LAKE OKEECHOBEE AND OKEECHOBEE WATERWAY

SHORELINE MANAGEMENT PLAN

Okeechobee Waterway Project

Central and Southern Florida Flood Control Project August 2004
Shoreline Management Plan
Lake Okeechobee and the Okeechobee Waterway

Purpose

To provide guidance and information to the public, specific to the effective management of the Lake Okeechobee and Okeechobee Waterway shoreline, the U.S. Army Corps of Engineers has developed the Lake Okeechobee and Okeechobee Waterway Shoreline Management Plan. Within the plan, the types of private use and activities that may be permitted on the shoreline are described. Additionally, the plan addresses shoreline allocations, rules, regulations, and other information relevant to Lake Okeechobee and the Okeechobee Waterway. This plan complements the Master Plan for Lake Okeechobee and Okeechobee Waterway.

Objective

Management of public lands and waters are necessary to provide opportunities for the optimum recreational experience for the maximum number of people. At the same time it must assure compatibility among general public use and permitted private use while assuring long term resource protection for the enjoyment of project benefits by all.

Authority

This plan was developed and prepared in accordance with the requirements directed in Engineering Regulation (ER) 1130-2-406, dated 31 October 1990, titled “Project Operation- Shoreline Management at Civil Works Projects,” as per Change 1 dated September 14, 1992, and Change 2 dated May 28, 1999.

Policy

It is the policy of the U.S. Army Corps of Engineers to manage and protect the Lake Okeechobee and Okeechobee Waterway Shoreline in a manner that promotes the safe and healthful use of the shoreline by the public while maintaining environmental safeguards to ensure a quality resource for future generations. Regulatory guidance requires that the U.S. Army Corps of Engineers seek reasonable measures to minimize private exclusive use of public property and to maximize general public use.

Jurisdiction

The term “project” refers to the land and water areas of any resources development project administered by the Chief of Engineers, without regard to ownership of underlying land; all lands owned in fee by the Federal Government and to all facilities therein or thereon of any such water resources development project.
This plan is applicable to all project lands owned in fee and easement by the U.S Army Corps of Engineers at Lake Okeechobee and the Okeechobee Waterway including:

- The St. Lucie Canal Pool and shoreline from the St. Lucie Lock and Dam west to Lake Okeechobee (Port Mayaca Lock and Dam)
- Lake Okeechobee and Herbert Hoover Dike right-of-way
- The Caloosahatchee River shoreline and the W.P. Franklin and Ortona Pools, including oxbows, from the W.P. Franklin Lock and Dam east to Lake Okeechobee (Moore Haven Lock and Dam).

The Lake Okeechobee and Okeechobee Waterway Shoreline Management Plan is not applicable to:

- Tidal influenced waters east of St. Lucie Lock.
- Tidal influenced waters west of W.P. Franklin Lock.
- Existing privately excavated canals.

Public Involvement

In March 2002, the Jacksonville District coordinated with regional congressional interests, federal, state and local government agencies, local real estate businesses and private adjacent landowners to begin the initial stages of updating the 1991 Lake Okeechobee and Okeechobee Waterway Shoreline Management Plan.

During this process, three public workshops were conducted. The workshop locations were St. Lucie Visitor Center, Stuart, Florida; Hendry County Courthouse in LaBelle, Florida; and W.P. Franklin Visitor Center, Alva, Florida. Following these workshops, written comments were accepted for a period of 30 days.

Three members of the public attended the workshops and only a few written and verbal comments were received from the public throughout this process. The South Florida Operations Office reviewed and considered these comments in developing the draft plan. There were no significant issues or controversial comments received throughout this process.

Project Description

Lake Okeechobee and the Okeechobee Waterway are part of two projects: 1) Central and Southern Florida Project and 2) Okeechobee Waterway. The U.S. Army Corps of Engineers, Jacksonville District is responsible for managing and maintaining a balance between the competing demands on the resources of each project.
Lake Okeechobee covers 730 square miles, with an average depth of 10 feet. It is part of the Central and Southern Florida Project. Authorizations include navigation, irrigation, water supply, fish and wildlife enhancement, drainage and water control, preservation of Everglades National Park, water supply for Everglades National Park, recreation, water quality, saltwater intrusion, groundwater intrusion, and flood damage reduction.

The Okeechobee Waterway stretches 152 miles from the Gulf of Mexico to the Atlantic Ocean. Project authorizations include recreation, fish and wildlife enhancement, navigation, water quality, and flood damage reduction.

Lake Okeechobee’s Herbert Hoover Dike and the Okeechobee Waterway consists of approximately 700 acres of Federal fee-owned and 23,000 acres of right-of-way and dredged material disposal easement lands deeded to the Federal Government.

The Herbert Hoover Dike easement deeds, in general, grant unto the United States, its officers, agents, and servants the right, privilege, power, and authority to:

- Enter upon, occupy, and use any or all of said lands for right-of-way purposes.
- To deposit material excavated in the construction, improvement, and maintenance of the waterway hereinafter named or any enlargement thereof.

The Okeechobee Waterway right-of-way easement deeds, in general, grant the Federal Government the perpetual right, power, and privilege to:

- Enter upon, excavate, cut away, and remove any or all of the land hereinafter described as may be required for the improvement and maintenance of the waterway, or any enlargement of the waterway.
- Maintain the channel and the portion so excavated as a part of the navigable waters of the United States.
- Enter upon, occupy, and use any portion of said land not so cut away and converted into public navigable waters, for the deposit of dredged material, the construction and maintenance of levees, and for other purposes that may be needed for the preservation and maintenance of the waterway.

The intent of the project’s perpetual easement estate is to ensure that the Federal Government has and retains the necessary real estate interest and land base to construct, maintain and protect the authorized project purposes. The Federal Government's easement estates are considered the dominant estate. While the Federal Government does have this dominant estate, it is not absolute. The fee owners of the lands underlying the easement estates retain certain ownership rights. These rights however cannot interfere
with or abridge the easement estate created. The objective of the Shoreline Management Plan is not to negate or supersede the fee owner's rights. The Plan's intent is to:

- Establish acceptable and allowable private use of project lands and waters to the maximum extent possible without interfering, abridging, or jeopardizing the easement rights granted to the Government for operation and maintenance.
- Provide the healthful and safe use of project waters by the general public.
- Provide for the protection and/or enhancement of the project’s natural resources.

Shoreline Allocations

Continued growth and economic development around Lake Okeechobee and along the Okeechobee Waterway has resulted in an increased use of land and development of adjacent private property. In order to accomplish the objectives of this plan, the Corps has allocated the entire project shoreline of Lake Okeechobee and the Okeechobee Waterway into four use categories.

