

LEGISLATIVE DELEGATION MEETING SCHEDULE

1

February 15, 2013

Friday

8:00 PM - 9:00 PM

(J) Northwest Florida Legislative Delegation -- WSRE
This event has no specified end time.

WSRE, Viewer Supported PBS for the Gulf Coast, will air a live dialogue with the Northwest Florida Legislative Delegation, Friday, February 15, 8 p.m. "Legislative Review: Dialogue with the Delegation" gives citizens the opportunity to ask state legislators tough questions on subjects ranging from the state's efforts to improve unemployment, the state's foreclosure problems, the impact of budget cuts to programs and services, or any other topic on viewers' minds. Legislators are expected to address important issues affecting Northwest Florida and the upcoming legislative session in Tallahassee, Fla. Citizens can submit their questions now by emailing them to questions@wsre.org or they can phone them in during the live program on February 15. All questions must include name and city of residence.

Participating Legislators (as of 2/12/13) include:
Senator Greg Evers, Rep. – District 2
Representative Clay Ingram, Rep. – District 1
Representative Clay Ford, Rep. – District 2
Representative Doug Broxson, Rep. – District 3
Representative Matt Gaetz, Rep. – District 4

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\* Denotes tagged bills  
Event time and agenda are subject to change.

**February 26, 2013**

Tuesday

5:00 PM - 6:00 PM

**(J) Gulf County Legislative Delegation -- Port St. Joe**  
This event has no specified end time.

Board of County Commissioners  
1000 Cecil G. Costin, Sr. Blvd.  
Port St. Joe, FL 32456

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* Denotes tagged bills
Event time and agenda are subject to change.

7:00 PM - 8:00 PM

(J) Franklin County Legislative Delegation -- Apalachicola
This event has no specified end time.

State Senator Bill Montford (D-Tallahassee) has announced the county's legislative delegation meeting will take place on Tuesday, Feb. 26, at 7 p.m. in the county commission chambers.

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Event time and agenda are subject to change.

1

**February 27, 2013**

Wednesday

3:00 PM - 6:00 PM

**(J) Orange County Legislative Delegation -- Orlando**

Senator Geraldine Thompson, Chair of the Orange County Legislative Delegation, has announced the following date and information concerning the delegation's Local Bill Hearing and Public Meeting:

Date: Wednesday, February 27, 2013

Time: 3:00 p.m. - 6:00 p.m.

Location: Ronald Blocker Educational Leadership Center

School Board Meeting Room

445 West Amelia Street

Orlando, FL 32801

The agenda for the meeting will include local bill presentations and remarks from members of the public.

Persons wishing to address the delegation (limit of 3 minutes) or present local legislation must request a place on the agenda by contacting Emmanuel Tormes in the legislative delegation office and submitting the attached appearance record form via email to LD@ocfl.net, by fax to 407-836-7360, or by mail to the address listed below. The deadline for submissions is Thursday, February 21, 2013 at 5:00 p.m.

Note that due to the high number of responses, spaces in the agenda normally fill up before the stated deadline. Spaces are filled on a first-come, first-served basis. Those interested in presenting to the delegation are encouraged to submit an appearance record form at their earliest convenience.

Presenters who have materials that they would like to distribute to the delegation members should provide 16 copies of the handout on 8.5"x11" letter-sized, 3-hole punched paper. These materials must be delivered to the legislative delegation office no later than 5:00 p.m. on Thursday, February 21, 2013. The office is located at:

Orange County Administration Center  
201 South Rosalind Avenue, Fifth Floor  
Orlando, FL 32801

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* Denotes tagged bills

Event time and agenda are subject to change.

BOCC

From: Candice Anderson <candice@jka-home.com>
Sent: Tuesday, February 12, 2013 3:35 PM
To: bocc@gulfcounty-fl.gov
Subject: Meeting Time

Dear Commissioners,

Please consider moving the meeting time back to evenings. It is very difficult for many people to attend meetings at 9:00 am.

Many people, including myself, have jobs and are therefore unable to attend meetings during business hours. These meetings are public forums and therefore should be held during a time that is convenient for the public to attend. Thank you in advance for consideration of this request.

Regards,

Candice Anderson

_____ Information from ESET NOD32 Antivirus, version of virus signature database 6705 (20111212)

The message was checked by ESET NOD32 Antivirus.

<http://www.eset.com>

2013 FEB 20 AM 10:39

Commissioner4

From: Turvaville, Debbie <DebbieTurvaville@fdle.state.fl.us>
Sent: Friday, February 08, 2013 2:44 PM
To: Bay County Administrator; Calhoun Board of County Commissioners; Chief Baggett; Chief Baggett; Chief Barnes; Chief Crews; Chief Horton; Chief McAlpin; Chief Messer; Chief Norris; Chief Smith; Chief Sweatt; Chief Thorne; Chief Watford; Chief Wells; Chief Whitman; Director Hutching; District Manager Jones; Gulf County Administrator; Holmes Board of County Commissioners; Honorable Glenn Hess; Honorable Herman Laramore; Interim Chief Ervin ; Jackson County Administrator; Lieutenant Montgomery; Panhandle Medical Society; Sheriff Brown; Sheriff Haddock; Sheriff Harrison; Sheriff Kimbrel; Sheriff McKeithen; Sheriff Roberts; The Bays Medical Society; Washington County Administrator
Subject: District 14 Medical Examiner Reappointment
Attachments: Reappointment Ballot FormDt14.doc

Dear Sir or Madam:

The gubernatorial appointment term of the district medical examiner in District 14 (Bay, Calhoun, Gulf, Holmes, Jackson, and Washington Counties) will expire on July 1, 2013. Pursuant to Florida Administrative Code, the Medical Examiners Commission will consider recommending to the Governor the incumbent, Michael Hunter, M.D., or other qualified candidates for this appointment. We are asking for your input so the Commission can make an informed decision.

This topic will be scheduled for discussion at the 2013 Spring Commission Meeting. Please complete the attached *Reappointment Ballot Form* and return it to this office by March 18, 2013 to staff member Doug Culbertson at dougculbertson@fdle.state.fl.us. Please provide favorable or unfavorable response to the recommendation for Dr. Hunter's reappointment. The Commission will also consider the nominations of other qualified candidates, if submitted.

If you have any questions or wish to discuss your input, please contact Commission staff at (850) 410-8600.

Sincerely,

Debbie Turvaville
Medical Examiners Commission Staff
FDLE
 Post Office Box 1489
 Tallahassee, Florida 32302
 (850) 410-8610

2013 FEB 20 AM 10:39

MEDICAL EXAMINERS COMMISSION

Recommendation for Reappointment

District 14 Medical Examiner

Dr. Michael Hunter

Favorable _____

Unfavorable _____

I do not wish to express an opinion on this matter. _____

If Favorable, please give suggestions for improvement.

If Unfavorable, please give reasons for negative response.

Completed By:

Signature: _____ Date: _____

Please Print Name: _____

Agency Name: _____

Address: _____

Please Return Completed Form To:

Email: dougculbertson@fdle.state.fl.us
Phone: (850) 410-8609 – Doug Culbertson

Or Mail To:

Address: Medical Examiners Commission
Florida Department of Law Enforcement (FDLE)
Post Office Box 1489
Tallahassee, FL 32302

Mowrey Law Firm, P.A.

Ronald A. Mowrey*

Rhonda DiVagno Morris
Nicholas D. Fugate

* Also admitted in District of Columbia

515 North Adams Street
Tallahassee, Florida 32301-1111
Telephone: (850) 222-9482
Facsimile: (850) 561-6867
E-mail: firm@mowreylaw.com

Crawfordville Office
Courthouse Square
Crawfordville, FL 32327
Tel: (850) 926-7666

February 6, 2013

Tan Smiley, Chair
Gulf County Board of County Commissioners
1000 Cecil G. Costin, Sr. Boulevard
Port St. Joe, Florida 32456

RE: FEMA Reclassification of Flood Zone Elevation Heights

Dear Chair Smiley:

As you may all know, FEMA is changing elevation heights, reclassifying flood zones and increasing rates dramatically. Obviously this will have a serious adverse impact on all coastal construction along the big bend coastline.

The City of St. Marks is interested in a meeting of the coastal communities to discuss this matter and available relief for our coastal communities.

Please contact our office if you are interested in participating in a meeting. We will then coordinate a meeting.

Thank you for your attention and consideration in this matter.

Very truly yours,



Ronald A. Mowrey, Esquire
Attorney for City of St. Marks, Florida

RAM:ted

c: Chuck Shields, Mayor
Zoe Mansfield, City Manager

J:\OPEN\City of St. Marks\General\Letters\FEMA mtng.wpd

2013 FEB 20 AM 10:50



Northwest Florida Water Management District

81 Water Management Drive, Havana, Florida 32333-4712
(U.S. Highway 90, 10 miles west of Tallahassee)

Jonathan P. Stevenson
Executive Director

Phone: (850) 539-5999 • Fax: (850) 539-2777

January 28, 2013

Clerk of the County Court:

2013 JAN 31 AM 11:44
CLERK OF THE COUNTY COURT
HAVANA, FLORIDA

Under Section 189.416, Florida Statutes, the Northwest Florida Water Management District is required to notify each local governing authority within the District of any changes to our Registered Agent.

Please be advised that as of January 28, 2013, the Registered Agent for the Northwest Florida Water Management District has been changed. Please update your records to reflect the following information:

Registered Agent: April Murray
Address: 81 Water Management Drive
Havana, FL 32333
Telephone: 850-539-5999
Fax: 850-539-2777
Email: april.murray@nfwmd.state.fl.us

Sincerely,

Brett J. Cyphers
Assistant Executive Director

GEORGE ROBERTS
Chair
Panama City

JERRY PATE
Vice Chair
Pensacola

JOYCE ESTES
Secretary-Treasurer
Eastpoint

JOHN ALTER
Malone

GUS ANDREWS
DeFuniak Springs

STEPHANIE BLOYD
Panama City Beach

JON COSTELLO
Tallahassee

NICK PATRONIS
Panama City Beach

BO SPRING
Port Saint Joe

THE APALACHICOLA RIVER
WILDLIFE AND ENVIRONMENTAL AREA
MANAGEMENT ADVISORY GROUP
AND THE
FLORIDA FISH AND WILDLIFE
CONSERVATION COMMISSION

PUBLIC HEARING

for the

FWC Lead Managed Portions of

**Apalachicola River Wildlife and Environmental Area Management Plan
Gulf County, Florida**

7:00 P.M. Wednesday, February 27, 2013

St. Joseph Bay State Buffer Preserve Center

3915 State Road 30-A

Port St. Joe, FL 32456

2013 FEB 20 AM 10:40

A G E N D A

1. Welcome - Management Advisory Group Representative
2. Agenda Explanation and Introductions – FWC Land Conservation and Planning Group
3. FWC Planning Process and Plan Approvals – FWC Planning Group
4. Presentation of Draft Management Intent, Goals, Objectives, Challenges and Strategies for the Management Plan – FWC Area Management Staff
5. Presentation of Draft Optimal Conservation Planning Boundary – FWC Area Management Staff
6. Clarifying Questions and Answers Concerning the Draft Management Plan
7. **Public Testimony:** Comments Regarding the Draft Management Plan
8. Adjourn

Important Notice: The specific purpose for this public hearing is to inform the public and record testimony for the draft Apalachicola River Wildlife and Environmental Area Management Plan. For other issues, such as public-use regulations and/or hunting regulations, there is a separate public input process. If you wish to comment to FWC on such other issues, public input forms are available that may be used to submit comments on issues that are not the subject of tonight's public hearing.

INFORMATION
DATE 2-26-13 **8** LL

Commissioner4

From: Shelton, Rebecca <rebecca.shelton@MyFWC.com>
Sent: Tuesday, February 19, 2013 3:06 PM
To: Undisclosed recipients:
Subject: Prospectus, Public Hearing Information and MAG Results
Attachments: ARWEA MAG Meeting Results Jan 25 2013.pdf; ARWEA public hearing agenda Franklin County (3).pdf; ARWEA public hearing agenda Gulf County.pdf; ARWEA Public Hearing Notice.pdf; Apalachicola River WEA Management Prospectus_FINAL.pdf

MAG participants,

Attached you will find the Public Hearing agenda for both the Franklin and Gulf County public hearings as well as the MAG results and Prospectus for the area. Please let me know if you have any questions. Thanks.

Rebecca Shelton

Florida Fish and Wildlife Conservation Commission
Wildlife and Habitat Management Section
Land Conservation and Planning
620 South Meridian Street
Tallahassee, FL 32399-1600
Phone: (850) 487-9982
Fax: (850) 487-9422
E-mail: Rebecca.Shelton@myFWC.com

**Apalachicola River Wildlife and Environmental Area (ARWEA)
Management Advisory Group (MAG)
Consensus Meeting Results**

January 16, 2013 in Eastpoint, 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 ARWEA consensus meeting was held on the morning of January 16, 2013 at the Apalachicola National Estuarine Research Reserve (NERR) in Eastpoint, Florida in Franklin County. The ideas found below were provided by stakeholders for consideration in the 2013 - 2023 Management Plan (MP) for ARWEA 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 ARWEA 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]	[11]	1. Manage fish and wildlife populations and their habitat to ensure their sustainability and that they function as part of larger regional populations. Address specific needs of rare species where natural systems management is not sufficient to meet their needs. Maintain and improve and restore natural habitat diversity while continuing traditional habitat management practices, with an emphasis on endangered and imperiled species habitat. Continue to survey and monitor wildlife and plant species with emphasis on endangered/imperiled and focal species (including 14 species).

<u>Rank</u>	<u># of Votes</u>	<u>Score</u>	<u>Idea</u>
2.	[5]	[15]	3. Apply prescribed fire in appropriate landscapes at appropriate return intervals including a high percentage of lightning season fires. Some kind of measurement of current prescribed fire on the area and whether we're meeting goals; need some kind of performance matrix.
3.	[5]	[17]	8. Restore and maintain natural communities to conditions that sustain ecological processes and conserve biodiversity. Include diversified fire management program, emphasizing growing season burns; revise the current Prescribed Fire Management Plan. Develop a Forest Resource Management Plan for benefits to wildlife and native communities; to include reforestation of offsite pine and imperiled species habitat enhancement.
4.	[5]	[18]	20. Continue to provide and balance user groups with a high quality outdoor recreational experiences (e.g., hunting, fishing, wildlife viewing) that meets their expectations to minimize user conflicts. Continue to offer diverse hunting and fishing opportunities. Continue to provide nature-based recreational opportunities including revising the ARWEA Recreation Master Plan and Road Access Plan. Challenge to Law Enforcement and land managers is to balance user groups and activities to ensure we have less conflict between user groups. Strive to provide a quality outdoor experience for all user groups, managers have to juggle all user groups and many times conflicts. Keep consciousness and awareness of different user groups that sometimes conflict. Make users aware (e.g., consumptive, non-consumptive).
5.	[3]	[7]	12. Control invasive exotic plant and animal species including enhanced participation of user groups. Before we let exotic species get out of control, let recreational user groups help out as possible. For example, flathead catfish are devastating our river system but user groups have come out and will conduct tournaments to help. Provides opportunities for user groups to be active in their control.

