

Appendices to the Management Plan for
Guana River
Wildlife Management Area
2015 - 2025



St. Johns County, Florida

Florida Fish and Wildlife Conservation Commission
620 South Meridian Street
Tallahassee, Florida 32399-1600

Volume 2 of 2

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13 Appendices

13.1 Lease 3585

AGENCY MANAGEMENT LEASE
FOR
GUANA RIVER WILDLIFE MANAGEMENT AREA

Lease No. 770-9006

THE BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, referred to herein as the "Board" and the STATE OF FLORIDA DEPARTMENT OF NATURAL RESOURCES, DIVISION OF STATE LANDS, referred to herein as "State Lands", as agent for the Board, do hereby grant to the STATE OF FLORIDA GAME AND FRESH WATER FISH COMMISSION, referred to herein as the "Commission", and the DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, DIVISION OF FORESTRY, referred to herein as "Forestry", management responsibilities for the Guana River Wildlife Management Area, located in St. Johns County, Florida described as follows and subject to all existing encumbrances:

All that part of Parcel "A" of Exhibit "A", attached hereto, lying North of the following described line:

Begin at a point on the East shore of the Tolomato River, said point being the intersection of the Southwesterly prolongation of a dike located in Section 48, Township 5 South, Range 29 East, with the East shore of said river; thence Northeasterly, Southeasterly and Northeasterly along said dike to an intersection with the North line of said Section 48; thence Northeasterly, 400 feet along said North line of Section 48; thence Northwesterly, perpendicular to the North line of Section 48, 1150 feet along a line being approximately 300 feet East of a lake; thence Northeasterly, parallel with the North line of Section 48, along a line being approximately one-half mile North of a causeway, to the Guana River and the point of termination, said part including the borrow ditch lying immediately North of said dike.

Also,

All of Parcel B, as described in Exhibit "A". LESS and EXCEPT that part occupied by the causeway and dam located in Section 31, Township 5 South, Range 30 East and forming the southern boundary of Guana Lake.

TO HAVE AND TO HOLD the above described property for a period of fifty (50) years.

W I T N E S S E T H

The Board and the Commission, for and in consideration of the covenants hereinafter contained, do hereby covenant as follows:

ement Plan

1. The lands shall be managed in accordance with a management plan to be prepared pursuant to Section 253.034, F.S. and presented to the Board for approval within twelve (12) months of the date of this Lease. The land management plan shall emphasize the original management concept approved by the Board at the time of acquisition and which established the primary purposes for which this tract was acquired. Activities of the parties shall be governed by and in compliance with the land management plan.

2. The Commission shall be the primary managing agency. As such, it shall coordinate and oversee all activities on the property; initiate appropriate management programs to meet the intent of the goals and objectives stated herein; coordinate preparation and periodic revision of the land management plan; coordinate and monitor all management activities undertaken by others; and, compile and submit such reports as may be required of the managing agencies.

3. The Commission shall: provide a permanent staff position to plan and supervise management of the property as funding is acquired; administer and regulate campsites as desired; manage wildlife habitat; regulate hunting, fishing and non-game activities; and, assist in patrolling and providing required law enforcement to prevent poaching, to protect threatened and endangered species, and to protect archaeological and historic sites from looting and other unauthorized activities.

The Commission shall maintain the soundness of the earthen dam forming the Southern boundary of Guana Lake, and maintain, operate and renew the water control devices in the dam as necessary for management of Guana Lake. The Commission will notify the Department of Natural Resources, Division of Recreation and Parks thirty days prior to undertaking any operation or activity that would affect recreational use of the dam, except in emergency circumstances of immediate threat to human safety or to the general well-being of ecological resources. Under such circumstances the Commission will,

nevertheless, notify the park manager assigned by the Division of Recreation and Parks to those lands containing the dam, prior to undertaking an operation.

4. The Commission shall have the right of access to, maintenance of, and water drainage by any existing ditches closely associated with the dike referred to above in Parcel "A", whether north or south of the dike, which ditches may be necessary to the control of water levels in lakes north of the dike.

5. Lessee agrees to provide for appropriate access to the lands leased hereunder for persons holding a state parks admission ticket or annual entrance permit; however, this permit will not cover license or stamp requirements for hunting or fishing.

6. It is understood by all parties that all management activities specified by this lease shall be designed to conserve, protect and enhance the lands covered by this lease as provided for by Chapter 259, Florida Statutes.

7. It is further understood and agreed that in addition to the management responsibilities specified herein, the following will be applicable:

- A. The land management plan for this tract shall be submitted to the Board for approval through State Lands, acting as agent for the Board. The approved land management plan shall provide the basic guidance for all management activities and shall be reviewed jointly by the Commission and the Board at no greater than five-year intervals. Annual work plans and management activities shall be reviewed prior to implementation and submitted to State Lands on an annual basis.
- B. The Commission shall not use or alter the property except as provided for in the approved land management plan without the advance written approval of State Lands, acting as agent for the Board.

- C. The Board may, on occasion, after discussion with and concurrence by the Commission, authorize compatible uses of the property by other parties during the life of this lease.
- D. The Board, or its duly authorized agent may, at any time, inspect the works and operations of the Commission in any matter pertaining to this lease. Should the Commission fail to keep or perform any of its responsibilities as designated by the land management plan or program provided for herein, the Board shall notify the Commission of such non-performance. If correction or jurisdiction is not made after sixty days of receipt of written notice, the Board may terminate the Commission's participation in the lease by providing thirty days written notice of such pending action. Any notice will be in writing from the Director of the Division of State Lands, as agent for the Board.
- E. This lease may be terminated at the option of State Lands, acting as agent for the Board, if the Board determines that the property would serve a greater public purpose. The Board, in consultation with the Commission, shall have the right to amend or terminate this lease by providing a reasonable time period to effectuate such an amendment or termination of activities. Any notice of such action shall be in writing from the Director of the Division of State Lands, as agent for the Board. The Commission herein shall have the right to terminate its participation in this management lease upon sixty days written notice to the Board and shall have up to 6 months to conclude its activities hereunder.

8. This lease and any rights and privileges contained herein are for the sole use of the managing agencies and shall not be assigned or transferred to another party without the

advance written approval of the Board. The managing agencies shall have the right to enter and occupy the property for the purposes necessary to meet its designated responsibilities, including protection of the property. The agencies' agents and employees shall take all reasonable measures to provide security against property damage, property degradation, and unauthorized uses.

9. The managing agencies agree to assist in the investigation of injury or damage claims either for or against the State of Florida, the Board or Division of State Lands pertaining to its respective areas of responsibility, or arising out of its respective areas of responsibility, or arising out of its respective management programs and activities, and to contact the Board regarding whatever legal action it deems appropriate to remedy same.

10. The managing agencies hereby covenant and agree to investigate all claims of every nature at their own expense and to indemnify, protect, defend, hold and save harmless the Board, State Lands and the State of Florida from any and all claims, actions, lawsuits and demands of any kind or nature arising out of this management lease to the extent allowable by law.

11. The land management plan prepared under this lease shall identify management strategies for exotic species, if present. The introduction of exotic species is prohibited, except when specifically authorized by the approved land management plan.

12. Execution of this agreement in no way affects any of the parties' obligations pursuant to Chapter 267, Florida Statutes. The collection of artifacts or the disturbance of archaeological and historic sites on state-owned lands is prohibited unless prior authorization has been obtained from the Department of State, Division of Historical Resources. The land management plan prepared pursuant to Section 253.034, Florida Statutes, shall be reviewed by the Department of State, Division of Historical Resources to insure that adequate measures have been planned to locate, identify, protect and preserve the

archaeological and historic sites and properties on the tract.

13. Forestry shall provide advice and on-site assistance to the Commission in implementing a prescribed burning program; respond to and take charge of any wildfire and oversee any timber planting and harvesting activities based on a consensus reached by all participating managing agencies.

IN TESTIMONY WHEREOF, the lawfully designated agent of the Board of Trustees of the Internal Improvement Trust Fund has hereunto subscribed his name and has caused the official seal of said Board to be hereunto affixed, in the City of Tallahassee, Florida, on the 15th day of April, 1988.

(SEAL)
BOARD OF TRUSTEES OF THE
INTERNAL IMPROVEMENT
TRUST FUND OF THE STATE
OF FLORIDA

BOARD OF TRUSTEES OF THE INTERNAL
IMPROVEMENT TRUST FUND OF THE
STATE OF FLORIDA

Virginia S. Curry
Witness

By: [Signature]
Acting DIRECTOR, DIVISION OF STATE
LANDS, AGENT FOR THE BOARD OF
TRUSTEES OF THE INTERNAL
IMPROVEMENT TRUST FUND OF THE
STATE OF FLORIDA

Violet L. Davis
Witness

STATE OF FLORIDA
COUNTY OF LEON

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State aforesaid and in the County of Leon, to me known to be the person described in and who executed the foregoing instrument and has acknowledged before me that he executed the same.

WITNESS my hand and official seal in the County and State last aforesaid this 15th day of April, 1988.

Approved as to Form and
Legality

[Signature]
DWP Attorney

Violet L. Davis
Notary Public

My Commission Expires: _____
NOTARY PUBLIC STATE OF FLORIDA
MY COMMISSION EXP. AUG 18, 1989
BONDED THRU GENERAL IND. VMD.

Approved for Compliance
with Chapter 253.03, F.S.

By: Catherine Daniels

STATE OF FLORIDA GAME AND FRESH
WATER FISH COMMISSION

James C. Bliss
Witness

By: Robert M. Brantly
Colonel Robert M. Brantly
Executive Director

Marilyn D. Daves
Witness

APPROVED AS FISCALLY
AND BUDGETARILY SOUND

William C. Sumner
DIRECTOR
DIVISION OF ADMINISTRATIVE SERVICES
GFWFC

[Signature]
APPROVED AS TO FORM
AND LEGAL SUFFICIENCY
Commission Attorney

STATE OF FLORIDA
COUNTY OF LEON

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State aforesaid and in the County aforesaid to take acknowledgement, personally appeared Robert M. Brantly, to me known to be the person described in and who executed the foregoing instrument and has acknowledged before me that he executed the same.

WITNESS my hand and official seal in the County and State last aforesaid this 26th day of January, 1988.

Thaddeus H. Tule
Notary Public

My Commission Expires: _____
Notary Public, State of Florida
My Commission Expires May 8, 1991

DEPARTMENT OF AGRICULTURE AND
CONSUMER SERVICES, DIVISION OF
FORESTRY

Virgie Thompson
Witness
Diane R. Easter
Witness

By: Doyle Conner
COMMISSIONER OF AGRICULTURE
Approved as to form and legality
By: Leslie McLeod, Jr.
Notary Attorney

STATE OF FLORIDA
COUNTY OF LEON

I HEREBY CEPTIFY that on this day, before me, an officer duly authorized in the State aforesaid and in the County aforesaid to take acknowledgement, personally appeared DOYLE CONNER, to me known to be the person described in and who executed the foregoing instrument and has acknowledged before me that he executed the same.

WITNESS my hand and official seal in the County and State last aforesaid this 11th day of March, 1988.

Virgie Thompson
NOTARY PUBLIC
My Commission Expires June 22, 1990
My Commission Expires _____

FARCEL "A" (Parcel A-1: Sale Parcel)

A tract of land in St. Johns County, Florida, comprised of portions of Township 4 South, Range 29 East; Township 5 South, Range 29 East; Township 5 South, Range 30 East; Township 6 South, Range 29 East; and Township 6 South, Range 30 East, that is generally bounded on the North by State Road Nos. 210 and 306, generally bounded on the East by Guana Lake and/or Guana River, and generally bounded on the West by the Intracoastal Waterway right of way and/or the Southerly extension thereof via Tolomato River to its intersection with the aforementioned Guana River. Said tract of land is further described as:

In Township 4 South, Range 29 East

All of unsurveyed Section 34, lying East of the Florida Intracoastal Waterway right of way, subject to the perpetual easement vested in the United States of America to deposit spoil and dredge material on said unsurveyed Section 34 as said rights are recorded in Foreign Judgment Book 4, Page 91, of the current Public Records of said County.

That part of unsurveyed Section 27, East of the Florida Intracoastal Waterway right of way and South of a line beginning 1,050 feet South of Permanent Reference Monument No. 94 on the East right of way thereof and running N-64°E to Section 34, Township and Range aforementioned, EXCEPT any portion thereof as described in the Public Records of said County, in Official Records Volume 122, Page 354, and further EXCEPTING any portion of the right of way of a county road as now established;

EXHIBIT A

NOTE: All references to acreage contained herein are based upon and refer to that certain "Boundary Survey of Portions of Townships 4, 5, & 6, Range 29 East, Together With Portions of Townships 5 & 6, Range 30, St. Johns County, Florida" prepared by Robert M. Anzas Associates, dated April 19, 1984, Job No. C-30929.

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All of unsurveyed Section 35 lying West of Section 56, in Township 4 South, Range 29 East.

F. P. Sanchez Grant or Section 53;

Davis Floyd Grant, Section 56;

All of the Pedro Mestre Grant or Section 54, lying South and East of the right of way of State Road No. 210, and South of the right of way of a county road as now established, EXCEPT any portion thereof as shown on the Plat of Palm Valley Shores, as recorded in the current Public Records of said County, in Map Book 10, Page 38, and further EXCEPTING any portion thereof as described in the Public Records of said County in Official Records Volume 122, Page 354;

Government Lots 1 and 5, and all of Government Lots 2 and 4 of Section 22, lying Easterly of the right of way of State Road 210;

All of Sections 46 and 75 lying South of the right of way of Micklers Road, as established by usage and West of the unrecorded development along Neck Road, EXCEPT any portions thereof described in the Public Records of said County in Deed Book 116, Page 510; Deed Book 117, Page 118; Deed Book 148, Page 385; Deed Book 159, Page 291; Deed Book 159, Page 294; Deed Book 179, Page 157; Deed Book 33, Page 208; Deed Book 118, Page 102; Deed Book 158, Page 49; Deed Book 235, Page 12; and Deed Book 120, Page 540; and Official Records Book 539, Page 665;

Government Lot 6, and all of Government Lots 1, 4, 5, and 7, Section 15, lying Easterly of the right of way of State Road 210 and/or Southerly of the right of way of Micklers Road;

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All of the N. Sanchez Grant or Section 52, EXCEPT that portion or parcel described in the Public Records of said County in Official Records Volume 173, Page 356;

Government Lot 3, Section 23, subject to the reservations in favor of the United States of America set forth in patent given by its granting relating to uranium, thorium or other fissionable materials, Deed Book 193, Page 515;

Government Lot 4, Section 14, subject to the reservations in favor of the United States of America set forth in patent given by its granting relating to uranium, thorium or other fissionable materials, Deed Book 193, Page 515;

In Township 5 South, Range 29 East

All of unsurveyed Section 2, lying East of the Florida Intracoastal Waterway right of way and West of Section 2 and John Floyd Grant or Section 38;

All of unsurveyed Section 3, lying East of the Florida Intracoastal Waterway right of way;

Government Lots 1, 2, and 3, Section 2, subject to the reservations in favor of the Trustees of the Internal Improvement Fund of the State of Florida contained in deed recorded in Deed Book 148, Page 119, of the Public Records of said County, as said reservations relate to Government Lot 3;

D. Floyd Grant or Section 37;

All of unsurveyed Section 10, lying East of Florida Intracoastal Waterway right of way;

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John Floyd Grant or Section 38;

All of Fractional Section 11, subject to the reservations in favor of the Trustees of the Internal Improvement Fund of the State of Florida contained in deed recorded in Deed Book 148, Page 119, of the Public Records of St. Johns County, Florida, granting Lots 1, 2, 3, 4, 5, 7 and 8, of Section 11;

Unsurveyed Section 11, East of the Florida Intracoastal Waterway right of way;

Government Lot 3, Section 12;

F. P. Sanchez Grant or Section 67;

G. I. F. Clarke Grant or Section 68;

All of Section 14 (surveyed and unsurveyed) and Government Lots 2 and 3, Section 13, said lands are subject to the reservation as a burial place for the dead of a portion of the land conveyed by Louisa Booth and James W. Booth by deed recorded in Deed Book 15, Page 184, of the Public Records of St. Johns County, Florida, conveying Lots 2 and 3 of Section 13, and Lot 4 of Section 14, Township 5 South, Range 29 East; (EXCEPT any portion of unsurveyed Section 14, lying within the right of way of the Florida Intracoastal Waterway right of way);

All of unsurveyed Section 15, lying East of the Florida Intracoastal Waterway right of way;

Unsurveyed Section 23;

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Section 25 and/or unsurveyed Section 26, as described in the Public Records of said County in Official Records Volume 137, Page 288, subject however to the reservations in favor of the Trustees of the Internal Improvement Fund of the State of Florida contained in deed recorded in the Public Records of said County in Deed Book 154, Page 59;

Portion of Pine Island, being in unsurveyed part of a parcel of unsurveyed swamp and overflow land in Section 22, as described in the Public Records of said County in Official Records Volume 9, Page 554;

Unsurveyed Section 22, lying east of Florida Intracoastal Waterway right of way and/or Tolomato River;

Section 25 and unsurveyed Section 25; EXCEPT that portion of unsurveyed Section 25 which lies East of Section 25, Section 50, and Section 46;

Any portion of unsurveyed Section 27 and any portion of unsurveyed Section 35, lying East of Florida Intracoastal Waterway right of way and/or East of Tolomato River;

Pedro Cocifacio Grant or Section 52;

Alkinson or Cocifacio Grant or Section 51;

J. P. DeBurgo Grant or Section 50;

Mariano Berla Grant or Section 46;

Mariano Berla Grant or Section 47;

Mariano Berla Grant or Section 48;

Section 49;

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Unsurveyed Section 10, as described in the Public Records of said County, in Deed Book 214, Page 43 and in Deed Book 174, Page 171, and subject to the reservations in favor of the Trustees of the Internal Improvement Fund of the State of Florida contained in deeds recorded in Deed Book 153, Page 559, of the Public Records of St. Johns County, Florida;

In Township 6 South, Range 20 East

Section 10; subject to the reservations in favor of the Trustees of the Internal Improvement Fund of the State of Florida contained in deeds recorded in Deed Book 217, Page 425, of the Public Records of St. Johns County, Florida;

Section 38;

Section 39;

Section 40;

Juan Segal Grant or Section 41;

Lucas O. Grant or Section 42;

John Kershaw Grant or Section 43;

M. Fontan Grant, or Section 97;

Unsurveyed Section 1, lying East of Tolomato River;

Portions of the above described lands may be subject to drainage easements as vested to Ponte Vedra Company by deed recorded in the Public Records of said County, in Deed Book 112, Page 49 and/or easements for spoil areas acquired by the United States of America along the East side of the Florida Intra-coastal Waterway right of way by instrument dated September 14, 1947, recorded in Deed Book 167, Page 57, of the Public Records of said County.

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In Township 6 South, Range 30 East

Any portions of unsurveyed Section 6, as described in the Public Records of said County, in Deed Book 214, Page 43, lying West of the Guana River, subject to the reservations in favor of the Trustees of the Internal Improvement Fund of the State of Florida contained in deed recorded in Deed Book 153, Page 560, of the Public Records of St. Johns County, Florida;

Unsurveyed Section 7, West of Guana River;

Unsurveyed Section 18, West and North of Guana River, as described in the Public Records of said County, in Deed Book 214, Page 43, subject to the reservations in favor of the Trustees of the Internal Improvement Fund of the State of Florida contained in deed recorded in Deed Book 153, Page 560, of the Public Records of St. Johns County, Florida;

J. Parade Grant of Section 45;

M. Fonten Grant of Section 41;

Lorenzo Ortega Grant of Section 39;

J. Kershaw Grant of Section 40;

J. Segui Grant of Section 38;

Section 37.

In Township 5 South, Range 30 East

Any portion of unsurveyed Section 31, lying West of the Guana River.

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Portions of the above described lands may be subject to drainage easements as vested to Ponte Vedra Company by deed recorded in the Public Records of said County, in Deed Book 112, Page 49 and/or easements for spoil areas acquired by the United States of America along the East side of the Florida Intracoastal Waterway right of way by instrument dated September 1-, 1947, recorded in Deed Book 167, Page 57, of the Public Records of said County.

LESS and EXCEPT any portion of Sections 56 and 52, Township 4 South, Range 29 East, which lies Easterly of the extreme Easterly line of demarcation of upland areas above and below the "Landward Extent of Waters of the State" ** located along the Westerly side of Guana Lake and generally located along the Easterly boundary line of said Sections.

LESS and EXCEPT the following described property:

LESS and EXCEPT a tract of land, in St. Johns County, Florida, comprised of portions of Township 4 South and Township 5 South, more particularly described as follows:

For point of reference, commence at the point of intersection of the Easterly right of way line of State Road 11A with the Southerly boundary line of Block 2, Ponte Vedra Beach Oceanfront Estates Section, according to plat thereof recorded in the Public Records of said County in Map Book 7, Page 12, and run S-77°38'40"W., along the Westerly prolongation of the aforementioned Southerly boundary line of said Plat, a distance of 66.00 feet to the Westerly right of way line of said State Road 11A; run thence S-12°21'20"E., along said Westerly right of way line, a distance of 1,599.84 feet to a point for point of beginning.

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**The term "Landward Extent of Waters of the State", as used throughout this Exhibit "A", has the same meaning in this Exhibit "A" as in Section 403.817, Florida Statutes (1983), and Chapter 17.4.02(17), Florida Administrative Code (in effect on March 7, 1984), and refers to the location of such boundary line as it existed on April 20, 1984.

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From the point of beginning thus described, continue Southeasterly, along said Westerly right of way line, as follows: first course, S-12°21'20"E. a distance of 2,347.47 feet to an angle point; second course, S-12°17'50"E. a distance of 3,235.66 feet to an angle point; third course, S-12°15'19"E. a distance of 1,777.30 feet to an angle point; fourth course, S-12°02'29"E. a distance of 12,711.82 feet to a point of curvature; fifth course, along the arc of a curve, concave Southwesterly and having a radius of 14,765.10 feet, a chord bearing and distance of S-11°04'24"E. 498.81 feet to the point of tangency of said curve; sixth course, S-10°06'19"E. a distance of 6,451.13 feet to an angle point; seventh course, S-10°04'43"E. a distance of 2,039.98 feet to the point in said right of way line where the width of right of way is increased to 100 feet; eighth course, S-79°55'17"W. a distance of 34.00 feet; ninth course, S-10°04'43"E. a distance of 1,474.60 feet to the Northeast corner of that property described in the Public Records of said County, in Official Records Volume 340, Page 538. Run thence Southwesterly, Southeasterly, and Northwesterly, along the boundary line of said property, as follows: first course, S-79°55'17"W. a distance of 36.00 feet to an angle point; second course, S-10°04'43"E. a distance of 33.00 feet to an angle point; third course, N-79°55'17"E. a distance of 36.00 feet to a point on the aforementioned Westerly right of way line of State road 11A; run thence Southeasterly, along said right of way line, as follows: first course, S-10°04'43"E. a distance of 136.34 feet to a point of curvature; second course, along the arc of a curve, concave Northeasterly and having a radius of 15,082.51 feet, a chord bearing and distance of S-12°02'29"E. 394.63 feet to the point of tangency of said curve; third course, S-12°20'16"E. a distance of 8,640.10 feet to a point located S-12°20'16"E. a distance of 550.00 feet from the point of intersection of said right of way line with the Westerly prolongation of the line dividing Blocks C and B, as said Blocks are shown on the Plat of South Ponte Vedra Beach, as recorded in the Public Records of said County, in Map Book 6, Pages 24, 25, and 26; run thence S-77°29'09"W. a distance of 356 feet, more or less, to the mean high water line of Guano River;

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run thence along said mean high water line, following the meandering of same, a distance of 1,120 feet, more or less, to the point of intersection of said line with the former mean high water line as it existed along the Westerly side of Guana River prior to construction of a manmade causeway Westerly from Section 31, Township 5 South, Range 30 East; run thence Northerly, along said former mean high water line, following the meandering of same, a distance of 200 feet, more or less, to the point of intersection of said line with the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State", along the Northerly side of the aforementioned causeway; run thence Westerly, along said line of demarcation, following the meandering of same, a distance of 1320 feet, more or less, to the point of intersection of said line with the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State" at its extreme Easterly location along the Westerly side of Guana Lake that was formed by the construction of the aforementioned causeway, the location of said line being further described as generally running along the line dividing surveyed from unsurveyed sections along the Westerly side of said lake; run thence Northerly, along said line of demarcation located on the Westerly side of Guana Lake, following the meandering of same, a distance of 41,680 feet, more or less, to a point which bears S-77°38'40"W. from the point of beginning; run thence N-77°38'40"E. a distance of 2,150 feet, more or less, to the point of beginning.

The above described property contains 5,451 acres, more or less, above and 2,118 acres, more or less, within the "Landward Extent of Waters of the State".

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PARCEL "B": (Parcel B-1: Sale parcel)

A tract of land, in St. Johns County, Florida, comprised of portions of Township 4 South and Township 5 South, more particularly described as follows:

For point of reference, commence at the point of intersection of the Easterly right of way line of State Road A1A with the Southerly boundary line of Block 2, Ponte Vedra Beach Oceanfront Estates Section, according to plat thereof recorded in the Public Records of said County in Map Book 7, Page 12, and run S-77°38'41"W., along the Westerly prolongation of the aforementioned southerly boundary line of said Plat, a distance of 66.00 feet to the Westerly right of way line of said State Road A1A; run thence S-12°21'20"E., along said Westerly right of way line, a distance of 1,599.84 feet to a point for point of beginning.

From the point of beginning thus described, continue Southeasterly, along said Westerly right of way line, as follows: first course, S-12°21'20"E. a distance of 2,347.47 feet to an angle point; second course, S-12°17'30"E. a distance of 3,235.66 feet to an angle point; third course, S-12°15'29"E. a distance of 1,777.30 feet to an angle point; fourth course, S-12°02'29"E. a distance of 12,711.82 feet to a point of curvature; fifth course, along the arc of a curve, concave Southwesterly and having a radius of 14,763.10 feet, a chord bearing and distance of S-11°04'24"E. 498.81 feet to the point of tangency of said curve; sixth course, S-10°06'19"E. a distance of 6,451.13 feet to an angle point; seventh course, S-10°04'43"E. a distance of 2,039.98 feet to the point in said right of way line where the width of right of way is increased to 100 feet; eighth course, S-79°55'17"W. a distance of 34.00 feet; ninth course, S-10°04'43"E. a distance of 1,474.60 feet to the Northeast corner of that property described in the Public Records of said County, in Official Records

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Volume 340, Page 538: run thence Southwesterly, Southeasterly and Northeasterly, along the boundary line of said property, as follows: first course, S-79°18'17"W, a distance of 56.00 feet to an angle point; second course, S-10°04'43"E, a distance of 52.00 feet to an angle point; third course, N-75°55'17"W, a distance of 56.00 feet to a point on the aforementioned Westerly right of way line of State road 1A1; run thence Southeasterly, along said right of way line, as follows: first course, S-10°04'43"E, a distance of 136.38 feet to a point of curvature; second course, along the arc of a curve, concave Northeasterly and having a radius of 15,000.00 feet, a chord bearing and distance of S-10°10'29"E, 194.63 feet to the point of tangency of said curve; third course, S-12°20'16"E, a distance of 8,640.18 feet to a point located S-12°10'16"E, a distance of 550.00 feet from the point of intersection of said right of way line with the Westerly prolongation of the line dividing Blocks C and D, as said Blocks are shown on the Plat of South Punta Verde Beach, as recorded in the Public Records of 1956 Lot 10, in Map Book G, Pages 24, 25, and 26; run thence S-77°11'09"W, a distance of 356 feet, more or less, to the mean high water line of Guana River; run thence along said mean high water line, following the meandering of same, a distance of 1,520 feet, more or less, to the point of intersection of said line with the former mean high water line as it existed along the Westerly side of Guana River prior to construction of a manmade causeway Westerly from Section 31, Township 5 South, Range 30 East; run thence Northerly, along said former mean high water line, following the meandering of same, a distance of 200 feet, more or less, to the point of intersection of said line with the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State", along the Northerly side of the aforementioned causeway; run thence Westerly, along said line of demarcation, following the meandering of same, a distance of 1320 feet, more or less, to the point of intersection of

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ient Plan

said line with the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State" at its extreme Easterly location along the Westerly side of Guana Lake that was formed by the construction of the aforementioned causeway, the location of said line being further described as generally running along the line dividing surveyed from unsurveyed sections along the Westerly side of said lake; run thence Northerly, along said line of demarcation located on the Westerly side of Guana Lake, following the meandering of same, a distance of 41,660 feet, more or less, to a point which bears S-77°38'40"W. from the point of beginning; run thence W-77°38'40"E. a distance of 2,150 feet, more or less, to the point of beginning.

Together with a tract of land comprised of a portion of Township 4 South, Range 29 East, St. Johns County, Florida, that is bounded on the South by the Westerly prolongation of the Northerly boundary line of Ponte Vedra Beach Greenfront Estates Section according to plat thereof recorded in the Public Records of said County, in Map Book 15, Pages 98 and 99. Said tract of land is further described as:

All of Sections 52 and 56 that are Easterly of the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State" located generally along the Easterly boundary of said Sections and adjacent to the Westerly side of Guana Lake;

Any portion of Sections 46, 47 and 74 (surveyed or unsurveyed) described in the Public Records of said County in Official Records Volume 137, Page 282;

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Unsurveyed Section 14 and/or Section 72 (surveyed or unsurveyed) lying South of Micklers Road, EXCEPT that portion thereof lying East of the government meander line and North of the line dividing Government Lots 1 and 2 of said Section 14; and EXCEPT any portion thereof lying within the following described boundary: Bounded on the South by the Westerly prolongation of the Southerly property line of Lot 11, Block 1, Ponte Vedra Beach Oceanfront Estates, according to plat thereof recorded in the Public Records of St. Johns County, Florida, in Map Book 7, Page 12; bounded on the North by a line parallel to and 1,695.00 feet North, when measured perpendicular to the South boundary, of the above described Southerly boundary; bounded on the East by the Westerly right of way line of State Road A1A; bounded on the West by the government meander line of Government Lots 1, 2, and 3, of Section 14, Township 1 South, Range 19 East;

Any portion of Section 14, and any portion of Section 13, described, as follows: Bounded on the North by the Westerly prolongation of the Southerly boundary line of Lot "11", Block 1, Ponte Vedra Beach Oceanfront Estates Section, according to plat thereof recorded in the Public Records of said St. Johns County, in Map Book 7, Page 12; bounded on the South by a line parallel to and 370.00 feet South of the above described Northerly boundary when measured perpendicular thereto; bounded on the West by the extreme Easterly location of the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State";

Any portion of Government Lot 2, Section 14, that lies Northerly of the Westerly prolongation of the Southerly property line of Lot 3, Block 1, Ponte Vedra Beach Oceanfront Estates, according to plat thereof recorded in the Public Records of said County, in Map Book 7, Page 12, and which lies Westerly of the extreme Easterly location of the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State";

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agement Plan

Any portion of Unsurveyed Section 23 which lies Westerly of the Government meander line, along the Westerly side of Government Lots 1 and 2, Section 23; together with any portion of Unsurveyed Section 23 and/or Government Lot 1, Section 23, within the following described boundary: bounded on the North by a line 10.00 feet South, when measured perpendicular to the Westerly prolongation of the Northerly property line of Lot 18, Block 1, Ponte Vedra Beach Oceanfront Estates, according to plat thereof recorded in the Public Records of said County, in Map Book 7, Page 12; bounded on the South by the line dividing Government Lots 1 and 2; and bounded on the East by the extreme Easterly location of the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State";

Government Lot 2, Section 23, LESS and EXCEPT any portion described in the Public Records of St. Johns County, in Deed Book 294, Page 134; EXCEPT any portion lying Easterly of the extreme Easterly location of the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State"; and EXCEPT any portion of upland area on an island resulting from the construction of a manmade causeway. Said island being bounded as follows: on the south by the Westerly prolongation of the Northerly boundary line of Lot 1, Block 2, Ponte Vedra Beach Oceanfront Estates, according to plat thereof recorded in the Public Records of St. Johns County, Florida, in Map Book 7, Page 12; on the North by a line parallel to and 1,350 feet Northerly of said Southerly boundary line; on the East by the Westerly right of way line of State Road A1A; and on the West by a line parallel to and 950 feet Westerly of the Westerly right of way line of State Road A1A.

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Any portion of Section 26, and any portion of Unsurveyed Section 26, lying West of the extreme Easterly location of the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State" and North of the Westerly prolongation of the Southerly boundary line of Block 2, Ponte Vedra Beach Oceanfront Estates Section, according to Plat thereof recorded in the Public Records of St. Johns County, in Map Book 7, Page 12; EXCEPT any portion thereof within the property described in the Public Records of said County in Deed Book 137, Page 478.

Any portion of Unsurveyed Section 26, lying Westerly of the former marsh line along the Easterly side of Guana River prior to construction of a manmade causeway to form Guana Lake, EXCEPT any portion within the property described in the Public Records of St. Johns County, in Deed Book 137, Page 478, and Deed Book 167, Page 29;

LESS and EXCEPT a tract of land, in St. Johns County, Florida, comprised of portions of Sections 25, 26, and 36, Township 4 South, Range 29 East; portions of Sections 1, 12, 13, 24, and 25, Township 5 South, Range 29 East; and portions of Sections 19, 30, and 31, Township 5 South, Range 30 East, more particularly described as follows:

For point of reference, commence at the point of intersection of the Easterly right of way line of State Road A1A with the Southerly boundary line of Block 2, Ponte Vedra Beach Oceanfront Estates Section, according to plat thereof recorded in the Public Records of said County in Map Book 7, Pages 11 and 12, and run S-77°38'40"W., along the Westerly prolongation of the aforementioned Southerly

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Management Plan

boundary line of said Plat, a distance of 66.00 feet to the Westerly right of way line of said State Road 11A; run thence S-12°21'20"E., along said Westerly right of way line, a distance of 1,599.84 feet to a point for point of beginning.

From the point of beginning thus described, continue Southeasterly, along said Westerly right of way line, as follows: first course, S-12°21'20"E. a distance of 2,347.47 feet to an angle point; second course, S-12°17'50"E. a distance of 3,235.66 feet to an angle point; third course, S-12°15'29"E. a distance of 1,777.30 feet to an angle point; fourth course, S-12°02'29"E. a distance of 12,711.82 feet to a point of curvature; fifth course, along the arc of a curve, concave Southwesterly and having a radius of 14,763.10 feet, a chord bearing and distance of S-11°04'24"E., 498.81 feet to the point of tangency of said curve; sixth course, S-10°06'19"E. a distance of 6,451.13 feet to an angle point; seventh course, S-10°04'43"E. a distance of 2,039.98 feet to the point in said right of way line where the width of right of way is increased to 100 feet; eighth course, S-79°55'17"W. a distance of 34.00 feet; ninth course, S-10°04'43"E. a distance of 1,474.60 feet to the Northeast corner of that property described in the Public Records of said County, in Official Records Volume 340, Page 538; run thence Southwesterly, Southeasterly, and Northeasterly, along the boundary line of said property, as follows: first course, S-79°55'17"W. a distance of 56.00 feet to an angle point; second course, S-10°04'43"E. a distance of 52.00 feet to an angle point; third course, N-79°55'17"E. a distance of 56.00 feet to a point on the aforementioned Westerly right of way line of State road 11A; run thence Southeasterly, along said right of way line, as follows: first course, S-10°04'43"E. a distance of 136.39 feet to a point of curvature; second course, along the arc of a curve, concave Northeasterly and having a radius of 15,082.91 feet, a chord bearing and distance of

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S-11°12'29"E., 594.63 feet to the point of tangency of said curve; third course, S-12°20'16"E. a distance of 8,640.11 feet to a point located S-12°20'16"E. a distance of 550.00 feet from the point of intersection of said right of way line with the Westerly prolongation of the line dividing Blocks C and B, as said Blocks are shown on the Plat of South Ponte Vedra Beach, as recorded in the Public Records of said County, in Map Book 6, Pages 24, 25, and 26; run thence S-77°29'09"W. a distance of 356 feet, more or less, to the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State" along the Easterly side of Guana River; run thence Southwesterly and Northerly, along said line of demarcation, following the meandering of same, a distance of 1040 feet, more or less, to the point of intersection of said line with the former mean high water line as it existed along the Easterly side of Guana River prior to construction of a manmade causeway Westerly from Section 31, Township 5 South, Range 30 East; run thence Northerly, along said former mean high water line, following the meandering of same, a distance of 400 feet, more or less, to the point of intersection of said line with the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State", along the Northerly side of the aforementioned causeway; run thence Easterly, along said line of demarcation, following the meandering of same, a distance of 25 feet, more or less, to the point of intersection of said line with the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State", at its extreme Easterly location between State Road A1A and the Guana Lake; run thence Northerly, along said line of demarcation adjacent to the Easterly side of Guana Lake, following the meandering of same, a distance of 59,493 feet, more or less, to a point of intersection of said line with a line that bears S-77°38'40"W. from the point of beginning; run thence N-77°38'40"E. a distance of 625 feet, more or less, to the point of beginning.

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EXHIBIT A

gement Plan

The above described lands are subject to an easement to St. Johns County for parking on a portion of Section 36, Township 4 South, Range 29 East.

Portions of the above described lands may be subject to drainage easements as vested to Ponte Vedra Company by deed recorded in the Public Records of said County, in Deed Book 112, Page 49. Portions of the above described lands may also be subject to the reservations and easements in favor of the Trustees of the Internal Improvement Fund of the State of Florida contained in the deeds recorded in Deed Book 153, Page 559; Deed Book 154, Page 59; and in Deed Book 165, Page 419, of the Public Records of St. Johns County, Florida.

The above described property contains 19 acres, more or less, above and 1,961 acres, more or less, within the "Landward Extent of Waters of the State" (and 355 acres within the former run of Guana River).

ALSO,

A parcel of sovereign submerged land in Section 31, Township 6 South, Range 30 East, St. Johns County, containing 0.6 acre, more or less, being separate but abutting the area known as Guana River Wildlife Management Area, being more particularly described as follows:

Commencing at the intersection of the mean high water line on the south side of Guana Dam and the six-foot chain link fence crossing Guana Dam approximately 100 feet west of the existing triple 72-inch corrugated metal pipe outlet structure, thence easterly meandering said mean high water line approximately 60 feet to the Point of Beginning. Thence south a distance of 50 feet; thence east a distance of 80 feet; thence south a distance of 180 feet; thence east a distance of 100 feet; thence north a distance of 130 feet; thence east a distance of 50 feet; thence north a distance of 35 feet to the mean high water line, thence westerly meandering said high water line a distance of approximately 230 feet, more or less, to the Point of Beginning.

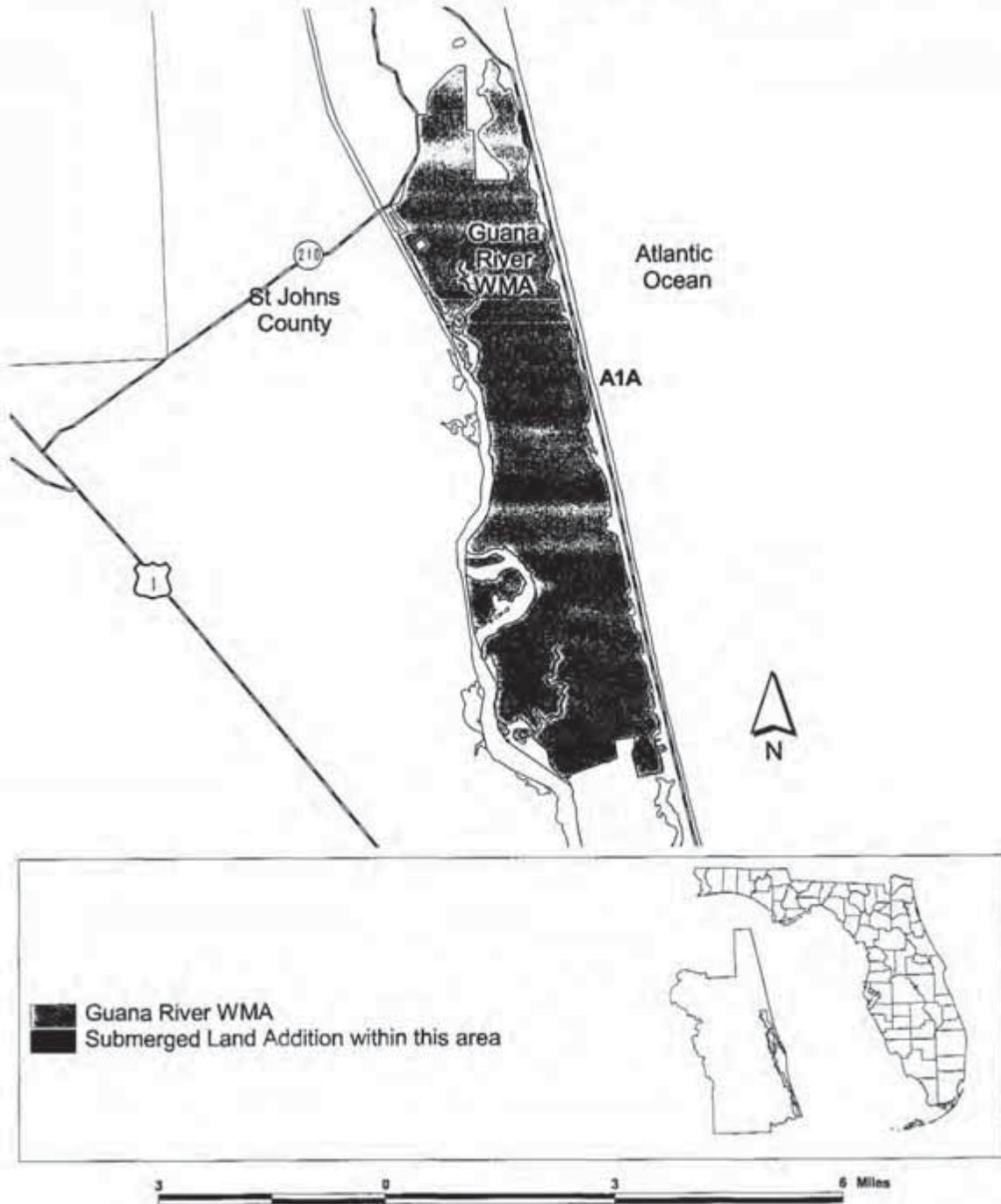
Parcel B
Page 5
July 1, 1988

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EXHIBIT "F"
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Management Plan

13.1.1 Amendment 1 to Lease 3585

Amendment 1 to Lease 3585, Guana River CARL Project, St. Johns County.
Addition of 5 acres of submerged land to the lease.
Boundaries are approximate.



ATL1 .45 Acres

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT
TRUST FUND OF THE STATE OF FLORIDA

FDACS CONTRACT #
007197

AMENDMENT NUMBER 1 TO LEASE NUMBER 3585

GUANA RIVER WILDLIFE MANAGEMENT AREA

THIS LEASE AMENDMENT is entered into this 14th day of February, 2003, by and between the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, hereinafter referred to as the "BOARD" and the STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, DIVISION OF STATE LANDS, successor in interest to the STATE OF FLORIDA DEPARTMENT OF NATURAL RESOURCES, DIVISION OF STATE LANDS, referred to herein as "STATE LANDS" and the STATE OF FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, successor in interest to the FLORIDA GAME AND FRESH WATER FISH COMMISSION, hereinafter referred to as the "COMMISSION", and the STATE OF FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, DIVISION OF FORESTRY, hereinafter referred to as "FORESTRY", collectively the MANAGING AGENCIES, whereby management responsibilities are granted for the Guana River Wildlife Management Area, located in St. Johns County, Florida.

W I T N E S S E T H

WHEREAS, the BOARD, by virtue of Section 253.03, Florida Statutes, holds title to certain lands and property for the use and benefit of the State of Florida; and

WHEREAS, on April 1, 1988, the BOARD and the MANAGING AGENCIES entered into Lease Number 3585; and

WHEREAS, TRUSTEES and MANAGING AGENCIES desire to amend the lease to add land to the leased property;

NOW THEREFORE, in consideration of the mutual covenants and agreements contained herein, the parties hereto agree as follows:

1. The legal description of the leased premises set forth in Exhibit "A" of Lease Number 3585 is hereby amended to include the real property described in Exhibit "A," attached hereto, and by reference made a part hereof.

ent Plan

2. It is understood and agreed by the BOARD and the MANAGING AGENCIES that in each and every respect the terms of the Lease Number 3977 except as amended shall remain unchanged and in full force and effect and the same are hereby ratified, approved and confirmed by the BOARD and the MANAGING AGENCIES.

IN WITNESS WHEREOF, the parties have caused this Lease Amendment to be executed on the day and year first above written.

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA

Judy Woodard
Witness

Judy Woodard
Print/Type Witness Name

Jack C. Wolff
Witness

JACK C. WOLFF
Print/Type Witness Name

By: Gloria C. Nelson (SEAL)
GLORIA C. NELSON, OPERATIONS AND MANAGEMENT CONSULTANT MANAGER, BUREAU OF PUBLIC LAND ADMINISTRATION, DIVISION OF STATE LANDS, DEPARTMENT OF ENVIRONMENTAL PROTECTION

"BOARD"



STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 14th day of February, 2003, by Gloria C. Nelson, as Operations and Management Consultant Manager, Bureau of Public Land Administration, Division of State Lands, Florida Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. She is personally known to me.

Florence L. Davis
Notary Public, State of Florida

Print/Type Notary Name

Commission Number:

Commission Expires:



Florence L. Davis
MY COMMISSION # C07466 EXPIRES
February 11, 2004
1100 WEST WASHINGTON, INC.

Approved as to Form and Legality

By: Frank Hillier
DEP Attorney

FLORIDA FISH AND WILDLIFE
 CONSERVATION COMMISSION, SUCCESSOR
 IN INTEREST TO FLORIDA GAME AND
 FRESH WATER FISH COMMISSION

PA Doerr
 Witness

PA Doerr
 Print/Type Witness Name

Kandi Lynn
 Witness

Karen D Huff
 Print/Type Witness Name

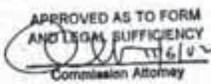
STATE OF FL
 COUNTY OF LEON

By: Timothy A Breault (SEAL)

Timothy A Breault
 Print/Type Name

Title: Asst Division Director

"COMMISSION"

APPROVED AS TO FORM
 AND LEGAL SUFFICIENCY

 Commission Attorney

The foregoing instrument was acknowledged before me this
15th day of November, 2002, by Timothy A. Breault
 as Asst Division Director, of the FLORIDA FISH AND WILDLIFE
 CONSERVATION COMMISSION. He/she is personally known to me.

Florida Parrish
 Rotary Public, State of Florida

Florida Parrish
 Print/Type Notary Name

Commission Number:  Florida Parrish
 MY COMMISSION # 00641411 EXPIRES
 July 11, 2005
 BONDED FARM TRUST FARM ASSURANCE, INC.

Commission Expires:

STATE OF FLORIDA DEPARTMENT OF
 AGRICULTURE AND CONSUMER SERVICES

Alicia Bush
 Witness

Alicia Bush
 Print/Type Witness Name

Angela B Rains
 Witness

Angela B. Rains
 Print/Type Witness Name

STATE OF FLORIDA
 COUNTY OF LEON

By: Mike Gresham (SEAL)

Mike Gresham
 Print/Type Name

Title: Director of Administration

"FORESTRY"

The foregoing instrument was acknowledged before me this
3rd day of February, 2003, by Mike Gresham
 as Director, of the DIVISION OF FORESTRY,
 STATE OF FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES.
 He/she is personally known to me.

 Karen A. Meyer
 MY COMMISSION # CC49322 EXPIRES
 October 20, 2004
 BONDED FARM TRUST FARM ASSURANCE, INC.

Karen A. Meyer
 Notary Public, State of Florida
KAREN A. MEYER
 Print/Type Notary Name

Commission Number:

This Instrument Prepared By and
Please Return To:
Pappas, Metcalf, Jenks & Miller, P.A.
200 West Forsyth Street #1400
Jacksonville, Florida 32202

Unrecorded Title

Public Records of
St. Johns County, FL
Clerk# 02-010594
O.R. 1721 PG 492
01:49PM 02/21/2002
REC \$17.00 SUR \$2.50
Doc Stamps \$70.00

19.50

**WARRANTY DEED
(STATUTORY FORM - SECTION 689.02, F.S.)**

THIS INDENTURE, made this 19th day of November, A.D. 2001, between A & S Land Development Co., a Florida corporation, whose address is 9471 Baymeadows Road Suite 403, Jacksonville, Florida 32256, grantor, and the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, whose post office address is c/o Florida Department of Environmental Protection, Division of State Lands, 3900 Commonwealth Boulevard, Mail Station 115, Tallahassee, FL 32399-3000, grantee,

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and their heirs, legal representatives, successors and assigns. "Grantor" and "grantee" are used for singular and plural, as the context requires and the use of any gender shall include all genders.)

WITNESSETH: That the said grantor, for and in consideration of the sum of Ten Dollars and other good and valuable considerations, to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said grantee, and grantee's successors and assigns forever, the following described land situate, lying and being in St Johns County, Florida, to-wit:

See Exhibit "A" attached hereto and by reference made a part hereof.

Acceptance of Transfer of Title to Donated Lands attached hereto as Exhibit "B" & by reference made a part hereof.

Property Appraiser's Parcel Identification Number: 067385-0000

This conveyance is subject to easements, restrictions, limitations and conditions of record if any now exist, but any such interests that may have been terminated are not hereby re-imposed.

AND the said grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF the grantor has hereunto set grantor's hand and seal, the day and year first above written.

Signed, sealed and delivered in the presence of:

Cheri Kruse
(Signature of first Witness)

Cheri Kruse
(Printed, typed or stamped name of first witness.)

Helen Breeding
(Signature of second Witness)

Helen Breeding
(Printed, typed or stamped name of second witness)

A & S LAND DEVELOPMENT COMPANY,
a Florida corporation

By: [Signature]

(CORPORATE SEAL)



STATE OF Florida
COUNTY OF St. Johns

The foregoing instrument was acknowledged before me this 19th day of November, 2001, by Gary D. Silverfield as Vice President of A&S Land Development Co., a Florida corporation, on behalf of the corporation. Such person(s) (Notary Public must check applicable box):

**APPROVED
AS TO FORM AND LEGALITY**

AUG 1 2002
u/cr

is personally known to me.
produced a current driver license.
produced _____ as identification.

Helen Breeding
Notary Public

HELEN BREEDING
Printed, Typed or Stamped Name of Notary Public
My commission expires Feb. 23, 2005
Commission Expires: _____ Commission No. CC991113

PAGE 4 OF 7
AMENDMENT NO. 1 TO LEASE NO. 3585
EXHIBIT A

10-1-1781

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EXHIBIT "A"

A parcel of land being Submerged lands, and being a portion of Government Lot 2, Section 23, Township 4 South, Range 29 East, St. Johns County, Florida, and also being more particularly described as follows:

For a Point of Reference, Commence at the Southeast corner of Lot 5, OLD PONTE VEDRA MARSHSIDE NORTH, shown on the plat thereof, recorded in Plat Book 29, pages 61 and 62 of the Public Records of said St. Johns County, Florida, and run thence North 12°21'50" West, along the Easterly line of aforesaid Lot 5, (also being the Westerly Right of Way line of State Road No. A-1-A), a distance of 57.50 feet, to a point lying 7.50 feet Southerly of the North line of said Lot 5; run thence South 77°38'10" West, parallel with said North line of Lot 5, a distance of 300.13 feet, to the Point of Curvature, of a curve leading Westerly; thence Westerly, along and around the arc of a curve, concave Northerly, and having a radius of 100.00 feet, through a central angle of 30°03'56" to the right, an arc distance of 52.47 feet, to the Point of Tangency, last said arc being subtended by a chord bearing and distance of N 87°19'52" W., 51.87 feet; thence N 72°17'54" W., along said tangency, a distance of 140.00 feet, to a point on the "Line of Demarcation between lands areas above and below the Landward Extent of the Waters of the State as that term" Landward Extent of the Waters of the State" has the same meaning as Section 403.817 Florida Statutes (1983) and Chapter 17.4.01 (17) Florida Administrative Code (in effect March 7, 1984) and refers to the location of such line of demarcation as it existed and shown on Survey by Robert M. Angas Associates, dated April 20, 1984 and the POINT OF BEGINNING.

From the POINT OF BEGINNING thus described, continue N 72°17'54" W. a distance of 113.05 feet, to a point on the Edge of the Marsh Grass; run thence, along the Edge of the Marsh Grass, the following two (2) courses and distances: Course No. 1: N 21°19'01" W., 41.06 feet, to a point; Course No. 2: N 10°36' 07" W., a distance of 55.28 feet, to a point; run thence N 74°00'05" E., a distance of 70.28 feet, to a point; run thence S 24°01'42" E., a distance of 160.22 feet, to the POINT OF BEGINNING.