These categories include:

- Public Recreation Areas
- Protected Shoreline Areas
- Prohibited Access Areas
- Limited Development Areas

The shoreline allocation for Lake Okeechobee and the Okeechobee Waterway is shown in Table 1 on the following page. Maps showing the areas within these categories are kept at project offices and are available for public inspection and review.
Table 1 – Shoreline Allocation

<table>
<thead>
<tr>
<th>Allocation Category</th>
<th>Map Color</th>
<th>Amount</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Recreation</td>
<td>Red</td>
<td>27.6 miles</td>
<td>Private moorage facilities or other private structures are not permitted within areas designated as Public Recreation, nor in project waters adjacent to developed or designated public recreation areas. Commercial concessions and marinas are permitted in public recreation areas, provided they are identified in an approved site plan contained in the project Master Plan. Modification of the land by private individuals is not permitted in these areas. Sites in this classification include Corps of Engineers, city, county, state, and privately operated public recreational areas.</td>
</tr>
<tr>
<td>Protected Shoreline</td>
<td>Yellow</td>
<td>159.7 miles</td>
<td>Private moorage facilities or other private structures are not permitted within areas designated as Protected Shoreline, or in project waters adjacent to Protected Shoreline areas. Protected Shoreline areas are designated primarily to protect project purposes and fish and wildlife values. Most of the Herbert Hoover Dike and portions of the St. Lucie Canal and Caloosahatchee River shorelines are included in this category. Private facilities are not permitted because of physical characteristics that would lead to interference with navigation, flood control, and fish and wildlife values. Land modifications may be approved on a case-by-case basis when the proposed activity does not adversely impact the above values. However, no land modification will be authorized on the Herbert Hoover Dike.</td>
</tr>
<tr>
<td>Limited Development</td>
<td>Green</td>
<td>101.2 miles</td>
<td>Limited Development Areas are areas where private moorage facilities and land use activities may be permitted. Generally, these are areas where private uses do not interfere with authorized project purposes, fish and wildlife values and/or public use. Applications for private moorage facilities and land use activities will be accepted in these areas, if such placement is consistent with the conditions set forth in the Project Land Management and Private Moorage Facilities and Other Minor Structures sections.</td>
</tr>
<tr>
<td>Prohibited Access</td>
<td>Orange</td>
<td>1.8 miles</td>
<td>These areas are established for the safety of the general public. Visitor access and all private structures are prohibited in these areas. The following areas are within this classification: 1. The concrete structures and pump houses, including the areas immediately upstream and downstream. 2. The Herbert Hoover Dike culverts. 3. The restricted areas of the locks’ spillways. 4. The service base area, including the warehouse storage areas. 5. Corps structures in the waterway.</td>
</tr>
</tbody>
</table>
Project Land Management

The following land management policy is the best means by which the U.S. Army Corps of Engineers assures the safety of the public and assures that future operation, maintenance and construction capabilities are protected.

Right-of-Way Management (Land Modification, Excavation and Alteration.)

- Herbert Hoover Dike- any excavation, alteration, and modification of the Herbert Hoover Dike right-of-way is prohibited. Waivers may be sent to the Jacksonville District and reviewed individually on a case-by-case basis. The District Commander may approve exceptions.

- St. Lucie Canal and Caloosahatchee River- See Jurisdiction for limits of this shoreline management plan. Excavation or removal of right-of-way that results in a loss of project uplands will not be authorized under the permit procedures of this plan. The applicant must meet the requirements of the Right-of-Way Excavation section.

Land Use Permits

Upon submission and approval of a Shoreline Use application, individuals may obtain a permit / license / consent to easement to modify landforms on right-of-way uplands located along the St. Lucie Canal and Caloosahatchee River. Land uses that may be approved include sloping of steep, erodible and vertical canal banks, removing exotic shrubs and trees, clearing of underbrush and/or mowing, planting native shrubs and trees, sodding and/or grassing exposed soils; and erosion control measures, such as riprap. Each application is reviewed on a case-by-case basis. Permit approval is required prior to the start of any work and will be issued for a five-year period. In order to obtain a land use permit / license / consent to easement, the applicant must meet the following conditions:

General Conditions:

- The applicant must own the property in fee title, or the applicant must have the underlying fee-owners consent or approval to access and/or perform the requested modification to Government owned easement lands.

- The applicant must submit an application and land use plan that specifies all land characteristics to be modified.

- The applicant must have written authorization from the Corps before work can begin.
Special Conditions

- Canal bank sloping applications are reviewed on a case-by-case basis, but
generally are authorized for final graded slopes that are no steeper than 3:1 or
no less than 10:1. The Corps will approve the final grade slope.

- Shoreline stabilization is required and will be accomplished by placing riprap
as detailed in Appendix A, or in some cases by other means approved by the
Corps.

- A concerted attempt should be made to avoid disturbance of, and save, native
vegetation encountered in the sloping and underbrush/mowing process.
Replacement of native trees destroyed or damaged during sloping may be
required to restore native vegetation to assist in erosion control.

- The entire disturbed slope is required to be revegetated within 15 days of
completion. The first four (4) feet landward of the riprap is to be sodded to
prevent siltation of water run-off and the remainder of the slope is to be
sodded, seeded or mulched to control erosion.

- As practical, care should be taken to avoid disturbing native shoreline aquatic
vegetation.

Right-of-Way Excavation

Requests to excavate project right-of-way uplands for boat basins or construction of
sea walls cannot be approved using the SAJ-67 General Permit. A separate Department of
the Army permit is required.

- The applicant must own the right-of-way property in fee title. Excavation of
Government fee owned lands will not be authorized. The District Commander may
approve exceptions.

- The right-of-way property must be allocated as “limited development.”

- The applicant must submit a joint Environmental Resource Permit Application to
the Florida Department of Environmental Protection (DEP) and the U.S. Army
Corps of Engineers. The applicant will need to include a detailed land use plan that
includes engineering details, plans and specifications of the proposed project, and
the proposed impact on the Okeechobee Waterway.

- The applicant, at his or her expense and prior to project construction, will be
required to provide the United States of America any of the following that apply:
1. A properly surveyed, monumented, titled, and recorded access easement around the landward perimeter of the proposed project.

2. A properly surveyed, monumented, titled, and recorded spoil disposal easement at least equal in size to the project right-of-way that would be removed.

3. Other easement estates that may be required by the Corps.

4. Provide a title insurance policy on all easements conveyed to the Government. The U.S. Army Corps of Engineers will make the final determination as to the type of easement and the dimensions of the easement upon project review.

- The applicant must obtain all necessary local and state approval for project construction and must submit proof of such authorization to the U.S. Army Corps of Engineers.

- Launching ramps and/or associated structures shall be located no closer than 100 feet from the near edge of the authorized navigation channel.

- Shoreline stabilization is required to restore all areas disturbed during the construction of boat basins, sea walls, and other uses that may require upland right-of-way excavation (see Land Use Permits - Special Conditions, page 7).

**Restricted Land Use**

All permanent structures, including but not limited to houses, patios, fences, septic tanks, outbuildings, septic tank field lines, sheds, gazebos, light poles, swimming pools etc., are prohibited on project lands. Permanent storage of private property, including but not limited to vehicles, boats, trash cans, refuse piles, etc., is prohibited on project lands.

**Boundary Line Delineation**

The U.S. Army Corps of Engineers right-of-way boundary line survey, monumentation, and signage has been completed along the St. Lucie Canal and the Caloosahatchee River. Survey monuments and witnesses are located approximately every 600 feet along the right-of-way to delineate the location of the U.S. Army Corps of Engineers right-of-way to adjacent landowners. Applicants who wish to modify land characteristics on project lands will be required to delineate the project boundary line. Normally, one or a combination of the following methods can satisfactorily accomplish delineation:
• Trees planted and maintained near the private property line corners and on 40 feet centers along the project boundary line.

• Shrubs similarly planted and maintained on 15-foot centers along the project boundary line.

• A hedge planted and maintained along the project boundary line.

• A fence or wall installed along the project boundary line.

• Corps of Engineers boundary signs may be attached to trees in heavily wooded areas where delineation by vegetation is impractical.

