



A Management Plan for the Indian River County Public Shooting Range 2019 - 2029

Indian River County, Florida



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



FLORIDA DEPARTMENT OF Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, FL 32399

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Lt. Governor

Noah Valenstein
Secretary

April 22, 2019

Mr. Thomas Houston
Florida Fish and Wildlife Conservation Commission
620 South Meridian Street
Tallahassee, FL 32399-1600

RE: Indian River County Public Shooting Range – Lease No. 4148

Dear Mr. Houston:

On **April 19, 2019**, the Acquisition and Restoration Council (ARC) recommended approval of the **Indian River County Public Shooting Range** management plan. Therefore, Division of State Lands, Office of Environmental Services, acting as agent for the Board of Trustees of the Internal Improvement Trust Fund, hereby approves the **Indian River County Public Shooting Range** management plan. The next management plan update is due April 19, 2029.

Pursuant to s. 253.034(5)(a), F.S., each management plan is required to “describe both short-term and long-term management goals, and include measurable objectives to achieve those goals. Short-term goals shall be achievable within a 2-year planning period, and long-term goals shall be achievable within a 10-year planning period.” Upon completion of short-term goals, please submit a signed letter identifying categories, goals, and results with attached methodology to the Division of State Lands, Office of Environmental Services.

Pursuant to s. 259.032(8)(g), F.S., by July 1 of each year, each governmental agency and each private entity designated to manage lands shall report to the Secretary of Environmental Protection, via the Division of State Lands, on the progress of funding, staffing, and resource management of every project for which the agency or entity is responsible.

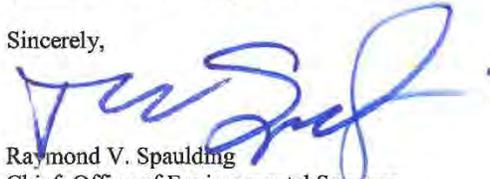
Pursuant to s. 259.036(2), F.S., management areas that exceed 1,000 acres in size, shall be scheduled for a land management review at least every 5 years.

Pursuant to s. 259.032, F.S., and Chapter 18-2.021, F.A.C., management plans for areas less than 160 acres may be handled in accordance with the negative response process. This process requires small management plans and management plan amendments be submitted to the Division of State Lands for review, and the Acquisition and Restoration

Council (ARC) for public notification. The Division of State Lands will approve these plans or plan amendments submitted for review through delegated authority unless three or more ARC members request the division place the item on a future council meeting agenda for review. To create better efficiency, improve customer service, and assist members of the ARC, the Division of State Lands will notice negative response items on Thursdays except for weeks that have State or Federal holidays that fall on Thursday or Friday. The Division of State Lands will contact you on the appropriate Friday to inform you if the item is approved via delegated authority or if it will be placed on a future ARC agenda by request of the ARC members.

Approval of this land management plan does not waive the authority or jurisdiction of any governmental entity that may have an interest in this project. Implementation of any upland activities proposed by this management plan may require a permit or other authorization from federal and state agencies having regulatory jurisdiction over those particular activities. Pursuant to the conditions of your lease, please forward copies of all permits to this office upon issuance.

Sincerely,



Raymond V. Spaulding
Chief, Office of Environmental Services
Division of State Lands
Department of Environmental Protection

**A Management Plan
for the
Indian River County Public Shooting Range**

Indian River County, Florida

Owned by the Board of Trustees of the Internal Improvement Trust Fund
Managed by the Florida Fish and Wildlife Conservation Commission and Indian
River County



November 2018

Approved 

Morgan Richardson
Director, Division of Hunting and Game Management

LAND MANAGEMENT PLAN EXECUTIVE SUMMARY

Lead Agency: Florida Fish and Wildlife Conservation Commission (FWC)

Common Name of Property: Indian River County Public Shooting Range

Location: Indian River County, Florida

Acreage Total: 320 acres

Acreage Breakdown:

<u>Land Cover Classification</u>	<u>Acres</u>	<u>Percent of Total Area</u>
Freshwater Marshes	11.25	3.5%
Mesic Flatwoods	204.96	64.5%
Mesic Hammock	8.09	2.5%
Ruderal	31.65	10.0%
Wet Flatwoods	62.20	19.6%

*GIS-calculated acreage for land cover classification varies slightly from actual total acreage.

Lease/Management Agreement No.: 4148 (Appendix 12.1)

Use: Single _____ Management Responsibilities:
 Multiple X Agency FWC Responsibilities
LEAD, LESSEE, SUBLESSEE

Designated Land Use: Conservation and Public Shooting Range

Sublease (s): None

Encumbrances: List: Utility Easement to BellSouth Communications, Inc. (Instrument No. 30694)

Type Acquisition: Conservation and Recreation Lands Program

Unique Features: Natural: Natural communities including mesic and wet flatwoods, mesic hammock, and freshwater marshes.

Archaeological/Historical: None documented within IRCPSR

Management Needs: Habitat restoration and improvement; public access and recreational opportunities; hydrological preservation and restoration; exotic and invasive species maintenance and control; imperiled species habitat maintenance, enhancement, and restoration.

Acquisition Needs/Acreage: None

Surplus Lands/Acreage: None

Public Involvement: Management Advisory Group consensus building meeting and Public Hearing (Appendix 12.3)

DO NOT WRITE BELOW THIS LINE (FOR DIVISION OF STATE LANDS USE ONLY)

ARC Approval Date _____ BTIITF Approval Date: _____

Comments: _____

Land Management Plan Compliance Checklist

Required for State-owned conservation lands over 160 acres

Section A: Acquisition Information Items

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
1	The common name of the property.	18-2.018 & 18-2.021	ii; 1
2	The land acquisition program, if any, under which the property was acquired.	18-2.018 & 18-2.021	3 - 4
3	Degree of title interest held by the Board, including reservations and encumbrances such as leases.	18-2.021	3 - 4
4	The legal description and acreage of the property.	18-2.018 & 18-2.021	ii; 1; 3 - 4; Appendix 12.1
5	A map showing the approximate location and boundaries of the property, and the location of any structures or improvements to the property.	18-2.018 & 18-2.021	8 - 11; 67
6	An assessment as to whether the property, or any portion, should be declared surplus. <i>Provide Information regarding assessment and analysis in the plan, and provide corresponding map.</i>	18-2.021	33
7	Identification of other parcels of land within or immediately adjacent to the property that should be purchased because they are essential to management of the property. <i>Please clearly indicate parcels on a map.</i>	18-2.021	54 - 57
8	Identification of adjacent land uses that conflict with the planned use of the property, if any.	18-2.021	7
9	A statement of the purpose for which the lands were acquired, the projected use or uses as defined in 253.034 and the statutory authority for such use or uses.	259.032(10)	3
10	Proximity of property to other significant State, local or federal land or water resources.	18-2.021	4 - 7; 13 - 14; 26

Section B: Use Items

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
11	The designated single use or multiple use management for the property, including use by other managing entities.	18-2.018 & 18-2.021	31 - 32
12	A description of past and existing uses, including any unauthorized uses of the property.	18-2.018 & 18-2.021	29 - 31
13	A description of alternative or multiple uses of the property considered by the lessee and a statement detailing why such uses were not adopted.	18-2.018	31 - 32
14	A description of the management responsibilities of each entity involved in the property's management and how such responsibilities will be coordinated.	18-2.018	3 - 4; 57
15	Include a provision that requires that the managing agency consult with the Division of Historical Resources, Department of State before taking actions that may adversely affect archeological or historical resources.	18-2.021	26; 53; 57 - 58; 63

16	Analysis/description of other managing agencies and private land managers, if any, which could facilitate the restoration or management of the land.	18-2.021	43 - 54; 57
17	A determination of the public uses and public access that would be consistent with the purposes for which the lands were acquired.	259.032(10)	29 - 33
18	A finding regarding whether each planned use complies with the 1981 State Lands Management Plan, particularly whether such uses represent "balanced public utilization," specific agency statutory authority and any other legislative or executive directives that constrain the use of such property.	18-2.021	31 - 32
19	Letter of compliance from the local government stating that the LMP is in compliance with the Local Government Comprehensive Plan.	BOT requirement	Appendix 12.13
20	An assessment of the impact of planned uses on the renewable and non-renewable resources of the property, including soil and water resources, and a detailed description of the specific actions that will be taken to protect, enhance and conserve these resources and to compensate/mitigate damage caused by such uses, including a description of how the manager plans to control and prevent soil erosion and soil or water contamination.	18-2.018 & 18-2.021	13 - 15; 25 - 26; 43 - 54
21	*For managed areas larger than 1,000 acres, an analysis of the multiple-use potential of the property which shall include the potential of the property to generate revenues to enhance the management of the property provided that no lease, easement, or license for such revenue-generating use shall be entered into if the granting of such lease, easement or license would adversely affect the tax exemption of the interest on any revenue bonds issued to fund the acquisition of the affected lands from gross income for federal income tax purposes, pursuant to Internal Revenue Service regulations.	18-2.021 & 253.036	N/A *Less than 1,000 acres
22	If the lead managing agency determines that timber resource management is not in conflict with the primary management objectives of the managed area, a component or section, prepared by a qualified professional forester, that assesses the feasibility of managing timber resources pursuant to section 253.036, F.S.	18-021	53
23	A statement regarding incompatible use in reference to Ch. 253.034(10).	253.034(10)	32

*The following taken from 253.034(10) is not a land management plan requirement; however, it should be considered when developing a land management plan: The following additional uses of conservation lands acquired pursuant to the Florida Forever program and other state-funded conservation land purchase programs shall be authorized, upon a finding by the Board of Trustees, if they meet the criteria specified in paragraphs (a)-(e): water resource development projects, water supply development projects, storm-water management projects, linear facilities and sustainable agriculture and forestry. Such additional uses are authorized where: (a) Not inconsistent with the management plan for such lands; (b) Compatible with the natural ecosystem and resource values of such lands; (c) The proposed use is appropriately located on such lands and where due consideration is given to the use of other available lands; (d) The using entity reasonably compensates the titleholder for such use based upon an appropriate measure of value; and (e) The use is consistent with the public interest.

Section C: Public Involvement Items			
Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
24	A statement concerning the extent of public involvement and local government participation in the development of the plan, if any.	18-2.021	13; Appendix 12.3
25	The management prospectus required pursuant to paragraph (9)(d) shall be available to the public for a period of 30 days prior to the public hearing.	259.032(10)	13; Appendix 12.3.4
26	LMPs and LMP updates for parcels over 160 acres shall be developed with input from an advisory group who must conduct at least one public hearing within the county in which the parcel or project is located. <i>Include the advisory group members and their affiliations, as well as the date and location of the advisory group meeting.</i>	259.032(10)	13; Appendix 12.3
27	Summary of comments and concerns expressed by the advisory group for parcels over 160 acres	18-2.021	Appendix 12.3.1
28	During plan development, at least one public hearing shall be held in each affected county. Notice of such public hearing shall be posted on the parcel or project designated for management, advertised in a paper of general circulation, and announced at a scheduled meeting of the local governing body before the actual public hearing. <i>Include a copy of each County's advertisements and announcements (meeting minutes will suffice to indicate an announcement) in the management plan.</i>	253.034(5) & 259.032(10)	Appendix 12.3
29	The manager shall consider the findings and recommendations of the land management review team in finalizing the required 10-year update of its management plan. <i>Include manager's replies to the team's findings and recommendations.</i>	259.036	N/A; 43
30	Summary of comments and concerns expressed by the management review team, if required by Section 259.036, F.S.	18-2.021	N/A; 43
31	If manager is not in agreement with the management review team's findings and recommendations in finalizing the required 10-year update of its management plan, the managing agency should explain why they disagree with the findings or recommendations.	259.036	N/A; 43

Section D: Natural Resources			
Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
32	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding soil types. <i>Use brief descriptions and include USDA maps when available.</i>	18-2.021	13 - 18; Appendix 12.4

33	Insert FNAI based natural community maps when available.	ARC consensus	18
34	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding outstanding native landscapes containing relatively unaltered flora, fauna and geological conditions.	18-2.021	13 - 25
35	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding unique natural features and/or resources including but not limited to virgin timber stands, scenic vistas, natural rivers and streams, coral reefs, natural springs, caverns and large sinkholes.	18-2.018 & 18-2.021	13 - 28
36	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding beaches and dunes.	18-2.021	26
37	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding mineral resources, such as oil, gas and phosphate, etc.	18-2.018 & 18-2.021	26
38	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding fish and wildlife, both game and non-game, and their habitat.	18-2.018 & 18-2.021	20 - 25
39	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding State and Federally listed endangered or threatened species and their habitat.	18-2.021	20 - 25
40	The identification or resources on the property that are listed in the Natural Areas Inventory. <i>Include letter from FNAI or consultant where appropriate.</i>	18-2.021	25; Appendix 12.5
41	Specific description of how the managing agency plans to identify, locate, protect and preserve or otherwise use fragile, nonrenewable natural and cultural resources.	259.032(10)	43 - 67
42	Habitat Restoration and Improvement	259.032(10) & 253.034(5)	
42-A.	Describe management needs, problems and a desired outcome and the key management activities necessary to achieve the enhancement, protection and preservation of restored habitats and enhance the natural, historical and archeological resources and their values for which the lands were acquired.	↓	43 - 72
42-B.	Provide a detailed description of both short (2-year planning period) and long-term (10-year planning period) management goals, and a priority schedule based on the purposes for which the lands were acquired and include a timeline for completion.		60 - 67
42-C.	The associated measurable objectives to achieve the goals.		60 - 67
42-D.	The related activities that are to be performed to meet the land management objectives and their associated measures. <i>Include fire management plans - they can be in plan body or an appendix.</i>		43 - 72; Appendix 12.11
42-E.	A detailed expense and manpower budget in order to provide a management tool that facilitates development of performance measures, including recommendations for cost-effective methods of accomplishing those activities.		68 - 70; Appendix 12.10