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 AMENDMENT NO. 1 TO LEASE NO. 3585
 EXHIBIT A

BSM APPROVED
 By SL Date 2-5-02

A parcel of land being Submerged lands, and being a portion of Government Lot 2, Section 23, Township 4 South, Range 29 East, St. Johns County, Florida, and also being more particularly described as follows:

For a Point of Reference, Commence at the Southeast corner of Lot 5, OLD PONTE VEDRA MARSHSIDE NORTH, shown on the plat thereof, recorded in Plat Book 29, pages 61 and 62 of the Public Records of said St. Johns County, Florida, and run thence North 12°21'50" West, along the Easterly line of aforesaid Lot 5, (also being the Westerly Right of Way line of State Road No. A-1-A), a distance of 57.50 feet, to a point lying 7.50 feet Southerly of the North line of said Lot 5; run thence South 77°38'10" West, parallel with said North line of Lot 5, a distance of 300.13 feet, to the Point of Curvature, of a curve leading Westerly; thence Westerly, along and around the arc of a curve, concave Northerly, and having a radius of 100.00 feet, through a central angle of 30°03'56" to the right, an arc distance of 52.47 feet, to the Point of Tangency, last said arc being subtended by a chord bearing and distance of N 87°19'52" W., 51.87 feet; thence N 72°17'54" W., along said tangency, a distance of 140.00 feet, to a point on the "Line of Demarcation between lands areas above and below the Landward Extent of the Waters of the State as that term" Landward Extent of the Waters of the State" has the same meaning as Section 403.817 Florida Statutes (1983) and Chapter 17.4.01 (17) Florida Administrative Code (in effect March 7, 1984) and refers to the location of such line of demarcation as it existed and shown on Survey by Robert M. Angas Associates, dated April 20, 1984 and the POINT OF BEGINNING.

From the POINT OF BEGINNING thus described, run thence S 22°18'25" E., a distance of 55.58 feet, to a point; run thence S 86°35'08" W., a distance of 164.14 feet, to a point on the Edge of the Marsh Grass; run thence N 05°02'13" E., along the Edge of the Marsh Grass, a distance of 79.16 feet, to a point; thence S 82°35'24" E., a distance of 136.95 feet, to the POINT OF BEGINNING.

PAGE 6 OF 7
AMENDMENT NO. 1 TO LEASE NO. 3585
EXHIBIT A

ST. JOHN'S COUNTY
2-5-02

rent Plan

EXHIBIT "B"

ACCEPTANCE OF TRANSFER OF TITLE TO DONATED LANDS

Board of Trustees of the Internal Improvement Trust Fund of the State of Florida hereby accepts this conveyance as a transfer of title of the real property as described in this Deed in accordance with F. S. 259.04(10)(a).

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA

Judith A. Booth
(SIGNATURE OF FIRST WITNESS)

Judith A. Booth
(PRINTED, TYPED OR STAMPED NAME OF FIRST WITNESS)

Adrienne Bellflower
(SIGNATURE OF SECOND WITNESS)

Adrienne Bellflower
(PRINTED, TYPED OR STAMPED NAME OF SECOND WITNESS)

BY: Lynda I. Godfrey
Lynda I. Godfrey, Senior Acquisition Review Agent
DIVISION OF STATE LANDS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
as agent for and on behalf of the Board of Trustees
of the Internal Improvement Trust Fund
of the State of Florida

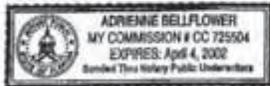
2-7-02
Date Signed

STATE OF Florida

COUNTY OF Leon

The foregoing instrument was acknowledged before me this 7 day of February, 2002, by Lynda I. Godfrey, Senior Acquisition Review Agent, Division of State Lands, Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. She is personally known to me.

(NOTARY PUBLIC SEAL)



Adrienne Bellflower
Notary Public

Adrienne Bellflower
(Printed, Typed, or Stamped Name of Notary Public)

Commission No.: CC 725504

My Commission Expires: 4/4/02

PAGE 7 OF 7
AMENDMENT NO. 7 TO LEASE NO. 3585
EXHIBIT A

13.2 Title Interests and Encumbrances

13.2.1 Lease W195: Ducks Unlimited

Ducks Unlimited, Inc.

Florida Game and
Fresh Water Fish
Commission
Guana River Wildlife
Management Area

Site-specific Agreement No. FL-908

This Agreement, made and entered into this 3rd day of February, 1987, in accordance with the Memorandum of Understanding dated March 22, 1985, between the Florida Game and Fresh Water Fish Commission and Ducks Unlimited, Inc.

I. Introduction and Purpose

Ducks Unlimited, Inc. (hereinafter "DU"), a not-for-profit corporation organized and existing under the laws of the District of Columbia, and the Florida Game and Fresh Water Fish Commission (hereinafter "FG&FWFC") have agreed to work together for the purpose of cooperatively acquiring, developing, restoring or enhancing waterfowl habitat in order to maintain and increase waterfowl populations. In furtherance of the parties' mutual interests in acquiring, developing, restoring or enhancing waterfowl habitat in the State of Florida, the parties hereto have executed this Agreement for the development of the Guana River Wildlife Management Area as described herein, subject to the terms and conditions of this Agreement. This Site-specific Agreement supplements the Memorandum of Understanding between the State of Florida and DU signed March 22, 1985. In the event of any conflict between the terms and conditions of the MOU and this Agreement, the terms of this Agreement shall govern.

II. Scope of the Agreement

A. Florida Game and Fresh Water Fish Commission agrees:

1. To prepare at its expense the Guana River Wildlife Management Area development plans and specifications for a waterfowl propagating, feeding and resting area, and habitat enhancement for other game and nongame species on the Guana River Wildlife Management Area as the same is defined in subparagraph 11.A.3. A copy of said Guana River Wildlife Management Area

development plans and specifications is attached hereto as Exhibit A.

2. To provide at its expense a site management plan for consideration and approval (which approval will not be unreasonably withheld) by DU prior to the awarding of the construction and other necessary contracts.

3. Subject to receipt of an acceptable bid to construct ten water control structures and other aids necessary to implement the terms and conditions of the Guana River Wildlife Management Area development plans and specifications as hereinafter provided for as defined in Exhibit A and more specifically described as follows: Located in St. Johns County, Florida, Lat. 30 degrees 04' N., Long. 81 degrees 28' W., all being property of the State of Florida for the use and benefit of the Florida Game and Fresh Water Fish Commission. A further, more particular description of the area to be developed is set forth in the Guana River Wildlife Management Area development plans and specifications in Exhibit A.

4. To provide at its expense routine rehabilitation, annual operation and maintenance necessary to maintain the continuing viability and functioning of the developments made pursuant to the Guana River Wildlife Management Area development plans and specifications. This includes installation and repair of mutually acceptable signs designating the project area.

5. To designate in writing a Project Officer prior to the solicitation of bids necessary to implement the Guana River Wildlife Management Area development plans and specifications, and further to apprise DU in writing of any changes in said officer.

6. At its expense, to continue to administer and manage the above-described lands for waterfowl habitat as part of the Guana River Wildlife Management Area.

B. Ducks Unlimited agrees:

1. Subject to availability and based on the MARSH matching grant formula to provide up to \$50,010 of the funding necessary to complete construction upon approval and in accordance

with the Guana River Wildlife Management Area development plans and specifications. Payment will be made upon completion of the project or identifiable portions of the project upon submission of an invoice from the FG&FWFC.

2. To designate in writing a Project Officer prior to the solicitation of bids necessary to implement the Guana River Wildlife Management Area development plans and specifications, and further to apprise the FG&FWFC in writing of any changes in said officer.

3. When replacement of water control structures funded under this Agreement is needed because of normal wear or corrosion not the fault of the FG&FWFC, then DU, ~~agrees to participate in~~ subject to availability of funds, will consider participating in funding this replacement.

C. DU and the FG&FWFC mutually agree:

[Signature] 4/3/87
D. M. R. 2/2/87

1. To consider the possibility of funding extraordinary repairs to the structures described in the Guana River Wildlife Management Area development plans and specifications.

2. To consider any substantial changes in the plans and specifications as the implementation of the Guana River Wildlife Management Area development plans and specifications progresses.

3. To cooperate in providing mutually acceptable recognition for contributors who provide a significant funding for the project; this recognition may include signs, plaques or cairns. Cost of such recognition shall be considered as part of the total cost of the project.

4. To cooperate in a final inspection, if necessary, prior to acceptance of the project as set forth in the Guana River Wildlife Management Area plans and specifications; in the event the parties are unable to agree as to the acceptability thereof, they shall select a third party who shall inspect the project and determine whether or not it is acceptable.

5. To review periodically the site management plans

for the project completed pursuant to the terms of this Agreement and to study and consider any needed modifications.

III. Execution, Modification and Duration of Agreement

This Agreement shall become effective when executed by the parties hereto and shall continue in force for a term of thirty (30) years thereafter. Unless written notification is received by the other party within six (6) months prior to the expiration of this Agreement, this Agreement shall be deemed to be renewed for an additional period of thirty (30) years. This Agreement may also be mutually terminated by agreement of the parties if all or any portion of the land and/or water described in or subject to this Site-specific Agreement is taken by the United States of America, State of Florida, or any governmental agency by means of eminent domain, or pursuant to any compelling reasons of health, safety or public welfare, or if the State of Florida abandons the project or fails to maintain it in accordance with its duties hereunder so that the project is no longer viable, which materially affects the purpose of this Agreement, either party may terminate this Agreement by providing to the other party (30) days' written notice thereof. In such event, DU shall be entitled to compensation from the State of Florida pending funding allotment and approval by the Legislature in accordance with the following:

	Total length of initial term of this Agreement minus the number of years since acquisition or capital improvement has been in place during such term.		Total cost incurred by DU from date of inception of the Agreement
Payment to DU = upon completion	<u>30 years</u>	X	

In Witness Whereof, the parties hereto have executed this Site-specific Agreement No. FL-900 as the date and year first above written.

DUCKS UNLIMITED, INC.

Allyson Shaw
Witness

John [Signature]
Executive Vice-President

Pura A. Covello
Witness

FLORIDA GAME AND FRESH WATER
FISH COMMISSION

Jimmie C. Davis
Witness

Robert M. Brantly
Colonel Robert M. Brantly
Executive Director

Thomas Wright
Witness

APPROVED AS FISCALLY
AND BUDGETARILY SOUND
Williams C. Sumner
DIRECTOR
DIVISION OF ADMINISTRATIVE SERVICES
GFWFC

W201/dr
WLD 8-5-3

Exhibit A

PROJECT MANAGEMENT PLAN

Guana River Wildlife Management Area
FL-900

Name of Area: Guana River Wildlife Management Area

Location: Approximately ten miles north of St. Augustine, Florida, on the upper reaches of the Matanzas River, St. Johns County, Lat. 30 degrees 04' N., Long. 81 degrees 20' W.

Project Name: Guana River Wildlife Management Area

Acreage:

Wetland Area: 750 acres
Upland Area: 750 acres
Total Area: 1,500 acres

Background: The lake, on the upper reaches of the Matanzas River, was originally constructed in 1958 as a cooperative venture between the FG&FWFC and a private landowner. The lease was terminated by the landowner in 1981. Through the 1960s, the area attracted substantial numbers of wintering ducks and coots. Since then, the water control structure has deteriorated to the point that water levels can no longer be manipulated. As a result, dense stands of cattails have encroached on the upper reaches of the lake and have caused a significant decline in waterfowl habitat quality.

Management Objectives: Provide wintering food and cover for ducks, e.g., lesser scaup, ring-necked ducks, blue-winged teal, wigeon, pintails and wood ducks.

Operations & Management Techniques: Funding has been appropriated by the Florida Legislature to rebuild the dam and water control structure. MARSH will participate in funding the construction of ten water control structures on six existing upland ponds that adjoin the lake; purchase of the necessary pumps and equipment to power them for water level management; plus control of cattails on the lake through the use of herbicides and a cookie cutter. The FG&FWFC will manage the area.

13.2.2 Agreements #88031 and #11060: Six Mile Landing Boat Ramp Permit

USE AGREEMENT
BETWEEN
THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
AND
THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FOR
USE AND MAINTAINANCE OF GUANA RIVER BOAT RAMP

THIS USE AGREEMENT is entered into by and between THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, 620 South Meridian Street, Tallahassee, Florida 32399-1600, hereafter "COMMISSION," and THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399, hereafter "DEP".

The purpose of this Use Agreement is to establish an agreement between the parties for the COMMISSION to use a parcel of Guana Tolomato Matanzas National Estuarine Research Reserve (GTMNERR), during the limited term of this Use Agreement for maintaining a public boat-launch ramp and access area, with right of ingress and egress.

WHEREAS, the DEP Office of Coastal and Aquatic Managed Areas manages and maintains GTMNERR in St. Johns County, Florida and described in Exhibit A; and

WHEREAS, the COMMISSION maintains jurisdiction of the adjoining Guana River Wildlife Management Area (WMA) in St. Johns County; and

WHEREAS, a certain parcel of land in the GTMNERR serves as a point of access for public recreational use and effectuates management of Guana Lake by DEP and the COMMISSION.

NOW, THEREFORE, for the considerations hereafter set forth, DEP hereby grants to the COMMISSION the right, subject to all terms and conditions of the lease agreement between DEP Division of Recreation and Parks and the Board of Trustees of the Internal Improvement Fund, dated January 8, 1987, identified as Board of Trustees Lease Agreement No. 3462, as assigned by Assignment dated December 15, 2003 to the Office of Coastal and Aquatic Managed Areas, "Exhibit A" (attached hereto), as it may be amended from time to time, to use The Property of GTMNERR during the limited term of this Agreement for the purpose of using and maintaining a public boat-launch ramp and boat access area to Guana Lake, with right of ingress and egress, under the following terms and conditions:

1. The parcel of land contemplated in this Use Agreement is the part of the GTMNERR described in Exhibit B and located by Exhibit C, both attached hereto, hereafter "The Property".
2. COMMISSION shall provide for the security and maintenance of The Property and shall at all times keep The Property clean of debris and trash. COMMISSION shall not allow or commit waste of The Property or cause damage to the natural resources of GTMNERR.

3. This Use Agreement shall be effective on the date of executed by the last of the parties, and will expire twenty (20) years from the effective date unless earlier terminated as provided below.
4. This Use Agreement may be terminated before the date of expiration by the COMMISSION if COMMISSION decides to discontinue its use of The Property and notifies DEP in writing 90 days prior to discontinuance.
5. This Use Agreement may also be terminated before the date of expiration by DEP if COMMISSION's use or actions violate the terms and conditions hereof and COMMISSION fails to remedy a violation within ninety (90) days after receiving written notice of such violation from DEP.
6. Any and all notices shall be delivered to the parties at the following addresses (or such changed address or addressee as may be provided by written notice). A notice or other communication shall be deemed received by the addressee on the next business day after having been placed in overnight mail with the U. S. Postal Service, or other overnight express service such as FedEx, UPS, or similar service. Notices sent by means other than overnight delivery shall be deemed received on the third day after the date of the notice.

FOR THE COMMISSION:

(Name) HSC/THCR
(Title) Section Leader
(Facility) Bryant Bldg
(Address) 620 S. Meridian St
(City, State, Zip) Tallahassee, FL 32399-1600
(telephone #) 850-410-0656
(fax #) 850-921-7793
(e-mail) Mike.Brooks@MyFWC.com

FOR DEP:

(Name) Planning team
(Title) CAMA
(Address) 3900 Commonwealth Blvd
(City, State, Zip) Tallahassee, FL 32399
(telephone #) 850-245-2100
(fax #) 850-245-2110
(e-mail) Pennv.Isom@dep.fl.state.us

7. All activities conducted by the COMMISSION pursuant to this Use Agreement are subject to Chapter 18-23, Florida Administrative Code and Chapter 253 Florida Statutes.
8. No rights and privileges granted by this Use Agreement may be assigned or transferred by COMMISSION without prior written approval of DEP.
9. All expenses and obligations incurred by COMMISSION as a result of its activities pursuant to the terms of this Use Agreement will be wholly borne by the COMMISSION.
10. Each party hereto agrees that it shall be solely responsible for the negligent or wrongful acts of its employees and agents for which it is found legally liable. However, nothing contained herein shall constitute a waiver by either party of its sovereign immunity or the provisions of Section 768.28, Florida Statutes.
11. In any matter pertaining to this Use Agreement, DEP and its duly authorized agents have the right at any time to inspect The Property and the works and operations of COMMISSION thereon.
12. This Use Agreement is subject to the authority and/or jurisdiction of any governmental entity which may have an interest in The Property
13. As part of the consideration for this Use Agreement, the parties hereby waive trial by jury in any action or proceeding brought by any party against any other party pertaining to any matter whatsoever arising out of or in any way connected with this Use Agreement, or with the products or services provided under this Use Agreement; including but not limited to any claim of quantum merit.

14. This Use Agreement with all incorporated attachments and exhibits represents the entire agreement of the parties. This Use Agreement may be amended only by mutual written agreement of the parties.

IN WITNESS WHEREOF, the parties hereto have caused this Permit to be executed through their duly authorized signatories on the day and year last below written.

STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL PROTECTION

BY: Lee Edmiston
LEE EDMISTON
Director

Date 6/16/11

Approved as to Form and Legality
[Signature]
DEP Attorney

The foregoing instrument was acknowledged before me this 16 day of JUNE, 2011,
by LEE EDMISTON, Director, Office of Coastal and Aquatic Managed Areas,
Department of Environmental Protection.

[Signature]
Notary Public



(Seal)

FLORIDA FISH AND WILDLIFE
CONSERVATION COMMISSION

Gregory L. Holder
NICK WILEY
Executive Director
GREG HOLDER

ASSISTANT EXECUTIVE DIRECTOR
Date July 3, 2011

Approved as to form and legality:
Anthony Pignatelli
Commission Attorney

STATE OF FLORIDA
LEON COUNTY

The foregoing instrument was acknowledged before me this 3rd day of July, 2011,
by Gregory L. Holder Executive Director, Florida Fish and Wildlife Conservation
Commission.

Jo Ann M. Fain
Notary Public

My Commission Expires:



(Seal)

CONSTRUCTION AND USE PERMIT
FOR
THE GAME AND FRESH WATER FISH COMMISSION
AT
GUANA RIVER STATE PARK

WHEREAS, the State of Florida Department of Natural Resources, Division of Recreation and Parks, hereinafter called "Permitter", manages and maintains Guana River State Park in St. Johns County, and

WHEREAS, the State of Florida Game and Fresh Water Fish Commission, hereinafter called "Permittee", maintains jurisdiction of the adjoining Guana River Wildlife Management Area in St. Johns County, by leasehold; and

WHEREAS, a certain parcel of land described in Exhibit "B" and hereinafter called "property" in Guana River State Park will serve as a point of access for public recreational use and effectuate the agency management of Guana Lake by Permitter and Permittee.

NOW, THEREFORE, for and in consideration of the mutual covenants and conditions contained herein, Permitter hereby grants to Permittee the right, subject to all terms and conditions of the lease agreement between Permitter and the Board of Trustees of the Internal Improvement Trust Fund, dated January 8, 1987, identified as Board of Trustees Lease Agreement No. 3462, and attached hereto as Exhibit A, and of any amendments thereof, to use a parcel of Guana River State Park during the limited term of this Permit for the purpose of constructing, using, and maintaining a public boat-launch ramp and access area, with right of ingress and egress, under the following terms and conditions:

1. The subject property to this Permit is that part of Guana River State Park described in Exhibit B and located by Exhibit C, both attached hereto.

2. This Permit will expire twenty (20) years from the date hereof, but is subject to early termination as provided below.

3. This Permit may be terminated before the date of expiration by the Permittee if Permittee decides to discontinue its use of the property by written notice to Permitter, or if Permittee's use or actions violate the terms and conditions hereof and Permittee fails to remedy a violation within ninety (90) days after receiving written notice of such violation from Permitter.

4. All activities conducted by the Permittee under this permit are subject to Chapter 16D-2, Florida Administrative Code and Chapter 258, Florida Statutes.

5. Permittee agrees, as a condition to this permit, to construct a public boat ramp and parking lot within the boundaries of the property. Prior to

commencing any construction, Permittee will submit to the Bureau of Planning and Design, Division of Recreation and Parks, a construction plan similar to the proposed revised plan dated November 13, 1984, and attached as page 2 of Exhibit B, together with specifications and a survey for Permitter's review and approval.

6. No rights and privileges granted by this Permit may be assigned or transferred by Permittee without prior written approval of Permitter.

7. All expenses and obligations incurred by Permittee as a result of this permit will be wholly borne by the Permittee.

8. Permittee shall hold and save harmless Permitter and the Board of Trustees of the Internal Improvement Trust Fund, to the extent permitted by Section 768.28, Florida Statutes, from any and all liability and claims arising from injury or death to any person or damage to any property resulting from the use of the property under this Permit.

9. Permittee shall provide for the security and maintenance of the property and shall at all times keep the property clean of debris and trash. Permittee shall not allow or commit waste of the property.

10. In any matter pertaining to this Permit, Permitter and its duly authorized agents have the right at any time to inspect the property and the works and operations of Permittee thereon,

11. This Permit in no way waives the authority and/or jurisdiction of any governmental entity which may have an interest in the property.

IN WITNESS WHEREOF, the lawfully designated agent of the State of Florida Department of Natural Resources, Division of Recreation and Parks, and Game and Freshwater Fish Commission have hereunto subscribed their names and caused their official seals to be hereunto affixed on the 8th day of August, 1988, and 28th day of July, 1988, respectively.

(SEAL)

WITNESSES

John D. [Signature]
[Signature]

STATE OF FLORIDA
DEPARTMENT OF NATURAL RESOURCES

BY: [Signature]
Director, Division of Recreation
and Parks

Approved as to Form and Legality

By: [Signature]
DNR Attorney

(2 of 3)

ent Plan

STATE OF FLORIDA
LEON COUNTY

The foregoing instrument was acknowledged before me this 8th day of August, 1988, by Ney C. Landrum, Director, Division of Recreation and Parks, Department of Natural Resources.

Jane M. Oswald
Notary Public

My Commission Expires:

(SEAL)

WITNESSES

STATE OF FLORIDA
GAME AND FRESH WATER FISH COMMISSION

Richard S. Murphy

Robert M. Brantly
Colonel Robert M. Brantly
Executive Director

Approved as to Form and Legality

[Signature]
GFWFC Attorney

STATE OF FLORIDA
LEON COUNTY

The foregoing instrument was acknowledged before me this 28th day of July, 1988 by Robert M. Brantly as Executive Director Florida Game and Fresh Water Fish Commission.

Rosemary [Signature]
Notary Public

My Commission Expires:

Notary Public, State of Florida
My Commission Expires Oct. 20, 1991
Printed Star Top Plate - Incomer Inc.

APPROVED AS FISCALLY
AND BUDGETARILY SOUND
William C. Sumner
DIRECTOR
DIVISION OF ADMINISTRATIVE SERVICES
GFWFC

(3 of 3)

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND

LEASE AGREEMENT

GUANA RIVER STATE PARK

No. 3462

The Board of Trustees of the Internal Improvement Trust Fund of the State of Florida is authorized in Section 253.03, Florida Statutes, to enter into leases for the use, benefit and possession of public lands by state agencies which may properly use and possess them for the benefit of the people of the State of Florida as specified in the following lease.

This lease agreement is made between the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, as Lessor, and THE DEPARTMENT OF NATURAL RESOURCES, for the use and benefit of the Division of Recreation and Parks, as Lessee.

The parties, for and in consideration of mutual covenants and agreements hereinafter contained, hereby covenant and agree as follows:

1. The Lessor does hereby lease to the Lessee the following described property in the County of St. Johns, State of Florida, together with the improvements thereon, as applicable, and subject to all existing encumbrances, viz:

All that part of Parcel "A" of Exhibit "A", attached hereto, lying South of the following described line:

Begin at a point on the East shore of the Tolomato River, said point being the intersection of the Southwesterly prolongation of a dike located in Section 48, Township 5 South, Range 29 East, with the East shore of said river; thence Northeasterly, Southeasterly and Northeasterly along said dike to an intersection with the North line of said Section 48; thence Northeasterly, 400 feet along said North line of Section 48; thence Northwesterly, perpendicular to the North line of Section 48, 1150 feet along a line being approximately 300 feet East of a lake; thence Northeasterly, parallel with the North line of Section 48, along a line being approximately one-half mile North of a causeway, to the Guana River and the point of termination.

All that part of Parcel "B" of Exhibit "A" occupied by the causeway and dam located in Section 31, Township 5

A
PAGE 1 OF 6

rent Plan

No. 3462

South, Range 30 East and forming the southern boundary of Guana Lake (said part including all the causeway and dam not included in that part of Parcel "A" described above).

Also,

All of Parcels C, D, E, F, G, H, I, J, K, and L, as described in Exhibit "A".

Reserving unto the State of Florida Game and Fresh Water Fish Commission the right to enter upon those lands known as Guana Lake Dam for the purpose of maintaining the soundness of the dam and for maintaining, operating and renewing the water control devices in the dam as necessary for management of water levels on Guana Lake, and

Reserving unto the State of Florida Game and Fresh Water Fish Commission the right of access to, maintenance of, and water drainage by any existing ditches closely associated with the dike referred to above in Parcel "A", whether north or south of the dike, which ditches may be necessary to the control of water levels in lakes north of the dike.

TO HAVE AND TO HOLD the above described land for a period of fifty (50) years for development and management for public outdoor recreation and related purposes.

2. The Lessee shall, through its agents and employees prevent the unauthorized use of said land or any use thereof not in conformity with this lease.

3. The Lessor warrants that it has the right to lease the hereinabove described property, however, this lease does not convey fee simple title.

4. A land management plan for this tract shall be prepared by the Lessee, in accordance with Section 253.034, Florida Statutes, within 12 months of the execution date of this lease and shall be submitted to the Lessor for approval through the Department of Natural Resources, Division of State Lands ("State Lands"), acting as agent for the Lessor. The approved land management plan shall provide the basic guidance for all management activities and shall be reviewed jointly by the Lessee and the Lessor at least every five (5) years. The Lessee shall not use or alter the property except as provided for in the approved land management plan without the advance written approval of State Lands, as agent for the Lessor.

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EXHIBIT A
PAGE 2 OF 6

rent Plan

No. 3462

5. The land management plan prepared under this lease shall identify management strategies for exotic species, if present. The introduction of exotic species is prohibited, except when specifically authorized by the approved land management plan.

6. The Lessor or its duly authorized agents shall have the right at any time to inspect the said land and the works and operations thereon of the Lessee, or its subagent when applicable, in any matter pertaining to this lease agreement.

7. Execution of this lease in no way affects any of the parties' obligations pursuant to Chapter 267, Florida Statutes. The collection of artifacts or the disturbance of archaeological and historic sites on state-owned lands is prohibited unless prior authorization has been obtained from the Department of State, Division of Historical Resources. The land management plan prepared pursuant to Section 253.034, Florida Statutes, shall be reviewed by the Department of State, Division of Historical Resources, to insure that adequate measures have been planned to locate, identify, protect and preserve the archaeological and historic sites and properties on the tract.

8. The Lessee hereby covenants and agrees to investigate all claims of every nature at its own expense and to indemnify, protect, defend, hold and save harmless the Lessor from any and all claims, actions, lawsuits and demands of any kind or nature arising out of this agreement to the extent allowable by law.

9. The Lessee agrees to assume all responsibility for liabilities that accrue to the leased premises or to the improvements thereon, including any and all drainage or special assessments or taxes of every kind and description which are now or may be hereafter lawfully assessed and levied against the leased premises during the effective period of this lease.

10. The Lessee is hereby authorized to grant utility easements which will be necessary to service authorized

EXHIBIT A Page 3

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rent Plan

facilities located within the leased premises. Copies of any such easements granted should be filed with the Lessor immediately after execution.

11. This agreement is for the purposes specified herein, and subleases of any nature are prohibited unless previously authorized by Lessor, with the exception of utility easements incidental to authorized facilities, the exception of agreements with local, state and federal governmental agencies as to any part of the leased premises in order to effectively carry out and further the general purposes hereof, and the exception of agreements contemplated in Paragraphs 12 and 13 hereafter.

12. Lessee is hereby authorized to enter into an agreement with South Ponte Vedra Association to provide the latter those use rights in and around an existing fire station and community center necessary to the continuation of those community functions.

13. Lessee is hereby authorized to enter into an agreement with the North Florida Council, Boy Scouts of America, to provide that organization those land-development and use rights necessary to any Boy Scout role given in the approved plan for use and management of the leased premises, consistent with the land management plan required pursuant to paragraph 4 of this Agreement.

14. Lessee shall have the right to establish outdoor recreation facilities on Guana Lake Dam and the right to improve the roadway thereon as an accessway to interior lands.

15. Lessee agrees to provide for appropriate access to and through the lands leased hereunder, without charge, for persons holding a wildlife management area stamp or sportsman's license; however, this stamp or license will not cover fees for boat launching, camping or other activities for which additional charges are made.

16. This lease agreement may be terminated by mutual agreement of the parties hereto. However, the lease agreement

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EXHIBIT A

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No. 3452

shall be terminated at the sole option of the Lessor when and if the said premises including land and improvements shall cease to be used for public outdoor recreation and related purposes. The Lessee shall upon termination surrender the premises. Any costs arising out of the enforcement of the terms of this lease agreement shall be the exclusive obligation of the Lessee, payable upon demand of the Lessor.

17. Upon cessation of occupation of the leased premises, the Lessee agrees to leave all fixed improvements for the use of the Lessor and to put no claim upon said fixed improvements; or, at the option of the Lessor, the Lessee agrees to remove any or all improvements on the property at the Lessee's expense. Any costs arising out of the enforcement of the terms of this lease agreement shall be the exclusive obligation of the Lessee, payable upon demand of the Lessor.

IN TESTIMONY WHEREOF, the lawfully designated agent of the Board of Trustees of the Internal Improvement Trust Fund has hereunto subscribed his name and has caused the official seal of said Board to be hereunto affixed, in the City of Tallahassee, Florida, on the 8 day of January, 1989.

(SEAL)
BOARD OF TRUSTEES
OF THE INTERNAL
IMPROVEMENT TRUST
FUND OF THE STATE
OF FLORIDA

Virginia L. Curry
Witness
Debra R. Cook
Witness

BOARD OF TRUSTEES OF THE
INTERNAL IMPROVEMENT TRUST
FUND OF THE STATE OF FLORIDA

By: [Signature]
DIRECTOR, DIVISION OF STATE
LANDS, AGENT FOR THE BOARD
OF TRUSTEES OF THE INTERNAL
IMPROVEMENT TRUST FUND OF
THE STATE OF FLORIDA

No. 3462

STATE OF FLORIDA
COUNTY OF LEON

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State aforesaid and in the County aforesaid to take acknowledgement, personally appeared James W. The Island, to me known to be the person described in and who executed the foregoing instrument and has acknowledged before me that he executed the same.

WITNESS my hand and official seal in the County and State last aforesaid this 8 day of January, 1988.

Approved As to Form and
Legality

James W. The Island
DNR Attorney

Violet Carl Davis
Notary Public
My Commission Expires 11/13/90

STATE OF FLORIDA DEPARTMENT OF
NATURAL RESOURCES

By: E. E. Harder, acting
DIVISION DIRECTOR,
DEPARTMENT OF NATURAL
RESOURCES, DIVISION OF
RECREATION AND PARKS

[Signature]
Witness
[Signature]
Witness

STATE OF FLORIDA
COUNTY OF LEON

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State aforesaid and in the County aforesaid to take acknowledgement, personally appeared E. E. Harder, to me known to be the person described in and who executed the foregoing instrument and has acknowledged before me that he executed the same.

WITNESS my hand and official seal in the County and State last aforesaid this 7th day of January, 1988.

De Anna Sanders
Notary Public
My Commission Expires: 11/13/90

This instrument prepared
and reviewed by:

Catherine Daniels

PARCEL "A" (Parcel A-1: Sale Parcel)

A tract of land in St. Johns County, Florida, comprised of portions of Township 4 South, Range 29 East; Township 5 South, Range 29 East; Township 5 South, Range 30 East; Township 6 South, Range 29 East; and Township 6 South, Range 30 East, that is generally bounded on the North by State Road Nos. 210 and 306, generally bounded on the East by Guana Lake and/or Guana River, and generally bounded on the West by the Intracoastal Waterway right of way and/or the Southerly extension thereof via Tolomato River to its intersection with the aforementioned Guana River. Said tract of land is further described as:

In Township 4 South, Range 29 East

All of unsurveyed Section 34, lying East of the Florida Intracoastal Waterway right of way, subject to the perpetual easement vested in the United States of America to deposit spoil and dredge material on said unsurveyed Section 34 as said rights are recorded in Foreign Judgment Book 4, Page 91, of the current Public Records of said County.

That part of unsurveyed Section 27, East of the Florida Intracoastal Waterway right of way and South of a line beginning 1,050 feet South of Permanent Reference Monument No. 94 on the East right of way thereof and running N-64°E to Section 54, Township and Range aforementioned, EXCEPT any portion thereof as described in the Public Records of said County in Official Records Volume 122, Page 354, and further EXCEPTING any portion of the right of way of a county road as now established;

EXHIBIT A

NOTE: All references to acreage contained herein are based upon and refer to that certain "Boundary Survey of Portions of Townships 4, 5, & 6, Range 29 East, Together With Portions of Townships 5 & 6, Range 30, St. Johns County, Florida" prepared by Robert M. Annes Associates, dated April 19, 1984, Job No. C-30929.

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All of unsurveyed Section 35 lying West of Section 56, in Township 4 South, Range 19 East.

F. P. Sanchez Grant of Section 53;

Davis Floyd Grant, Section 56;

All of the Pedro Mestre Grant or Section 54, lying South and East of the right of way of State Road No. 210, and South of the right of way of a county road as now established, EXCEPT any portion thereof as shown on the Plat of Palm Valley Shores, as recorded in the current Public Records of said County, in Map Book 10, Page 38, and further, EXCEPTING any portion thereof as described in the Public Records of said County in Official Records Volume 122, Page 354;

Government Lots 1 and 5, and all of Government Lots 2 and 4 of Section 22, lying Easterly of the right of way of State Road 210;

All of Sections 46 and 73 lying South of the right of way of Micklers Road, as established by usage and West of the unrecorded development along Neck Road, EXCEPT any portions thereof described in the Public Records of said County in Deed Book 116, Page 510; Deed Book 117, Page 118; Deed Book 148, Page 383; Deed Book 159, Page 291; Deed Book 159, Page 294; Deed Book 170, Page 157; Deed Book 33, Page 208; Deed Book 118, Page 102; Deed Book 158, Page 49; Deed Book 235, Page 12; and Deed Book 120, Page 540; and Official Records Book 559, Page 665;

Government Lot 6, and all of Government Lots 1, 4, 5, and 7, Section 15, lying Easterly of the right of way of State Road 210 and/or Southerly of the right of way of Micklers Road;

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All of the N. Sanchez Grant or Section 12, EXCEPT that portion or parcel described in the Public Records of said County in Official Records Volume 173, Page 356;

Government Lot 3, Section 23, subject to the reservations in favor of the United States of America set forth in patent given by its granting relating to uranium, thorium or other fissionable materials, Deed Book 193, Page 515;

Government Lot 4, Section 14, subject to the reservations in favor of the United States of America set forth in patent given by its granting relating to uranium, thorium or other fissionable materials, Deed Book 193, Page 515;

In Township 5 South, Range 29 East

All of unsurveyed Section 2, lying East of the Florida Intracoastal Waterway right of way and West of Section 2 and John Floyd Grant or Section 38;

All of unsurveyed Section 3, lying East of the Florida Intracoastal Waterway right of way;

Government Lots 1, 2, and 3, Section 2, subject to the reservations in favor of the Trustees of the Internal Improvement Fund of the State of Florida contained in deed recorded in Deed Book 148, Page 119, of the Public Records of said County, as said reservations relate to Government Lot 3;

D. Floyd Grant or Section 37;

All of unsurveyed Section 10, lying East of Florida Intracoastal Waterway right of way;

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John Floyd Grant or Section 38;

All of Fractional Section 11, subject to the reservations in favor of the Trustees of the Internal Improvement Fund of the State of Florida contained in deed recorded in Deed Book 148, Page 119, of the Public Records of St. Johns County, Florida, granting Lots 1, 2, 3, 4, 5, 7 and 8, of Section 11;

Unsurveyed Section 11, East of the Florida Intracoastal Waterway right of way;

Government Lot 3, Section 12;

F. P. Sanchez Grant or Section 67;

G. I. F. Clarke Grant or Section 68;

All of Section 14 (surveyed and unsurveyed) and Government Lots 2 and 3, Section 13, said lands are subject to the reservation as a burial place for the dead of a portion of the land conveyed by Louisa Booth and James W. Booth by deed recorded in Deed Book 15, Page 184, of the Public Records of St. Johns County, Florida, conveying Lots 2 and 3 of Section 13, and Lot 4 of Section 14, Township 5 South, Range 29 East; (EXCEPT any portion of unsurveyed Section 14, lying within the right of way of the Florida Intracoastal Waterway right of way);

All of unsurveyed Section 15, lying East of the Florida Intracoastal Waterway right of way;

Unsurveyed Section 23;

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Section 26 and/or unsurveyed Section 26, as described in the Public Records of said County in Official Records Volume 137, Page 288, subject however to the reservations in favor of the Trustees of the Internal Improvement Fund of the State of Florida contained in deed recorded in the Public Records of said County in Deed Book 134, Page 59;

Portion of Pine Island, being in unsurveyed part of a parcel of unsurveyed swamp and overflow land in Section 22, as described in the Public Records of said County in Official Records Volume 9, Page 154;

Unsurveyed Section 22, lying east of Florida Intracoastal Waterway right of way and/or Toxomato River;

Section 25 and unsurveyed Section 25; EXCEPT that portion of unsurveyed Section 25 which lies East of Section 25, Section 50, and Section 46;

Any portion of unsurveyed Section 27 and any portion of unsurveyed Section 35, lying East of Florida Intracoastal Waterway right of way and/or East of Toxomato River;

Pedro Cocifacio Grant or Section 32;

Alkinson or Cocifacio Grant or Section 31;

J. P. DeBurgo Grant or Section 30;

Mariano Berla Grant or Section 46;

Mariano Berla Grant or Section 47;

Mariano Berla Grant or Section 48;

Section 49;

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Unsurveyed Section 36, as described in the Public Records of said County, in Deed Book 114, Page 43 and in Deed Book 174, Page 171, and subject to the reservations in favor of the Trustees of the Internal Improvement Fund of the State of Florida contained in deed recorded in Deed Book 153, Page 559, of the Public Records of St. Johns County, Florida;

In Township 6 South, Range 29 East

Section 101; subject to the reservations in favor of the Trustees of the Internal Improvement Fund of the State of Florida contained in deed recorded in Deed Book 117, Page 423, of the Public Records of St. Johns County, Florida;

Section 38;

Section 39;

Section 40;

Juan Segui Grant or Section 41;

Lezare Ortega Grant or Section 42;

John Kershaw Grant or Section 43;

M. Fontan Grant, or Section 57;

Unsurveyed Section 1, lying East of Tolomato River;

Portions of the above described lands may be subject to drainage easements as vested to Ponte Vedra Company by deed recorded in the Public Records of said County, in Deed Book 110, Page 49 and/or easements for spoil areas acquired by the United States of America along the East side of the Florida Intraconstral Waterway right of way by instrument dated September 14, 1947, recorded in Deed Book 167, Page 57, of the Public Records of said County.

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In Township 6 South, Range 30 East

Any portions of unsurveyed Section 6, as described in the Public Records of said County, in Deed Book 214, Page 43, lying West of the Guana River, subject to the reservations in favor of the Trustees of the Internal Improvement Fund of the State of Florida contained in deed recorded in Deed Book 153, Page 560, of the Public Records of St. Johns County, Florida;

Unsurveyed Section 7, West of Guana River;

Unsurveyed Section 18, West and North of Guana River, as described in the Public Records of said County, in Deed Book 214, Page 43, subject to the reservations in favor of the Trustees of the Internal Improvement Fund of the State of Florida contained in deed recorded in Deed Book 153, Page 560, of the Public Records of St. Johns County, Florida;

J. Parades Grant or Section 45;

M. Fontan Grant or Section 41;

Lorenzo Ortigas Grant or Section 39;

J. Kershaw Grant or Section 40;

J. Segui Grant or Section 38;

Section 37.

In Township 5 South, Range 30 East

Any portion of unsurveyed Section 31, lying West of the Guana River.

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Portions of the above described lands may be subject to drainage easements as vested to Ponte Vedra Company by deed recorded in the Public Records of said County, in Deed Book 112, Page 49 and/or easements for spoil areas acquired by the United States of America along the East side of the Florida Intracoastal Waterway right of way by instrument dated September 1-, 1947, recorded in Deed Book 167, Page 57, of the Public Records of said County.

LESS and EXCEPT any portion of Sections 56 and 50, Township 4 South, Range 29 East, which lies Easterly of the extreme Easterly line of demarcation of upland areas above and below the "Landward Extent of Waters of the State" located along the Westerly side of Guana Lake and generally located along the Easterly boundary line of said Sections.

LESS and EXCEPT the following described property:

LESS and EXCEPT a tract of land, in St. Johns County, Florida, comprised of portions of Township 4 South and Township 5 South, more particularly described as follows:

For point of reference, commence at the point of intersection of the Easterly right of way line of State Road 11A with the Southerly boundary line of Block 2, Ponte Vedra Beach Oceanfront Estates Section, according to plat thereof recorded in the Public Records of said County in Map Book 7, Page 12, and run S-77°38'40"W., along the Westerly prolongation of the aforementioned Southerly boundary line of said Flat, a distance of 66.00 feet to the Westerly right of way line of said State Road 11A; run thence S-17°11'20"E., along said Westerly right of way line, a distance of 1,599.54 feet to a point for point of beginning.

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**The term "Landward Extent of Waters of the State", as used throughout this Exhibit "A", has the same meaning in this Exhibit "A" as in Section 403.217, Florida Statutes (1983), and Chapter 17.4.02(17), Florida Administrative Code (in effect on March 7, 1984), and refers to the location of such boundary line as it existed on April 20, 1984.

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From the point of beginning thus described, continue Southeasterly, along said Westerly right of way line, as follows: first course, S-12°01'20"E. a distance of 2,347.47 feet to an angle point; second course, S-10°17'50"E. a distance of 3,235.66 feet to an angle point; third course, S-12°15'29"E. a distance of 1,777.30 feet to an angle point; fourth course, S-12°02'29"E. a distance of 12,711.62 feet to a point of curvature; fifth course, along the arc of a curve, concave Southwesterly and having a radius of 14,763.10 feet, a chord bearing and distance of S-11°04'24"E. 498.81 feet to the point of tangency of said curve; sixth course, S-10°06'19"E. a distance of 6,431.15 feet to an angle point; seventh course, S-10°04'43"E. a distance of 2,039.98 feet to the point in said right of way line where the width of right of way is increased to 100 feet; eighth course, S-79°55'17"W. a distance of 34.00 feet; ninth course, S-10°04'43"E. a distance of 1,474.60 feet to the Northeast corner of that property described in the Public Records of said County, in Official Records Volume 340, Page 538; run thence Southwesterly, Southeasterly, and Northeasterly, along the boundary line of said property, as follows: first course, S-79°55'17"W. a distance of 36.00 feet to an angle point; second course, S-10°04'43"E. a distance of 32.00 feet to an angle point; third course, N-79°55'17"E. a distance of 36.00 feet to a point on the aforementioned Westerly right of way line of State road 1A1A; run thence Southeasterly, along said right of way line, as follows: first course, S-10°04'43"E. a distance of 156.39 feet to a point of curvature; second course, along the arc of a curve, concave Northeasterly and having a radius of 15,062.91 feet, a chord bearing and distance of S-11°12'29"E. 594.63 feet to the point of tangency of said curve; third course, S-12°20'16"E. a distance of 8,640.11 feet to a point located S-12°20'16"E. a distance of 550.00 feet from the point of intersection of said right of way line with the Westerly prolongation of the line dividing Blocks C and E, as said Blocks are shown on the Plat of South Ponte Vedra Beach, as recorded in the Public Records of said County, in Map Book 6, Pages 24, 25, and 26; run thence S-77°29'09"W. a distance of 356 feet, more or less, to the mean high water line of Guano River;

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run thence along said mean high water line, following the meandering of same, a distance of 1,520 feet, more or less, to the point of intersection of said line with the former mean high water line as it existed along the Westerly side of Guana River prior to construction of a manmade causeway Westerly from Section 31, Township 5 South, Range 30 East; run thence Northerly, along said former mean high water line, following the meandering of same, a distance of 200 feet, more or less, to the point of intersection of said line with the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State", along the Northerly side of the aforementioned causeway; run thence Westerly, along said line of demarcation, following the meandering of same, a distance of 1320 feet, more or less, to the point of intersection of said line with the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State" at its extreme Easterly location along the Westerly side of Guana Lake that was formed by the construction of the aforementioned causeway, the location of said line being further described as generally running along the line dividing surveyed from unsurveyed sections along the Westerly side of said lake; run thence Northerly, along said line of demarcation located on the Westerly side of Guana Lake, following the meandering of same, a distance of 41,680 feet, more or less, to a point which bears S-77°38'40"W. from the point of beginning; run thence N-77°38'40"E. a distance of 2,150 feet, more or less, to the point of beginning.

The above described property contains 5,491 acres, more or less, above and 2,118 acres, more or less, within the "Landward Extent of Waters of the State".

LESS and EXCEPT that 2,118 acres, more or less, of the above described property within the "Landward Extent of Waters of the State".

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PARCEL "B" (Parcel B-1: Sale parcel)

A tract of land, in St. Johns County, Florida, comprised of portions of Township 4 South and Township 5 South, more particularly described as follows:

For point of reference, commence at the point of intersection of the Easterly right of way line of State Road 11A with the Southerly boundary line of Block 2, Ponte Vedra Beach Oceanfront Estates Section, according to plat thereof recorded in the Public Records of said County in Map Book 7, Page 12, and run S-77°38'40"W., along the Westerly prolongation of the aforementioned Southerly boundary line of said Plat, a distance of 66.00 feet to the Westerly right of way line of said State Road 11A; run thence S-12°11'20"E., along said Westerly right of way line, a distance of 1,599.84 feet to a point for point of beginning.

From the point of beginning thus described, continue Southeasterly, along said Westerly right of way line, as follows: first course, S-12°11'20"E. a distance of 2,347.47 feet to an angle point; second course, S-12°17'50"E. a distance of 3,135.66 feet to an angle point; third course, S-12°15'19"E. a distance of 1,777.30 feet to an angle point; fourth course, S-12°02'29"E. a distance of 12,711.82 feet to a point of curvature; fifth course, along the arc of a curve, concave Southwesterly and having a radius of 14,763.10 feet, a chord bearing and distance of S-11°04'24"E. 498.81 feet to the point of tangency of said curve; sixth course, S-10°06'10"E. a distance of 6,451.13 feet to an angle point; seventh course, S-10°04'43"E. a distance of 2,039.98 feet to the point in said right of way line where the width of right of way is increased to 100 feet; eighth course, S-79°13'17"W. a distance of 34.00 feet; ninth course, S-10°04'43"E. a distance of 1,474.60 feet to the Northeast corner of that property described in the Public Records of said County, in Official Records

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Volume 340, Page 338; run thence Southwesterly, Southeasterly and Northeasterly, along the boundary line of said property, as follows: first course, S-79°55'17"W, a distance of 56.00 feet to an angle point; second course, S-10°04'43"E, a distance of 52.00 feet to an angle point; third course, N-79°55'17"E, a distance of 56.00 feet to a point on the aforementioned Westerly right of way line of State road A1A; run thence Southeasterly, along said right of way line, as follows: first course, S-10°04'43"E, a distance of 136.39 feet to a point of curvature; second course, along the arc of a curve, concave Northeasterly and having a radius of 15,082.91 feet, a chord bearing and distance of S-11°12'29"E, 594.63 feet to the point of tangency of said curve; third course, S-12°20'16"E, a distance of 8,640.11 feet to a point located S-12°20'16"E, a distance of 350.00 feet from the point of intersection of said right of way line with the Westerly prolongation of the line dividing Blocks C and E, as said Blocks are shown on the Plat of South Ponte Vedra Branch, as recorded in the Public Records of said County, in Map Book 6, Pages 24, 25, and 26; run thence S-77°29'09"W, a distance of 356 feet, more or less, to the mean high water line of Guana River; run thence along said mean high water line, following the meandering of same, a distance of 1,820 feet, more or less, to the point of intersection of said line with the former mean high water line as it existed along the Westerly side of Guana River prior to construction of a manmade causeway Westerly from Section 31, Township 5 South, Range 30 East; run thence Northerly, along said former mean high water line, following the meandering of same, a distance of 200 feet, more or less, to the point of intersection of said line with the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State", along the Northerly side of the aforementioned causeway; run thence Westerly, along said line of demarcation, following the meandering of same, a distance of 1820 feet, more or less, to the point of intersection of

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said line with the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State" at its extreme Easterly location along the Westerly side of Guana Lake that was formed by the construction of the aforementioned causeway, the location of said line being further described as generally running along the line dividing surveyed from unsurveyed sections along the Westerly side of said lake; run thence Northerly, along said line of demarcation located on the Westerly side of Guana Lake, following the meandering of same, a distance of 41,680 feet, more or less, to a point which bears S-77°38'40"W. from the point of beginning; run thence N-77°38'40"W. a distance of 2,150 feet, more or less, to the point of beginning.

Together with a tract of land comprised of a portion of Township 4 South, Range 29 East, St. Johns County, Florida, that is bounded on the South by the Westerly prolongation of the Northerly boundary line of Ponte Vedra Beach Oceanfront Estates Section according to plat thereof recorded in the Public Records of said County, in Map Book 15, Pages 98 and 99. Said tract of land is further described as:

All of Sections 52 and 56 that lies Easterly of the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State" located generally along the Easterly boundary of said Sections and adjacent to the Westerly side of Guana Lake;

Any portions of Sections 46, 47, and 74 (surveyed or unsurveyed) described in the Public Records of said County in Official Records Volume 137, Page 188;

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Unsurveyed Section 14 and/or Section 72 (surveyed or unsurveyed) lying South of Micklers Road, EXCEPT that portion thereof lying East of the government meander line and North of the line dividing Government Lots 1 and 2 of said Section 14; and EXCEPT any portion thereof lying within the following described boundary: Bounded on the South by the Westerly prolongation of the Southerly property line of Lot 11, Block 1, Ponte Vedra Beach Oceanfront Estates, according to plat thereof recorded in the Public Records of St. Johns County, Florida, in Map Book 7, Page 12; bounded on the North by a line parallel to and 1,695.00 feet North, when measured perpendicular to the South boundary, of the above described Southerly boundary; bounded on the East by the Westerly right of way line of State Road 11A; bounded on the West by the government meander line of Government Lots 1, 2, and 3, of Section 14, Township 1 South, Range 29 East;

Any portion of Section 14, and any portion of Section 13, described, as follows: Bounded on the North by the Westerly prolongation of the Southerly boundary line of Lot "11", Block 1, Ponte Vedra Beach Oceanfront Estates Section, according to plat thereof recorded in the Public Records of said St. Johns County, in Map Book 7, Page 12; bounded on the South by a line parallel to and 370.00 feet South of the above described Northerly boundary when measured perpendicular thereto; bounded on the West by the extreme Easterly location of the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State";

Any portion of Government Lot 3, Section 14, that lies Northerly of the Westerly prolongation of the Southerly property line of Lot 3, Block 1, Ponte Vedra Beach Oceanfront Estates, according to plat thereof recorded in the Public Records of said County, in Map Book 7, Page 12, and which lies Westerly of the extreme Easterly location of the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State";

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Any portion of Unsurveyed Section 23 which lies Westerly of the Government meander line, along the westerly side of Government Lots 1 and 2, Section 23; together with any portion of Unsurveyed Section 23 and/or Government Lot 1, Section 23, within the following described boundary: bounded on the North by a line 10.00 feet South, when measured perpendicular to the Westerly prolongation of the Northerly property line of Lot 18, Block 1, Ponte Vedra Beach Oceanfront Estates, according to plat thereof recorded in the Public Records of said County, in Map Book 7, Page 12; bounded on the South by the line dividing Government Lots 1 and 2; and bounded on the East by the extreme Easterly location of the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State";

Government Lot 2, Section 23, LESS and EXCEPT any portion described in the Public Records of St. Johns County, in Deed Book 214, Page 154; EXCEPT any portion lying Easterly of the extreme Easterly location of the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State"; and EXCEPT any portion of upland area on an island resulting from the construction of a manmade causeway. Said island being bounded as follows: on the south by the Westerly prolongation of the Northerly boundary line of Lot 1, Block 2, Ponte Vedra Beach Oceanfront Estates, according to plat thereof recorded in the Public Records of St. Johns County, Florida, in Map Book 7, Page 12; on the North by a line parallel to and 1,350 feet Northerly of said Southerly boundary line; on the East by the Westerly right of way line of State Road A1A; and on the West by a line parallel to and 550 feet Westerly of the Westerly right of way line of State Road A2A.

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Any portion of Section 26, and any portion of Unsurveyed Section 26, lying West of the extreme Easterly location of the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State" and North of the Westerly prolongation of the Southerly boundary line of Block 2, Ponte Vedra Beach Oceanfront Estates Section, according to Plat thereof recorded in the Public Records of St. Johns County, in Map Book 7, Page 12; EXCEPT any portion thereof within the property described in the Public Records of said County in Deed Book 137, Page 478.