• Corps of Engineers survey markers and boundary signs are not to be disturbed. Any disturbance to these will require replacement by the applicant at their own expense. Disturbed survey markers will be required to be reset or replaced by a State of Florida registered land surveyor.

Private Moorage Facilities and other Minor Structures

Shoreline Use Permit applications for private moorage facilities or other minor structures required as support facilities for private moorage facilities will be considered in shoreline areas allocated as Limited Development. These facilities will be approved only for the applicant’s personal uses. Applications for private use permits will be reviewed with full consideration of the policies set forth in ER 1130-2-406, the requirements of the Shoreline Management Plan and the U.S Army Corps of Engineers SAJ-67 General Permit.

New Moorage Facilities

Permits for new facilities, either individual or community-owned, are allowed in Limited Development areas under the conditions set forth and when the granting of such permits does not create navigational hazards or adversely impact project purposes or public use and enjoyment of the waterway.

New permit applications submitted for review shall include plans and specifications of the proposed facility and support facilities. Permit approval is required prior to the start of construction and will be issued for a five-year period.

Work permitted on the Okeechobee Waterway that is covered under the Shoreline Management Plan also requires a state Environmental Resource Permit (ERP) from the Florida Department of Environmental Protection (FDEP). Local (county or city) permits may also be required and it is the applicant’s responsibility to obtain any necessary local permits or authorizations.
Submission of the permit application and accompanying plans and specifications should include engineering details, structural design, and construction materials (See Appendix B) and shall meet the following conditions:

**General Conditions**

- The applicant must own the property in fee title or have authorized access to the project shoreline allocated as limited development.

- Moorage facilities shall be located 100 feet or further from the near bottom edge of the authorized navigation channel where possible. In narrow reaches of the waterway, a 5-foot-wide marginal (parallel to the shoreline) moorage facility may be authorized. The proposed facility must not interfere with navigation or public use of the waterway. A narrow reach is defined as an area where there is less than 100 feet from the shoreline to the near bottom edge of the channel. In oxbows, moorage facilities shall not exceed 1/4 the width of the oxbow at normal pool elevation. (Limiting the width prevents restriction of navigation and provides sufficient open water area for safe maneuvering of watercraft.)

- Removal or excavation of right-of-way uplands for boat basins, seawalls, or other uses is prohibited, unless the conditions in the Right-of-Way Excavation section are met.

- Single-family moorage facilities shall not exceed the minimum size required to moor the owner’s boat(s) or 1,000 square feet (whichever is less). Other moorage facilities shall not exceed the minimum size required to achieve their intended purpose or 1,000 square feet (whichever is less).

- Single-family moorage facilities and other private structures shall be spaced no closer than 50 feet from structure to structure.

- Construction of enclosed moorage facilities, sleeping accommodations, cooking facilities, heating facilities, toilet and shower facilities, and other items conducive to human habitation are prohibited.

- Mooring permits shall be issued on a first come-first serve basis.

- Community moorage facilities are encouraged where practical in an effort to reduce the proliferation of individual facilities. Applications for community facilities will be reviewed on a case-by-case basis to ensure that conflicts between various uses are minimized.
Existing Facilities

- Existing permits for private facilities will remain in effect and will continue to be subject to the terms and conditions of the existing permit. All structures are to be maintained as stated in permit terms and conditions. Violation of permit conditions may result in the dock being removed from the project.

- Grandfather Clause – Existing moorage facilities that were permitted prior to the original approved Shoreline Management Plan (April 1991) and are located in other allocated areas (Protected Shoreline, Public Recreation and Prohibited Areas) will be permitted. These facilities are to remain as specified by their existing permit in their present locations until transfer of ownership of the property, need of replacement or death of the grantee and his widow or widower, as applicable. Upon the transfer of ownership of the property, the need of replacement of the permitted facility or the death of the grantee and his widow or widower, the permit expires and the facilities must be removed.

Public Law 99-662 - Protects previously authorized docks that were in place on or before 17 November 1986 from forced removal for an indefinite period of time. Structures protected by this Public Law must be maintained in a usable and safe condition, must not occasion a threat to life or property, and be in compliance with the conditions of the permit. Upon expiration of Public Law 99-662, the structures authorized by the provisions of that law will be considered “Grandfathered” structures and will then fall under the provision of the grandfather clause. Development of this plan has included full consideration for existing permitted private facilities and the Government's easement estate in the project right-of-way.

- The submittal of new or renewal permit applications and the subsequent issuance of any permit is based on the applicant’s understanding and agreeing to conform with the permit conditions set forth and attached to the permit.

Removal of Facilities

Existing unpermitted facilities or facilities that are not removed when specified in the permit or when requested after revocation of the permit, will be treated as an unauthorized structure pursuant to the Code of Federal Regulations, Title 36, Chapter III, Part 327.20 Unauthorized structures.

Permit Fees

An administrative charge will be collected for issuance of a permit and the initial inspection of the permit site. An additional annual facility inspection fee for each additional year in the term of the permit will also be collected in advance at the time the permit is issued. See Exhibit III for the rate schedule.

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Department of the Army Permits/Compliance with the National Environmental Policy Act (NEPA) and Other Pertinent Environmental Requirements

Pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and/or Section 404 of the Clean Water Act, General Permit SAJ-67, has been issued for certain activities specified within the Lake Okeechobee and Okeechobee Waterway Shoreline Management Plan. The requirements of NEPA and other pertinent environmental laws and regulations were addressed during the permit process. No activity shall be authorized under the SAJ-67, which by its size or location may adversely affect water quality, fish and wildlife habitat, wetlands, or emergent or submerged aquatic vegetation. Nor will any activity adversely affect registered properties or properties listed as eligible for inclusion in the National Register or Historic places. In addition and prior to start of work, the permittee must determine, in consultation with the State Historic Preservation Officer in Tallahassee, that no impacts to significant cultural resources will occur.

All activities that fall outside the scope of the Lake Okeechobee and Okeechobee Waterway Shoreline Management Plan and General Permit SAJ-67 (such as extensive dredging/riprapping, construction of outfall lines and the discharge of dredged or fill materials in navigable waters) are administered under conditions specified for individual permits processed under authority of Section 10, Rivers and Harbors Act of 3 March 1899 (33 USC 403) and/or Section 404 of the Clean Water Act. Lake Okeechobee and Okeechobee Waterway shoreline use permits are not issued for these activities. A separate permit application must be applied for through the Corps of Engineers Regulatory Office. Individual Department of the Army permit actions normally requires the preparation of an Environmental Assessment. However, if the Corps determines that granting the permit would constitute a major federal action and that the proposed activity would have a significant effect on the human environment, an Environmental Impact Statement will be prepared prior to final action on the permit application as required by Section 102(2)(c) of the National Environmental Policy Act of 1969. The applicant would be required to provide information and other support should an EIS be required.

Summary

The Lake Okeechobee and Okeechobee Waterway Shoreline Management Plan was developed to provide long-term protection of the authorized project purposes as well as provide recreational and natural resource benefits to the public. In order to meet this objective, the Operations Manager will continually monitor and recommend revisions that will minimize conflicts between the various project uses.

This plan will be reviewed at least once every five years and revised, as necessary, by the District Commander to determine the need for update. If warranted, consideration will be given to a process of re-evaluation of this plan including the
shoreline allocations, review of the National Historic Preservation Act of 1966, The National Environmental Policy Act of 1969 and The Preservation of Historical and Archaeological Data Act of 1974, where Congress gave the Corps the authority to protect historic sites and recover historical and archeological data.