<u>Rank</u>	<u># of Votes</u>	<u>Score</u>	<u>Idea</u>
6.	[3]	[12]	22. Work with partners and stakeholders to achieve resource management objectives and conservation goals and visitor use and environmental education. Increase coordination and partnerships with adjacent landowners and agencies. Maximize recreational opportunities (before expansion). Work with partners more, especially now with increased workloads and less staff. Several campgrounds just north that are struggling to keep the doors open. Would like to see more usage. If there are opportunities to share facilities/ recreational opportunities, we should where appropriate.
7.	[2]	[4]	6. Provide sufficient water and stabilize water supply and quality to the lower Apalachicola Bay. Manage the land to protect and restore water resources including Apalachicola Bay fisheries, restores sloughs, restore hydroperiods. Would like to see more water reaching the Apalachicola Bay. This water is the life blood of our flora and fauna; need to do what we can to protect. Manage uplands, bottomlands, and water resources to improve conditions in the estuarine ecosystem including hydrological restoration.
8.	[2]	[5]	10. Ensure all people have equal access to camping areas by preventing permanent occupation of campsites, especially those accessed by water. The NFWMD has some situations on adjacent lands where there are houseboats, they are seeing a real proliferation of constructed items on land (e.g., platforms, camping areas), which is against the rules. Both resource impacts and private use of public lands, excludes other users. Tends to occur on choice campsites easily accessible by the river. Wants to see the rules enforced. Educational opportunities exist. Private occupation of public land should not be occurring.
Two items of equal rank:			
9.	[2]	[9]	16. Address houseboat issues and any potential concerns (e.g., water quality, resource impacts) including enforcement of existing laws and regulations. What are the issues, what are the concerns, and how do we address them. Address potential problems locally and regionally before it is decided to do from a higher position. See existing laws.

<u>Rank</u>	<u># of Votes</u>	<u>Score</u>	<u>Idea</u>
9.	[2]	[9]	23. Minimize adverse impacts from plants and animals that are known to cause problems or have a potential to cause problems. Include inventory, monitor, and control exotic and invasive plant and animals species (e.g., lygodium, Chinese tallow, cogongrass). Even includes some native invasives (e.g., titi).

Three items of equal rank:

10.	[1]	[3]	2. Manage public access and public use to minimize disturbance. Self explanatory.
10.	[1]	[3]	18. Identify and resolve upriver pollution sources. Where are the pollution sources coming from (e.g., Atlanta, houseboats)? Regardless of the reason, we need to identify and stop them.
10.	[1]	[3]	21. Enhance recreational user education, address environmental education, or prohibitive uses. For example, educate people that removal of timber from these areas is illegal (recreational user education). Also, address environmental education.
14.	[1]	[4]	17. Increase land management, law enforcement efforts, and public education to prevent unauthorized removal of WEA natural resources including standing and down timber, also including cypress knees. Three different problem activities: first, licensed deadhead loggers who take opportunity to take deadhead or non-deadhead logs off of land they are not permitted to work on; second, unlicensed taking of timber from non-sovereign lands; third, is those that are harvesting cypress knees. Growing problem, impacting our resources. We need more law enforcement to control.

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

15.	[]	[]	24. Conserve, protect, and ensure preservation of cultural resources. Self explanatory.
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**Apalachicola River Wildlife and Environmental Area
MAG Meeting Participants**

<u>Name</u>	<u>Affiliation</u>
Active Participants	
Matthew Hortman	FWC Area Biologist
Capt. Parramore	FWC Law Enforcement
Tyler Macmillan	Northwest Florida Water Management District
Dan Hipes	Florida Natural Areas Inventory
Bobby Miller	Angler/Hunter
Ricky Lackey	National Wild Turkey Federation
Marcus Beard	United States Forest Service
Lee Edmiston	Apalachicola NERR/Department of Environmental Protection
Supportive Participants	
Patrick McElhone	FWC Habitat and Species Conservation (HSC) Biologist
Lt. Dennis Welsh	FWC Law Enforcement
Phil Manor	FWC HSC, District Biologist
Tom M. Matthews	FWC Office of Public Access and Wildlife Viewing Services (OPAWVS)
Billy Sermons	FWC HSC, Regional Biologist
Liz Sparks	FWC OPAWVS
Diana Pepe	FWC HSC Conservation Biologist
Paul Scharine	NW region - FWC Division of Hunting and Game Management
Richard Noyes	FWC OPAWVS
Derek Fussell	FWC HSC Biologist
Invited but Unable to Attend	
Randy Gregory	Florida Forest Service
David Printiss	The Nature Conservancy
Ron Peterson	Florida Trail Association
Allen Courtney	Angling Stakeholder
Brian McGraw	USDA-NRCS
Linda Vause	Equestrian Stakeholder
Dayle Lenos	Paddling Stakeholder
Shelly Stiaes	U.S. Fish and Wildlife Service
William Massey	Franklin County Board of Commissioners
Tan Smiley	Gulf County Board of Commissioners
Dan Tonsmeire	Apalachicola Riverkeepers
Curt Blair	Local Tourism Development Council
Carmen L. McLemore	Gulf County Board of Commissioners
Pinki Jackel	Franklin County Board of Commissioners
Rusty McKeithen	Florida Dog Hunters and Sportsmen's Association
Shane Fuller	Landowner
Mike Wisenbaker	Division of Historical Resources
FWC Planning Personnel	
Larame Ferry	Meeting Facilitator
Gary Cochran	Meeting Facilitator, Land Conservation and Planning Administrator
Tom Houston/Rebecca Shelton	Recorders

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MAG Meeting Participants**

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Lee Edmiston	Apalachicola NERR/Department of Environmental Protection
Supportive Participants	
Patrick McElhone	FWC Habitat and Species Conservation (HSC) Biologist
Lt. Dennis Welsh	FWC Law Enforcement
Phil Manor	FWC HSC, District Biologist
Tom M. Matthews	FWC Office of Public Access and Wildlife Viewing Services (OPAWVS)
Billy Sermons	FWC HSC, Regional Biologist
Liz Sparks	FWC OPAWVS
Diana Pepe	FWC HSC Conservation Biologist
Paul Scharine	NW region - FWC Division of Hunting and Game Management
Richard Noyes	FWC OPAWVS
Derek Fussell	FWC HSC Biologist
Invited but Unable to Attend	
Randy Gregory	Florida Forest Service
David Printiss	The Nature Conservancy
Ron Peterson	Florida Trail Association
Allen Courtney	Angling Stakeholder
Brian McGraw	USDA-NRCS
Linda Vause	Equestrian Stakeholder
Dayle Lenos	Paddling Stakeholder
Shelly Stiaes	U.S. Fish and Wildlife Service
William Massey	Franklin County Board of Commissioners
Tan Smiley	Gulf County Board of Commissioners
Dan Tonsmeire	Apalachicola Riverkeepers
Curt Blair	Local Tourism Development Council
Carmen L. McLemore	Gulf County Board of Commissioners
Pinki Jackel	Franklin County Board of Commissioners
Rusty McKeithen	Florida Dog Hunters and Sportsmen's Association
Shane Fuller	Landowner
Mike Wisenbaker	Division of Historical Resources
FWC Planning Personnel	
Larame Ferry	Meeting Facilitator
Gary Cochran	Meeting Facilitator, Land Conservation and Planning Administrator
Tom Houston/Rebecca Shelton	Recorders

NOTICE

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

PUBLIC HEARINGS

For the
FWC Lead Managed Portions of
Apalachicola River Wildlife and Environmental Area
Management Plan
Gulf and Franklin Counties, Florida

7:00 P.M. Wednesday, February 27, 2013
St. Joseph Bay State Buffer Preserve Center
3915 State Road 30-A
Port St. Joe, FL 32456

7:00 P.M. Thursday, February 28, 2013
Apalachicola NERR
108 Island Drive
East Pointe, FL 32328

PURPOSE: To receive public comment regarding considerations for the FWC ten-year Land Management Plan for the FWC Lead Managed Portions of Apalachicola River Wildlife and Environmental Area (WEA). This hearing is being held **EXCLUSIVELY** for discussion of the DRAFT Apalachicola River WEA 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 Apalachicola River WEA 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.

**THE APALACHICOLA RIVER
 WILDLIFE AND ENVIRONMENTAL AREA
 MANAGEMENT ADVISORY GROUP
 AND THE
 FLORIDA FISH AND WILDLIFE
 CONSERVATION COMMISSION**

PUBLIC HEARING

for the

FWC Lead Managed Portions of

Apalachicola River Wildlife and Environmental Area Management Plan

Franklin County, Florida

7:00 P.M. Thursday, February 28, 2013

**Apalachicola National Estuarine Research Reserve Environmental Education
and Training Center**

108 Island Drive

East Pointe, FL. 32328

A G E N D A

1. Welcome - Management Advisory Group Representative
2. Agenda Explanation and Introductions – FWC Land Conservation and Planning Group
3. FWC Planning Process and Plan Approvals – FWC Planning Group
4. Presentation of Draft Management Intent, Goals, Objectives, Challenges and Strategies for the Management Plan – FWC Area Management Staff
5. Presentation of Draft Optimal Conservation Planning Boundary – FWC Area Management Staff
6. Clarifying Questions and Answers Concerning the Draft Management Plan
7. **Public Testimony**: Comments Regarding the Draft Management Plan
8. Adjourn

Important Notice: The specific purpose for this public hearing is to inform the public and record testimony for the draft Apalachicola River Wildlife and Environmental Area Management Plan. For other issues, such as public-use regulations and/or hunting regulations, there is a separate public input process. If you wish to comment to FWC on such other issues, public input forms are available that may be used to submit comments on issues that are not the subject of tonight's public hearing.

Management Prospectus
APALACHICOLA RIVER
WILDLIFE AND ENVIRONMENTAL AREA
January 2013
Florida Fish and Wildlife Conservation Commission



Introduction

The Apalachicola River Wildlife and Environmental Area (ARWEA) is part of a vast ecosystem that begins hundreds of miles away in the Chattahoochee National Forest in Georgia where the headwaters of the Apalachicola River begin. The 86,140 acre ARWEA contains the largest expanse of floodplain forest in Florida. The ARWEA is an important element of conserving the nationally and internationally recognized biological diversity of the Apalachicola River and Bay ecosystem that has been designated as a United Nations International Biosphere site for its vital role in sustaining ecological diversity. The area's outstanding wildlife habitats, including floodplain forests, sawgrass marshes, and pine flatwoods support significant populations of both rare and common wildlife.

The Florida Fish and Wildlife Conservation Commission (FWC) is currently assigned lead management authority for approximately 64,465 acres of the 86,140 acre ARWEA. The Florida Forest Service (FFS), the Northwest Florida Water Management District (NFWFMD) and the Department of Environmental Protection (DEP), have lead management authority over the remaining 21,676 acres within the ARWEA (Figure 1), with the FFS managing (3,005 acres), the NFWFMD managing (14,278 acres), and DEP managing (4,392 acres).

FWC has entered into cooperative agreements with these agencies to incorporate additional lands into the Establishment Order for ARWEA in order to provide public hunting opportunities. Therefore, this management prospectus is primarily focused on only those 64,465 acres of ARWEA on which FWC is the lead managing agency.

ARWEA is managed by FWC to conserve and restore natural wildlife habitat for an array of imperiled and other native wildlife including the red-cockaded woodpecker (*Picoides borealis*), gopher tortoise (*Gopherus polyphemus*), and eastern indigo snake (*Drymarchon couperi*), among others, while also providing stellar opportunities for wildlife viewing, nationally recognized paddling opportunities, and other fish and wildlife-based public outdoor recreation opportunities such as hunting, fishing, horseback-riding, camping, and hiking.

Located within the FWC's Northwest Region, the ARWEA straddles both Gulf and Franklin counties. ARWEA begins just north of the town of Apalachicola and extends northward to the vicinity of Wewahitchka. Numerous access points to the area from State Road (SR) 71, County Road (CR) 381, CR 387, and Sauls Creek Road are in Gulf County. In Franklin

County, access points are located off of SR 65, U. S. Highway-98, and CR 384 near Apalachicola. The city of Eastpoint is one mile south, Carrabelle is 14 miles east, and Port St. Joe is 22 miles west (Figure 2). The ARWEA is in multiple sections of Township 5 South, Ranges 8 and 9 West, Township 6 South, Ranges 8 and 9 West, Township 7 South, Ranges 7 and 8 West and Township 8 South, Ranges 6, 7 and 8 West in Franklin and Gulf counties.

The unique ecological qualities, general location and the accessibility to the general public make ARWEA extremely valuable for the multiple-use, restoration and improvement of relatively unaltered fish and wildlife resources and their habitats, as well as its important hydrologic function in the North West Region of Florida.

Adjacent Public and Private Conservation Lands and Florida Forever Projects

The ARWEA is located in the vicinity of a large number of publicly owned conservation areas and several Florida Forever projects (Figure 3). Tables 1 and 2 list the Florida Forever projects and conservation lands within a 20-mile radius of the ARWEA, including lands managed by public and private entities, that conserve cultural and natural resources within this region of Florida.

