Permit Review Criteria Operational Draft July 2000

1. Purpose.

This document will be used by Corps Project Managers to identify the potential cumulative and indirect effects when reviewing applications for Department of the Army Permits under Section 404 of the Clean Water Act.

2. Area.

This document applies to the study area of the Environmental Impact Statement for Improving the Regulatory Process in Southwest Florida (EIS). The study area measures 1,556 square miles.

3. Format.

This document lists many issues. Each has its own map(s). For example, a particular species will have a map showing areas with a high probability that species habitat is present and a high potential that the loss of that habitat will adversely affect the species. The narrative accompanying each issue is divided into four paragraphs:

A description of the concern;

The site-specific characteristics to identify the applicability of the issue to the project;

A description of how the map was drawn; and,

Information on assessment of the effect of the project.

4. Status.

This document represents for a single point in time the state of analysis of the information found in the EIS. The document may be modified in the future, with appropriate NEPA analysis (if required), based on the availability of new information. Expected sources of new information include the following.

a. SLOPES.

The Corps and the U.S. Fish and Wildlife Service are developing Supplemental Local Operating Procedures for Endangered Species consultations. A key component is preparation of maps and quidance to assist the Corps in preparing the initial determination of effect of a proposed project on species under the Endangered Species Act. That process may result in modifications to this document since the SLOPES work will be looking at the entire range of the species instead of just the sub-area.

b. MSRP.

The U.S. Fish and Wildlife Service is also continuing work on the Multi-Species Recovery Plan. This will provide species specific recovery implementation measures that may result in modifications to this document.

c. Other.

The evaluation factors used to analyze the effects are not elaborate. Their purpose is to present the relationship of an individual permit to the whole. As these are used, the Corps will periodically evaluate, in cooperation with other agencies, the accumulation of permit decisions to evaluate The Corps is committed to working with the U.S. Fish and Wildlife Agency, U.S. Environmental Protection Agency and others to develop more detailed analysis tools to be ultimately incorporated into the Corps' decision processes.

5. Updating Maps.

The map descriptions include references to the Florida Department of Transportation Land Use, Cover and Forms Classification System (FLUCCS). The maps are necessarily based on regional or statewide mapping programs. This was used since it is often used by applicants describing their project sites, and is thought to ease the convenience of future revisions of these maps with updated information. The Corps will use site-specific information provided by the applicant to confirm the map (for example, whether habitat is actually present) or finds the issue is not applicable due to the nature of the project.

6. Permit Review.

The Corps' decision whether to issue or deny a Permit is based on site and project specific information. The information is gathered to support the evaluation and weighing of the impacts and benefits of the proposed project on many factors, including but not limited to wildlife, endangered species, and water quality. The decision will consider both the direct and immediate effects and the indirect (cumulative and secondary) effects of the proposal. The Corps will use this document to focus effort on those issues relevant to the review of the individual projects. In geographic areas where there are few concerns, the Corps will reduce the processing time through administrative mechanisms such as General Permits. The number of issues applicable to a particular project will depend on how many of the individual maps intersect the project location. A location with a larger number of issues will receive a greater rigor of review. However, the maps do not predetermine the Corps permit decision. In addition, neither this document nor the Map applies to projects holding unexpired Department of the Army permits. This document only applies to applicants seeking authorizations for placement of fill in Waters of the United States under Section 404 of the Clean Water Act

7. Natural Resource Overlay Map

The many individual maps related to natural resource issues are overlaid on the following figure. The area shaded represent areas with high potential value for wildlife and other wetland functions compared to the remainder of the area. If a project in those areas requires a Corps permit, the Corps will subject that permit application to more rigorous review than an application for a permit in an area that has less potential value. In addition, if site specific information confirm the presence and value of the natural resource, the Corps will expect an analysis whether practicable alternative locations are available in areas of less value.