When determined that significant changes are needed, the plan will be formally updated through the public participation process. The District Commander may make minor revisions to the plan when the revisions are consistent with Corps policy and funds for a complete plan update are not available. The amount and type of public involvement needed for such revision is at the discretion of the District Commander.

Additional National Environmental Policy Act documentation addressing Corps activities around Lake Okeechobee may be found in the 1999 Central and Southern Project Restudy and the 2001 Lake Okeechobee Water Regulation Schedule.

Questions concerning the Lake Okeechobee and Okeechobee Waterway Shoreline Management Plan may be directed to the South Florida Operations Office by mail at 525 Ridgelawn Road, Clewiston, Florida 33440 or by telephone at (863) 983-8101.
References

Federal Register
Chapter II, “Corps of Engineers, Department of the Army,” Part 330,
“Nationwide Permit Program.”
“Corps of Engineers, Department of the Army,” Part 327 “Rules and Regulations
Governing Public Use of Water Resources Projects Administered by the Chief of
Engineers.”

National Fire Protection Association

Public Laws
1899 Rivers and Harbors Act of 1899, Section 10. (33 USC 403).
1979 P.L. 96-95, Archeological Resources Protection Act. (16 USC 470aa-490mm).
1990 P.L. 101-601, Native American Graves Protection and Repatriation Act. (25 USC 3001-
3013).
The National Environmental Policy Act of 1969, (42 U.S.C 4321 et seq.).
  • Section 6, Public Law 970140, December 29, 1981, 95 Stat. 1718.
  • Section 4, Flood Control Act of 1944, Public Law 78-534, as amended by Public Law 87-874.

U.S. Army Corps of Engineers
1988 ER 200-2-2, Environmental Quality, Procedures for Implementing NEPA
1996 EP 1130-2-540, Project Operations, Environmental Stewardship Operations and
Maintenance Guidance and Procedures.
1996 ER 1130-2-540, Project Operations, Environmental Stewardship Operations and
Maintenance Policies.
1990 ER 1130-2-406, Project Operations – Shoreline Management at Civil Works Project (as
per Change 1, dated 14 Sep 92; and Change 2, dated 28 May 99).
1985 ER 405-1-12, Real Estate Handbook.
Appendix A

Specifications for Shoreline Stabilization
(Minimum Design Standards)

All plans for shoreline stabilization must meet the minimum design standards in this plan to ensure a quality, safe design to effectively control erosion. Plans must show that the method of shoreline stabilization will be expected to remain in place and should effectively control erosion when exposed to wind, wave action, wake action, and other outdoor conditions that occur on the Okeechobee Waterway.

If new applicants do not wish to use a licensed contractor, they may submit their own plan. The following minimum design standards are to be used as a guide in developing functional shoreline stabilization plans. See Land Use Permits for general and special conditions regarding land use permits. Some potential erosion control designs for sloped banks and wave run-up zones include riprap, vegetation and a combination of the two.

Structural (Riprap)

Stone riprap is natural rock placed on a shoreline bank to prevent erosion. The most effective technique involves the combination of a riprap blanket lain over the bank slope to prevent erosion and riprap placed along the toe of a bank to minimize scour. A riprap blanket is relatively flexible and can conform to minor changes in bank shape due to settlement or scour. Construction of a riprap blanket is not complicated and adding more stone can repair minor damages. In conjunction with the riprap blanket, the toe of the slope and the terminal ends of the blanket should be stabilized with a key trench and end trenches filled with riprap. These trenches prevent the riprap from sloughing down the slope and protect the terminal ends from wake and wave scour. Block-type riprap is preferred over elongated stone for construction because the stones interlock more effectively. Large protruding stones should be removed or broken up to prevent accelerated water flow from scouring around the large stone and displacing small stones adjacent to it.

Design Standards for Riprap

- A well-distributed mix of stones weighing from 20 to 200 pounds is suitable for applications where the maximum stream velocity is less than 10 feet per second. With this range of weights, the openings formed by the larger stones will be filled with the smaller stones in an interlocking fashion.
• The stones should be hard and dense and free from cracks and other defects that would tend to increase deterioration due to weathering. Professional guidance should be sought if there is any question about the quality or size of the stone.

• For banks where the primary soils are silt and fine sand, filter cloth will be placed between the riprap and the bank to prevent the soil from moving through the revetment. The filter cloth will also prevent the revetment from sinking into the soil, permit natural seepage from the bank and prevent build-up of excessive ground water pressure. Technical assistance should be obtained to ensure that the filter cloth would be properly matched with the riprap revetment.

• The thickness of a riprap revetment should be at least 1 to 1.5 times the maximum diameter of the largest stones used or twice the average diameter of the stones used. For most applications, a 12 to 18 inch thick blanket is acceptable. The thickness of the blanket should be increased by 50% for underwater portions of the revetment.

• The recommended maximum slope ratio for placement of stone is 1 foot vertical for 3 feet horizontal.

• The revetment should be stabilized at its base with a key trench to prevent the stone from sliding down the bank.

• The upstream and downstream terminal ends of the revetment should be tied into the bank with end trenches filled with riprap to prevent erosion and destruction of the revetment. The depth of a trench should be twice the revetment thickness and the bottom width of the trench should be three times the revetment thickness.

• A certified engineer should technically review final plans for construction of riprap blankets and bank toe protection before submitting for Corps approval.

**Aquatic/Transitional Vegetation**

To provide shoreline protection, native aquatic and native transitional vegetation may be planted within their respective zones. Native vegetation improves conditions for fish and wildlife, is less expensive than most structural methods and can do the following for aiding in erosion control:
• Root systems help hold the soil together and increase overall bank stability.

• Exposed vegetation (stalks, stems, branches, and foliage) increases the resistance to flow and reduces local flow and wake velocities.

• Vegetation acts as a buffer against the abrasive effect of transported materials.

• Close-growing vegetation can induce sediment deposition causing zones of low velocity at the bank where shear stresses may become small enough to allow coarse sediments to settle out of the flow.

Refer to Tables 2, 3, and 4 on the next page for a selection guide to native plant materials and appropriate planting zones. Additional native plant materials may be substituted and submitted for consideration as part of the application review process.

Combinations

Combinations of riprap may be interspersed with shoreline vegetation and/or combinations of aquatic/transitional vegetation in conjunction with synthetic and slowly degradable erosion mats. These mats include jute netting, straw erosion mats and coconut=straw erosion mats.
### Table 2 - Native Aquatic Plant Selection List

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Genus/species</th>
<th>Planting Density (Stems/sq. meter)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fragrant water lily</td>
<td>Nymphaea odorata</td>
<td>1</td>
</tr>
<tr>
<td>Umbrella-grass</td>
<td>Fuirena scruarrosa</td>
<td>7</td>
</tr>
<tr>
<td>Sawgrass</td>
<td>Caladium iamaicense</td>
<td>4</td>
</tr>
<tr>
<td>Tapegrass</td>
<td>Vallisneria americana</td>
<td>10</td>
</tr>
<tr>
<td>Giant bulrush</td>
<td>Scirpus californicus</td>
<td>7</td>
</tr>
<tr>
<td>Soft-stem bulrush</td>
<td>Scirpus validus</td>
<td>7</td>
</tr>
<tr>
<td>Pickerelweed</td>
<td>Pontederia cordata</td>
<td>5</td>
</tr>
<tr>
<td>Duck-potato</td>
<td>Saggittaria lancifolia</td>
<td>5</td>
</tr>
<tr>
<td>Slender spikerush</td>
<td>Eleocharis baldwinii</td>
<td>7</td>
</tr>
<tr>
<td>Golden canna</td>
<td>Canna flaccida</td>
<td>4</td>
</tr>
</tbody>
</table>