Most of the conservation lands listed in Table 2 are owned in full-fee by a public entity. However, some of these areas fall within a 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 Vicinity of the ARWEA

Project Name	GIS Acres
Apalachicola River	18,880
Bear Creek Forest	100,461
Pierce Mound Complex	650
St. Joe Timberland - Lake Wimico	25,188
St. Joe Timberland - St. Joseph Bay Buffer	3,030
St. Joe Timberland - St. Vincent Sound-to-Lake Wimico Ecosystem	49,822
St. Joe Timberland - Tates Hell/Carrabelle Tract	16,003

Table 2. Conservation Lands in Vicinity of the ARWEA

Federal Government	Managing Agency
Apalachicola Savannah Research Natural Area	USFS
Apalachicola National Forest	USFS
Lathrop Bayou Tract	BLM

Table 2. Conservation Lands in Vicinity of the ARWEA

St. Vincent National Wildlife Refuge	USFWS
State of Florida	
	Managing Agency
Apalachicola National Estuarine Research Reserve	DEP
Apalachicola River Wildlife and Environmental Area	FWC
Box-R Wildlife Management Area	FWC
Cape St. George State Reserve	DEP
Constitution Convention Museum State Park	FFS
Corbin-Tucker Conservation Easement	DEP
Dr. Julian G. Bruce St. George Island State Park	DEP
John Gorrie Museum State Park	DEP
Orman House Historic State Park	DEP
St. Joseph Bay State Buffer Preserve	DEP
Tate's Hell State Forest	FFS
Tate's Hell Wildlife Management Area	FWC
Water Management District	
	Managing Agency
Gaskin et al. Conservation Easement	NWFWMD
Apalachicola River Water Management Area	NWFWMD
County/City	
	Managing Agency
Dead Lakes Park	Gulf County
John David Patton Wildlife Park	City of Carrabelle
Salinas Park	Gulf County
Private/Public Conservation Organization	
	Managing Agency
Calhoun Spigelia Preserve	TNC
Jeff Lewis Wilderness Preserve	TNC
Eastpoint Preserve	TNC
Wilma Tract	TNC
Sumatra Property	Coastal Plains Institute

Acronym	Acronym Legend
BLM	Bureau of Land Management
DEP	Florida Department of Environmental Protection
USFS	United States Forest Service
FWC	Florida Fish and Wildlife Conservation Commission
FFS	Florida Forest Service
NWFWMD	North West Florida Water Management District
TNC	The Nature Conservancy
USFWS	United States Fish and Wildlife Service

Acquisition History and the Purpose for Acquisition

The Governor and Cabinet sitting as the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida (Board of Trustees) holds 100% undivided title interest on 64,465 acres (Lease 3584) in fee-simple title subject to any mineral reservations described in the legal descriptions of the area. In 1972, the Florida Legislature passed the "Land Conservation Act" which authorized the state to purchase environmentally endangered lands. At about this same time, the M-K Ranch began draining and diking large areas of marsh and swamp forest of the Lower Apalachicola region. This action, coupled with an ever-growing need to protect the area, resulted in the authorization of the series of land purchases in the Apalachicola River Basin.

In 1974, the Board of Trustees authorized the first purchase of a large tract of land in the Lower Apalachicola River Basin under the Environmentally Endangered Lands (EEL) program. The central core (EEL Tract) of the ARWEA was purchased in 1974 to protect the natural habitats in the area and the seafood industry of the lower Apalachicola River Basin. Prior to state acquisition, uses on most of this area included hardwood logging, dredging, and spoil deposition along the main river channel, commercial activities such as fishing and shipping (barge traffic), as well as recreational hunting and fishing. Included in the original purchase was a sawgrass marsh north of the Jackson River and west of the Apalachicola River. This area had been diked and drained in preparation for rice farming at the time of purchase.

In 1985, the state purchased five parcels under the CARL program. The M-K Ranch unit, the largest of these parcels (8,793 acres), had been intensively altered for cattle grazing and for hay and soybean farming. As with the EEL tract, the upper Saul Creek marsh was diked, ditched, and drained for rice production. A final consent decree was signed in July 1982 between the Environmental Protection Agency and M-K Ranch over their illegal dredge and fill operations. Through the settlement, M-K Ranch agreed to restore the area to pre-project hydrological and biotic regimes prior to state acquisition.

In 1994, the state purchased the Bloody Bluff unit. Originally this unit had been used for timber, cattle grazing, and turpentine production. However, with the advent of raised beds for tree planting, the area was managed for intensive silviculture, primarily for slash pine.

Sand Beach and the Quinn Tract units were acquired by the state in 1996 and 1998, respectively. The main use of these areas, prior to their purchase, was primarily for intensive silvicultural practices, though they shared the same history as the Bloody Bluff unit. As a result of past forest management activities, the historic hydrologic patterns were disrupted. Ditching, bedding, and tram or road development have expedited drainage, and in some places, negatively impacted water quality on the area.

The additional lands that comprise the ARWEA were purchased under the Conservation and Recreation Lands (CARL) and Preservation-2000, and Florida Forever programs.

ARWEA provides for the protection and preservation of the highly productive Apalachicola River and Bay estuarine system. A buffer area was deemed critical to protect the valuable marshes and natural vegetation essential to the bay's continued productivity. Additionally, unique and outstanding wildlife habitat, including that of some rare and endangered species, was conserved. The authorization for acquisition stipulated that the property, once acquired, would be managed in accordance with a management concept submitted with the purchase recommendation.

In summary, the ARWEA was purchased to protect the floodplain of the lower Apalachicola River for the purposes of (1) perpetuating its function as a buffer, a filtering system for the removal of silt and pollutants, and a source of nutrients and detritus for the river/bay complex; (2) maintaining natural wildlife habitat; and (3) protecting rare, threatened, endangered, and unique animals and plants.

Natural Resources

The Florida Natural Areas Inventory (FNAI) describes 23 community types existing on the ARWEA. These include alluvial forest, alluvial river, baygall, blackwater stream, bottomland forest, depression marsh, dome swamp, floodplain marsh, floodplain swamp, hydric hammock, maritime hammock, mesic flatwoods, mesic hammock, pine plantation, ruderal, salt marsh, sandhill, scrubby flatwoods, successional hardwood forest, upland hardwood forest, wet flatwoods, and wet prairie (Table 3, Figure 4).

Some portions of the area have been heavily disturbed as a result of agriculture and silviculture (tree farming). Cut-over timber plantations in Franklin County that were not reforested have some natural pine regeneration and a shrub layer of titi, myrtle, gallberry, and other native woody species. The old fields south of Howard Creek in Gulf County have been invaded by exotics and native species such as titi, wax myrtle, and gallberry. Area biologists along with contracted surveys through FNAI found several rare species (Table 4) and a number of invasive exotic species (Table 5) on the ARWEA.

Table 3. Community Types Known to Occur on the FWC Lead Managed Portion of ARWEA

Community Type	Acres	Percentage of Area
Alluvial forest	1,042.33	1.66%
Alluvial river	2,252.38	3.58%
Basin swamp	354.47	0.56%
Baygall	1,194.80	1.90%
Blackwater stream	318.17	0.51%
Bottomland forest	1,957.48	3.11%

Community Type	Acres	Percentage of Area
Depression marsh	18.76	0.03%
Dome swamp	180.88	0.29%
Floodplain marsh	5,591.13	8.88%
Floodplain swamp	36,499.05	57.98%
Hydric hammock	28.64	0.05%
Maritime hammock	73.27	0.12%
Mesic flatwoods	1,171.45	1.86%
Mesic hammock	64.90	0.10%
Pine plantation	6,875.42	10.92%
Ruderal	990.58	1.57%
Salt marsh	1,254.41	1.99%
Sandhill	28.33	0.04%
Scrubby flatwoods	133.49	0.21%
Successional hardwood forest	23.77	0.04%
Upland hardwood forest	94.08	0.15%
Wet flatwoods	2,428.26	3.86%
Wet prairie	378.82	0.60%

Table 4. Rare Plant Species Found on the ARWEA

Common Name	Scientific Name
Carolina grass-of-parnassus	<i>Parnassia caroliniana</i>
Chapman's crownbeard	<i>Verbesina chapmanii</i>
Corkwood	<i>Leitneria floridana</i>
Florida bear-grass	<i>Nolina atopocarpa</i>
Florida skullcap	<i>Scutellaria floridana</i>
Florida waxweed	<i>Cuphea aspera</i>
Giant water-dropwort	<i>Oxypolis greenmanii</i>
Godfrey's butterwort	<i>Pinguicula ionantha</i>
Many-flowered grass-pink	<i>Calopogon multiflorus</i>
Panhandle spiderlily	<i>Hymenocallis henryae</i>
Pine-woods aster	<i>Aster spinulosus</i>
Pine-woods bluestem	<i>Andropogon arctatus</i>
Rose pogonia	<i>Pogonia ophioglossoides</i>
Scare-weed	<i>Baptisia simplicifolia</i>
Small-flowered meadowbeauty	<i>Rhexia parviflora</i>
Southern milkweed	<i>Asclepias viridula</i>
Southern red lily (pine lily)	<i>Lilium catesbaei</i>
Spoon-leaved sundew	<i>Drosera intermedia</i>
Sweet shrub	<i>Calycanthus floridus</i>
Thick-leaved water willow	<i>Justicia crassifolia</i>

Thorne's buckthorn	<i>Sideroxylon thornei</i>
Washington hawthorn	<i>Crataegus phaenopyrum</i>
West's flax	<i>Linum westii</i>
White-birds-in-a-nest	<i>Macbridea alba</i>
White-top pitcherplant	<i>Sarracenia leucophylla</i>
Wiregrass gentian	<i>Gentiana pennelliana</i>

Table 5. Invasive Exotic Plant Species Found on the ARWEA

Common Name	Scientific Name
Alligatorweed	<i>Alternanthera philoxeroides</i>
Camphortree	<i>Cinnamomum camphora</i>
Wild toaro	<i>Colocasia esculenta</i>
Water-hyacinth	<i>Eichhornia crassipes</i>
Cogongrass	<i>Imperata cylindrica</i>
Japanese honeysuckle	<i>Lonicera japonica</i>
Japanese climbing fern	<i>Lygodium japonicum</i>
Torpedograss	<i>Panicum repens</i>
Chinese tallowtree	<i>Sapium sebiferum</i>
Rattlebox	<i>Sesbania punicea</i>
Mimosa	<i>Albizia julibrissin</i>

Table 6. Native Plant Species Found on the ARWEA

Common Name	Scientific Name
American elm	<i>Ulmus americana</i>
American holly	<i>Ilex opaca</i>
American hornbeam	<i>Carpinus caroliniana</i>
Arrowhead	<i>Sagittaria spp.</i>
Ash	<i>Fraxinus spp.</i>
Bald cypress	<i>Taxodium distichum</i>
Bamboo vine	<i>Smilax laurifolia</i>
Bayberry	<i>Myrica heterophylla</i>
Beakrushes	<i>Rhynchospora spp.</i>
Beautyberry	<i>Callicarpa americana</i>
Beggar's lice	<i>Desmodium spp.</i>
Big threeawn grass	<i>Aristida condensata</i>
Black gum	<i>Nyssa biflora</i>
Black needle rush	<i>Juncus roemerianus</i>
Black titi	<i>Cliftonia monophylla</i>
Black willow	<i>Salix nigra</i>
Blackgum	<i>Nyssa biflora</i>
Blazing star	<i>Liatris spp.</i>

Bluejack oak	<i>Quercus incana</i>
Blue-stem palmetto	<i>Sabal minor</i>
Buckeye	<i>Aesculus pavia</i>
Bulrush	<i>Scirpus validus</i>
Cabbage palm	<i>Sabal palmetto</i>
Catbrier	<i>Smilax bona-nox</i>
Cattail	<i>Typha</i> spp.
Chain fern	<i>Woodwardia virginica</i>
Chapman's beakrush	<i>Rhynchospora chapmanii</i>
Chapman's oak	<i>Quercus chapmani</i>
Chapman's St. John's wort	<i>Hypericum chapmanii</i>
Clematis	<i>Clematis crispa</i>
Climbing fern	<i>Lygodium japonicum</i>
Coastal plain St. John's wort	<i>Hypericum brachyphyllum</i>
Common reed	<i>Phragmites australis</i>
Coral bean	<i>Erythrina herbacea</i>
Coral greenbriar	<i>Smilax walteri</i>
Cross vine	<i>Bignonia capreolata</i>
Deerberry	<i>Vaccinium stamineum</i>
Deertongue	<i>Carphephorus odoratissimus</i>
Dwarf huckleberry	<i>Gaylussacia dumosa</i>
Dwarf live	<i>Quercus minima</i>
Dwarf runner oak	<i>Quercus minima</i>
Elderberry	<i>Sambucus canadensis</i>
False indigobush	<i>Amorpha fruticosa</i>
Fetterbush	<i>Lyonia lucida</i>
Few-flowered beakrush	<i>Rhynchospora oligantha</i>
Floodland beakrush	<i>Rhynchospora inundata</i>
Florida dropseed	<i>Sporobolus foridanus</i>
Giant cane	<i>Arundinaria gigantea</i>
Giant cord grass	<i>Spartina cynosuroides</i>
Giant Gallberry	<i>Ilex glabra</i>
Goldcrest	<i>Lophiola americana</i>
Golden aster	<i>Pityopsis oligantha</i>
Green ash	<i>Fraxinus caroliniana</i>
Green haw	<i>Crataegus viridis</i>
Gum bumelia	<i>Sideroxylon lanuginosa</i>
Hatpins	<i>Eriocaulon</i> spp.
Head beakrush	<i>Rhynchospora glomerata</i>
Highbush blueberry	<i>Vaccinium corymbosum</i>
Horned beakrush	<i>Rhynchospora corniculata</i>
Indian woodoats	<i>Chasmanthium latifolium</i>

Jessamine
 Large-fruited beakrush
 Laurel oak
 Live oak
 Loblolly bay
 Loblolly pine
 Low panic grasses
 Marsh dwarf butterworts
 Marsh elder
 Mayberry
 Milk pea
 Muscadine
 Myrtle oak
 Myrtle-leaved holly
 Netted chain fern
 Obedient plant
 Ogeche lime
 Overcup oak
 Panic grasses
 Partridgeberry
 Peppervine
 Pickerelweed
 Picknut hickory
 Pipeworts
 Planer tree
 Plumed beakrush
 Poison ivy
 Pond cypress
 Possum haw
 Red maple
 Redroot
 Resurrection fern
 River birch
 Rose meadowbeauty
 Royal fern
 Rusty lyonia
 Sand live oak
 Sand pine
 Sandweed St. John's wort
 Sarsaparilla vine
 Swamp sawgrass
 Saw palmetto

Gelsimium sempervirens
Rhynchospora megalocarpa
Quercus laurifolia
Quercus virginiana
Gordonia lasianthus
Pinus taeda
Dichanthelium spp.
Pinguicula pumila
Iva frutescens
Vaccinium elliotii
Galactia volubilis
Vitis rotundifolia
Quercus myrtifolia
Ilex myrtifolia
Woodwardia areolata
Physotegia leptophylla
Nyssa ogeche
Quercus lyrata
Panicum spp.
Mitchella repens
Ampelopsis arborea
Pontederia cordata
Carya glabra
Eriocaulon spp.
Planera aquatica
Rhynchospora plumosa
Toxicodendron radicans
Taxodium ascendens
Ilex decidua
Acer rubrum
Lacnathes caroliniana
Polypodium polypodioides
Betula nigra
Rhexia alifanus
Osmunda regalis
Lyonia fruticosa
Quercus geminata
Pinus clausa
Hypericum fasciculatum
Smilax pumila
Cladium mariscoides
Serenoa repens

Sawgrass
 Sebastian bush
 Sedges
 Sensitive fern
 Slash pine
 Slender woodoats
 Soft rush
 Southern magnolia
 Southern red cedar
 Spanish moss
 Sparkleberry
 Spikegrass
 St. Johns Wort
 Stiff cornel
 Summer grape
 Sundew
 Swamp bay
 Swamp dock
 Swamp lily
 Sweet bay
 Sweet gallberry
 Sweet pepperbush
 Sweetgum
 Trailing blackberry
 Turkey oak
 Vine-wicky
 Virginia chain fern
 Virginia creeper
 Virginia willow
 Water hickory
 Water locust
 Water oak
 Water tupelo
 Wax myrtle
 White titi
 Wicky
 Wild azalea
 Wild olive
 Winged sumac
 Wiregrass
 Wirey beakruses
 Witch hazel

Cladium jamaicense
Sebastiania fruticosa
Carex spp.
Onoclea sensibilis
Pinus elliotti
Chasmanthium laxum
Juncus effusus
Magnolia grandiflora
Juniperus silicicola
Tillandsia usneoides
Vaccinium arboreum
Chasmanthium sessiliflorum
Hypericum hypericoides
Cornus foemina
Vitis aestivalis
Drosera capillaris
Persea palustris
Rumex verticillatus
Crinum spp.
Magnolia virginiana
Ilex coriacea
Clethra alnifolia
Liquidambar styraciflua
Rubus trivialis
Quercus laevis
Pieris phillyreifolia
Woodwardia virginica
Parthenocissus quinquefolia
Itea virginica
Carya aquatica
Gleditsia aquatica
Quercus nigra
Nyssa aquatica
Myrica cerifera
Cyrilla racemiflora
Kalmia hirsuta
Rhododendron sp.
Osmanthus americanus
Rhus coppallina
Aristida stricta
Rhynchospora spp.
Hamamelis virginiana

Woolly-berry	<i>Gaylussacia mosieri</i>
Yaupon holly	<i>Ilex vomitoria</i>
Yellow meadowbeauty	<i>Rhexia lutea</i>
Yellow pitcherplant	<i>Sarracenia flava</i>
Yellow-eyed grasses	<i>Xyris</i> spp.