8. Cumulative Impacts.

All the predicted futures describe changes in land cover within areas described by the Natural Resource Overlay Map as locations where change would potentially have an adverse effect. For the wildlife issues in particular the number of acres of predicted change is worrisome to the maintenance of current populations. The size of the potential change was one consideration by which an issue was included in the list of Permit Review Criteria. For the individual permit review of a particular natural resource issue, one approach to avoid cumulative impact is to seek alternative sites for the project in a location outside of the area mapped for that resource. If alternatives are impracticable, then one consideration for the evaluating proposed compensatory mitigation is whether it either restores/creates the resource function at a location within/adjacent to areas mapped for the natural resource.

9. Immokalee Reservation, Seminole Tribe of Florida.

The Immokalee Reservation is not assigned individual maps. Therefore, there is no prepared list of issues for reviewing the cumulative effects of projects proposed within the Immokalee Reservation. Corps Project Managers will continue to recognize the status, governmental authority, and powers of the Seminole Tribe of Florida and the rights under any tribal agreement with any agency of the U.S. Government.

Insert Overlay Map

Figure. Overlay of Natural Resource Issues.

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10. Audubon's crested caracara

Description. The primary cause for the decline of this species has been habitat loss. This species prefers native range and unimproved pasture for foraging. All the Ensembles predict a decline in existing agricultural area.

Site Identification. Dry prairies with wetter areas and scattered cabbage palm comprise typical habitat. Caracara also occur in improved pasture lands and even in lightly wooded areas with more limited stretches of open grassland.

Map. Caracaras are documented in the eastern portions of the EIS study area primarily in association with agricultural lands. Historically, caracaras were documented as far west as Colonial and Summerlin Boulevards in Ft. Myers. The map shows areas identified as rangeland, improved pasture and unimproved pasture (FLUCCS 211, 212, 213 and 300) that are east and north of I-75 and outside of Lehigh Acres.

Assessment of Effect. Small isolated patches are not likely to be used by this species unless near many other large patches that would form a potential home range (reported home ranges vary from 940 to 6,000 acres). Reduction of patch size will reduce the suitability of the remaining area. If loss cannot be avoided, provide replacement by restoring lands near existing populations. Also see the Audubon's caracara narrative of Section 4.3 of the EIS.

11. Bald eagle.

Description. Bald eagle population was decimated in the 19th and early 20th centuries by habitat destruction, hunting, pesticide use and lead poisoning. 26 active nests are recorded in the study area as of the 1996 winter census. Some of the nests will have future development occurring near them.

Site Identification. Nests typically occur in pines and cypress within the study area but occasionally eagles nest in Australian pines.

Map. Not all habitat has been surveyed. Nesting eagles in the study area are mainly concentrated along coastal areas. Map shows known nets with a 1,500 foot buffer.

Assessment of Effect. Use the <u>Habitat Management Guidelines for the Bald Eagle in the Southern Region</u> which recommends minimum buffer distances for construction and permanent activity near a nest site. It does not provide specific distances for protection of foraging areas or for flyways between nest and foraging areas. Projects will avoid disturbance of nest sites and of foraging and preserve patches of suitable trees along coast and waterways that may provide nesting opportunity. Also see the Bald eagle narrative of Section 4.3 of the EIS.

12. Management of Preserves.

Description. Preserves are affected by the compatibility of adjacent lands and by actions that directly degrade or improve the public lands proper. Maintenance of agriculture or expansion of the preserves is evaluated to be beneficial generally because these provide a buffer to suburban development.

Site Identification. Preserves are owned by government agencies or non-governmental organizations managed for natural resource values.

Map. All such lands were originally acquired for some purpose or multiple purposes, such as recreation, unique wildlife, water supply protection, or hunting. Their management reflects that. How a change in adjacent land use effects the managed land depends on the purpose. State parks are developing "green lines" that designate areas outside of boundaries that could affect the management purpose. The map included here at this time only shows the boundary of the managed lands without any "green line" or buffer.

Assessment of Effect. An activity proposed in the vicinity of an existing preserve will be assessed for compatibility with the management purpose of the preserve.

13. Public Acquisition Program

Description. Lands are identified under various programs for acquisition for various purposes. An application for a project proposed, for example, in the middle of a potential acquisition of a corridor could render pointless the remaining acquisition.

Site Identification. Proposals for acquisition are maintained on many separate lists. The goal of the Southwest Florida Regional Planning Council's Strategic Land Conservation Strategy is to coordinate these.