43	***Quantitative data description of the land regarding an inventory of forest and other natural resources and associated acreage. <i>See footnote.</i>	253.034(5)	14 - 20
44	Sustainable Forest Management, including implementation of prescribed fire management	18-2.021, 253.034(5) & 259.032(10) ↓	
44-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).		43 - 72
44-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		60 - 67
44-C.	Measurable objectives (see requirement for #42-C).		60 - 67
44-D.	Related activities (see requirement for #42-D).		43 - 72
44-E.	Budgets (see requirement for #42-E).		68 - 70; Appendix 12.10
45	Imperiled species, habitat maintenance, enhancement, restoration or population restoration	259.032(10) & 253.034(5)	
45-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	43 - 72
45-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		60 - 67
45-C.	Measurable objectives (see requirement for #42-C).		60 - 67
45-D.	Related activities (see requirement for #42-D).		43 - 72
45-E.	Budgets (see requirement for #42-E).		68 - 70; Appendix 12.10
46	***Quantitative data description of the land regarding an inventory of exotic and invasive plants and associated acreage. <i>See footnote.</i>		253.034(5)
47	Place the Arthropod Control Plan in an appendix. If one does not exist, provide a statement as to what arrangement exists between the local mosquito control district and the management unit.	BOT requirement via lease language	Appendix 12.12
48	Exotic and invasive species maintenance and control	259.032(10) & 253.034(5)	
48-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	43 - 72
48-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		60 - 67
48-C.	Measurable objectives (see requirement for #42-C).		60 - 67
48-D.	Related activities (see requirement for #42-D).		43 - 72
48-E.	Budgets (see requirement for #42-E).		68 - 70; Appendix 12.10

Section E: Water Resources

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
49	A statement as to whether the property is within and/or adjacent to an aquatic preserve or a designated area of critical state concern or an area under study for such designation. <i>If yes, provide a list of the appropriate managing agencies that have been notified of the proposed plan.</i>	18-2.018 & 18-2.021	25 - 26
50	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding water resources, including water classification for each water body and the identification of any such water body that is designated as an Outstanding Florida Water under Rule 62-302.700, F.A.C.	18-2.021	25 - 26
51	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding swamps, marshes and other wetlands.	18-2.021	14 - 20; 25 - 26
52	***Quantitative description of the land regarding an inventory of hydrological features and associated acreage. <i>See footnote.</i>	253.034(5)	14 - 20; 25 - 26
53	Hydrological Preservation and Restoration	259.032(10) & 253.034(5)	
53-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	53
53-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		60 - 67
53-C.	Measurable objectives (see requirement for #42-C).		60 - 67
53-D.	Related activities (see requirement for #42-D).		43 - 72
53-E.	Budgets (see requirement for #42-E).		68 - 70; Appendix 12.10

Section F: Historical, Archeological and Cultural Resources

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
54	**Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding archeological and historical resources. <i>Include maps of all cultural resources except Native American sites, unless such sites are major points of interest that are open to public visitation.</i>	18-2.018, 18-2.021 & per DHR's request	26; 53
55	***Quantitative data description of the land regarding an inventory of significant land, cultural or historical features and associated acreage.	253.034(5)	26; 53
56	A description of actions the agency plans to take to locate and identify unknown resources such as surveys of unknown archeological and historical resources.	18-2.021	53; Appendix 12.8
57	Cultural and Historical Resources	259.032(10) & 253.034(5)	
57-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	43 - 72
57-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		60 - 67

57-C.	Measurable objectives (see requirement for #42-C).		60 - 67
57-D.	Related activities (see requirement for #42-D).		43 - 72
57-E.	Budgets (see requirement for #42-E).		68 - 70; Appendix 12.10

**While maps of Native American sites should not be included in the body of the management plan, the DSL urges each managing agency to provide such information to the Division of Historical Resources for inclusion in their proprietary database. This information should be available for access to new managers to assist them in developing, implementing and coordinating their management activities.

Section G: Facilities (Infrastructure, Access, Recreation)			
Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
58	***Quantitative data description of the land regarding an inventory of infrastructure and associated acreage. <i>See footnote.</i>	253.034(5)	53 - 54
59	Capital Facilities and Infrastructure	259.032(10) & 253.034(5)	
59-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	43 - 72
59-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		60 - 67
59-C.	Measurable objectives (see requirement for #42-C).		60 - 67
59-D.	Related activities (see requirement for #42-D).		43 - 72
59-E.	Budgets (see requirement for #42-E).		68 - 70; Appendix 12.10
60	*** Quantitative data description of the land regarding an inventory of recreational facilities and associated acreage.	253.034(5)	49 - 54; 67
61	Public Access and Recreational Opportunities	259.032(10) & 253.034(5)	
61-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	43 - 72
61-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		60 - 67
61-C.	Measurable objectives (see requirement for #42-C).		60 - 67
61-D.	Related activities (see requirement for #42-D).		43 - 72
61-E.	Budgets (see requirement for #42-E).		68 - 70; Appendix 12.10

Section H: Other/ Managing Agency Tools			
Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
62	Place this LMP Compliance Checklist at the front of the plan.	ARC and managing agency consensus	iii - x

63	Place the Executive Summary at the front of the LMP. Include a physical description of the land.	ARC and 253.034(5)	ii
64	If this LMP is a 10-year update, note the accomplishments since the drafting of the last LMP set forth in an organized (categories or bullets) format.	ARC consensus	33 - 43
65	Key management activities necessary to achieve the desired outcomes regarding other appropriate resource management.	259.032(10)	43 - 72
66	Summary budget for the scheduled land management activities of the LMP including any potential fees anticipated from public or private entities for projects to offset adverse impacts to imperiled species or such habitat, which fees shall be used to restore, manage, enhance, repopulate, or acquire imperiled species habitat for lands that have or are anticipated to have imperiled species or such habitat onsite. The summary budget shall be prepared in such a manner that it facilitates computing an aggregate of land management costs for all state-managed lands using the categories described in s. 259.037(3) which are resource management, administration, support, capital improvements, recreation visitor services, law enforcement activities.	253.034(5)	68 - 70; Appendix 12.10
67	Cost estimate for conducting other management activities which would enhance the natural resource value or public recreation value for which the lands were acquired, include recommendations for cost-effective methods in accomplishing those activities.	259.032(10)	68 - 70; Appendix 12.10
68	A statement of gross income generated, net income and expenses.	18-2.018	68 - 70; Appendix 12.10

*** = The referenced inventories shall be of such detail that objective measures and benchmarks can be established for each tract of land and monitored during the lifetime of the plan. All quantitative data collected shall be aggregated, standardized, collected, and presented in an electronic format to allow for uniform management reporting and analysis. The information collected by the DEP pursuant to s. 253.0325(2) shall be available to the land manager and his or her assignee.

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Management Plan Acronym Key

ADA	Americans with Disabilities Act
ARC	Acquisition and Restoration Council
BEBR	Bureau of Economic and Business Research
BOT	Board of Trustees of the Internal Improvement Trust Fund
CARL	Conservation and Recreation Lands Program
CAS	Conservation Action Strategy
CLC	Florida Cooperative Land Cover Map
CLIP	Critical Lands and Waters Identification Project
DACS	Department of Agriculture and Consumer Services
DEP	Department of Environmental Protection
DSL	Division of State Lands
FAC	Florida Administrative Code
FFS	Florida Forest Service
FLEPPC	Florida Exotic Pest Plant Council
FLUE	Florida Land Use Element
FNAI	Florida Natural Areas Inventory
FS	Florida Statute(s)
FWC	Florida Fish and Wildlife Conservation Commission
FWRI	Fish and Wildlife Research Institute
FWHAP	FWC's Fish and Wildlife Habitat Acquisition Program
GFC	Florida Game and Freshwater Fish Commission
GIS	Geographic Information Systems
IMPP	Internal Management Policies and Procedures
IPCC	Intergovernmental Panel on Climate Change
IWHRS	Integrated Wildlife Habitat Ranking System
LAP	Landowner Assistance Program
LMR	Land Management Review
LPIGD	Land Parcel Inventory of Geo-Database and Process
OBVM	Objective-Based Vegetation Management
OCPB	Optimal Conservation Planning Boundary
OFW	Outstanding Florida Waters
ORB	Optimal Resource Boundary
PUD	Planned Unit Development
RSPH	Rare Species Potential Habitat
SCHA	Strategic Habitat Conservation Areas
SFWMMD	South Florida Water Management District
SJRWMD	St. John's River Water Management District
WCPR	Wildlife Conservation Prioritization and Recovery

1 Introduction and General Information

The Indian River County Public Shooting Range (IRCPSR) is located in northeastern Indian River County, approximately three miles south of the Brevard County line. The IRCPSR conserves approximately 320 acres of important habitat. Although the area is known for its public shooting range, it also contains mesic and wetland habitats. Set within an increasingly urbanized region, visitors to the IRCPSR have opportunities to find solace from the nearby bustle and see a diverse assemblage of Florida’s wildlife and landscapes.

The IRCPSR is managed by the Florida Fish and Wildlife Conservation Commission (FWC) and the Indian River County for the conservation of imperiled and more common wildlife, and for fish- and wildlife-based public outdoor recreation. The area is managed to provide a variety of recreation opportunities and to conserve the important natural communities on site that provide habitat for several wildlife species.

The IRCPSR is owned by the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees). The FWC holds the lease and has lead management authority for all resources within the established boundary. The FWC also holds a concessionaire contract with Indian River County for operation and management of the shooting range facilities. The IRCPSR is managed to conserve and restore natural wildlife habitats, and to provide high-quality opportunities for the shooting range facilities, fishing, wildlife viewing, hunter education, and other fish- and wildlife-based public outdoor recreational opportunities.

1.1 Management Plan Purpose

This Management Plan serves as the basic statement of policy and direction for the management of the IRCPSR. It provides information including the past usage, conservation acquisition history, and descriptions of the natural and historical resources found on the IRCPSR. Furthermore, it identifies the FWC’s future management intent, goals and associated short and long-term objectives, as well as identifying challenges and solutions. This Management Plan has been developed to guide each aspect of the IRCPSR’s resource and operational management for the next ten years.

This Management Plan is submitted for review to the Acquisition and Restoration Council (ARC) acting on behalf of the Board of Trustees of the State of Florida through the Florida Department of Environmental Protection’s Division of State Lands (DSL), in compliance with paragraph seven of Lease No. 4148 (Appendix 12.1) and pursuant to Chapters 253 and 259, Florida Statutes (FS), and Chapters 18-2 and 18-4, Florida Administrative Code (FAC). Format and content were drafted in accordance with ARC requirements for management plans and the model plan outline provided by the staff of the DSL. Terms (Appendix 12.9) used in this Management Plan describing management activities and associated measurable goals and objectives conform to those developed for the Land Management Uniform Accounting Council Biennial Land Management Operational Report.

1.1.1 FWC Planning Philosophy

The FWC’s planning philosophy includes emphasizing management recommendation consensus-building among stakeholders and input from user groups and the general public at the beginning of the planning process. The FWC engages stakeholders by convening a Management Advisory Group and solicits additional input from user groups and the general public at a public hearing (Appendix 12.3). The FWC also engages area, district, and regional agency staff, as well as other FWC staff expertise, in developing this Management Plan, thereby facilitating area biologist and manager “ownership” of the Management Plan, and thus the development of meaningful management intent language, goals with associated measurable objectives, timelines for completion, and the identification of challenges and solution strategies for inclusion in the IRCPSR Management Plan (Sections 5 – 8).

Further management planning input is received through Land Management Reviews (LMR) conducted every five years, which includes a review of the previous Management Plan, as well as a field review of the IRCPSR. The LMR report provides the FWC staff with important information and guidance provided by a diverse team of land management auditors and communicates the recommendations of the LMR team to FWC so they may be adequately addressed in this Management Plan, and thus guide the implementation of the LMR team recommendations on the IRCPSR.

Furthermore, the FWC maintains transparency and accountability throughout the development and implementation of this Management Plan. A “living document” concept, linking this updated Management Plan to the previous one, is accomplished by reporting on the objectives, management activities, and projects accomplished over the last planning timeframe (previous ten years; see Section 4), thereby ensuring agency accountability through time. Also, in an effort to remain adaptive for the duration of this Management Plan, continuous input and feedback will be collected from FWC staff, stakeholders, user groups, and other interested parties and individuals. As needed, amendments to this Management Plan will be presented to the DSL and ARC for review and consideration.

1.2 Location

The IRCPSR lies within Sections 25 and 26 of Township 31 South and Range 30 East. The area is also located just east of I-95, about three miles southwest of the city of Sebastian, and the western boundary of the property borders I-95 for approximately one-third of a mile. The area entrance is located off of 102nd Terrace about a mile and a half north of C.R. 512.