Any portion of Unsurveyed Section 26, lying Westerly of the former marsh line along the Easterly side of Guana River prior to construction of a manmade causeway to form Guana Lake, EXCEPT any portion within the property described in the Public Records of St. Johns County, in Deed Book 137, Page 479, and Deed Book 167, Page 29;

LESS and EXCEPT any portion of the above described property lying within the former run of the Guana River.

LESS and EXCEPT a tract of land, in St. Johns County, Florida, comprised of portions of Sections 25, 26, and 36, Township 4 South, Range 29 East; portions of Sections 1, 12, 13, 24, and 25, Township 3 South, Range 29 East; and portions of Sections 19, 30, and 31, Township 3 South, Range 30 East, more particularly described as follows:

For point of reference, commence at the point of intersection of the Easterly right of way line of State Road 11A with the Southerly boundary line of Block 2, Ponte Vedra Beach Oceanfront Estates Section, according to plat thereof recorded in the Public Records of said County in Map Book 7, Pages 11 and 12, and run S-77°35'40"W., along the Westerly prolongation of the aforementioned Southerly

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boundary line of said Plat, a distance of 68.00 feet to the westerly right of way line of said State Road 11A; run thence S-12°21'20"E., along said westerly right of way line, a distance of 1,599.84 feet to a point for point of beginning.

From the point of beginning thus described, continue Southeasterly, along said westerly right of way line, as follows: first course, S-12°21'20"E. a distance of 2,347.47 feet to an angle point; second course, S-12°17'50"E. a distance of 3,235.66 feet to an angle point; third course, S-12°15'29"E. a distance of 1,777.30 feet to an angle point; fourth course, S-12°02'29"E. a distance of 12,711.82 feet to a point of curvature; fifth course, along the arc of a curve, concave Southwesterly and having a radius of 14,763.10 feet, a chord bearing and distance of S-12°04'24"E., 498.81 feet to the point of tangency of said curve; sixth course, S-10°00'19"E. a distance of 6,421.13 feet to an angle point; seventh course, S-10°04'43"E. a distance of 2,039.98 feet to the point in said right of way line where the width of right of way is increased to 100 feet; eighth course, S-79°55'17"W. a distance of 36.00 feet; ninth course, S-10°04'43"E. a distance of 1,474.60 feet to the Northeast corner of that property described in the Public Records of said County, in Official Records Volume 340, Page 138; run thence Southwesterly, Southeasterly, and Northeasterly, along the boundary line of said property, as follows: first course, S-79°55'17"W. a distance of 36.00 feet to an angle point; second course, S-10°04'43"E. a distance of 52.00 feet to an angle point; third course, N-79°55'17"E. a distance of 36.00 feet to a point on the aforementioned westerly right of way line of State road 11A; run thence Southeasterly, along said right of way line, as follows: first course, S-10°04'43"E. a distance of 136.39 feet to a point of curvature; second course, along the arc of a curve, concave Northeasterly and having a radius of 15,082.91 feet, a chord bearing and distance of

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EXHIBIT "A"
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S-12°12'28"E., 594.63 feet to the point of tangency of said curve; third course, S-12°10'16"E. a distance of 6,640.11 feet to a point located S-12°20'16"E. a distance of 850.00 feet from the point of intersection of said right of way line with the Westerly prolongation of the line dividing Blocks C and B, as said Blocks are shown on the Plat of South Ponte Vedra Beach, as recorded in the Public Records of said County, in Map Book 6, Pages 24, 25, and 26; run thence S-77°29'09"W. a distance of 356 feet, more or less, to the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State" along the Easterly side of Guana River; run thence Southwesterly and Northerly, along said line of demarcation, following the meandering of same, a distance of 1040 feet, more or less, to the point of intersection of said line with the former mean high water line as it existed along the Easterly side of Guana River prior to construction of a manmade causeway Westerly from Section 31, Township 5 South, Range 30 East; run thence Northerly, along said former mean high water line, following the meandering of same, a distance of 400 feet, more or less, to the point of intersection of said line with the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State", along the Northerly side of the aforementioned causeway; run thence Easterly, along said line of demarcation, following the meandering of same, a distance of 25 feet, more or less, to the point of intersection of said line with the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State", at its extreme Easterly location between State Road A1A and the Guana Lake; run thence Northerly, along said line of demarcation adjacent to the Easterly side of Guana Lake, following the meandering of same, a distance of 89,498 feet, more or less, to a point of intersection of said line with a line that bears S-77°38'40"W. from the point of beginning; run thence N-77°38'40"E. a distance of 135 feet, more or less, to the point of beginning.

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The above described lands are subject to an easement to St. Johns County for parking on a portion of Section 36, Township 4 South, Range 29 East.

Portions of the above described lands may be subject to drainage easements as vested to Ponte Vedra Company by deed recorded in the Public Records of said County, in Deed Book 112, Page 49. Portions of the above described lands may also be subject to the reservations and easements in favor of the Trustees of the Internal Improvement Fund of the State of Florida contained in the deeds recorded in Deed Book 153, Page 559; Deed Book 154, Page 59; and in Deed Book 165, Page 419, of the Public Records of St. Johns County, Florida.

The above described property contains 19 acres, more or less, above and 1,961 acres, more or less, within the "Landward Extent of Waters of the State" (and 355 acres within the former run of Guana River).

LESS and EXCEPT that 1,961 acres, more or less, of the above described property within the "Landward Extent of Waters of the State"; and that 355 acres, more or less, of the above described property within the former run of Guana River.

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July 5, 1983

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PARCEL "D"

All of the land in Section 7, unsurveyed Section 7, Section 6, and unsurveyed Section 6, Township 6 South, Range 30 East; together with Section 31 and unsurveyed Section 31, Township 5 South, Range 30 East, St. Johns County, Florida, which lies East of the mean high water line of Guana River, West of State Road 11A, and bounded on the North by the following described line:

For point of reference, commence at the Northwest corner of Block B, South Ponte Vedra Beach, according to plat thereof recorded in the Public Records of said County, in Map Book 6, Pages 24, 25, and 26, and run S-77°39'44"W. a distance of 100.00 feet to a point located on the Westerly right of way line of State Road 11A; run thence S-12°20'16"E., along said Westerly right of way line, a distance of 350.00 feet to a point for point of beginning.

From the point of beginning thus described, run S-77°29'09"W. a distance of 356 feet, more or less, to the mean high water line of Guana River and the terminus of said line.

LESS and EXCEPT that property described in the Public Records of said County, in Official Records Volume 611, Page 195, subject however, to the easement as described therein.

LESS and EXCEPT that property described in the Public Records of said County, as the South Water Plant at South Ponte Vedra, in Official Records Volume 340, Page 137.

LESS and EXCEPT a parcel of land, comprised of a portion of Section 31, Township 5 South, Range 30 East, St. Johns County, Florida, more particularly described as follows:

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For point of reference, commence at the Northwest corner of Block B, South Ponte Vedra Beach, according to plat thereof recorded in the Public Records of said County, in Map Book 6, Pages 24, 25, and 26, and run S-77°39'44"W. a distance of 100.00 feet to a point located on the Westerly right of way line of State Road 11A; run thence S-12°20'16"E., along said Westerly right of way line, a distance of 550.00 feet to a point for point of beginning.

From the point of beginning thus described, continue S-12°20'16"E., along said Westerly right of way line, a distance of 125.15 feet to an angle point; run thence S-12°30'51"E., along said Westerly right of way line, a distance of 275.15 feet to a point; run thence S-77°29'09"W. a distance of 400.00 feet to a point; run thence N-12°30'51"W. a distance of 254 feet, more or less, to the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State" along the Easterly side of the Guana Rivet; run thence Northerly, along said line of demarcation, following the meanderings of same, a distance of 333 feet, more or less, to a point which bears S-77°29'09"W. from the point of beginning; run thence N-77°29'09"E. a distance of 356 feet, more or less, to the point of beginning.

LESS and EXCEPT a portion of Government Lot 2, Section 7, Township 6 South, Range 30 East, St. Johns County, Florida, more particularly described as follows:

For point of reference, commence at the Northwest corner of Block D, South Ponte Vedra Beach, according to plat recorded in the current Public Records of said County, in Map Book 6, Pages 29 and 30, and run S-78°01'36"W. a distance of 100.00 feet to the Southeast corner of that property described in the Public Records of said County, in Official Records Volume 612, Page 153 for point of beginning.

From the point of beginning thus described, run S-11°38'24"E., along the Westerly right of way line of State Road 11A (a 100-foot right of way, as established in this location), a distance of 522.13 feet to an angle point; run thence S-12°26'44"E., along said right of way line, a distance of 449.08 feet to the intersection of said line with the Southerly boundary line of said Section 7; run thence S-89°15'18"W., along the Southerly boundary line of said Section 7, a distance of 557 feet, more or less, to the intersection of said section line with the extreme Easterly location of the line of demarcation between upland area above and below the "Landward Extent of Waters of the State" along the Easterly side of the Guana River as it traverses this area; run thence Northerly, along said line, following the meandering of same, a distance of 880 feet, more or less, to a point located in the Southerly boundary line of the aforementioned property described in the Public Records of said County, in Official Records Volume 612, Page 893, said point also located S-78°01'36"W. from the point of beginning; run thence N-78°01'36"E., along said Southerly boundary line, a distance of 489 feet, more or less, to the point of beginning. Said property is subject to a lease agreement with St. Johns County, Florida for a county park.

LESS and EXCEPT a tract of land in St. Johns County, Florida, comprised of a portion of Section 31, Township 5 South, Range 30 E.; together with portions of Sections 6 and 7, Township 6 South, Range 30 East, more particularly described as follows:

For point of reference, commence at the Northwest corner of Block B, South Ponte Vedra Beach, according to plat thereof recorded in the Public Records of said County, in Map Book 6, Pages 14, 28, and 36, and run S-77°19'44"W. a distance of 100.00 feet to a point located on the Westerly right of way line of State Road 11A; run thence S-12°20'16"E., along said Westerly right of way line, a distance of 675.15 feet to an angle point; run thence S-11°30'31"E., along said Westerly right of way line, a distance of 175.25 feet to a point; run thence S-77°29'09"W. a distance of 400.00 feet to a point for point of beginning.

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EXHIBIT 2
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From the point of beginning thus described, run N-77°29'09"E. a distance of 400.00 feet to a point in the aforementioned Westerly right of way line of State Road 11A; run thence Southerly, along said right of way line, as follows: first course, S-12°30'51"E. a distance of 2,694.30 feet to an angle point; second course, S-11°59'52"E. a distance of 4,411.33 feet to an angle point; third course, S-11°58'24"E. a distance of 2,978.46 feet to the Northeast corner of that property described in the Public Records of said County, in Official Records Volume 612, Page 153; run thence S-78°01'56"W., along the Northerly property line of said property, a distance of 870 feet, more or less, to the point of intersection of said line with the extreme Easterly location of the line of demarcation between upland area above and below the "Landward Extent of Waters of the State" along the Easterly side of the Guana River in this area; run thence Northerly, along said line, following the meandering of same, a distance of 13,820 feet, more or less, to a point that bears N-12°30'51"W. from the point of beginning; run thence S-12°30'51"E. a distance of 354 feet, more or less, to the point of beginning.

Portions of the above described lands may also be subject to the reservations and easements in favor of the Trustees of the Internal Improvement Fund of the State of Florida contained in the deeds recorded in the Public Records of St. Johns County, Florida, in Deed Book 168, Page 423.

The above described property contains 0.6 acres, more or less, above and 116 acres, more or less, within the "Landward Extent of Waters of the State".

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June 19, 1984

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PARCEL "D"

A parcel of land, comprised of a portion of unsurveyed Section 18, Township 6 South, Range 30 East, St. Johns County, Florida, more particularly described as follows:

All of said unsurveyed Section 18, as described in the Public Records of said County, in Deed Book 174, Page 171, LESS and EXCEPT that portion described in the Public Records of said County, in Deed Book 259, Page 75.

The above described property contains .04 acres, more or less, above and 14.4 acres, more or less, within the "Landward Extent of Waters of the State".

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PARCEL "E":

A tract of land, in St. Johns County, Florida, comprised of portions of Sections 25, 26 and 36, Township 4 South, Range 29 East; portions of Sections 1, 12, 13, 24, and 25, Township 5 South, Range 29 East; and portions of Sections 19, 30, and 31, Township 5 South, Range 30 East, more particularly described as follows:

For point of reference, commence at the point of intersection of the Easterly right of way line of State Road 11A with the Southerly boundary line of Block 2, Ponte Vedra Beach Oceanfront Estates Section, according to plat thereof recorded in the Public Records of said County in Map Book 7, Pages 11 and 12, and run S-77°38'40"W., along the Westerly prolongation of the aforementioned Southerly boundary line of said Plat, a distance of 66.00 feet to the Westerly right of way line of said State Road 11A; run thence S-12°21'20"E., along said Westerly right of way line, a distance of 1,599.84 feet to a point for point of beginning.

From the point of beginning thus described, continue Southeasterly, along said Westerly right of way line, as follows: first course, S-12°21'20"E. a distance of 2,347.47 feet to an angle point; second course, S-12°17'50"E. a distance of 3,235.66 feet to an angle point; third course, S-12°15'29"E. a distance of 1,777.30 feet to an angle point; fourth course, S-12°02'29"E. a distance of 10,721.82 feet to a point of curvature; fifth course, along the arc of a curve, concave Southwesterly and having a radius of 14,763.10 feet, a chord bearing and distance of S-11°04'24"E., 498.81 feet to the point of tangency of said curve; sixth course, S-10°06'19"E. a distance of 6,451.23 feet to an angle point; seventh course, S-10°04'43"E. a distance of 2,039.98 feet to the point in said right of way line where the width of right of way is increased to 100 feet; eighth course, S-79°55'17"W. a distance of 34.00 feet; ninth course, S-10°04'43"E. a distance of 2,474.60 feet to

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the Northeast corner of that property described in the Public Records of said County, in Official Records Volume 340, Page 536; run thence Southwesterly, Southeasterly, and Northeasterly, along the boundary line of said property, as follows: first course, S-79°55'17"W. a distance of 56.00 feet to an angle point; second course, S-10°04'43"E. a distance of 52.00 feet to an angle point; third course, N-79°55'17"E. a distance of 56.00 feet to a point on the aforementioned Westerly right of way line of State road A1A; run thence Southeasterly, along said right of way line, as follows: first course, S-10°04'43"E. a distance of 136.39 feet to a point of curvature; second course, along the arc of a curve, concave Northwesterly and having a radius of 15,082.91 feet, a chord bearing and distance of S-11°12'09"E., 594.63 feet to the point of tangency of said curve; third course, S-12°20'16"E. a distance of 8,640.11 feet to a point located S-12°20'16"E. a distance of 550.00 feet from the point of intersection of said right of way line with the Westerly prolongation of the line dividing Blocks C and B, as said Blocks are shown on the Plat of South Ponte Vedra Beach, as recorded in the Public Records of said County, in Map Book 6, Pages 24, 25, and 26; run thence S-77°19'09"W. a distance of 356 feet, more or less, to the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State" along the Easterly side of Guana River; run thence Southwesterly and Northerly, along said line of demarcation, following the meandering of same, a distance of 1040 feet, more or less, to the point of intersection of said line with the former mean high water line as it existed along the Easterly side of Guana River prior to construction of a manmade causeway Westerly from Section 31, Township 5 South, Range 30 East; run thence Northerly, along said former mean high water line, following the meandering of same, a distance of 400 feet, more or less, to the point of intersection of said line with the line of demarcation between upland areas above and below the "Landward Extent of Waters of the State", along the Northerly side of the aforementioned

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PARCEL

A parcel of land situated, lying and being in St. Johns County, Florida, more particularly described as follows:

Those portions of Government Lots 1 and 4, Section 15, Township 5 South, Range 29 East that are bounded on the West by the Easterly right of way of State Road 11A; on the East by the mean high water line of the Atlantic Ocean; on the North by the Southerly boundary line of Lot 1, Block "M", South Ponte Vedra Beach, according to Plat thereof recorded in the Public Records of said County, in Map Book 11, Page 1; and bounded on the South by the Northerly boundary line of the Plat of Block "M", South Ponte Vedra Beach, according to Plat thereof recorded in the Public Records of said County, in Map Book 10, Page 99.

The above described property contains 15.8 acres, more or less.

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June 18, 1984

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 EXHIBIT A
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PARCEL "C"

A parcel of land situate, lying and being in St. Johns County, Florida, more particularly described as follows:

All of Block "J", South Ponte Vedra Beach; according to the Plat thereof recorded in Map Book 11, Page 1, of the Public Records of said County, LRES and EXCEPT any rights of St. Johns County in the four 10-foot walkways shown thereon as a result of recording of said Plat.

The above described property contains 10.5 acres, more or less.

NOTE: All references to acreage contained herein are based upon and refer to that certain "Boundary Survey of Portions of Townships 4, 5, 16, Range 19 East, together with portions of Townships 5 & 6, Range 30, St. Johns County, Florida" prepared by Robert M. Arnes Associates, dated April 26, 1984, Job No. C-30529.

Exhibit A comprises 3 pages.

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PARCEL "M"

A parcel of land situate, lying and being in St. Johns County, Florida, more particularly described as follows:

Portions of Sections 25 and 36, Township 4 South, Range 29 East, and portions of Sections 1 and 12, Township 5 South, Range 29 East that are bounded on the West by the Easterly right of way line of State Road A1A, on the East by the mean high water line of the Atlantic Ocean; on the North by the Southerly boundary line of the Plat of Block E, Ponte Vedra Beach Oceanfront Estates Section, according to Plat thereof recorded in the Public Records of said County in Map Book 15, Pages 98 and 99; and on the South by the Northerly boundary line of the Plat of Block "J", South Ponte Vedra Beach, according to Plat thereof recorded in the Public Records of said County, in Map Book 11, Page 1.

The above described property is subject to an access easement to St. Johns County.

The above described property contains 145 acres, more or less.

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June 10, 1984

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PARCEL "I"

050 933

A portion of Government Lot 2, Section 7, Township 6 South, Range 30 East, St. Johns County, Florida, more particularly described as follows:

For point of reference, commence at the Northwest corner of Block D, South Ponte Vedra Beach, according to plat recorded in the current Public Records of said County, in Map Book 6, Pages 29 and 30, and run S-78°01'36"W. a distance of 100.00 feet to the Southeast corner of that property described in the Public Records of said County, in Official Records Volume 612, Page 395 for point of beginning.

From the point of beginning thus described, run S-11°58'24"E., along the Westerly right of way line of State Road 1A (a 100-foot right of way, as established in this location), a distance of 522.13 feet to an angle point; run thence S-12°26'44"E., along said right of way line, a distance of 449.08 feet to the intersection of said line with the Southerly boundary line of said Section 7; run thence S-89°15'18"W., along the Southerly boundary line of said Section 7, a distance of 357 feet, more or less, to the intersection of said section line with the extreme Easterly location of the line of demarcation between upland area above and below the "Landward Extent of Waters of the State" along the Easterly side of the Guana River as it traverses this area; run thence Northerly, along said line, following the meandering of same, a distance of 860 feet, more or less, to a point located in the Southerly boundary line of the aforementioned property described in the Public Records of said County, in Official Records Volume 612, Page 393, said point also located S-78°01'36"W. from the point of beginning; run thence N-78°01'36"E., along said Southerly boundary line, a distance of 488 feet, more or less, to the point of beginning. Said property is subject to a lease agreement with St. Johns County, Florida for a county park.

The above described property contains 10.9 acres, more or less, above the "Landward Extent of Waters of the State".

June 15, 1964

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PARCEL

A tract of land in St. Johns County, Florida, comprised of a portion of Section 31, Township 5 South, Range 30 E.; together with portions of Sections 6 and 7, Township 6 South, Range 30 East, more particularly described as follows:

For point of reference, commence at the Northwest corner of Block E, South Ponte Vedra Beach, according to plat thereof recorded in the Public Records of said County, in Map Book 6, Pages 14, 15, and 26, and run S-77°29'42"W. a distance of 100.00 feet to a point located on the Westerly right of way line of State Road A1A; run thence S-12°20'16"E., along said Westerly right of way line, a distance of 675.15 feet to an angle point; run thence S-12°30'31"E., along said Westerly right of way line, a distance of 275.15 feet to a point; run thence S-77°29'09"W. a distance of 400.00 feet to a point for point of beginning.

From the point of beginning thus described, run N-77°29'09"E. a distance of 400.00 feet to a point in the aforementioned Westerly right of way line of State Road A1A; run thence Southerly, along said right of way line, as follows: first course, S-12°30'31"E. a distance of 2,694.30 feet to an angle point; second course, S-11°29'32"E. a distance of 4,411.33 feet to an angle point; third course, S-11°58'24"E. a distance of 1,876.46 feet to the Northeast corner of that property described in the Public Records of said County, in Official Records Volume 612, Page 193; run thence S-78°01'36"W., along the Northerly property line of said property, a distance of 376 feet, more or less, to the point of intersection of said line with the extreme Easterly location of the line of demarcation between upland area above and below the "Landward Extent of Waters of the State" along the Easterly side of the Guana River in this area; run thence Northerly, along said line, following the meandering of same, a distance of 13,720 feet, more or less, to a point that bears N-12°10'51"W. from the point of beginning; run thence S-12°30'31"E. a distance of 154 feet, more or less, to the point of beginning.

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PARCEL "B"

11:00 AM Sat

A parcel of land situate, lying and being in St. Johns County, Florida, more particularly described as follows:

All of Block "D", South Ponte Vedra Beach, according to the plat thereof recorded in Map Book 6, Pages 29 and 30, of the Public Records of said County. Said property is subject to a lease to St. Johns County for a county park.

The above described property contains 3.5 acres, more or less.

June 18, 1964

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PARCEL "L"

TH 050 942

A parcel of land situated, lying and being in St. Johns County, Florida, more particularly described, as follows:

All of Blocks "A", "B", and "C", South Ponte Vedra Beach, according to the plat thereof recorded in Map Book 6, Pages 24, 25, and 26, of the Public Records of said County.

The above described property contains 7.4 acres, more or less.

June 18, 1964

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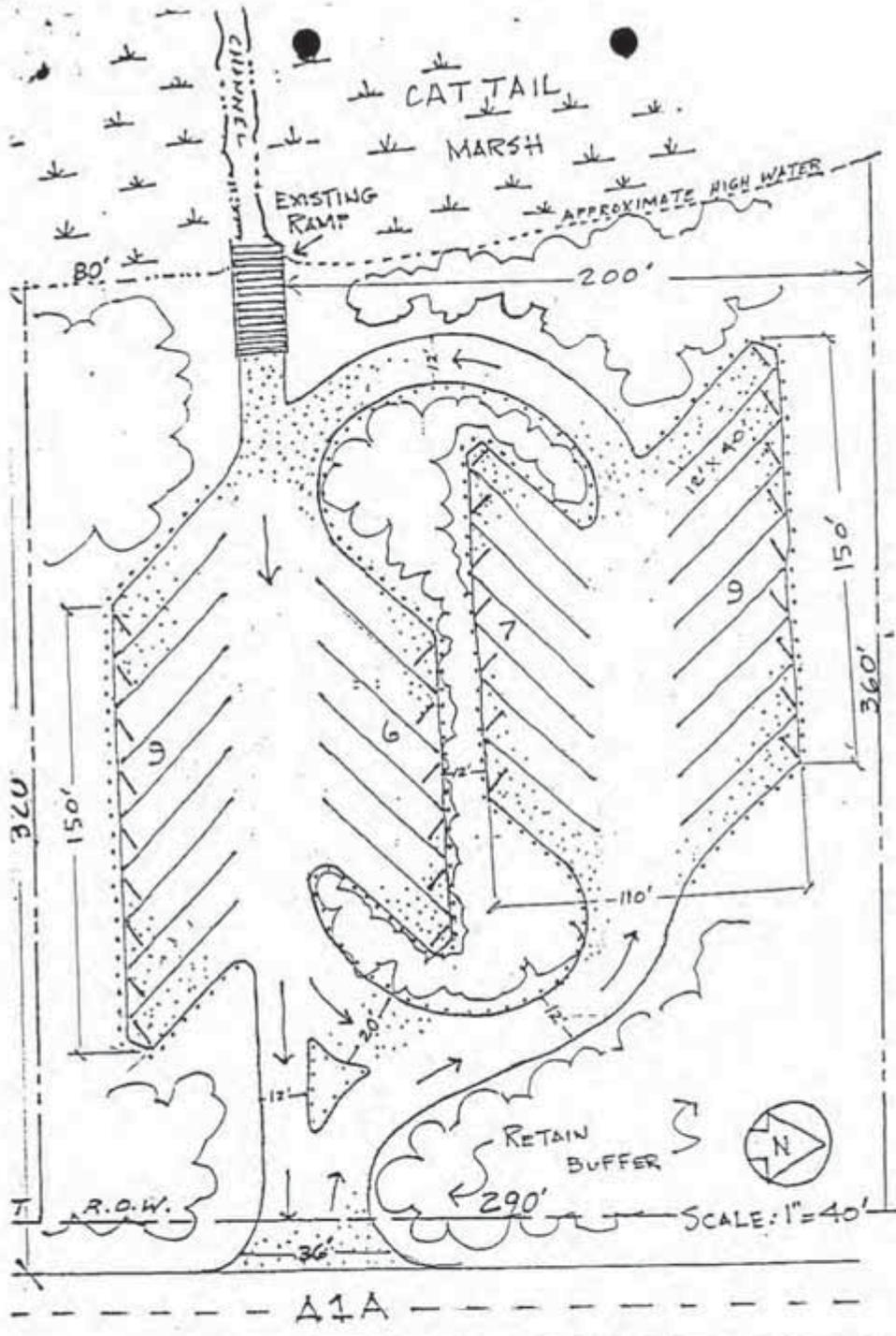
LEGAL DESCRIPTION

A parcel of land, in St. Johns County, Florida, located in Section 36, Township 4 South, Range 29 East, more particularly described as follows:

For point of reference, commence at the point of intersection of the Easterly right-of-way line of State Road A1A with the Southerly boundary line of Block 2, Ponte Vedra Beach Oceanfront Estates Section, according to plat thereof recorded in the Public Records of said County in Map Book 7, Pages 11 and 12, and run South 77° 38' 40" West, along the Westerly prolongation of the aforementioned Southerly boundary line of said Plat, a distance of 66.00 feet to the Westerly right-of-way line of said State Road A1A; thence run South 12° 21' 20" East, along said Westerly right-of-way line, a distance of 1,599.84 feet; thence run along said Westerly right-of-way line, South 12° 21' 20" East a distance of 2,347.47 feet to a point; thence run South 12° 17' 50" East a distance of 3,235.66 feet to a point; thence run South 12° 15' 29" East, a distance of 1,777.30 feet to the POINT OF BEGINNING. From said POINT OF BEGINNING run along said Westerly right-of-way line, South 12° 02' 29" East a distance of 71.45 feet to a point; thence run South 77° 39' 44" West a distance of 320 feet, more or less, to the line of demarcation between upland areas above and below the landward extent of waters of the State of Florida along the Easterly side of Guana River; thence run Northerly along said line of demarcation to a point on a line running South 77° 39' 44" West from the West right-of-way of State Road A1A said line intersecting with the Westerly right-of-way line at a point 218.55 feet north of the POINT OF BEGINNING; thence run North 77° 39' 44" East along said line to a point on the Westerly right-of-way line of State Road A1A; thence run Southerly along said westerly right-of-way line a distance of 218.55 feet to the POINT OF BEGINNING.

Reference bearing Base Florida Grid Coordinate System - East zone from a survey by Robert M. Angas Associates, April 9, 1984, Job Number C-30929

EXHIBIT B
PAGE 1 OF 2



NOTE:
IF PARKING AREA IS NOT
AVED, SPACES SHOULD BE
IDENTIFIED BY USING WOOD
BE STOPS ANCHORED IN
LACE AS SHOWN.

PROPOSED ACCESS &
PARKING FOR 6 MILE RAMP;
GUANA RIVER STATE PARK

EXHIBIT B (REVISED PLAN 11-13-84)
APPROXIMATE 2.3 ACRES

DATE: 3-13-87

2 of 2

ent Plan

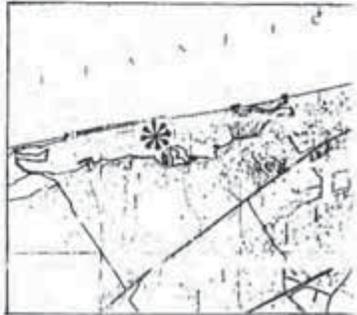
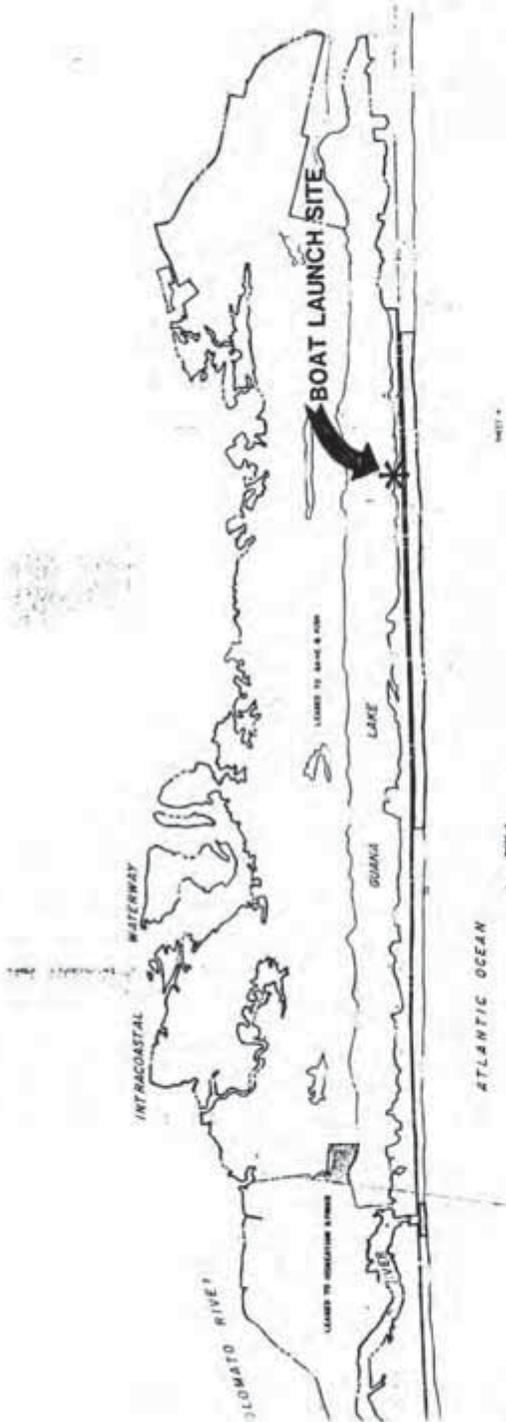


EXHIBIT C
 PAGE 1 OF 1

13.2.3 Memorandum of Understanding #90050: Emergency Operation of Guana Dam

MEMORANDUM OF UNDERSTANDING
 between the
 Florida Game and Fresh Water Fish Commission
 and the
 Department of Natural Resources
 and
 St. Johns County
 concerning
 Emergency Response Procedures
 for
 Guana Dam Water Control Structure

The intent of this memorandum of understanding is to identify the priority and protocol of response for emergency operation of the Guana Dam water control structure (WCS), outline the responsibility of each agency comprising the Emergency Response Team, and provide a course of response for each agency under emergency conditions.

The Emergency Response Team will consist of selected and trained personnel from the Florida Game and Fresh Water Fish Commission (GFC), Department of Natural Resources (DNR), and St. Johns County (County). Understandably, emergency responses and action will vary depending upon the circumstances. However, specific instructions on the course of action for manual operation of the structure will be provided to each team member through operational/instructional information and on-site training by the GFC. It will be the responsibility of each team member to learn and understand the proper course of action to be taken under varying emergency conditions.

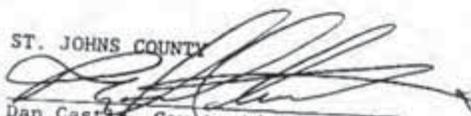
NOW THEREFORE, IT IS UNDERSTOOD THAT:

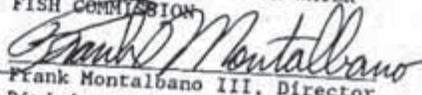
1. The function of the emergency response team is to respond only to emergency circumstances to insure public safety and, safeguard against capital loss and potential flooding of public and private property. The priority and protocol of response to emergency conditions, which include but are not limited to storms with a potential to result in loss of life, flooding of building and homes, and failure of the water control structures is as follows:
 - A. Game and Fresh Water Fish Commission
 - B. Department of Natural Resources
 - C. St. Johns County

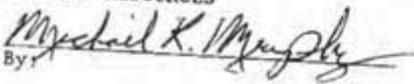
2. GFC will serve as the team leader, and will organize and coordinate all activities and manipulations of the WCS under emergency conditions or otherwise, and will train and direct other team members to respond and/or assist in the operation of the WCS under emergency conditions.

3. If the GFC is unable to immediately respond to an emergency situation, on-site DNR team members will coordinate the proper action by immediately alerting the GFC as to the problem and proceed with the manipulation of the WCS as appropriate.
4. The County team members will be responsible for assisting the GFC or DNR under emergency conditions as requested. If either the GFC or the DNR are unable to respond to an emergency circumstance, the County team members will coordinate the proper action to be taken by alerting the GFC as to the problem and proceed with the manipulation of the WCS as appropriate.
5. Under no circumstances will any team member be allowed to make ambiguous manipulations to the structure or control gates at any time.
6. Any team member may assist other team members in manipulating the structure under emergency conditions or otherwise, if such assistance is required by the established protocol of response or is requested.
7. All other procedures, operation and maintenance of the WCS will be the responsibility of the GFC.
8. This memorandum of understanding shall commence upon execution and shall remain in effect for an indefinite time period or until terminated or provided for herein.
9. The GFC, DNR or County may terminate this memorandum of understanding by giving written notice to the others at least 60 days prior to the termination date.

IN WITNESS WHEREOF the parties hereto have executed this memorandum of understanding through their duly authorized signatories on this 27 day of December, 1990.

ST. JOHNS COUNTY

 Dan Castle, County Administrator

FLORIDA GAME AND FRESH WATER
 FISH COMMISSION

 Frank Montalbano III, Director
 Division of Wildlife

FLORIDA DEPARTMENT OF
 NATURAL RESOURCES

 By: Michael K. Murphy

APPROVED AS TO FORM
 AND LEGAL SUFFICIENCY

 Commission Attorney

**13.2.4 Memorandum of Agreement #99098 with St. Johns County: Palm Valley
Bridge replacement project mitigation**

MEMORANDUM OF AGREEMENT

Draft 7/21/99

THIS MEMORANDUM OF AGREEMENT ("MOA"), by and between the FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, hereinafter called the "COMMISSION," a component agency of the State of Florida, and ST. JOHNS COUNTY, hereinafter called the "COUNTY," effective as of the date executed by the COUNTY.

WITNESSETH:

WHEREAS, as part of its responsibilities for the PALM VALLEY BRIDGE REPLACEMENT PROJECT (PROJECT), the COUNTY is required to ensure that the wetland mitigation features are operated and maintained for the economic life of the PROJECT as identified in the draft Project Cooperation Agreement with the U.S. Department of the Army, Corps of Engineers, hereinafter called the "CORPS," and said draft is made a part hereof as Attachment "A"; and

WHEREAS, the COMMISSION, in order to retain their normal supervision and administration responsibilities, desires to implement and maintain the mitigation features in Guana River Wildlife Management Area (GRWMA) described in Attachment "B" and said description is made a part hereof; and

WHEREAS, the entire mitigation features of the above mentioned PROJECT are within or adjacent to the geographic limits of the COUNTY; and

WHEREAS, the COUNTY, by Resolution No. 99-162 dated November 9, 1999, attached hereto and made a part hereof, desires to enter into this MOA and authorizes its officers to do so.

NOW THEREFORE, for and in consideration of the mutual benefits each to flow to the other, the parties covenant and agree as follows:

1. The COMMISSION shall appoint a representative for the administration of this MOA. The COMMISSION representative will be the "contact" for the COUNTY'S Project Engineer and/or the COUNTY'S Project Engineer's representative concerning all aspects of this MOA, including communications with the public and political officials. The COMMISSION shall be responsible for the operation and maintenance of all facilities and wetland restoration projects within the GRWMA having limits identified in Attachment "B." The COMMISSION shall be responsible for the implementation and the operation and

maintenance of the mitigation features during all operations covered by this MOA, in accordance with the provisions set forth in Attachment "B." For the purpose of this MOA, the restoration projects to be implemented and locations to be operated and maintained by the COMMISSION shall be operated and maintained at least to a minimum standard so as to meet the requirements set forth in Attachment "B." Should any item of implementation, operation or maintenance not follow the requirements of Attachment "B", the COMMISSION agrees to immediately concentrate efforts and to bring the deficient item up to a standard deemed as acceptable by the CORPS. The COMMISSION will not be responsible for the deficient items if the cause and effect is not due to neglect by the COMMISSION (such as following a natural disaster) at which time assistance from the COUNTY may be requested.

2. The COMMISSION shall, within the GRWMA identified in Attachment "B," accomplish the following during the term of this MOA:
 - A. Implement the wetland restoration projects in a timely manner as identified in Attachment "B."
 - B. Perform regular maintenance on the new well installed in Booth's Pond in order to assure normal operation. Also, limit the amount of public fishing in this pond as necessary to prevent the overfishing of native species.
 - C. Perform regular maintenance on the new well installed in Cook's Pond and on the connecting ditches associated with water level control on the impoundment in order to assure normal operation.
 - D. Perform regular maintenance on the new well and the new water control structure installed in Diego Pond and on the connecting interior ditches in order to assure normal operation.
 - E. Perform regular maintenance on the new well and new boat launching area installed in McNeil's Pond and on the new culverts or water control structures, connecting ditches and access roads in order to assure normal operation. Also, limit the amount of public fishing in this pond as necessary to prevent the overfishing of native species.

- F. Perform regular maintenance on the new well installed in Big Savannah Pond and the connecting ditches associated with water level control on the impoundment in order to assure normal operation.
 - G. Perform regular maintenance on the new well installed in Little Savannah Pond and connecting ditches associated with water level control on the impoundment in order to assure normal operation.
 - H. Perform regular maintenance on the new adjustable flap-gates and weir gates installed in Guana Lake in order to assure normal operation. Also, update and modify the technical operations manual for the water control structure as needed to account for any changes made to the system.
3. It is understood between the parties that all mitigation features and maintenance activities covered by this MOA may be deleted, removed or adjusted at any time prior to construction of the mitigation features as found necessary by the COMMISSION in order to allow flexibility in the funding considerations as identified in Attachment "B" which may be due to the timing of the allocation of funds, permit requirements and/or the bidding process. Any change from this MOA shall be fully coordinated between and approved by both parties.
4. To the extent allowed by law, the COMMISSION covenants and agrees that it will indemnify and hold harmless the COUNTY and all of the COUNTY'S officers, agents and employees, from any claim, loss, damage, cost or expense arising out of any act, action, neglect or omission by the COMMISSION during the performance of this MOA, whether direct or indirect, and whether to any person or property to which the COUNTY or said parties may be subject, except that neither COMMISSION nor any of its agents or contractors will be liable under this section for damages arising out of injury or damage to persons or property directly caused or resulting from the sole negligence of the COUNTY or any of its officers, agents or employees.
5. The COUNTY may inspect the mitigation features identified in Attachment "B" at any stage within the term of this MOA with the coordination of the COMMISSION. The COUNTY

Project Engineer must follow the appropriate procedure of contacting the COMMISSION'S appointed representative and coordinating a time for the inspection.

6. If, at any time after the COMMISSION has assumed the mitigation features' implementation, operation and maintenance responsibility above-mentioned, it shall come to the attention of the COUNTY'S Project Engineer that the facilities and wetland restoration projects identified in Attachment "B" or a part thereof is not properly operated or maintained pursuant to the terms of this MOA, said Project Engineer may at his/her option issue a written notice that a deficiency exists, by sending a certified letter to the COMMISSION'S appointed representative to place said COMMISSION on notice thereof. Thereafter, the COMMISSION shall have a period of thirty (30) calendar days within which to correct the cited deficiencies. If said deficiencies are not corrected within this time period, the COUNTY may, at its option, proceed as follows:
 - A. Undertake the correction of said deficiencies and maintain the subject facilities as required by this MOA, with COUNTY or a contractor's personnel and equipment, and invoice the COMMISSION for all reasonably incurred costs and expenses related thereto, all of which the COMMISSION hereby agrees to pay immediately upon invoicing; and/or
 - B. Terminate the COMMISSION'S right to perform hereunder, and undertake with its own forces or retain the services of a contractor to complete required performance under this MOA and recover from the COMMISSION all of the COUNTY'S reasonably incurred costs and expenses related to said completion.
7. The COUNTY does not agree to pay the COMMISSION any amount for the mitigation features' implementation, operation or maintenance above-mentioned. All costs for the implementation of said mitigation features are to be paid in a lump sum by the CORPS to the COMMISSION as identified in Attachment "B." All costs for operation and maintenance shall be paid for by the COMMISSION.
8. This MOA or part thereof is subject to termination in the event the COUNTY exercises the

option identified in paragraph 6B.

9. The term of this MOA shall be for the economic life of the Palm Valley Bridge Replacement, commencing on the date that the CORPS Engineer for the Jacksonville District notifies the COUNTY in writing of the CORPS' determination that the construction of the PROJECT is complete.
10. This writing embodies the entire MOA and understanding between the parties hereto and there are no other prior agreements or understandings, oral or written with reference to the subject matter hereof that are not merged herein and superseded hereby.
11. This MOA is nontransferable and nonassignable in whole or in part without the written consent of the COUNTY.
12. This MOA shall be governed by and construed according to the laws of the State of Florida.
13. The parties agree that the execution of a Project Cooperation Agreement between the COUNTY and the CORPS concerning the Palm Valley Replacement Project shall be a mandatory prerequisite for performance under this MOA.

IN WITNESS WHEREOF the parties hereto have caused these presents to be executed as of the Executed/MOA Effective Date stated below.

ST. JOHNS COUNTY BOARD OF COUNTY COMMISSIONERS

By: *Ben Adams*
Title: Ben Adams, County Administrator

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

By: *Keith Heller*
Title: Asst. Exec. Director

ATTEST: Cheryl Strickland, Clerk of Court
By: *Patricia DeGrande* Deputy Clerk

ATTEST: *Jimmie C. Bevis*

(SEAL)

Executed/MOA Effective

Date: NOVEMBER 10, 1999

Page 6

ATTACHED AS TO FORM
AND LEGAL SUFFICIENCY
Patricia DeGrande
Commission Attorney

PROJECT COOPERATION AGREEMENT
BETWEEN
THE DEPARTMENT OF THE ARMY
AND
ST. JOHNS COUNTY, FLORIDA
FOR CONSTRUCTION, OPERATION AND MAINTENANCE OF THE
PALM VALLEY BRIDGE REPLACEMENT PROJECT
INTRACOSTAL WATERWAY
ST. JOHNS COUNTY, FLORIDA

THIS AGREEMENT is entered into this _____ day of _____, 199__, by and between the DEPARTMENT OF THE ARMY (hereinafter the "Government"), represented by the Assistant Secretary of the Army (Civil Works), and ST. JOHNS COUNTY, FLORIDA (hereinafter the "Non-Federal Sponsor"), represented by the Chairman of its Board of County Commissioners.

WITNESSETH, THAT:

WHEREAS, construction of the Atlantic Intracoastal Waterway, Palm Valley Bridge Replacement Project at St. Johns County, Florida, (hereinafter the "Project" as defined in Article I.A. of this Agreement) was authorized by Section 101(a)(9) of the Water Resources Development Act of 1996, Public Law 104-303, and constitutes a Water Resources Development Project under the jurisdiction of the Secretary of the Army;

WHEREAS, Section 101(a)(9) of the Water Resources Development Act of 1986, Public Law 104-303, specifies the cost sharing requirements applicable to the Project;

WHEREAS, on _____ the Non-Federal Sponsor requested the Government to add an additional two lanes to the replacement bridge (hereinafter the "betterment" as defined in Article I.F. of this Agreement);

WHEREAS, the Government Secretary agrees to construct the betterment and the Non-Federal Sponsor shall pay 100 percent of the costs of the betterment;

WHEREAS, the Government and the Non-Federal Sponsor desire to enter into a Project Cooperation Agreement (hereinafter the "Agreement") for construction of the Project and betterment;

WHEREAS, Section 221 of the Flood Control Act of 1970, Public Law 91-611, as amended, and Section 103 of the Water Resources Development Act of 1986, Public Law 99-662, as amended, provide that the Secretary of the Army shall not commence construction of any water resources project, or separable element thereof, until each non-Federal sponsor has entered into a written agreement to furnish its required cooperation for the project or separable element;

ATTACHMENT A

WHEREAS, Section 902 of Public Law 99-662 establishes the maximum amount of costs for the Project and sets forth procedures for adjusting such maximum amount; and

WHEREAS, the Government and Non-Federal Sponsor have the full authority and capability to perform as hereinafter set forth and intend to cooperate in cost-sharing and financing of the construction of the Project and the betterment in accordance with the terms of this Agreement.

NOW, THEREFORE, the Government and the Non-Federal Sponsor agree as follows:

ARTICLE I - DEFINITIONS AND GENERAL PROVISIONS

For purposes of this Agreement:

A. The term "Project" shall mean the design, acquisition, and construction of a two lane, high-level, fixed span bridge and related approaches, and removal and disposal of the existing Highway 210 bridge (hereinafter the "bridge replacement features") and restoration of low to moderate value wetlands to high value wetlands on State of Florida owned lands within the Guana River Wildlife Management Area (hereinafter the "mitigation features") all as generally described in the Report of the Chief of Engineers, dated June 24, 1994.

B. The term "total project costs" shall mean the costs, as determined by the Government, that the Government would have incurred had the Project been completed and constructed. Such costs shall consist of all costs the Government would have incurred in the construction of the Project, including but not necessarily limited to continuing planning and engineering costs incurred after 1 October 1985; advanced engineering and design costs; preconstruction engineering and design costs; engineering and design costs during construction; the costs of investigations to identify the existence and extent of hazardous substances in accordance with Article XV.B. of this Agreement; costs of historic preservation activities in accordance with Article XVIII.A. of this Agreement; estimated removal and construction costs of the Project~~bridge replacement features and mitigation features~~, including the costs of alteration, lowering, raising, or replacement and attendant removal of existing railroad bridges and approaches thereto; supervision and administration costs; costs of contract dispute settlements or awards; and the value of lands, easements, rights-of-way, relocations, and suitable borrow and dredged or excavated material disposal areas that the Government determines, pursuant to Article III of this Agreement, to be required for the Project~~bridge replacement features and mitigation features~~. The term does not include any costs for operation, maintenance, repair, replacement, or rehabilitation of the Bridge and mitigation features; any costs due to betterments; any costs of participation in the Project Coordination Team in accordance with Article V of this Agreement; or any costs of dispute resolution under Article VII of this Agreement.

C. The term "period of construction" shall mean the time from the date the Government first notifies the Non-Federal Sponsor in writing, of the scheduled date for issuance of the solicitation for the first contract for construction of the bridge replacement features, mitigation features, or betterment to the date that the U.S. Army Engineer for the Jacksonville District

(hereinafter the "District Engineer") notifies the Non-Federal Sponsor in writing of the Government's determination that construction of the bridge replacement features, mitigation features, and betterment are complete.

D. The term "relocation" shall mean providing a functionally equivalent facility to the owner of an existing utility, cemetery, highway, railroad (including any bridge thereof), or public facility when such action is authorized, in accordance with applicable legal principles of just compensation or providing a functionally equivalent facility when such action is specifically provided for, and is identified as a relocation, in the authorizing legislation for the Project or any report referenced therein. Providing a functionally equivalent facility may take the form of alteration, lowering, raising, or replacement and attendant removal of the affected facility or part thereof.

E. The term "fiscal year" shall mean one fiscal year of the Government. The Government fiscal year begins on October 1 and ends on September 30.

F. The term "betterment" shall mean a change in the design and construction of one or more an-elements of the bridge replacement features accomplished at the request of the Non-Federal Sponsor resulting from the application of standards that the Government determines exceed those that the Government would otherwise apply for accomplishing the design and construction of that element. Such betterment shall include, but not necessarily be limited to, widening the bridge replacement features from two lanes to four lanes.

G. The term "Bridge" shall mean the completed replacement of the existing Highway 210 bridge with a four lane, high-level, fixed-span bridge and related approaches.

H. The term "dredged or excavated material disposal areas" shall mean the lands, easements, or rights-of-way together with the improvements necessary on those lands, easements, or rights-of-way to enable the proper disposal of dredged or excavated material associated with the construction, operation, or maintenance of the bridge replacement features, mitigation features, or betterment.

I. The term "borrow areas" shall mean the lands, easements, or rights-of-way together with the improvements necessary on those lands, easements, or rights-of-way to enable the borrowing of material for the construction, operation, or maintenance of the bridge replacement features, mitigation features, or betterment.

J. The term "functional portion of the Project and betterment" shall mean a portion of the Project and betterment that is suitable for tender to the Non-Federal Sponsor to operate and maintain in advance of completion of the entire Project and betterment. For a portion of the Project and betterment to be suitable for tender, the District Engineer must notify the Non-Federal Sponsor in writing of the Government's determination that a portion of the Project and betterment is complete and can function independently and for a useful purpose, although the balance of the Project and betterment is not complete.

ARTICLE II - OBLIGATIONS OF THE GOVERNMENT AND THE NON-FEDERAL SPONSOR

A. The Government, subject to receiving funds appropriated by the Congress of the United States (hereinafter, the "Congress") and using those funds and funds provided by the Non-Federal Sponsor for the costs of the betterment, shall expeditiously perform and construct the Project and betterment (including alteration, lowering, raising, or replacement and attendant removal of existing railroad bridges and approaches thereto), applying those procedures usually applied to Federal projects, pursuant to Federal laws, regulations, and policies.

1. The Government shall afford the Non-Federal Sponsor the opportunity to review and comment on the solicitations for all contracts, including relevant plans and specifications, prior to the Government's issuance of such solicitations. The Government shall not issue the solicitation for the first construction contract until the Non-Federal Sponsor has confirmed in writing its willingness to proceed with the Project and betterment. To the extent possible, the Government shall afford the Non-Federal Sponsor the opportunity to review and comment on all contract modifications, including change orders, prior to the issuance to the contractor of a Notice to Proceed. In any instance where providing the Non-Federal Sponsor with notification of a contract modification or change order is not possible prior to issuance of the Notice to Proceed, the Government shall provide such notification in writing at the earliest date possible. To the extent possible, the Government also shall afford the Non-Federal Sponsor the opportunity to review and comment on all contract claims prior to resolution thereof. The Government shall consider in good faith the comments of the Non-Federal Sponsor, but the contents of solicitations, award of contracts, execution of contract modifications, issuance of change orders, resolution of contract claims, and performance of all work on the Project and betterment (whether the work is performed under contract or by Government personnel), shall be exclusively within the control of the Government.

2. Throughout the period of construction, the District Engineer shall furnish the Non-Federal Sponsor with a copy of the Government's Written Notice of Acceptance of Completed Work for each contract for the Project and betterment.

B. The Non-Federal Sponsor has requested the Government to accomplish a betterment to widen the bridge replacement features from two lanes to four lanes and provide all additional lands (approximately 1.7 acres), easements, rights-of-way, relocations, utility relocations, and suitable borrow and dredged or excavated material disposal areas that the Government determines are necessary for the construction, operation, maintenance, repair, replacement, and rehabilitation of the betterment. The Government agrees, upon receipt of funds from the Non-Federal Sponsor, to accomplish the betterment in accordance with this Agreement. The Non-Federal Sponsor shall be solely responsible for all costs of the betterment and shall pay all such costs in accordance with Article VI.B. of this Agreement.

C. When the District Engineer determines that the entire Project and betterment is complete or that a portion of the Project and betterment has become a functional portion of the Project and betterment, the District Engineer shall so notify the Non-Federal Sponsor in writing

and the Government shall furnish the Non-Federal Sponsor with an Operation, Maintenance, Repair, Replacement, and Rehabilitation Manual (hereinafter the "OMRR&R Manual") and with copies of all of the Government's Written Notices of Acceptance of Completed Work for all contracts for the Project and betterment or the functional portion of the Project and betterment that have not been provided previously. Upon such notification, the Non-Federal Sponsor shall operate, maintain, repair, replace, and rehabilitate the entire Project and betterment or the functional portion of the Project and betterment in accordance with Article VIII of this Agreement.

D. The Government shall be solely responsible for total project costs and the costs of all interests in real property determined by the Government to be necessary for the ~~Project~~ bridge replacement features and mitigation features acquired during the period of construction.

E. The Government shall perform a final accounting in accordance with Article VI.C. of this Agreement to determine the contributions provided by the Non-Federal Sponsor in accordance with paragraph B. of this Article and to determine whether the Non-Federal Sponsor has met its obligations under paragraph B. of this Article.