Map. Known proposals are shown.

Assessment of Effect. If an activity proposed is in the footprint of a potential acquisition, the remaining lands within the footprint will be evaluated to determine if purpose of acquisition can still be achieved.

14. Flowways

Description. The study area has many man-made changes to the historic flow patterns, including drainage canals, roads that block historic sheet-flow, and berms. Many ideas have been developed in the past to retrofit structures or to restore areas. Wider flowways or preservation of wetlands in flowways are evaluated to be beneficial generally because these actions reduce the potential for changes in flood depth, maintained historic flow patterns, and reduced reliance on structural water management solutions.

Site Identification. Within this area, lands typically drained to sloughs that eventually reached streams on the coast. Many sloughs have now been intercepted/converted to canals.

Map. Slough-shaped areas identified by FLUCCS codes for slough waters (560), inland sloughs (616), cypress (621), bottomland (615), and streams (510).

Assessment of Effect. Maintain or restore wetlands within the footprint of the slough of sufficient width for wet season flows. If a site has a canal, consider restoration of the original slough by partial blocking of the canal or other actions.

15. Habitat Fragmentation

Description. The area still has a wide variety and large population of wildlife. Suburban development has been expanding inland from the urban centers of Fort Myers, Bonita Springs, and Naples to meet with the build-out of Lehigh Acres and Golden Gate Estates. Large expanses of the historically characteristic pinelands are becoming more fragmented. Many species forage over large areas and require a mixture of vegetative communities for their life histories. Connections between the large

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islands of existing preserves are evaluated to be beneficial generally because they are considered to retain a sustainable fabric of habitat.

Site Identification. Typically are lands with natural plant community located between major preserves. These typically follow historic flowways.

Map. Areas identified as natural plant community (both upland and wetland FLUCCS 400 and 600) within 1000 feet of flowways.

Assessment of Effect. Maintain or restore native cover for the species expected to utilize the connection.

16. Marshes.

Description. Short hydropattern wetlands are foraging areas for a wide variety of wading birds, including the federally listed Wood stork and Snail kite, and are depended upon by other species. Because of their small size and shallow depth, these have been the ones most affected by drainage, direct fill, or changes in surrounding landscape. Preserving natural plant types around these wetlands is evaluated to be beneficial generally because that would maintain sheetflow connections between individual marshes, provide clean water runoff to hydrate the marshes, and provide cover for species. A large percentage of these marshes are expected to be surrounded in the future by development.

Site Identification. Herbaceous vegetation in shallow depressions surrounded by scrub and forest.

Map. Areas identified as marsh and wet prairie (FLUCCS 641 and 643).

Assessment of Effect. The key goal is production and concentration of forage fish for wading birds. Wetlands throughout the area hydrate and draw down at different times of the year depending on their location, size, and water supply. A mix of hydropattern is needed so that foraging is available throughout the year. Existing foraging locations should be preserved on-site or, if impact unavoidable, replaced near-site rather than off-site due to the difficulty of replicating the hydropattern and the danger of locating foraging into a few geographic areas. Physical characteristics that affect the forage value include: water source sheet flow (gradual hydration) or pulse (weir); water is runoff from native vegetation (marsh ready) or from development (metals, etc.); concentration pond present in winter or dries out in winter (no prey maintained) or is constant depth (no concentration); connected to other marshes (movement of fish); shallow littoral zone or a sharp edge only shallow part of year; shrub/tree buffer for resting/perching/cover. Also see the Wood stork and Snail kite narratives of Section 4.3 of the EIS.

17. Florida Panther.

Description. This wide ranging species uses large areas of a mixture of upland, wetland, and open cover types. Correlation of telemetry data from radio-collared panthers and plant cover plus other observations suggest preference for hardwood swamp, mixed hardwood swamp, cypress swamp, hardwood hammock, and pinelands. Panther will cross other lands that have low human presence to travel to other patches of forested cover. Also, prey are found at the edges of forested and range, prairie, and agricultural areas. Expansion of preserves and/or maintenance of existing levels of agricultural activity is evaluated to be beneficial generally because these maintain a contiguous mix of suitable cover types.