1.3 Acquisition

1.3.1 Purpose for Acquisition of the Property

The IRCPSR was part of the Sebastian Creek Conservation and Recreation Lands (CARL) project, acquired in a partnership between the CARL program and the St. Johns River Water Management District (SJRWMD). Sebastian Creek is an important aggregation site for the endangered West Indian manatee. The surrounding lands provide important buffers and contain important habitat and natural communities. The CARL project was intended to help protect the manatee and the water quality of its habitat by protecting the Sebastian Creek as well as providing a substantial upland buffer. The Sebastian Creek project was originally designated as a state buffer preserve and was also intended to provide the public a large area for camping, fishing, hiking, and other pursuits. The major project area is now the St. Sebastian River Preserve State Park. The shooting range site is approximately two miles west of Sebastian Creek. The area containing the IRCPSR was added to the original CARL project boundary because the previous owner did not want to sell just the eastern portion of his property. Use of the site adjacent to I-95 as a shooting range sustains the original intent of providing an upland buffer for Sebastian Creek while enhancing the diversity of recreational opportunities of the overall project.

The IRCPSR is managed by the FWC and Indian River County for the purpose of operating a Public Shooting Range, providing ecological diversity, providing managed habitats for both common and imperiled wildlife, and for providing the public with fish- and wildlife-oriented outdoor recreational opportunities.

1.3.2 Acquisition History

The IRCPSR was acquired on February 16, 1996 by the CARL program using Preservation 2000 funds; and the Board of Trustees currently holds the title. The FWC holds a 50-year lease on the property from the Board of Trustees (Lease No. 4148), entered into on January 22, 1998. The FWC is directed via Lease numbers 4148, from the Board of Trustees to “...manage the leased premises only for the conservation and protection of natural and historical resources and resource-based public outdoor recreation...”

The FWC also has a concessionaire contract with Indian River County for the operation and management of the shooting range facilities, which was entered into in March 2001, and subsequently renewed in February 2016 (Appendix 12.2).

1.4 Management Authority

The FWC is the designated lead managing agency for the IRCPSR under the authority granted by Lease Number 4148 from the Board of Trustees agent, DSL. Under the concessionaire contract with the Indian River County, the FWC has designated the County as lead manager for the shooting range facilities. Further management authority derives

from Article IV, Section 9 of the Florida Constitution as well as the guidance and directives of Chapters 253, 259, 327, 370, 373, 375, 378, 379, 403, 487, 597, and 870, and of the Florida Statutes. These constitutional provisions and laws provide the FWC the authority to protect, conserve, and manage the State’s fish and wildlife resources.

1.5 Management Directives

The 50-year Board of Trustees’ Lease Agreement Number 4148 with the FWC directs the FWC to “manage the leased premises only for the conservation and protection of natural and historical resources and resource-based, public outdoor recreation which is compatible with the conservation and protection of these public lands, as set forth in subsection 253.023(11), FS...” The lease agreement further directs the FWC to “implement applicable Best Management Practices for all activities under this lease in compliance with paragraph 18-2.018(2)(h), FAC, which have been selected, developed, or approved by lessor, lessee, or other land managing agencies for the protection and enhancement of the leased premises.”

1.6 Title Interest and Encumbrances

The Board of Trustees holds the fee title interest to all lands within the IRCPSR. The FWC is the lead management authority on all lands established within the boundary of the IRCPSR, with the Indian River County as the operational manager for the public shooting range facilities. The IRCPSR has only one encumbrance, a utility easement to BellSouth Communications, Inc. (Instrument No. 30694), located near the roadway. Florida Power and Light uses the same utility easement area. Furthermore, there are no outstanding mineral rights or other interests within the established boundary. The IRCPSR is documented as having an area of 320 acres.

1.7 Proximity to Other Public Conservation Lands

The IRCPSR is located in the vicinity of an extensive network of conservation lands, including lands managed by the SJRWMD, the Department of Environmental Protection-Division of Recreation and Parks (DEP-DRP), Indian River County and Brevard County. Several Florida Forever projects (Figure 4) are also located in the vicinity of the area.

Tables 1 and 2 list the Florida Forever projects and conservation lands within a 10-mile radius of the IRCPSR, 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 within a 10-mile Vicinity

Project Name	GIS Acres
Archie Carr Sea Turtle Refuge	1,059.52
Brevard Coastal Scrub Ecosystem – Malabar Expansion and Valkaria/Micco Expansion	10,682.05
Brevard Coastal Scrub Ecosystem – Micco Expansion	823.54
Brevard Coastal Scrub Ecosystem – Scrub Jay Refugia - Micco	1,277.15
Brevard Coastal Scrub Ecosystem – Scrub Jay Refugia - South Babcock	619.24
Brevard Coastal Scrub Ecosystem – Scrub Jay Refugia - Valkaria	1,621.63
Brevard Coastal Scrub Ecosystem – St. Sebastian - St. Johns River	7,276.74
Greenway	
Indian River Lagoon Blueway	28,060.13

Table 2. Conservation Lands within a 10-mile Vicinity

Water Management District	Managing Agency
Blue Cypress Conservation Area	SJRWMD
Fellsmere Water Management Area	SJRWMD
Met Life and Wheeler Farms Parcels	SJRWMD
Sand Lakes Conservation Area	SJRWMD
Sebastian Stormwater Park	SJRWMD
Sembler Conservation Easement	SJRWMD
Three Forks Conservation Area	SJRWMD
Willowbrook Conservation Easement	SJRWMD
County/City	Managing Agency
Ansin Tract	Indian River County
Barrier Island Ecosystem Center	Brevard County
Captain Forster Hammock Preserve	Indian River County
Fellsmere Trailhead Preserve	City of Fellsmere
Grant Flatwoods Sanctuary	Brevard County
Golden Sands Park	Indian River County
Hardwood Hammock Sanctuary	Brevard County
Louis Bonsteel III Memorial Park	Brevard County
Micco Scrub Sanctuary	Brevard County
North Sebastian Conservation Area	Indian River County
Rodney Kroegel Homestead	Indian River County
Russell Grove	Indian River County
Sebastian Harbor Preserve	Indian River County
Sebastian Scrub Conservation Area	Indian River County

Sexton Ranch Conservation Easement	Indian River County
South Babcock	Brevard County
Treasure Shores Park	Indian River County
Valkaria Expansion	Brevard County
Valkaria Scrub Sanctuary	Brevard County
Wabasso Scrub Conservation Area	Indian River County
Windmillier Parcel	Indian River County
Federal Government	Managing Agency
Archie Carr National Wildlife Refuge	USFWS
Pelican Island National Wildlife Refuge	USFWS
State of Florida	Managing Agency
Indian River Lagoon Preserve State Park	DEP-DRP
Micco Expansion	FWC
Sebastian Inlet State Park	DEP-DRP
St. Sebastian River Preserve State Park	DEP-DRP
T.M. Goodwin Waterfowl Management Area	FWC
Private/Public Conservation Organization	Managing Agency
Basin 22 Mitigation Bank	J. Pat Corrigan Family LLLP & Hugh Corrigan III Family LLLP
Mary A Ranch Mitigation Bank	B.K.I., Inc., Consulting Ecologists
Pine Island	Indian River Land Trust
Quay Dock Road	Indian River Land Trust
Reed Cut	Indian River Land Trust
Toni Robinson Waterfront Trail	Indian River Land Trust
Winter Beach Salt Marsh	Indian River Land Trust

Acronym Key	Agency Name
DEP-DRP	Department of Environmental Protection
FWC	Florida Fish and Wildlife Conservation Commission
SJRWMD	St. Johns River Water Management District
USFWS	United States Department of Interior's Fish and Wildlife Service

1.8 Adjacent Land Uses

As described above, the IRCPSR is located in Central Florida in the northeast region of Indian River County.

The 2016 U.S. Census estimates that there are 146,410 people living in Indian River County. The Department of Economic Affairs, Bureau of Economic and Business Research's (BEBR) medium-range population projection indicates that in the year 2025, there will be 168,426 people living in Indian River County. The BEBR population projections for the counties surrounding Indian River County for the year 2025 are as follows: Brevard County – 625,483; Okeechobee County – 43,082; Osceola County – 435,210; and St. Lucie County – 349,882.

The current zoning ordinance for the IRCPSR is Conservation-1, public lands conservation district. According to Indian River County's comprehensive plan, this designation does not permit housing to occur on the area. According to the Indian River County's Recreation Master Plan, the primary purpose of the IRCPSR is as a public shooting range, however the following activities are also allowed: hiking, fishing, wildlife viewing, and nature study. Activities that are not approved on the IRCPSR include hunting, camping, and equestrian uses. Indian River County's future land use maps indicate that the IRCPSR will be designated and zoned as Conservation-1, which will continue to allow the area to be managed for the conservation of its resources, conservation education, and natural resource research.

The current land use designations for areas in the vicinity of the IRCPSR, are light industrial and municipality. The adjacent land use designations as depicted in the county's future land use maps are zoned as commercial/industrial and municipality.

The IRCPSR is not within an area of critical state concern or presently under study for such a designation.

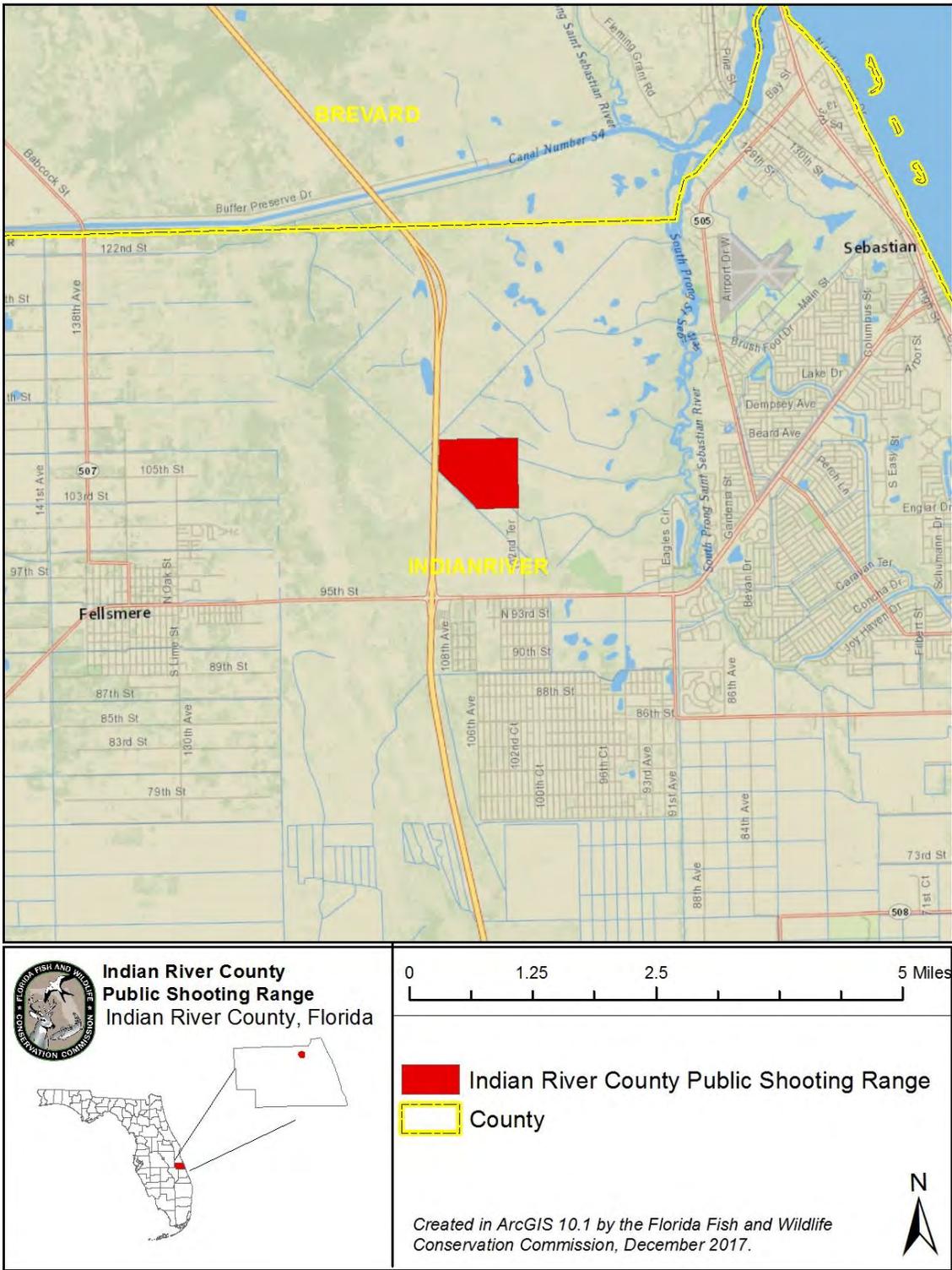


Figure 1. The IRCPSR Location

Florida Fish and Wildlife Conservation Commission | Indian River County Public Shooting Range Management Plan



