Preparedness (i.e., Evacuation Routes and Shelter Availability)
- h. Mitigation
1. Total Acres Provided for Mitigation Opportunity
  2. Total Wetland Function Improvement Opportunity Provided
- i. Cumulative/Secondary Impacts
1. Impacts on Infant Mortality
  2. Impacts on Road Needs
  3. Impacts on Air Pollution Loading
  4. Impacts on Water Pollution Loading
  5. Impacts on Crime Rates
  6. Impacts on Hurricane Vulnerability
  7. EPA Index of Watershed Indicators
  8. Impacts on Wetlands Only
  9. Impacts on Hydrology
  10. Amount of Lands in Public and Private Ownership in Protected Status
- j. Restoration/Retrofit
1. Natural Functions Maintained in Natural Systems (i.e., Flowways)
  2. Exotic Species Control (Percent and Size of Parcels Treated and Restored)
  3. Percent of Residents Using Self-Supplied Infrastructure (i.e. Septic Tanks)
  4. Percent of Agricultural Land Applying Best Management Practices (BMP)

- 5. Wildlife Habitat Restoration
  
- k. Avoidance of Wetland Impacts
  - 1. Total Acres at Risk
  - 2. Total Wetland Acres by Functionality at Risk
  
- l. Public Lands Management/Use
  - 1. Compatibility with Land Management Plans
  - 2. Degradation or Improvement of Resources on Public Lands

The means of evaluation within each impact issue was based upon analysis of local data and assessment of proposed changes against existing and proposed economic and resource protection goals.

#### 1.6.3 ISSUES ELIMINATED FROM DETAIL ANALYSIS

The following issues were not considered during the detailed analysis as part of this Environmental Impact Statement. The ADG identified two issues that did not fit within the twelve previously listed issue categories; a holistic approach to management, and higher standards for data and information. The ADG concluded that these were goals to strive for in Southwest Florida, not issues that could be addressed in the development of alternatives (ADG 1998) for the purposes of this EIS.

### **1.7 PERMITS, LICENSES, AND ENTITLEMENTS**

The proposed action, which is adoption of standardized Permit Review Criteria together with the Natural Resources Overlay Map, is a procedure the Corps uses to review applications for 404 wetlands fill permits. Therefore, the proposed action itself does not require any local, state, or federal permits.