Site Identification. Patches of forested cover connected at any distance by any combination of range, prairie, agricultural and other forested areas to the Florida Panther NWR. Areas of residential

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or commercial development and major highways generally considered to be avoided by panther due to human disturbance or lack of prey.

Map. All lands except those with intense residential or commercial development that are east of I-75 and north of Tamiami Trail. Low density residential areas in western portions of Golden Gate Estates and northwestern portions of Lehigh Acres are shown as currently potential transit locations.

Assessment of Effect. If project results in direct loss of forested patch, or in separation of the patch by residential or commercial development, or in reduction of non-forested areas (particularly those near forested areas used by prey or for travel), then place emphasis on avoidance, or if this is not possible, consider replacement of the area lost by restoration or creation elsewhere in the range of the species. Any replacement area must meet or exceed the habitat functions lost. Also see Florida panther narrative of Section 4.3 of the EIS.

18. Shorebirds.

Description. Shorebirds in general, and the federally listed Piping plover in particular, use beaches within the study area. While direct impacts to these beaches are unlikely, indirect effects may occur as a result of human disturbance (pets, noise, nuisance animals) and fill activities associated with increased coastal development.

Site Identification. Sandy beaches, mudflats, and sandflats.

Map. 1,000 foot buffer around areas identified as beaches (FLUCCS 181 and 710) and tidal flats (651).

Assessment of Effect. Avoid disturbance in buffer along undeveloped beach stretches. See also the Piping plover narrative of Section 4.3 of the EIS.

19. Red-cockaded woodpecker.

Description. There are 40 known groups of this species in the study area. Not all habitat has been surveyed so other may exist, although there is only a limited amount of mature pine forests in the region. Foraging distances from cluster sites have included distances of 2 miles over open pasture. Dispersal into other suitable habitat has been described to vary from approximately 2 miles (frequent) to 7 miles (infrequent).

Site Identification. The preferred habitat is old growth pine.

Map. Larger contiguous patches of areas identified as pine flat (FLUCCS 411), cypress/pine (624), and wet forest mix (630) where the patch is within dispersal distance of existing cluster sites.

Assessment of Effect. For existing sites, preservation of foraging area. For potential areas, preservation of old-growth areas within dispersal distances of known groups or unsurveyed forest patches. See also the Red cockaded woodpecker narrative of Section 4.3 of the EIS.

20. Florida scrub jay.

Description. This species has very narrow habitat requirements, being endemic to Florida' relic dune ecosystems and scrub. Scrub habitats are considered to be among the most threatened natural

systems. There are 26 known families of scrub-jays in the study area. Not all habitat has been surveyed, so others may exist, although there is only a limited amount of remaining scrub habitat.

Site Identification. Oak dominated scrub or xeric oak scrub plant cover on well drained sandy soils.

Map. Areas identified as xeric oak (FLUCCS 421), sand pine (413), shrub brush/rangeland (329 and 330), and pine-mesic oak (414) excluding the agricultural areas south of State Road 82.

Assessment of Effect. Preserve scrub-jay habitat in foraging needs if existing family present. Preserve potential habitat if within dispersal of existing families. Also see the Florida scrub jay narrative of Section 4.3 of the EIS.

21. Coastal.

Description. These areas serve as nursery areas for commercial and recreational fishing, assimilate pollutants, provide detrital export to support estuarine food chain, among other functions. Preservation along the coastal areas is evaluated to be beneficial generally because of preservation of ecotone and waterflow characteristics maintained the shoreline ability to maintain aquatic nursery and foraging habitat.

Site Identification. Coastal forests and marshes and adjacent natural upland plant communities.

Map. Areas identified as mangrove (FLUCCS 612), saltwater marsh (642) and emergent vegetation (644) plus natural plant areas (upland and wetland) within 1/2 mile of these.

Assessment of Effect. If preservation is unavoidable, maintain a buffer sufficient to provide upland ecotone and surface runoff characteristics.