F. Upon completion of construction of the Project and betterment or functional portion of the Project and betterment, the Government shall transfer to the Non-Federal Sponsor by appropriate instruments, subject to approval of the Secretary of the Army, and the Non-Federal Sponsor shall accept, ownership of the Project features and betterment, together with such lands, easement, and rights-of-way the Government determines to be necessary to operate, maintain, repair, replace and rehabilitate the Project and betterment subject to existing easements and such rights as the Government determines it must reserve to operate, maintain, repair, replace and rehabilitate the Intracoastal Waterway. The property rights, title and interest to be transferred to the Non-Federal Sponsor shall be subject to the Government's paramount right to operate, maintain, repair, replace and rehabilitate the Intracoastal Waterway.

G. For so long as the Project remains authorized, the Non-Federal Sponsor shall insure that the Bridge remains toll-free.

H. After the period of construction, the Non-Federal Sponsor shall, at no cost to the Government, provide all additional lands, easements, rights-of-way, and suitable borrow and dredged or excavated material disposal areas and perform or ensure performance of relocations, that the Non-Federal Sponsor determines to be necessary for the operation, maintenance, repair, replacement, and rehabilitation of the Project and betterment.

I. The Non-Federal Sponsor shall not use Federal funds to meet the Non-Federal Sponsor's share of total project costs ~~costs of the betterment~~ under this Agreement unless the Federal granting agency verifies in writing that the expenditure of such funds is expressly authorized by statute.

ARTICLE III - LANDS, RELOCATIONS, DISPOSAL AREAS, AND PUBLIC LAW 91-646 COMPLIANCE

A. The Government, after consultation with the Non-Federal Sponsor, shall determine the lands, easements, and rights-of-way required for the construction, operation, and maintenance of the Project and betterment, including those required for relocations, borrow materials, and dredged or excavated material disposal. The Government shall delineate which of the required lands, easements, and rights-of-way are necessary for the Project and the betterment. The Government in a timely manner shall provide the Non-Federal Sponsor with general written descriptions, including maps as appropriate, of the lands, easements, and rights-of-way that the Government determines are required for the Project and betterment. Prior to the end of the period of construction, the Government shall acquire all lands, easements, and rights-of-way set forth in such descriptions for the Project and betterment. The Government shall acquire by direct purchase or by use of its authority of eminent domain all lands required for the Project and betterment. Costs associated with the acquisition of lands, easements, or rights-of-way required for the Project shall be the responsibility of the Government. Should the Non-Federal Sponsor own any lands or interests in lands required for the Project and betterment, the Non-Federal Sponsor shall provide the Government with authorization for entry to all lands, easements, and rights-of-way over these lands prior to the issuance of the solicitation for each construction contract for the Project and betterment.

1. The Non-Federal Sponsor shall be responsible for contributing an allocable percentage (currently estimated at approximately six (6) percent) of the cost of the following items, including, but not limited to Government in-house labor costs, associated with the acquisition of the lands required for the betterment, excluding, however, the land costs set forth in paragraph A.2. of this Article. The estimated total cost of these items is \$657,900, with the Non-Federal Sponsor's cost estimated at \$39,500.

a. Preparation or contracting to obtain a right-of-way survey, which shall show the lands required for the Project and the betterment.

b. Preparation or contracting to obtain individual parcel legal descriptions for all parcels to be acquired.

c. Obtaining Preliminary title insurance commitments from a Title Insurance Company for all the parcels to be acquired and preparation and obtaining all curative material for title exceptions set forth on the preliminary title insurance commitments.

d. Obtaining Individual parcel appraisal reports for the parcels to be acquired for the Project and betterment. The appraisal reports will disclose the valuation difference between the lands required for the Project and the betterment. The Government shall be responsible for review and approval of all appraisal reports.

e. Performance of all negotiations with landowners and acquiring by direct purchase the lands required for both the Project and the betterment in the name of the United States of America, including preparation of all closing papers and related documents.

f. Labor costs associated with the performance by the Government of acquisition by its exercise of the Federal power of eminent domain in the name of the United

States, including Government preparation of all condemnation assemblies.

g. Any litigation expenses of the Department of Justice (hereinafter the "DOJ") in the handling of the Condemnation actions.

h. Preparation of a quitclaim to the Secretary of the Army requesting approval and signature for transfer of the acquired lands

i. Performance of all relocations and providing all relocation assistance as required by Public Law 91-646, as amended, for all tracts acquired by the United States.

j. Preparation and negotiation of all utility relocation contracts for utilities, which have to be relocated due to the construction of the Project and the betterment.

2. For the following items, the Government shall secure or perform the items and the Non-Federal Sponsor shall provide the actual costs of each.

a. The appraisal reports obtained by the Government will disclose the valuation difference between the lands required for the Project and the betterment. The Non-Federal Sponsor shall provide the appraised fair market value for the lands required for the betterment.

b. The Government shall secure final title insurance policies after acquisition of the required lands. The Government shall determine the additional cost of the final title insurance policy over and above what the Government would have paid had it acquired the lands required for the Project only. The Non-Federal Sponsor shall pay this excess cost.

B. The Government and DOJ shall litigate any condemnation action to the final disposition (including appeals filed by the landowner or which the U.S. Solicitor General determines to file) of all interests acquired, or obtain a settlement of the condemnation action. The Non-Federal Sponsor shall be consulted and kept informed at all phases of the litigation or settlement process.

C. For the condemnation of those lands, easements, or rights-of-way, located within the lands required for the betterment, the Non-Federal Sponsor shall be responsible for the payment of a percentage of any award or settlement, including any awards and interest, made pursuant to the Equal Access to Justice Act (EAJA), and court costs, including any incidental proceeding such as a request for writ of assistance as well as any appeal by the Government or any other party to the action. The Government shall immediately notify the Non-Federal Sponsor of any judgment obtained in a condemnation action. The Government shall determine the costs associated with the award or settlement and allocable to the betterment and the Non-Federal Sponsor shall pay to the Government, no later than 45 days after receipt of written notice to pay its portion of the deficiency judgment. The percentage required to be paid by the Non-Federal Sponsor shall be determined by the ratio of the appraised fair market value of each parcel of the lands required for the betterment to the appraised fair market value of the entire parcel so condemned. Final authority to recommend settlements shall rest with the Government. This includes the right to

revest property, revise estates and issue Government permits or consents. Authority and discretion to recommend an appeal to the DOJ shall rest with the Government.

D. The Non-Federal Sponsor shall accept upon delivery a quitclaim deed from the United States for title to each tract of land acquired pursuant to this Agreement. Neither the termination of this Agreement nor the presence of any contamination, whether or not regulated under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. 9601-9675g, shall be grounds for refusing to accept upon delivery a quitclaim deed from the United States.

E. For so long as the Project remains authorized, the Non-Federal Sponsor shall ensure that lands, easements, and rights-of-way that the Government determines to be required for the operation and maintenance of the Project and betterment and that were provided by the Government or the Non-Federal Sponsor are retained in public ownership for uses compatible with the authorized purposes of the Project.

F. The Government, after consultation with the Non-Federal Sponsor, shall determine the improvements required on lands, easements, and rights-of-way to enable the proper disposal of dredged or excavated material associated with the construction, operation, and maintenance of the Project and the betterment. Such improvements may include, but are not necessarily limited to, retaining dikes, wasteweirs, bulkheads, embankments, monitoring features, stilling basins, and de-watering pumps and pipes. The Government shall delineate which of the improvements are necessary for the Project and the betterment. The Government in a timely manner shall provide the Non-Federal Sponsor with general written descriptions of such improvements necessary for the Project and the betterment. Furthermore, prior to issuance of the solicitation for each Government construction contract for the Project and the betterment, the Government shall prepare plans and specifications for all improvements the Government determines to be required for the proper disposal of dredged or excavated material under that contract, submit such plans and specifications to the Non-Federal for review. The Government shall provide such improvements in accordance with the approved plans and specifications.

G. The Government, after consultation with the Non-Federal Sponsor, shall determine the relocations necessary for the construction, operation, and maintenance of the Project and the betterment, including those necessary to enable the removal of borrow materials and the proper disposal of dredged or excavated material. The Government shall delineate which of the relocations are necessary for the Project and the betterment. The Government in a timely manner shall provide the Non-Federal Sponsor with general written descriptions, including maps as appropriate, of such relocations necessary for the Project and the betterment. Prior to the end of the period of construction, the Government shall perform or ensure the performance of all relocations as set forth in such descriptions for the Project and the betterment. Furthermore, prior to issuance of the solicitation for each Government construction contract for the Project and the betterment, the Government shall prepare or ensure the preparation of plans and specifications for, and perform or ensure the performance of, all relocations the Government determines to be necessary for that contract.

H. The Government and Non-Federal Sponsor shall comply with the applicable provisions

of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended by Title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Public Law 100-17), and the Uniform Regulations contained in 49 C.F.R. Part 24, in acquiring lands, easements, and rights-of-way required for the construction, operation, and maintenance of the Project and the betterment, including those necessary for relocations, borrow materials, and dredged or excavated material disposal. The Government shall be responsible for informing all affected persons of applicable benefits, policies, and procedures in connection with said Act.

ARTICLE IV – MITIGATION FEATURES

A. The Government shall enter into a separate agreement with the Florida ~~FishGame~~ and ~~WildlifeFreshwater-Fish~~ Fish Conservation Commission that provides all terms and conditions necessary for the Florida Fish and Wildlife Conservation Commission to construct the mitigation features. Pursuant to Section 906(a)(1) of the Water Resources Development Act of 1986, construction of the mitigation features shall be performed prior to or concurrently with construction of the bridge replacement features.

B. The Non-Federal Sponsor shall enter into a separate agreement with the Florida ~~FishGame~~ and ~~WildlifeFreshwater-Fish~~ Fish Conservation Commission that provides all terms and conditions necessary for the Florida Fish and Wildlife Conservation Commission to operate, maintain, repair, replace, and rehabilitate the mitigation features for so long as the Project is authorized in accordance with Article VIII of this Agreement.

ARTICLE V - PROJECT COORDINATION TEAM

A. To provide for consistent and effective communication, the Non-Federal Sponsor and the Government, not later than 30 days after the effective date of this Agreement, shall appoint named senior representatives to a Project Coordination Team. Thereafter, the Project Coordination Team shall meet regularly until the end of the period of construction. The Government's Project Manager and a counterpart named by the Non-Federal Sponsor shall co-chair the Project Coordination Team.

B. The Government's Project Manager and the Non-Federal Sponsor's counterpart shall keep the Project Coordination Team informed of the progress of construction and of significant pending issues and actions, and shall seek the views of the Project Coordination Team on matters that the Project Coordination Team generally oversees.

C. Until the end of the period of construction, the Project Coordination Team shall generally oversee the Project and betterment, including but not necessarily limited to matters related to design; plans and specifications; scheduling; real property, and relocation requirements; real property acquisition; contract awards and modifications; contract costs; the Government's cost projections; final inspection of the entire Project and betterment or functional portions of the Project and betterment; preparation of the proposed OMR&R Manual; anticipated requirements

and needed capabilities for operation, maintenance, repair, replacement, and rehabilitation of the Project and betterment; and other related matters. This oversight shall be consistent with a project management plan developed by the Government after consultation with the Non-Federal Sponsor.

D. The Project Coordination Team may make recommendations that it deems warranted to the District Engineer on matters that the Project Coordination Team generally oversees, including suggestions to avoid potential sources of dispute. The Government in good faith shall consider the recommendations of the Project Coordination Team. The Government, having the legal authority and responsibility for construction of the Project and betterment, has the discretion to accept, reject, or modify the Project Coordination Team's recommendations.

E. Each party shall be solely responsible for its costs of participation in the Project Coordination Team.

ARTICLE VI - METHOD OF PAYMENT

A. The Government shall maintain current records of contributions provided by the Non-Federal Sponsor and current projections of total project costs and costs of the betterment under Article II.B. of this Agreement until the Government furnishes the Non-Federal Sponsor with the results of the final accounting. ~~On or before January 1, 2000~~ ~~By ????~~ ~~of each year~~ and at least quarterly thereafter, the Government shall provide the Non-Federal Sponsor with a report setting forth all contributions provided to date and the current projections of total project costs and of costs of the betterment under Article II.B. of this Agreement. On the effective date of this Agreement, total project costs are estimated to be \$18,700,000, and costs of the betterment are estimated to be \$7,813,000. Such amounts are estimates subject to adjustment by the Government and are not to be construed as the total financial responsibilities of the Government and the Non-Federal Sponsor.

B. The Non-Federal Sponsor shall provide the costs of the betterment required by Article II.B. of this Agreement in accordance with the provisions of this paragraph.

1. Not less than 30 days after execution of this Agreement, the Non-Federal Sponsor shall provide the Government with the full amount of \$220,000 by delivering a check payable to "FAO, USAED, Jacksonville District" to the District Engineer. These funds shall be utilized for the acquisition of the lands, easements, rights-of-way, required for construction of the betterment.

2. Not less than 30 calendar days prior to the scheduled date for issuance of the solicitation for the first construction contract, the Government shall notify the Non-Federal Sponsor in writing of such scheduled date and the funds the Government determines to be required from the Non-Federal Sponsor to meet the costs of the betterment through the first fiscal year of construction, including any costs of the betterment incurred prior to the commencement of the period of construction. Not later than such scheduled date, the Non-Federal Sponsor shall provide the Government with the full amount of the required funds by delivering a check payable to "FAO, USAED, Jacksonville District" to the District Engineer, or verifying to the satisfaction

of the Government that the Non-Federal Sponsor has deposited the required funds in an escrow or other account acceptable to the Government, with interest accruing to the Non-Federal Sponsor, or presenting the Government with an irrevocable letter of credit acceptable to the Government for the required funds or providing an Electronic Funds Transfer in accordance with procedures established by the Government.

3. For the second and subsequent fiscal years of construction, the Government shall notify the Non-Federal Sponsor in writing, no later than 60 calendar days prior to the beginning of that fiscal year, of the funds the Government determines to be required from the Non-Federal Sponsor to meet the costs of the betterment for that fiscal year. No later than 30 days prior to the beginning of the fiscal year, the Non-Federal Sponsor shall make the full amount of the required funds for that fiscal year available to the Government through the any of the payment mechanisms specified in Article VI.B.2. of this Agreement.

34. The Government shall draw from the funds provided by the Non-Federal Sponsor such sums as the Government deems necessary to cover the costs of the betterment as they are incurred.

45. If at any time during the period of construction the Government determines that additional funds will be needed from the Non-Federal Sponsor to cover the costs of the betterment for the current fiscal year, the Government shall notify the Non-Federal Sponsor in writing of the additional funds required and provide an explanation of why additional funds are required, and the Non-Federal Sponsor, no later than 75 calendar days from receipt of such notice, shall make the additional required funds available through any of the payment mechanisms specified in Article VI.B.2. of this Agreement.

C. Upon completion of the Project and betterment or termination of this Agreement, and upon resolution of all relevant claims and appeals, the Government shall conduct a final accounting and furnish the Non-Federal Sponsor with the results of the final accounting. The final accounting shall determine the total project costs and costs of the betterment under Article II.B. of this Agreement and the Non-Federal Sponsor's cash contribution provided pursuant to Article II.B. of this Agreement.

1. In the event the final accounting shows that the total contribution provided by the Non-Federal Sponsor is less than its required share of costs of the betterment under Article II.B. of this Agreement, the Non-Federal Sponsor shall, no later than 90 calendar days after receipt of written notice, make a cash payment to the Government of whatever sum is required to meet the Non-Federal Sponsor's required share of costs of the betterment under Article II.B. of this Agreement.

2. In the event the final accounting shows that the total contribution provided by the Non-Federal Sponsor exceeds its required share of costs of the betterment under Article II.B. of this Agreement, the Government shall, subject to the availability of funds, refund the excess to the Non-Federal Sponsor no later than 90 calendar days after the final accounting is complete. In the event existing funds are not available to refund the excess to the Non-Federal Sponsor, the Government shall seek such appropriations as are necessary to make the refund.

ARTICLE VII - DISPUTE RESOLUTION

As a condition precedent to a party bringing any suit for breach of this Agreement, that party must first notify the other party in writing of the nature of the purported breach and seek in good faith to resolve the dispute through negotiation. If the parties cannot resolve the dispute through negotiation, they may agree to a mutually acceptable method of non-binding alternative dispute resolution with a qualified third party acceptable to both parties. The parties shall each pay 50 percent of any costs for the services provided by such a third party as such costs are incurred. The existence of a dispute shall not excuse the parties from performance pursuant to this Agreement.

ARTICLE VIII - OPERATION, MAINTENANCE, REPAIR, REPLACEMENT, AND REHABILITATION (OMRR&R)

A. Upon notification in accordance with Article II.C. of this Agreement and for so long as the Project remains authorized, the Non-Federal Sponsor shall operate, maintain, repair, replace, and rehabilitate the entire Project and betterment or the functional portion of the Project and betterment, at no cost to the Government, in a manner compatible with the Project's authorized purposes and in accordance with applicable Federal and State laws as provided in Article XI of this Agreement and specific directions prescribed by the Government in the OMRR&R Manual and any subsequent amendments thereto.

B. The Non-Federal Sponsor hereby gives the Government a right to enter, at reasonable times and in a reasonable manner, upon property that the Non-Federal Sponsor owns or controls for access to the Project and betterment for the purpose of inspection and, if necessary, for the purpose of completing, operating, maintaining, repairing, replacing, or rehabilitating the Project and betterment. If an inspection shows that the Non-Federal Sponsor for any reason is failing to perform its obligations under this Agreement, the Government shall send a written notice describing the non-performance to the Non-Federal Sponsor. If, after 30 calendar days from receipt of notice, the Non-Federal Sponsor continues to fail to perform, then the Government shall have the right to enter, at reasonable times and in a reasonable manner, upon property that the Non-Federal Sponsor owns or controls for access to the Project and betterment for the purpose of completing, operating, maintaining, repairing, replacing, or rehabilitating the Project and betterment. No completion, operation, maintenance, repair, replacement, or rehabilitation by the Government shall operate to relieve the Non-Federal Sponsor of responsibility to meet the Non-Federal Sponsor's obligations as set forth in this Agreement, or to preclude the Government from pursuing any other remedy at law or equity to ensure faithful performance pursuant to this Agreement.

ARTICLE IX - INDEMNIFICATION

The Non-Federal Sponsor shall hold and save the Government free from all damages arising from the construction, operation, maintenance, repair, replacement, and rehabilitation of the Project and any Project-related betterments, except for damages due to the fault or negligence of the Government or its contractors.

ARTICLE X - MAINTENANCE OF RECORDS AND AUDIT

A. Not later than 60 calendar days after the effective date of this Agreement, the Government and the Non-Federal Sponsor shall develop procedures for keeping books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to this Agreement. These procedures shall incorporate, and apply as appropriate, the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 C.F.R. Section 33.20. The Government and the Non-Federal Sponsor shall maintain such books, records, documents, and other evidence in accordance with these procedures and for a minimum of three years after the period of construction and resolution of all relevant claims arising therefrom. To the extent permitted under applicable Federal laws and regulations, the Government and the Non-Federal Sponsor shall each allow the other to inspect such books, documents, records, and other evidence.

B. Pursuant to 32 C.F.R. Section 33.26, the Non-Federal Sponsor is responsible for complying with the Single Audit Act of 1984, 31 U.S.C. Sections 7501-7507, as implemented by Office of Management and Budget (OMB) Circular No. A-133 and Department of Defense Directive 7600.10. Upon request of the Non-Federal Sponsor and to the extent permitted under applicable Federal laws and regulations, the Government shall provide to the Non-Federal Sponsor and independent auditors any information necessary to enable an audit of the Non-Federal Sponsor's activities under this Agreement. The costs of any non-Federal audits performed in accordance with this paragraph shall be solely the responsibility of the Non-Federal Sponsor.

C. In accordance with 31 U.S.C. Section 7503, the Government may conduct audits in addition to any audit that the Non-Federal Sponsor is required to conduct under the Single Audit Act. Any such Government audits shall be conducted in accordance with Government Auditing Standards and the cost principles in OMB Circular No. A-87 and other applicable cost principles and regulations. The costs of Government audits performed in accordance with this paragraph shall be solely the responsibility of the Government.

ARTICLE XI - FEDERAL AND STATE LAWS

In the exercise of their respective rights and obligations under this Agreement, the Non-Federal Sponsor and the Government agree to comply with all applicable Federal and State laws and regulations, including, but not limited to, Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d), as implemented by Department of Defense Directive 5500.11 and Army Regulations 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs

and Activities Assisted or Conducted by the Department of the Army".

ARTICLE XII - RELATIONSHIP OF PARTIES

A. In the exercise of their respective rights and obligations under this Agreement, the Government and the Non-Federal Sponsor each act in an independent capacity, and neither is to be considered the officer, agent, or employee of the other.

B. In the exercise of its rights and obligations under this Agreement, neither party shall provide, without the consent of the other party, any contractor with a release that waives or purports to waive any rights such other party may have to seek relief or redress against such contractor either pursuant to any cause of action that such other party may have or for violation of any law.

ARTICLE XIII - OFFICIALS NOT TO BENEFIT

No member of or delegate to the Congress, nor any resident commissioner, shall be admitted to any share or part of this Agreement, or to any benefit that may arise therefrom.

ARTICLE XIV - TERMINATION OR SUSPENSION

A. If at any time the Non-Federal Sponsor fails to fulfill its obligations under Article II.B. or VI of this Agreement, the Assistant Secretary of the Army (Civil Works) shall terminate this Agreement or suspend future performance under this Agreement unless he determines that continuation of work on the Project and betterment is in the interest of the United States or is necessary in order to satisfy agreements with any other non-Federal interests in connection with the Project.

B. If the Government fails to receive annual appropriations in amounts sufficient to meet its scheduled expenditures for the Project for the then-current or upcoming fiscal year, the Government shall so notify the Non-Federal Sponsor in writing, and 75 calendar days thereafter either party may elect without penalty to terminate this Agreement or to suspend future performance under this Agreement. In the event that either party elects to suspend future performance under this Agreement pursuant to this paragraph, such suspension shall remain in effect until such time as the Government receives sufficient appropriations or until either the Government or the Non-Federal Sponsor elects to terminate this Agreement, whichever occurs first.

C. In the event either party elects to terminate this Agreement pursuant to this Article or Article XV of this Agreement, the Government shall proceed to a final accounting in accordance with Article VI.C. of this Agreement.

D. Any termination of this Agreement or suspension of future performance under this

Agreement in accordance with this Article or Article XV of this Agreement shall not relieve the parties of liability for any obligation previously incurred. Any delinquent payment shall be charged interest at a rate, to be determined by the Secretary of the Treasury, equal to 150 per centum of the average bond equivalent rate of the 13-week Treasury bills auctioned immediately prior to the date on which such payment became delinquent, or auctioned immediately prior to the beginning of each additional 3-month period if the period of delinquency exceeds 3 months.

ARTICLE XV - HAZARDOUS SUBSTANCES

A. After execution of this Agreement and upon direction by the District Engineer, the Non-Federal Sponsor shall perform, or cause to be performed, any investigations for hazardous substances that the Government or the Non-Federal Sponsor determines to be necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (hereinafter "CERCLA"), 42 U.S.C. Sections 9601-9675, that may exist in, on, or under lands, easements, and rights-of-way that the Government determines to be required for the construction, operation, and maintenance of the mitigation features and the betterment. However, for lands that the Government determines to be subject to the navigation servitude, only the Government shall perform such investigations unless the District Engineer provides the Non-Federal Sponsor with prior specific written direction, in which case the Non-Federal Sponsor shall perform such investigations in accordance with such written direction.

B. After execution of this Agreement, the Government shall perform, or cause to be performed, any investigations for hazardous substances that the Government determines to be necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (hereinafter "CERCLA"), 42 U.S.C. Sections 9601-9675, that may exist in, on, or under lands, easements, and rights-of-way that the Government determines to be necessary for the construction of the bridge replacement features.

C. In the event it is discovered through any investigation for hazardous substances or other means that hazardous substances regulated under CERCLA exist in, on, or under any lands, easements, or rights-of-way that the Government determines to be required for the construction, operation, and maintenance of the Project and betterment, the Non-Federal Sponsor and the Government shall provide prompt written notice to each other, and the Government shall not proceed with the acquisition of the real property interests until both parties agree.

D. The Government and the Non-Federal Sponsor shall determine whether to initiate construction of the Project and betterment, or, if already in construction whether to continue with construction of the Project and betterment, suspend future performance under this Agreement, or terminate this Agreement for the convenience of the Government, in any case where hazardous substances regulated under CERCLA are found to exist in, on, or under any lands, easements, or rights-of-way that the Government determines to be necessary for the construction, operation, and maintenance of the Project or betterment. Should the Government and the Non-Federal Sponsor determine to initiate or continue with construction of the Project and betterment after considering

any liability that may arise under CERCLA, the Government shall be responsible, as between the Government and the Non-Federal Sponsor, for the costs of clean-up and response, to include the costs of any studies and investigations necessary to determine an appropriate response to the contamination for any contamination occurring on lands required for the bridge replacement features prior to the end of the period of construction. Until such time as the end of the period of construction occurs the Non-Federal Sponsor shall have no obligation under this Agreement for the costs of any clean-up and response for any contamination occurring on lands required for the bridge replacement features. Should the Government and the Non-Federal Sponsor determine to initiate or continue with construction of the Project and betterment after considering any liability that may arise under CERCLA, the Non-Federal Sponsor shall be responsible, as between the Government and the Non-Federal Sponsor, for the costs of clean-up and response, to include the costs of any studies and investigations necessary to determine an appropriate response to the contamination for any contamination occurring on lands required for the mitigation features and the betterment. In the event the Non-Federal Sponsor fails to provide any funds necessary to pay for clean up and response costs or to otherwise discharge the Non-Federal Sponsor's responsibilities under this paragraph upon direction by the Government, the Government may, in its sole discretion, either terminate this Agreement for the convenience of the Government, suspend future performance under this Agreement, or continue work on the Project and betterment.

E. The Non-Federal Sponsor and the Government shall consult with each other in accordance with Article V of this Agreement in an effort to ensure that responsible parties bear any necessary clean up and response costs as defined in CERCLA. Any decision made pursuant to paragraph D. of this Article shall not relieve any third party from any liability that may arise under CERCLA.

F. As between the Government and the Non-Federal Sponsor, the Non-Federal Sponsor shall be considered the operator of the Project and betterment for purposes of CERCLA liability. To the maximum extent practicable, the Government and the Non-Federal Sponsor shall perform their responsibilities under this Agreement in a manner so that liability will not arise under CERCLA.

ARTICLE XVI - NOTICES

A. Any notice, request, demand, or other communication required or permitted to be given under this Agreement shall be deemed to have been duly given if in writing and either delivered personally or by telegram or mailed by first-class, registered, or certified mail, as follows:

If to the Non-Federal Sponsor:

County Administrator
St. Johns County, Florida
4020 Lewis Speedway
St. Augustine, Florida 32095

If to the Government:

District Engineer
USAED, Jacksonville
Post Office Box 4970
Jacksonville, Florida 32232-0019

B. A party may change the address to which such communications are to be directed by giving written notice to the other party in the manner provided in this Article.

C. Any notice, request, demand, or other communication made pursuant to this Article shall be deemed to have been received by the addressee at the earlier of such time as it is actually received or seven calendar days after it is mailed.

ARTICLE XVII - CONFIDENTIALITY

To the extent permitted by the laws governing each party, the parties agree to maintain the confidentiality of exchanged information when requested to do so by the providing party.

ARTICLE XVIII - HISTORIC PRESERVATION

A. The costs of identification, survey and evaluation of historic properties for the Project, incurred before the end of the period of construction, shall be borne entirely by the Government. The costs of identification, survey and evaluation of historic properties for the betterment, incurred before the end of the period of construction, shall be borne entirely by the Non-Federal Sponsor.

B. The costs of identification, survey and evaluation of historic properties, incurred after the period of construction, shall be considered financial obligations for operation and maintenance of the Project and betterment and shall be borne entirely by the Non-Federal Sponsor.

C. As specified in Section 7(a) of Public Law 93-291 (16 U.S.C. Section 469c(a)), the costs of mitigation and data recovery activities associated with historic preservation for the Project shall be borne entirely by the Government and shall not be included in total project costs, up to the statutory limit of one percent of the total amount authorized to be appropriated for construction of the Project.

D. The Government shall not incur costs for mitigation and data recovery that exceed the statutory one percent limit specified in paragraph C. of this Article unless and until the Assistant Secretary of the Army (Civil Works) has waived that limit in accordance with Section 208(3) of

Public Law 96-515 (16 U.S.C. Section 469c-2(3)). Any costs of mitigation and data recovery that exceed the one percent limit shall not be included in total project costs.

ARTICLE XIX - SECTION 902 PROJECT COST LIMITS

The Non-Federal Sponsor has reviewed the provisions set forth in Section 902 of Public Law 99-662, as amended, and understands that Section 902 establishes the maximum amount of total project costs for the Project. Notwithstanding any other provision of this Agreement, the Government shall not make a new Project financial obligation or make a Project expenditure, if such obligation or expenditure, would result in total project costs exceeding this maximum amount, unless otherwise authorized by law. On the effective date of this Agreement, this maximum amount is estimated to be \$24,277,000, as calculated in accordance with ER 1105-2-100 using October 1, 1999 price levels and allowances for projected future inflation. The Government shall adjust this maximum amount in accordance with Section 902.

ARTICLE XX - AMENDMENTS OR MODIFICATIONS

This Agreement may be modified by written amendments executed by the parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, which shall become effective upon the date it is signed by the Assistant Secretary of the Army (Civil Works).

THE DEPARTMENT OF THE ARMY

ST. JOHNS COUNTY, FLORIDA

BY: _____
Joseph W. Westphal
Assistant Secretary of the Army
(Civil Works)

BY: _____
Marc Jacalone
Chairman
Board of County Commissioners

DATE: _____

DATE: _____

CERTIFICATE OF AUTHORITY

I, James Sisco, do hereby certify that I am the principal legal officer of St. Johns County, Florida, that St. Johns County, Florida is a legally constituted public body with full authority and legal capability to perform the terms of the Agreement between the Department of the Army and St. Johns County, Florida in connection with the Palm Valley Bridge Replacement Project, and to pay damages in accordance with the terms of this Agreement, if necessary, in the event of the failure to perform, as required by Section 221 of Public Law 91-611 (42 U.S.C. Section 1962d-5b), and that the persons who have executed this Agreement on behalf of St. Johns County, Florida have acted within their statutory authority.

IN WITNESS WHEREOF, I have made and executed this certification this
_____ day of _____ 19__.

James Sisco
County Attorney
St. Johns County, Florida

CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-L.L.L., "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

DATE: _____

Marc Jacalone
Chairman
Board of County Commissioners
St. Johns County, Florida

ATTACHMENT "B"
WETLAND MITIGATION PLAN FOR THE
PALM VALLEY BRIDGE REPLACEMENT PROJECT

**Wetland Mitigation Plan for the
Palm Valley Bridge Replacement Project**

Craig R. LeSchack
Florida Game and Fresh Water Fish Commission
Division of Wildlife

July 20, 1998

ATTACHMENT B

BACKGROUND

The Final Feasibility Report and Environmental Assessment for the Palm Valley Bridge Replacement Project were completed in March of 1994. Field surveys were jointly conducted by biologists from the U.S. Fish and Wildlife Service (Service) and the U.S. Army Corps of Engineers (Corps) in an attempt to quantify wildlife values for habitats that would be impacted by the project. Loss of wetlands due to bridge replacement was estimated to be at least 13.9 acres. As a result, four mitigation alternatives were submitted for evaluation. One of these alternatives was to restore wetland habitat on the Guana River Wildlife Management Area (GRWMA). The Florida Game and Fresh Water Fish Commission (Commission) developed a restoration plan that included several elements to restore valuable fish and wildlife habitat on GRWMA. The Service recommended that the Corps accept this alternative to mitigate for wetland impacts. However, the Palm Valley Bridge project was not initiated due to budget constraints.

The project resumed in March 1997 when the Corps filed an environmental resource permit with the Department of Environmental Protection. In addition, a joint meeting was held in December 1997 between the Corps, St. Johns County, and the Commission to discuss several aspects of the project, including the wetland mitigation plan. Several of the restoration elements submitted by the Commission have been completed due to the time lapse between the development of the mitigation plan and actual implementation. Also, new estimates were calculated to reflect current costs. Project amendments are reviewed later in the plan. This document will serve as the new mitigation plan for wetland impacts associated with the Palm Valley Bridge Replacement Project.

The projects listed below are generally prioritized according to our current planned objectives. The Commission anticipates needing 3-5 years to fully implement all phases of the mitigation plan. This would include receiving authorization to spend the funds, obtaining all necessary permits (e.g., dredge and fill), and bidding projects to contractors. If planned objectives and priorities change during that time, the Commission would request authorization to substitute or modify the proposed spending. This would be fully coordinated among all agencies involved in the mitigation project.

*Palm Valley Bridge Wetland Mitigation Project - 2***PRIORITIZED LIST OF PROJECTS****1. Booths Pond restoration:**

This is a 22-acre impoundment managed primarily for optimal populations of native fish. In addition to the fishery resource, Booths Pond provides deep, freshwater habitat for various migratory and resident wildlife species.

- a. Initiate muck removal and bottom restoration, including planting of native species and herbiciding undesirable species. *Estimated cost is \$55,000.*
- b. The existing 4" flowing well is not sufficient to flood the pond in a timely manner nor maintain adequate levels during periods of drought. An additional well (10-12") will enhance management capabilities. *Estimated cost is \$15,000.*
- c. Restock the pond with native fish. *Estimated cost is \$8,000.*

Subtotal for 1: \$78,000

2. Cooks Pond restoration:

This wetland is a 19-acre freshwater impoundment where the primary management objective is moist soil management. Among the complex of interior wetlands, Cooks Pond provides important food and cover for numerous migratory and resident wildlife, particularly aquatic birds.

- a. The existing 4" flowing well is not sufficient to flood the pond in a timely manner nor maintain adequate levels during periods of drought. An additional well (10-12") will enhance moist soil management capabilities. *Estimated cost is \$15,000.*
- b. Clean approximately 3,400 feet of ditching associated with water level control on the impoundment. Current ditching requires maintenance for proper water level management. A rotary ditcher and/or heavy equipment will be used to remove debris and sediments to allow for effective management. *Estimated cost is \$10,000.*

Subtotal for 2: \$25,000

Palm Valley Bridge Wetland Mitigation Project - 3

3. Diego Pond restoration:

This 28-acre brackish water impoundment is managed for a variety of migratory and resident aquatic and semi-aquatic wildlife and fish species. Restoration will enhance the Commission's ability to manage this system to meet resource management goals.

- a. The primary objective on Diego Pond is to manage for submerged aquatic vegetation (e.g., widgeon-grass). Installing a flowing well (10-12") will assist in regulating salinity levels. *Estimated cost is \$15,000.*
- b. Replace the water control structure for the impoundment. Current structure does not function properly. *Estimated cost is \$10,000.*
- c. Clean existing interior ditching system using a rotary ditcher or heavy equipment if required. *Estimated cost is \$5,000.*

Subtotal for 3: \$30,000

4. McNeils Pond restoration:

This is a 30-acre impoundment managed primarily for optimal populations of native fish. In addition to the fishery resource, McNeils Pond provides deep, freshwater habitat for various migratory and resident wildlife species.

- a. Initiate muck removal and bottom restoration, including planting of native species and herbiciding undesirable species. *Estimated cost is \$74,000.*
- b. The existing 4" flowing well is not sufficient to flood the pond in a timely manner nor maintain adequate levels during periods of drought. An additional well (10-12") will enhance management capabilities. *Estimated cost is \$15,000.*
- c. Remove debris from ditches to restore proper drainage and fill in unnecessary ditches to natural grade where appropriate. Install new culverts or water control structures and restore damaged access roads. *Estimated cost is \$40,000.*
- d. Remove an existing antiquated wooden dock facility and replace with a primitive boat launching area to facilitate public recreation. *Estimated cost is \$10,000.*
- e. Restock the pond with native fish. *Estimated cost is \$10,000.*

Subtotal for 4: \$149,000

Palm Valley Bridge Wetland Mitigation Project - 4

5. Big Savannah Pond restoration:

This 39-acre freshwater impoundment is primarily managed to enhance and maintain a roost site commonly used by wood storks and many other species of wading birds including roseate spoonbills, yellow-crowned night herons, tricolored herons, and white ibis.

- a. The existing 4" flowing well is not sufficient to flood the pond in a timely manner nor maintain adequate levels during periods of drought. An additional well (10-12") will enhance moist soil management capabilities. *Estimated cost is \$15,000.*
- b. Clean approximately 3,000 feet of ditching associated with water level control on the impoundment. Current ditching requires maintenance for proper water level management. A rotary ditcher and/or heavy equipment will be used to remove debris and sediments to allow for effective management. *Estimated cost is \$8,000.*

Subtotal for 5: \$23,000

6. Little Savannah Pond restoration:

This wetland is a 29-acre freshwater impoundment where the primary management objective is moist soil management. Among the complex of interior wetlands, Little Savannah Pond provides important food and cover for numerous migratory and resident wildlife, particularly aquatic birds.

- a. The existing 4" flowing well is not sufficient for a moist soil management program. An additional well (10-12") will enhance management capabilities. *Estimated cost is \$15,000.*
- b. Clean approximately 1,800 feet of ditching associated with water level control. Current ditching requires maintenance for proper water level management. A rotary ditcher and/or heavy equipment will be used to remove debris and sediments to allow for effective management. *Estimated cost is \$5,000.*

Subtotal for 6: \$20,000

Palm Valley Bridge Wetland Mitigation Project - 5

7. Repairs to the Guana Lake water control structure:

The Guana Lake water control structure services a 2,309-acre impoundment which is managed for a variety of wildlife species. The impoundment provides important brackish and freshwater habitat vital to numerous migratory and resident aquatic and semi-aquatic wildlife species. It also provides for high levels of wildlife- and fisheries-oriented public recreation.

- a. Modify the existing submerged erosion control barrier on the upstream portion of the water control structure to fully utilize recharging/flooding capacity. Repair erosion damage which has occurred to the existing stabilization features installed on the channel banks and slopes. *Estimated cost is \$25,000.*
- b. Develop a technical operations manual for the water control structure. This manual would describe and illustrate the technical aspects of operation and maintenance of the control structure, and would be prepared by design engineers. The manual would be provided to personnel responsible for operating the water control structure under emergency and normal conditions. *Estimated cost is \$5,000.*
- c. Develop five adjustable flap-gates that will allow water level regulation between one and two feet above mean sea-level, and five weir gates that will allow controlled water level regulation through the flashboard system. *Estimated cost is \$35,000.*

Subtotal for 7: \$65,000

Total for projects 1-7:	\$390,000
Contingency funding:	\$15,000
GRAND TOTAL:	\$405,000

*Palm Valley Bridge Wetland Mitigation Project - 6***FUNDING CONSIDERATIONS**

The original cost estimates were derived in 1994 and the amount of mitigation funding was \$375,000. The plan was revised to reflect a more accurate estimate of costs for implementing the wetland mitigation projects. If the projects are unable to be funded at the current anticipated cost (i.e., \$405,000), then some of the projects can be amended by deleting certain elements to lower anticipated funding needs. However, it is important to remember that these are 1998 cost estimates and it might be an additional 2-3 years before projects are initiated due to a variety of reasons including project delays, permit requirements, implementation of agreements, etc.

COMPLETED PROJECTS

The following projects were deleted from the original mitigation plan:

1. Guana Dam (Project 1a, 1b): downstream repair of the erosion barrier will be completed with funds that have been allocated as part of the Commission's FY 1998-99 budget.
2. Construction of culverts and bulkhead at Big Savannah Pond (Project 5c): completed.
3. Wildcat Savannah (Project 6): the project was completed in 1996 as part of a mitigation project involving the Commission and St. Johns River Water Management District.

Palm Valley Bridge Wetland Mitigation Project - 7

The following table presents the restoration elements, acreage of each element, their existing habitat value and calculated habitat units (HU), their expected future value and calculated HU, and net gain in HU.

Restoration Element	Acreage	Existing	Future	Net HU
Booths Pond	22	3.5 (77.0)	5.0 (110.0)	+33.0
Cooks Pond	19	4.1 (77.9)	4.7 (89.3)	+11.4
Diego Pond	28	4.1 (114.8)	4.6 (128.8)	+14.0
McNeils Pond	30	4.3 (129.0)	4.7 (141.0)	+12.0
Big Savannah Pond	39	4.5 (175.5)	4.9 (191.1)	+15.6
Little Savannah Pond	29	4.7 (136.3)	4.9 (142.1)	+5.8
Guana Lake	85	4.6 (391.0)	4.8 (408.0)	+17.0
Total				+108.8

The following table presents an incremental cost analysis of the various restoration elements. The elements are presented in increasing order of cost.

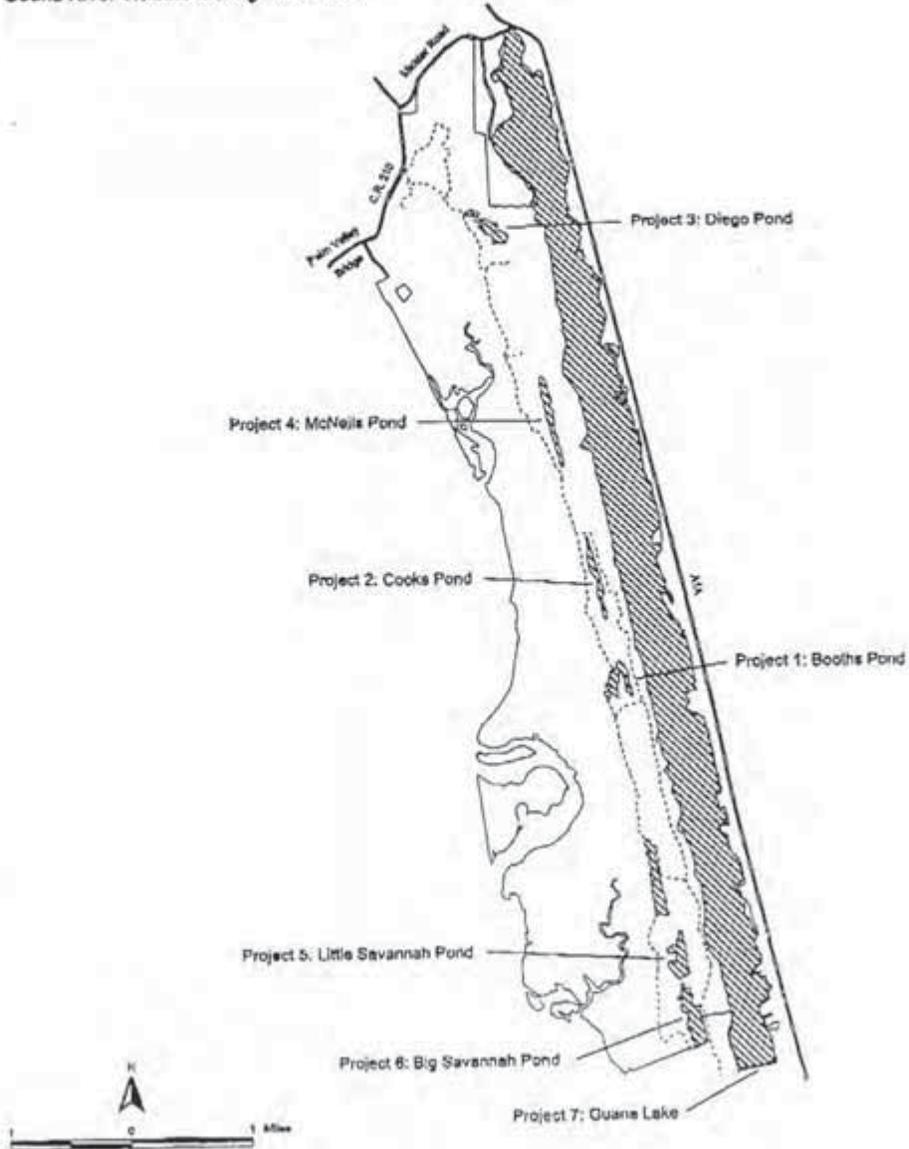
Restoration Element	Net HU	Cost	Cost / HU
Big Savannah Pond	+15.6	\$23,000	\$1,474
Diego Pond	+14.0	\$30,000	\$2,143
Cooks Pond	+11.4	\$25,000	\$2,193
Booths Pond	+33.0	\$78,000	\$2,364
Little Savannah Pond	+5.8	\$20,000	\$3,448
Guana Lake	+17.0	\$65,000	\$3,824
McNeils Pond	+12.0	\$149,000	\$12,417
Totals	+108.8¹	\$390,000²	

¹ Restoration elements would completely mitigate for direct project impacts of 107.4 HU.

² Estimated cost does not include contingency funding of \$15,000.

Palm Valley Bridge Wetland Mitigation Project - 8

**Location of Wetland Restoration Projects
Guana River Wildlife Management Area**



**13.2.5 Project Cooperation Agreement #99235 with U.S. Army Corps of Engineers:
Palm Valley Bridge replacement project mitigation**

**PROJECT COOPERATION AGREEMENT
BETWEEN
THE DEPARTMENT OF THE ARMY AND
THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
FOR THE MITIGATION PROJECT AT GUANA RIVER WILDLIFE
MANAGEMENT AREA**

This PROJECT COOPERATION AGREEMENT is entered into this 23rd day of August, 2000, by and between the DEPARTMENT OF THE ARMY (hereinafter the "the Government"), represented by the District Engineer, U.S. Army Corps of Engineers, and the FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (hereinafter "the Commission), referred to collectively as "the Parties."

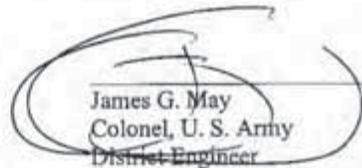
The Parties, in furtherance of the construction, operation and maintenance of the Palm Valley Bridge Replacement Project, Intracoastal Waterway, St. Johns County, Florida, do hereby covenant and agree as follows:

1. St. Johns County, Florida, intends to construct, operate and maintain the above-referenced structure with funding from the Government.
2. As part of the Palm Valley Bridge Replacement Project, the Government requires mitigation of wetland resources at or near the project site.
3. Guana River Wildlife Management Area ("GRWMA"), located within St. Johns County, has been selected by the Parties and St. Johns County as the site for the required mitigation. GRWMA is managed by the Commission.
4. The Government shall pay the Commission \$405,000 (four hundred and five thousand dollars), in lump sum, and as set forth in Exhibit 1, for the implementation of the mitigation on GRWMA. The Commission shall be paid by the Government upon the submission of properly certified invoices to the Government. Such invoices shall contain detail sufficient for a proper preaudit and postaudit thereof. Invoices shall be sent to the Government in care of Mr. Richard Bonner, Deputy District Engineer for Project Management, 400 West Bay St., Jacksonville, Florida 32202.
5. The Parties agree that the execution of a Project Cooperation Agreement between the Government and St. Johns County and of a Memorandum of Agreement between the Commission and St. Johns County, both concerning the Palm Valley Bridge Replacement Project, shall be mandatory prerequisites for performance under this Agreement.
6. The Government shall be afforded the right of inspection, at reasonable times, of all mitigation performed by the Commission as part of this Agreement. Said inspection shall be used to ascertain that this project is conducted accurately and in an efficient manner.

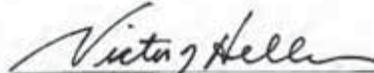
7. It is understood that an employer-employee relationship does not exist between the Parties and that there is no conflict of interest or any other prohibited relationship between the Parties.
8. The Commission reserves the right to unilaterally cancel this Agreement for refusal by the Government to allow public access to all documents, papers, letters or other material subject to the provisions of Chapter 119, Florida Statutes, made or received by the Government in conjunction with this Agreement.

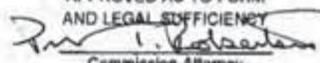
IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the date first above written.

DEPARTMENT OF THE ARMY


James G. May
Colonel, U. S. Army
District Engineer
400 West Bay St.
Jacksonville, Florida 32202

**FLORIDA FISH AND WILDLIFE
CONSERVATION COMMISSION**


Dr. Allan L. Egbert
Executive Director
Florida Fish and Wildlife Conservation
Commission
620 South Meridian St.
Tallahassee, Florida 32399-1600

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY

Commission Attorney

**13.2.6 Memorandum of Agreement #98046: Cooperative management of the
GTMNERR**

MEMORANDUM OF AGREEMENT

among the

Florida Department of Environmental Protection (DEP) Division of Marine Resources

DEP's Division of Recreation and Parks,

Florida Game and Fresh Water Fish Commission,

St. Johns River Water Management District,

National Park Service,

and

Flagler County,

for the cooperative management of the

GUANA TOLOMATO MATANZAS NATIONAL ESTUARINE RESEARCH RESERVE

Whereas, the Guana Tolomato Matanzas National Estuarine Research Reserve, hereinafter called the "Reserve", is established under authority of the Coastal Zone Management Act of 1972 (P.L. 96-583) and its amendments of 1976 (P.L. 94-370) and 1980 (P.L. 96-464) to designate representative sites of America's estuaries as natural field laboratories for gathering data through scientific studies of natural and human processes to enhance the scientific knowledge, environmental education, and on-site management of this estuarine ecosystem for the long term protection and benefit of the nation's coastlines; and,

Whereas, the National Estuarine Research Reserve (NERR) System is administered at the federal level by the National Oceanic and Atmospheric Administration's Office of Coastal Resource Management (NOAA/OCRM), and at the state level in Florida by the Department of Environmental Protection (DEP), Division of Marine Resources (DMR), Bureau of Coastal and Aquatic Managed Areas (CAMA); and,

Whereas, DEP and all the parties hereto are property owners and/or managers of lands included within the boundaries of the reserve who desire to enter into this agreement to:

Acknowledge the designation of the estuarine ecosystem comprised of the Guana, Tolomato, and Matanzas (GTM) Rivers estuarine ecosystem and the surrounding publicly owned uplands as a NERR;

Commit the publicly owned lands within the Reserve boundaries that are managed by the parties of this agreement to inclusion into the reserve, with the understanding by all parties that neither the responsibility nor authority for the management of those uplands is altered whatsoever by this agreement;

Establish a partnership for the purpose of enhancing the ability to effectively manage this valuable ecosystem through cooperation, the sharing of knowledge, skills and abilities, and the recognition of the roles of each party in the operations and functioning of the Reserve;

Whereas, the parties recognize the fragile nature of the Reserve environment and that the routine activities in fulfilling their duties may affect the environmental quality of the Reserve;

Whereas, the parties recognize the need for continuing cooperation in managing the Reserve to ensure that the management of the Reserve remains consistent with the goals and objectives of the NERR System;

Whereas, it is mutually beneficial for Florida's NERRs to be operated on a permanent basis in a manner consistent with the guidelines of the NERR system as stated in 15 CFR Part 921, the objectives of the parties hereto, and the specific objective and goals as follows:

The objective of the Reserve is to establish and manage, through federal, state, and local government cooperation, a permanent NERR to provide opportunities for long-term scientific research and environmental education.

The goals of the NERR program for carrying out this objective are to:

Provide a scientific research and monitoring program in the Reserve which is responsive to the resource management needs of the cooperators for the purpose of ultimate improvement of the management of this coastal ecosystem; and,

Provide resource management by implementing a long-term management plan tailored to the site's specific resources; and,

Enhance public awareness and understanding of the estuarine environment through the implementation of environmental education programs in the local public schools and the nearby communities, and by conducting on-site interpretation of the natural and cultural resources within the Reserve; and,

Promote local, state, and federal government cooperation in the management of the Reserve.

BE IT THEREFORE RESOLVED, that the parties hereto covenant and agree to the following articles:

ARTICLE I - PURPOSE

The purpose of this agreement is to coordinate, through local, state, and federal government cooperation, the activities of all involved agencies to ensure the protection of the GTM estuary, to provide for the enhancement and promotion of scientific research and public environmental education, and to allow environmentally compatible public access and recreation.

ARTICLE II - RESPONSIBILITIES

DMR, in order to fulfill the obligations of this Agreement, shall:

Actively seek federal funding assistance that is available through the NOAA/OCRM and state funding assistance from the Florida Legislature for the development of the Reserve facilities and programs, and for the daily operations costs of the Reserve;

Manage the Reserve to the best of its ability at the level of funding and staffing provided by NOAA/OCRM and the Florida Legislature;

Accept sole responsibility for conformance with NERR program goals and objectives, as well as the administrative requirements, such as filing operations grant proposals, providing required financial and activity reports, and meeting other similar administrative functions required of the state partners of NOAA throughout the NERR system under federal and state law;

Develop, implement and update a management plan, which is compatible and consistent with the existing resource management plans of the parties hereto, as needed to achieve the federal and state program goals;

Provide the parties of this agreement the right of advance review and comment on the management plan and environmental impact statement for the reserve and any subsequent amendments thereto;

Provide a copy of the Reserve management plan to each of the parties of this agreement;

Provide scientific data and other information on issues affecting the Reserve and adjacent areas (this may include, but is not limited to, research reports, research proposals, educational materials, scientific publications and, periodic status reports);

Actively seek the cooperation and assistance of appropriate local, state and federal agencies and the public to enhance the Reserve's programs;

Recognize and acknowledge that the Reserve does not play a direct role in the management of the properties within the reserve boundaries;

Conduct and facilitate scientific research projects that are beneficial to the health and preservation of the GTM estuarine ecosystem, and contribute to the accomplishment of the goals of the parties to this agreement;

Establish a Management Advisory Group (MAG) by charter and seek program management advice from the MAG to assist in program operations;

Assist the responsible public land owners with efforts to acquire privately owned lands within or adjacent to the Reserve to provide additional upland buffers for the protection of the GTM estuarine ecosystem;

Provide the use of any Reserve facilities, equipment, and personnel as availability permits and DMR deems appropriate, for support to scientific researchers, environmental educators, resource managers, and the parties of this agreement;

Encourage participation of the parties to this agreement in Reserve functions such as, but not limited to, environmental education and scientific research workshops; and,

Monitor activities within the Reserve and report any problems or violations to the appropriate agencies.