ARWEA Community Descriptions

Alluvial River – the Apalachicola River flows through the center of the ARWEA, and its floodplain swamps dominate the Area's central landscape. ARWEA encompasses large portions of the Apalachicola River's main channel as well as the numerous creeks and smaller rivers that spread out towards the River's mouth near the town of Apalachicola. Alluvial streams originate in uplands that are primarily composed of sandy clays and clayey-silty sands. Surface runoff is the primary water source for alluvial streams. Thus, alluvial stream waters are typically turbid due to a high content of suspended particulates, including clays, silts, sands, and organic debris. Fluctuations in water depths are dependent upon rainfall patterns and can be separated into two stages, a normal or low flow stage and a flood or high flow stage. During the low flow stage the water is confined within the stream banks, while during flood stage the water overflows the banks and inundates the adjacent floodplain communities. Additionally, flow or water level fluctuations of the Apalachicola River are affected by the system of dams and reservoirs on the Chattahoochee/Flint/Apalachicola River systems that are managed by the U. S. Army Corps of Engineers. There are few alluvial streams in Florida, and all are restricted to the Panhandle.

Basin swamps are forested wetlands that occur in large irregularly shaped depressions in mesic and wet flatwoods. There is typically a mix of evergreen and deciduous canopy trees and, in ARWEA, a dense understory of evergreen shrubs. Evergreen canopy tree dominants include slash pine, and sweet bay, with rarely loblolly bay. Deciduous trees are most often pond cypress or bald cypress, black gum, and red maple. Often these deciduous trees form monotypic stands in deeper portions of the basin swamp. Understory species include black titi, white titi, sweet bay, swamp bay, bayberry, giant gallberry, gallberry, and fetterbush. Herbs are typically very sparse. The basin swamps on ARWEA, for the most part, are dominated by cypress, sweet bay and slash pine.

Baygalls are 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. The most common type of baygall on ARWEA is characterized by thick, nearly impenetrable thickets of evergreen shrubs, primarily black titi and white titi. Baygall occurs in flatwoods depressions and on the edges of dome swamps and basin swamps. It has expanded considerably since the exclusion of fire from the landscape since the late 1940's. In most locations in ARWEA, slash pines or sweet bay are important components and occur as emergent trees over the dense evergreen canopy. Another type of baygall on ARWEA is less common and has a dense canopy of sweet bay, swamp bay and, to a lesser extent, loblolly

bay, with black and white titi beneath. Other common species in baygalls are wax myrtle, fetterbush, giant gallberry, and sweet pepperbush. Herbs are sparse to non-existent. Bamboo vine can form large tangles throughout the vegetation.

Blackwater streams originate in deep sandy lowlands where extensive wetlands with organic soils function as reservoirs, collecting rainfall and discharging it slowly. The acidic, tea-colored waters of blackwater streams are laden with tannins, particulates, and dissolved organic matter. Water temperatures fluctuate seasonally with air temperature, but are also dependent upon water depth and shading by adjacent vegetation. Blackwater streams are the most widely distributed and numerous riverine systems in the southeast coastal plain.

Bottomland forests occur within floodplain forests and swamps on higher ground that is rarely inundated except during unusual flood events. Much of the area classified as bottomland forest in ARWEA has likely experienced past human disturbances such as logging. Most areas are older loblolly pine stands that were almost certainly planted or seeded many years ago. However, these forests are now well developed, and can be considered a natural community. On ARWEA, bottomland forests typically have a dense canopy dominated by loblolly pine with mixture of hardwoods that include red maple, water oak, and laurel oak. In wetter areas blackgum, sweetbay occur, and in some drier sites southern magnolia can be found. The understory and shrub layers contain American holly, American hornbeam, wax myrtle, witch hazel, deerberry, highbush blueberry, wild azalea, mayberry, blue-stem palmetto, Sebastian bush and sweet pepperbush. Typical herbs include spikegrass, sedges, panic grasses, giant cane, partridgeberry, sarsaparilla vine and netted chain fern. Vines can be abundant and include muscadine, cross vine, bamboo vine, and poison ivy.

Depression marshes are herbaceous wetlands found in depressions in low flatlands. On ARWEA these are a minor component of the landscape, and quite botanically simple. They seem to be remnant portions of tidal marshes, occurring primarily in the Sand Beach Road area. These marshes are typically dominated by sawgrass, and less often with black needle rush. Soft rush is commonly on the outer edges. On the edge of one marsh, dwarf butterworts and sawgrass were found.

Dome swamps are shallow, forested depressions that sometimes present a domed profile because trees are shorter in the shallower waters of the outer edge, gradually becoming taller in the deeper water of the interior. On ARWEA this profile has likely been altered due to past silvicultural site preparation practices that encroached on the outer edges of the dome swamps. These swamps are dominated by pond cypress and/or blackgum. Slash pine and sweetbay may also occur in the canopy. The understory varies from very shrubby and dense, to very open, with shrubs occurring only on hummocks surrounded by open water. Common understory shrubs include Virginia willow, sweet pepperbush, fetterbush, wax myrtle, myrtle-leaved holly, giant gallberry, white titi, and black titi. Vine-wicky can sometimes be found also climbing hummocks or tree trunks. Herbs are sparse and include

Virginia chain fern, royal fern, pipeworts, panic grasses, beakrushes, sedges, and yellow-eyed grasses.

Floodplain forests on ARWEA occur on slight elevations in the Apalachicola River system, such as levees, ridges or terraces, and are usually flooded for a portion of the growing season. Typical canopy species are water hickory, overcup oak, laurel oak, American elm, green ash, sweetgum, water oak and red maple. These species also occur in the subcanopy and shrub layers, along with cabbage palm, river birch, possum haw, blue-stem palmetto, St. Johns Wort, Virginia willow, elderberry, green haw and American hornbeam. The herbaceous component of floodplain forests varies in abundance with time of year, hydrological regime, and shading by woody plants. Herbs were abundant in most floodplain forests visited during this survey, and include slender woodoats and Indian woodoats, trailing blackberry, sedged, low panic grasses, horned beakrush, giant cane and false indigobush. Ferns are often common, and include netted chain fern, royal fern, and sensitive fern. Climbing fern is found in several locations. The most commonly seen vine was poison ivy. Other vines include coral greenbriar, muscadine, summer grape, peppervine and occasionally clematis. Floodplain forest occurs primarily on river levees in the ARWEA, and quickly grades into lower, wetter floodplain swamp vegetation away from the levees.

Floodplain marshes on ARWEA occur within the floodplains of blackwater streams and in small areas within the vast floodplain swamps of the Apalachicola River. These are simple communities composed of sawgrass and often grade into floodplain forest. Along the Apalachicola River there are also very narrow fringes of bulrush, arrowhead, and pickerelweed bordering floodplain forests and swamps. These narrow marshes were generally too narrow to map; they occur sporadically throughout the river.

Floodplain swamps are riverine forested wetlands inundated or saturated for large portions of the year. In ARWEA this community dominates the Apalachicola River floodplain. The canopy is dominated by bald cypress, water tupelo, water hickory, and ogeche lime. There are relatively pure stands of these species in permanently inundated areas; in other areas these species occur with a mixture of hardwoods that include red maple, black gum, overcup oak, American elm, ash, planer tree, laurel oak, and sweet bay. Small trees and shrubs include water locust, stiff cornel, and planer tree and Virginia willow. Common herbs seen were swamp dock, lizard's tail, and pickerelweed and swamp lily. Occasionally, on the edges of the floodplain swamps and forests, particularly in small areas where sandbars occur at times of low water, black willow forms dense stands.

In the lower parts of ARWEA, where the Apalachicola River fans out into numerous smaller rivers (for example, the Little St. Marks, St. Marks, and East Rivers, this floodplain swamp vegetation grades almost imperceptibly into freshwater tidal swamp. This inclusion community contains many of the same specie as floodplain swamps further upstream, but represents a transition to the tidal marshes. Trees here are sparser and often fairly stunted; they are dominated by cypress and Ogeche lime, with sweet bay and cabbage palm

more prominent than further upstream. The understory in these freshwater tidal swamps is typically yaupon wax myrtle and red maple, along with many of the same herbaceous species listed above that occur in floodplain swamp. The invasive exotic, alligator weed, is very common in the floodplain swamps and freshwater tidal swamps in the lower Apalachicola River floodplain.

Hydric hammocks on ARWEA are dominated by slash pine and cabbage palm, that occur as forested wetland "fringes" where upland pine lands grade into tidal marshes primarily in the Sand Beach Road area. They also occur as small, low "islands" within marshes and along the shoreline of Blounts Bay and East Bay. Understory species are typically saplings of cabbage palm, yaupon, sawgrass, black needlerush, wax myrtle, and marsh elder.

Maritime hammocks on ARWEA occur in the Sand Beach Road area in narrow bands along the shorelines of Blounts Bay and East Bay. The newly established foot trail at the south end of Sand Beach Road features a nice example of maritime hammock. The maritime hammocks seen on ARWEA are dominated by live oak, with cabbage palm, pignut hickory, water oak, southern magnolia also occurring in the canopy. Understory trees and shrubs include southern red cedar, deerberry, American holly, yaupon, gum bumelia, winged sumac, saw palmetto, beautyberry, and buckeye. Herbaceous species include spikegrass, low panic grasses, beggar's lice, coral bean, and milk pea. Vines include Virginia creeper, muscadine, and greenbrier. Spanish moss and resurrection fern are found on the branches of live oaks.

Mesic flatwoods are open pinelands that occur on higher ground within the ARWEA, with a low understory composed of varying mixtures of shrubs and grasses. In areas that have been well-burned, shrubs are low in stature, and grasses predominate; less frequently burned areas may be more shrub-dominated, but grasses still persist. On ARWEA mesic flatwoods have all experienced some form of alteration due to past silvicultural activities, and only rarely are longleaf pine found; more typically slash pine are in the canopy and subcanopy layers. Characteristic grasses include wiregrass, and Florida dropseed. Characteristic shrubs are saw palmetto and giant gallberry. Other shrubs found include fetterbush, rusty lyonia, woolly-berry, dwarf huckleberry, dwarf runner oak, and wicky. Herbaceous species include rose meadowbeauty, yellow eyed grasses, golden aster, blazing star, deertongue, and occasionally bracken fern.

Mesic hammocks on ARWEA occur in very small patches ("oak domes") within pine plantations or mesic flatwoods. They are characterized by a canopy of live oak. Other canopy and subcanopy trees include laurel oak, picknut hickory and cabbage palm. Shrubs can be dense and patchy, and include yaupon, saw palmetto, and wild olive. Herbs are very sparse, but include large-fruited beakrush. Vines include jessamine, catbrier, and muscadine.

Pine plantations make up the majority of the upland areas and a large portion of historic wetland areas in ARWEA. These are large tracts of loblolly pine and slash pine plantation, in a variety of silvicultural stages. These plantations occur in areas were historically wet

flatwoods, mesic flatwoods, wet prairie, and bottomland forest. Prior to acquisition by the state, these areas had been subjected to heavy site preparation techniques such as bedding and double roller-chopping. Where recent restoration activities such as thinning and burning have taken place, many of these plantations are beginning to resemble, at least in structure, the historic landscape, although deep beds or large equipment tire ruts remain throughout. When wiregrass and wirey beakrushes were seen in any abundance in a thinned plantation, FNAI classified the plantation as a wet or mesic flatwoods. Where the groundcover was completely dominated by weeds such as broomsedges or weedy shrubs, white titi, and St. Johns Wort, and where wiregrass or wirey beakrushes were absent, the area was classified as pine plantation, even in these thinned stands. Denser pine plantations typically had very shrubby or vine-dominated understories with dense needle duff; in these plantations very rarely small wiregrass patches were found; although these tiny fragments of native groundcover offer clues to the historic vegetation, their existence was typically not common enough to merit classification of the denser plantation to a natural community type. **Sandhill** vegetation is found only in the Magnolia Bluff tract in the southern portion of the ARWEA in two small areas within a larger matrix of scrubby and mesic flatwoods. The canopy contains older longleaf pine, but is invaded with sand pine. The understory contains turkey oak, sand live oak, bluejack oak, and saw palmetto. Herbs are sparse, and include wiregrass, large-fruited beakrush, big threeawn grass, and low panic grasses. Lichens are also common.

Scrubby flatwoods are found only in the Magnolia Bluff unit. This upland community is similar to mesic flatwoods in structure and species composition, but with more xeric soils that support scattered clumps of myrtle oak, sand live oak, and Chapman's oak in the tall and short shrub layers. Other typical species include saw palmetto, wiregrass and dwarf live oak.