### Table 3 - Native Transitional Plant Selection List

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Genus/species</th>
<th>Planting Location*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaked rush</td>
<td>Rhynchospora microcarpa</td>
<td>Zone 1</td>
</tr>
<tr>
<td>Switch grass</td>
<td>Panicum virgatum</td>
<td>Zone 2</td>
</tr>
<tr>
<td>Chain fern</td>
<td>Woodwardia virginica</td>
<td>Zone 2</td>
</tr>
<tr>
<td>Swamp fern</td>
<td>Blechnum serrulatum</td>
<td>Zone 2</td>
</tr>
<tr>
<td>Flat-sedge</td>
<td>Cyperus odoratus</td>
<td>Zone 2</td>
</tr>
<tr>
<td>Bald cypress</td>
<td>Taxodium distichium</td>
<td>Zone 3</td>
</tr>
<tr>
<td>Water hyssop</td>
<td>Bacopa mannieri</td>
<td>Zone 3</td>
</tr>
<tr>
<td>Wax myrtle</td>
<td>Myrica cerifera</td>
<td>Zone 4</td>
</tr>
<tr>
<td>Virginia willow</td>
<td>Itea virginica</td>
<td>Zone 4</td>
</tr>
<tr>
<td>Sand cordgrass</td>
<td>Spartina bakeri</td>
<td>Zone 4</td>
</tr>
<tr>
<td>Sabal Palm</td>
<td>Sabal palmetto</td>
<td>Zone 4</td>
</tr>
<tr>
<td>Live Oak</td>
<td>Quercus virginiana</td>
<td>Zone 4</td>
</tr>
<tr>
<td>Sand Live Oak</td>
<td>Quercus geminata</td>
<td>Zone 4</td>
</tr>
<tr>
<td>Longleaf Pine</td>
<td>Pinus palustris</td>
<td>Zone 4</td>
</tr>
<tr>
<td>Saw Palmetto</td>
<td>Serenoa repens</td>
<td>Zone 4</td>
</tr>
</tbody>
</table>

*See Table 4 - Key to Planting Zones - Okeechobee Waterway

### Table 4 - Key to Planting Zones – Okeechobee Waterway

The following table indicates appropriate planting zones (elevations) for recommended transitional vegetation. Zone elevations are measured in feet from mean sea level (MSL).

<table>
<thead>
<tr>
<th>Location</th>
<th>Zone 1</th>
<th>Zone 2</th>
<th>Zone 3</th>
<th>Zone 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Lucie Canal</td>
<td>13.5 – 15.5</td>
<td>14.5 - 17.5</td>
<td>14.5 - 15.5</td>
<td>15.5 - 17.5</td>
</tr>
<tr>
<td><em>St. Lucie Lock to Port Mayaca Lock</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caloosahatchee River</td>
<td>10.0 – 12.0</td>
<td>11.0 – 14.0</td>
<td>11.0 – 12.0</td>
<td>12.0 – 14.0</td>
</tr>
<tr>
<td><em>Moore Haven Lock to Ortona Lock</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caloosahatchee River</td>
<td>2.0 – 4.0</td>
<td>3.0 – 6.0</td>
<td>3.0 – 4.0</td>
<td>4.0 – 6.0</td>
</tr>
<tr>
<td><em>Ortona Lock to W.P. Franklin Lock</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Lake Okeechobee and the Okeechobee Waterway Shoreline Management Plan -19
Appendix B

Specifications for Moorage Facilities
(Minimum Design Standards)

All plans for new docks and modifications to existing docks must meet the minimum design standards to ensure a quality, safe design upon construction. The plans must include a statement that the structure can normally be expected to remain in a safe condition when exposed to wind, wave action, wake action, and other outdoor conditions that occur on the Okeechobee Waterway.

If new applicants do not want to use a dock builder or engineer, they may submit their own plan. The following minimum design standards should be used as a guide in developing dock construction plans.

Construction Material

Metal
• Metal used in moorage facilities will be in accordance with the American Institute of Steel Construction specifications or applicable specifications of the American Society of Civil Engineers Proceedings, depending on the type of metal used. Welded or bolted connections are optional. All metal materials including nails, nuts, bolts, straps or structural members used in the construction of the facility will be galvanized, patented enamel, anodized aluminum finish or a combination thereof.

Wood
• Wood used in moorage facilities will be treated with an approved wood preservative, AWPB LP-2 minimum standard.

Other
• Concrete and/or other construction material may be approved on a case-by-case basis upon plan review.

Design standards

Framing
• Wood floor joists shall not be less than 2” X 6” standard lumber.

• Framing for wood construction shall not be less than 2” X 6” standard lumber. Studs shall not exceed 24” center to center.
• Metal floor joists and frames shall not be less than 2” ID standard pipe. The Corps may approve other standard structural steel materials and structural aluminum tubing on a case-by-case basis.

• Framing for pipe type construction shall not be less than 2” ID standard pipe or structural aluminum tubing. Studs shall not exceed 48” center to center. The Corps may approve other standard structural steel materials and structural aluminum tubing on a case-by-case basis.

**Decking**

• Decks will have a minimum surface area of 15 square feet.

• Decks must be a minimum of 18” above mean high water.

• Flooring and decking shall not be less than 2” X 4” normal rough S4S material and spaced no greater than .25” to allow for expansion. No plywood may be used.

• Metal, concrete, or similar types of flooring and decking may be approved on a case-by-case basis.

• Floating docks may be approved on a case-by-case basis, provided that the floating portion of the dock is permanently anchored to fixed pilings with ring collars or similar hardware and flotation material is in accordance with Condition 12 of Exhibit II.

**Walkways**

• Walkways will have a minimum width of 3’ and a maximum width of 6’.

• Walkways must be structurally sound and adhere to the same standards as the decking and framing.

**Handrails**

• If constructed, will be a 34”- 42” high solid rail with an intermediate rail securely installed.

**Pilings and Footings**

• Pilings shall have a minimum butt diameter of 6”.

• Pilings must be set into the foundation material to a depth of at least 5’ or 40% of the length of the piling, whichever is greater.

• Pilings shall be treated with an approved wood preservative (0.80 ACA or CCA).
Roofs
• Roofs must be securely fastened to the superstructure to resist a net wind uplift of 25 psf.

• Wooden roofs must adhere to the same construction standards as the superstructure (decking and framing).

• Metal roof joists or rafters shall not be less than 1.25” ID standard pipe or structural aluminum tubing, and spaced not more than 2’ center to center. Purlins shall not be more than 2’ center to center.

• Steel roofs must be a minimum gauge of 28; aluminum roofs must be a minimum thickness of .032”.

• Other construction material such as canvas may be approved on a case-by-case basis upon plan review.

Structure Size and Configuration
• The surface area of the structure, including decks, walkways, and areas covered by roofs must not exceed 1,000 square feet or the minimum size required to meet the structure’s intended purpose, whichever is less.

• Moorage facilities and other structures may be constructed using various configurations, approved by the Corps on a case-by-case basis.

Electrical
• Electrical service and equipment leading to or on private mooring facilities or other structures must not pose a safety hazard or conflict with other recreational use.

• All electrical installations must conform to the National Electric Code (NEC) and all state and local codes and regulations.