Each of the other parties hereto, in order to fulfill the obligations of this Agreement, shall:

Recognize the MAG and its role as set forth in its Charter;

Recognize and support the implementation of the Reserve Management Plan to the extent possible without compromising their own management goals and objectives as stated in their approved management plans;

Provide DMR with a final published copy of approved management plans for properties within or adjacent to the Reserve;

Provide DMR with copies of scientific data and other information, which may include but not be limited to periodic status or progress reports and scientific publication;

Cooperate in good faith with DMR and all other parties hereto toward the goal of maximum environmental protection and public benefit;

Provide the use of facilities, equipment and personnel as available and within reasonable limits, as determined by each party, to assist in carrying out the Reserve duties and functions;

Strive to provide DMR with advance notice of all activities, including but not limited to ecological burns, road construction, and dredging within or adjacent to the Reserve which may affect the Reserve; and,

Allow access to the properties of the parties to this agreement to DMR staff for carrying out the environmental education, scientific research and environmental monitoring function of the reserve, in a manner that is acceptable to each party for their respective properties.

ARTICLE III - MISCELLANEOUS

This agreement shall remain in effect until canceled by the parties hereto.

Cancellation of this agreement between DEP and individual parties shall not affect the other parties hereto.

Any party to this agreement may cease its participation and attendant responsibilities with 30 days advance notice to all parties as follows:

Florida Game and Fresh Water Fish Commission
620 South Meridian Street
Tallahassee, Florida 32399-1600

St. Johns River Water Management District
P.O. Box 1429
Palatka, Florida 32708-1429

Flagler County Board of County Commission
1200 East Moody Boulevard #1
Bunnell, Florida 32330

National Park Service
Atlanta Federal Center
1924 Building
100 Atlanta Street, Southwest
Atlanta, Georgia 30303

Department of Environmental Protection
Division of Recreation and Parks
3900 Commonwealth Boulevard
Tallahassee, Florida 32399

Department of Environmental Protection
Division of Marine Resources
3900 Commonwealth Boulevard
Tallahassee, Florida 32399

This agreement shall become effective upon the date of execution by the parties hereto and shall remain in full force and effect until terminated.

BE IT FURTHER RESOLVED that the parties hereto agree to negotiate in good faith to deal with any points, whether or not specifically covered by this agreement, to resolve any differences in the best interest of the Reserve program and the public.

Florida Game and Fresh Water Fish Commission

The Florida Game and Fresh Water Fish Commission (GFC) and the Department of Environmental Protection (DEP) do hereby agree to the inclusion of the Guana River WMA properties under GFC management and lease from the Trustees into the Reserve, and recognize and acknowledge the obligations of GFC and DEP as stated previously in this agreement and the specific paragraph below:

GFC will include Reserve staff in the review and comment of Conceptual Management Plans and updates for management plans for the Guana River WMA. This does not include minor changes in hunting schedules, policy, road grading or other minor administrative changes. DEP recognizes that the GFC maintains the water control structure(s) and associated berms on the Guana River WMA and agrees that the GFC shall continue to utilize such structures to manipulate water levels on said lakes.

IN WITNESS WHEREOF, the legally designated agents for the parties hereto have caused this agreement to be executed on this 30th day of December, 1998.

Florida Game and Fresh Water Fish Commission

By: [Signature]
Allan L. Egbert, Ph.D., Executive Director

[Signature]
Witness

[Signature]
Witness

Department of Environmental Protection

By: [Signature]
Kirby B. Green, III, Secretary

APPROVED AS TO FORM AND LEGALITY

BY: [Signature]
DEP Attorney

DATE: 12/21/98

[Signature]
Witness

[Signature]
Witness

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY
[Signature]
Commission Attorney

The St. Johns River Water Management District

The St. Johns River Water Management District (hereinafter referred to as the District), does hereby recognize, acknowledge, and agree to the inclusion of the District owned Pellicer Creek, Moses Creek and Stokes Landing properties, and to the obligations of DMR and the District as stated in the Agreement and in recognition of further obligations shall:

Cooperate with DMR to establish a coordinated environmental education program;

Coordinate scientific research projects within and adjacent to the Reserve and share resulting data;

Provide technical expertise and personnel assistance, to the greatest degree practicable, on issues relating to the District's statutory responsibilities within its jurisdiction, which relate to the Reserve;

Provide funding assistance for environmental education, scientific research, and resource management projects of the Reserve to the degree appropriate and reasonable, to be determined by the District;

Provide DMR the opportunity of advance review and comment on its proposed management plans, major development plans, major policy changes, permit applications, or other activities within or adjacent to the Reserve which may affect the quality of the Reserve;

Liabilities of the parties to this agreement shall be determined by the applicable laws and regulations now or hereafter in force; However, DMR, nor any person or entity claiming by or through DMR shall hold the District liable for any injury or damage to person or personal property which may occur on District-owners properties.

IN WITNESS WHEREOF, the legally designated agents for the parties hereto have caused this Agreement to be executed on this 30th day of December, 1998.

St. Johns River Water Management District

By: [Signature]
Henry Deary, Executive Director

Witness

Witness

Department of Environmental Protection

By: [Signature]
Kirby B. Green, III, Secretary

[Signature]
Witness

APPROVED AS TO FORM AND LEGALITY

BY: [Signature]
DEP Attorney

DATE: 12/28/98

[Signature]
Witness

Witness

National Park Service

The National Park Service (hereinafter referred to as the NPS) does hereby agree to the inclusion of the Ft. Matanzas National Monument into the GTMNERR, and recognizes, acknowledges, and agrees to the obligations of the NPS and DEP as stated in the Agreement and in recognition of further obligations shall:

Provide DEP the opportunity of advance review and comment on its proposed management plans, major development plans, major policy changes, permit applications or other activities within or adjacent to the Reserve which may affect the environmental quality of the Reserve;

DEP further agrees to the following further obligations:

During the performance of this Agreement, DEP agrees to abide by the terms of Executive Order 11246 on nondiscrimination and will not discriminate against any person because of race, color, religion, sex, or national origin, and will take affirmative action to ensure that applicants are employed without regard to their race, color, religion, sex or national origin.

No member or delegate to Congress, or resident Commissioner, shall be admitted to any share or part of this agreement, or to any benefit that may arise therefrom, but his provision shall not be construed to extend to this Agreement if made with a corporation for its general benefit.

IN WITNESS WHEREOF, the legally designated agents for the parties hereto have caused this Agreement to be executed on this 20th day of October, 1998.

National Park Service

By: [Signature]
Jerry Belson, Regional Director

[Signature]
Witness

[Signature]
Witness

Department of Environmental Protection

By: [Signature]
Kirby B. Green, III, Secretary

[Signature]
Witness

[Signature]
Witness

APPROVED AS TO FORM AND LEGALITY
BY: [Signature]
DEP Attorney
DATE: 12/28/98

The Flagler County Board of County Commissioners

The Flagler County Board of County Commissioners (hereinafter referred to as the Flagler Commission), does hereby agree to the inclusion of the upland properties of the "Princess Place", and recognizes and acknowledges the obligations of DMR and the Flagler Commission as stated in the Agreement and in recognition of further obligations shall:

Cooperate with DEP to establish a coordinated environmental protection program between the Flagler Commission and the Reserve at no cost to Flagler County. This program shall include, but not be limited to, organism identification, biological studies related to estuarine ecology, resource conservation, and the management of upland and submerged coastal resources in Flagler County.

IN WITNESS WHEREOF, the legally designated agents for the parties heretofore identified have caused this Agreement to be executed on this 21st day of May, 1999.

Flagler County Board of County Commissioners

By: James A. Darby
James Darby, Chairman

APPROVED AS TO
FORM AND LEGALITY

Ray E. Boone
COUNTY ATTORNEY

Marion J. Fanch
Witness

Catherine A. Colone
Witness

Department of Environmental Protection

By: David B. Struhs
David B. Struhs, Secretary

Clayton Bakke
Witness

Lucina Bridges
Witness

APPROVED AS TO FORM AND LEGALITY
BY: [Signature]
DEP Attorney
DATE: 5/4/99

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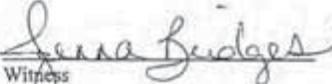
Division of Recreation and Parks

The Divisions of Recreation and Parks (DRP) and Marine Resources (DMR) of the Florida Department of Environmental Protection recognize, acknowledge and agree to the inclusion of the Faver Dykes and Guana River State Parks and the Washington Oaks State Gardens into the GTMNERR and to the obligations of both divisions and the department in the management of the GTMNERR and vow to work cooperatively in carrying out their respective duties and responsibilities to develop this reserve into another well managed and effective coastal management project that will contribute to the accomplishment of the goals and objectives of both divisions and the department.

IN WITNESS WHEREOF, the legally designated agents for the parties hereto have caused this Agreement to be executed on this 28th day of December, 1998.

Department of Environmental Protection

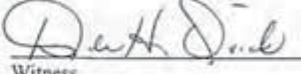
By: 
Edwin Conklin, Director
Division of Marine Resources

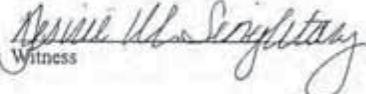

Witness


Witness

Department of Environmental Protection

By: 
Fran P. Mainella, Director
Division of Recreation and Parks


Witness


Witness

13.2.7 Agreement #11162: SJRWMD rain gauge

SJRWMD Rain Gauge Site
FWC contract # 11162

STATE OF FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
RAIN GAUGE LICENSE AGREEMENT

THIS LICENSE AGREEMENT is hereby made and entered into this 11th day of August, 2011, by the STATE OF FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, hereinafter referred to as "LICENSOR", and the ST. JOHNS RIVER WATER MANAGEMENT DISTRICT, a public body existing under Chapter 373, Florida Statutes, hereinafter referred to as "LICENSEE."

WITNESSETH:

WHEREAS, LICENSOR is the lessee of certain lands referred to as the Guana River Wildlife Management Area ("Guana River WMA") in St. Johns County, Florida pursuant to Lease No. 3585 dated April 1, 1988 with the Board of Trustees of the Internal Improvement Trust Fund which includes certain real property, as more particularly identified in Exhibit "A", attached hereto and by reference made a part hereof; and

WHEREAS, LICENSEE desires to utilize LICENSOR'S property for the purpose of constructing, operating, maintaining and access to rain gauge telemetry equipment site, to be used for collecting hydrological and other scientific data; and

WHEREAS, LICENSOR is desirous of granting to LICENSEE a license for the aforementioned purpose.

NOW THEREFORE, for and in consideration of the terms, conditions, and mutual covenants hereinafter contained, LICENSOR and LICENSEE, both intending to be legally bound, hereby agree as follows:

1. LICENSOR hereby grants to LICENSEE, its agents, representative and employees the right, privilege, permission and license to utilize the property described in Exhibit "A", (depicting the 10'x10' site hereinafter referred to as "License

Area, "as well as the "Existing Gate for Access" and "Existing Access Trail/Road" to be used for access to the License Area) to install, operate, maintain and remove the rain gauge telemetry equipment and access upon, and across said License Area; and for the purpose of exercising the rights, privileges, and license granted herein.

2. This License is granted for a term of twenty years from the date written above unless or until sooner terminated by LICENSOR or LICENSEE giving sixty days written notice to the other party of intention so to terminate.

3. LICENSOR retains the right to use the License Area in any manner not inconsistent with the rights granted to LICENSEE.

4. LICENSEE agrees that it does not and shall not claim at any time any interest or estate of any kind or extent whatsoever in the License Area, by virtue of this License Agreement or its occupancy or use hereunder.

5. In consideration of the privileges herein granted, LICENSEE will not claim any damages from LICENSOR in connection with or on account of any injuries or damages arising in or on the License Area while being used by LICENSEE and its agents, representatives and employees. LICENSEE shall maintain a program of insurance covering its liabilities as prescribed by Section 768.28, F.S., and shall be responsible for the acts or omissions of its officers, employees, representatives, and agents in the event that such acts or omissions result in injury to persons or damage to property. A copy of insurance required by Section 768.28, F.S. shall be provided to the LICENSOR.

LICENSOR does not warrant or represent that the License Area is safe or suitable for the purpose for which LICENSEE is permitted to use the License Area and LICENSEE assumes all risks in its use.

6. LICENSEE will provide copies of the monitoring results, as they become available, to the LICENSOR.

7. LICENSEE may install fencing to prevent the general public to access, utilize or go upon the License Area.
8. Clearing vegetation, making any change to the existing access gate or existing access route or removal of the monitoring equipment without the consent and supervision of the LICENSOR is prohibited.
9. Upon termination of this License Agreement, LICENSEE shall, at LICENSEE'S sole cost and expense, remove all equipment, accessories, and material owned by LICENSEE from the License Area. Restoration Plans by the LICENSEE for the License Area will be developed with the assistance of the LICENSOR and will be restored to the requirements of the LICENSOR. All areas requiring restoration will be restored to a condition as or better than it was before LICENSEE entered upon it. LICENSEE will complete said removal and restoration within sixty days of the date upon which LICENSEE ceases its operations on the License Area or portion thereof.
10. Prior to initial use of License Area by LICENSEE, LICENSEE shall give the LICENSOR's local manager as herein below defined; at least forty-eight hours advance notification. The installation and removal of the rain gauge telemetry equipment and materials as well as restoration of the site will be done under the supervision of the LICENSOR, whose local manager (a/k/a area biologist) may be reached at the Guana River WMA field office, 2690-E S. Ponte Vedra Boulevard, Ponte Vedra Beach, FL 32082, (904)825-6877. Prior to installation of the rain gauge telemetry equipment, LICENSEE shall obtain the written consent of the State of Florida Department of State, Division of Historical Resources and provide a copy of the consent to LICENSOR.
11. The License herein granted is subject to revocation by the LICENSOR if the License Area is not utilized for the purpose

outlined in this License Agreement or if there is a change in ownership of the License Area.

12. This License Agreement is personal to LICENSEE and may not be assigned or transferred, without prior written approval of LICENSOR.

13. This License Agreement embodies the entire understanding of the parties and there are no further agreements or understandings, written or oral, in effect between the parties, relating to the subject matter hereof. This instrument may only be amended or modified by an instrument of equal formality signed by the respective parties.

14. For purposes of this License Agreement, all notification shall be provided as follows:

LICENSOR:

Florida Fish and Wildlife Conservation Commission
Attn: HSC / THCR Section Leader
620 S. Meridian Street
Tallahassee, FL 32399-1600

LICENSEE: St. Johns River Water Management District
Attn: Director, Division of Real Estate Services
4049 Reid Street
P. O. Box 1429
Palatka, FL 32178-1429

15. The following special conditions shall apply to this License Agreement:

a. The rain gauge telemetry equipment area and ingress-egress area of the License Area will not exceed 6,000 square feet/0.138 acres in size;

b. Should LICENSEE determine that fencing is needed to protect its equipment, LICENSEE shall advise LICENSOR of its intentions and shall install and maintain fencing and gates at LICENSEE'S sole cost and expense. LICENSEE shall provide to LICENSOR a set of keys and/or lock combinations to all fence gates and access gates. Should LICENSOR elect, the LICENSOR can install its own locks on any fence or access gate.

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Well Monitoring License Agreement

Revised 01/30/07

c. LICENSOR shall not physically disturb the rain gauge telemetry equipment in any way without prior approval from LICENSEE.

d. All activities related to the rain gauge telemetry equipment shall be conducted during reasonable hours approved by LICENSOR's local manager as there may be times when LICENSEE may not be able to allow monitoring or other water management activities.

IN WITNESS WHEREOF, the parties have caused this License Agreement to be executed on the day and year first above written.

Ram Matlock
Witness
Ram Matlock
Print/Type Witness Name
Ram Matlock
Witness
Ram Matlock
Print/Type Witness Name

"LICENSOR"
FLORIDA FISH AND WILDLIFE
CONSERVATION COMMISSION
By: Greg Holder (SEAL)
Print/Type Witness Name
GREG HOLDER
ASSISTANT EXECUTIVE DIRECTOR

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 11th day of August, 2011, by Gregory D. Holder as Assistant Executive Director for and on behalf of the Florida Fish and Wildlife Conservation Commission. He/she is personally known to me.

Jo Ann M. Fain
Notary Public, State of Florida
Jo Ann M. Fain
Print/Type Notary Name

Commission Number:
Commission Expires:



Approved as to Form and Content
By: Anthony P. ...
FWC Attorney

"LICENSEE"
ST. JOHNS RIVER WATER MANAGEMENT
DISTRICT

Attest:

W.H. Congdon
Bill Congdon
Deputy General Counsel

By: Kirby B. Green III
Kirby B. Green III
Executive Director,
St. Johns River Water
Management District

STATE OF FLORIDA
COUNTY OF Putnam

The foregoing instrument was acknowledged before me this
21 day of July, 2011,
by DAVE W. FISK Assistant Executive Director of the St. Johns
River Water Management District, a public body existing under
Chapter 373, Florida Statutes, on behalf of the St. Johns River
Water Management District. He is personally known to me.

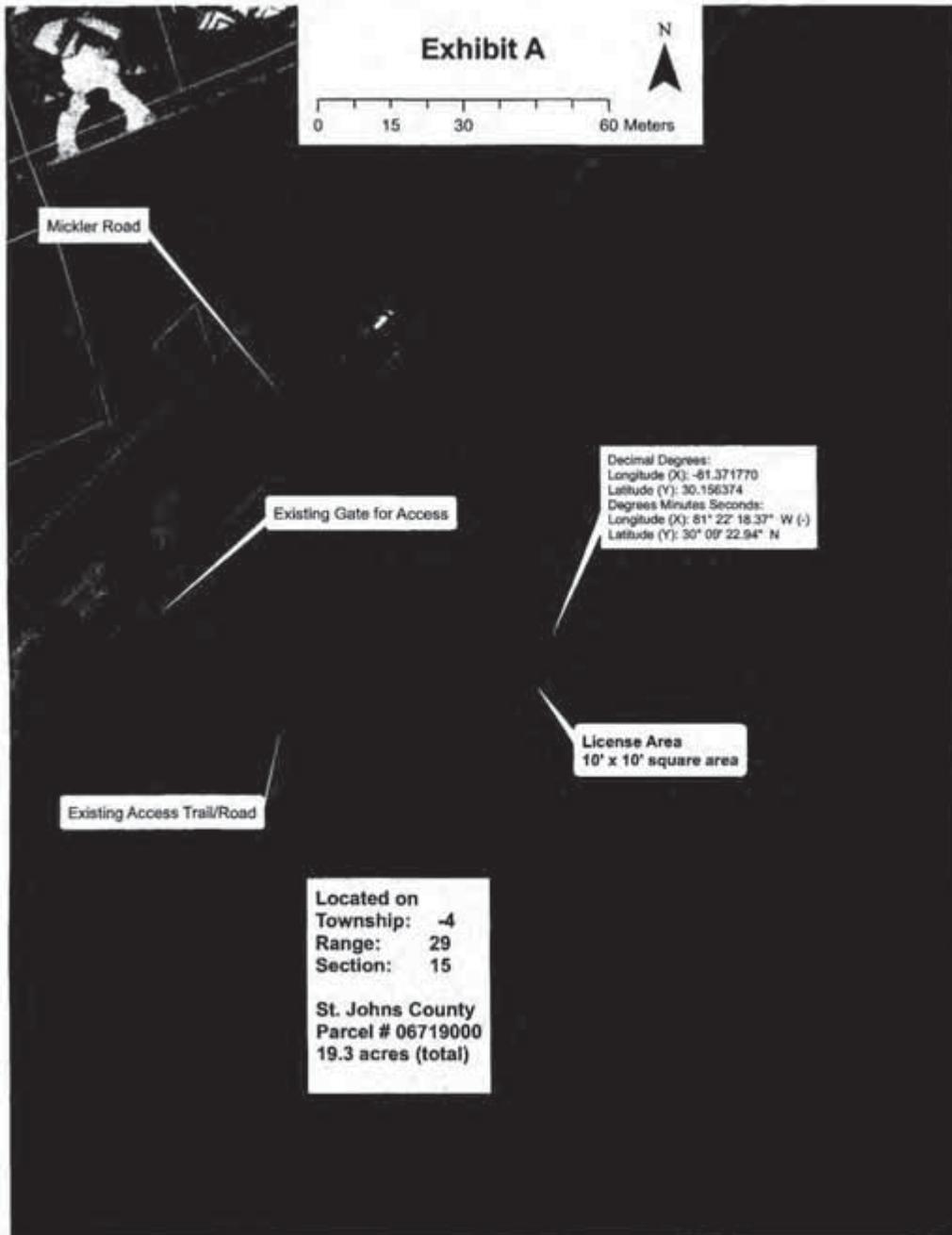
Maryetta C. Ledone
Notary Public, State of Florida

Commission Number:
Commission Expires:



Approved as to Form and Legality

By: Stanley J. Abrams
Office of General Counsel
Bill Abrams



13.2.8 Contract #12174: Apiary Agreement

AGREEMENT FOR APIARY ACTIVITIES ON STATE LANDS

THIS AGREEMENT is made by and between the Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Tallahassee, FL 32399-1600, hereinafter known as "the COMMISSION," and Archangel Michael Apiaries, 12600 West Highway 318, Williston, Florida, 32696, telephone number (352) 209-8235, hereinafter known as "the USER."

WITNESSETH

In consideration of the mutual promises to be kept by each and the payments to be made by the USER, the parties agree as follows:

1. TERM: This Agreement will begin upon execution of the agreement and will end three (3) years from the date of execution.
2. The COMMISSION Agrees:
 - a. To provide apiary sites on state lands, which will be identified by the COMMISSION staff and located on the property identified in (4) (h) below.
 - b. To provide technical assistance for bear-proofing, where required by Area Biologist, of site(s) made available under this Agreement.
 - c. To allow the USER to place a total number of up to 350 hive boxes, up to 50 on each of seven sites located in the Guana River Wildlife Management Area (WMA), the Half Moon WMA, and Herky Huffinan/Bull Creek WMA including as particularly described in Section 4(h) below and as represented by Attachments B, C, and D, each attached hereto and hereafter made a part of this agreement.
3. The USER Agrees:
 - a. To pay \$280.00 on or before the execution date of this Agreement and each year thereafter on or before anniversary date of the original contract execution date, with check or money order payable to the Florida Fish and Wildlife Conservation Commission. All payments shall be remitted to The Florida Fish and Wildlife Conservation Commission, Finance and Budgeting, Accounting Section, PO Box 6150, Tallahassee, FL 32399-6150, and a copy of the check to The Florida Fish and Wildlife Conservation Commission, Wildlife and Habitat Management Section, Attn: Section Leader, 620 South Meridian Street, Tallahassee, Florida 32399-1600.

- b. To have no more than 50 hive boxes on any of the seven sites in the Guana River WMA, the Half Moon WMA, and Herky Huffman/Bull Creek WMA.
- c. To comply with the Florida Honey Certification and Honeybee Law, Chapter 586, Florida Statutes, and Rule 5B-19, Florida Administrative Code, and all other applicable federal, state, or local laws, rules or ordinances.
- d. To not damage, cut or remove any trees in the course of preparing for or conducting operations under this Agreement.
- e. To repair within 30 days of occurrence any damage to roads, trails, fences, bridges, ditches, or other public property caused by USER'S operations under this Agreement based on discretion of the COMMISSION to ensure the WMA/WEA management goals are met. All repairs will be coordinated with the Area Biologist to ensure management goals are met. If USER does not comply within the 30 day requirement, then the COMMISSION may use a third party to perform the repairs and charge the USER accordingly.
- f. To report any forest fires observed and to prevent forest fires during the course of operations under this Agreement.
- g. To abide by all WMA/WEA rules and regulations in addition to items in this Agreement.
- h. To notify the Area Biologist within 24 hours when a bear depredation event occurs.
- i. To post their name in an agreed upon location at each site covered by this Agreement or otherwise use an identifying system that is approved by the Area Biologist.
- j. To furnish proof of general liability insurance prior to starting apiary activities on state property or within 30 days of execution of this Agreement, whichever is earlier, and proof of annual renewal of the general liability insurance policy prior to or upon expiration date of the policy. The USER shall maintain continuous general liability insurance throughout the term of this Agreement for no less than \$300,000 for bodily injury and \$100,000 for property damage for each occurrence. Such a policy shall name the COMMISSION as the Certificate Holder. The USER's current certificate of insurance shall contain a provision that the insurance will not be canceled for any reason during the term of this Agreement except after thirty (30) days written notice to the COMMISSION.

- k. To be liable for all damage to persons or property resulting from operations under this Agreement, and to release, acquit, indemnify, save and hold harmless the COMMISSION, its officers, agents, employees and representatives from any and all claims, losses, damages, injuries and liabilities whatsoever, whether for personal injury or otherwise, resulting from, arising out of or in any way connected with activities under this Agreement or activities occurring from any other source not under this Agreement and the USER further agrees to assume all risks of loss and liabilities incidental to any natural or artificial condition occurring on state lands covered by this Agreement.
 - l. To construct and maintain electric fences, when required by the Area Biologist at the Area Biologist's discretion, to provide protection of apiaries from black bear depredation consistent with the technical information bulletin attached to this agreement, and, if so required, to maintain an open buffer around the fencing of five (5) feet or more. (See Attachment A, Florida Fish and Wildlife Conservation Commission (FWC) Technical Information Bulletin, December 2001, Use of Electric Fencing To Exclude Bears and Prevent Property Damage)
 - m. To remove all personal property from the site within thirty (30) days of termination or expiration of this Agreement. The USER understands that after this time, all the USER'S personal property remaining on the WMA/WEA shall be deemed abandoned and become the property of the COMMISSION, which will be utilized or disposed of at the sole discretion of the COMMISSION, and that reasonable storage and/or disposal fees and/or costs may be charged to the USER.
4. The parties mutually agree:
- a. This Agreement is not transferable.
 - b. The USER's failure to submit payment by the due date established herein may result in cancellation of the Agreement by the COMMISSION.
 - c. The USER's failure to submit proof of general liability insurance or proof of annual renewal in compliance with (3) (j) above may result in cancellation of this Agreement by the COMMISSION.
 - d. This Agreement shall be in effect for a period of three (3) years and issuance of a new agreement will be contingent upon a satisfactory performance evaluation and approval of the Area Biologist.

- e. Each apiary site shall be situated so as to be at least one-half (1/2) mile inward from state property lines and there shall be at least one (1) mile separation between sites. Exceptions to this rule must be reviewed by Area Biologist and presented to and approved by the Wildlife and Habitat Management Section Leader.
- f. The USER shall save, hold harmless and indemnify the State of Florida and the COMMISSION against any and all liability, claims, judgments or costs of whatsoever kind and nature for injury to, or death of any person or persons and for the loss or damage to any property resulting from the use, service, operation or performance of work under the terms of this Contract, resulting from the acts or omissions of the USER, his subcontractor, or any of the employees, agents or representatives of the USER or subcontractor.
- g. This Contract with all incorporated attachments and exhibits represents the entire agreement of the parties. Any alterations, variations, changes, modifications or waivers of provisions of this Contract shall only be valid when they have been reduced to writing, and duly signed by each of the parties hereto, unless otherwise provided herein.
- h. The sites covered by this Agreement are described as being in the vicinity of or at the following latitude and longitude coordinates:

Guana River Sites

The first site is: latitude 30°5'37.437"N and longitude 81°21'14.441"W (North Site). The second site is: latitude 30°4'14.237"N and longitude 81°20'52.049"W (South Site) in the Guana River WMA and as represented by the Attachment B map.

Half Moon Sites

The first site is: latitude 28° 55.64613"N and longitude 82° 14.933761"W (Potter Bend Site). The second site is: latitude 28° 54.011385"N and longitude 82° 14.827184"W (Alto Landing Site) in the Half Moon WMA and as represented by the Attachment C map.

Herky Huffman/Bull Creek Sites

The first site is: latitude 28° 6'10.08"N and longitude 80°56'53.39"W (Site 1). The second site is: latitude 28° 2'39.34"N and longitude 80°56'55.07"W (Site 2). The third site is: latitude 28° 3'10.61"N and longitude 80°56'10.00"W

(Site 3) in the Herky Huffman/Bull Creek WMA and as represented by the Attachment D map.

- i. In accordance with Section 287.134, Florida Statutes, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal or reply on a contract to provide goods or services to any public entity; may not submit a bid, proposal or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant with any public entity; and may not transact business with a public entity.
- j. As part of the consideration of this Agreement, the parties hereby waive trial by jury in action brought by either party pertaining to any matter whatsoever arising out of or in any way connected with this Agreement. Exclusive venue for all judicial actions pertaining to this Agreement is in Leon County, Florida.
- k. This Agreement may be terminated by the COMMISSION upon thirty (30) days written notice to the USER in the event the continuations of the apiary activities are found to be incompatible with the COMMISSION'S management plans or for any other reason at the sole discretion of the COMMISSION.
- l. Unless a notice of change of address is given, any and all notices shall be delivered to the parties at the following addresses:

USER

Modesto Alexopoulos
12600 West Highway 318
Williston, FL. 32696

COMMISSION

Section Leader HSC/WHM, M/S – 10
620 South Meridian Street
Tallahassee, FL. 32399-1600

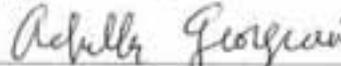
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IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year last
below written.


USER SIGNATURE

Date: November 15, 2012

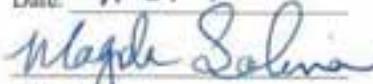

Witness


Witness

FLORIDA FISH AND WILDLIFE
CONSERVATION COMMISSION


Mike Brooks, Section Leader
Wildlife and Habitat Management

Date: 11-27-12


Witness


Witness

Approved as to form and legality


Commission Attorney

13.3 Definitions of Management Plan Terms

Management Plan Goals and Objectives Terms and Definitions

Assessment: Assessment—when a historic resource professional determines the possible effects—positive or negative—that an action or inaction may have on a historical resource (e.g., site, building, object or structures) by analyzing its current condition and documenting any modifications and changes to its original state as well as identifying any potential human or natural threats to its existence.

Capital Improvement: Capital improvement" or "capital project expenditure" means those activities relating to the acquisition, restoration, public access, and recreational uses of such lands, water areas, and related resources deemed necessary to accomplish the purposes of this chapter. Eligible activities include, but are not limited to: the initial removal of invasive plants; the construction, improvement, enlargement or extension of facilities' signs, firelanes, access roads, and trails; or any other activities that serve to restore, conserve, protect, or provide public access, recreational opportunities, or necessary services for land or water areas. Such activities shall be identified prior to the acquisition of a parcel or the approval of a project. The continued expenditures necessary for a capital improvement approved under this subsection shall not be eligible for funding provided in this chapter.

Desired future condition: Desired Future Condition is a description of the land or resource conditions that are believed necessary if management goals and objectives are fully achieved. Desired Future Condition varies by specific habitat and ecosystem. It can also vary, based upon a specific agency's management goals.

Evaluation: Review by a professional in archaeology, history or architecture as to the integrity and significance of the site, building or structure. The criteria of the National Register of Historic Places will be applied.

Facility: all developed structures and improvements provided for a specific purpose or contained within a clearly defined area.

Fire management plan: An element of the land management plan or an independent document that outlines the goals and objectives of a fire management program (prescribed and wildfire) for a predetermined period of time.

Historic: An object, site or structure that is 50 years or older.

Hydrological assessment: A documented, systematic evaluation by a qualified professional of the existing and historical quantity, quality, movement and function of water resources (e.g., computer modeling).

Imperiled species: A species or subspecies that is listed by the U.S. Fish and Wildlife Service as Endangered or Threatened; Florida Fish and Wildlife Conservation Commission (FWC) as Endangered, Threatened, or Special Concern; Florida Department of Agriculture and Consumer Services (FDACS) as Endangered or Threatened; or is tracked by Florida

Natural Areas Inventory (FNAI) as globally or state Critically Imperiled or Imperiled. Imperiled Species does NOT refer to species that are on the FDACS list of commercially exploited plants that are not Endangered or Threatened.

Improve: the enhancement or expansion of facilities, roads and trails.

Maintenance: the daily or regular work of keeping facilities, roads and trails in proper condition.

Monitoring: Periodic examination of the site, building or structure to determine the current condition and threats such as erosion, structural deterioration, vegetation intrusion, poaching or vandalism. An updated Florida Master Site File form is used to complete this assessment.

Natural community/habitat/ecological improvement: Similar to restoration but on a smaller less intense scale. Typically includes small scale vegetation management activities, spot treatments of exotic plants, or minor habitat manipulations. Any habitat alteration that increases the diversity of a habitat or increases the population of a particular species.

Natural community/habitat/ecological restoration: The process of assisting the recovery and natural functioning of degraded natural communities to desired future condition, including the re-establishment of biodiversity, ecological processes, vegetation structure, and physical characters. Activities may include vegetative treatments (e.g., hardwood removal, mechanical treatment, pine tree thinning, etc.), groundcover establishment, non-commercial tree plantings, erosion control, hydrological manipulation (filling ditches), and beach management.

Not in maintenance condition: Species composition and/or structure is outside the targeted range. The natural community is in need of more frequent or recurring management treatments that are beyond maintenance activities. Examples include natural communities with exotic plant or animal infestations that are at levels requiring significant treatment, natural communities that have exceeded maximum targeted fire return intervals, and natural communities in need of restoration treatments.

Poor, fair, good condition: Evaluating the condition of cultural resources is accomplished using a three part evaluative scale, expressed as good, fair and poor. These terms describe the present condition, rather than comparing what exists against the ideal. "Good" describes a condition of structural stability and physical wholeness, where no obvious deterioration other than normal occurs. "Fair" describes a condition in which there is a discernible decline in condition between inspections, and the wholeness or physical integrity is and continues to be threatened by factors other than normal wear. A "fair" assessment is cause for concern. "Poor" describes an unstable condition where there is palpable, accelerating decline, and physical integrity is being compromised quickly. A resource in poor condition suffers obvious declines in physical integrity from year to year. A poor condition suggests immediate action is needed to reestablish physical stability.

Population survey: Using broadly accepted methodologies to detect changes in population

trends over time.

Public access: access by the general public to state lands and water, including vessel access made possible by boat ramps, docks, and associated support facilities, where compatible with conservation and recreation objectives.

Recorded: A Florida Master Site File form has been completed and filed with the Florida Department of State, Division of Historical Resources.

Recreational/visitor opportunity: measure of potential number of users based on existing resource conditions and developed facilities.

Repair (major): the restoration of facilities, road and trails to proper condition after damage or failure.

Restoration underway: restoration planning/design, executing, evaluating and reporting.

Restored/Maintenance condition: (refers to natural community) - within the range of target species composition and structure such that no significant, non-recurring alterations to structure or species composition are needed for ecological restoration. Invasive exotic plants or animals are absent or at levels requiring minimal recurring treatments, and prescribed fire rotations are within target intervals. Refers to Natural Communities. Includes NCs that meet DFC, and NCs that have received restoration action (such as thinning, clearcut and native species planting) and only require time and recurring maintenance actions such as prescribed fire, maintenance level exotics control, or sustainable forestry practices if applicable.

Road: a paved or unpaved motor vehicle route unless identified and managed as a trail.

Significant: Listed in or determined eligible for listing in the National Register of Historic Places as an individual property, element of a multiple listing or in an historic district. Cultural resource professionals are able to make the determination, but final determination rests with the Director of the Division of Historical Resources.

Sustainable forestry: The stewardship and harvest of forest products in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality, and potential to fulfill, now and in the future, relevant ecological, economic, and social functions at local, national and global levels, and that does not cause damage to other ecosystems.

Systematic survey: A sampling protocol designed to assess the occurrence or population status of a species or a suite of species (e.g., presence/absence, mark and recapture, transect survey, etc.).

Trail: a linear route or path which has been specifically prepared or designed for one or more recreational functions such as hiking, biking, horseback riding or multiple use. In many cases, unimproved service roads are also designated as trails.

Treatment: A mechanical, chemical, biological or manual action that changes the structure or composition of an area in order to facilitate restoration or improvement.

Visitor carrying capacity: An estimate of the number of users a recreation resource or facility can accommodate and still provide a high quality recreational experience and preserve the natural values of the site.

Wildlife activities: wildlife-associated recreation such as birdwatching, fishing, hunting, etc.

13.4 Public input

13.4.1 Management Advisory Group Meeting Results

**Guana River Wildlife Management Area (GRWMA)
Management Advisory Group (MAG)
Consensus Meeting Results**

August 28, 2012 in Ponte Vedra Beach, Florida

The intent of convening a consensus meeting is to involve a diverse group of stakeholders in assisting the Florida Fish and Wildlife Conservation Commission (FWC) in development of a rational management concept for lands within the agency’s managed area system. FWC does this by asking spokespersons for these stakeholders to participate in a half-day meeting to provide ideas about how FWC-managed lands should be protected and managed.

The GRWMA consensus meeting was held on the morning of August 28, 2012 at the Guana Tolomato Matanzas National Estuarine Research Reserve (GTMNERR) Environmental Education Center in Ponte Vedra Beach, Florida in St. Johns County. The ideas found below were provided by stakeholders for consideration in the 2013 - 2023 Management Plan (MP) for GRWMA with priority determined by vote. These ideas represent a valuable source of information to be used by biologists, planners, administrators, and others during the development of the MP. Upon approval by FWC, the Acquisition and Restoration Council (ARC), and the Trustees of the Internal Improvement Trust Fund (Governor and Cabinet), the GRWMA MP will guide the activities of FWC personnel over the ten-year duration of the management plan and will help meet agency, state, and federal planning requirements.

Numbers to the left of **bold-faced ideas** listed below represent the total number of votes and the score of each idea. Rank is first determined by the number of votes (vote cards received for each idea) and then by score. Score is used to break ties when two or more ideas have the same number of votes. A lower score indicates higher importance because each voter’s most important idea (recorded on card #1) received a score of 1, and their fifth most important idea (recorded on card #5) received a score of 5. Ideas not receiving any votes are listed, and were considered during the development of the MP, but carry no judgment with regard to priority.

Statements following the bold-faced ideas represent a synopsis of the clarifying discussion of ideas as transcribed and interpreted by the FWC recorder at the meeting. As indicated above, the ideas below are presented in priority order:

<u>Rank</u>	<u># of Votes</u>	<u>Score</u>	<u>Idea</u>
1.	[7]	[10]	1. Maintain current boundary and pursue and identify properties for acquisition and acquire if possible. In the last ten years there have been several attempts to take WMA land and use for other purposes (e.g., schools, road widening). There is an ~100 acre inholding and another smaller inholding that would be beneficial to acquire.

<u>Rank</u>	<u># of Votes</u>	<u>Score</u>	<u>Idea</u>
2.	[7]	[25]	11. Develop detailed trail maps with blazes and rules to reduce visitor disorientation, and review and enhance recreational guide. If we want to increase our public profile and participation and ensure public safety, then trail maintenance should be a top priority. Need signs or blazes on the trails. A uniform system between GTMNERR and the GRWMA would be beneficial. Would like to see on the trail map or separate protocol publication (i.e., "rules of the road;" equestrians, bikers, pedestrians: who yields?). People get lost, many staff (e.g., GTMNERR, FWC) get involved and it can be costly; additional signage would be helpful.
3.	[6]	[12]	26. Control invasive exotic plants and animals, especially trapping feral hogs. Chinese tallow, torpedo grass, and feral hogs are a few of the invasive exotic species. GTMNERR has trappers outside the GRWMA year-round trying to control the population. Hogs are causing serious habitat damage. It's a continuing problem that needs to be improved.
4.	[6]	[17]	14. Keep the area pristine and natural. No more building and keep the area as beautiful as it is. GRWMA is the jewel of the crown. If we continue to develop step by step, will continue to slowly slice away from the WMA. Keep the area natural; keep roadways down, keep traffic down, allow nature to move freely and preserve for the future.
5.	[6]	[21]	4. Enhance accountability, accessibility, and improve coordinated research and visitor services with GTMNERR/education center. Would like to better accommodate visitors. Most visitors, if they ask questions, ask GTMNERR; GTMNERR staff are requesting FWC staff to help coordinate with GTMNERR on what the area has to offer. A joint publication would be beneficial, coordinated trail map/informative materials that crosses boundaries. This area is a major asset to the County; make user friendly, easily accessible, so they will know about it and use it. Opportunities to share resources and information that's available. Increase communication between the agencies.

<u>Rank</u>	<u># of Votes</u>	<u>Score</u>	<u>Idea</u>
6.	[4]	[7]	6. Update prescribed burn plan and timber management plan and continue prescribed fire in appropriate communities. Area staff has done an excellent job coordinating fire regimine thus far. Continue to coordinate with the Florida Forest Service and update the burn plan.

Three items of equal rank:

7T.	[3]	[12]	21. Provide and update publication relations and provide interpretive materials to the public. Currently have ~200,000 residents, several million visitors, would be good to get the word out to the public and get their support. Focus on getting the materials out to people in the area and not just on site.
7T.	[3]	[12]	32. Increase/create law enforcement positions for the area. The last ten years the number of officers was reduced. It would be good to hear from the public that this is important to them.
7T.	[3]	[12]	43. Reduce the limit of redfish to one. In order to try to preserve the resource that we have for the future.
10.	[3]	[15]	9. Update Arthropod Management Plan for new environmentally safe larvicides. The Mosquito Control District does a lot of applied research and if they find a larvicide that will work for state lands, they would like to make it available. The District kills more mosquitoes in larval stage than adult stage. Currently use a DTI bacteria (stomach toxin), that only hurts mosquitoes. District has a three-day window when it comes to salt marsh mosquitoes and they need to plan appropriately. Their products will not affect non-targets, only mosquito larvae. They actively spray on salt marsh flats with airboats. Need integrated pest management. Control mosquitos for the citizens in an environmentally safe way.

<u>Rank</u>	<u># of Votes</u>	<u>Score</u>	<u>Idea</u>
11.	[2]	[6]	39. Improve hunting opportunities in the south lake area. Most of the ducks congregate north of six mile lake; therefore, that is where hunters congregate. To disperse hunters, we should look at some of flats, sloughs, and potholes down in the south. Work with Ducks Unlimited to come up with strategies to improve hunting opportunities in those areas.
12.	[2]	[7]	46. Continue DEP/Mosquito Control District shared position. Coordinate research activities also with the GRWMA.
13.	[2]	[10]	28. Continue to provide for and foster research on the Wildlife Management Area. Currently have handful of research projects; helps increase management decisions. Continue to coordinate and facilitate research.

Five items of equal rank:

14T.	[1]	[1]	3. Rework six mile check point. Access to improve vehicular flow and parking, provide improved quota control, and eliminate safety issues. Look at entire operation (i.e., how hunters enter, launch, how quota controls are handed out). Large safety issue/congestion.
14T.	[1]	[1]	10. Include language for ethical, accountable, and insured commercial vendors, outfitters, and hunting groups. Create parameters of expectations so insurance is covered by vendors and there is no risk to the State. Should define accountability parameters and ethical concerns. There are educational opportunities regarding the recreational uses available.

<u>Rank</u>	<u># of Votes</u>	<u>Score</u>	<u>Idea</u>
14T.	[1]	[1]	22. Allow aerial adulticide spraying over state lands in case of emergency (e.g., west nile). The Mosquito Control District would like to be proactive and not have a human case of west nile. There are many state lands in St. Johns County and they have had to dodge many places this year. With rains and moisture, mosquitoes have an avenue to disperse. They need to utilize a larvicide and adulticide program.
14T.	[1]	[1]	24. Make trail maintenance a high priority. Self explanatory.
14T.	[1]	[1]	37. Continue user friendly access. Self explanatory.
19.	[1]	[2]	31. Conduct hydrologic restoration to enhance freshwater and marsh habitats and to reduce wildfire hazards. Habitats cross boundaries between GTMNERR and the GRWMA. Look for opportunities to enhance the habitat by looking at it as a system instead of two different management units.

Five items of equal rank:

20T.	[1]	[3]	7. Identify known and anticipated rare plant species. Combine efforts between agencies and take on other partnerships (e.g., Florida Native Plant Society) in updating and maintaining rare plant species lists.
20T.	[1]	[3]	27. Consider enlarging Roscoe Boulevard Trailhead. Not an issue now but could see becoming a problem in the long-term (congestion). Some instructional signage could be good too.
20T.	[1]	[3]	38. Consider making the lake a no motor zone with the exception of waterfowl and alligator hunting. This could reduce pollution and increase visitor enjoyment on the lake.
20T.	[1]	[3]	41. Increase the penalty for rule violations, especially illegal access. Self explanatory.

<u>Rank</u>	<u># of Votes</u>	<u>Score</u>	<u>Idea</u>
20T.	[1]	[3]	47. Conduct research on lead concentraion on wildlife and lake sediments. Sampling is done by the Florida Fish and Wildlife Research Institute. Would be nice to know what kinds of concentrations there are.

Three items of equal rank:

25T.	[1]	[4]	17. Limit each hunter to 25 shells per hunt on the lake. Limiting the shells might limit the numbers of shells shot by hunters. Hunting experience would be improved by limiting the number of shots. Reduces "sky blasting" and/or injuring ducks.
25T.	[1]	[4]	23. Measure nutrient and pesticide runoff from adjacent land use and development. Current management plan includes. Would like to see that this is occurring in the next ten years.
25T.	[1]	[4]	34. Continue coordination with the Anastasia Mosquito Control District. Self explanatory.
28.	[1]	[5]	15. Maintain/increase recreational levels without detriment to wildlife or habitat. Maintain the recreational carrying capacity so that in ten years it will not be detrimental to wildlife or the habitat.

The following items received no votes. All ideas represent valuable input, and are considered in development of the management plan, but carry no rank with regard to the priority perceptions of the MAG.

16. **Reduce the number of hunters in the area at one time for safety and hunter quality.** Currently the area gets crowded on hunting dates. If we reduced the amount of hunters by a small amount, it would increase hunter satisfaction.

<u>Rank</u>	<u># of Votes</u>	<u>Score</u>	<u>Idea</u>
20.			Separate user groups spatially and temporally. Much of the hunting is geared around the waterfowl. There should be some areas during a hunting weekend when a family can go out and recreate. Could be displayed in a recreation guide and on signage.
29.			Increase hog hunting opportunities. Some WMAs are using night hunts with dogs or could provide additional hunting opportunities on the GTMNERR. Dogs are much more efficient at getting hogs (e.g., the smarter ones avoiding the traps). Consider looking at these opportunities on the GRWMA to better control the hog population.
30.			Deploy FWC officers on Lake Ponte Vedra. Would be helpful to have an officer on the lake; particularly on those days when so many hunters are there. If not, can foresee restrictions in the future, which would not like to see.
33.			Identify potential exotic species early detection rapid response. Self explanatory.
40.			Explore opportunities to lessen impacts of lake release on adjacent estuaries and water quality and wildlife. Pull information and data that's available to help guide management.
42.			Determine if specific wildlife and plant species require efforts beyond landscape scale. Self explanatory.
44.			Consolidate prescribed burning with adjacent properties. Lands purchased (GTMNERR, FWC) under the Conservation and Recreation Lands acquisition program were acquired for very similar reasons; yet there is an artificial boundary up. We should manage across the boundary; utilize prescribed fire in a more wholistic way. Best using resources with partners and habitats as a priority; increase coordination.

<u>Rank</u>	<u># of Votes</u>	<u>Score</u>	<u>Idea</u>
			45. Evaluate existing and potential partnerships. Self explanatory.
			48. Strive for growing season burns in fire dependent communities. Self explanatory.
			49. Evaluate goals and problems not met from previous plan if still valid. Self explanatory.
			50. Ensure protection of historical and cultural resources. Self explanatory.

**Guana River Wildlife Management Area
MAG Meeting Participants**

Name

Affiliation

Active Participants

Justin Ellenberger	FWC Area Biologist
Investigator John Brechler	FWC Law Enforcement
Commissioner Jay Morris	St. Johns County Board of County Commissioners
Michael Blackford	St. Johns County Planning Department
Aaron Bowden	North Florida Trailblazers/Florida Trail Association
Gary Carpenter	Florida Forest Service
Ricky Lackey	National Wild Turkey Federation
Ellen O'Brien	Ponte Vedra Riding Club
Dr. Mike Shirley	Florida Department of Environmental Protection (DEP)/GTMNERR
Mike Smith	Anastasia Mosquito Control District
Bart Swab	Action Kayak Adventures
John Veal	Waterfowler
Danny Young	Florida Native Plant Society
Eric Ziecheck	Ripple Effect Ecotours

Supportive Participants

Mike Brooks	FWC Habitat and Species Conservation (HSC), Wildlife and Habitat Management Section Leader
Mike Abbott	FWC HSC, Regional Biologist
Jimmy Conner	FWC HSC, District Biologist
Alex Pries	FWC HSC, Conservation Biologist
Rich Noyes	FWC, Office of Public Access and Wildlife Viewing Services (OPAWVS)
Tom M. Matthews	FWC, OPAWVS
Alli Jones	FWC, OPAWVS
Bill Gentry	North Florida Trailblazers/Florida Trail Association
David Taylor	Anastasia Mosquito Control District
Darryl Thornhill	FWC Law Enforcement
Janet Zimmerman	DEP/GTMNERR
Joe Burgess	DEP/GTMNERR

Invited but Unable to Attend

Preston Robertson	Florida Wildlife Federation
Matthew Corby	St. Johns River Water Management District
Mary Glowacki	Florida Department of State, Division of Historical Resources
Alice Bard	DEP, Division of Parks and Recreation
Thomas Cheyne	Natural Resources Conservation Service
Dan Hipes	Florida Natural Areas Inventory
Pete Johnson	Audubon Society
Whit Whitlock	Adjacent landowner

Greg Owen
Craig LeSchack

Night Navigation/Trekking
Ducks Unlimited

FWC Planning Personnel

Gary Cochran
Michael Hallock-Solomon
Laramie Ferry Recorder

Land Conservation and Planning Administrator
Meeting facilitator

13.4.2 Public Hearing Notice, Advertisements and Press Release

NOTICE

The Florida Fish and Wildlife Conservation Commission (FWC)
Announces a

PUBLIC HEARING

for the
**Guana River
Wildlife Management Area
Management Plan**

St. Johns County, Florida

7:00 P.M. Thursday, September 27, 2012

St. Johns County Agricultural Center
3125 Agricultural Center Drive
St. Augustine, FL 32092

PURPOSE: To receive public comment regarding considerations for the FWC ten-year Land Management Plan for the Guana River Wildlife Management Area (WMA). This hearing is being held **EXCLUSIVELY** for discussion of the **DRAFT** Guana River WMA Management Plan. This meeting is not being held to discuss area hunting or fishing regulations. For more information on the process for FWC rule and regulation development go online to: myfwc.com/about/rules-regulations/rule-changes/ or call (850) 487-1764.

A Management Prospectus for the Guana River WMA is available upon request. For a copy, please contact Rebecca Shelton, Florida Fish and Wildlife Conservation Commission, Land Conservation and Planning, 620 South Meridian Street, Tallahassee, Florida 32399-1600. Telephone: (850) 487-9982.

Tue, Sep 18, 2012
10:12:22

Receipt No:

Rebecca Shelton
850-
487-
9422

Classified Ad Invoice The St. Augustine Record

Acct: 1000616082
Phone: 8504879952
E-Mail:
Client:

Name: FL FISH AND WILDLIFE CONSE
Address: 820 S MERIDIAN ST

City: TALLAHASSEE State: FL Zip: 32399-4517

Caller: HEARING SEPTEMBER 27, 2012

Ad Name: L2600-12 Reply Request
Ad Id: 14483791 Standby Type:

Start: 09/19/2012 Issues: 2 Step: 09/23/2012
Class: 7520 Rate: L01
Copy Line: GUANA RIVER WMA Rep: SAR KAREN BRANNON
Editions: RE/TNS/ G. D. #
Colors: Phytype: CC
Tear sheets:

Earliest Production Deadline: 00:00:00

Lines.....	50.00
Depth.....	3.60
Columns..	1
Price:	129.24
Other Charges:	0.00
Discounts:	0.00
Total	129.24

NOTICE
The Florida Fish and Wildlife Conservation Commission (FWC) announces a PUBLIC HEARING for the FWC managed Guana River Wildlife Management Area located in St. Johns County, Florida.
7:00 P.M. Thursday,
September 27, 2012
St. Johns County Agricultural Center
320 Agricultural Center Drive
St. Augustine, FL 32092

PURPOSE: To receive public comment regarding considerations for FWC's 10-year Management Plan for the Guana River Wildlife Management Area (GRWMA).