Strand swamps, (also known as cypress stringers) are cypress drainage areas that are more shallow than blackwater creek systems; they are typically elongated shallow depressions or channels that are likely to be dry during periods of drought, and thus historically burned. Although very few of these were noted on ARWEA, many more may have existed historically but have been obscured or eliminated by past silvicultural practices. Strand swamp vegetation is characterized by an open cypress canopy, sometimes with fewer slash pines and sweetbay. The subcanopy and shrub layers are variable, often quite sparse, and the herbaceous layer is typically abundant. Shrubs in the understory are dominated typically by sandweed St. Johns wort and Chapman's St. John's wort, but other evergreen shrubs such as fetterbush and common gallberry may occur. Herbs are dominated by larger leaved beakrushes, such as floodland beakrush, horned beakrush, or head beakrush. Other common herbs include yellow-eyed grasses, hatpins, and panic grasses.

Tidal marshes are the dominant landscape feature associated with the mouth of the Apalachicola River. These marshes are dominated by saw grass; however many other species are abundant, and form a vast mosaic of monotypic patches. The most common species

include black needle rush, giant cord grass, cattail, and common reed. Often on the outer edges of these marshes is a band of great bulrush, arrowhead, and pickereelweed. During the survey of these marshes in May, the bright pink blossoms of obedient plant were often visible on the edges of these marshes.

Upland mixed forest on ARWEA represents a few areas, and is poorly understood at the present time. This forest type is a mixture of pines and hardwoods, and is likely a result of two scenarios: long term fire exclusion in mesic flatwoods, or mesic hammocks or bottomland forests that were converted to silviculture and planted with pines long ago. The best example of this vegetation type is east of the north end of Sand Beach Road; it is an area of that, according to FWC timber stand map data was planted in 1969. The forest is slash pine dominated, with a mixture of hardwoods that include water oak, sweetgum, live oak, red maple, and an occasional cabbage palm. Beneath the canopy the vegetation is somewhat open, with shrubs that include gallberry, yaupon, deerberry, mayberry, wax myrtle and sparkleberry. Saw palmetto may occur, but is not dominant. Spikegrass is dominant in the groundcover and is abundant. Vines include Jessamine, muscadine.

Wet flatwoods on ARWEA have a relatively open canopy of slash pine and an understory that varies widely in structure, from shrub-dominated, to open and grassy. Typical shrubs include black titi, white titi, common gallberry, giant gallberry, wax myrtle, woolly-berry, and fetterbush. In some areas, particularly where wet and mesic flatwoods intergrade, saw palmetto can be present, but typically it is not as abundant as in better drained mesic flatwoods. St. John's wort is also present and can be considered a common shrub in more open areas, particularly in deeper parts of vehicle ruts and between silvicultural beds. Dominant graminoids include wiregrass, Chapman's beakrush, other beakrushes, panic grasses, and nutrushes. Other common herbaceous species are pipeworts, and yellow-eyed grasses.

Wet prairies are grass- and sedge-dominated wetlands maintained by a high or perched ground water table and frequent fires. They occur in narrow seepage zones of saturated soil at the base of gentle slopes of stream drainages and in flat lowlands. In ARWEA wet prairies are dominated by wiregrass and/or wiry beakrushes, and are generally represented in small fragments within larger pine plantations that serve to offers clues to the historic vegetation. All mapped areas of wet prairie have experienced some sort of alteration from past silvicultural practices. The largest example occurs in an old pine plantation/clear cut along Pool Loop Hammock Road. The presence of wirey beakrushes such as Chapman's beakrush, plumed beakrush, or few-flowered beakrush along with wiregrass is key to identifying areas of wet prairie. Common shrubs are sandweed St. John's wort, Chapman's St. John's wort, and coastal plain St. John's wort. Common herbs are goldcrest, redroot, sundew, yellow meadowbeauty, and panic grasses. The yellow pitcherplant was occasionally seen in wet prairie fragments.

Fish and Wildlife

Rare and Imperiled Species

The ARWEA currently supports many wildlife species. Active wildlife management practices and a diversity of natural communities make ARWEA an excellent place to view wildlife. The area's outstanding wildlife habitats including floodplain forest, sawgrass marshes, and pine flatwoods support significant populations of both rare and common wildlife. The Apalachicola ecosystem supports the highest diversity of amphibians and reptiles in North America, north of Mexico, as well as the greatest number of freshwater fish species (86) in Florida. Table 6 lists the rare and imperiled wildlife species that have been documented as occurring on or in the vicinity of the ARWEA.

A Wildlife Conservation Prioritization and Recovery (WCPR) strategy has not been completed or approved for the ARWEA. The WCPR is expected to be completed in 2013. Other observed fish and wildlife species are listed in Tables 7 – 10.

Table 6. Rare and Imperiled Wildlife Species Occurring On or Near the ARWEA

Common Name	Scientific Name	Status
American alligator ¹	<i>Alligator mississippiensis</i>	FT(S/A)
Alligator snapping turtle	<i>Macrolemys temminckii</i>	SSC
American oystercatcher	<i>Haematopus palliatus</i>	SSC
Barbour's map turtle	<i>Graptemys barbouri</i>	SSC
Black skimmer	<i>Rynchos niger</i>	SSC
Bluenose shiner	<i>Pteronotropis welaka</i>	SSC
Brown pelican	<i>Pelecanus occidentalis</i>	SSC
Eastern indigo snake	<i>Drymarchon couperi</i>	FT
Fat threeridge	<i>Amblema neislerii</i>	FE
Gopher tortoise	<i>Gopherus polyphemus</i>	ST
Gulf moccasinshell	<i>Medionidus penicillatus</i>	FE
Gulf sturgeon	<i>Acipenser oxyrinchus desotoi</i>	FT
Least tern	<i>Sternula antillarum</i>	ST
Little blue heron	<i>Egretta caerulea</i>	SSC
Marian's marsh wren	<i>Cistothorus palustris marianae</i>	SSC
Oval pigtoe	<i>Pleurobema pyriforme</i>	FE
Piping plover	<i>Charadrius melodus</i>	FT
Purple bankclimber	<i>Elliptoideus sloatianus</i>	FT
Red-cockaded woodpecker	<i>Picoides borealis</i>	FE
Snowy egret	<i>Egretta thula</i>	SSC
Snowy plover	<i>Charadrius nivosus</i>	ST
Tricolored heron	<i>Egretta tricolor</i>	SSC

Table 6. Rare and Imperiled Wildlife Species Occurring On or Near the ARWEA

Common Name	Scientific Name	Status
White ibis	<i>Eudocimus albus</i>	SSC
Wood stork	<i>Mycteria americana</i>	FE

Abbreviation	Status
FE	Federal Endangered
FT	Federal Threatened
FT(S/A)	Federal Threatened due to similarity of appearance
SSC	State Species of Special Concern
ST	State Threatened
NL	Not Listed

¹The alligator in Florida is classified as threatened due to similarity of appearance. This special designation is used because, although the alligator in Florida is no longer biologically endangered, it is necessary to maintain restrictions on commercial activities to ensure the conservation of alligator populations in other states and of similar-looking threatened or endangered crocodylian species such as the American crocodile.

All abbreviations and status determinations were derived from *Florida's Endangered and Threatened Species List* published by FWC in May 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/>.

In May, 2011 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 have been reviewed and those species are either designated as State-threatened and given a management plan or removed from the list. More detailed descriptions and management prescriptions are available on the FWC website: <http://www.myfwc.com/wildlifehabitats/profiles/>.

Table 8. Exotic Mammal Species documented on the ARWEA

Common Name	Scientific Name
Rock pigeon	<i>Columba livia</i>
Eurasian collared-dove	<i>Streptopelia decaocto</i>
European starling	<i>Sturnus vulgaris</i>
House sparrow	<i>Passer domesticus</i>
Rock pigeon	<i>Columba livia</i>
Brown anole	<i>Anolis sagrei</i>
Feral pig	<i>Sus scrofa</i>
Eurasian collared-dove	<i>Streptopelia decaocto</i>

Table 9. Mammal Species documented on the ARWEA

Common Name	Scientific Name
Beaver	<i>Castor canadensis</i>
Big brown bat	<i>Eptesicus fuscus</i>
Bobcat	<i>Lynx rufus</i>
Brazilian free-tailed bat	<i>Tadarida brasiliensis</i>
Cotton mouse	<i>Peromyscus gossypinus</i>
Coyote	<i>Canis latrans</i>
Eastern cottontail	<i>Sylvilagus floridanus</i>
Eastern fox squirrel	<i>Sciurus niger shermani</i>
Eastern gray squirrel	<i>Sciurus carolinensis</i>
Eastern harvest mouse	<i>Reithrodontomys fulvescens</i>
Eastern mole	<i>Scalopus aquaticus</i>
Eastern pipistrelle	<i>Pipistrellus subflavus</i>
Eastern red bat	<i>Lasiurus borealis</i>
Eastern woodrat	<i>Neotoma floridana smalli</i>
Evening bat	<i>Nycticeius humeralis</i>
Florida black bear	<i>Ursus americanus floridanus</i>
Golden mouse	<i>Ochrotomys nuttalli</i>
Gray fox	<i>Urocyon cinereoargenteus</i>
Hispid cotton rat	<i>Sigmodon hispidus</i>
Hoary bat	<i>Lasiurus cinereus</i>
Least shrew	<i>Cryptotis parva</i>
Little brown bat	<i>Myotis lucifugus</i>
Long-tailed weasel	<i>Mustela frenata</i>
Marsh rabbit	<i>Sylvilagus palustris</i>
Marsh rice rat	<i>Oryzomys palustris</i>

Mink	<i>Mustela vison</i>
Nine-banded armadillo	<i>Dasypus novemcinctus</i>
Northern yellow bat	<i>Lasiurus intermedius</i>
Oldfield mouse	<i>Peromyscus polionotus</i>
Opossum	<i>Didelphis virginiana</i>
Pine vole	<i>Microtus pinetorum</i>
Raccoon	<i>Procyon lotor</i>
Rafinesque's big-eared bat	<i>Corynorhinus rafinesquii</i>
Red fox	<i>Vulpes vulpes</i>
River otter	<i>Lontra canadensis</i>
Seminole bat	<i>Lasiurus seminolus</i>
Southeastern bat	<i>Myotis austroriparius</i>
Southeastern pocket gopher	<i>Geomys pinetis</i>
Southeastern shrew	<i>Sorex longirostris</i>
Southern flying squirrel	<i>Glaucomys volans</i>
Southern short-tailed shrew	<i>Blarina carolinensis</i>
Striped skunk	<i>Mephitis mephitis</i>
West indian manatee	<i>Trichechus manatus</i>
White-tailed deer	<i>Odocoileus virginianus</i>
Southern flying squirrel	<i>Glaucomys volans</i>

Table 10. Reptile and Amphibian Species documented on ARWEA

Common Name	Scientific Name
Alligator snapping turtle ^{SS1}	<i>Macrochelys temminckii</i>
American alligator ^{SA1}	<i>Alligator mississippiensis</i>
Apalachicola kingsnake	<i>Lampropeltis getula meansi</i>
Banded water snake	<i>Nerodia fasciata fasciata</i>
Barbour's map turtle ^{SS1}	<i>Graptemys barbouri</i>
Bird voiced treefrog	<i>Hyla acivoca</i>
Broadhead skink	<i>Plestiodon laticeps</i>
Bronze frog	<i>Rana clamitans clamitans</i>
Bullfrog	<i>Rana catesbeiana</i>
Common ribbon snake	<i>Thamnophis sauritus sauritus</i>
Common snapping turtle	<i>Chelydra serpentina</i>
Cope's gray treefrog	<i>Hyla chrysoscelis</i>
Corn snake	<i>Pantherophis guttatus</i>
Dusky pigmy rattlesnake	<i>Sistrurus miliarius barbouri</i>
Dwarf salamander	<i>Eurycea quadridigitata</i>
Eastern chicken turtle	<i>Deirochelys reticularia reticularia</i>

Eastern coachwhip	<i>Masticophis flagellum flagellum</i>
Eastern coral snake	<i>Micrurus fulvius</i>
Eastern diamondback rattlesnake	<i>Crotalus adamanteus</i>
Eastern fence lizard	<i>Sceloporus undulatus</i>
Eastern garter snake	<i>Thamnophis sirtalis sirtalis</i>
Eastern glass lizard	<i>Ophisaurus ventralis</i>
Eastern hognose snake	<i>Heterodon platirhinos</i>
Eastern indigo snake ST	<i>Drymarchon couperi</i>
Eastern kingsnake	<i>Lampropeltis getula getula</i>
Eastern lesser siren	<i>Siren intermedia intermedia</i>
Eastern mud snake	<i>Farancia abacura abacura</i>
Eastern mud turtle	<i>Kinosternon subrubrum subrubrum</i>
Eastern musk turtle	<i>Sternotherus odoratus</i>
Eastern narrowmouth toad	<i>Gastrophryne carolinensis</i>
Eastern newt	<i>Notophthalmus viridescens</i>
Eastern smooth earth snake	<i>Virginia valeriae valeriae</i>
Eastern spadefoot toad	<i>Scaphiopus holbrookii</i>
Florida cooter	<i>Pseudemys floridana floridana</i>
Florida cottonmouth	<i>Agkistrodon piscivorus conanti</i>
Florida cricket frog	<i>Acris gryllus dorsalis</i>
Florida softshell turtle	<i>Apalone ferox</i>
Four-toed salamander	<i>Hemidactylium scutatum</i>
Glossy crawfish snake	<i>Regina rigida</i>
Gopher tortoise ST	<i>Gopherus polyphemus</i>
Gray rat snake	<i>Pantherophis spiloides</i>
Greater siren	<i>Siren lacertina</i>
Green anole	<i>Anolis carolinensis</i>
Green treefrog	<i>Hyla cinerea</i>
Greenhouse frog	<i>Eleutherodactylus planirostris planirostris</i>
Ground skink	<i>Scincella lateralis</i>
Gulf coast box turtle	<i>Terrapene carolina major</i>
Little grass frog	<i>Pseudacris ocularis</i>
Loggerhead musk turtle	<i>Sternotherus minor minor</i>
Marbled salamander	<i>Ambystoma opacum</i>
Mole salamander	<i>Ambystoma talpoideum</i>
Mole skink	<i>Plestiodon egregius</i>
Mud salamander	<i>Pseudotriton montanus</i>
Oak toad	<i>Anaxyrus quercicus</i>
Pig frog	<i>Rana grylio</i>
Pinewoods treefrog	<i>Hyla femoralis</i>
Redbelly water snake	<i>Nerodia erythrogaster erythrogaster</i>
River frog	<i>Rana heckscheri</i>