Figure 2. The IRCPSR Aerial Imagery

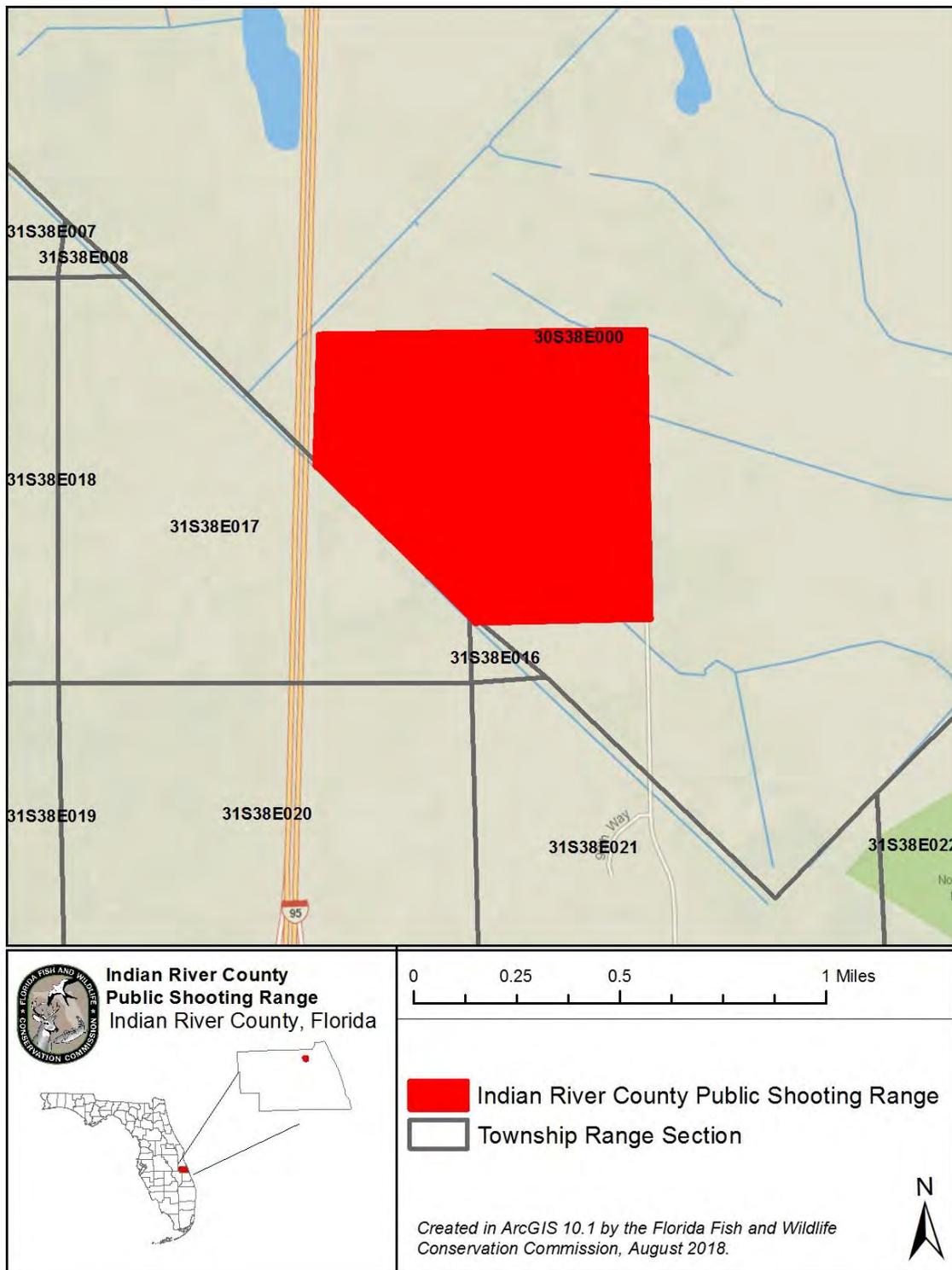


Figure 3. The IRCPSR - Township, Range, and Section

Florida Fish and Wildlife Conservation Commission | Indian River County Public Shooting Range Management Plan

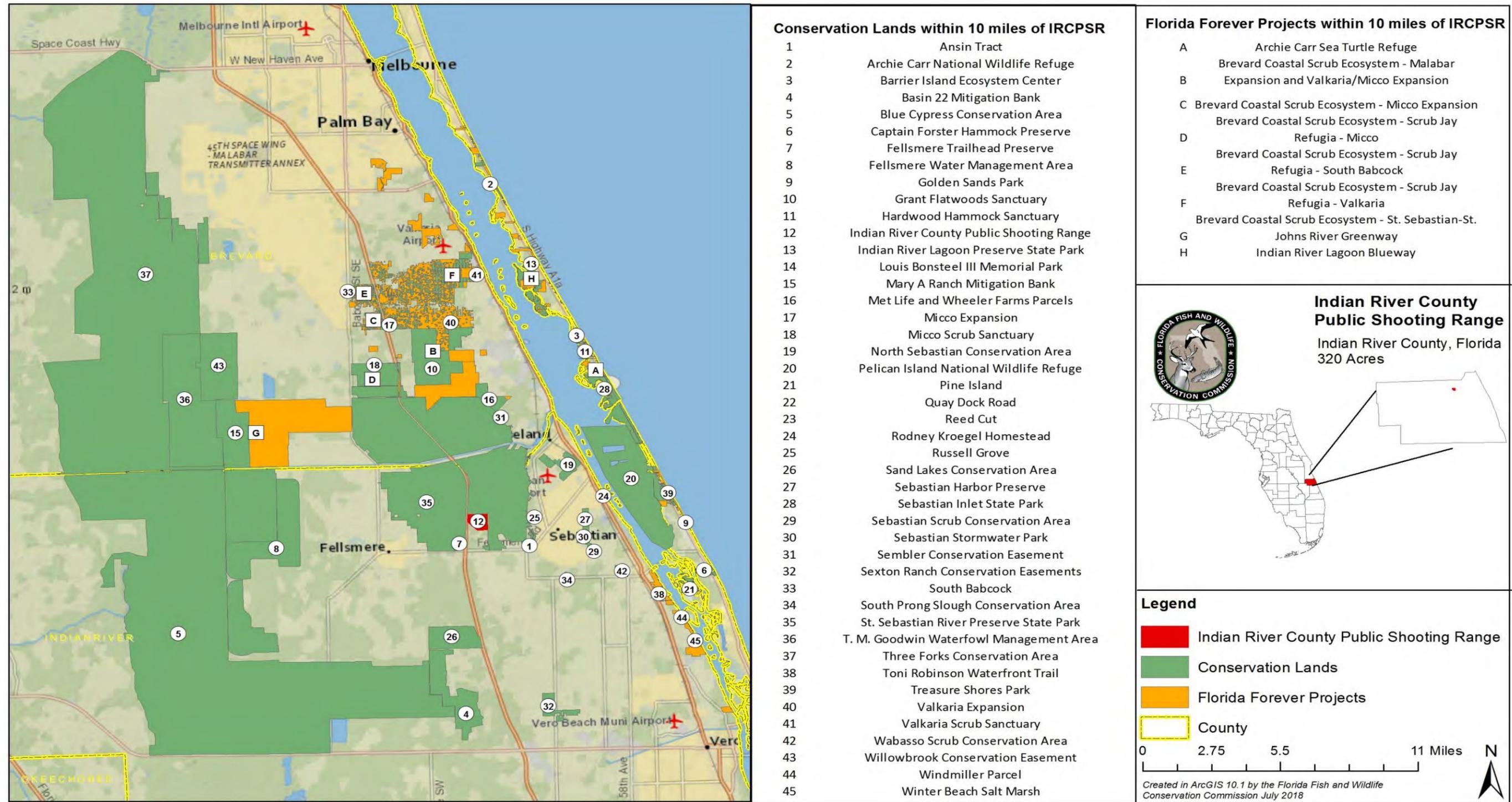


Figure 4. IRCPSR Conservation Lands and Florida Forever Projects within a 10 miles Vicinity

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1.9 Public Involvement

The FWC conducted a Management Advisory Group (MAG) meeting in Sebastian, Florida on January 31st, 2018 to obtain input from both public and private stakeholders regarding management of the IRCPSR. Results of this meeting were used by the FWC to develop management goals and objectives and to identify opportunities and strategies for inclusion in this Management Plan. A summary of issues and opportunities raised by the MAG, as well as a listing of participants, is included as Appendix 12.3.1. Further, a public hearing, as required by Chapter 259.032(10), FS, was held in Vero Beach, FL on March 29th, 2018, to solicit input and comment from the general public regarding this Management Plan. The report of that hearing is also contained in Appendix 12.3.3. A website is also maintained for receipt of public input at <http://myfwc.com/conservation/terrestrial/management-plans/develop-mps/>. Further testimony and input is received at a public hearing held by the ARC. Input received from all public involvement efforts has been considered in the development of this Management Plan.

2 Natural and Historical Resources

2.1 Physiography

The IRCPSR is located in the major transpeninsular physiographic division known as the Central or Mid-Peninsular zone. Along the eastern edge of the Osceola Plain, the IRCPSR is located within the Eastern Valley physiographic division, west of the Atlantic Coastal Ridge. The area is predominantly flat, with only gentle slopes and slight changes in elevation, ranging from 15-25 feet.

2.1.1 Climate

The climate of Indian River County, like most of peninsular Florida, is humid and subtropical, with long, warm, and humid summers and mild, dry winters. In the summer, temperature tends to remain relatively constant from day to day, with high temperatures being tempered by clouds and frequent afternoon rain showers. In the winter, on the other hand, temperatures tend to vary considerably due to dry, cold air coming in the form of cold fronts from the north. The average annual temperature is 85° Fahrenheit (F) in the summer and 62° F in the winter. The average annual rainfall is approximately 54 inches, with approximately 60% of the rainfall occurring in the wettest months from June to September. Temperatures tend to be the highest in July and August, when the average maximum temperature is 92° F and the average minimum is nearly 74° F. January tends to be the coldest month, with an average maximum temperature of around 71° F and an average minimum temperature of 49° F.

2.1.2 Topography

The IRCPSR occurs in a physiographic district known as the Eastern Flatwoods District. Elevations within the area vary from a maximum of 50 feet above Mean Sea Level (MSL), to a minimum of 15 feet. The topography of this area is generally low and flat, with sandy soils and ranging areas of mixed hardwood.

The IRCPSR does not contain beaches, dunes, or virgin timber.

2.1.3 Soils

The U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) data were used to identify the IRCPSR's soil series and soil depth to water table (Figures 5 and 6). The map units described in the soil survey of the IRCPSR are distributed as shown in Figure 5. Analyses of depth to water table for map units occurring within the IRCPSR are also provided in Figure 6. The NRCS defines a soil map unit as: "a collection of soil areas or non-soil areas (miscellaneous areas) delineated in a soil survey." Soil map units may contain multiple soil components, which are given names that are unique identifiers. Appendix 12.4 provides aggregation data for IRCPSR map units.

Soils found within the IRCPSR are generally those associated with the area's mix of natural communities and are thus poorly to very poorly drained sandy or organic soils. Pineda fine sand makes up around 81% of the area, along with Riviera fine sand making up approximately 13%, Wabasso fine sand making up 6%, and Oldsmar fine sand making up less than 0.1%.

2.1.4 Geologic Conditions

The primary geological condition of the IRCPSR is the Pleistocene unit. This unit covers approximately 38% of Indian River County. Specifically, the IRCPSR consists of the Anastasia Formation. Lying beneath the Atlantic Coastal Ridge, and occurring primarily near the coast, the Anastasia Formation extends from St. Johns County south to Palm Beach County. The Anastasia Formation, is composed of interbedded sands and coquina limestone. The Anastasia sediments are mostly orangish brown in color, unindurated to moderately indurated, coquina of whole and fragmented mollusk shells in a matrix of sand often cemented by sparry calcite. The sands occur as light gray to tan and orangish brown, unconsolidated to moderately indurated, unfossiliferous to very fossiliferous beds.

2.2 Vegetation

The natural communities for the IRCPSR were mapped using the Florida Cooperative Land Cover Map (CLC), and with assistance of FWC staff. The CLC is a cooperative effort between the FWC and the FNAI to develop ecologically-based statewide land cover from existing sources and expert review of aerial photography. The CLC and FWC staff describe five natural and anthropogenic community types existing on the IRCPSR, (Table 3, and Figure 7). FWC biologists have also documented three invasive exotic plant species (Table

4) as occurring on the IRCPSR. There are no known rare plant species occurring on the area.

Table 3. Natural and Altered Community Types on the IRCPSR

Land Cover Classification	GIS Acres	Percentage
Freshwater Marshes	11.25	3.5%
Mesic Flatwoods	204.96	64.5%
Mesic Hammock	8.09	2.5%
Ruderal	31.65	10.0%
Wet Flatwoods	62.20	19.6%

Table 4. Exotic and invasive plant species occurring on or near the IRCPSR

Common Name	Scientific Name	FLEPPC Category
Brazilian peppertree	<i>Schinus terebinthifolius</i>	I
Cogon grass	<i>Imperata cylindrica</i>	I
Old-world climbing fern	<i>Lygodium microphyllum</i>	I

2.2.1 FNAI Natural Community Descriptions

Freshwater Marshes (~11.25 acres)

Freshwater marshes are associated with freshwater non-forested wetlands which are herbaceous or shrubby palustrine communities in floodplains or depressions, and sometimes include canopy trees, but are often sparse and stunted. Freshwater marshes have a long hydroperiod and are dominated by grasses, sedges, broadleaf emergent, floating aquatics or shrubs. This community currently exists in several areas around the area.

Mesic Flatwoods (~ 204.96 acres)

Mesic flatwoods historically were the most widespread natural community in Florida, covering the flat sandy terraces left behind by former high sea levels. Mesic flatwoods are open, pine forests with a diverse understory of shrubs and herbs occurring on low, flat terrain. Soils are acidic, nutrient-poor, fine sands with upper layers darkened by organic matter. Drainage in this flat terrain can be impeded by a loosely cemented organic layer (spodic horizon) formed within several feet of the soil surface. The soils may be alternately xeric during dry periods, and saturated or even inundated after heavy rain events. Fire is an important factor in maintaining high plant diversity and naturally occurs primarily during the late spring/early summer lightning season.