• All electrical service must be waterproof and include the installation of a ground fault circuit interrupter (GFCI).

• The facility must be equipped with quick-disconnect fittings mounted landward of the right-of-way boundary line. The quick-disconnect must be accessible at all times to Corps personnel, regardless of the owner’s presence.

• Details of all electrical service hardware and locations must be illustrated on a diagram and provided with the application.

• All electrical installations must be certified in writing by a licensed, registered, or otherwise certified electrician. A copy of the electrical certification (license)
must be provided to the operations manager before a Shoreline Use Permit can be issued or renewed. Renewal permits will not be issued until a licensed electrician has performed an electrical inspection, and documentation has been provided with the application for renewal.

- All new electrical lines must be installed underground. Existing overhead lines will be allowed, provided they meet all applicable electrical codes, regulations and the above guidelines, including safety and compatibility with fluctuating water levels.

- The operations manager will require immediate removal or disconnection of any electrical service or equipment that is not certified (if appropriate), does not meet code, or is not safely maintained.

**Designs for Persons with Disabilities**

Special deviations from the design requirements may be permitted to accommodate disabled members of the adjacent landowner’s household. To qualify for special consideration, the individual must be eligible for and receiving federal or state assistance or have other justifying documentation. Every effort will be made to grant permits to those who meet the eligibility requirements. However, site conditions and other circumstances will limit the U.S. Army Corps of Engineers ability to accommodate every applicant.
Appendix C

Specifications for Boat Ramps

(Minimum Design Standards)

All plans for boat ramps and modifications to existing boat ramps must meet the minimum design standards to ensure a quality, safe design upon construction. The plans must include a statement that the structure can normally be expected to remain in a safe condition when exposed to wind, wave and wake action and other outdoor conditions that occur on the Okeechobee Waterway. If new applicants do not want to use a contractor or engineer, they may submit their own plan. The following minimum design standards should be used as a guide in developing boat ramp construction plans.

Length and Width

- The optimum length and width of a boat ramp will vary depending upon the physical conditions of a given site. Widths may vary as follows:

<table>
<thead>
<tr>
<th>Boat Ramp Length</th>
<th>Boat Ramp Lane Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 50 feet</td>
<td>12 feet</td>
</tr>
<tr>
<td>50 – 75 feet</td>
<td>14 feet</td>
</tr>
<tr>
<td>Over 75 feet</td>
<td>16 feet</td>
</tr>
</tbody>
</table>

- Lengths will vary depending upon pool elevations and ramp grade.

Grade

- Boat ramps will have a minimum grade of 12% and a maximum grade of 16%.
- A straight-line grade is not necessary when changes in grade will better fit the terrain.

Shoulders

- Boat ramp shoulders should be stabilized with quarry run rock or graded riprap to prevent erosion.
- Rock should be sized for the anticipated wave action or current.

Surface and Bedding

- Boat ramps will be surfaced with reinforced or pre-stressed concrete with a minimum thickness of 6 inches.
- A 6-inch bedding course compacted to 100% density and sub-grade compacted to 95% density.

Upper and Lower Limits

- Upper limit elevation will be a minimum of 3 feet above the normal operating pool.
- Lower limit elevation will be a minimum of four feet below the normal operating pool.
Exhibit I

SHORELINE USE PERMIT/LICENSE/CONSENT TO EASEMENT
LAKE OKEECHOBEE AND THE OKEECHOBEE WATERWAY

A Guide to Applicants

INTRODUCTION

The U.S. Army Corps of Engineers welcomes you to Lake Okeechobee and the Okeechobee Waterway. The Corps has been delegated authority by Congress to manage and regulate public use of the lake and waterway. As part of its management program, the Corps may issue permits to install minor private facilities.

The purpose of this application package is to furnish information on permit procedures for shoreline use as prescribed in the Lake Okeechobee and Okeechobee Waterway Shoreline Management Plan. The purpose of the Lake Okeechobee and Okeechobee Waterway Shoreline Management Plan is to provide policies and guidelines for the effective long-range management of the project’s land, water, and shoreline. The illustrations included here are examples only; they illustrate construction methods that are acceptable, but not necessarily required. They include details that are required in an application, but alternate configurations may be approved as long as they meet the minimum requirements outlined in the shoreline management plan.

WHO MAY APPLY

Individuals who own property in fee title adjacent to public waters and share a common boundary line with the Corps may apply for a Shoreline Use Permit/License. The type of items that may be permitted is based on the zoning of the shoreline adjacent to the shared common boundary line. First-time applicants for new facilities must meet on-site with a park ranger.

Individuals who have the consent or approval of the underlying fee-owner to access or perform modifications to lands that the Government owns an easement may also apply.

HOW TO APPLY

For information regarding a shoreline use permit/license on the Caloosahatchee River, contact the W.P. Franklin Visitor Center at (239) 694-2582. For information on a permit/license for the St. Lucie Canal, contact the St. Lucie Visitor Center at (772) 219-4575. For all other areas or general information, you may also contact the South Florida Operations Office at (863) 983-8101.

Lake Okeechobee and the Okeechobee Waterway Shoreline Management Plan -25
A park ranger will meet with you to discuss shoreline management policies. You will be given an application packet to complete and return to for review and approval. Final approval will not be given until the Operations Manager, South Florida Operations Office and the Chief of Real Estate Division review and issue the permit/license/consent to easement. Once approved a permit tag will be issued to the permittee. This tag must be displayed on the outside of the dock.

WHAT TO FILE

- Two copies of CESAJ 1196, Application and Permit-License/Consent-to-Easement for Shoreline Use with original signature
- Location map
- Land modification drawings
- Construction standards for moorage facilities
- Moorage facility drawings
- Boat ramp drawings
- Dredge plan drawings
- Electric Certification (if applicable)
- Check Payable to FAO, USAED, Jacksonville in the amount specified by the rate schedule.

Complete listing of details and requirements are outlined in the Lake Okeechobee and Okeechobee Waterway Application for Shoreline Use package. Packages are available at the South Florida Operations Office, the W.P. Franklin Visitor Center, and St. Lucie Visitor Center.

WHERE TO FILE

<table>
<thead>
<tr>
<th>South Florida Operations Office</th>
<th>W.P. Franklin Visitor Center</th>
<th>St. Lucie Visitor Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>525 Ridgelawn Road</td>
<td>1660 S. Franklin Lock Rd.</td>
<td>2170 SW Canal Street</td>
</tr>
<tr>
<td>Clewiston, Florida 33440</td>
<td>Alva, Florida 33920</td>
<td>Stuart, Florida 34997</td>
</tr>
<tr>
<td>(863) 983-8101</td>
<td>(239) 694-2582</td>
<td>(772) 219-4575</td>
</tr>
</tbody>
</table>

WHAT MAY BE AUTHORIZED

- Shoreline Stabilization
- Boat Ramps
- Single/Multi-Family Piers
- Planting Native Vegetation
- Dredging not to exceed 500 cubic yards
- Aerial or Subaqueous Transmission Lines
- Removal of Exotic Vegetation
- Underbrushing/Mowing

HOW TO MODIFY THE PERMIT

Modification to any part of a permit requires prior approval. A site review is generally required. Contact the South Florida Operations Office for additional information.
RENEWAL OF PERMITS

Permit renewals are normally processed within 30 days. Please keep your mailing address current.

RULES AND REGULATIONS

Regulations governing the use of Lake Okeechobee and the Okeechobee Waterway are established in the Code of Federal Regulations, Title 36, Chapter III, Part 327. Copies are available upon request.