This hearing is being held EXCLUSIVELY for discussion of the DRAFT Guana River WMA Management Plan. This meeting is not being held to discuss and/or adopt or amend regulations. For more information on the process for FWC rule and regulation development go online to: www.floridawildlife.com or call (888) 487-9952 or (850) 487-9767 or by e-mail at Shelton@floridawildlife.com

A Management Prospectus for Guana River WMA and copy of the agenda is available upon request from the Florida Fish and Wildlife Conservation Commission, Land Conservation and Planning Group, 638 South Meridian Street, Tallahassee, Florida 32399-4400. Telephone: (888) 487-9952 or (850) 487-9767 or by e-mail at Shelton@floridawildlife.com
L2600-12 Sep 18, 2012

Ad shown is not actual print size

Thank you and have a nice day!

For more information, you may contact: Patricia Hubbard, (386)238-4910 or Patricia_Hubbard@dcf.state.fl.us.

The **Orlando Area Refugee Task Force** announces a public meeting to which all persons are invited.

DATE AND TIME: Wednesday, October 10, 2012, 10:00 a.m. – 12:00 Noon

PLACE: TBD

GENERAL SUBJECT MATTER TO BE CONSIDERED: The purpose of the Orlando Area Refugee Task Force meeting is to increase awareness of the refugee populations, share best practices, spot trends in refugee populations, build collaborations between agencies, help create good communication among service providers, get informed about upcoming community events, and discuss refugee program service needs and possible solutions to meeting those needs.

A copy of the agenda may be obtained by contacting: Pedro Padua, (407)317-7336 or Taddese Fessehaye, (407)317-7335.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 5 days before the workshop/meeting by contacting: Pedro Padua, (407)317-7336 or Taddese Fessehaye, (407)317-7335. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

For more information, you may contact: Pedro Padua, (407)317-7336 or Taddese Fessehaye, (407)317-7335.

The **Miami-Dade Refugee Task Force** announces a public meeting to which all persons are invited.

DATE AND TIME: October 12, 2012, 10:00 a.m. – 12:00 Noon

PLACE: Miami-Dade College, Wolfson Campus, 500 N.E. 2nd Avenue, Room 3208-9, Miami, FL 33132

GENERAL SUBJECT MATTER TO BE CONSIDERED: The purpose of the Miami-Dade Refugee Task Force meeting is to increase awareness of the refugee populations, share best practices, spot trends in refugee populations, build collaborations between agencies, help create good communication among service providers, get informed about upcoming community events, and discuss refugee program service needs and possible solutions to meeting those needs.

A copy of the agenda may be obtained by contacting: Adria Dilme-Bejel, (305)377-7518 or Lourdes Dysna-Leconte, (305)376-1947.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 5 days before the workshop/meeting by contacting: Adria Dilme-Bejel, (305)377-7518 or Lourdes Dysna-Leconte, (305)376-1947. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

For more information, you may contact: Adria Dilme-Bejel, (305)377-7518 or Lourdes Dysna-Leconte, (305)376-1947.

The Florida **Department of Children and Families** Refugee Services Program announces a public meeting to which all persons are invited.

DATE AND TIME: October 17, 2012, 1:00 p.m.

PLACE: Florida Department of Children and Families, Auditorium, 5920 Arlington Expressway, Jacksonville, FL 32211

GENERAL SUBJECT MATTER TO BE CONSIDERED: A public community stakeholder meeting to discuss the new concept and design of a program to assist refugee children (ages 0-5) living in the Jacksonville area become school ready. Services will be competitively procured in the very near future. A copy of the agenda may be obtained by contacting: Debbie Ansbacher, Debbie_Ansbacher@dcf.state.fl.us.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 5 days before the workshop/meeting by contacting: Debbie Ansbacher, email: Debbie.Ansbacher@dcf.state.fl.us. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

FISH AND WILDLIFE CONSERVATION COMMISSION

The Florida **Fish and Wildlife Conservation Commission** announces a hearing to which all persons are invited.

DATE AND TIME: Thursday, September 27, 2012, 7:00 p.m.

PLACE: St. Johns County Agricultural Center, 3125 Agricultural Center Drive, St. Augustine, FL 32092

GENERAL SUBJECT MATTER TO BE CONSIDERED: To receive public comment regarding considerations for the FWC ten-year Land Management Plan for the Guana River Wildlife Management Area (WMA). This hearing is being held EXCLUSIVELY for discussion of the DRAFT Guana River WMA Management Plan. This meeting is not being held to discuss area hunting or fishing regulations.

For more information on the process for FWC rule and regulation development go online: myfwc.com/about/rules-regulations/rule-changes/ or call: (850)487-1764.

A Management Prospectus for the Guana River WMA is available upon request.

For a copy, please contact: Rebecca Shelton, Florida Fish and Wildlife Conservation Commission, Land Conservation and Planning, 620 South Meridian Street, Tallahassee, Florida 32399-1600 (850)487-9982.

The Florida **Fish and Wildlife Conservation Commission** announces a facilitated stakeholder meeting to discuss and examine manatee issues.

NOTICE:

The Florida Fish and Wildlife Conservation Commission (FWC) announce a PUBLIC HEARING for the FWC managed Guana River Wildlife Management Area located in St. Johns County, Florida.

7:00 P.M. Thursday, September 27, 2012
St. Johns County Agricultural Center
3125 Agricultural Center Drive
St. Augustine, FL 32092

PURPOSE: To receive public comment regarding considerations for FWC's ten-year Management Plan for the Guana River Wildlife Management Area (GRWMA).

This hearing is being held EXCLUSIVELY for discussion of the DRAFT Guana River WMA Management Plan. This meeting is not being held to discuss area hunting or fishing regulations. For more information on the process for FWC rule and regulation development go online to: myfwc.com/about/rules-regulations/rule-changes/ or call (850) 487-1764.

A Management Prospectus for Guana River WMA and copy of the agenda is available upon request from the Florida Fish and Wildlife Conservation Commission, Land Conservation and Planning Group, 620 South Meridian Street, Tallahassee, Florida 32399-1600. Telephone: (850) 487-9982 or (850) 487-9767 or by e-mail at Rebecca.Shelton@MyFWC.com.

13.4.3 Public Hearing Report

PUBLIC HEARING REPORT
FOR THE
GUANA RIVER WILDLIFE MANAGEMENT AREA
MANAGEMENT PLAN
HELD BY THE
GUANA RIVER WMA MANAGEMENT ADVISORY GROUP
AND THE
FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
SEPTEMBER 27, 2012 – ST. JOHNS COUNTY, FLORIDA

The following report documents the public input that was received at the Guana River Wildlife Management Area (GRWMA) Management Advisory Group's (MAG) Public Hearing for the update to the Management Plan for GRWMA that was held at 7:00-9:00 PM, on September 27, 2012, at the St. Johns County Agricultural Center in St. Augustine, Florida.

GRWMA Management Advisory Group Introduction:

The meeting was introduced by Mr. Eric Ziecheck, a GRWMA MAG participant, who represented the Paddling/Kayaking Tours Representative Stakeholder group. Mr. Ziecheck indicated that he was one of fourteen stakeholders that attended the Florida Fish and Wildlife Conservation Commission (FWC) facilitated MAG meeting held on August 28, 2012. Mr. Ziecheck stated that the draft Management Plan was being presented tonight by FWC staff, and that hardcopies of the draft plan and the MAG meeting report were available at the front door for the public's review. Mr. Ziecheck thanked everyone for attending and then introduced FWC staff Mr. Gary Cochran, Land Conservation and Planning Administrator, FWC, to facilitate and coordinate the presentation of an overview of GRWMA; FWC's planning process, and the draft components of the Management Plan.

Presentation on an Overview of GRWMA and the FWC Planning Process: Mr. Cochran welcomed everyone and thanked the public for their attendance. Mr. Cochran then went over an orientation of the material and explained that the purpose of the public hearing was to solicit public input regarding the Draft Management Plan for GRWMA, and not hunting and fishing regulations, indicating there is a separate public input process for FWC rule and regulation development. Mr. Cochran then described the materials that were available at the door for public review, including the draft Management Plan and the GRWMA MAG Meeting Report and Accomplishment Report. Mr. Cochran then presented

the agenda for the public hearing and facilitated the introduction of all FWC staff in attendance to the audience. Mr. Cochran then presented an overview and orientation of GRWMA, including a description of the natural communities, data about park visitors, money generated for the state by the park, wildlife species, recreational opportunities found on the area, surrounding conservation lands, surrounding Florida Forever lands, acquisition history, etc. He also explained FWC's planning process and asked if there were any questions regarding that process.

Questions, Answers and Discussion on the GRWMA Overview and FWC's Planning Process: Mr. Cochran facilitated an informal question and answers session where members of the public in attendance, without necessarily identifying themselves, could ask questions of the FWC staff, and discuss the answers. Mr. Cochran again emphasized that the exclusive purpose for the public hearing was to collect public input regarding the draft Management Plan for GRWMA, and not to discuss area hunting, fishing and use regulations since, as was noted earlier, FWC has a separate process for input on hunting and fishing regulations. No questions were received regarding this part of the presentation.

Presentation of the GRWMA Draft Management Plan

At this point, Mr. Justin Ellenberger, the GRWMA Area Biologist/Manager began the presentation of the Draft GRWMA Management Plan. Mr. Ellenberger, the Area Biologist then completed and concluded the presentation of the GRWMA Draft Management Plan.

Questions and Comments on the GRWMA Draft Management Plan Presentation

Mr. Cochran encouraged everyone to fill out a speaker card for public testimony. He informed them that all cards will be considered equally.

Public Question: An anonymous gentleman had a question regarding the recreation management plan and about there being stakeholder groups that actually advise on those issues: He wanted to know if that was something that happened within that ten year plan.

FWC Response: Mr. Cochran informed him that it could happen within the ten year plan. Mr. Cochran then introduced Mr. Richard Noyes, Section Leader of the Office of Public Access and Wildlife Viewing Services, and Mr. Tom Matthews, Recreation Planner of the Office of Public Access and Wildlife Viewing Services, to explain more about the Recreation Master Plan. Mr. Noyes informed the gentleman that there is an existing Master Recreation plan for GRWMA from 2005 and that they're contemplating doing a trail and survey event on another site to get insight from their users to determine the suitability of current trails and facilities. He said that they do not anticipate redoing the RMP itself but they may amend it based on what they find out about the trail event.

Public Question: An anonymous gentleman had a question about maintaining the current boundary as well as pursuing opportunities to expand. He said that he's aware of past attempts to grab GRWMA land, and wants to know if there are any future plans to try to grab more land.

FWC Response: Mr. Cochran asked if he was referring to alternative uses, such as the high school and informs him that they're not aware of any current proposals by local, regional, or other entities. He said they could receive one any day but that it's a fairly rigorous process to receive any approval for any alternative use for any public conservation area and they'd have to go all the way to the Acquisition Restoration Council (ARC) and the Governor in Cabinet and that the cost and approval bar is high to do it.

Public Question: An anonymous gentleman asked a question regarding the invasive species management and was wondering if GRWMA had a program to get volunteers involved in this process. He was wondering if they were planning to implement programs where volunteers would be able to assist staff, and how would that word be put out?

FWC Response: Mr. Justin Ellenberger informed him that most of volunteers they received are for the prescribed fire burns program. He informed the gentleman that their team implemented a volunteer program either shortly before or after the Recreational Master Plan and that it didn't really take off. He informed the public that there is a regional volunteer coordinator in their regional office but that currently that position is vacant.

Mr. Noyes, FWC, also informed the gentleman that it would be done through a volunteer coordinator and that there is an application process involved. He informed the gentleman that if he has any interest to please give Mr. Noyes his contact information and a volunteer coordinator will be in touch with him.

Public Testimony on the GRWMA Draft Management Plan: Two members of the public audience submitted speaker card(s) indicating their intention to provide formal public testimony. Mr. Cochran again emphasized that the public hearing was for taking input regarding the GRWMA Draft Management Plan, and called the first speaker to the podium.

Public Testimony Comment: Ms. Ellen O'Brien, founding member of the Ponte Vedra Riding Club, said that she's aware of GRWMA's mission statement and that she's also aware that public land plays a critical role in the social well-being of the local community. She said that she and her friends have enjoyed the pristine beauty and ambiance of GRWMA over the past twenty years. She made the comment that she's very happy that the new plan will continue its policy of low-impact, recreational activities. She informed the public that she would like to say a few kind things about Justin Ellenberger, the manager of the GRWMA. She stated that she's known Mr. Ellenberger for over ten years and would like to applaud his attitude of user-friendliness, with is dedication to wildlife management.

She knows with his continued management of GRWMA, everyone will be able to enjoy these unique experiences of nature for years to come. And she wishes his team and him the best of luck.

Public Testimony Comment: Mr. Eric Ziecheck stated that he wanted to thank Mr. Ellenberger and all the other biologists and FWC staff for the great job they've been doing so far. He thinks the community is blessed to have so many acres in St. Johns County and that's it's an amazing natural resource. Mr. Ziecheck added that he wants to encourage everyone to stay motivated to work on GRWMA because he's sure surrounding, developing communities will try to persuade them to think otherwise. He also believes that the younger generation appreciates what they're doing. Mr. Ziecheck continued and said that FWC law enforcement is being given lots of responsibilities to regulate more and more and he feels like there should be a ratio of the number of regulations to the number of staff to make it fair to those guys, or to pay them more because it's only getting harder and harder. A final comment Mr. Ziecheck had was in terms of the recreational opportunities. He stated that he believes that it's really important that they start thinking about how they look at the recreational opportunities now, in particular the promotion of guide services in the GRWMA. He added that the way it is now, that there're no boundaries on who does it or how they do it or what insurance they have and the point he's getting at is about how easy it is now to have people being promoted within these positions who are possibly unethical or who are giving incorrect information. So he would just like everyone to be cognizant of this as FWC is creating the GRWMA ten year plan and that they really need look at some sort of language or give merit to who is going in and providing guide services, making sure they're insured and have qualifications to ensure the information given out is correct.

Adjournment: Mr. Cochran asked if there were any other members of the public that wished to give public testimony. Seeing no other persons who had comments or questions, Mr. Cochran then declared the public hearing adjourned.

13.4.4 Management Prospectus

Management Prospectus

Guana River Wildlife Management Area

September 2012

Florida Fish and Wildlife Conservation Commission



Introduction

Positioned between the Tolomato River and A1A, immediately inland from the Atlantic Ocean along Florida's east coast, the Guana River Wildlife Management Area (GRWMA) conserves and protects a unique maritime ecosystem harboring an array of imperiled, rare and more common fish and wildlife among its lakes, marshes, hammocks and flatwoods habitats. Set within a mosaic of public conservation lands, GRWMA provides important water quality and flood plain protection for the region's rivers and wetlands while simultaneously providing exceptional fish and wildlife-based public outdoor recreational opportunities such as hunting, fishing, wildlife viewing, hiking, paddling and horseback riding within close proximity to one of Florida's larger metropolitan areas.

Located about 15 miles south of Jacksonville and 13 miles north of St. Augustine (Figure 1), the GRWMA comprises roughly 9,815 acres of the approximately 12,000-acre Guana River tract that was acquired by the State of Florida in 1984. Included within the expanse of public conservation and recreation lands surrounding GRWMA is the 73,352-acre coastal Guana Tolomato Matanzas National Estuarine Research Reserve (GTMNERR), managed by the Florida Department of Environmental Protection (DEP). The GRWMA features Lake Ponte Vedra, tidal salt marshes, aquatic impoundments and interior uplands. Due to the high quality of the Guana Tract's aquatic habitats, the Guana River tract was designated as the Guana River Marsh Aquatic Preserve in 1985. The GRWMA is managed by the Florida Fish and Wildlife Conservation Commission (FWC) to conserve habitat for an assortment of imperiled and other native wildlife including the wood stork (*Mycteria Americana*), peregrine falcon (*Falco peregrinus*), gopher tortoise (*Gopherus polyphemus*), brown pelican (*Pelecanus occidentalis*) and eastern indigo snake (*Drymarchon corais couperi*), along with other important natural and cultural resources.

GRWMA is located east of the St. Johns River in St. Johns County (Figure 2). The property is located within parts of Sections 14, 15, 22, 23, 25, 26, 36, 38, 46, 47, 52-54, 56 and 72-74, Township 4 South and Range 29 East, as well as within the Sections 1, 2, 6, 11-14, 24, 25, 37, 38, 46-48, 50-52, 67, 68 and 30-31 in Township 5 South and Ranges 29 and 30 East.

The conservation areas and Florida Forever projects surrounding GRWMA are shown in Figure 2; Tables 1 and 2 lists the Florida Forever projects and conservation lands within a

20-mile radius of GRWMA, including lands managed by public and private entities, that conserve cultural and natural resources within this region of Florida.

Most of the public conservation lands listed in Table 2 are owned in full-fee by a public entity. Though some fall within less-than-fee ownership classification where the land is owned and being managed by a private landowner while a public agency or not-for-profit organization holds a conservation easement on the land.

Table 1. Florida Forever Projects in Proximity to GRWMA

Project Name
Northeast Florida Blueway
Pumpkin Hill Creek
St. Johns River Blueway

Table 2. Conservation Lands in Proximity to GRWMA

State of Florida/Federal Government	Managing Agency
Anastasia State Park	DEP
Castillo de San Marcos National Monument	USDI-NPS
Deep Creek State Forest	DACS
Fort Caroline National Memorial	USDI-NPS
Fort George Island Cultural State Park	DEP
Fort Mose Historic State Park	DEP
Guana Tolomato Matanzas National Estuarine Research Reserve	DEP
Jacksonville Naval Air Station	DOD-Navy
Kingsley Plantation	USDI-NPS
Little Talbot Island State Park	DEP
Matanzas State Forest	DACS
Mayport Naval Station	DOD-Navy

Roberts Property	DEP
Theodore Roosevelt Area	USDI-NPS
Timucuan Ecological and Historic Preserve	USDI-NPS
Watson Island State Forest	DACS
Yellow Bluff Fort Historic State Park	DEP

Water Management District	Managing Agency
9A Mitigation Parcels	SJRWMD
Deep Creek Conservation Area	SJRWMD
Hodges Conservation Easements	SJRWMD
Julington-Durbin Preserve	SJRWMD
Moses Creek Conservation Area	SJRWMD
Stokes Landing Conservation Area	SJRWMD
Sylvan West Conservation Easement	SJRWMD
Twelve Mile Swamp Conservation Area	SJRWMD

County/City	Managing Agency
Alpine Groves Park	St. Johns County
Beach and Peach Preserve	City of Jacksonville
Canopy Shores Park	St. Johns County
Castaway Island Preserve	City of Jacksonville
Cradle Creek Preserve	City of Jacksonville Beach
Dutton Island Park and Preserve	City of Jacksonville
Fanning Island Preserve	City of Jacksonville
Ferngully Preserve	City of Jacksonville
Floyd Tract	St. Johns County

Freedom Commerce Center	City of Jacksonville
Goodbys Creek Preserve	City of Jacksonville
Huguenot Memorial Park	City of Jacksonville
Jack Wright Island Conservation Area	St. Johns County
Kathryn Abbey Hanna Park	City of Jacksonville
Larson Tract	St. Johns County
Moccasin Slough	Clay County
Mussallem Trail Head	St. Johns County
Nocatee Preserve	St. Johns County
St. Johns County Conservation Area	St. Johns County
Tocoi Junction Conservation Area	St. Johns County
Turnbull Creek Regional Mitigation Area	St. Johns County
Vaill Point Park	St. Johns County
Vilano Bridge Conservation Parcels	St. Johns County
Vilano Oceanfront Park	St. Johns County
Wards Creek Mitigation Parcel	St. Johns County
Watson Island Parcel	St. Johns County
Windswept Acres Park	St. Johns County

Private/Public Conservation Organization	Managing Agency
E. Dale Joyner Nature Preserve at Pelotes Island	JEA
Grandy Preserve	Duval Audubon Society, Inc.
Guana River Marsh Sanctuary	Florida Audubon Society, Inc.
Machaba Balu Preserve	The Nature Conservancy
Palm Island Sanctuary	Duval Audubon Society, Inc.

Saturiwa Swamp Conservation Area

Private Individual(s)

Sawmill Slough Preserve

University of North Florida

Wonderwood Drive Sanctuary

Duval Audubon Society, Inc.

Acronym Key	Agency Name
DACS	Florida Department of Agriculture and Consumer Services
DEP	Florida Department of Environmental Protection
DOD	United States Department of Defense
SJRWMD	St. Johns River Water Management District
USDI-NPS	United States Department of the Interior, National Park Service
JEA	Jacksonville Electrical Authority

Acquisition History and the Purpose for Acquisition

The GRWMA was recommended for purchase by the Conservation and Recreation Lands (CARL) committee in September, 1983. The Guana River tract, which encompasses GRWMA property, was acquired by the Florida Department of Natural Resources (now DEP) on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida (Board of Trustees) in four increments: (1) July 1984, (2) January 1985, (3) January 1986 and (4) January 1987. The CARL Trust Fund was approved in 1979 and relies on funds generated principally from the documentary stamp tax and severance taxes on phosphate rock. The CARL program was established for the purpose of purchasing environmentally endangered lands and other lands such as those which have potential for public recreation.

As noted above, the GRWMA was recommended for purchase by the CARL committee in September 1983. The CARL committee in its project assessment prepared for the Governor and Cabinet, sitting as the Board of Trustees, described the unique character of the Guana River tract as follows:

“It is unusual for a single proposed project area to combine such a diversity of valuable natural, cultural and recreational resources. These include: (1) excellent ocean-front beach

with high dunes stabilized by natural vegetation; (2) an unusually extensive natural area of undisturbed Atlantic coastal strand (scrub) vegetation; (3) extensive maritime hammock containing an unusual natural association of mature trees; (4) extensive estuarine wetlands (marsh); (5) extensive areas of pine flatwoods; (6) bird rookeries, including a sizable population of the endangered wood stork; and (7) extensive aboriginal middens, aboriginal burial mounds and artifacts of aboriginal and Spanish colonial (origin).” While the FWC managed GRWMA does not contain any beach front property, the DEP’s GTMNERR does and is managed by Coastal and Aquatic Managed Areas (CAMA). FWC’s 50 year lease agreement through DEP from the Board of Trustees for lands within GRWMA directs FWC to “manage the leased premises only for the conservation and protection of natural and historical resources and resource-based, public outdoor recreation which is compatible with the conservation and protection of these public lands, as set forth in subsection 253.023 (11), Florida Statutes (F.S.).” The lease agreement further directs FWC to “implement applicable Best Management Practices for all activities under this lease in compliance with paragraph 18-2.004 (1)(d), Florida Administrative Code (F.A.C.), which have been selected, developed or approved for the protection and enhancement of the leased premises.”

FWC’s land management purpose expressed through goals and objectives of the GRWMA Management Plan are consistent with the acquisition purpose and management goals set forth under the CARL Program. The purpose, goals and objectives for all of the lands acquired and managed as GRWMA are more comprehensively expressed in the GRWMA Management Plan that is reviewed and approved by the Acquisition and Restoration Council, the land acquisition and management advisory council to the Board of Trustees.

Natural Resources

The Florida Natural Areas Inventory (FNAI) describes 16 natural community types existing on GRWMA. Table 3 lists percentages of each natural community type known to occur on GRWMA and are displayed in Figure 3.

Table 17. GRWMA FNAI Natural and Anthropogenic Communities

Natural Community	Acreage*	Percentage
Impoundment/Artificial pond	2442.3	26.7%
Salt marsh	2218.3	24.3%
Mesic flatwoods	1708.6	18.7%
Maritime hammock	809.7	8.9%
Scrub	356.9	3.9%
Scrubby flatwoods	352.9	3.9%
Xeric hammock	291.7	3.2%
Mesic hammock	240.4	2.6%
Depression marsh	218.6	2.4%
Basin swamp	142.7	1.6%

Basin marsh	104.9	1.1%
Pine plantation	87.5	1.0%
Spoil area	38.9	0.4%
Wet flatwoods	35.7	0.4%
Baygall	32.6	0.4%
Clearing	24.4	0.3%
Marsh lake	22.7	0.2%
Dome swamp	8.0	0.1%
Hydric hammock	1.5	<0.1%
Developed	0.9	<0.1%

*Total GIS-calculated acreage for natural community classifications varies slightly from the actual total acreage of GRWMA.

Table 18. Native Plant Species of the GRWMA

Common Name	Scientific Name
American beautyberry	<i>Callicarpa americana</i>
American cupscale	<i>Sacciolepis striata</i>
American elm	<i>Ulmus americana</i>
American holly	<i>Ilex opaca</i>
Angle pod	<i>Gonolobus suberosus</i>
Arrowgrass	<i>Triglochin striata</i>
Atlantic St. John's-wort	<i>Hypericum tenuifolium</i>
Bachelor's button	<i>Centaurea cyanus</i>
Baldwin's spikerush	<i>Eleocharis baldwinii</i>
Bartram's rosegentian	<i>Sabatia decandra</i>
Bastard indigo	<i>Amorpha fruticosa</i>
Beakrushes	<i>Rhynchospora</i> spp.
Bedstraw St. John's-wort	<i>Hypericum galioides</i>
Bigseed alfalfa dodder	<i>Cuscuta indecora</i>
Black cherry	<i>Prunus serotina</i>
Black gum	<i>Nyssa sylvatica</i>
Black mangrove	<i>Avicennia germinans</i>
Black needlerush	<i>Juncus roemerianus</i>
Bladderworts	<i>Utricularia</i> spp.
Blue maidencane	<i>Amphicarpum muhlenbergianum</i>
Blue waterhyssop	<i>Bacopa caroliniana</i>
Bluestem grass	<i>Andropogon</i> spp.
Blunt spikerush	<i>Eleocharis obtuse</i>
Bog buttons	<i>Lachnocaulon</i> spp.
Bog white violet	<i>Viola lanceolata</i>
Bottlebrush threeawn	<i>Aristida spiciformis</i>
Bracken fern	<i>Pteridium aquilinum</i>

Table 18. Native Plant Species of the GRWMA

Common Name	Scientific Name
Branched hedgehyssop	<i>Gratiola ramosa</i>
Broadleaf cattail	<i>Typha latifolia</i>
Broomsedge bluestem	<i>Andropogon virginicus</i>
Buckthorn	<i>Sideroxylon tenax</i>
Bulrushes	<i>Scirpus spp.</i>
Butterwort	<i>Pinguicula spp.</i>
Buttonbush	<i>Cephalanthus occidentalis</i>
Cabbage palm	<i>Sabal palmetto</i>
Canada toadflax	<i>Linaria canadensis</i>
Candyroot	<i>Polygala nana</i>
Carolina horsenettle	<i>Solanum carolinense</i>
Carolina laurelcherry	<i>Prunus caroliniana</i>
Carolina sealavender	<i>Limonium carolinianum</i>
Carolina wild petunia	<i>Ruellia caroliniensis</i>
Carolina yelloweyed grass	<i>Xyris caroliniana</i>
Chapman's oak	<i>Quercus chapmanii</i>
Christmasberry	<i>Lycium carolinianum</i>
Cinnamon fern	<i>Osmunda cinnamomea</i>
Coast cockspur grass	<i>Echinochloa walteri</i>
Coastal plain willow	<i>Salix caroliniana</i>
Coastal waterhyssop	<i>Bacopa monnieri</i>
Common duckweed	<i>Spirodela polyrhiza</i>
Compact dodder	<i>Cuscuta compacta</i>
Coralbean	<i>Erythrina herbacea</i>
Corkwood	<i>Leitneria floridana</i>
Creeping beggarweed	<i>Desmodium incanum</i>
Crossvine	<i>Bignonia capreolata</i>
Deerberry	<i>Vaccinium stamineum</i>
Devil's walkingstick	<i>Aralia spinosa</i>
Dixie ticktrefoil	<i>Desmodium tortuosum</i>
Dog fennel	<i>Eupatorium capillifolium</i>
Dotted smartweed	<i>Polygonum punctatum</i>
Duck potato	<i>Sagittaria lancifolia</i>
Dwarf huckleberry	<i>Gaylussacia dumosa</i>
Dwarf live oak	<i>Quercus minima</i>
Dwarf spikerush	<i>Eleocharis parvula</i>
Earleaf greenbrier	<i>Smilax auriculata</i>
Eastern milkpea	<i>Galactia volubilis</i>
Eastern red cedar	<i>Juniperus virginiana</i>
Fall panicgrass	<i>Panicum dichotomiflorum</i>
Fireweed	<i>Erechtites hieraciifolius</i>

Table 18. Native Plant Species of the GRWMA

Common Name	Scientific Name
Firewheel	<i>Gaillardia pulchella</i>
Florida maple	<i>Acer floridanum</i>
Florida mudmidget	<i>Wolffiella gladiata</i>
Flypoison	<i>Amianthium muscaetoxicum</i>
Forked rush	<i>Juncus dichotomus</i>
Fringed yellow stargrass	<i>Hypoxis juncea</i>
Gallberry	<i>Ilex glabra</i>
Giant bristlegrass	<i>Setaria magna</i>
Giant sedge	<i>Carex gigantea</i>
Grassy arrowhead	<i>Sagittaria graminea</i>
Greenvein ladies'-tresses	<i>Spiranthes praecox</i>
Groundsel tree	<i>Baccharis halimifolia</i>
Hackberry	<i>Celtis spp.</i>
Hairawn muhly	<i>Muhlenbergia capillaris</i>
Hairy smartweed	<i>Polygonum hirsutum</i>
Heartwing dock	<i>Rumex hastatulus</i>
Helmet skullcap	<i>Scutellaria integrifolia</i>
Hibiscus	<i>Hibiscus spp.</i>
Highbush blueberry	<i>Vaccinium corymbosum</i>
Hog plum	<i>Prunus umbellata</i>
Hooded pitcherplant	<i>Sarracenia minor</i>
Hop clover	<i>Trifolium dubium</i>
Horned beaksedge	<i>Rhynchospora inundata</i>
Huckleberry	<i>Gaylussacia frondosa</i>
Indianpipe	<i>Monotropa uniflora</i>
Large gallberry	<i>Ilex coriacea</i>
Lateflowering thoroughwort	<i>Eupatorium serotinum</i>
Laurel oak	<i>Quercus laurifolia</i>
Live oak	<i>Quercus virginiana</i>
Lizard's tail	<i>Saururus cernuus</i>
Loblolly bay	<i>Gordonia lasianthus</i>
Longleaf pine	<i>Pinus palustris</i>
Low panicgrass	<i>Dichanthelium spp.</i>
Lyreleaf sage	<i>Salvia lyrata</i>
Maidencane	<i>Panicum hemitomon</i>
Marshay cordgrass	<i>Spartina patens</i>
Mermaidweed	<i>Proserpinaca pectinata</i>
Mexican primrosewillow	<i>Ludwigia octovalvis</i>
Milk pea	<i>Galactia elliotii</i>
Millet beaksedge	<i>Rhynchospora miliacea</i>
Mock bishopweed	<i>Ptilimnium capillaceum</i>

Table 18. Native Plant Species of the GRWMA

Common Name	Scientific Name
Mohr's thoroughwort	<i>Eupatorium mohrii</i>
Muscadine	<i>Vitis rotundifolia</i>
Muskgrass	<i>Chara spp.</i>
Myrtle oak	<i>Quercus myrtifolia</i>
Myrtle-leaved holly	<i>Ilex myrtifolia</i>
Naked St. John's-wort	<i>Hypericum nudiflorum</i>
Narrowleaf blue-eyed grass	<i>Sisyrinchium angustifolium</i>
Narrowleaf cattail	<i>Typha angustifolia</i>
Nutrushes	<i>Scleria spp.</i>
Nuttall's lobelia	<i>Lobelia nuttallii</i>
Oak mistletoe	<i>Phoradendron serotinum</i>
Orange milkwort	<i>Polygala lutea</i>
Pacific mosquitofern	<i>Azolla filiculoides</i>
Pale meadowbeauty	<i>Rhexia mariana</i>
Panicled ticktrefoil	<i>Desmodium paniculatum</i>
Partridge pea	<i>Chamaecrista nictitans</i>
Pennywort	<i>Hydrocotyle spp.</i>
Peppervine	<i>Ampelopsis arborea</i>
Perennial glasswort	<i>Sarcocornia ambigua</i>
Persimmon	<i>Diospyros virginiana</i>
Pickernelweed	<i>Pontederia cordata</i>
Pignut hickory	<i>Carya glabra</i>
Pigweeds	<i>Amaranthus spp.</i>
Pink sundew	<i>Drosera capillaries</i>
Pink woodsorrel	<i>Oxalis debilis</i>
Pipeworts	<i>Eriocaulon spp.</i>
Plumegrass	<i>Saccharum giganteum</i>
Pond cypress	<i>Taxodium ascendens</i>
Pond pine	<i>Pinus serotina</i>
Pond spice	<i>Litsea aestivalis</i>
Poor Joe	<i>Diodia teres</i>
Priarie wedgescale	<i>Sphenopholis obtusata</i>
Pricklypear	<i>Opuntia humifusa var. humifusa</i>
Rabbit tobacco	<i>Pseudognaphalium obtusifolium</i>
Red bay	<i>Persea borbonia</i>
Red maple	<i>Acer rubrum</i>
Red mulberry	<i>Morus rubra</i>
Redroot	<i>Lachnanthes caroliniana</i>
Resurrection fern	<i>Pleopeltis polypodioides var. polypodioides</i>
Rosy camphorweed	<i>Pluchea baccharis</i>
Roundleaf thoroughwort	<i>Eupatorium rotundifolium</i>

Table 18. Native Plant Species of the GRWMA

Common Name	Scientific Name
Rusty Lyonia	<i>Lyonia ferruginea</i>
Sago pondweed	<i>Stuckenia pectinata</i>
Saltgrass	<i>Distichlis spicata</i>
Saltwort	<i>Batis maritima</i>
Sand blackberry	<i>Rubus cuneifolius</i>
Sand cordgrass	<i>Spartina bakeri</i>
Sand live oak	<i>Quercus geminata</i>
Sand pine	<i>Pinus clausa</i>
Saw palmetto	<i>Serenoa repens</i>
Sawgrass	<i>Cladium jamaicense</i>
Sawtooth blackberry	<i>Rubus argutus</i>
Sea oxeye	<i>Borrichia frutescens</i>
Sensitive brier	<i>Mimosa quadrivalvis</i>
Shiny blueberry	<i>Vaccinium myrsinites</i>
Shiny Lyonia	<i>Lyonia lucida</i>
Shoreline seapurslane	<i>Sesuvium portulacastrum</i>
Slash pine	<i>Pinus elliottii</i>
Slender seapurslane	<i>Sesuvium maritimum</i>
Slender woodoats	<i>Chasmanthium laxum</i>
Smooth cordgrass	<i>Spartina alterniflora</i>
Soft rush	<i>Juncus effusus</i>
Southern cattail	<i>Typha domingensis</i>
Southern cutgrass	<i>Leersia hexandra</i>
Southern dewberry	<i>Rubus trivialis</i>
Southern magnolia	<i>Magnolia grandiflora</i>
Southern naiad	<i>Najas guadalupensis</i>
Southern waxy sedge	<i>Carex glaucescens</i>
Spanish bayonet	<i>Yucca aloifolia</i>
Spanish moss	<i>Tillandsia usneoides</i>
Spanish needles	<i>Bidens pilosa</i>
Spiderwort	<i>Tradescantia spp.</i>
Spiny waternymph	<i>Najas marina</i>
Spring coralroot	<i>Corallorhiza wisteriana</i>
Spring ladies'-tresses	<i>Spiranthes vernalis</i>
Spurred butterfly pea	<i>Centrosema virginianum</i>
St. Peter's-wort	<i>Hypericum crux-andreae</i>
Staggerbush	<i>Lyonia fruticosa</i>
Stream bogmoss	<i>Mayaca fluviatilis</i>
Summer grape	<i>Vitis aestivalis</i>
Swamp bay	<i>Persea palustris</i>
Swamp dogwood	<i>Cornus foemina</i>

Table 18. Native Plant Species of the GRWMA

Common Name	Scientific Name
Swamp smartweed	<i>Polygonum hydropiperoides</i>
Swamp titi	<i>Cyrilla racemiflora</i>
Swamp tupelo	<i>Nyssa biflora</i>
Sweetbay	<i>Magnolia virginiana</i>
Sweetgum	<i>Liquidambar styraciflua</i>
Sweetscent	<i>Pluchea odorata</i>
Switchcane	<i>Arundinaria gigantea</i>
Tall nutgrass	<i>Scleria triglomerata</i>
Tall pinebarren milkwort	<i>Polygala cymosa</i>
Tarflower	<i>Bejaria racemosa</i>
Thistle	<i>Carduus spp.</i>
Threeflower ticktrefoil	<i>Desmodium triflorum</i>
Tread-softly	<i>Cnidocolus urens var. stimulosus</i>
Tree sparkleberry	<i>Vaccinium arboreum</i>
Trumpet creeper	<i>Campsis radicans</i>
Vanillaleaf	<i>Carphephorus odoratissimus</i>
Virginia chain fern	<i>Woodwardia virginica</i>
Virginia creeper	<i>Parthenocissus quinquefolia</i>
Virginia iris	<i>Iris virginica</i>
Virginia pepperweed	<i>Lepidium virginicum</i>
Virginia plantain	<i>Plantago virginica</i>
Viviparous spikerush	<i>Eleocharis vivipara</i>
Walter's aster	<i>Symphyotrichum walteri</i>
Water lily	<i>Nymphaea odorata</i>
Water oak	<i>Quercus nigra</i>
Water spangles	<i>Salvinia minima</i>
Wax myrtle	<i>Myrica cerifera</i>
White spikerush	<i>Eleocharis albida</i>
White water lily	<i>Nymphaea alba</i>
Widgeongrass	<i>Ruppia maritima</i>
Winged sumac	<i>Rhus copallinum</i>
Wiregrass	<i>Aristida stricta</i>
Wood sage	<i>Teucrium canadense</i>
Woodland ladies'-tresses	<i>Spiranthes sylvatica</i>
Yankeeweed	<i>Eupatorium compositifolium</i>
Yaupon holly	<i>Ilex vomitoria</i>
Yellow hatpins	<i>Syngonanthus flavidulus</i>
Yellow jessamine	<i>Gelsemium sempervirens</i>
Yellow woodsorrel	<i>Oxalis dillenii</i>
Yellow-eyed grasses	<i>Xyris spp.</i>

Natural Community Descriptions

Basin marsh is an herb-dominated community that occurs in large, often irregularly shaped depressions. Basin marshes are regularly inundated freshwater herbaceous wetlands that may occur in a variety of situations, but in contrast to depression marshes, are not small or shallow inclusions within a fire-maintained natural community. Plant species composition is heterogeneous, both within and between marshes, but can generally be divided into submersed, floating-leaved, emergent, and grassy zones from deepest to shallowest portions; shrub patches may be present within any of these zones.

On the GRWMA these depressions are generally elongate, oriented north-south in ancient interdunal swales or inlets. Sand cordgrass is the dominant plant in this community, often occupying the entire marsh. Some basin marshes, however, have multiple zones of vegetation. Outer edges of marshes may have a sparse to moderately dense cover of wax myrtle and persimmon over sand cord grass, blue maidencane, redroot, and various sedges. Moderately deep portions of basin marshes may support a dense cover of maidencane. Deepest portions of basin marshes support white water lily, duck potato and pickerel weed. Slash pine, water oak, and red maple may invade basin marshes that are hydrologically altered or fire suppressed. Dog fennel, fireweed, low panic grass and other weedy species may invade portions of basin marshes where the soil has been disturbed.

Basin swamp is a forested wetland community that occurs in large irregularly shaped depressions, and is vegetated with hydrophytic trees and shrubs that can withstand an extended hydroperiod. Basin swamps are highly variable in size, shape, and species composition. Mixed species tree canopies are common, often including both evergreen and deciduous tree species. This natural community typically occurs in any type of large landscape depression such as old lake beds, river basins, and ancient coastal swales and lagoons that existed during higher sea levels.

Basin swamp areas on the GRWMA with a canopy cover above 50% were generally described as basin swamp rather than basin marsh. Aggressive use of prescribed fire in these communities could result in a vegetative structure and composition more characteristic of basin marshes.

On the GRWMA, this community is generally distributed toward the northern half of the area. The open to moderately dense canopy (30 - 80% coverage) generally is dominated by red maple, slash pine, swamp tupelo, American elm, or pond cypress. Tall shrub cover is generally sparse to moderate (5 - 50%) coverage, and is usually dominated by red maple, wax myrtle, and buttonbush. Shiny Lyonia replaces maple and buttonbush in some basin swamp. Highbush blueberry is common in the tall and short shrub layer, particularly along the outer edge of the basin. Herbaceous cover generally is sparse to moderate (5 - 75 % coverage), dominated by sawgrass, Virginia chain fern, lizard's tail, and sedges.

Baygall is characterized by dense stands of evergreen trees and shrubs that occur in depressions or seepage areas where groundwater is at or near the surface for long periods of time. Although most baygalls are small in acreage, some form large, mature forests. Soils are generally composed of peat, with seepage from uplands, rainfall, and capillary action from adjacent wetlands maintaining a saturated substrate. Baygall typically develops at the bases of slopes, edges of floodplains, in depressions, and in stagnant drainages. Generally influenced by flowing water, baygall is often drained by small blackwater streams.

On the GRWMA, baygall communities generally support a moderately dense (40 - 60% coverage) canopy and midstory of loblolly bay. Pond pine also may be present in the canopy. Sweet bay and swamp bay are present in the midstory and tall shrub layer. There is generally a dense (50 - 100% cover) of shiny lyonia. Saw palmetto, huckleberry, and highbush blueberry also may be present in the shrub layer. Herbaceous cover is generally sparse to absent, but may include cinnamon fern and sedges.

Depression marsh, an herbaceous wetland community found in low flatlands, forms the characteristic pockmarked landscape seen on aerial photographs of the flat landscapes of the Florida peninsula. Depression marsh is usually characterized as a shallow, rounded depression in sand substrate with herbaceous vegetation and shrubs, often in concentric bands. These marshes also frequently form an outer rim around swamp communities such as dome swamps. They form when the overlying sands slump into depressions dissolved in underlying limestone. Depression marshes often burn with the surrounding landscape, and are seasonally inundated. Depression marshes typically occur in landscapes occupied by fire-maintained natural communities such as mesic flatwoods, dry prairie, or sandhill.

On the GRWMA, the herbaceous cover of depression marshes is generally 75 - 100%, principally represented by sand cordgrass, Virginia chain fern, and maidencane. Other herbaceous present in depression marshes are bluestem grass, blue maidencane, yellow-eyed grasses, plume grass, yellow hatpins, bladderworts, mermaid weed, grassy arrowhead, blue water-hyssop, horned beaksedge, and southern cutgrass.

Pond spice (state listed as endangered) was found at two locations in depression marshes in the central portion of the GRWMA.

Dome swamps are isolated and forested depression wetlands occurring within a fire-maintained community such as mesic flatwoods. These swamps are generally small, but may also be large and shallow. The characteristic dome shape is created by smaller trees that grow in the shallower waters of the outer edge, while taller trees grow in the deeper water in the interior of the swamp. Dome swamps are most often found on flat terraces, where they develop when the overlying sand has slumped into a depression in the underlying limestone, creating a rounded depression connected to a shallow water table. In

uplands with clay soils, dome swamps may occupy depressions over a perched water table. Soils in dome swamps are variable, but are most often composed of a layer of peat, which may be thin or absent at the periphery, becoming thicker toward the center of the dome.

On the GRWMA, dome swamps are smaller than basin swamps and generally occur in circular depressions and lack red maple, elm and buttonbush. Fire tends to burn through dome swamps, which inhibits development of a shrub layer.

Hydric hammock is an evergreen hardwood and/or palm forest with a variable understory typically dominated by palms and ferns occurring on moist soils, often with limestone very near the surface. While species composition varies, the community generally has a closed canopy of oaks and palms, an open understory, and a sparse to a moderate groundcover of grasses and ferns. Hydric hammock occurs on low, flat, wet sites where limestone may be near the surface, and soil moisture is kept high mainly by rainfall accumulation on poorly drained soils. Periodic flooding from rivers, seepage, and spring discharge may also contribute to hydric conditions.

The GRWMA contains less than two acres of hydric hammock in an area directly adjacent to Guana Lake that is surrounded by mesic flatwoods and maritime hammock.

Maritime hammock is a predominantly evergreen hardwood forest growing on stabilized coastal dunes lying at varying distances from the shore. Species composition changes from north to south with temperate species dominating from the Georgia border to Cape Canaveral and tropical species increasingly prevalent south of Cape Canaveral. From the Georgia border to north of Cape Canaveral, live oak, cabbage palm, and red bay combine to form a dense canopy. The low, streamlined profile deflects winds and generally prevents hurricanes from uprooting the trees. Maritime hammock occurs on deep well-drained acid quartz sands, or well-drained, moderately alkaline quartz sands mixed with shell fragments. Due to their coastal location, with water bodies on at least one side, fire was probably naturally rare and very spotty in maritime hammock.

On the GRWMA, maritime hammock occupies extensive acreage on the ancient dune ridge along the Guana River impoundment. There is a nearly closed canopy of live oak with pockets of hickory. There is a subcanopy of cabbage palm, laurel oak and eastern red cedar. The tall shrub cover is sparse to moderate (5 - 25% cover), composed of yaupon holly, tree sparkleberry, Carolina laurel cherry, red bay, and buckthorn. The short shrub layer is dominated by saw palmetto which covers 5 - 50 percent of the strata. Herbaceous cover is sparse to moderate (1 - 25%), represented by bastard indigo, tall nutgrass, slender woodoats, and panic grasses. Leaf litter covers nearly 100 % of the ground.

Marsh Lakes are generally shallow, open water areas within wide expanses of freshwater marsh. These water bodies typically have variable water chemistry, but are

characteristically composed of highly colored, acidic, soft water with moderate mineral content.

On the GRWMA, the approximately 23-acre Little Savannah Pond accounts for the entirety of the marsh lake natural community type on the area. The Little Savannah Pond was originally designated open water by FNAI until the area was re-mapped in 2010 and that designation was changed to marsh lake.

Mesic flatwoods is the most widespread natural community in Florida, covering the flat sandy terraces left behind by former high sea levels. Mesic flatwoods is characterized by an open canopy of tall pines and a dense, low ground layer of shrubs, grasses, and forbs. Longleaf pine is the principal canopy tree in northern and Central Florida, transitioning to predominately slash pine in south Florida. Soils are acidic, nutrient-poor, fine sands with upper layers darkened by organic matter. Drainage in this flat terrain can be impeded by a loosely cemented organic layer (spodic horizon) formed within several feet of the soil surface. The soils may be alternately xeric during dry periods, and saturated or even inundated after heavy rain events.

Mesic flatwoods are distributed in the western half of the GRWMA in association with wet and scrubby flatwoods. Typically there is a sparse canopy of slash pine or pond pine. The tall shrub layer may be represented by a few scattered red bay or encroaching oak. The short shrub layer is generally a dense cover of saw palmetto and gallberry. Other common shrubs include shiny Lyonia, shiny blueberry, huckleberry, and wax myrtle. Tarflower and dwarf live oak are occasional. Herbaceous cover within the mesic flatwoods is sparse to moderate (1 - 25%) and usually includes wiregrass, bottlebrush threeawn, bluestem grass, St. John's-wort, yellow-eyed grass, wild bachelor's button, yellow-hatpins, and low panic grasses.

Several marsh islands were identified as mesic flatwoods. These communities have cabbage palm, yaupon holly, and red cedar in the tall shrub layer. Less well drained islands with a sparse palmetto cover and high sedge cover were identified as wet flatwoods.

Mesic flatwoods grade into wet flatwoods and scrubby flatwoods, often with broad transition zones. Wet flatwoods typically have less saw palmetto and a higher coverage (25 - 75 %) of shiny Lyonia and huckleberry, and frequently support cinnamon fern or Virginia chain fern. Flatwoods with a scrub oak component greater than 25 % were identified as scrubby flatwoods. Small inclusions of wet and scrubby flatwoods were not delineated on the map for the GRWMA.

Mesic hammock is a well-developed evergreen hardwood and/or palm forest, typically with a closed canopy of live oak. Mesic hammock may occur as "islands" on high ground within basin or floodplain wetlands, as patches of oak/palm forest in dry prairie or flatwoods communities, on river levees, or in ecotones between wetlands and upland

communities. Historically, mesic hammocks were likely restricted to fire shadows, or other naturally fire-protected areas such as islands and peninsulas of lakes. Other landscape positions that can provide protection from the spread of fire are likely places for mesic hammock development, including edges of lakes, sinkholes, other depressional or basin wetlands, and river floodplains. Although mesic hammock is not generally considered a fire-adapted community, some small patches of hammock occurring as islands within marshes or prairies may experience occasional low-intensity ground fires. Mesic hammocks occur on well-drained sands mixed with organic matter and are rarely inundated. High moisture is maintained by heavy shading of the ground layer and accumulation of litter. Where limestone is near the surface, rocky outcrops are common in mesic hammocks

On the GRWMA, mesic hammock is similar in structure to maritime hammock; however, the soils are less well drained with more of an organic component and less sand and shell material. There is generally a canopy of live oak, cabbage palm, slash pine, and laurel oak. Sabal palmetto and laurel oak are common in the tall shrub layer. Red bay is occasional. Cabbage palm also is dominant in the short shrub layer along with saw palmetto. Herbaceous coverage is sparse to moderate (5 - 50%) dominated by slender woodoats, panic grasses, and various sedges.

Salt marsh, sometimes referred to as tidal marsh, is a largely herbaceous community that occurs in the portion of the coastal zone affected by tides and seawater and protected from large waves, either by the broad, gently sloping topography of the shore, by a barrier island, or by location along a bay or estuary. The width of the intertidal zone depends on the slope of the shore and the tidal range. Salt marsh may have distinct zones of vegetation, each dominated by a single species of grass or rush. Salt marsh soils range from deep mucks with high clay and organic content in the deeper portions to silts and fine sands in higher areas.

On the GRWMA, salt marsh is present along the Tolomato River. Structure and composition are variable along a hydrologic and salinity gradient. Marsh edges have a moderate cover of shrubs including Christmasberry, yaupon holly, cabbage palm, and red cedar. Inland portions of the marsh with little tidal influence are dominated by sand cordgrass. Deeper areas with muck soils and some tidal influence are dominated by black needle rush. The upper marsh along the main river channel is dominated by salt grass and glasswort with patches of sea oxeye. Closer to the river are large expanses of smooth cordgrass and black needlerush each in nearly uniform stands creating bands of bright green cordgrass and grey needlerush along the river and tidal creeks.

Scrub is a community composed of evergreen, xerophytic shrubs, with or without a canopy of pines, and is found on dry, infertile, sandy ridges. Scrub communities dominated by a canopy of sand pine are usually found on the highest sandy ridgelines. The pine canopy may range from widely scattered trees with a short, spreading growth form, to tall thin

trees forming a dense canopy of uniform height. Scrub is located on dry, infertile, sandy ridges which often mark the location of former shorelines.

Scrub occurs as a broad discontinuous band extending along the eastern half of the GRWMA. Sand pine may be present in the canopy, but is generally not a major component of the scrub community on the WMA. Height and cover percentages are variable. The shrub cover is generally dense (75 - 100%). Sand live oak is the dominant oak, generally covering 25 - 50 percent of the shrub strata. Chapman's oak myrtle oak, saw palmetto, and rusty lyonia are frequent, each generally covering 5 - 50 percent of the shrub strata. Winged sumac, huckleberry, and shiny blueberry also may be present in the shrub layer. Herbaceous cover is generally sparse except in recently chopped and burned areas. Such areas support a moderately dense cover of weedy forbs and grasses, including dog fennel, fireweed, low panic grasses, and broomsedge. Milk pea is common in the scrub regardless of successional stage, generally covering 1 - 5 percent of the ground or twining in the shrub layer. Wiregrass is either absent or very sparse (<1% cover).

Scrubby flatwoods have an open canopy of widely spaced pine trees and a low, shrubby understory dominated by scrub oaks and saw palmetto, often interspersed with areas of barren white sand. Principal canopy species are longleaf pine and slash pine in northern and Central Florida. The shrub layer consists of oak species and shrubs typical of mesic flatwoods, as well as grasses and dwarf varieties of other shrubs. Scrubby flatwoods occur on slight rises within mesic flatwoods and in transitional areas between scrub and mesic flatwoods. Soils of scrubby flatwoods are moderately well-drained sands with or without an organic layer (spodic horizon).

On the GRWMA, the vegetation within scrubby flatwoods is a combination of scrub and mesic flatwoods species. There is typically a sparse canopy of slash pine or pond pine. The tall shrub layer may be represented by sand live oak and Chapman's oak. The short shrub layer is generally a dense cover of sand live oak, Chapman's oak, myrtle oak, saw palmetto, gallberry, rusty lyonia, staggerbush, and tarflower. Other common shrubs include shiny lyonia, shiny blueberry, huckleberry, and wax myrtle. Herbaceous cover within the scrubby flatwoods is sparse to moderate (1 - 25%) and usually includes wiregrass, bluestem grass, St. John's-wort, and low panic grasses.