22. Strategic Habitat Conservation Area (SHCA) Lands.

Description. The Florida Game and Freshwater Fish Commission report Closing the Gaps in Florida's Wildlife Habitat Conservation System identified the minimum quantity of land that would maintain Florida's animal and plant populations at levels sustainable into the future. This area is called the Strategic Habitat Conservation Area (SHCA). 8.2% of the statewide SHCA is found in the EIS study area. Expansion of public preserves is desirable.

Site Identification. The SHCA is composed of overlaying maps of potential habitat for each species. Each map is based on areas identified as having plant covers and other characteristics that are thought to indicate the location may used by the species. The mapping was based on interpretation of satellite images so actual site plant cover and characteristics must be compared to the species models in the report.

Map. From the report. The individual maps for federally listed species are also shown. These maps were not included in the Overlay of Natural Resources to avoid double-counting species ranges.

Assessment of Effect. Although the statewide mapping has some errors and the estimates of land required are simple, this report is the only report that essentially prioritizes the habitat value of land statewide. Absent any additional species-specific analysis, this report will be used as a framework to coordinate regulatory actions with land management and acquisition initiatives. If plant cover or other characteristics for one or more species is present on the site, then provide replacement cover elsewhere in area mapped for that species.

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23. Wading Bird Rookeries.

Description. There are several reported rookeries in the study area. Additional wildlife surveys could document additional locations. Development may occur near some of the rookeries that introduces visual or noise disturbance or introduce domestic animals that render the site less attractive for continued use.

Site Identification. Large group of nesting birds.

Map. 2,000 foot area around reported locations.

Assessment of Effect. Preserve actual rookery location and areas used for foraging or transit by providing buffers of native vegetation. Buffers sized to protect rookery from visual and noise disturbance (size depending upon nature of activity in proposed project and type of native vegetation) and arranged to discourage people visiting the site.

24. High Proportion Wetland.

Description. Corps regulations, including the Section 404(b)(1) Guidelines, require an analysis that shows the proposed project is the least damaging practicable alternative. The analysis is performed in sequence: (1) demonstration that no other sites are available to avoid the wetland impact, or if available, have greater impact; (2) demonstration that the selected site and selected site plan has the minimum impact compared to other alternatives; and (3) compensation for the resulting unavoidable impacts is provided. The U.S. EPA may formally raise concerns with the alternative analysis by writing comment letters as provided by the 404g MOU. Existing urban/suburban infrastructure has largely drained, fragmented, or otherwise impacted wetland areas so there is less impact to avoid. Also, these areas have this infrastructure because Comprehensive Planning processes have designated them for development. Projects in locations that have a large proportion of wetland will have a more difficult time avoiding wetland impacts.

Site Identification. Site with high proportion of wetland and little surrounding development and/or infrastructure.

Map. Locations with large proportion of areas identified as wetland (FLUCCS 600).

Assessment of Effect. Projects in areas with higher proportion of wetlands provide analysis of alternative sites inside urban/suburban areas.

25. Water Quality

Description. Thirteen subbasins in the EIS study area are reported by FDEP in the 1998 305(b) Report and on the 1998 303(d) List as either Partially or Not meeting FDEP waterbody designated use classifications and/or State of Florida water quality standards .Section 4.10.3 of the EIS suggests greater implementation of BMPs or a reduction in the wetland fill would result in is less degradation as measured by IWQ.

Site Identification. Located in a basin defined by FDEP's 305(b)/303(d) list report that does not or only partially meets FDEP waterbody designated uses and water quality standards or in an EIS watershed defined by USEPA as demonstrating continuing 1990's water quality degradation based on the WQI score.

Map. Maps from the appropriate FDEP and US EPA water quality evaluations.

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Assessment of Effect. If the proposed project is located as described above, describe why there is not a practicable alternative that would avoid the location of or minimize the quantity of fill placed in the wetland. As described by 40CFR 230.10(a)(2), an alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. If unavoidable, describe practicability of locating project in a different basin. If project cannot be located in a different basin, describe practicability of treating the stormwater to achieve 95% reduction of the average annual load of pollutants See also the ideas for Enhanced Stormwater BMP Development special permit conditions in EIS Section 4.10.2.8.2.2.