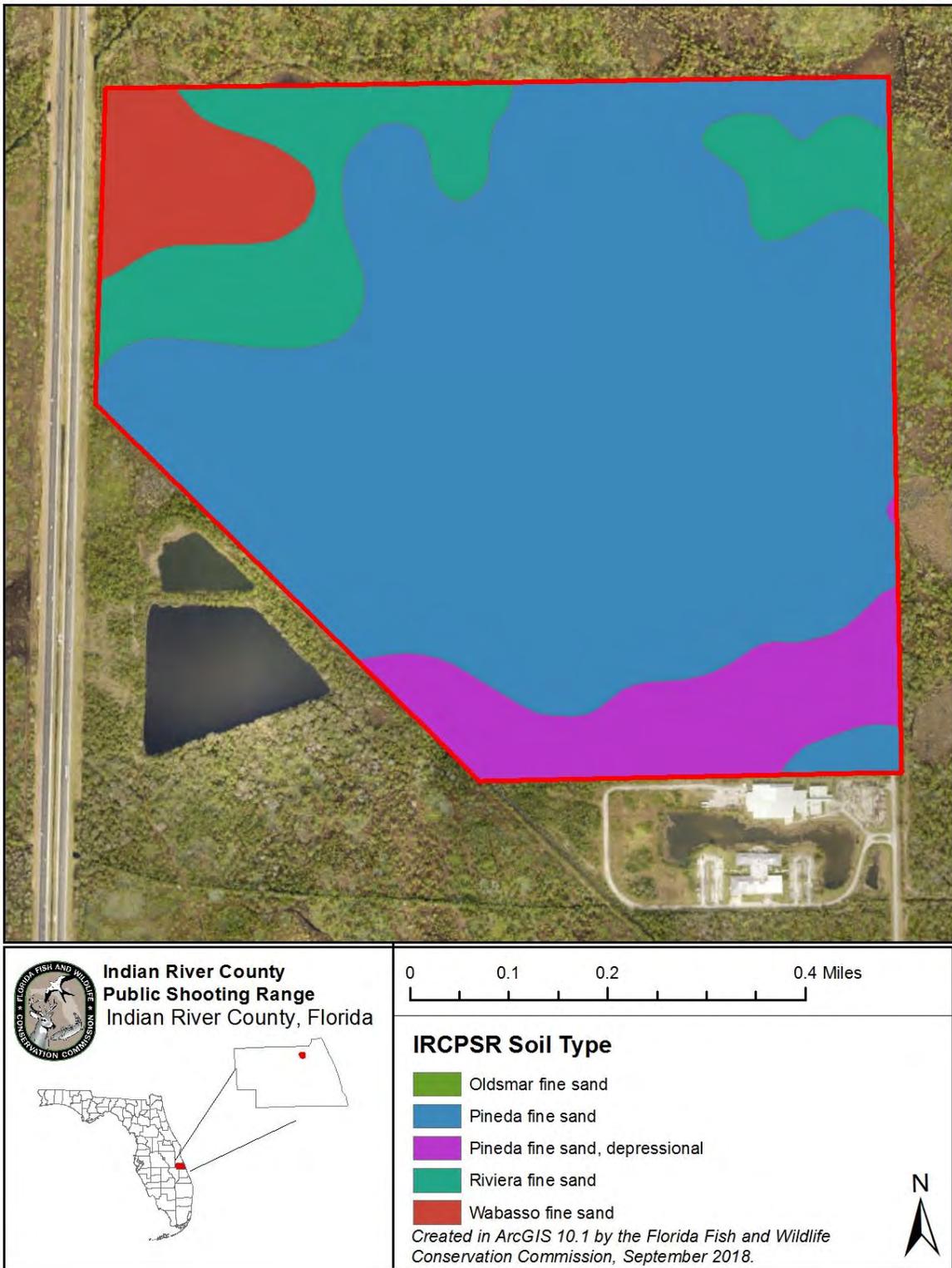


Figure 5. IRCPSR Soils

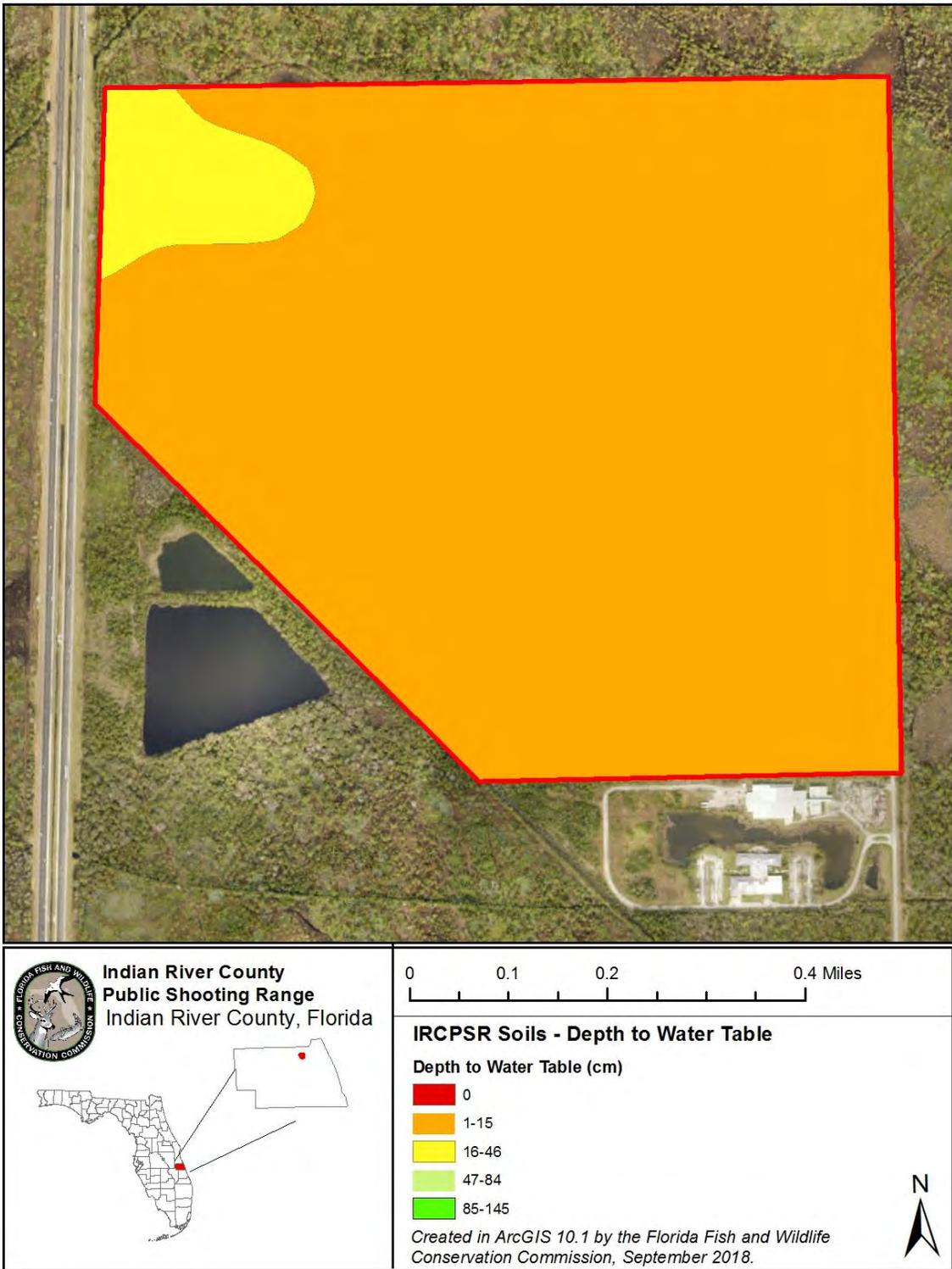


Figure 6. IRCPSR Soils - Depth to Water Table

Florida Fish and Wildlife Conservation Commission | Indian River County Public Shooting Range Management Plan

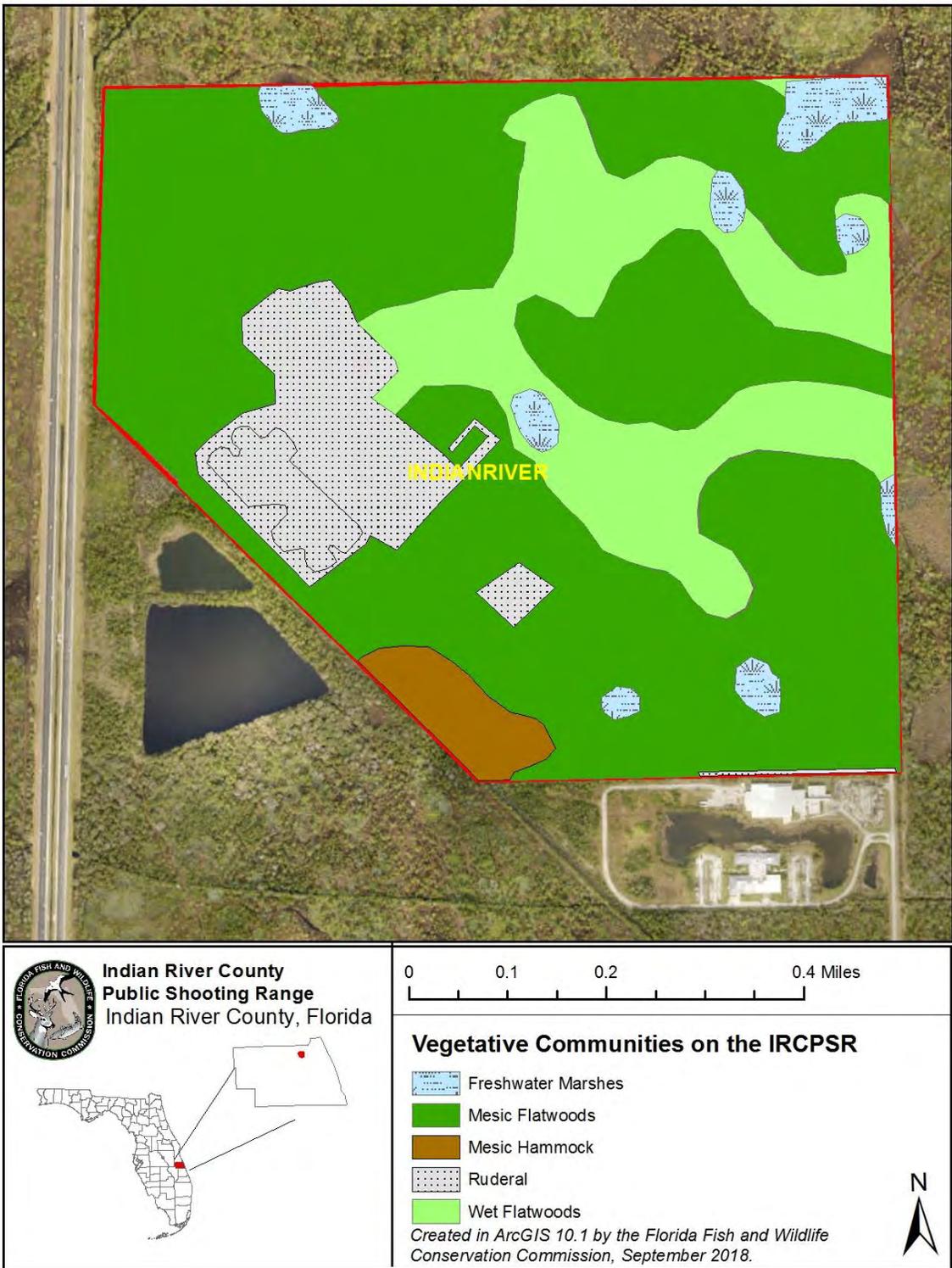


Figure 7. Vegetative Communities of the IRCPSR

At the IRCPSR, mesic flatwoods are the predominant community found on the area, making up approximately 65%. The canopy is dominated by longleaf pine (*Pinus palustris*) or slash pine (*Pinus elliottii*), although pines may be sparse or even absent in some areas.

Mesic Hammock (~ 8.09 acres)

Mesic hammocks are forests of temperate evergreen hardwood species occurring along wetlands or as islands within wetlands where they are sheltered from fire. Mesic hammock is a well-developed evergreen hardwood and/or palm forest, typically with a closed canopy of live oak. Mesic hammock may occur as “islands” on high ground within basin or floodplain wetlands, as patches of oak/palm forest in dry prairie or flatwoods communities, on river levees, or in ecotones between wetlands and upland communities. Historically, mesic hammocks were likely restricted to fire shadows, or other naturally fire-protected areas such as islands and peninsulas of lakes. Other landscape positions that can provide protection from the spread of fire are likely places for mesic hammock development, including edges of lakes, sinkholes, other depressional or basin wetlands, and river floodplains. Although mesic hammock is not generally considered a fire-adapted community, some small patches of hammock occurring as islands within marshes or prairies may experience occasional low-intensity ground fires. Mesic hammocks occur on well-drained sands mixed with organic matter and are rarely inundated. High moisture is maintained by heavy shading of the ground layer and accumulation of litter. Where limestone is near the surface, rocky outcrops are common in mesic hammocks. Fire is rare, and when mesic hammocks burn they may convert to the community they border.

At the IRCPSR, mesic hammocks have relatively low species diversity. They are characterized by a closed canopy of mostly live oak (*Quercus virginiana*) with occasional slash pine. Other oaks, namely swamp laurel oak (*Quercus laurifolia*) and water oak (*Quercus nigra*) are common and cabbage palm (*Sabal palmetto*) is occasional in the subcanopy. Both the shrub and herb layers are sparse.