Wet flatwoods occur in broad, low flatlands, often in a mosaic with these communities. They are found in the ecotones between mesic flatwoods, shrub bogs, wet prairies, dome swamps, or strand swamps. Wet flatwoods are pine forests with a sparse or absent midstory and a dense groundcover of hydrophytic grasses, herbs, and low shrubs. The relative density of shrubs and herbs varies greatly in wet flatwoods. Shrubs tend to dominate where fire has been absent for a long period or where cool season fires predominate; herbs are more abundant in locations that are frequently burned. Soils and hydrology also influence the relative density of shrubs and herbs. Soils of shrubby wet

flatwoods are generally poorly to very poorly drained sands. These soils generally have a mucky texture in the uppermost horizon. Loamy sands are typical of soils in grassy wet flatwoods.

Wet flatwoods are distributed in the western half of the GRWMA in association with mesic flatwoods. There is typically a sparse to moderately dense canopy of pond pine in wet flatwoods. The tall shrub layer may be represented by a few scattered wax myrtles, red bay, and sweet bay. The short shrub layer is generally a dense cover of shiny lyonia, gallberry, and huckleberry. Other common shrubs include saw palmetto and shiny blueberry. Herbaceous cover within the wet flatwoods is sparse to moderate (1 - 25%) and usually includes wiregrass, bottlebrush threeawn, bluestem grass, yellow-eyed grass, and wild bachelor's button, yellow hatpins, cinnamon fern, and Virginia chain fern.

Several marsh islands were identified as wet flatwoods. These communities have cabbage palm, yaupon holy, and red cedar in the tall shrub layer. Saw palmetto is sparse to absent. Herbaceous cover is moderate to abundant (25 - 75%), dominated by sedges.

Wet flatwoods grade into mesic flatwoods and scrubby flatwoods, often with broad transition zones. Wet flatwoods typically have less saw palmetto and high coverage (25 - 75 %) of shiny lyonia and huckleberry and frequently support cinnamon fern or Virginia chain fern. Small inclusions of wet flatwoods in a mesic flatwoods matrix were not delineated on the map for the GRWMA.

Xeric Hammock is an evergreen forest found on well-drained sandy soils. The low canopy is typically closed and usually dominated by sand live oak. An emergent canopy of pine may be present. Xeric hammock typically develops where fire-exclusion allows for the establishment of the oak canopy. This may occur naturally when the area has significant barriers to fire, or more commonly, as the result of human intervention. In these areas, xeric hammock can form extensive stands or can occur as small patches within or near sandhill or scrub. Xeric hammock can also occur on high islands within flatwoods, or on a high, well-drained ridge within a floodplain. Xeric hammock also can occur on barrier islands and in other coastal environs as an advanced successional stage of scrub.

On the GRWMA, xeric hammock is present where former scrub has not burned for many years and also in transition areas from scrub to maritime hammock. Typically, there is a nearly closed canopy of sand live oak. Chapman's oak, myrtle oak and rusty lyonia are common in the subcanopy and tall shrub layer. Saw palmetto dominates the short shrub layer, covering 25 - 50 percent of the strata. Shiny blueberry is infrequent. Herbaceous cover is suppressed by abundant leaf litter, and generally comprises nutrushes, beakrushes, and low panic grass.

Anthropogenic Community Descriptions

Pine plantations are areas altered by silvicultural activities. These include lands where either planted pines are having or will have an ongoing detrimental effect on native groundcover, the history of planted pines has damaged ground cover to the point where further restoration beyond thinning and burning is required, or the method of planting has severely impacted groundcover. Such pine plantations are often dominated by slash pine and typically have sparse to absent herbaceous vegetation.

On the GRWMA, none of the pine plantations were bedded and restoration to mesic flatwoods requires only thinning and burning. When the GRWMA was originally mapped in 2004, FNAI classified 775 acres as pine plantation. Upon re-mapping the area in 2010 and 2011, the total area classified as pine plantation was drastically reduced to just over 87 acres. The vast majority of the acreage that was originally classified as pine plantation was re-classified as mesic flatwoods due to the management activities, including thinning and prescribed fire application, that were implemented during the intervening period.

Impoundment/Artificial Pond is an anthropogenic community type that can include stream or watershed impoundments, water retention ponds, cattle ponds, and borrow pits.

This community type composes nearly 27% of the GRWMA, including both the 2,342-acre area encompassing Lake Ponte Vedra as well as the 27-acre area encompassing McNeils Pond. The areas classified as impoundment/artificial pond on the GRWMA include open water as well as wet flatwoods and basin marsh. Although classified as an anthropogenic community, this land cover type provides vital habitat for a wide number of animal species, including several species of imperiled wading birds.

Spoil areas include places where dredge or spoil material is deposited. A total of 39 acres of the GRWMA are classified as spoil areas, with individual spoil areas ranging in size from less than an acre to more than seven acres. Most of these spoil areas are located along the western border of the GRWMA, adjacent to the Tolomato River. The largest spoil area is located within the mesic flatwoods community on Pine Island.

Clearings account for over 24 acres of the GRWMA and consist entirely of wildlife food plots planted by area management. The food plots that are classified as clearings are generally located within the mesic flatwoods throughout the area and often consist of plantings of iron clay peas, buckwheat, millet, black-oily sunflower, sorghum, purple-top turnips, and Austrian winter pea.

Developed areas can include check stations, ORV use areas, parking lots, buildings, campgrounds, and other altered areas. The single developed area on the GRWMA totals less than one acre and consists of the large parking area, restrooms, and informational kiosk at the Roscoe Boulevard Entrance on the northwest side of the property.

Fish and Wildlife

Rare and Imperiled Species

The area's diverse natural communities provide the resources necessary to sustain large wildlife assemblages and create good habitat conditions for far-ranging species, as well as allowing seasonal movement of wildlife species. Active wildlife management practices combined with a diversity of natural communities make GRWMA an excellent place to view wildlife, especially birds. Nearly 3,000 – 4,000 migratory ducks, American coots (*Fulica Americana*), common moorhens (*Gallinula chloropus*) and pied-billed grebes (*Podilymbus podiceps*) winter at Ponte Vedra Lake.

White pelicans (*Pelecanus erythrorhynchos*), ospreys (*Pandion haliaetus*) and bald eagles (*Haliaeetus leucocephalus*) often fish at the impounded lake. During low water levels, yellowlegs (*Tringa melanoleuca*), short-billed dowitcher (*Limnodromus griseus*), black-necked stilts (*Himantopus mexicanus*), and other shore birds are visible at the lake's north end.

At Big Savannah and other ponds, especially in May through September, wood storks, roseate spoonbills (*Ajaja ajaja*), white ibis (*Eudocimus albus*) and glossy ibis (*Plegadis falcinellus*) may be seen. The Guana Dam and the tower on Hammock Road are excellent spots to photograph and observe birds as well as a variety of other wildlife species.

Table 4. Imperiled Animal Species of GRWMA

Common name	Scientific name	Status
American alligator	<i>Alligator mississippiensis</i>	FT (S/A)
American oystercatcher	<i>Haematopus palliatus</i>	SSC
Black skimmer	<i>Rynchops niger</i>	SSC
Brown pelican	<i>Pelecanus occidentalis</i>	SSC
Eastern indigo snake	<i>Drymarchon corais couperi</i>	FT
Florida manatee	<i>Trichechus manatus latirostris</i>	FE
Florida mouse	<i>Podomys floridanus</i>	SSC
Gopher tortoise	<i>Gopherus polyphemus</i>	ST
Least tern	<i>Sternula antillarum</i>	ST
Limpkin	<i>Aramus guarauna</i>	SSC
Little blue heron	<i>Egretta caerulea</i>	SSC
Piping plover	<i>Charadrius melodus</i>	FT
Reddish egret	<i>Egretta rufescens</i>	SSC
Roseate spoonbill	<i>Platalea ajaja</i>	SSC
Snowy egret	<i>Egretta thula</i>	SSC
Tricolored heron	<i>Egretta tricolor</i>	SSC

Table 4. Imperiled Animal Species of GRWMA

Common name	Scientific name	Status
White ibis	<i>Eudocimus albus</i>	SSC
Wood stork	<i>Mycteria americana</i>	FT

Abbreviation	Status
FT	Federal Threatened
FT (S/A)	Federally Threatened due to Similarity of Appearance
FE	Federal Endangered
ST	State Threatened
SSC	Species of Special Concern

In January 2010, a Wildlife Conservation Prioritization and Recovery (WCPR) strategy was approved for the GRWMA. This strategy, reviewed by area staff, regional staff and species experts, identified focal wildlife species for the GRWMA, needed management prescriptions and monitoring protocols. These focal species are listed in Table 5.

Table 5. Focal Species Identified as having Potential Habitat on GRWMA

Common Name	Scientific Name	Status
Anastasia Island beach mouse	<i>Peromyscus polionotus phasma</i>	FE
Bachman's sparrow	<i>Aimophila aestivalis</i>	NL
Brown-headed nuthatch	<i>Sitta pusilla</i>	NL
Cooper's hawk	<i>Accipiter cooperii</i>	NL
Florida black bear	<i>Ursus americanus floridanus</i>	NL
Florida mouse	<i>Podomys floridanus</i>	SSC
Florida pine snake	<i>Pituophis melanoleucus mugitus</i>	SSC
Gopher frog	<i>Lithobates capito</i>	SSC
Gopher tortoise	<i>Gopherus polyphemus</i>	ST
Limpkin	<i>Aramus guarauna</i>	SSC
Northern bobwhite	<i>Colinus virginianus</i>	NL
Painted bunting	<i>Passerina ciris</i>	NL
Red-cockaded woodpecker	<i>Picoides borealis</i>	FE
Sherman's fox squirrel	<i>Sciurus niger shermani</i>	SSC
Southern bald eagle	<i>Haliaeetus leucocephalus</i>	NL
Striped newt	<i>Notophthalmus perstriatus</i>	NL
Swallow-tailed kite	<i>Elanoides forficatus</i>	NL
Wading birds	<i>Multiple spp.</i>	

Abbreviation	Status
FE	Federally Endangered
NL	Not Listed
ST	State Threatened
SSC	Species of Special Concern

All abbreviations and status determinations were derived from *Florida's Endangered and Threatened Species List* published by FWC in October 2011. FWC maintains the state list of animals designated as Federally-designated Endangered or Threatened, State-designated Threatened or State-designated Species of Special Concern, in accordance with Rules 68A-27.003 and 68A-27.005, respectively, of the F.A.C. <https://www.flrules.org/>.

On November 8, 2010 new threatened species rules approved by the Commission went into effect. The list of wildlife presented here reflects those changes to the rules. All federally listed species that occur in Florida are now included on Florida's list as Federally-designated Endangered or Federally-designated Threatened species. In addition, the state has a listing process to identify species that are not federally listed but at risk of extinction. These species will be called State-designated Threatened. All State-designated species that have recently undergone status reviews were presented and approved at the June 2011 Commission meeting. FWC will continue to maintain a separate Species of Special Concern category until all the species are reviewed and either designated as State Threatened, and/or given a management plan and/or removed from the list. More detailed descriptions and management prescriptions are available on the FWC website <http://www.myfwc.com/wildlifehabitats/profiles/>.

An inventory of observed bird species on or nearby the GRWMA is displayed in Table 6. Other observed fish and wildlife species are listed in Tables 7 – 10.

Table 6. Avian Species of GRWMA

Common name	Scientific name
Acadian flycatcher	<i>Empidonax vireescens</i>
American bittern	<i>Botaurus lentiginosus</i>
American black duck	<i>Anas rubripes</i>
American coot	<i>Fulica americana</i>
American crow	<i>Corvus brachyrhynchos</i>
American golden-plover	<i>Pluvialis dominica</i>
American goldfinch	<i>Carduelis tristis</i>
American kestrel	<i>Falco sparverius paulus</i>
American oystercatcher	<i>Haematopus palliatus</i>
American redstart	<i>Setophaga ruticilla</i>

Table 6. Avian Species of GRWMA

Common name	Scientific name
American robin	<i>Turdus migratorius</i>
American white pelican	<i>Pelecanus erythrorhynchos</i>
American wigeon	<i>Anas americana</i>
American woodcock	<i>Scolopax minor</i>
Anhinga	<i>Anhinga anhinga</i>
Bachman's sparrow	<i>Aimophila aestivalis</i>
Barn owl	<i>Tyto alba</i>
Barn swallow	<i>Hirundo rustica</i>
Barred owl	<i>Strix varia</i>
Bay-breasted warbler	<i>Setophaga castanea</i>
Belted kingfisher	<i>Megasceryle alcyon</i>
Black and white warbler	<i>Mniotilta varia</i>
Black scoter	<i>Melanitta nigra</i>
Black skimmer	<i>Rynchops niger</i>
Black vulture	<i>Coragyps atratus</i>
Black-bellied plover	<i>Pluvialis squatarola</i>
Black-bellied whistling duck	<i>Dendrocygna autumnalis</i>
Black-crowned night-heron	<i>Nycticorax nycticorax</i>
Black-necked stilt	<i>Himantopus mexicanus</i>
Black-throated blue warbler	<i>Setophaga caerulescens</i>
Black-throated green warbler	<i>Setophaga virens</i>
Blue grosbeak	<i>Passerina caerulea</i>
Blue jay	<i>Cyanocitta cristata</i>
Blue-gray gnatcatcher	<i>Polioptila caerulea</i>
Blue-headed vireo	<i>Vireo solitarius</i>
Blue-winged teal	<i>Anas discors</i>
Boat-tailed grackle	<i>Quiscalus major</i>
Bobolink	<i>Dolichonyx oryzivorus</i>
Bonaparte's gull	<i>Chroiocephalus philadelphia</i>
Brant	<i>Branta bernicla</i>
Brown noddy	<i>Anous stolidus</i>
Brown thrasher	<i>Toxostoma rufum</i>
Brown-headed cowbird	<i>Molothrus ater</i>
Brown-headed nuthatch	<i>Sitta pusilla</i>
Bufflehead	<i>Bucephala albeola</i>
Canada goose	<i>Branta canadensis</i>
Canvasback	<i>Aythya valisineria</i>
Cape May warbler	<i>Setophaga tigrina</i>
Carolina chickadee	<i>Poecile carolinensis</i>

Table 6. Avian Species of GRWMA

Common name	Scientific name
Carolina wren	<i>Thryothorus ludovicianus</i>
Caspian tern	<i>Hydroprogne caspia</i>
Cattle egret	<i>Bubulcus ibis</i>
Cedar waxwing	<i>Bombycilla cedrorum</i>
Chestnut-sided warbler	<i>Setophaga pensylvanica</i>
Chimney swift	<i>Chaetura pelagica</i>
Chipping sparrow	<i>Spizella passerina</i>
Chuck-will's-widow	<i>Caprimulgus carolinensis</i>
Clapper rail	<i>Rallus longirostris</i>
Common eider	<i>Somateria mollissima</i>
Common goldeneye	<i>Bucephala clangula</i>
Common grackle	<i>Quiscalus quiscula</i>
Common ground-dove	<i>Columbina passerina</i>
Common loon	<i>Gavia immer</i>
Common moorhen	<i>Gallinula chloropus</i>
Common nighthawk	<i>Chordeiles minor</i>
Common snipe	<i>Gallinago gallinago</i>
Common tern	<i>Sterna hirundo</i>
Common yellowthroat	<i>Geothlypis trichas</i>
Dark-eyed junco	<i>Junco hyemalis</i>
Double-crested cormorant	<i>Phalacrocorax auritus</i>
Downy woodpecker	<i>Picoides pubescens</i>
Dunlin	<i>Calidris alpina</i>
Eastern bluebird	<i>Sialia sialis</i>
Eastern brown pelican	<i>Pelecanus occidentalis carolinensis</i>
Eastern kingbird	<i>Tyrannus tyrannus</i>
Eastern meadowlark	<i>Sturnella magna</i>
Eastern phoebe	<i>Sayornis phoebe</i>
Eastern screech-owl	<i>Megascops asio</i>
Eastern towhee	<i>Pipilo erythrophthalmus</i>
Eastern wood-pewee	<i>Contopus virens</i>
European starling	<i>Sturnus vulgaris</i>
Field sparrow	<i>Spizella pusilla</i>
Fish crow	<i>Corvus ossifragus</i>
Forster's tern	<i>Sterna forsteri</i>
Fox sparrow	<i>Passerella iliaca</i>
Fulvous whistling-duck	<i>Dendrocygna bicolor</i>
Gadwall	<i>Anas strepera</i>
Glossy ibis	<i>Plegadis falcinellus</i>

Table 6. Avian Species of GRWMA

Common name	Scientific name
Gray catbird	<i>Dumetella carolinensis</i>
Great black-backed gull	<i>Larus marinus</i>
Great blue heron	<i>Ardea herodias</i>
Great egret	<i>Ardea alba</i>
Great horned owl	<i>Bubo virginianus</i>
Great-crested flycatcher	<i>Myiarchus crinitus</i>
Greater scaup	<i>Aythya marila</i>
Greater yellowlegs	<i>Tringa melanoleuca</i>
Green heron	<i>Butorides virescens</i>
Green-winged teal	<i>Anas crecca</i>
Gull-billed tern	<i>Gelochelidon nilotica</i>
Hairy woodpecker	<i>Picoides villosus</i>
Hermit thrush	<i>Catharus guttatus</i>
Herring gull	<i>Larus argentatus</i>
Hooded merganser	<i>Lophodytes cucullatus</i>
Hooded warbler	<i>Setophaga citrina</i>
Horned grebe	<i>Podiceps auritus</i>
House wren	<i>Troglodytes aedon</i>
Indigo bunting	<i>Passerina cyanea</i>
Killdeer	<i>Charadrius vociferus</i>
King rail	<i>Rallus elegans</i>
Laughing gull	<i>Leucophaeus atricilla</i>
Least bittern	<i>Ixobrychus exilis</i>
Least sandpiper	<i>Calidris minutilla</i>
Least tern	<i>Sternula antillarum</i>
Lesser black-backed gull	<i>Larus fuscus</i>
Lesser scaup	<i>Aythya affinis</i>
Lesser yellowlegs	<i>Tringa flavipes</i>
Limpkin	<i>Aramus guarauna</i>
Little blue heron	<i>Egretta caerulea</i>
Loggerhead shrike	<i>Lanius ludovicianus</i>
Long-billed dowitcher	<i>Limnodromus scolopaceus</i>
Long-tailed duck	<i>Clangula hyemalis</i>
Magnificent frigatebird	<i>Fregata magnificens</i>
Magnolia warbler	<i>Setophaga magnolia</i>
Mallard duck	<i>Anas platyrhynchos</i>
Marbled godwit	<i>Limosa fedoa</i>
Marsh wren	<i>Cistothorus palustris</i>
Merlin	<i>Falco columbarius</i>

Table 6. Avian Species of GRWMA

Common name	Scientific name
Mottled duck	<i>Anas fulvigula</i>
Mourning dove	<i>Zenaida macroura</i>
Northern bobwhite	<i>Colinus virginianus</i>
Northern cardinal	<i>Cardinalis cardinalis</i>
Northern flicker	<i>Colaptes auratus</i>
Northern gannet	<i>Morus bassanus</i>
Northern harrier	<i>Circus cyaneus</i>
Northern mockingbird	<i>Mimus polyglottos</i>
Northern parula	<i>Setophaga americana</i>
Northern pintail	<i>Anas acuta</i>
Northern rough-winged swallow	<i>Stelgidopteryx serripennis</i>
Northern shoveler	<i>Anas clypeata</i>
Orange-crowned warbler	<i>Oreothlypis celata</i>
Orchard oriole	<i>Icterus spurius</i>
Osprey	<i>Pandion haliaetus</i>
Ovenbird	<i>Seiurus aurocapilla</i>
Painted bunting	<i>Passerina ciris</i>
Palm warbler	<i>Setophaga palmarum</i>
Peregrine falcon	<i>Falco peregrinus</i>
Pied-billed grebe	<i>Podilymbus podiceps</i>
Pileated woodpecker	<i>Dryocopus pileatus</i>
Pine warbler	<i>Setophaga pinus</i>
Piping plover	<i>Charadrius melodus</i>
Prairie warbler	<i>Setophaga discolor</i>
Purple finch	<i>Carpodacus purpureus</i>
Purple gallinule	<i>Porphyrio martinicus</i>
Purple martin	<i>Progne subis</i>
Red knot	<i>Calidris canutus</i>
Red-bellied woodpecker	<i>Melanerpes carolinus</i>
Red-breasted merganser	<i>Mergus serrator</i>
Red-breasted nuthatch	<i>Sitta canadensis</i>
Reddish egret	<i>Egretta rufescens</i>
Red-eyed vireo	<i>Vireo olivaceus</i>
Redhead	<i>Aythya americana</i>
Red-headed woodpecker	<i>Melanerpes erythrocephalus</i>
Red-shouldered hawk	<i>Buteo lineatus</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Red-throated loon	<i>Gavia stellata</i>
Red-winged blackbird	<i>Agelaius phoeniceus</i>

Table 6. Avian Species of GRWMA

Common name	Scientific name
Ring-billed gull	<i>Larus delawarensis</i>
Ring-necked duck	<i>Aythya collaris</i>
Rock dove	<i>Columba livia</i>
Roseate spoonbill	<i>Platalea ajaja</i>
Rose-breasted grosbeak	<i>Pheucticus ludovicianus</i>
Royal tern	<i>Thalasseus maximus</i>
Ruby-crowned kinglet	<i>Regulus calendula</i>
Ruby-throated hummingbird	<i>Archilochus colubris</i>
Ruddy duck	<i>Oxyura jamaicensis</i>
Ruddy turnstone	<i>Arenaria interpres</i>
Saltmarsh sharp-tailed sparrow	<i>Ammodramus caudacutus</i>
Sanderling	<i>Calidris alba</i>
Sandwich tern	<i>Thalasseus sandvicensis</i>
Savannah sparrow	<i>Passerculus sandwichensis</i>
Seaside sparrow	<i>Ammodramus maritimus</i>
Sedge wren	<i>Cistothorus platensis</i>
Semipalmated plover	<i>Charadrius semipalmatus</i>
Sharp-shinned hawk	<i>Accipiter striatus</i>
Short-billed dowitcher	<i>Limnodromus griseus</i>
Short-tailed hawk	<i>Buteo brachyurus</i>
Snow goose	<i>Chen caerulescens</i>
Snowy egret	<i>Egretta thula</i>
Solitary sandpiper	<i>Tringa solitaria</i>
Song sparrow	<i>Melospiza melodia</i>
Sora rail	<i>Porzana carolina</i>
Southern bald eagle	<i>Haliaeetus leucocephalus leucocephalus</i>
Spotted sandpiper	<i>Actitis macularius</i>
Summer tanager	<i>Piranga rubra</i>
Surf scoter	<i>Melanitta perspicillata</i>
Swainson's thrush	<i>Catharus ustulatus</i>
Swallow-tailed kite	<i>Elanoides forficatus</i>
Swamp sparrow	<i>Melospiza georgiana</i>
Tree swallow	<i>Tachycineta bicolor</i>
Tricolored heron	<i>Egretta tricolor</i>
Tufted titmouse	<i>Baeolophus bicolor</i>
Tundra swan	<i>Cygnus columbianus</i>
Turkey vulture	<i>Cathartes aura</i>
Veery	<i>Catharus fuscescens</i>
Vesper sparrow	<i>Poocetes gramineus</i>

Table 6. Avian Species of GRWMA

Common name	Scientific name
Virginia rail	<i>Rallus limicola</i>
Water pipit	<i>Anthus spinoletta</i>
Western kingbird	<i>Tyrannus verticalis</i>
Western sandpiper	<i>Calidris mauri</i>
Whip-poor-will	<i>Caprimulgus vociferus</i>
White ibis	<i>Eudocimus albus</i>
White-eyed vireo	<i>Vireo griseus</i>
White-throated sparrow	<i>Zonotrichia albicollis</i>
White-winged scoter	<i>Melanitta fusca</i>
Wild turkey	<i>Meleagris gallopavo</i>
Willet	<i>Tringa semipalmata</i>
Wilson's plover	<i>Charadrius wilsonia</i>
Wilson's snipe	<i>Gallinago delicata</i>
Wood duck	<i>Aix sponsa</i>
Wood stork	<i>Mycteria americana</i>
Wood thrush	<i>Hylocichla mustelina</i>
Yellow warbler	<i>Setophaga petechia</i>
Yellow-bellied sapsucker	<i>Sphyrapicus varius</i>
Yellow-billed cuckoo	<i>Coccyzus americanus</i>
Yellow-crowned night heron	<i>Nyctanassa violacea</i>
Yellow-rumped warbler	<i>Setophaga coronata</i>
Yellow-throated vireo	<i>Vireo flavifrons</i>
Yellow-throated warbler	<i>Setophaga dominica</i>

Table 7. Reptilian and Amphibian Species of GRWMA

Common name	Scientific name
American alligator	<i>Alligator mississippiensis</i>
Broad-headed skink	<i>Plestiodon laticeps</i>
Coastal dunes crowned snake	<i>Tantilla relicta pamlica</i>
Dusky pygmy rattlesnake	<i>Sistrurus miliarius barbouri</i>
Eastern coral snake	<i>Micrurus fulvius</i>
Eastern diamondback rattlesnake	<i>Crotalus adamanteus</i>
Eastern garter snake	<i>Thamnophis sirtalis</i>
Eastern glass lizard	<i>Ophisaurus ventralis</i>
Eastern indigo snake	<i>Drymarchon corais couperi</i>

Table 7. Reptilian and Amphibian Species of GRWMA

Common name	Scientific name
Eastern narrow-mouthed toad	<i>Gastrophryne carolinensis</i>
Eastern rat snake	<i>Pantherophis alleghaniensis</i>
Eastern spadefoot	<i>Scaphiopus holbrookii</i>
Florida cottonmouth	<i>Agkistrodon piscivorus conanti</i>
Florida snapping turtle	<i>Chelydra serpentina osceola</i>
Florida softshell turtle	<i>Apalone ferox</i>
Gopher tortoise	<i>Gopherus polyphemus</i>
Greater siren	<i>Siren lacertina</i>
Green anole	<i>Anolis carolinensis</i>
Green treefrog	<i>Hyla cinerea</i>
Ground skink	<i>Scincella lateralis</i>
Little grass frog	<i>Pseudacris ocularis</i>
Mole salamander	<i>Ambystoma talpoideum</i>
Mud turtle	<i>Kinosternon spp.</i>
Oak toad	<i>Anaxyrus quercicus</i>
Peninsula ribbon snake	<i>Thamnophis sauritus sackenii</i>
Pig frog	<i>Lithobates grylio</i>
Pine woods snake	<i>Rahdinaea flavilata</i>
Pinewoods treefrog	<i>Hyla femoralis</i>
Scarlet snake	<i>Cemophora coccinea</i>
Six-lined racerunner	<i>Cnemidophorus sexlineatus</i>
Skinks	<i>Plestiodon spp.</i>
Southern black racer	<i>Coluber constrictor priapus</i>
Southern leopard frog	<i>Lithobates sphenoccephalus</i>
Southern ringneck snake	<i>Diadophis punctatus punctatus</i>
Southern toad	<i>Anaxyrus terrestris</i>
Squirrel treefrog	<i>Hyla squirella</i>
Striped crayfish snake	<i>Regina alleni</i>
Striped newt	<i>Notophthalmus perstriatus</i>

Table 19. Mammalian Species of GRWMA

Common name	Scientific name
Bobcat	<i>Lynx rufus</i>
Cotton mouse	<i>Peromyscus gossypinus</i>
Cotton mouse	<i>Peromyscus gossypinus</i>
Coyote	<i>Canis latrans</i>
Eastern woodrat	<i>Neotoma floridana</i>
Florida black bear	<i>Ursus americanus floridanus</i>
Florida manatee	<i>Trichechus manatus latirostris</i>

Table 19. Mammalian Species of GRWMA

Common name	Scientific name
Florida mouse	<i>Podomys floridanus</i>
Golden mouse	<i>Ochrotomys nuttalli</i>
Gray fox	<i>Urocyon cinereoargenteus</i>
Gray squirrel	<i>Sciurus carolinensis</i>
Hispid cotton rat	<i>Sigmodon hispidus</i>
Marsh rabbit	<i>Sylvilagus palustris</i>
Opossum	<i>Didelphis virginiana</i>
Raccoon	<i>Procyon lotor</i>
River otter	<i>Lontra canadensis</i>
Short-tail shrew	<i>Blarina carolinensis</i>
Southern flying squirrel	<i>Glaucomys volans</i>
Striped skunk	<i>Mephitis mephitis</i>
White-tailed deer	<i>Odocoileus virginianus</i>

Table 9. Fish Species of GRWMA

Common name	Scientific name
American eel	<i>Anguilla rostrata</i>
Anchovy	<i>Anchoa spp.</i>
Atlantic croaker	<i>Micropogonias undulatus</i>
Atlantic stingray	<i>Dasyatis sabina</i>
Black drum	<i>Pogonias cromis</i>
Bluefish	<i>Pomatomus saltatrix</i>
Bluegill	<i>Lepomis macrochirus</i>
Bowfin	<i>Amia calva</i>
Brown bullhead	<i>Ameiurus nebulosus</i>
Eastern mosquitofish	<i>Gambusia affinis</i>
Florida gar	<i>Lepisosteus osseus</i>
Flounders	<i>Paralichthys spp.</i>
Gizzard shad	<i>Dorosoma cepedianum</i>
Golden shiner	<i>Notemigonus crysoleucas</i>
Hardhead catfish	<i>Ariopsis felis</i>
Hickory shad	<i>Alosa mediocris</i>
Jack crevalle	<i>Caranx hippos</i>
Ladyfish	<i>Elops saurus</i>
Lake chubsucker	<i>Erimyzon sucetta</i>
Largemouth bass	<i>Micropterus salmoides floridanus</i>
Menhaden	<i>Brevoortia spp.</i>
Mojarra	<i>Eucinostomus spp.</i>
Mollies	<i>Poecilia spp.</i>

Table 9. Fish Species of GRWMA

Common name	Scientific name
Needlefish	<i>Strongylura spp.</i>
Pinfish	<i>Lagodon rhomboides</i>
Red drum	<i>Sciaenops ocellatus</i>
Redear sunfish	<i>Lepomis microlophus</i>
Seminole killifish	<i>Fundulus seminolis</i>
Sheepshead	<i>Archosargus probatocephalus</i>
Sheepshead minnow	<i>Cyprinodon variegatus</i>
Silver perch	<i>Bairdiella chrysoura</i>
Snook	<i>Centropomus spp.</i>
Spot	<i>Leiostomus xanthurus</i>
Spotted seatrout	<i>Cynoscion nebulosus</i>
Striped mullet	<i>Mugil cephalus</i>
Tarpon	<i>Megalops atlanticus</i>
Threadfin shad	<i>Dorosoma petenense</i>
Warmouth	<i>Lepomis gulosus</i>

Table 20. Invertebrate Species of GRWMA

Common name	Scientific name
American oyster	<i>Crassostrea virginica</i>
Barnacles	<i>Balanus spp.</i>
Blue crab	<i>Callinectes sapidus</i>
Brown shrimp	<i>Farfantepenaeus aztecus</i>
Fiddler crab	<i>Uca pugnax</i>
Grass shrimp	<i>Palaemonetes spp.</i>
Horseshoe crab	<i>Limulus polyphemus</i>
Pink shrimp	<i>Farfantepenaeus duorarum</i>
Sand fiddler crab	<i>Uca pugilator</i>
Stone crab	<i>Menippe spp.</i>
White shrimp	<i>Litopenaeus setiferus</i>

Management Intent

Management of wildlife on the GRWMA includes efforts designed to perpetuate all species of wildlife native to the area. The FWC uses a comprehensive resource management approach to managing FWC-managed areas. Restoring the form and function of Florida's natural communities is the foundation of this management philosophy. FWC uses Objective-based Vegetation Management (OBVM) to monitor how specific vegetative parameters are responding to FWC management. OBVM includes the delineation of

management units and quantification of the desired future condition for the natural community.

In addition, FWC uses the WCPR program to ensure management is having the desired effect on wildlife as another important component of FWC's comprehensive resource management approach to managing FWC-managed areas. The goal of WCPR is to provide assessment, recovery and planning support for FWC-managed areas to enhance management of focal species and recovery of imperiled species. The WCPR program objectives include prioritizing what FWC does for imperiled and focal species on FWC-managed areas; ensuring the actions taken on these areas are part of statewide conservation programs and priorities; and informing others about the work accomplished on lands FWC manages.

Conditions Affecting Intensity of Management

Resources described in this management prospectus indicate conditions affecting intensity of management. These include natural community types, topography and soils, surface and ground water conditions, extent of historic disturbance and already existing improvements. Environmentally sensitive areas, such as erosion-prone sites, important habitats and outstanding natural areas and wetlands shall be identified, appropriately managed and protected.

The FWC conducts analysis of historic vegetation of natural community types when necessary to determine appropriate desired future conditions. Upland wildlife management concentrates on appropriate vegetative manipulations, primarily the application of prescribed fire, to achieve conditions acceptable to a broad range of wildlife species. Areas sometimes require ecological restoration of ground cover, control of invasive species and reforestation. Such resource management projects may be necessary to accomplish restoration objectives to attain the desired future condition. This is especially important for conservation of habitats and populations of imperiled or rare species. Landscape ecology is also important. Land use changes in the vicinity of a managed area may affect attainment of resource conservation goals for the area and effectiveness of necessary resource management projects.

Timetable for Implementing Management Provisions

A management plan has been developed by FWC describing the management goals and objectives necessary to implement future resource management. The management plan also establishes the current and future roles of cooperating entities including governmental agencies, non-governmental organizations and other stakeholders.

Long-range plans will stress ecosystem management and the protection and management of focal, species of special concern, rare and imperiled species. Historic analysis of natural communities and vegetation types may be conducted if deemed necessary. Quantified vegetation management objectives shall be developed. The FWC shall assess the condition of wildlife resources and provide planning support to enhance management of focal species and recovery of imperiled species on GRWMA. Use of prescribed fire and other resource management activities shall maintain and restore natural communities and vegetation types to benefit native wildlife resources.

Estimate of Revenue-Generating Potential

The revenue generating potential of the GRWMA will depend upon future uses to be approved in the management plan. However, revenue from such environmental lands might include sales of various permits and recreational user fees and ecotourism activities, if such projects could be economically developed. Additional revenue may be generated from potential timber sales. The annual area regulations can be consulted to clarify the necessary and required permits, fees and regulations. The long-term values of ecosystem services to local and regional land and water resources and to human health are expected to be significant. The Legislature appropriates funds for land management.

Recommendations as to Other Governmental Agency Involvement

FWC will cooperate with other state and local governmental agencies including the U.S. Fish and Wildlife Service, Florida Forest Service, DEP, SJRWMD, St. Johns County, among others, in the continuing management of the property.

Estimate of Costs

Following is an estimate of costs to operate and manage the GRWMA under the GRWMA Management Plan. Optimal management of the GRWMA would require three full-time equivalent (FTE) positions to optimally manage the area. Salary requirements for these FTE positions, as well as those of other needed FWC staff, and costs to operate and manage the GRWMA are reflected in the cost estimates below. All land management funding is dependent upon annual legislative appropriations.

Guana River WMA Management Plan Cost Estimate
Maximum expected one year expenditure

<u>Resource Management</u>	<u>Expenditure</u>	<u>Priority</u>	<u>Priority schedule:</u>
Exotic Species Control	\$7,638	(1)	(1) Immediate (annual)
Prescribed Burning	\$31,421	(1)	(2) Intermediate (3-4 years)
Cultural Resource Management	\$2,169	(1)	(3) Other (5+ years)
Timber Management	\$3,033	(1)	
Hydrological Management	\$51,274	(1)	
Other (Restoration, Enhancement, Surveys, Monitoring, etc.)	\$111,871	(1)	
Subtotal	\$207,406		
<u>Administration</u>			
General administration	\$9,751	(1)	
<u>Support</u>			
Land Management Planning	\$43,586	(1)	
Land Management Reviews	\$0	(3)	
Training/Staff Development	\$6,506	(1)	
Vehicle Purchase	\$94,379	(2)	
Vehicle Operation and Maintenance	\$64,922	(1)	
Other (Technical Reports, Data Management, etc.)	\$3,731	(1)	
Subtotal	\$213,124		
<u>Capital Improvements</u>			
New Facility Construction	\$0	(2)	
Facility Maintenance	\$98,991	(1)	
Subtotal	\$98,991		
<u>Visitor Services/Recreation</u>			
Info./Education/Operations	\$22,746	(1)	
<u>Law Enforcement</u>			
Resource protection	\$8,964	(1)	
<u>Total</u>	\$560,982 *		

* Based on the characteristics and requirements of this area, three FTE positions would be optimal to fully manage this area. All land management funding is dependent upon annual legislative appropriations.

Guana River WMA Management Plan Cost Estimate
Ten-year projection

<u>Resource Management</u>	<u>Expenditure</u>	<u>Priority</u>	Priority schedule:
Exotic Species Control	\$67,111	(1)	(1) Immediate (annual)
Prescribed Burning	\$276,071	(1)	(2) Intermediate (3-4 years)
Cultural Resource Management	\$19,055	(1)	(3) Other (5+ years)
Timber Management	\$26,647	(1)	
Hydrological Management	\$450,503	(1)	
Other (Restoration, Enhancement, Surveys, Monitoring, etc.)	\$982,907	(1)	
Subtotal	\$1,822,294		
<u>Administration</u>			
General administration	\$85,672	(1)	
<u>Support</u>			
Land Management Planning	\$382,951	(1)	
Land Management Reviews	\$8,030	(3)	
Training/Staff Development	\$57,166	(1)	
Vehicle Purchase	\$332,122	(2)	
Vehicle Operation and Maintenance	\$570,413	(1)	
Other (Technical Reports, Data Management, etc.)	\$32,781	(1)	
Subtotal	\$1,383,463		
<u>Capital Improvements</u>			
New Facility Construction	\$6,652	(2)	
Facility Maintenance	\$869,743	(1)	
Subtotal	\$876,395		
<u>Visitor Services/Recreation</u>			
Info./Education/Operations	\$199,847	(1)	
<u>Law Enforcement</u>			
Resource protection	\$78,763	(1)	
<u>Total</u>	\$4,446,434 *		

* Based on the characteristics and requirements of this area, three FTE positions would be optimal to fully manage this area. All land management funding is dependent upon annual legislative appropriations.



Figure 1. GRWMA Proximity Map with Section, Township and Range

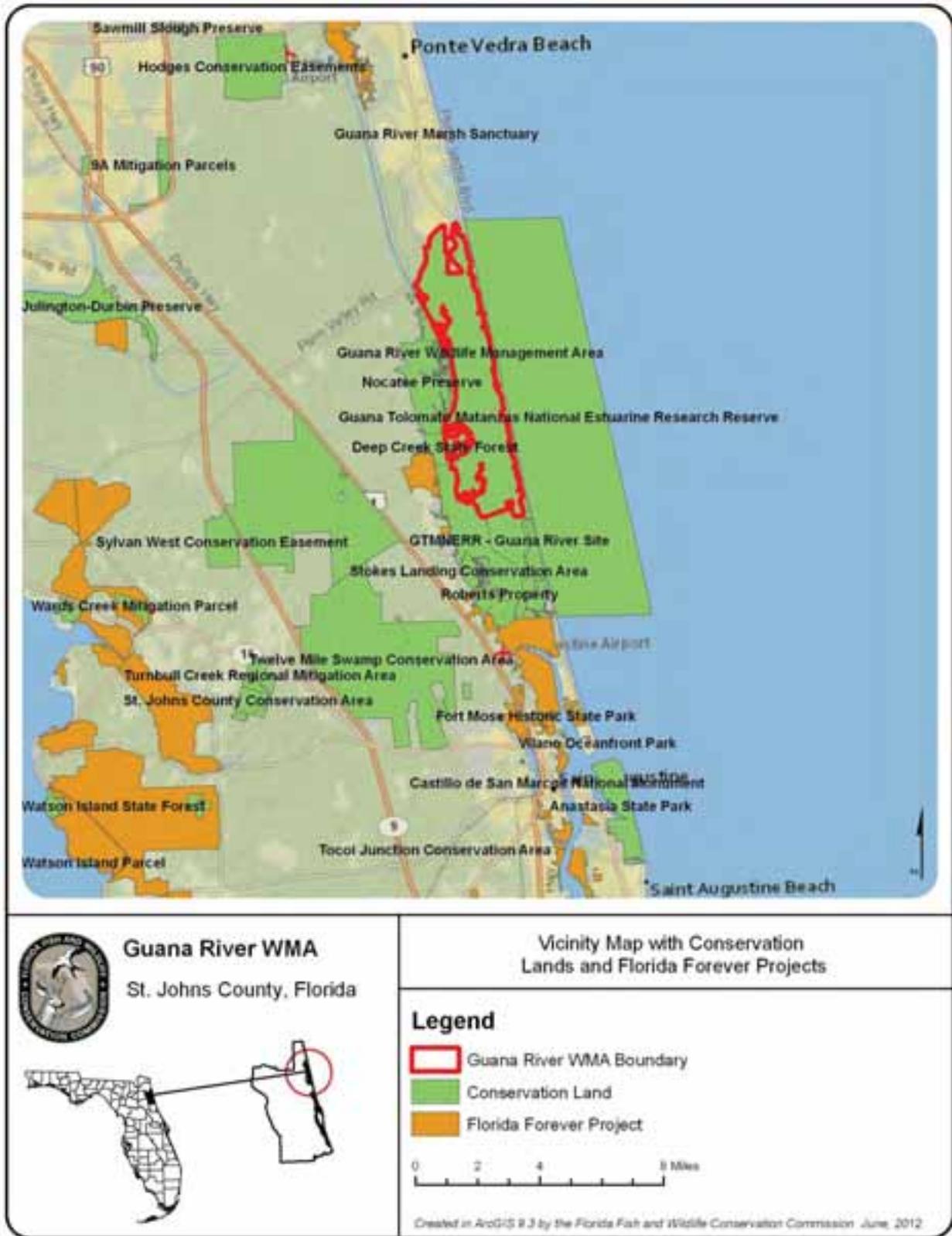


Figure 2. Vicinity Map with Conservation Land and Florida Forever Projects

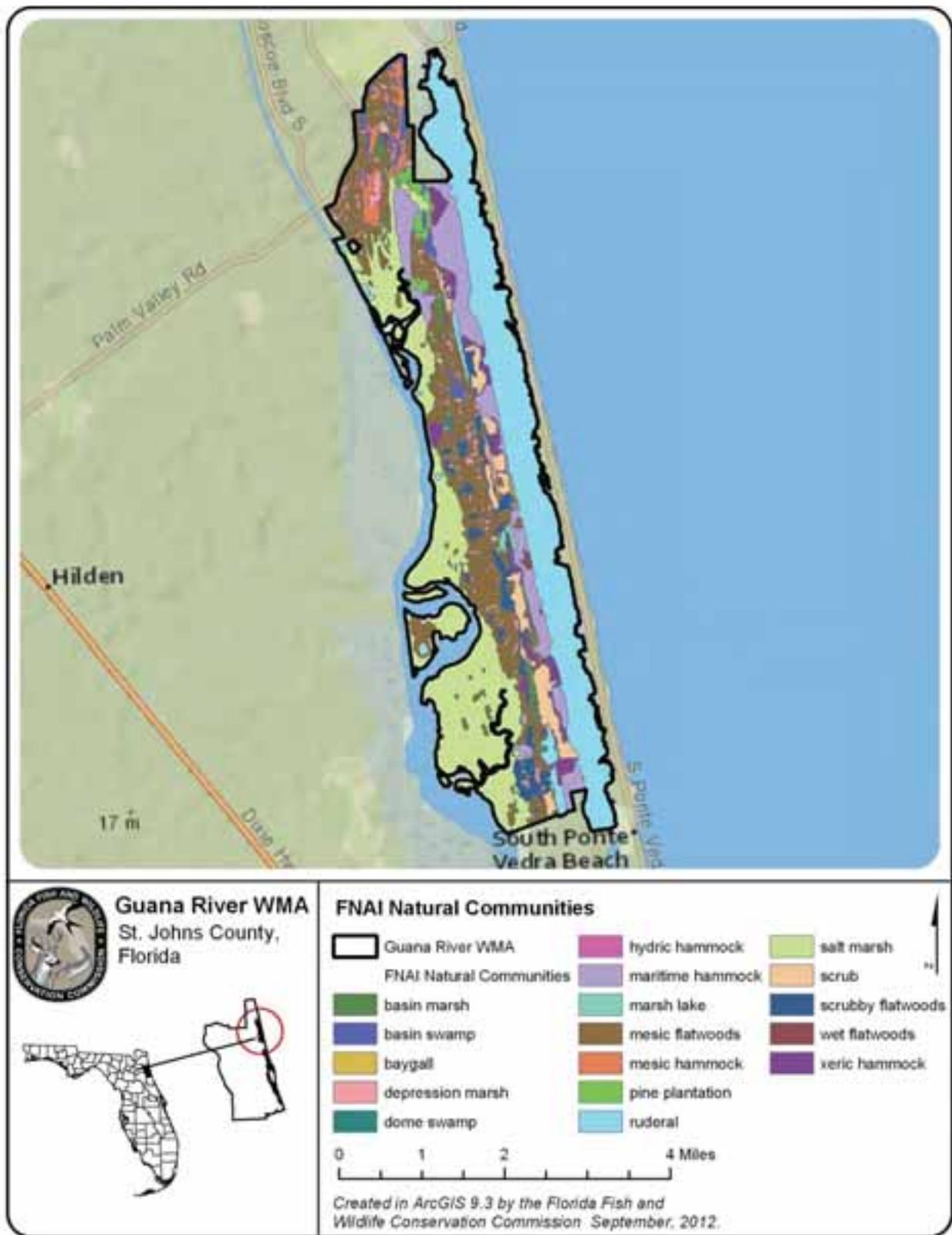


Figure 3. GRWMA Natural Communities



Figure 4. FWC Wildlife Observations and FNAI Element Occurrences
Florida Fish and Wildlife Conservation Commission | Guana River WMA Management Plan

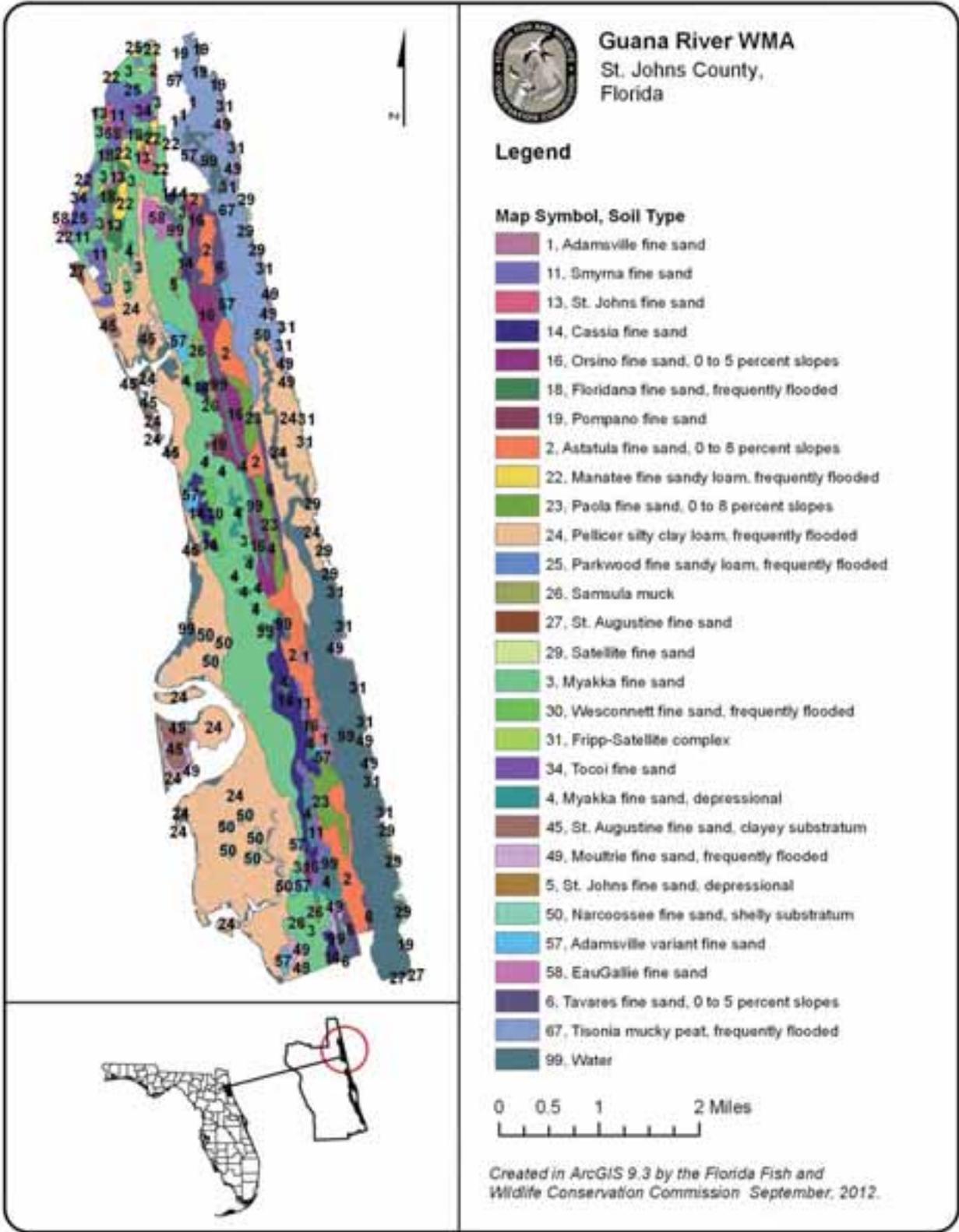


Figure 5. GRWMA Soils



Figure 6. Soils – Depth to Water Table

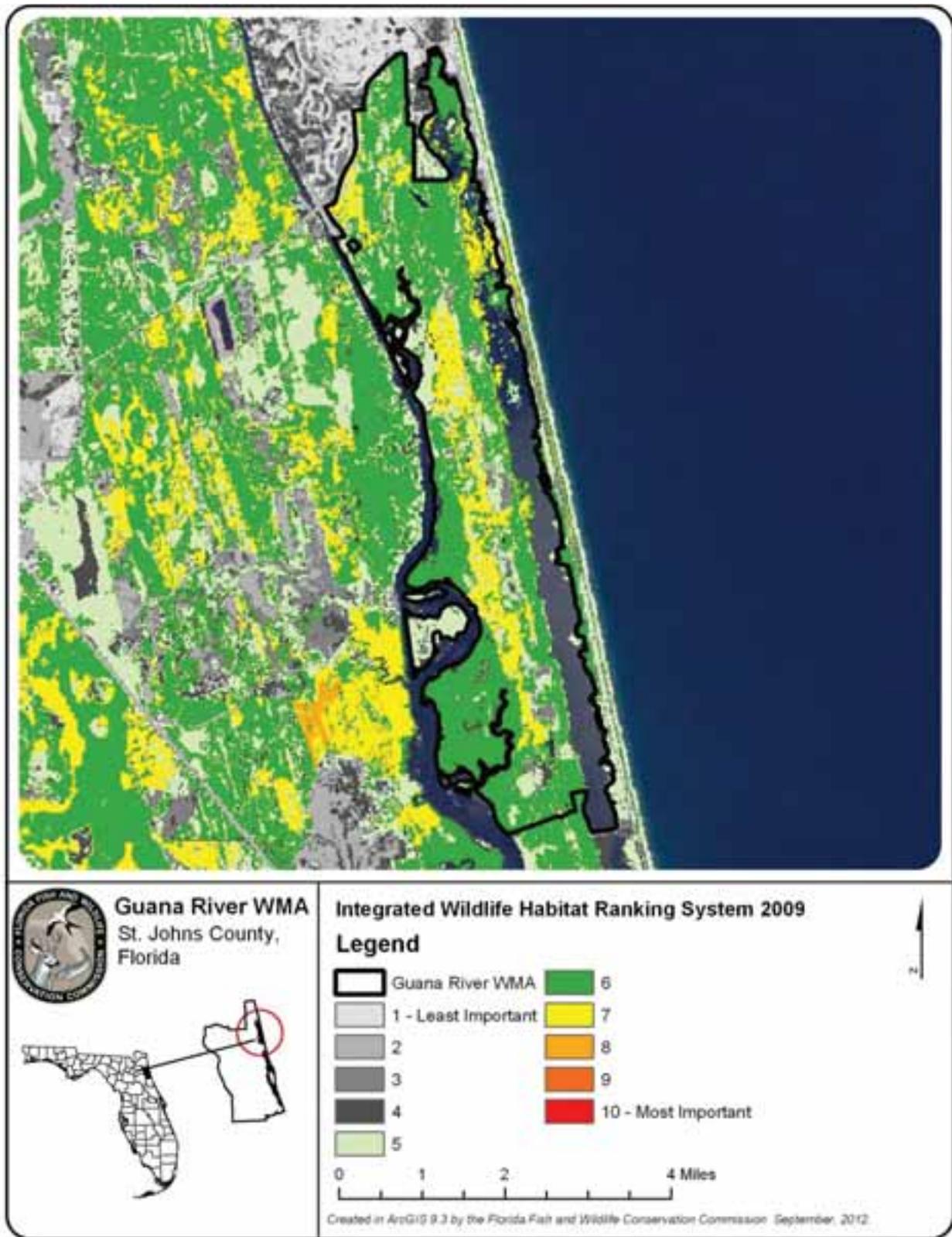


Figure 7. FWC Integrated Wildlife Habitat Ranking System 2009

13.5 Land Management Review Report

2014 Land Management Review Team Report for Guana River Wildlife Management Area

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1. Introduction

Section 259.036, F.S. requires a periodic on-site review of conservation and recreation lands titled in the name of the Board of Trustees to determine (1) whether the lands are being managed for the purposes for which they were acquired and (2) whether they are being managed in accordance with their land management plan adopted pursuant to s. 259.032, F.S. In case where the managed areas exceed 1,000 acres in size, such a review must be scheduled at least every five years. In conducting this review, a statutorily constructed review team "shall evaluate the extent to which the existing management plan provides sufficient protection to threatened or endangered species, unique or important natural or physical features, geological or hydrological functions or archaeological features. The review shall also evaluate the extent to which the land is being managed for the purposes for which it was acquired and the degree to which actual management practices, including public access, are in compliance with the adopted management plan."