Scarlet kingsnake	<i>Lampropeltis triangulum elapsoides</i>
Scarlet snake	<i>Cemophora coccinea</i>
Six-lined racerunner	<i>Aspidoscelis sexlineata</i>
Slimy salamander	<i>Plethodon grobmani</i>
Southeastern five-lined skink	<i>Plestiodon inexpectatus</i>
Southern black racer	<i>Coluber constrictor priapus</i>
Southern chorus frog	<i>Pseudacris nigrita</i>
Southern cricket frog	<i>Acris gryllus gryllus</i>
Southern dusky salamander	<i>Desmognathus auriculatus</i>
Southern leopard frog	<i>Rana sphenoccephala utricularia</i>
Southern ringneck snake	<i>Diadophis punctatus punctatus</i>
Southern spring peeper	<i>Pseudacris crucifer bartramiana</i>
Southern toad	<i>Anaxyrus terrestris</i>
Southern two-lined salamander	<i>Eurycea cirrigera</i>
Squirrel treefrog	<i>Hyla squirella</i>
Three-lined salamander	<i>Eurycea guttolineata</i>
Tiger salamander	<i>Ambystoma tigrinum tigrinum</i>
Two-toed amphiuma	<i>Amphiuma means</i>
Upland chorus frog	<i>Pseudacris triseriata feriarum</i>

Table 11. Observed Bird Species on ARWEA

Common Name	Scientific Name
Common loon	<i>Gavia immer</i>
Acadian flycatcher	<i>Empidonax virescens</i>
American avocet	<i>Recurvirostra americana</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</i>
American oystercatcher	<i>Haematopus palliatus</i>
American pipit	<i>Anthus rubescens</i>
American redstart	<i>Setophaga ruticilla</i>
American robin	<i>Turdus migratorius</i>
American white pelican	<i>Pelecanus erythrorhynchos</i>
American wigeon	<i>Anas americana</i>
American woodcock	<i>Scelopax minor</i>
Anhinga	<i>Anhinga anhinga</i>

Ash-throated flycatcher	<i>Myiarchus cinerascens</i>
Bachman's sparrow	<i>Aimophila aestivalis</i>
Baird's sandpiper	<i>Calidris bairdii</i>
Bald eagle	<i>Haliaeetus leucocephalus</i>
Baltimore oriole	<i>Icterus galbula</i>
Bank swallow	<i>Riparia riparia</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>Ceryle alcyon</i>
Black rail	<i>Laterallus jamaicensis</i>
Black skimmer	<i>Rynchos niger</i>
Black tern	<i>Chlidonias niger</i>
Black vulture	<i>Coragyps atratus</i>
Black-and-white warbler	<i>Mniotilta varia</i>
Black-bellied plover	<i>Pluvialis squatarola</i>
Black-billed cuckoo	<i>Coccyzus erythrophthalmus</i>
Blackburnian warbler	<i>Setophaga fusca</i>
Black-crowned night heron	<i>Nycticorax nycticorax</i>
Black-necked stilt	<i>Himantopus mexicanus</i>
Blackpoll warbler	<i>Setophaga striata</i>
Black-throated blue warbler	<i>Setophaga caerulescens</i>
Black-throated green warbler	<i>Setophaga tirus</i>
Blue grosbeak	<i>Passerina caerulea</i>
Blue jay	<i>Cyanocitta cristata</i>
Blue-gray gnatcatcher	<i>Poliophtila caerulea</i>
Blue-headed vireo	<i>Vireo solitarius</i>
Blue-winged teal	<i>Anas discors</i>
Blue-winged warbler	<i>Vermicora cyanoptera</i>
Boat-tailed grackle	<i>Quiscalus major</i>
Bobolink	<i>Dolichonyx oryzivorus</i>
Bonaparte's gull	<i>Chroicocephalus philadelphia</i>
Broad-winged hawk	<i>Buteo platypterus</i>
Brown creeper	<i>Certhia americana</i>
Brown pelican	<i>Pelecanus occidentalis</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 warbler	<i>Cardellina canadensis</i>
Canvasback	<i>Aythya valisineria</i>

Cape may warbler	<i>Setophaga tigrina</i>
Carolina chickadee	<i>Poecile carolinensis</i>
Carolina wren	<i>Thryothorus ludovicianus</i>
Caspian tern	<i>Hydroprogne caspia</i>
Cattle egret	<i>Bubulcus ibis</i>
Cedar waxwing	<i>Bombycilla cedrorum</i>
Cerulean warbler	<i>Setophaga cerulea</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>
Clay-colored sparrow	<i>Spizella pallida</i>
Cliff swallow	<i>Petrochelidon pyrrhonota</i>
Common goldeneye	<i>Bucephala clangula</i>
Common grackle	<i>Quiscalus quiscula</i>
Common ground-dove	<i>Columbina passerina</i>
Common moorhen	<i>Gallinula chloropus</i>
Common nighthawk	<i>Chordeiles minor</i>
Common snipe	<i>Gallinago gallinago</i>
Common yellowthroat	<i>Geothlypis trichas</i>
Connecticut warbler	<i>Oporornis agilis</i>
Coopers hawk	<i>Accipiter cooperii</i>
Dickcissel	<i>Spiza americana</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 kingbird	<i>Tyrannus tyrannus</i>
Eastern meadowlark	<i>Sturnella magna</i>
Eastern phoebe	<i>Sayornis phoebe</i>
Eastern screech owl	<i>Otus asio</i>
Eastern towhee	<i>Pipilo erythrophthalmus</i>
Eastern wood-pewee	<i>Contopus virens</i>
Field sparrow	<i>Spizella pusilla</i>
Fish crow	<i>Corvus ossifragus</i>
Forster's tern	<i>Sterna forsteri</i>
Fulvous whistling duck	<i>Dendrocygna bicolor</i>
Gadwall	<i>Anas strepera</i>
Golden-crowned kinglet	<i>Regulus satrapa</i>
Golden-winged warbler	<i>Vermivora chrysoptera</i>
Grasshopper sparrow	<i>Ammodramus saccanum</i>

Gray catbird	<i>Dumetella carolinensis</i>
Gray kingbird	<i>Tyrannus dominicensis</i>
Gray-cheeked thrush	<i>Catharus minimus</i>
Great blue heron	<i>Ardea herodias</i>
Great crested flycatcher	<i>Myiarchus crinitus</i>
Great egret	<i>Ardea alba</i>
Great horned owl	<i>Bubo virginianus</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 guttata</i>
Herring gull	<i>Larus argentatus</i>
Hooded merganser	<i>Lophodytes cucullatus</i>
Hooded warbler	<i>Wilsonia citrina</i>
House wren	<i>Troglodytes aedon</i>
Indigo bunting	<i>Passerina cyanea</i>
Kentucky warbler	<i>Oporornis formosus</i>
Killdeer	<i>Chavodrius vociferus</i>
King rail	<i>Rallus elegans</i>
Laughing gull	<i>Leucophaeus atricilla</i>
Least bittern	<i>Ixobrychus exilis</i>
Least flycatcher	<i>Empidonax minimus</i>
Least sandpiper	<i>Calidris minutilla</i>
Least tern	<i>Sternula antillarum</i>
Lesser scaup	<i>Aythya affinis</i>
Lesser yellowlegs	<i>Tringa flavipes</i>
Little blue heron	<i>Egretta caerulea</i>
Loggerhead shrike	<i>Lanius ludovicianus</i>
Long-billed curlew	<i>Numenius americanus</i>
Long-billed dowitcher	<i>Limnodromus scolopaceus</i>
Louisiana waterthrush	<i>Parkeesia motacilla</i>
Magnolia warbler	<i>Setophaga magnolia</i>
Mallard	<i>Anas platyrhynchos</i>
Marbled godwit	<i>Limosa fedoa</i>
Marian's marsh wren	<i>Cistothorus palustris marianae</i>
Merlin	<i>Falco columbarius</i>
Mississippi kite	<i>Ictinia mississippiensis</i>
Mottled duck	<i>Anas fulvigula</i>
Mourning dove	<i>Zenaidura macroura</i>

N Rough-winged swallow	<i>Stelgidopteryx serripennis</i>
Nelson's sparrow	<i>Ammodramus nelsoni</i>
Northern bobwhite	<i>Colinus virginianus</i>
Northern cardinal	<i>Cardinalis cardinalis</i>
Northern flicker	<i>Colaptes auratus</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 shoveler	<i>Anas clypeata</i>
Northern waterthrush	<i>Parus noveboracensis</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 palmaram</i>
Peregrin falcon	<i>Falco peregrinus</i>
Pied-billed grebe	<i>Podilymbus podiceps</i>
Pileated woodpecker	<i>Dryocopus pileatus</i>
Pine siskin	<i>Spinus pinus</i>
Pine warbler	<i>Setophaga pinus</i>
Piping plover	<i>Charadrius melodus</i>
Prairie warbler	<i>Setophaga discolor</i>
Prothonotary warbler	<i>Protonotaria citrea</i>
Purple finch	<i>Carpodacus purpureus</i>
Purple gallinule	<i>Porphyrio martinica</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>
Red-cockaded woodpecker	<i>Picoides borealis</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-winged blackbird	<i>Agelaius phoeniceus</i>
Ring-billed gull	<i>Larus delawarensis</i>
Ring-necked duck	<i>Aythya collaris</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>
Rusty blackbird	<i>Euphagus carolinus</i>
Sanderling	<i>Calidris alba</i>
Sandwich tern	<i>Thalasseus sandvicensis</i>
Savannah sparrow	<i>Passerculus sandwichensis</i>
Scarlet tanager	<i>Piranga olivacea</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>
Snow goose	<i>Chen caerulescens</i>
Snowy egret	<i>Egretta thula</i>
Snowy plover	<i>Charadrius nivosus</i>
Solitary sandpiper	<i>Tringa solitaria</i>
Song sparrow	<i>Melospiza melodia</i>
Sora	<i>Porzana carolina</i>
Spotted sandpiper	<i>Actitis macularius</i>
Sprague's pipit	<i>Anthus spragueii</i>
Summer tanager	<i>Piranga rubra</i>
Swainson's thrush	<i>Cotharus ustulatus</i>
Swainson's warbler	<i>Limothlypis swainsonii</i>
Swallow-tailed kite	<i>Elanoides forficatus</i>
Swamp sparrow	<i>Melospiza georgiana</i>
Tennessee warbler	<i>Oreothlypis peregrina</i>
Tree swallow	<i>Tachycineta bicolor</i>
Tricolored heron	<i>Egretta tricolor</i>
Tufted titmouse	<i>Baeolophus bicolor</i>
Turkey vulture	<i>Cathartes aura</i>
Veery	<i>Catharus fuscescens</i>
Vesper sparrow	<i>Pooecetes gramineus</i>
Virginia rail	<i>Rallus limicola</i>
Western kingbird	<i>Tyrannus verticalis</i>
Western sandpiper	<i>Calidris mauri</i>
Western tanager	<i>Piranga ludoviciana</i>
Whimbrel	<i>Numenius phaeopus</i>
Whip-poor-will	<i>Caprimulgus vociferus</i>
White ibis ^{SSC}	<i>Eudocimus albus</i>

White-crowned sparrow	<i>Zonotrichia leucophrys</i>
White-eyed vireo	<i>Vireo griseus</i>
White-throated sparrow	<i>Zonotrichia albicollis</i>
White-winged dove	<i>Zenaidura asiatica</i>
Wild turkey	<i>Meleagris gallopavo</i>
Willet	<i>Tringa semipalmata</i>
Willow flycatcher	<i>Empidonax traillii</i>
Wilson's plover	<i>Charadrius wilsonia</i>
Wilson's warbler	<i>Cardellina pusilla</i>
Winter wren	<i>Troglodytes hiernalis</i>
Wood duck	<i>Aix sponsa</i>
Wood stork	<i>Mycteria americana</i>
Wood thrush	<i>Hylocichla mustelina</i>
Worm-eating warbler	<i>Helminthos vermivora</i>
Yellow warbler	<i>Setophaga petechia</i>
Yellow-bellied sapsucker	<i>Sphyrapicus varius</i>
Yellow-billed cuckoo	<i>Coccyzus americanus</i>
Yellow-breasted chat	<i>Icteria virens</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>

Management Intent

The ARWEA is managed by FWC as a Wildlife and Environmental Area in conformance with the original purposes for acquisition noted above in order to ensure the preservation of fish and wildlife resources, other natural and cultural resources, and for fish and wildlife based public outdoor recreation. 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. As noted above, the WCPR strategy for the ARWEA has not been completed yet but has a completed target date of 2013.

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, along with short-term (2 years) and long-term (3-10 years) completion timelines, necessary to implement future resource and operational management of ARWEA. 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 continue to assess the condition of wildlife resources and provide planning support to enhance management of focal species and recovery of imperiled species on the ARWEA. Use of prescribed fire and other essential resource management activities have been implemented to maintain and restore natural communities and vegetation types to benefit native wildlife resources.

Estimate of Revenue-Generating Potential

The revenue generating potential of the ARWEA will depend upon future uses to be approved in the management plan. However, revenue from ARWEA may 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 Franklin and Gulf Counties, the DEP, and the NFWFMD, and Florida Forest Service among others, in the continuing management of the property.

Estimate of Costs

Following is an estimate of costs to operate and manage the ARWEA under the ARWEA Management Plan. Optimal management of the ARWEA would require 12 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 ARWEA are reflected in the cost estimates below. All land management funding is dependent upon annual legislative appropriations.

ARWEA 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	\$146,504	(1)	(1) Immediate (annual)
Prescribed Burning	\$95,573	(1)	(2) Intermediate (3-4 years)
Cultural Resource Management	\$4,836	(1)	(3) Other (5+ years)
Timber Management	\$21,166	(1)	
Hydrological Management	\$13,785	(1)	
Other (Restoration, Enhancement, Surveys, Monitoring, etc.)	\$408,413	(1)	
Subtotal	\$690,278		
<u>Administration</u>			
General administration	\$23,004	(1)	
<u>Support</u>			
Land Management Planning	\$44,182	(1)	
Land Management Reviews	\$0	(3)	
Training/Staff Development	\$20,451	(1)	
Vehicle Purchase	\$188,611	(2)	
Vehicle Operation and Maintenance	\$70,402	(1)	
Other (Technical Reports, Data Management, etc.)	\$35,139	(1)	
Subtotal	\$358,784		
<u>Capital Improvements</u>			
New Facility Construction	\$0	(2)	
Facility Maintenance	\$190,754	(1)	
Subtotal	\$190,754		
<u>Visitor Services/Recreation</u>			
Info/Education/Operations	\$59,950	(1)	
<u>Law Enforcement</u>			
Resource protection	\$59,860	(1)	
<u>Total</u>	\$1,382,631 *		

* Based on the characteristics and requirements of this area, 12 FTE positions would be optimal to fully manage this area. All land management funding is dependent upon annual legislative appropriations.