NOTE

• All information required as part of the application must be submitted at the same time.
• Partial or incomplete packages will NOT be accepted.
• A permit must be issued before any work is begun

PROCESSING THE APPLICATION

It will take approximately 20 –25 business days to evaluate and process land use applications once it is received. Applications for boat mooring facilities and boat ramps may take as long 120 days due to the requirement that they be coordinated with the U.S. Fish and Wildlife Service for impacts to manatees. Much of this time depends on accuracy and completeness of your application. Be sure to check all requirements prior to submitting application.
Exhibit II
CONDITIONS OF PERMIT/LICENSE/CONSENT TO EASEMENT
FOR SHORELINE USE

1. The Grantee shall pay, to the United States of America, (Hereinafter referred to as the "Government"), prior to issuance of outgrant, compensation in accordance with the fee schedule attached hereto as Exhibit "B". Checks should be made payable to FAO, USAED, Jacksonville.

2. The exercise of privileges hereby granted shall be without cost or expense to the Government, under the general supervision and approval of the officers executing this instrument or duly authorized representative (hereinafter the Operations Manager), subject to such regulations as may be prescribed by him from time to time, and is subject to the Government's navigation servitude; Title 33, Code of Federal Regulations Part 325, and to all applicable Federal, State and local laws and regulations.

3. The Government has a right-of-way easement over the above-numbered tract of land, which easement, by its terms, reserves to the Government, in perpetuity, the right to use said easement for the construction, improvement, and maintenance of the Okeechobee Waterway, Florida.

4. It is understood that this instrument is effective only insofar as the property rights of the Government in the land to be occupied are concerned, and that it does not relieve the Grantee from the necessity of obtaining grants from the owners of the fee and/or other interests, therein, nor does it eliminate the requirement that the grantee obtain State or local approval required by law for the activity authorized herein. That any proposed improvements or use authorized herein shall not be commenced until appropriate rights have been obtained by the Grantee from the record owners and encumbrances of the fee title to the lands involved, or until the Grantee has obtained all Federal, State, or local permits required by law.

5. This instrument does not convey any property rights, either in real estate or material, or any exclusive privileges, and it does not authorize any injury to property or invasion of rights or any infringement of Federal, State or local laws or regulations.

6. Structures are subject to periodic inspections by Corps personnel. If an inspection reveals conditions, which make the facility unsafe in any way, or conditions that deviate from the approved plans, the owner upon receipt of notification will correct such conditions immediately. The Government shall in no case be liable for failure to supervise or inspect the improvements or use authorized herein. No deviations or changes from approved plans will be permitted without prior written approval from said officer. That any improvements or use not specifically authorized or identified herein shall constitute a violation of this instrument which may result in a revocation of this instrument and in the institution of such legal proceeding as the Government may consider appropriate, whether or not this instrument has been revoked or modified.
7. Any property of the Government damaged or destroyed by exercising the privileges herein granted shall be promptly repaired or replaced by the Grantee to the satisfaction of the Operations Manager, or in lieu of such repair or replacement the Grantee shall, if so required by the Operations Manager, pay to the Government, money in an amount sufficient to compensate for the loss sustained by the Government by reason of damage to or destruction of Government property.

8. The Grantee agrees that the Government shall not be responsible for damages to the property or injuries to the persons which may arise from or be incident to the exercise of the privileges herein granted, or for damages to the property or for injuries to the person of the Grantee, or the persons of Grantee's officers, agents, servants, employees or others who may be on the premises at the invitation of the Grantee or at the invitation of one of them, and the Grantee shall hold the Government harmless from any and all claims, causes of action, suits at law or from any liability of any nature. The Government shall in no case be liable for any damage or injury to the improvements authorized herein which may be caused by the Government for the improvement of navigation or arising from Governmental activity on or in the vicinity of the property.

9. That the Grantee hereby recognizes that structures granted within Federal navigation waterways are subject to damage by wavewash from passing vessels. The issuance of this outgrant does not relieve the Grantee from taking all proper steps to ensure the integrity of the structure granted herein and the safety of boats moored thereto from damage by wavewash, and the Grantee shall not hold the Government liable for any such damage nor restrict in any way the full use of the Federal Waterway by the general public by the placement of unauthorized "no wake" signs and/or buoys. Speed zones will not be authorized to protect private property.

10. Should the grantee cease to operate and/or maintain the approved facility, or upon the relinquishment, termination, expiration, revocation, forfeiture, or annulment of this instrument, the Grantee shall remove his/her facility within 30 days, at his/her expense, and restore the water and land area to its former condition. If the Grantee fails to remove and restore the water premises to the satisfaction of the Operations Manager, the Operations Manager may do so by contract or otherwise and recover the cost thereof from the Grantee, and no claim for damages against the Government, or its officer or agents, shall be created by or made on account of such removal or restoration.

11. No attempt shall be made by the Grantee to forbid the full and free use by the public of all navigable waters and/or Government-owned shoreline, at or adjacent to the approved facility.

12. Floats and flotation material for all docks shall be fabricated of materials manufactured for marine use. The float and its floatation material shall be 100% warranted for a minimum of eight (8) years against sinking, becoming waterlogged, and cracking, peeling, fragmenting or losing beads. All floats shall resist puncture and
penetration and shall not be subject to damage by animals under normal conditions for the area. All floats and the floatation material used in them shall be fire resistant. The use of new recycled plastic or metal drums or non-compartmentalized air containers for encasement or floats is prohibited.

13. No improvement authorized is to be used for human habitation. Household furnishings are not permitted on boat piers, boathouses, or other structures. No houseboat, cabin cruiser or other vessel shall be used for human habitation at any mooring point.

14. No charge may be made for use of the facility, nor shall commercial activities be conducted thereon.

15. The outgrant tag provided for structures shall be posted on the facility or on the land areas covered by the instrument so that it can be visually checked with ease in accordance with instructions of the Operations Manager.

16. No vegetation other than that prescribed may be damaged, destroyed or removed. No vegetation of any kind will be planted other than that specifically prescribed. No change in landform such as grading, excavation or filling may be done, other than that specifically prescribed.

17. The Grantee agrees that he will complete construction within 1 year of the instrument's issue date. The instrument shall become null and void if construction is not completed within that period. Further, the Grantee agrees that he/she will operate and maintain the facility in a manner so as to minimize any adverse impact on fish and wildlife habitat, natural environmental values, and in a manner so as to minimize the degradation of water quality.

18. The Grantee agrees that if subsequent operations by the Government for any authorized project require an alteration in the location of the facility or, if in the opinion of the said officer, the facility shall cause unreasonable obstruction to navigation or that the public interest requires, the grantee shall, upon written notice from the said officer, remove, alter, or relocate the facility, without expense to the Government, and no claim for damages shall be made against the Government on account of such alterations, removal or relocation.

19. General permit proposals and plans must be reviewed and approved by the Operations Manager. The Operations Manager will administer General Permits under the guidelines of Section 4, 1944 Flood Control Act, as amended, PL 87-874 (16 USC 460.d) and changes for shoreline management as specified in Title 36 CFR, Part 327.30, Shoreline Management Plan.
20. In issuing authorizations under these procedures, the Government has relied on the information and data that the Grantee has provided in connection with his/her application. If, subsequent to the issuance of an authorization under the Shoreline Management Plan, such information and data prove to be materially false, incomplete or inaccurate, the authorization may be modified, suspended or revoked, in whole or in part and/or the Government may, in addition, institute appropriate legal proceedings.