The land management review teams are coordinated by the Division of State Lands and consist of representatives from the Division of Recreation and Parks (DEP), the Florida Forest Service (DACS), the Fish and Wildlife Conservation Commission, the local government in which the property is located, the DEP District in which the parcel is located, the local soil and water conservation district, a conservation organization member, and a local private land manager.

Each Land Management Review Report is divided into three sections. Section 1 provides the details of the property being reviewed as well as the overall results of the report. Section 2 provides details of the Field Review, in which the Review Team inspects the results of management actions on the site. Section 3 provides details of the Land Management Plan Review, in which the team determines the extent to which the Management Plan provides for and documents adequate natural and recreational resource protection.

Finally, each report may also contain an Appendix that lists individual team member comments. This is a compilation of feedback, concerns or other thoughts raised by individual team members, but not necessarily indicative of the final consensus reached by the Land Management Review Team.

1.1. Property Reviewed in this Report

Name of Site: Guana River Wildlife Management Area
Managed by: Fish & Wildlife Conservation Commission
Acres: 4,500.85
Purpose(s) for Acquisition:
Acquisition Program(s): CARL/SOR
Area Reviewed: Entire Property

County(ies): St. Johns County

Original Acquisition Date: 03/14/85
Last Management Plan Approval Date: 6/28/12
Review Date: 03/18/14

Agency Manager and Key Staff Present:

- Justin Ellenberger, Manager
- Samantha Dupree
- Jimmy Conner, District Biologist
- Travis Bennett

Review Team Members Present (voting)

- DRP: Jason DePue
- SWCD:
- FWC: Travis Blunden
- Local gov't:
- FFS: Bill Korn
- Conservation organization: Gail Duggins
- DEP:
- Private land manager:

Other Non-Team Members Present (attending)

- Keith Singleton, DEP/DSL
- Alex Farr, FNPS
- Gary Raulerson, DEP/FCO
- Michael Duggins, FNPS

1.2 Property Map



1.3. Overview of Land Management Review Results

Is the property managed in accordance with the purposes for which it was acquired?

Yes = 4, No = 0

Are the management practices, including public access, in compliance with the management plan?

Yes = 4, No = 0

Table I shows the average scores received for each applicable category of review. *Field Review* scores refer to the adequacy of management actions in the field, while *Management Plan Review* scores refer to adequacy of discussion of these topics in the management plan. Scores range from 1 to 5 with 5 signifying excellence. For a more detailed key to the scores, please see Appendix A.

Table 1: Results at a glance.

Major Land Management Categories	Field Review	Management Plan Review
Natural Communities / Forest Management	4.49	3.97
Prescribed Fire / Habitat Restoration	4.75	3.99
Hydrology	2.98	2.56
Imperiled Species	4.06	2.53
Exotic / Invasive Species	3.89	3.10
Cultural Resources	3.75	3.75
Public Access / Education / Law Enforcement	4.06	3.44
Infrastructure / Equipment / Staffing	3.57	N/A

Color Code (See Appendix A for detail)

Exceeds	Above Average	Below Average	Poor
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1.3.1 Consensus Commendations for the Managing Agency

The following commendations resulted from discussion and vote of the review team members:

1. The team commends the FWC for their research efforts to evaluate the effectiveness of various methods of mechanical fuel manipulation to manage scrub habitat. (4+, 0-)
2. The team commends the FWC for their efforts to make areas more accessible for ADA purposes. (4+, 0-)
3. The team commends the FWC for their excellent fire management of the flatwoods natural communities within a fire return of 2-4 years. (4+, 0-)

4. The team commends the FWC for their OBVM program and their natural community goals for restoration. (4+, 0-)

5. The team commends the FWC for work with water level/salinity manipulation of Lake Ponte Vedra for the benefit of waterfowl, wading birds, and shorebirds. (4+, 0-)

6. The team commends the FWC manager and staff for preparation of an excellent package of maps and detailed data for use by the LMR team. (4+, 0-)

1.3.2. Consensus Recommendations to the Managing Agency

The following recommendations resulted from a discussion and vote of review team members. The next management plan update should include information about how these recommendations have been addressed:

1. The team recommends that FWC staff assess opportunities to burn some scrub units under conditions that promote intensive fire behavior, reducing the need for mechanical treatments. (4+, 0-)

Managing Agency Response: *FWC is currently conducting an ongoing, adaptive management research study on scrub management. This project starting in 1999 with 100% of scrub units roller chopped and burned. Vegetation studies have shown mowing and burning can achieve the same result with less ground disturbance. Current research is looking at treating 50% of the unit mechanically with mowing in linear strips, crosshatch pattern, or perimeter mow. Early results show that we can achieve the same result by treating only 50% of the scrub mechanically. FWC will continue to work to restore scrub units on GRWMA and achieve the recommended fire return intervals and desired future conditions.*

2. The team recommends that FWC staff continue efforts to reduce the amount of pine that has recruited into depression marshes. (4+, 0-)

Managing Agency Response: *FWC staff are currently implementing recommendations from a 2009 report from the Coastal Plains Institute titled "Inventory, Assessment, and Restoration Potential of Ephemeral Wetlands on FFWCC Wildlife Management Areas". These recommendations include use of prescribed fire and mechanical removal of pines from ephemeral wetlands. FWC will continue to work to restore depression marshes on GRWMA and achieve the recommended fire return intervals and desired future conditions.*

2. Field Review Details

2.1 Field Review Checklist Findings

The following items received high scores on the review team checklist, which indicates that management actions exceeded expectations.

1. **Natural Communities**, specifically basin marsh, impounded marsh, salt marsh, dome swamp/basin swamp, mesic flatwoods, scrub, maritime hammock, mesic hammock, xeric hammock and marsh lake:
2. **Listed Species Protection and Preservation**, animals in general, gopher tortoise:
3. **Natural Resources Survey/Monitoring Resources**, specifically sport fish or their habitat monitoring, listed species or their habitat monitoring, fire effects monitoring, other habitat management effects monitoring and invasive species survey/monitoring:
4. **Cultural Resources**, specifically protection and preservation:
5. **Prescribed Fire**, specifically area being burned, frequency and quality:
6. **Forest Management**, specifically timber inventory and timber harvesting:
7. **Non-Native, Invasive & Problem Species**, specifically plants, animal and pests/pathogens prevention and control of plants:
8. **Hydro-alteration**, specifically water level alteration and dams, reservoirs or other impoundment:
9. **Ground Water Monitoring**, specifically quality and quantity:
10. **Surface Water Monitoring**, specific quality and quantity:
11. **Resource Protection**, specifically boundary survey, gates and fencing, signage, and law enforcement presence:
12. **Adjacent Property Concerns**, specifically inholdings/additions:
13. **Public Access and Education**, specifically roads, parking and boat access:
14. **Environmental Education & Outreach**, specifically habitat management activities, interpretive facilities and signs and management of visitor impacts:
15. **Management Resources**, specifically waste disposal:

2.2. Items Requiring Improvement Actions in the Field

The following items received low scores on the review team checklist, which indicates that management actions noted during the Field Review were not considered sufficient (less than 3.0 score on average).

Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. **The management plan update should include information on how these items have been addressed:**

1. **Environmental Education & Outreach**, specifically invasive species, received a below average score. The review team is asked to evaluate, based on information provided by the managing agency, whether environmental education & outreach are sufficient.

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Managing Agency Response: Invasive flora and fauna and their management are topics included in outreach and educational events. Outreach events have been given to the University of Florida wildlife ecology class field trip, Boy Scouts of America, Northeast Florida Scrub Working Group, Northeast Florida Invasive Working Group, National Estuaries Day, and Society for Ecological Restoration. FWC will continue to work to expand environmental education and outreach regarding invasive species.

2.3. Field Review Checklist and Scores

Field Review Item	Reference #	Anonymous Team Members								Average
		1	2	3	4	5	6	7	8	
Natural Communities (I.A)										
Basin Marsh	I.A.1	4	4	5	5					4.50
Impounded Marsh	I.A.2	4	4	5	5					4.50
Salt Marsh	I.A.3	5	5	5	5					5.00
Dome Swamp/Basin Swamp	I.A.4	4	4	5	5					4.50
Mesic Flatwoods	I.A.5	3	5	5	5					4.50
Scrub	I.A.6	5	5	5	5					5.00
Maritime Hammock	I.A.7	4	5	5	5					4.75
Mesic Hammock	I.A.8	4	5	5						4.67
Scrubby Flatwoods	I.A.9	3	4	4						3.67
Depression Marsh	I.A.10	3	4	4	4					3.75
Xeric Hammock	I.A.11	X	5	4	4					4.33
Marsh Lake	I.A.12	X	4	X	5					4.50
Natural Communities Average Score										4.47
Listed species: Protection & Preservation (I.B)										
Animals	I.B.1	2		5	5					4.00
Gopher Tortoise	I.B.1.a	4	4	5	5					4.50
Plants	I.B.2	2		5	4					3.67
Listed Species Average Score										4.06
Natural Resources Survey/Management Resources (I.C)										
Sport fish or their habitat monitoring	I.C.1	4	4	4	4					4.00
Listed species or their habitat monitoring	I.C.2	3	4	4	5					4.00
Other non-game species or their habitat monitoring	I.C.3	2	4	5	4					3.75
Fire effects monitoring	I.C.4	4		4	5					4.33
Other habitat management effects monitoring	I.C.5	3		5	4					3.00
Invasive species survey / monitoring	I.C.6	5		5	5					5.00
Cultural Resources (Archaeological & Historic sites) (II.A, II.B)										
Cultural Res. Survey	II.A	3	4	4	3					3.50
Protection and preservation	II.B	3	4	5	4					4.00

Cultural Resources Average Score										4.75	
Resource Management, Prescribed Fire (III.A)											
Area Being Burned (no. acres)	III.A.1	5	4	5	5						4.75
Frequency	III.A.2	5	4	5	5						4.75
Quality	III.A.3	5	4	5	5						4.75
Resource Management, Prescribed Fire Average Score										4.75	
Forest Management (III.C)											
Timber Inventory	III.C.1	4	4	5	5						4.50
Timber Harvesting	III.C.2	4	4	5	5						4.50
Forest Management Average Score										4.50	
Non-Native, Invasive & Problem Species (III.D)											
Prevention											
prevention - plants	III.D.1.a	4		4	4						4.00
prevention - animals	III.D.1.b	5	3	4	4						4.00
prevention - pests/pathogens	III.D.1.c	5		4	4						4.33
Control											
control - plants	III.D.2.a	3	5	5	5						4.50
control - animals	III.D.2.b	4	2	4	4						3.50
control - pest/pathogens	III.D.2.c	1	4	4	3						3.00
Non-Native, Invasive & Problem Species Average Score										4.80	
Hydrologic/Geologic function Hydro-Alteration (III.E.1)											
Roads/culverts	III.E.1.a	3	4	4	4						3.75
Ditches	III.E.1.b	3	3	4	4						3.50
Hydro-period Alteration	III.E.1.c	3	2	4	4						3.25
Water Level Alteration	III.E.1.d	4	4	4	4						4.00
Dams, Reservoirs or other Impoundments	III.E.1.e	4	4	5	5						4.50
Hydrologic/Geologic function, Hydro-Alteration Average Score										3.81	
Ground Water Monitoring (III.E.2)											
Ground water quality	III.E.2.a		4	4	4						4.00
Ground water quantity	III.E.2.b		4	4	4						4.00
Ground Water Monitoring Average Score										4.00	
Surface Water Monitoring (III.E.3)											
Surface water quality	III.E.3.a	3	4	5	4						4.00
Surface water quantity	III.F.3.b	4	4	5	4						4.25
Surface Water Monitoring Average Score										4.13	
Resource Protection (III.F)											
Boundary survey	III.F.1	5	4	5	5						4.75
Gates & fencing	III.F.2	5	4	5	4						4.50
Signage	III.F.3	5	4	4	4						4.25
Law enforcement presence	III.F.4	3	4	4	5						4.00
Resource Protection Average Score										4.38	
Adjacent Property Concerns (III.G)											
Land Use											

Expanding development	III.G.1.a	3	4	3	5						3.75
Inholdings/additions	III.G.2	3		3	4						3.33
Public Access & Education (IV.1, IV.2, IV.3, IV.4, IV.5)											
Public Access											
Roads	IV.1.a	3		4							3.50
Parking	IV.1.b	3		4							3.50
Environmental Education & Outreach											
Wildlife	IV.2.a	2	5	4	4						4.25
Invasive Species	IV.2.b	2	3	4	2						2.75
Habitat Management Activities	IV.2.c	4	4	4	4						4.00
Interpretive facilities and signs	IV.3	5	4	5	5						4.75
Recreational Opportunities	IV.4	3	4	4	4						3.75
Management of Visitor Impacts	IV.5	3	4	5	4						4.00
Public Access & Education Average Score											3.75
Management Resources (V.1, V.2, V.3, V.4)											
Maintenance											
Waste disposal	V.1.a	3	4	4	5						4.00
Sanitary facilities	V.1.b	3	4	4	4						3.75
Infrastructure											
Buildings	V.2.a	3	2	3	4						3.00
Equipment	V.2.b	3		4	4						3.67
Staff	V.3	3	3	4	3						3.25
Funding	V.4	3	4	4	4						3.75
Management Resources Average Score											3.57

Color Code: Excellent Above Average Below Average Poor Missing Vote Insufficient Information See Appendix A for detail

3. Land Management Plan Review Details

3.1 Items Requiring Improvements in the Management Plan

The following items received low scores on the review team checklist, which indicates that the text noted in the Management Plan Review does not sufficiently address this issue (less than 3.0 score on average). Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. The next management plan update should address the checklist items identified below:

1. **Natural Communities, specifically xeric hammock and marsh lake, received below average scores. This is an indication that the management plan does not sufficiently address current or desired condition and/or future management actions to protect or restore.**

Managing Agency Response: FWC notes that FNAI remapped and recertified the natural communities of Guana River WMA in 2011, subsequent to the management plan approval in 2002. FWC will revise the natural community descriptions, maps, and desired future conditions in the next update of the management plan which will be submitted to DEP in 2014.

2. **Listed species: Protection & Preservation, specifically animals and plants, received below average scores. This is an indication that the management plan does not sufficiently address protection and preservation of species.**

Managing Agency Response: FWC notes that the existing management plan for GRWMA provided information regarding the protection and preservation of animals and plants, including discussion of plant and animal resources in Section II-C, plant and animal species lists in Tables 3 through 8, and associated goals and objectives regarding protection and preservation of plant and wildlife species in Section V. However, since completion and approval of the 2002 GRWMA management plan, FWC has completed a Wildlife Conservation Prioritization and Recovery (WCPR) Strategy for GRWMA, which provides further guidance on the protection and preservation of animal species and associated habitats. This WCPR Strategy, along with updated discussions of natural communities and associated plant species and management, expanded plant and animal species lists, as well as expanded goals and objectives regarding the preservation and protection of species will be included in the updated management plan for GRWMA to be submitted to DEP in 2014. Additionally, in Section 1.3.1 of this LMR report FWC has received commendations on the implementation of OBVM and the natural community goals for restoration, which benefits the protection and preservation of plant and animal species.

3. **Natural Resources Survey and Monitoring Resources, specifically listed species or their habitat monitoring, received a below average score. This is an indication that the management plan does not sufficiently address survey or monitoring.**

Managing Agency Response: FWC notes that the field review checklist findings of this LMR report commends the FWC for natural resources survey/monitoring resources including the monitoring of listed species or their habitat. Additionally, as noted above, in Section 1.3.1 of this LMR report FWC has received commendations on the implementation of OBVM and the natural community goals for restoration, which includes the monitoring of habitat for listed species. Additionally, FWC notes that the existing management plan for GRWMA provided information regarding the survey and monitoring of listed plant and animal species, including discussion of imperiled plant and animal resources in Section II-C, a list of imperiled animal species in Table 8, and associated goals and objectives regarding protection and preservation of listed plant and animal species in Section V. However, since completion and approval of the 2002 GRWMA management plan, FWC has completed a Wildlife Conservation Prioritization and Recovery (WCPR) Strategy for GRWMA, which provides further guidance on the protection and preservation of animal species, including listed species, and associated habitats. This WCPR Strategy, along with updated discussions of natural communities and associated plant species

and management, expanded imperiled plant and animal species lists, as well as expanded goals and objectives regarding the monitoring of imperiled species will be included in the updated management plan for GRWMA to be submitted to DEP in 2014. As noted above, FWC has implemented an OBVM program which

4. **Non-Native, Invasive & Problem Species, specifically prevention of pest/pathogens, received a below average score. This is an indication that the management plan does not sufficiently address prevention of invasive species.**

Managing Agency Response: FWC notes that both the existing GRWMA management plan and the updated plan to be submitted in 2014 contain goals and objectives regarding the treatment and eradication of non-native invasive species on the area. Additionally, the control and prevention of invasive exotic plants and animals are addressed in Section V of the current management plan. FWC will expand the discussion of exotic invasive species prevention and control measures in the update to the management plan.

The reference to "pests and pathogens" is not clear to FWC since it is not a required element of management plans. However, FWC will evaluate the need to address the issue of pests/pathogens in the scheduled management plan update. Additionally, FWC addresses the introduction of pests and pathogens on a case-by-case basis and for some areas, specifically in South Florida, this issue is more acute and those management plans discuss how this issue can be most adequately addressed. For example, on some areas FWC has recommended constructing a vehicle and equipment washing facility to prevent the introduction of pests and pathogens. However, the introduction of pests/pathogens was not determined to be a significant issue that needed to be addressed on the GRWMA during the recent workshop for the updated management plan. If it is determined that the introduction of pests/pathogens is a significant problem on GRWMA, it will be addressed in the updated management plan that will be submitted to DEP in 2014.

5. **Adjacent Property Concerns, specifically discussion of potential surplus land determination, received a below average score. This is an indication that the management plan does not sufficiently address surplus lands.**

Managing Agency Response: FWC notes that the existing management plan provides limited information regarding potential surplus lands in the area on pages 43 and 44. However, FWC will provide an expanded discussion of FWC's methodology and analysis for determining potential surplus lands in the area in the management plan update for GRWMA that will be submitted to DEP in 2014.

6. **Environmental Education & Outreach, specifically invasive species, received a below average score. This is an indication that the management plan does not sufficiently address visitor impacts.**

Managing Agency Response: FWC will provide an expanded discussion of environmental education and outreach, specifically in regards to invasive species, in the management plan update that will be submitted to DEP in 2014.

3.2 Management Plan Review Checklist and Scores

Plan Review Item	Reference #	Anonymous Team Members								Average
		1	2	3	4	5	6	7	8	
Natural Communities (I.A)										
Basin Marsh	I.A.1	5	4	3	3					3.75
Impounded Marsh	I.A.2	5	4	4	3					4.00
Salt Marsh	I.A.3	5	4	4	3					4.00
Dome Swamp/Basin Swamp	I.A.4	5	4	4	3					4.00
Mesic Flatwoods	I.A.5	5	5	4	3					4.25
Scrub	I.A.6	5	5	4	3					4.25
Maritime Hammock	I.A.7	5	4	4	3					4.00
Mesic Hammock	I.A.8	5	4	4	3					4.00
Scrubby Flatwoods	I.A.9	5	4	3	3					3.75
Depression Marsh	I.A.10	5	4	3	3					3.75
Xeric Hammock	I.A.11	1	4	1	1					1.75
Marsh Lake	I.A.12	1	4	1	1					1.75
Natural Communities Average Score										3.63
Listed species: Protection & Preservation (I.B)										
Animals	I.B.1	2		2	2					2.00
Gopher Tortoise	I.B.1.a	5	4	2	2					3.25
Plants	I.B.2	3		2	2					2.33
Listed Species Average Score										2.53
Natural Resources Survey/Management Resources (I.C)										
Sport fish or their habitat monitoring	I.C.1	4	3	2	3					3.00
Listed species or their habitat monitoring	I.C.2	2	3	2	3					2.50
Other non-game species or their habitat monitoring	I.C.3	2	3	3	4					3.00
Fire effects monitoring	I.C.4	4		4	5					4.33
Other habitat management effects monitoring	I.C.5	3		3	5					3.67
Invasive species survey / monitoring	I.C.6	4		3	3					3.33
Cultural Resources (Archeological & Historic sites) (II.A,II.B)										
Cultural Res. Survey	II.A	4	4	3	3					3.50
Protection and preservation	II.B	4	4	3	5					4.00
Cultural Resources Average Score										3.75
Resource Management, Prescribed Fire (III.A)										
Area Being Burned (no. acres)	III.A.1	5	4	2	5					4.00
Frequency	III.A.2	5	4	2	5					4.00
Quality	III.A.3	5	4	2	4					3.75

Resource Management, Prescribed Fire Average Score										3.92
Forest Management (III.C)										
Timber Inventory	III.C.1	4	4	5						4.33
Timber Harvesting	III.C.2	4	4	5						4.33
Forest Management Average Score										4.33
Non-Native, Invasive & Problem Species (III.D)										
Prevention										
prevention - plants	III.E.1.a	3	4	3	4					3.50
prevention - animals	III.E.1.b	5	4	3	3					3.75
prevention - pests/pathogens	III.E.1.c	1		3	3					2.33
Control										
control - plants	III.E.2.a	3		3	3					3.00
control - animals	III.E.2.b	5		3	3					3.67
control - pest/pathogens	III.E.2.c	1		3	3					2.33
Non-Native, Invasive & Problem Species Average Score										3.10
Hydrologic/Geologic function, Hydro-Alteration (III.E.1)										
Roads/culverts	III.F.1.a	3		3	4					3.50
Ditches	III.F.1.b	3		3	3					3.00
Hydro-period Alteration	III.F.1.c	3	4	3	5					3.75
Water Level Alteration	III.F.1.d	4	4	3	4					3.75
Dams, Reservoirs or other impoundments	III.F.1.e	4		4	4					4.00
Hydrologic/Geologic function, Hydro-Alteration Average Score										3.57
Ground Water Monitoring (III.E.2)										
Ground water quality	III.F.2.a	4	4	3	3					3.50
Ground water quantity	III.F.2.b	4	4	3	3					3.50
Ground Water Monitoring Average Score										3.50
Surface Water Monitoring (III.E.3)										
Surface water quality	III.F.3.a	3	4	3	4					3.50
Surface water quantity	III.F.3.b	4	4	3	4					3.75
Surface Water Monitoring Average Score										3.03
Resource Protection (III.F)										
Boundary survey	III.G.1	5	4	4	3					4.00
Gates & fencing	III.G.2	5	4	4	3					4.00
Signage	III.G.3	5	4	3	3					3.75
Law enforcement presence	III.G.4	3	4	3	3					3.25
Resource Protection Average Score										3.75
Adjacent Property Concerns (III.G)										
Land Use										
Expanding development	III.H.1.a	3		3	3					3.00
Inholdings/additions	III.H.2	3		4	5					4.00
Discussion of Potential Surplus Land Determination	III.H.3	1		3	2					2.00
Surplus lands identified?	III.H.4	1		3	5					3.00

Public Access & Education (IV.1, IV.2, IV.3, IV.4, IV.5)										
Public Access										
Roads	IV.1.a	2		3	4					3.00
Parking	IV.1.b	3		3	4					3.33
Environmental Education & Outreach										
Wildlife	IV.2.a	2	4	3						3.00
Invasive Species	IV.2.b	2		3	3					2.67
Habitat Management Activities	IV.2.c	4		3	3					3.33
Interpretive facilities and signs	IV.3	5		3	3					3.67
Recreational Opportunities	IV.4	3		3	3					3.00
Management of Visitor Impacts	IV.5	3		3	3					3.00
Public Access & Education Average Score									3.17	
Managed Area Uses (VI.A, VI.B)										
Existing Uses										
Hunting	VI.A.1	5	4	5	5					4.75
Fishing	VI.A.2	5	4	5	5					4.75
Wildlife Observation	VI.A.3	2	4	5	5					4.00
Photography	VI.A.4	2	4	5	5					4.00
Hiking	VI.A.5	5	4	5	5					4.75
Bicycling	VI.A.6	5	4	4	5					4.50
Horseback Riding	VI.A.7	5	4	4	5					4.50
Picnicking	VI.A.8	2	4	5	5					4.00
Boating	VI.A.9	5	4	5	5					4.75
Proposed Uses										

Color Code: Excellent Some Concern Some Concern Poor Missing Vote Insufficient Information See Appendix A for detail

Appendix A: Scoring System Detail

Explanation of Consensus Commendations:

Often, the exceptional condition of some of the property's attributes impress review team members. In those instances, team members are encouraged to offer positive feedback to the managing agency in the form of a commendation. The teams develop commendations generally by standard consensus processes or by majority vote if they cannot obtain a true consensus.

Explanation of Consensus Recommendations:

Subsection 259.036(2), F.S., specifically states that the managing entity shall consider the findings and recommendations of the land management review. We ask team members to provide general recommendations for improving the management or public access and use of the property. The teams discuss these recommendations and develop consensus recommendations as described above. We provide these recommendations to the managing agency to consider when finalizing the required ten-year management plan update. We encourage the manager to respond directly to these recommendations and include their responses in the final report when received in a timely manner.

Explanation of Field Review Checklist and Scores, and Management Plan Review Checklist and Scores:

We provide team members with a checklist to fill out during the evaluation workshop phase of the Land Management Review. The checklist is the uniform tool used to evaluate both the management actions and condition of the managed area, and the sufficiency of the management plan elements. During the evaluation workshop, team members individually provide scores on each issue on the checklist, from their individual perspective. Team members also base their evaluations on information provided by the managing agency staff as well as other team member discussions. Staff averages these scores to evaluate the overall conditions on the ground, and how the management plan addresses the issues. Team members must score each management issue 1 to 5: 1 being the management practices are clearly insufficient, and 5 being that the management practices are excellent. Members may choose to abstain if they have inadequate expertise or information to make a cardinal numeric choice, as indicated by an "X" on the checklist scores, or they may not provide a vote for other unknown reasons, as indicated by a blank. If a majority of members failed to vote on any issue, that issue is determined to be irrelevant to management of that property or it was inadequately reviewed by the team to make an intelligent choice. In either case staff eliminated the issue from the report to the manager.

Average scores are interpreted as follows:

- Scores 4.0 to 5.0 are *Excellent*
- Scores 3.0 to 3.99 are *Above Average*.
- Scores 2.0 to 2.99 are *Below Average*
- Scores 1.0 to 1.99 are considered *Poor*

13.6 Soil Series Descriptions

Map Unit Description

St. Johns County, Florida

Map unit: 1 - Adamsville fine sand

Component: Adamsville (85%)

The Adamsville component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on rises on marine terraces on coastal plains, flats on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 2 - Astatula fine sand, 0 to 8 percent slopes

Component: Astatula (85%)

The Astatula component makes up 85 percent of the map unit. Slopes are 0 to 8 percent. This component is on ridges on marine terraces on coastal plains, knolls on marine terraces on coastal plains. The parent material consists of eolian or sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is very high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 3 - Myakka fine sand

Component: Myakka, nonhydric (70%)

The Myakka, nonhydric component makes up 70 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: Myakka, hydric (20%)

The Myakka, hydric component makes up 20 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during June, July, August, September. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 4 - Myakka fine sand, depressional

Component: Myakka, depressional (90%)

The Myakka, depressional component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during February, March, April, May, June, July, August, September, October. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map Unit Description

St. Johns County, Florida

Map unit: 5 - St. Johns fine sand, depressional

Component: St. Johns, depressional (85%)

The St. Johns, depressional component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 7e. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 6 - Tavares fine sand, 0 to 5 percent slopes

Component: Tavares (85%)

The Tavares component makes up 85 percent of the map unit. Slopes are 0 to 5 percent. This component is on ridges on marine terraces on coastal plains. The parent material consists of eolian or sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 57 inches during June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 7 - Immokalee fine sand

Component: Immokalee, nonhydric (70%)

The Immokalee, nonhydric component makes up 70 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains, rises on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: Immokalee, hydric (20%)

The Immokalee, hydric component makes up 20 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 8 - Zolfo fine sand

Component: Zolfo (90%)

The Zolfo component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains, rises on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map Unit Description

St. Johns County, Florida

Map unit: 9 - Pomona fine sand

Component: Pomona, nonhydic (70%)

The Pomona, nonhydic component makes up 70 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during July, August, September. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: Pomona, hydric (20%)

The Pomona, hydric component makes up 20 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August, September. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 11 - Smyrna fine sand

Component: Smyrna, nonhydic (70%)

The Smyrna, nonhydic component makes up 70 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 14 inches during July, August, September, October. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: Smyrna, hydric (20%)

The Smyrna, hydric component makes up 20 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August, September, October. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 12 - Ona fine sand

Component: Ona, nonhydic (65%)

The Ona, nonhydic component makes up 65 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: Ona, hydric (20%)

The Ona, hydric component makes up 20 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60

Map Unit Description

St. Johns County, Florida

Map unit: 12 - Ora fine sand

Component: Ora, hydric (20%)

inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during June, July, August, September. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 13 - St. Johns fine sand

Component: St. Johns, hydric (60%)

The St. Johns, hydric component makes up 60 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 3 inches during January, February, March, April, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: St. Johns, nonhydric (30%)

The St. Johns, nonhydric component makes up 30 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 14 - Cassia fine sand

Component: Cassia (80%)

The Cassia component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains, rises on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during January, July, August, September, October, November, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 15 - Pomello fine sand, 0 to 5 percent slopes

Component: Pomello (85%)

The Pomello component makes up 85 percent of the map unit. Slopes are 0 to 5 percent. This component is on ridges on marine terraces on coastal plains, knolls on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during July, August, September, October, November. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map Unit Description

St. Johns County, Florida

Map unit: 16 - Orsino fine sand, 0 to 5 percent slopes

Component: Orsino (90%)

The Orsino component makes up 90 percent of the map unit. Slopes are 0 to 5 percent. This component is on ridges on marine terraces on coastal plains, knolls on marine terraces on coastal plains. The parent material consists of eolian or sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is very high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 51 inches during June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 18 - Floridana fine sand, frequently flooded

Component: Floridana, frequently flooded (80%)

The Floridana, frequently flooded component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on food plains on marine terraces on coastal plains, drainage ways on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 7 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 19 - Pompano fine sand

Component: Pompano, nonhydric (70%)

The Pompano, nonhydric component makes up 70 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 72 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: Pompano, hydric (20%)

The Pompano, hydric component makes up 20 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 21 - Wabasso fine sand

Component: Wabasso (85%)

The Wabasso component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map Unit Description

St. Johns County, Florida

Map unit: 22 - Manatee fine sandy loam, frequently flooded

Component: Manatee (85%)

The Manatee component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on marine terraces on coastal plains, drainage ways on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during January, February, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 9 percent. Nonirrigated land capability classification is 5s. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 23 - Paola fine sand, 0 to 8 percent slopes

Component: Paola (90%)

The Paola component makes up 90 percent of the map unit. Slopes are 0 to 8 percent. This component is on ridges on marine terraces on coastal plains, hilltops on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is very high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 24 - Pellicer silty clay loam, frequently flooded

Component: Pellicer (90%)

The Pellicer component makes up 90 percent of the map unit. Slopes are 0 to 1 percent. This component is on tidal marshes on marine terraces on coastal plains. The parent material consists of clayey marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches is high. Shrink-swell potential is high. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 19 percent. Nonirrigated land capability classification is 6. This soil meets hydric criteria. The soil has a strongly saline horizon within 30 inches of the soil surface. The soil has a strongly sodic horizon within 30 inches of the soil surface.

Map unit: 25 - Parkwood fine sandy loam, frequently flooded

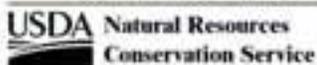
Component: Parkwood (90%)

The Parkwood component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on marine terraces on coastal plains, drainage ways on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 8 percent. Nonirrigated land capability classification is 5s. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 15 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 26 - Samsula muck

Component: Samsula (90%)

The Samsula component makes up 90 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of herbaceous organic material over sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September.



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Map Unit Description

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Map unit: 26 - Samsula muck

Component: Samsula (90%)

October, November, December: Organic matter content in the surface horizon is about 60 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 27 - St. Augustine fine sand

Component: St. Augustine (95%)

The St. Augustine component makes up 95 percent of the map unit. Slopes are 0 to 2 percent. This component is on adjacent to tidal marshes flats on marine terraces on coastal plains. The parent material consists of sandy mine spoil or earthy fill. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 27 inches during July, August, September, October. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 28 - Beaches

Component: Beaches (95%)

Generated brief soil descriptions are created for major soil components. The Beaches is a miscellaneous area.

Map unit: 29 - Satellite fine sand

Component: Satellite (90%)

The Satellite component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on interdunal flats on marine terraces on coastal plains, rises on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is very high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 27 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 8s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 30 - Wesconnett fine sand, frequently flooded

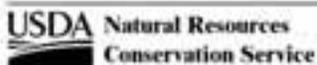
Component: Wesconnett (90%)

The Wesconnett component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on drainageways on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 6s. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 31 - Fripp-Satellite complex

Component: Fripp (55%)

The Fripp component makes up 55 percent of the map unit. Slopes are 8 to 15 percent. This component is on dunes on marine terraces on coastal plains. The parent material consists of eolian or sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation.



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Map Unit Description

St. Johns County, Florida

Map unit: 31 - Fripp-Satellite complex

Component: Fripp (55%)

within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: Satellite (20%)

The Satellite component makes up 20 percent of the map unit. Slopes are 0 to 2 percent. This component is on interdunal flats on marine terraces on coastal plains, interdunal swales on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is very high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 27 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 32 - Palm Beach sand, 0 to 5 percent slopes

Component: Palm Beach (90%)

The Palm Beach component makes up 90 percent of the map unit. Slopes are 0 to 5 percent. This component is on dunes on marine terraces on coastal plains, ridges on marine terraces on coastal plains. The parent material consists of shells and sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is very high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 13 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 33 - Jonathan fine sand

Component: Jonathan (90%)

The Jonathan component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on knolls on marine terraces on coastal plains, ridges on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 48 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 34 - Tocoi fine sand

Component: Tocoi, nonhydric (65%)

The Tocoi, nonhydric component makes up 65 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, August, September, October, November, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: Tocoi, hydric (20%)

The Tocoi, hydric component makes up 20 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of

Map Unit Description

St. Johns County, Florida

Map unit: 34 - Toco fine sand

Component: Toco, hydric (20%)

60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during January, February, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3v. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 35 - Horton muck

Component: Horton (90%)

The Horton component makes up 90 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of herbaceous organic material. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 3v. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 36 - Riviera fine sand, frequently flooded

Component: Riviera, frequently flooded (85%)

The Riviera, frequently flooded component makes up 85 percent of the map unit. Slopes are 0 to 1 percent. This component is on flood plains on marine terraces on coastal plains, drainage ways on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5v. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 38 - Pts

Component: Pts (100%)

Generated brief soil descriptions are created for major soil components. The Pts is a miscellaneous area.

Map unit: 40 - Pottsburg fine sand

Component: Pottsburg, nonhydric (70%)

The Pottsburg, nonhydric component makes up 70 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, July, August, September, October, November, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4v. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: Pottsburg, hydric (20%)

The Pottsburg, hydric component makes up 20 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August, September, October. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land

Map Unit Description

St. Johns County, Florida

Map unit: 40 - Pottsburg fine sand

Component: Pottsburg, hydric (20%)

capability classification is 4e. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 41 - Tomoka muck

Component: Tomoka (80%)

The Tomoka component makes up 80 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of herbaceous organic material over loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 90 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 42 - Bluff sandy clay loam, frequently flooded

Component: Bluff (85%)

The Bluff component makes up 85 percent of the map unit. Slopes are 0 to 1 percent. This component is on flood plains on marine terraces on coastal plains, drainageways on marine terraces on coastal plains. The parent material consists of loamy and clayey marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is high. Shrink-swell potential is high. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 8 inches during July, August, September, October, November, December. Organic matter content in the surface horizon is about 38 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 11 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 44 - Spart fine sand, 0 to 5 percent slopes

Component: Spart (85%)

The Spart component makes up 85 percent of the map unit. Slopes are 0 to 5 percent. This component is on rises on marine terraces on coastal plains, knolls on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during July, August, September, October. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 45 - St. Augustine fine sand, clayey substratum

Component: St. Augustine, clayey substratum (90%)

The St. Augustine, clayey substratum component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains, rises on marine terraces on coastal plains. The parent material consists of sandy mine spoil or earthy fill. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 27 inches during July, August, September, October. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map Unit Description

St. Johns County, Florida

Map unit: 46 - Holopaw fine sand

Component: Holopaw, nonhydic (70%)

The Holopaw, nonhydic component makes up 70 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: Holopaw, hydric (15%)

The Holopaw, hydric component makes up 15 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during July, August. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 47 - Holopaw fine sand, frequently flooded

Component: Holopaw, frequently flooded (90%)

The Holopaw, frequently flooded component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on drainageways on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 48 - Winder fine sand, frequently flooded

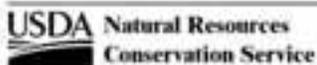
Component: Winder, frequently flooded (85%)

The Winder, frequently flooded component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on marine terraces on coastal plains, drainageways on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 49 - Moultrie fine sand, frequently flooded

Component: Moultrie (90%)

The Moultrie component makes up 90 percent of the map unit. Slopes are 0 to 1 percent. This component is on tidal marshes on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 8. This soil meets hydric criteria. The soil has a strongly saline horizon within 30 inches of the soil surface. The soil has a strongly sodic horizon within 30 inches of the soil surface.



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Map Unit Description

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Map unit: 50 - Narcoossee fine sand, shelly substratum

Component: Narcoossee (90%)

The Narcoossee component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains, knolls on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 20 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 51 - St. Augustine-Urban land complex

Component: St. Augustine (55%)

The St. Augustine component makes up 55 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy mine spoil or earthy fill. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 27 inches during July, August, September, October. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: Urban land (35%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Map unit: 52 - Durbin muck, frequently flooded

Component: Durbin (90%)

The Durbin component makes up 90 percent of the map unit. Slopes are 0 to 1 percent. This component is on tidal marshes on marine terraces on coastal plains. The parent material consists of herbaceous organic material over sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 3 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 40 percent. Nonirrigated land capability classification is 8. This soil meets hydric criteria. The soil has a strongly saline horizon within 30 inches of the soil surface. The soil has a strongly sodic horizon within 30 inches of the soil surface.

Map unit: 53 - Immokalee-Urban land complex

Component: Immokalee, nonhydric (50%)

The Immokalee, nonhydric component makes up 50 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: Urban land (35%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Map Unit Description

St. Johns County, Florida

Map unit: 53 - Immokalee-Urban land complex

Component: Immokalee, hydric (5%)

The Immokalee, hydric component makes up 5 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 54 - Astatula-Urban land complex

Component: Astatula (50%)

The Astatula component makes up 50 percent of the map unit. Slopes are 0 to 8 percent. This component is on ridges on marine terraces on coastal plains. The parent material consists of eolian or sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is very high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: Urban land (40%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Map unit: 55 - Arents, 0 to 2 percent slopes

Component: Arents (100%)

The Arents component makes up 100 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats, rises on marine terraces on coastal plains. The parent material consists of altered marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 36 inches during January, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 57 - Adamsville variant fine sand

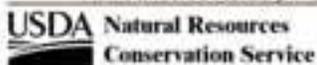
Component: Adamsville variant (90%)

The Adamsville variant component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on rises on marine terraces on coastal plains, knolls on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 58 - EauGalle fine sand

Component: EauGalle, nonhydric (70%)

The EauGalle, nonhydric component makes up 70 percent of the map unit. Slopes are 0 to 2 percent. This component is on rises on marine terraces on coastal plains, knolls on marine terraces on coastal plains. The parent material consists of sandy and loamy marine



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Map Unit Description

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Map unit: 58 - EauGalle fine sand

Component: EauGalle, nonhydic (70%)

deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: EauGalle, hydic (15%)

The EauGalle, hydic component makes up 15 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 8 inches during June, July, August, September. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 61 - Riviera fine sand, depressional

Component: Riviera, depressional (90%)

The Riviera, depressional component makes up 90 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 62 - Floridana fine sand

Component: Floridana (90%)

The Floridana component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 3 inches during January, February, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 7 percent. Nonirrigated land capability classification is 2w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

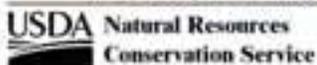
Component: Floridana, depressional (10%)

The Floridana, depressional component makes up 10 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September. Organic matter content in the surface horizon is about 7 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 63 - Placid fine sand

Component: Placid (85%)

The Placid component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on



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Map Unit Description

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Map unit: 53 - Flacid fine sand

Component: Flacid (85%)

coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 3 inches during January, February, March, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 54 - Elzey fine sand

Component: Elzey, nonhydric (60%)

The Elzey, nonhydric component makes up 60 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces, coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: Elzey, hydric (30%)

The Elzey, hydric component makes up 30 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces, coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during June, July, August, September. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 55 - Riviera fine sand

Component: Riviera, nonhydric (60%)

The Riviera, nonhydric component makes up 60 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: Riviera, hydric (25%)

The Riviera, hydric component makes up 25 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during June, July, August, September. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 56 - Terra Ceia muck, frequently flooded

Component: Terra Ceia (50%)

The Terra Ceia component makes up 50 percent of the map unit. Slopes are 0 to 1 percent. This component is on flood plains on marine terraces on coastal plains. The parent material consists of herbaceous organic material. Depth to a root restrictive layer is greater than

Map Unit Description

St. Johns County, Florida

Map unit: 86 - Terra Ceia muck, frequently flooded

Component: Terra Ceia (90%)

60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 80 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 87 - Tisonia mucky peat, frequently flooded

Component: Tisonia (85%)

The Tisonia component makes up 85 percent of the map unit. Slopes are 0 to 1 percent. This component is on tidal marshes on marine terraces on coastal plains. The parent material consists of organic material over clayey alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches is very high. Shrink-swell potential is high. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 3 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 53 percent. Nonirrigated land capability classification is 8. This soil meets hydric criteria. The soil has a strongly saline horizon within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 88 - Winder fine sand

Component: Winder (85%)

The Winder component makes up 85 percent of the map unit. Slopes are 0 to 1 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2v. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 89 - Bakersville muck

Component: Bakersville (100%)

The Bakersville component makes up 100 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 35 percent. Nonirrigated land capability classification is 6r. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 99 - Water

Component: Water (100%)

Generated brief soil descriptions are created for major soil components. The Water is a miscellaneous area.

Map Unit Description

St. Johns County, Florida

Map unit: 100 - Waters of the Atlantic Ocean

Component: Water (100%)

Generated brief soil descriptions are created for major soil components. The Water is a miscellaneous area.

13.7 FNAI Element Occurrence Data Usage Letter



1018 Thomsonville Road
Suite 200-C
Tallahassee, FL 32309
850-224-8207
fax 850-481-0264
www.fnai.org

April 11, 2014

David Alden
Land Conservation & Planning
Florida Fish and Wildlife Conservation Commission
Tallahassee, FL

Dear David,

By virtue of this letter we are updating and continuing our agreement that it is unnecessary for your office to request FNAI element occurrence data for each land management plan you prepare, under the following conditions:

- FNAI will continue to provide our Florida Element Occurrence GIS database to FWC on a quarterly update basis;
- The FNAI GIS data will be available to FWC staff for reference and incorporation as required in management plan review and preparation.

Our database manager, Frank Price, currently provides this update via ftp to FWC staff on a quarterly basis. Current FWC contacts for the quarterly update are Beth Stys and Ted Hochst. We are pleased to continue this beneficial collaboration with the Florida Fish and Wildlife Conservation Commission.

Sincerely,

Gary Knight
Director
Florida Natural Areas Inventory



Florida Resources
and Environmental
Analysis Center
Institute of Science
and Public Affairs
The Florida State University

Tracking Florida's Biodiversity

13.8 FWC Agency Strategic Plan

Florida Fish and Wildlife Conservation Commission
Agency Strategic Plan
2014 – 2019

Theme One – Florida’s Fish and Wildlife Populations and Their Habitats

Goal 1: Ensure the sustainability of Florida’s fish and wildlife populations.

Strategies:

1. Manage listed species so they no longer meet Florida’s endangered and threatened listing criteria.
2. Manage species to keep them from meeting Florida’s endangered and threatened listing criteria.
3. Anticipate and address fish and wildlife species’ conservation needs in light of adaptation to long-term environmental changes.
4. Develop, acquire and apply the appropriate biological and sociological science to inform fish and wildlife conservation decisions.
5. Inform and guide partners regarding how their regulations, policies, procedures and other actions affect fish and wildlife conservation.
6. Protect fish and wildlife species through effective outreach and enforcement.

Goal 2: Ensure sufficient habitats exist to support healthy and diverse fish and wildlife populations.

Strategies:

1. Use science to determine quantity, quality and location of the habitats most critical to sustain healthy and diverse fish and wildlife populations.
2. Protect lands and waters critical to sustaining healthy and diverse fish and wildlife populations through diverse incentive programs.
3. Manage habitats to sustain healthy and diverse fish and wildlife populations.

Theme Two – Interactions with Fish and Wildlife, including Fishing, Hunting, Boating and Wildlife Viewing Opportunities

Goal 1: Provide residents and visitors with quality fishing, hunting, boating and wildlife viewing opportunities that meet their needs and expectations while providing for the sustainability of those natural resources.

Strategies:

1. Develop, acquire and use the appropriate biological and sociological science necessary to provide sustainable fishing, hunting, boating and wildlife viewing opportunities that meet the needs and expectations of user groups while providing for the sustainability of those resources.
2. Manage fish and wildlife populations to provide sustainable fishing, hunting, and wildlife viewing opportunities.
3. Develop and maintain widely available, diverse and accessible fishing, hunting, boating and wildlife viewing opportunities that meet the needs and expectations of residents and visitors while providing for the sustainability of those resources and emphasizing partnerships with both public and private landowners.
4. Recruit and manage sustainable levels of resident and visitor participation in fishing, hunting, boating and wildlife viewing.
5. Provide targeted fishing, hunting, boating and wildlife viewing programs for youth, the disabled and veterans.

Goal 2: Enhance the safety and outdoor experience of those who hunt, fish, boat and view wildlife.

Strategies:

1. Provide and promote opportunities for residents, and visitors to learn safety practices for fishing, hunting, boating and wildlife viewing.
2. Enhance the boating safety and waterway experience of residents and visitors through improved access, management, education and enforcement.
3. Promote Florida's outdoor environment as a safe and healthy recreational option for residents and visitors.
4. Address the growing disconnect between people and nature by marketing and providing opportunities and education for diverse age, race, gender, ethnic and other demographic sectors.

Goal 3: Use minimal regulations to manage sustainable fish and wildlife populations, manage access to fish and wildlife resources, and protect public safety.

Strategies:

1. Continually evaluate proposed and existing regulations, based on resource management benefits, public safety concerns, and economic and social impacts, to improve or eliminate regulations as warranted.
2. Coordinate with partners and stakeholders to ensure that appropriate authorities and regulations exist to maintain sustainable fish and wildlife populations.
3. Implement and enforce regulations in an informative, proactive and influential manner to enrich resident and visitors' outdoor experience while safeguarding the natural resources.

Goal 4: Minimize adverse environmental, social, economic and health and safety impacts from fish, wildlife and plants that are known, or have a potential, to cause adverse impacts.

Strategies:

1. Manage species and their habitats, as well as species and human interactions, to eliminate or reduce the adverse environmental, social, economic and health and safety impacts from native and non-native fish, wildlife and plants.
2. Effectively communicate to residents, visitors and businesses how to be safe and act responsibly when interacting with or possessing fish, wildlife and plants.
3. Manage captive and non-native wildlife movement and trade through proactive and responsive enforcement, regulation and education, with an emphasis on species that pose a high risk to our native fish and wildlife.
4. Enhance partnerships to address adverse environmental, social, economic and health and safety impacts from fish, wildlife and plants and ensure a consistent and integrated approach with FWC.

Theme Three – Sharing Responsibility for Fish and Wildlife Conservation and Management with an emphasis on developing conservation values in our youth

Goal 1: Ensure current and future generations support fish and wildlife conservation.

Strategies:

1. Expand and promote the Florida Youth Conservation Centers Network through leveraging FWC programs and staff, and developing public and private partnerships and sponsorships.
2. Develop and deliver standardized youth conservation curricula and fishing, hunting, boating and wildlife viewing outdoor activity programs, and assist with adapting programs and curricula to meet the needs of diverse communities.
3. Foster stewardship and shared responsibility for fish and wildlife conservation through conservation education programs.
4. Expand marketing and outreach to reach diverse audiences and engage all staff in priority outreach initiatives.

Goal 2: Ensure residents, visitors, stakeholders and partners are engaged in the processes of developing and implementing conservation programs.

Strategies:

1. Foster a common vision among partners and the FWC to maintain and enhance fish and wildlife populations and their habitats through interagency coordination, mutually beneficial goals and initiatives.
2. Engage residents, visitors, stakeholders and partners to understand their perspectives, develop and implement conservation programs, and implement fishing, hunting, boating and wildlife viewing management activities.
3. Use citizen science to enhance conservation programs.

Goal 3: Increase opportunities for residents and visitors, especially youth, to actively support and practice fish and wildlife conservation stewardship.

Strategies:

1. Inform residents and visitors about conservation stewardship and encourage their active involvement in achieving conservation of fish and wildlife.
2. Provide and promote opportunities for residents and visitors, especially youth, to participate in conservation stewardship activities, including FWC volunteer opportunities.

Goal 4: Encourage communities to conserve lands and waters critical to sustaining healthy and diverse fish and wildlife populations.

Strategies:

1. Provide communities with the necessary assistance to help them obtain the social and economic benefits of local conservation lands.
2. Provide residents and visitors with relevant information on the social and economic benefits of conservation, fishing, hunting, boating, and wildlife viewing.
3. Support community events and programs that promote fish and wildlife conservation.

Theme Four – Responsive Organization and Quality Operations

Goal 1: Integrate our commitment to benefit the community and enhance the economy through our conservation efforts and public service.

Strategies:

1. Identify and implement ways to support Florida businesses and job growth while managing fish and wildlife.
2. Identify and promote opportunities for staff to benefit local communities through participation in approved activities where FWC resources can be used (for example, the Florida State Employees' Charitable Campaign, the Guardian ad Litem Program, mentoring programs, FWC Disaster Response Teams, and American Red Cross Disaster Services).
3. Provide residents and visitors with reliable and current information on Florida's fish and wildlife.
4. Continue to attract visitors by providing top-quality fishing, hunting, boating and wildlife viewing opportunities.

Goal 2: Provide resources and support for the safety and protection of residents and visitors, our natural and cultural resources, and for emergency responses to critical incidents and environmental disasters.

Strategies:

1. Identify existing and emerging risks to the safety of residents and visitors and foster internal collaboration and external partnerships necessary to effectively manage, reduce or eliminate those risks.
2. Provide immediate and effective disaster response and recovery through mutual-aid efforts with local, state and federal partners.
3. Provide search, rescue, and recovery services in coordination with local, state and federal entities to ensure the safety of residents and visitors.

4. Protect natural and cultural resources through proactive and responsive enforcement efforts.

Goal 3: Ensure the FWC has highly effective and adaptive business practices.

Strategies:

1. Address emerging biological, social and economic trends, anticipate impacts and take advantage of opportunities to accomplish FWC's mission.
2. Expect each employee to be an ambassador for FWC and its mission to Florida's diverse residents and visitors.
3. Provide efficient and effective service to Florida's diverse residents, visitors, and FWC staff.
4. Foster a diverse, accountable, responsive and skilled workforce who effectively serves Florida's residents and visitors.
5. Manage existing and secure additional resources necessary to achieve fish and wildlife conservation and meet residents, visitor and stakeholder needs.
6. Create and maintain an effective business model that supports the FWC's mission by using continuous improvement approaches that foster a collaborative and professional culture.