Wet Flatwoods (~ 62.20 acres)

Wet flatwoods occur in broad, low flatlands, often in a mosaic with these communities. They are found in the ecotones between mesic flatwoods, shrub bogs, wet prairies, dome swamps, or strand swamps. Wet flatwoods are pine forests with a sparse or absent midstory and a dense groundcover of hydrophytic grasses, herbs, and low shrubs. The relative density of shrubs and herbs varies greatly in wet flatwoods. Shrubs tend to dominate where fire has been absent for a long period or where cool season fires predominate; herbs are more abundant in locations that are frequently burned. Soils and hydrology also influence the relative density of shrubs and herbs. Soils of shrubby wet flatwoods are generally poorly to very poorly drained sands. These soils generally have a

mucky texture in the uppermost horizon. Loamy sands are typical of soils in grassy wet flatwoods.

At the IRCPSR, wet flatwoods make up almost 20% of the area and are located primarily to the east of the shooting range facilities. They are found in the ecotones between mesic flatwoods and marshes. Wet flatwoods are pine forests with a sparse or absent midstory and a dense groundcover of hydrophytic grasses, herbs, and low shrubs. The relative density of shrubs and herbs varies greatly in wet flatwoods. Shrubs tend to dominate where fire has been absent for a long period or where cool season fires predominate; herbs are more abundant in locations that are frequently burned. Soils and hydrology also influence the relative density of shrubs and herbs. Soils of shrubby wet flatwoods are generally poorly to very poorly drained sands. These soils generally have a mucky texture in the uppermost horizon. Loamy sands are typical of soils in grassy wet flatwoods. Wet flatwoods typically have an open pine canopy with an understory of hydrophytic herbs and shrubs. Wet flatwoods that burn frequently typically have a sparse understory and a dense complement of herbs and smaller shrubs. Conversely, thick, shrubby understory layers tend to suppress groundcover plants.

Altered Community Descriptions

Ruderal (~31.65)

Ruderal can also be referred to as developed area. This can include check stations, parking lots, buildings, maintained lawns (as part of recreational, business, or residential areas), botanical or ornamental gardens, campgrounds, and recreational, industrial and residential areas. Ruderal communities are primarily concentrated in and around the shooting range facilities, and include offices, parking lots, and maintained areas.

2.3 Fish and Wildlife Resources

As described above, the IRCPSR has a variety of natural communities and habitat types that support a wide array of imperiled, rare, and more prevalent wildlife species. Active, ongoing wildlife management practices and the high quality of habitat make the IRCPSR an excellent place to view wildlife. The IRCPSR's mesic and wet flatwoods, freshwater marshes, and mesic hammock provide critical habitat for resident and migratory wildlife.

Additionally, the FWC maintains an inventory of fauna occurring on or near the IRCPSR listed in the following tables, including birds (Table 6), mammals (Table 7), and amphibians and reptiles (Table 8). Table 9 contains an inventory of the exotic wildlife species that have been documented on or near the IRCPSR.

2.3.1 Integrated Wildlife Habitat Ranking System

The FWC has developed the Integrated Wildlife Habitat Ranking System (IWHRS) as a Geographic Information Systems (GIS)-based assessment tool that incorporates a wide variety of land cover and wildlife species data. The IWHRS evaluates the Florida landscape based upon the habitat needs of wildlife as a way to identify ecologically significant lands in the state, and to assess the potential impacts of management and land-use changes. The IWHRS was developed to provide technical assistance to various local, regional, state, and federal agencies, and entities interested in wildlife needs and conservation in order to: (1) determine ways to avoid or minimize project impacts by evaluating alternative placements, alignments, and transportation corridors during early planning stages, (2) assess direct, secondary, and cumulative impacts to habitat and wildlife resources, and (3) identify appropriate parcels for public land acquisition for wetland and upland habitat mitigation purposes. The IWHRS (2009) indicates that the IRCPSR has a mean wildlife value of 5.8. (Figures 8).

2.3.2 Imperiled Fish and Wildlife

For the purposes of this Management Plan, the term “Imperiled Species” refers to plant and animal species that are designated as Endangered, Threatened, or a Species of Special Concern by the FWC, or that are designated as Endangered or Threatened by the U.S. Fish and Wildlife Service. This designation is also commonly known as “listed species.”

At its November 2016 Commission meeting, the FWC approved Florida’s Imperiled Species Management Plan (<http://myfwc.com/wildlifehabitats/imperiled/plan/>), which included changes to the listing status for many wildlife species. Subsequent rule changes (68A-27.003 and 68A-27.005 FAC) reflecting changes came into effect in January 2017. All federally listed species that occur in Florida are included in Florida’s Endangered and Threatened Species list (<http://myfwc.com/media/1515251/threatened-endangered-species.pdf>) as federally-designated Endangered or federally-designated Threatened. Species that are not federally listed, but which have been identified by the FWC as being at some level of risk of extinction, are listed as state-designated Threatened. Additionally, the FWC continues to maintain a separate Species of Special Concern category. This category was reviewed as part of Florida’s Imperiled Species Management Plan, with the majority of the species previously contained within the category either being removed from Florida’s Endangered and Threatened Species list due to conservation success, or had their status changed to state-designated Threatened.

Table 5. Imperiled wildlife species occurring on or near the IRCPSR

Common Name	Scientific Name	Status
American alligator	<i>Alligator mississippiensis</i>	FT (S/A)
Eastern indigo snake	<i>D. couperi</i>	FT

Common Name	Scientific Name	Status
Florida sandhill crane	<i>Antigone canadensis pratensis</i>	ST
Gopher tortoise	<i>Gopherus polyphemus</i>	ST
Little blue heron	<i>Egretta caerulea</i>	ST
Southeastern American kestrel	<i>Falco sparverius paulus</i>	ST
Tricolored heron	<i>Egretta tricolor</i>	ST
Woodstork	<i>Mycteria americana</i>	FT

Abbreviation	Status
FE	Federal Endangered
FT	Federal Threatened
F(XN)	Federally Listed as an experimental population in Florida
FT(S/A)	Federally Threatened due to similarity of appearance
SSC	State Species of Special Concern
ST	State Threatened

Table 6. Native bird species occurring on or near the IRCPSR

Common Name	Scientific Name
American crow	<i>Corvus brachyrhynchos</i>
American kestrel	<i>Falco sparverius</i>
American robin	<i>Turdus migratorius</i>
Bachman's sparrow	<i>Aimophila aestivalis</i>
Barn owl	<i>Tyto alba</i>
Barred owl	<i>Strix varia</i>
Belted kingfisher	<i>Megaceryle alcyon</i>
Black vulture	<i>Coragyps atratus</i>
Blue jay	<i>Cyanocitta cristata</i>
Blue-gray gnatcatcher	<i>Polioptila caerulea</i>
Blue-winged teal	<i>Anas discors</i>
Boat-tailed grackle	<i>Quiscalus major</i>
Brown-headed nuthatch	<i>Sitta pusilla</i>
Brown thrasher	<i>Toxostoma rufum</i>
Carolina wren	<i>Thryothorus ludovicianus</i>
Cattle egret	<i>Bubulcus ibis</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>

Common Name	Scientific Name
Cooper's hawk	<i>Accipiter cooperii</i>
Downy woodpecker	<i>Picoides pubescens</i>
Eastern bluebird	<i>Sialia sialis</i>
Eastern meadowlark	<i>Sturnella magna</i>
Eastern screech owl	<i>Otus asio</i>
European starling	<i>Sturnus vulgaris</i>
Fish crow	<i>Corvus ossifragus</i>
Gray catbird	<i>Dumetella carolinensis</i>
Great crested flycatcher	<i>Myiarchus crinitus</i>
Great egret	<i>Ardea alba</i>
Great horned owl	<i>Bubo virginianus</i>
Glossy ibis	<i>Plegadis falcinellus</i>
Green-backed heron	<i>Butorides striata</i>
Killdeer	<i>Charadrius vociferus</i>
Limpkin	<i>Aramus guarauna</i>
Little blue heron	<i>Egretta caerulea</i>
Loggerhead shrike	<i>Lanius ludovicianus</i>
Mourning dove	<i>Zenaida macroura</i>
Northern bobwhite quail	<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>
Osceola wild turkey (wild turkey)	<i>Meleagris gallopavo</i>
Pileated woodpecker	<i>Dryocopus pileatus</i>
Prothonotary warbler	<i>Protonotaria citrea</i>
Purple gallinule	<i>Porphyrio martinica</i>
Purple martin	<i>Progne subis</i>
Red-bellied woodpecker	<i>Melanerpes carolinus</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>
Sandhill crane	<i>G. c. pratensis</i>
Snowy egret	<i>Egretta thula</i>
Southeastern American kestrel	<i>Falco sparverius paulus</i>
Southern bald eagle	<i>Haliaeetus leucocephalus</i>
Swallow-tailed kite	<i>Elanoides forficatus</i>
Tricolored heron	<i>Egretta tricolor</i>

Common Name	Scientific Name
Turkey vulture	<i>Cathartes aura</i>
Tufted titmouse	<i>Baeolophus bicolor</i>
Tree swallow	<i>Tachycineta bicolor</i>
White ibis	<i>Eudocimus albus</i>
Wood duck	<i>Aix sponsa</i>
Wood stork	<i>Mycteria americana</i>

Table 7. Native mammal species occurring on or near the IRCPSR

Common Name	Scientific Name
Bobcat	<i>Lynx rufus</i>
Cotton mouse	<i>Peromyscus gossypinus</i>
Eastern cottontail	<i>Sylvilagus floridanus</i>
Coyote	<i>Canis latrans</i>
Eastern gray squirrel	<i>Sciurus carolinensis</i>
Gray fox	<i>Urocyon cinereoargenteus</i>
Marsh rabbit	<i>Sylvilagus palustris</i>
Opossum	<i>Didelphis virginiana</i>
River otter	<i>Lontra canadensis</i>
Raccoon	<i>Procyon lotor</i>
Southern flying squirrel	<i>Glaucomys volans</i>
White tailed deer	<i>Odocoileus virginianus</i>

Table 8. Native reptile and amphibian species occurring on or near the IRCPSR

Common Name	Scientific Name
American alligator	<i>Alligator mississippiensis</i>
Black racer	<i>Coluber constrictor</i>
Brown anole	<i>Anolis sagrei</i>
Eastern coachwhip	<i>Masticophis flagellum</i>
Eastern coral snake	<i>Micrurus fulvius</i>
Eastern cottontail	<i>Sylvilagus floridanus</i>
Eastern diamondback rattlesnake	<i>Crotalus adamanteus</i>
Eastern garter snake	<i>Thamnophis sirtalis</i>
Eastern slender glass lizard	<i>Ophisaurus attenuatus longicaudus</i>
Eastern indigo snake	<i>D. couperi</i>
Florida box turtle	<i>Terrapene Carolina bauri</i>
Gopher tortoise	<i>Gopherus polyphemus</i>
Green anole	<i>Anolis carolinensis</i>

Green tree frog	<i>Hyla cinerea</i>
Oak toad	<i>Anaxyrus quercicus</i>
Rough green snake	<i>Opheodrys aestivus</i>
Pine snake	<i>Pituophis melanoleucus mugitus</i>
Six-lined racerunner	<i>Cnemidophorus sexlineatus</i>
Softshell turtle	<i>Apalone ferox</i>
Southern five-lined skink	<i>Eumeces inexpectatus</i>
Southern leopard frog	<i>Lithobates sphenoccephalus</i>
Southern toad	<i>Anaxyrus terrestris</i>
Ringneck snake	<i>Diadophis punctatus</i>
Yellow rat snake	<i>Pantherophis alleghaniensis</i>

Table 9. Exotic species occurring on or near the IRCPSR

Common Name	Scientific Name
Feral hogs	<i>Sus scrofa</i>

2.3.1 FWC Wildlife Observations and FNAI Element Occurrences

A diversity of wildlife species is found on the IRCPSR. The FNAI element occurrence records include one occurrence of bald eagles and one occurrence of gopher tortoises in the vicinity of the IRCPSR. As defined by the FNAI, an “element” is any exemplary or rare component of the natural environment, such as a species, natural community, bird colony, spring, sinkhole, cave, or other ecological feature. An element occurrence is a single extant habitat which sustains or otherwise contributes to the survival of a population or a distinct, self-sustaining example of a particular element. The FNAI assigns a rank to each “element” occurrence. This ranking system was developed by The Nature Conservancy and the Natural Heritage Program Network based on the element’s global rank (element’s worldwide status) or state rank (status of element in Florida). The FNAI ranking system and definitions are located on the following website: www.fnai.org/ranks.cfm.

Known locations of FWC wildlife occurrences and FNAI element occurrences from the most recent GIS databases of the respective agencies are displayed in Figure 9. Appendix 12.5 contains a letter from the FNAI authorizing the FWC to utilize their database for the purpose of displaying known plant and animal resources.

2.4 Native Landscapes

As mentioned previously, the predominate native landscapes occurring on the IRCPSR include mesic and wet flatwoods, mesic hammock, and freshwater marshes. Complete descriptions of the natural communities found on the IRCPSR can be found in Section 2.2 of the Management Plan.

2.5 Water Resources

All surface waters of the State are classified by the DEP according to designated uses as described in Chapter 62-302.44 FAC. The surface waters of the IRCPSR are designated as Class III, and classified for fish consumption; recreation, as well as propagation and maintenance of a healthy, well-balanced population of fish and wildlife. The IRCPSR does not contain a first magnitude spring, nor is it designated as an aquatic preserve and is not under consideration for such designation, and there are no portions of the IRCPSR that are designated as Outstanding Florida Waters (OFW).