ARWEA Management Plan Cost Estimate***Ten-year projection***

<u>Resource Management</u>	<u>Expenditure</u>	<u>Priority</u>	<u>Priority schedule:</u>
Exotic Species Control	\$1,287,199	(1)	(1) Immediate (annual)
Prescribed Burning	\$839,718	(1)	(2) Intermediate (3-4 years)
Cultural Resource Management	\$42,492	(1)	(3) Other (5+ years)
Timber Management	\$185,967	(1)	
Hydrological Management	\$121,120	(1)	
Other (Restoration, Enhancement, Surveys, Monitoring, etc.)	\$3,588,360	(1)	
Subtotal	\$6,064,856		
<u>Administration</u>			
General administration	\$202,117	(1)	
<u>Support</u>			
Land Management Planning	\$388,185	(1)	
Land Management Reviews	\$28,860	(3)	
Training/Staff Development	\$179,687	(1)	
Vehicle Purchase	\$663,729	(2)	
Vehicle Operation and Maintenance	\$618,559	(1)	
Other (Technical Reports, Data Management, etc.)	\$308,734	(1)	
Subtotal	\$2,187,754		
<u>Capital Improvements</u>			
New Facility Construction	\$370,948	(2)	
Facility Maintenance	\$1,675,987	(1)	
Subtotal	\$2,046,935		
<u>Visitor Services/Recreation</u>			
Info./Education/Operations	\$526,726	(1)	
<u>Law Enforcement</u>			
Resource protection	\$525,940	(1)	
<u>Total</u>	\$11,554,328 *		

* Based on the characteristics and requirements of this area, 12 FTE positions would be optimal to fully manage this area. All land management funding is dependent upon annual legislative appropriations.

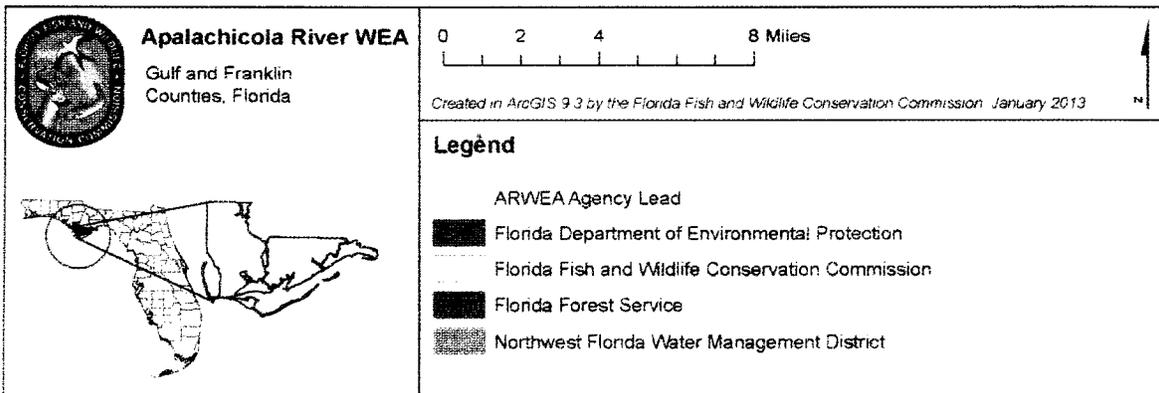
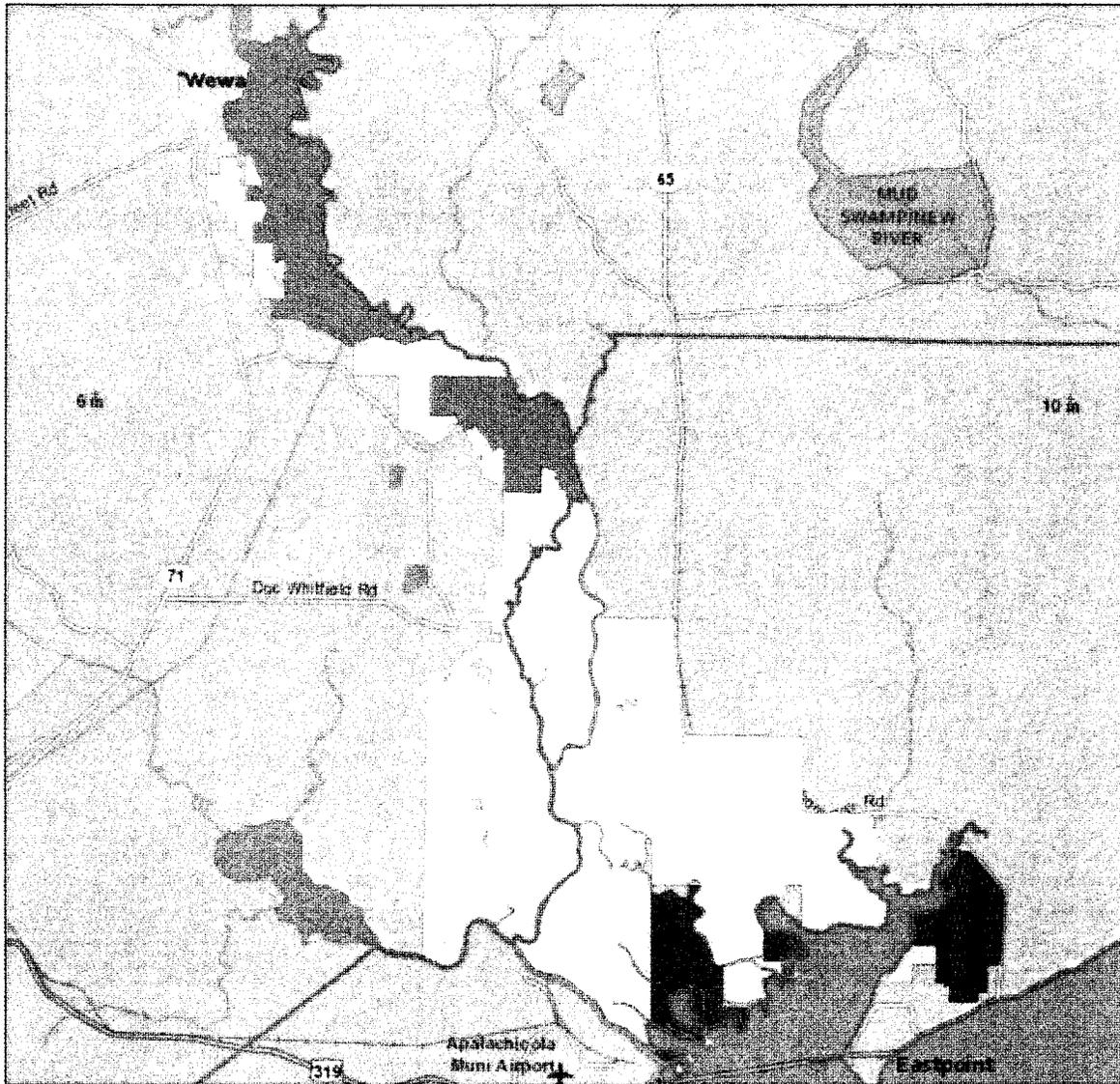