21. Activities which are not specified in the Shoreline Management Plan or General Permits or which exceed the limitations of these outgrant conditions will require individual Department of the Army authorization from the Corps of Engineers before work can commence. The District Commander also may require authorization under general or individual permits for a specific project that might be contrary to the public interest.

22. That the Grantee shall not remove or disturb, or cause or permit to be removed or disturbed, any historical, archaeological, architectural, or other cultural artifacts, relics, vestiges, remains, or objects of antiquity. In the event such items are discovered on the premises, the Grantee shall immediately notify the Operations Manager, and the site and the material shall be protected by the Grantee from further disturbance until a professional examination of them can be made or until clearance to proceed is authorized by the Operations Manager.

23. This instrument is non-transferable. Upon the sale or other transfer of the facility or the death of the permittee and his/her legal spouse, this permit is null and void.

24. If the ownership of a facility is sold or transferred, the permittee or new owner will notify the operations manager of the action prior to finalization. The new owner must apply for a Shoreline Use Permit/License/Consent to Easement within 30 days or remove the facility and restore the area within 90 days from the date of ownership transfer.

25. This instrument may be terminated by the Grantee at any time by giving to the Operations Manager, at least ten (10) days notice in writing; provided that, in case of such termination, no refund by the Government of any fee therefore paid shall be made.

26. By thirty (30) days written notice, mailed to the Grantee by registered or certified mail, the Operations Manager may revoke this instrument whenever he determines that the public interest necessitates such revocation or when he determines that the grantee has failed to comply with the conditions of this instrument. The revocation notice shall specify the reasons for such action. If within the 30-day period the Grantee requests a hearing in writing to the District Commander through the Operations Manager, the District Commander shall grant such hearing at the earliest opportunity. In no event shall the hearing date exceed (sixty) 60 days from the date of the hearing request. At the conclusion of such hearing, the District Commander shall render a final decision in writing and mail such decision to the Grantee by registered or certified mail. The Grantee may, within five (5) days of receipt of the decision of the District Commander
appeal such decision to the Division Commander. The decision of the Division Commander shall be rendered as expeditiously as possible and shall be sent to the Grantee by registered or certified mail. The Grantee may, within 5 days of receipt of the decision of the Division Commander, appeal such decision in writing to the Chief of Engineers. The decision of the Chief of Engineers shall be final.

27. Notwithstanding condition 25 above, if, in the opinion of the District Commander, circumstances dictate, the District Commander may summarily revoke this instrument.

28. The Operations Manager or his/her authorized representative shall be allowed to cross the Grantee’s property, as necessary, to inspect facilities and/or activities under permit.

29. When vegetation modification is allowed, the Grantee will delineate the Government easement boundary in a clear but not unobtrusive manner approved by the Operations Manager in accordance with the Lake Okeechobee and Okeechobee Waterway Shoreline Management Plan.

30. Prior to the execution of this instrument, Condition Number(s) ______________________ were deleted.

This instrument is not subject to Title 10, United States Code, Section 2662, as amended.
Exhibit III

South Atlantic Division Fee Schedule
FOR CONSOLIDATED PERMITS
COVERING SHORELINE FACILITIES/ACTIVITIES
Effective 1 January 2006

ADMINISTRATIVE FEES for docks & other facilities (5-Year Term)

<table>
<thead>
<tr>
<th>Service</th>
<th>Fee</th>
<th>Owner/prorated fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Permit (or new owner of existing facility)</td>
<td>$400</td>
<td></td>
</tr>
<tr>
<td>Re-issue Permit (to same owner of existing facility)</td>
<td>$175</td>
<td></td>
</tr>
<tr>
<td>Permit Modification¹ (additions/changes to existing facility)</td>
<td>$90</td>
<td></td>
</tr>
</tbody>
</table>

¹ Modifications may not be for a five year term.

PLUS +

FAIR MARKET VALUE FEE, if applicable (5-Year Term)

<table>
<thead>
<tr>
<th>Service</th>
<th>Fee Estate</th>
<th>Easement Estate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility right-of-way (each utility)</td>
<td>$35.00</td>
<td>No charge</td>
</tr>
<tr>
<td>Boat launching ramp</td>
<td>$67.00</td>
<td>No charge</td>
</tr>
<tr>
<td>Clearing of underbrush and/or mowing</td>
<td>$10.00</td>
<td>No charge</td>
</tr>
<tr>
<td>Erosion Control</td>
<td>No charge</td>
<td>No charge</td>
</tr>
</tbody>
</table>

Notes:

1. Fees will be prorated when the instrument is issued for terms shorter than 5 years. However, a minimum of $20.00 will be imposed for all uses except erosion control.

2. Fees for approved privileges not listed above will be commensurate with the privilege granted.
EXHIBIT IV

CRITERIA USED FOR EVALUATING THE SHORELINE USE ALLOCATION FOR LAKE OKEECHOBEE AND OKEECHOBEE WATERWAY SHORELINE MANAGEMENT PLAN

The following criteria were used to evaluate the shoreline use allocations at Lake Okeechobee and Okeechobee Waterway. In all shoreline use allocations, consideration was given to the limited land base, right-of-way estates, the continued increase in public use, the existing and expected operations and maintenance requirements, as well as the projected adjacent private development along the waterway. The criteria were established with the intent of managing private exclusive use in order to protect the project purposes and the general public's use of the waterway and to enhance the natural resources of the project.

I. Public Recreation Areas – These areas were allocated utilizing the following criteria:

   a. Public recreation areas identified in the project Master Plan. The shoreline adjacent to these areas was classified in this allocation to be compatible with the recreation areas in the Master Plan.

   b. Public recreation area allocations were also made at the request of state, county, city, or other public agencies that informed the Corps of their planned recreation development along the waterway.

   c. As recreational sites are planned in the future, the shoreline use allocation may be changed to accommodate for public recreation.

II. Prohibited Access Areas - These areas were evaluated and allocated to protect the safety of the project visitor and security of the project operations.

III. Protected Shoreline Areas - These areas were evaluated and established based on three categories.

   a. Areas Necessary for Project Operations.

      (1) Right-of-way necessary for routine snagging and other maintenance storage areas.

      (2) Work site areas necessary for spillway, drainage and/or other structure maintenance. These areas differ in size, depending on the size of the structures.

      (3) Areas necessary to ensure the protection of the Herbert Hoover Dike.

      (4) Access roads and/or access right-of-way to project lands and/or structures.
b. **Areas Established for Fish and Wildlife Habitat** - these areas include portions of the Caloosahatchee River and Lake Hicpochee, which were identified as prime manatee and/or wading bird habitat areas.

c. **Areas Established for Public Safety.**

   (1) Areas located immediately upstream and downstream of spillways and/or navigational lock structures - these areas also include vessel staging areas. These areas differ in size depending on the design features of the structures.

   (2) Areas located immediately adjacent to or within public highway right-of-way.

   (3) Areas located on either side of and adjacent to oxbows, outlets to natural and/or manmade canals, etc. These areas encompass a minimum distance of fifty (50) linear feet along the project boundary in both directions from the shoreline/boundary line interface. Note: Distance may be greater to ensure docks and/or other private facilities are not protruding into the entrance of said areas.

IV. **Limited Development Areas** - All shoreline areas that did not fall within the criteria for public recreation areas, prohibited access areas, and protected shoreline areas were included in the limited development area allocation.