2.6 Beaches and Dunes

There are no beach or dune resources on the IRCPSR.

2.7 Mineral Resources

There are no known commercial mineral deposits on the IRCPSR.

2.8 Historical Resources

The Florida Department of State's Division of Historical Resources (DHR) indicates that there is no recorded archaeological site within the boundaries of the IRCPSR.

Procedures outlined by the DHR will be followed to preserve archaeological and historical resources. The FWC will continue to consult with the DHR in an attempt to locate and preserve any historical or archaeological features on the area. As necessary, the FWC will also contact professionals from the DHR for assistance prior to any ground-disturbing activity on the area.

2.9 Scenic Resources

The IRCPSR offers remarkably scenic views of mesic and wet flatwoods. As a result, the area has been valued for its scenic quality unaffected by development and most other human alterations of the landscape. Wildlife is abundant year-round throughout the area. Although most of the IRCPSR restricts regular public access, St. Sebastian River Preserve State Park is located directly adjacent to the area offering many accessible scenic sites.

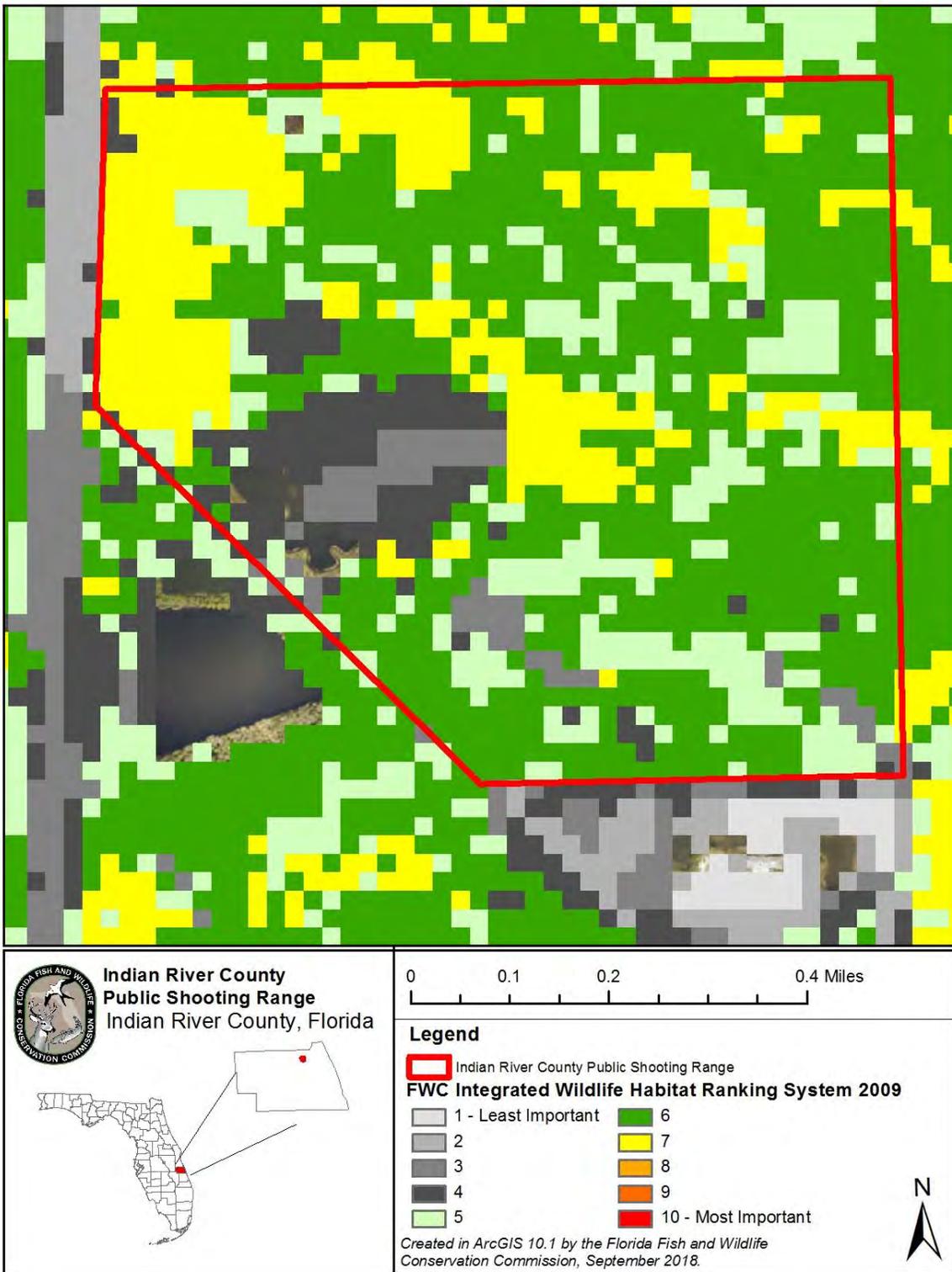


Figure 8. FWC Integrated Wildlife Habitat Ranking System for the IRCPSR

Florida Fish and Wildlife Conservation Commission | Indian River County Public Shooting Range Management Plan



Figure 9. FNAI Element Occurrences and FWC Wildlife Observations for the IRCPSR

3 Uses of the Property

3.1 Previous Use and Development

Florida was inhabited for thousands of years before Spanish explorer Ponce de Leon landed on the peninsula he named La Florida in 1513. Among those early indigenous people were the Ais, Apalachee, Calusa, Timucua, and Tocobaga tribes. Here in the central part of the state, the Timucua and Tocobaga people roamed the land. It is estimated that about 50,000 Timucua lived in Florida at the time that European explorers arrived.

Consequently, prior to European settlement, the landscape of Florida was settled and used by a variety of aboriginal peoples whose culture relied mainly on hunting, fishing, and subsistence agriculture. Though some land alteration occurred, more intensive alteration of the landscape is thought to have taken place with the advent of European settlement beginning with the Spanish occupation of Florida in the sixteenth century.

Along with more advanced agricultural practices, the Spanish and other settlers brought livestock, primarily cattle and hogs, as well as horses to Florida. This began an era of broad use of the landscape for agriculture. Rangeland cattle grazing, and other agricultural practices began to be utilized in a more systematic way and occurred throughout much of the central Florida peninsula through most of the European settlement era from the 16th through the 20th centuries. Use of these agricultural practices began an era of increased alteration of the natural landscape. However, it wasn't until the 19th and 20th centuries when major settlement and more extensive alteration of the landscape in the area began with the widespread use of agriculture and associated development.

The region in general was used for cattle and hog ranching and timbering with some agriculture. The shooting range land was probably used for cattle grazing in the recent past. Some ditches were also dug on the property prior to state ownership, presumably for agricultural purposes.

3.2 Current Use of the Property

The IRCPSR is leased to and managed by the FWC in cooperation with Indian River County as a Public Shooting Range in conformance with the provisions of the Board of Trustees lease to the FWC to protect and provide for water conservation; maintain ecological diversity; conserve habitat for imperiled, rare, and more common wildlife species; and to provide a diversity of public outdoor recreational opportunities that are fish- and wildlife-oriented, and that are compatible with the Board of Trustees lease provisions that do not adversely impact the long-term well-being of fish and wildlife habitats and their associated wildlife populations.

Being one of only eight ranges in the state managed by the FWC, funding for range facilities was provided by a Pittman-Robertson federal grant administered by the FWC.

The facilities, including the road, borrow pit, ranges, buildings and associated facilities, take up about 33 acres, approximately 10%, of the property. The remainder of the property is primarily in natural condition (Figure 7).

The Indian River County Public Shooting Range is one of only 13 ranges in the country with a five-star rating by the National Association of Shooting Ranges (www.rangeinfo.org). Five-star ranges are “the best of the best at providing a quality recreational experience for customers and representing the shooting sports in their community.” The rating is based on appearance, management, customer service, amenities, customer development and community relations.

The public shooting range has a separate pistol range with 35 firing stations. It also has a separate rifle range with 29 firing stations. The ranges provide 25, 50 and 100-yard range targets and two 200-yard target firing stations. Both ranges are lighted for night-time use. The rifle and pistol ranges are fenced and locked when not in operation.

The facility also has a 5-stand range and a sporting clay course for shotgun use. Air rifle and pellet gun target facilities are also provided. The facility also has an archery range and a field archery course. The borrow pit has been stocked with fish for kids fishing. Loaner guns are available as well as fishing rods for the kids.

A multi-use building serves as a small classroom area, visitor information center and administrative offices. Parking is available between the building and the range.

A shop/storage building is also located adjacent to the parking lot. Restroom water is provided by a small well. Sewage from restrooms is handled by a septic tank system with drain field. Electrical power and telephone service is provided by lines that run along the property border to the range facility. Private vehicles are restricted to the road and parking areas. Access is limited via CR-512 to 102nd Terrace to the gated entryway of the range.

The range is generally open to the public 9:00am - 5:00pm Thursday through Monday and may be closed or operations may be suspended due to inclement weather. At certain times of the year range hours are shifted on some days to allow evening use. The range is also used for training by law enforcement agencies (Indian River County Sheriff Department and the Fellsmere, Sebastian, Melbourne Beach and Indian River Shores police departments) at times coordinated with range staff.

3.2.1 Visitation and Economic Benefits

Visitation and public use of the area for the shooting range and fish- and wildlife-based public outdoor recreational opportunities is the primary source of economic benefits from the IRCPSR and contributes to the overall economy for the northeast region of Florida. If

the current maximum visitation level of 470 visitors per day were achieved, a total of 70,810 visitors per year could be expected. If the area were at carrying capacity, FWC economic analysis estimates indicate that the IRCPSR could potentially generate an estimated economic impact of \$13,424,375 for the State and the Northeast region of Florida. This estimated annual economic impact would aid in the creation of an estimated 234 jobs.

The above figures are based on expenditure data from the 2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation (USFWS) and 2006 IMPLAN economic models assembled by Southwick Associates and the USFWS. The results were updated in 2010 based on hunting and fishing license trends and inflation. The results were combined and weighted based on the numbers of hunters, anglers and wildlife viewers statewide. The results assume participants' expenditures and the results impacts are consistent throughout the state. Users applying these results to local situations should be aware that differences might exist between these statewide averages and the site in question and make adjustments if needed.

Further potential of the IRCPSR will depend upon future uses to be approved in the management plan. Additional economic impact from environmental lands such as the IRCPSR might include sales of various permits and recreational user fees and ecotourism activities, if such projects could be economically developed. 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, through the protection of air and water quality are expected to be significant. The legislature appropriates funds for land management.

3.3 Single- or Multiple-use Management

The IRCPSR will be managed under the multiple-use concept as a conservation area and public shooting range. The IRCPSR will provide fish and wildlife resource based public outdoor recreation and educational opportunities, while protecting the natural and historical resources found on the area. Any natural and historical resources of the IRCPSR will be managed under the guidance of the ARC, the Conceptual State Lands Management Plan, and as outlined in the original purposes for acquisition.

3.3.1 Analysis of Multiple-use Potential

The following actions or activities have been considered under the multiple-use concept as possible uses to be allowed on the IRCPSR. Uses classified as "Approved" are considered to be in accordance with the purposes for acquisition, as well as with the Conceptual State Lands Management Plan, and with the FWC agency mission, goals and objectives as expressed in the Agency Strategic Plan (Appendix 12.6). Uses classified as "Conditional" indicate that the use may be acceptable but will be allowed only if approved through a process other than the management plan development and approval process (e.g., special-use permitting, managed-area regulation and rule development). Uses classified as

“Rejected” are not considered to be in accordance with the original purpose of acquisition or one or more of the various forms of guidance available for planning and management:

	<u>Approved</u>	<u>Conditional</u>	<u>Rejected</u>
Apiaries		✓	
Astronomy		✓	
Bicycling			✓
Cattle grazing			✓
Citrus or other agriculture			✓
Ecosystem services and maintenance	✓		
Ecotourism		✓	
Environmental Education	✓		
First-responder training	✓		
Fishing		✓	
Geocaching		✓	
Hiking		✓	
Horseback riding			✓
Hunting			✓
Linear facilities			✓
Military training		✓	
Preservation of historical resources	✓		
Primitive camping			✓
Protection of imperiled species	✓		
Off-road vehicle use			✓
Shooting sports park	✓		
Soil and water conservation	✓		
Timber harvest		✓	
Wildlife observation	✓		

3.3.2 Incompatible Uses and Linear Facilities

Consideration of incompatible uses and linear facilities on the IRCPSR are made in accordance with the requirements of Section 253.034(10) FS, and other applicable Florida constitution, statute, rule, and policy requirements, as well as other provisions governing applications for proposed incompatible uses or linear facilities on state-owned conservation lands. Upon approval and implementation of this management plan, any proposed future uses that have been classified herein as Rejected, or other proposed future uses that are determined to be incompatible with the purposes of acquisition or other management authorizations and guidance, will be forwarded for review and approval consideration to the DEP-DSL, the ARC and the Board of Trustees prior to any incompatible use or linear facility being authorized on the IRCPSR.

3.3.3 Assessment of Impact of Planned Uses of the Property

To communicate the FWC's planned uses and activities, specific management intentions, long- and short-term goals and with associated objectives, identified challenges, and solution strategies have been developed for the IRCPSR (Sections 5 - 8). A detailed assessment of the benefits and potential impacts of planned uses and activities on natural and historical resources was an integral part of the development of the management activities and intent, goals, objectives, challenges, and strategies sections of this Management Plan.