Figure 1. Lead Management Interests

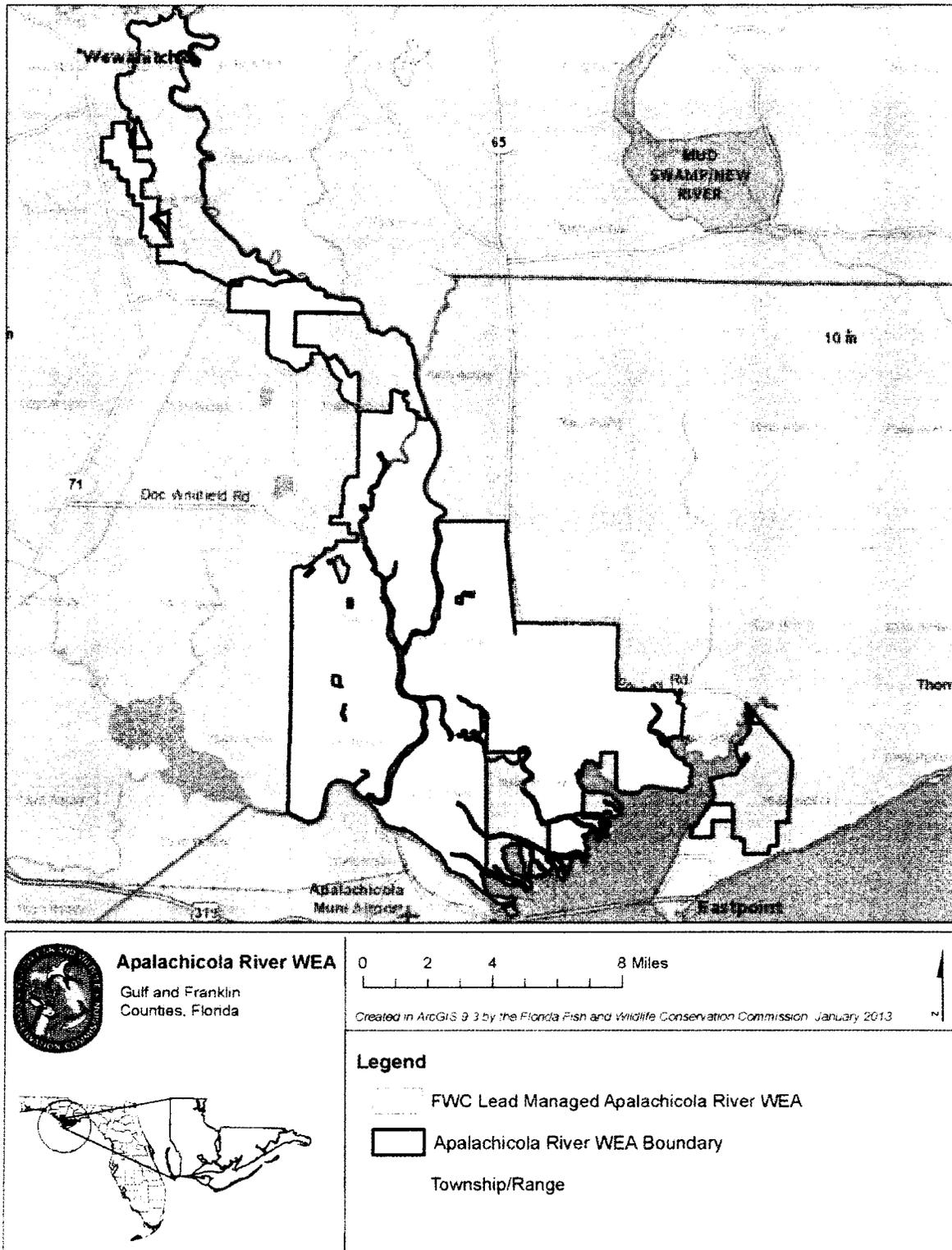


Figure 2. Proximity Map, Township and Range

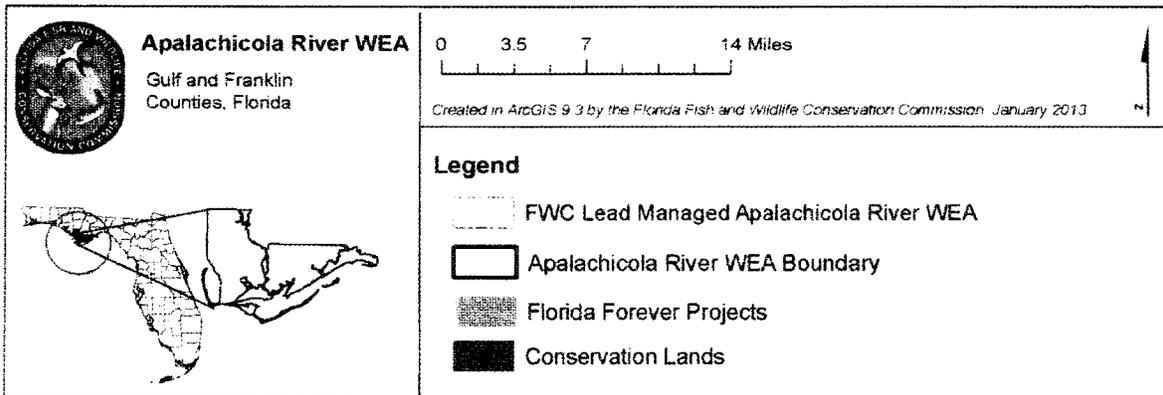


Figure 3. Proximity Conservation Lands and Florida Forever Projects

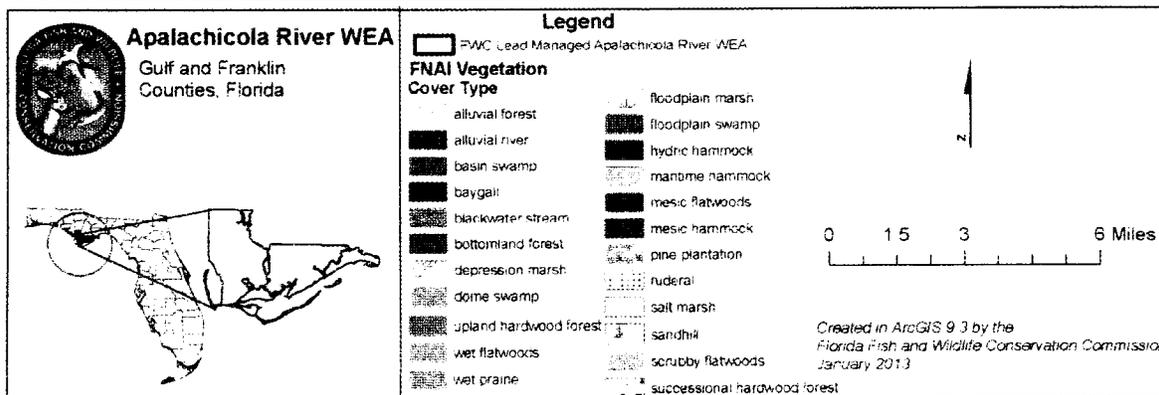


Figure 4. FNAI Natural Communities

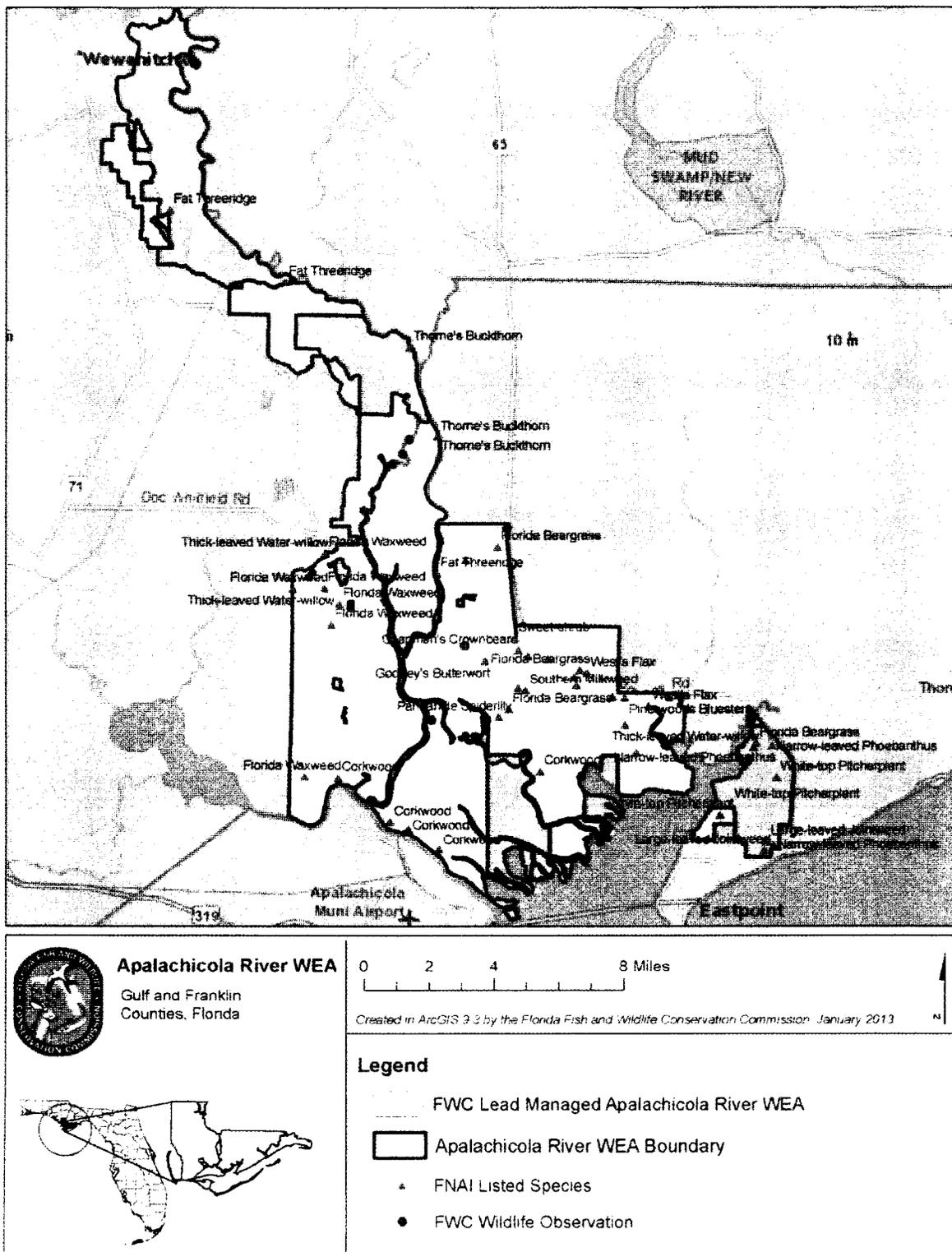


Figure 5. FWC Wildlife Observations and FNAI Element Occurrences

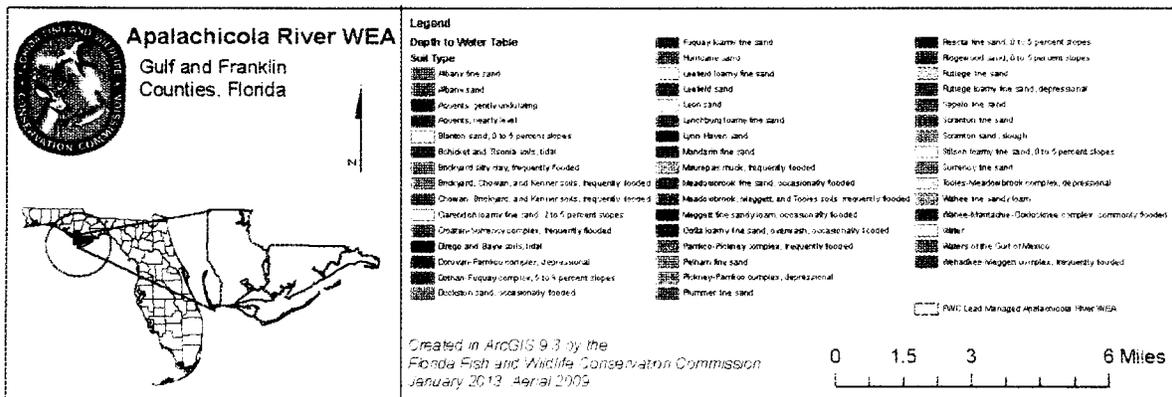


Figure 5. ARWEA Soils

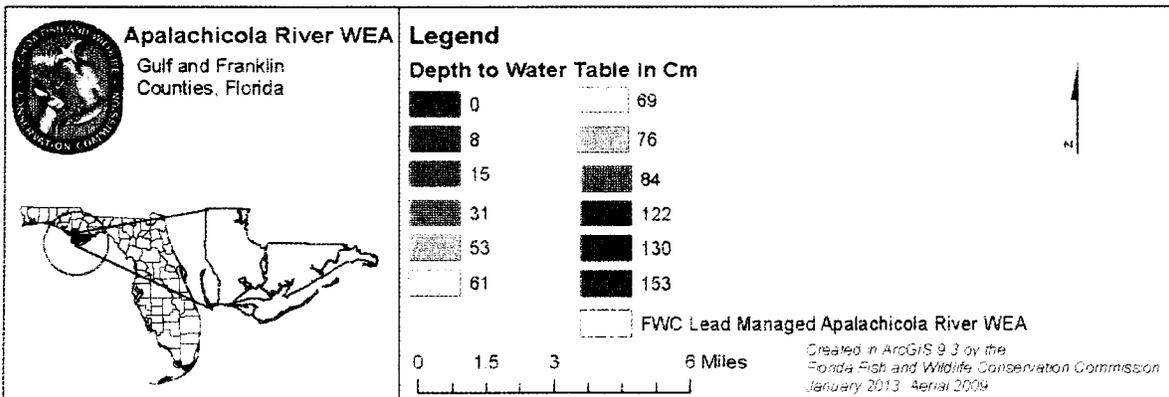


Figure 6. Soils – Depth to Water Table

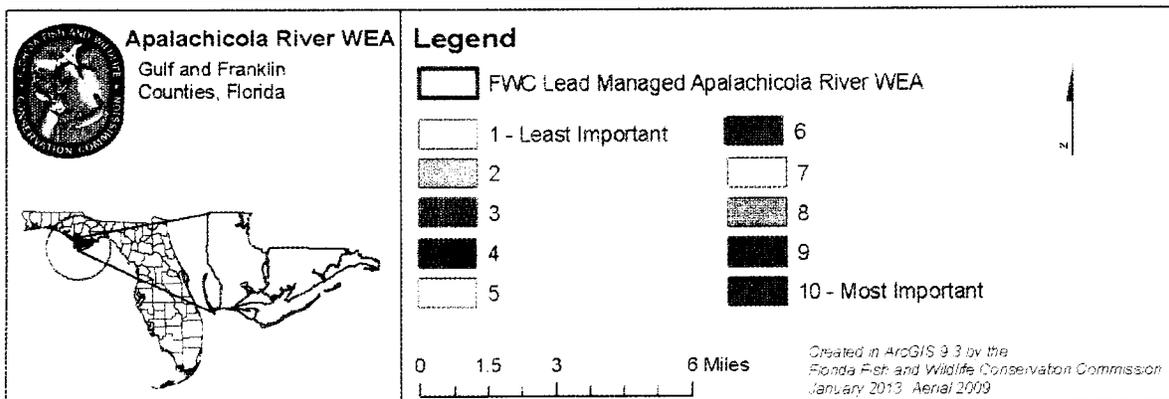


Figure 7. FWC Integrated Wildlife Habitat Ranking System 2009



FEMA

Mr. William C. Williams, III
Chairman, Board of Commissioners, Gulf County
1000 Cecil G. Costin Blvd.
Port St. Joe, FL 32456

FEB 01 2013

Dear Mr. Williams:

The purpose of this letter is to provide you with the results of the National Flood Insurance Program (NFIP) Community Rating System (CRS) field verification findings based on your 5-year cycle application. I am pleased to inform you the Department of Homeland Security, Federal Emergency Management Agency (FEMA), has determined that your community will retain its current rating as a CRS Class 8 community in the NFIP CRS. The floodplain management activities implemented by your community will continue to qualify flood insurance policy holders in your community for a 10 percent discount in the premium costs for NFIP policies issued or renewed in Special Flood Hazard Areas. I am enclosing the field verification report based on your 5-year cycle application for your records. This savings is a tangible result of the flood mitigation activities your community implements to protect lives and reduce property damage.

Please note that Preferred Risk Policies, applicable in Zones B, C, and X on your community's NFIP Flood Insurance Rate Map, are not eligible for the CRS discount. Standard rated flood insurance policies in Zones B, C, X, D, AR, and A99 are limited to a CRS discount of 10 percent in CRS Class 1-6 communities and 5 percent in CRS Class 7-9 communities. The rates for these zones already reflect significant premium reductions.

If your community remains in compliance with NFIP regulations actions, the CRS rating for your community will automatically be renewed annually and a notification letter will not be sent to your community. This renewal will occur as long as your community continues to implement the CRS activities you certify each October. If no additional modifications or new CRS activities are added, the next verification visit for your community will be in accordance with its established 5-year cycle. In the interim, FEMA will periodically send the *NFIP/CRS Update* newsletter and other notices to your CRS Coordinator to keep your community informed.

I commend you on your community actions and your determination to lead your community to be more disaster resistant. This commitment enhances public safety, protects property, preserves the natural functions of floodplains, and reduces flood insurance premiums.

If you have any questions or need additional information, please contact the FEMA Region IV Office, CRS Coordinator, Janice Mitchell, by telephone at (770) 220-5441.

Sincerely,

David L. Miller
Associate Administrator
Federal Insurance and Mitigation Administration

Enclosure

cc: David Richardson, Planner/Floodplain Administrator

COMMUNITY
RATING
SYSTEMVERIFICATION
REPORT

Gulf County, FL

Verified Class 8

NFIP Number: 120098

Cycle

Date of Verification Visit: August 23, 2011

This Verification Report is provided to explain the recommendations of Insurance Services Office, Inc. (ISO) to DHS/FEMA concerning credits under the Community Rating System (CRS) for the above named community.

A total of 1212 credit points are verified which results in a recommendation that the community remain classified as a CRS Class 8. The following is a summary of our findings with the total credit points for each activity noted in parenthesis:

Activity 310 – Elevation Certificates: The Building Department maintains elevation certificates for new and substantially improved buildings. Copies of elevation certificates are made available upon request. (51 points)

Activity 330 – Outreach Projects: The community provides flood information through a mailing to approximately 3,064 properties in areas where there has been repetitive loss flooding. (9 points)

Activity 340 – Hazard Disclosure: Credit is provided for the State requirement that sellers of properties seaward of the Coastal Construction Control Line (CCCL) disclose that the property being purchased is in a coastal area subject to coastal erosion and frequent and severe fluctuations and that the property is subject to certain federal, state, or local regulations that govern coastal construction; and the Florida Department of Environmental Protection has additional information regarding the property being purchased. (10 points)

Activity 350 – Flood Protection Information: Documents relating to floodplain management are available in the reference section of the Gulf County Public Library. Credit is also provided for floodplain information displayed on the community's website. (40 points)

Activity 410 – Additional Flood Data: Credit is provided for a cooperating technical partnership agreement with FEMA. (12 points)

Activity 420 – Open Space Preservation: Credit is provided for preserving approximately 52,672 acres in the SFHA as open space. (145 points)

Activity 430 – Higher Regulatory Standards: Credit is provided for enforcing regulations that require freeboard for new and substantial improvement construction, other higher regulatory standards, land development criteria and state mandated regulatory standards. Credit is also provided for a BCEGS Classification of 4/4 and the adoption and implementation of the International Series of Building Codes. (231 points)

Activity 440 – Flood Data Maintenance: Credit is provided for maintaining and using digitized maps, overlay maps and parcel records in the day to day management of the floodplain. (112 points)

Activity 450 – Stormwater Management: The community enforces regulations for stormwater management, freeboard in non-SFHA zones, soil and erosion control, and water quality. (119 points)

Activity 510 – Floodplain Management Planning: Based on the updates made to the NFIP Report of Repetitive Losses as of claims on or before January 31, 2011, Gulf County has 38 repetitive loss properties and is a Category C community for CRS purposes. All requirements for the 2011 cycle have been met. Credit is provided for the adoption and implementation of the Floodplain Management Plan. Since Gulf County is a Category C community with an approved Floodplain Management Plan, a progress report must be submitted on an annual basis. (142 points)

Activity 540 – Drainage System Maintenance: Portions of the community's drainage system are inspected regularly throughout the year and maintenance is performed as needed by the Gulf County Public Works Department. Records are being maintained for both inspections and required maintenance. Credit is also provided for an ongoing Capital Improvements Program. The community also enforces a regulation prohibiting dumping in the drainage system. (270 points)

Activity 630 – Dam Safety: All Florida communities currently receive CRS credit for the state's dam safety program. (71 points)

Attached is the Community Calculations Worksheet that lists the verified credit points for the Community Rating System.

CEO Name / Address:

Warren J. Yeager, Jr.
 Chairman, Board of County Commissioners
 1000 Cecil G. Costin Senior Boulevard
 Port Saint Joe, Florida 32456

CRS Coordinator Name / Address:

David Richardson
 Planner/Floodplain Administrator
 1000 Cecil G. Costin Senior Boulevard
 Port Saint Joe, Florida 32456
 (850) 227 - 9563

Date Report Prepared: January 23, 2012

Community : Gulf County, FL

NFIP Number : 120098

720 COMMUNITY CREDIT CALCULATIONS (Cycle):

CALCULATION SECTION :

Verified Activity Calculations:	Credit
c310 53	53
c320	
c330 9	9
c340 10	10
c350 40	40
c360	
c410 10 x CGA 1.18 =	12
c420 123 x CGA 1.18 =	145
c430 196 x CGA 1.18 =	231
c440 95 x CGA 1.18 =	112
c450 101 x CGA 1.18 =	119
c510 142	142
c520	
c530	
c540 270	270
c610	
c620	
c630 71	71

722 Community Classification Calculation:

cT = total of above	cT = <u>1212</u>
Community Classification (from Appendix C):	Class = <u>8</u>

CEO Name / Address:

Warren J. Yeager, Jr.
 Chairman, Board of County Commissioners
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Date Report Prepared: January 23, 2012

AW-720