3.4 Acreage Recommended for Potential Surplus Review

On conservation lands where the FWC is the lead manager, the FWC evaluates and identifies recommended areas for a potential surplus designation by the DSL, the ARC, and the Board of Trustees. This evaluation consists of GIS modeling and analysis, aerial photography interpretation, analysis of fish and wildlife resources, a review of resource and operational management needs, and a review of public access and recreational use of the area. Also, the FWC considers recommendations for surplus lands as they relate to Florida's "No Net Loss of Hunting Lands" legislation (Ch. 379.3001 F.S.), as well as surplus restrictions for lands acquired through the Federal Aid in Wildlife Restoration Act (Pittman-Robertson) or through other federal grant programs.

The evaluation of the IRCPSR by the FWC has determined that all portions of the area are being managed and operated for the original purposes of acquisition and remain integral to the continued conservation of important fish and wildlife resources and continue to provide good fish and wildlife resource based public outdoor recreational opportunities. Therefore, no portion of the IRCPSR is recommended for potential surplus review.

4 Accomplished Objectives from the IRCPSR Management Plan 2008 – 2018 or Interim Management Activities

This section is dedicated to reporting the extent to which the Objectives described in the IRCPSR Management Plan 2008-2018 were successfully completed. Accomplishments for the IRCPSR during the previous planning timeframe are further discussed in more comprehensive detail throughout **Section 5 Management Activities and Intent** of this Management Plan.

The following **Resource Management Goals and Objectives** from the 2008 – 2018 IRCPSR Management Plan describe the planned activities for the IRCPSR during this period. The degree to which the FWC was able to accomplish the planned activities during this period is reflected as **Percent Accomplished** for each associated Objective.

<u>Goals and Objectives</u>	<u>Percent Accomplished</u>
Goal 1: Manage soil to reduce and prevent erosion	
<u>Objective 1:</u> Include erosion control in any management activities <i>Comment: Erosion control has been continuously monitored, however no activities have been deemed necessary to take place.</i>	50%
Goal 2: Protect water quality.	
<u>Objective 1:</u> Continue well water quality monitoring program and ensure that range is in compliance with the SJRWMD permit. <i>Comment: The FWC and Indian River County continue to communicate with the SJRWMD regarding well water quality, and monitoring occurs annually. The area continues to be in compliance with the existing permit.</i>	100%
<u>Objective 2:</u> Continue soil liming program to prevent lead deterioration and water quality impacts. <i>Comment: Annual ph testing has occurred on the area and lime has been applied as necessary and appropriate.</i>	100%
<u>Objective 3:</u> Ensure facilities and activities do not cause runoff and water quality problems. <i>Comment: All facilities and activities on the area are assessed on an as needed basis to ensure no runoff or water quality issues occur.</i>	100%
Goal 3: Maintain and protect natural communities	
<u>Objective 1:</u> Establish and conduct a prescribed fire program; coordinate operations with the St. Sebastian River Preserve State Park. <i>Comment: A prescribed fire was conducted in 2009. Before additional fires are conducted, exotic plants on the property will be treated to prevent their spread by mechanical preparations. In Spring, 2018, the FWC along with St. Sebastian River Preserve State Park staff have verbally agreed to coordinate burning on the two properties.</i>	25%
Goal 4: Maintain and protect the native species	

<p>Objective 1: Establish and conduct a prescribed fire program; coordinate operations with the St. Sebastian River Preserve State Park.</p> <p><i>Comment: A prescribed fire was conducted in 2009. Before additional fires are conducted, exotic plants on the property will be treated to prevent their spread by mechanical preparations. In Spring, 2018, the FWC along with St. Sebastian River Preserve State Park staff have verbally agreed to coordinate burning on the two properties.</i></p>	25%
<p>Goal 5: Maintain and protect the listed species</p>	
<p>Objective 1: In cooperation with partners, monitor documented listed species and provide information to FNAI and FWC data bases.</p> <p><i>Comment: The FWC, in cooperation with partners, have not identified any imperiled plant species on the area, however have identified several imperiled wildlife species to have the potential to occur, as listed in Table 5.</i></p>	100%
<p>Objective 2: If the prescribed fire program alone is not sufficient for species management, prepare and implement a plan for additional necessary management activities.</p> <p><i>Comment: A prescribed fire occurred once on the area during the previous planning period and no species were observed. No further plans were deemed necessary.</i></p>	100%
<p>Goal 6: Eradicate invasive non-native species or maintain at the lowest practical level</p>	
<p>Objective 1: Inventory invasive non-native species on the property</p> <p><i>Comment: An official inventory on the area occurred during this planning period.</i></p>	100%
<p>Objective 2: If warranted, coordinate with the DEP Bureau of Invasive Plant Management to establish an exotic species operational plan for the property.</p> <p><i>Comment: During this planning period the DEP Bureau of Invasive Plant Management was dissolved into the FWC. Coordination has occurred with the FWC's Invasive Plant Management Section and the property has been surveyed.</i></p>	100%
<p>Objective 3: Control/eradicate Brazilian pepper and other invasive non-native plant species.</p> <p><i>Comment: The FWC has conducted treatments on the area in order to control Brazilian pepper and all other exotics.</i></p>	100%

<p><u>Objective 4:</u> Continue efforts to reduce/eliminate population of feral hogs by trapping or other means as needed. <i>Comment: The FWC and Indian River County monitor and remove any found feral hogs.</i></p>	100%
<p>Goal 7: Conduct fire management operations to help restore and maintain natural communities and to mimic natural fire effects</p>	
<p><u>Objective 1:</u> Document all woods, roads, trails, and fire lines. <i>Comment: The FWC and Indian River County have documented roads, trails, and fire lines on the area. However, the "woods" on the area have not been documented or surveyed.</i></p>	75%
<p><u>Objective 2:</u> Develop a burn plan for the property compatible with that of the St. Sebastian River Preserve State Park. <i>Comment: A burn plan for the property has been completed and is compatible with St. Sebastian River Preserve State Park.</i></p>	100%
<p><u>Objective 3:</u> Delineate fire management and rescue access routes and provide this information to the sheriff and emergency services. <i>Comment: The prescribed fire that has occurred on the area, fire management activities and rescue access routes were provide to the sheriff and emergency services at that time.</i></p>	100%
<p><u>Objective 4:</u> Install fire lines if necessary to facilitate fire management. <i>Comment: A fire line has been installed by St. Sebastian Preserve State Park staff, which has carried over onto the IRCPSR property. Additional needed fire lines will be established in the upcoming management plan period.</i></p>	50%
<p><u>Objective 5:</u> Notify neighboring landowners in advance of prescribed burns. <i>Comment: During the prescribed fire that has occur on the area in 2009, neighboring landowners were notified prior to the prescribed fire occurring.</i></p>	100%
<p><u>Objective 6:</u> Restore vegetation structure and composition of pyrogenic natural communities through an aggressive prescribed fire program. <i>Comment: A prescribed fire was conducted in 2009. Exotic plants have also been treated on the area, however, prior to initiation of additional prescribed burning further exotic plants removal may take place, to prevent further spread.</i></p>	25%

<p><u>Objective 7:</u> Accomplish the annual burn objectives listed in the burn plan. <i>Comment: A prescribed fire was conducted in 2009. Exotic plants have also been treated on the area, however, prior to initiation of additional prescribed burning further exotic plants removal may take place, to prevent further spread.</i></p>	25%
<p><u>Objective 8:</u> Protect the property from wildfire. <i>Comment: No wildfire has occurred on the area during this planning period.</i></p>	100%
<p>Goal 8: Survey, monitor and protect archaeological and historic sites on the property</p>	
<p><u>Objective 1:</u> Conduct all ground-disturbing activities in accordance with the DHR guidelines. <i>Comment: The DHR completed a survey of the area in 2001, and coordination and communication with the DHR has continued to occur.</i></p>	100%
<p><u>Objective 2:</u> Report all significant cultural-related resource on-site to DHR. <i>Comment: The DHR completed a survey of the area in 2001, and coordination and communication with DHR has continued to occur.</i></p>	100%
<p>Goal 9: Maintain security measures sufficient to protect the property's integrity and to restrict unauthorized access and use</p>	
<p><u>Objective 1:</u> Evaluate the current boundary posting and maintain the boundary of the property. <i>Comment: Currently, the area that contains the shooting range facilities has been continually maintained, however the boundary surrounding the remaining 300 acres are not currently maintained and do not contain boundary posting.</i></p>	50%
<p><u>Objective 2:</u> Coordinate with Indian River County Sheriff and FWC and DEP law enforcement about security concerns. <i>Comment: Law enforcement presence occurs regularly on the area, and ongoing communication and coordination occurs.</i></p>	100%
<p>Goal 10: Educate the public on firearm safety and safe and responsible hunting</p>	
<p><u>Objective 1:</u> Continue to provide hunter education and firearm safety instruction in the classroom and on the range. <i>Comment: The FWC and Indian River County continues to provide hunter educational opportunities and firearm safety instruction on the area.</i></p>	100%

<p><u>Objective 2:</u> Continue to increase the use of the range by existing shooters and attract new shooters. <i>Comment: The FWC and Indian River County continues to explore further promotional opportunities to increase awareness of the area.</i></p>	100%
<p><u>Objective 3:</u> Increase youth programs for shooting and gun safety, such as Eddie Eagle, the USA Junior Shooting Program and Archery in the Schools. <i>Comment: The FWC and Indian River County work towards exploring youth program opportunities for shooting and gun safety.</i></p>	100%
<p><u>Objective 4:</u> Provide facilities to law enforcement agencies for education/training purpose. <i>Comment: The FWC and Indian River County provide several facilities open to law enforcement agencies for education/training opportunities.</i></p>	100%
<p><u>Objective 5:</u> Work with the Chamber of Commerce to bring events to the site. <i>Comment: The FWC and Indian River County staff continue to work with the Chamber of Commerce and other county entities for events and promotional opportunities.</i></p>	100%
<p><u>Objective 6:</u> Develop clubs to increase usage of the shooting range. <i>Comment: The FWC and Indian River County continue to explore further opportunities to increase awareness of the area.</i></p>	100%
<p><u>Objective 7:</u> Continue to give speeches and presentations to increase the public awareness. <i>Comment: The FWC and Indian River County continue to explore further opportunities to increase awareness of the area.</i></p>	100%
<p><u>Objective 8:</u> Promote a safe place for recreational and law enforcement shooting. <i>Comment: The FWC and Indian River County provide several facilities open to law enforcement agencies for education/training opportunities.</i></p>	100%
<p><u>Objective 9:</u> Promote competitive and charitable shooting events throughout the year. <i>Comment: The FWC and Indian River County staff continue to work with the Chamber of Commerce and other county entities for events and promotional opportunities.</i></p>	100%
<p>Goal 11: Continue to provide public access to all facilities, including handicap access</p>	
<p><u>Objective 1:</u> Maintain all public access facilities. <i>Comment: The FWC and Indian River County continue to maintain all facilities on the area.</i></p>	100%

<p>Objective 2: Provide daytime recreational vehicle parking, if feasible. <i>Comment: The FWC and Indian River County continue to provide several parking areas for recreational opportunities.</i></p>	100%
<p>Objective 3: As facilities are developed, provide universal access in all cases except where the law allows reasonable exceptions (e.g., where handicap access is structurally impractical, or where providing such access would change the fundamental character of the facility being provided). <i>Comment: The FWC and Indian River County continue to provide several parking areas, including ADA parking for recreational opportunities.</i></p>	100%
<p>Goal 12: Provide hunter safety and firearm safety instruction and range facilities and additional environmental education facilities</p>	
<p>Objective 1: Continue to maintain facilities for hunter safety and firearm safety instruction. <i>Comment: The FWC and Indian River County continue to maintain all facilities on the area.</i></p>	100%
<p>Objective 2: Pursue additional classroom space to be able to provide classes for re-connecting children to nature and hunter safety and education. <i>Comment: During this planning period the FWC and Indian River County built a new classroom facility on the area for hunter safety and educational programs.</i></p>	100%
<p>Objective 3: Provide two banks of five skeet and trap fields, if environmentally feasible and funds are available. <i>Comment: During this planning period the FWC and Indian River County built new skeet and trap fields on the area for recreational use.</i></p>	100%
<p>Goal 13: Continue to provide fishing opportunities in the borrow pit</p>	
<p>Objective 1: Continue to provide fishing opportunities to children. <i>Comment: The FWC and Indian River County continue to provide fishing opportunities as feasible.</i></p>	100%
<p>Objective 2: Certify one or more staff members or volunteers to teach the Hooked on Fishing Not on Drugs curriculum. <i>Comment: Hooked on Fishing Not on Drugs was determined not feasible during this planning period; however, efforts are being made to establish these activities for the next planning period.</i></p>	0%

<p>Objective 3: Conduct additional Hooked on Fishing Not on Drugs events and Kids Fishing Clinics. <i>Comment: Hooked on Fishing Not on Drugs was determined not feasible during this planning period; however, efforts are being made to establish these activities for the next planning period.</i></p>	0%
<p>Objective 4: Request FWC fishery staff to assess the fish populations at the borrow pit and initiate a fish stocking plan if warranted. <i>Comment: The FWC fishery staff have assessed the fish populations on the area and stocked the area as appropriate.</i></p>	100%
<p>Objective 5: Assess the impacts, desirability, demand for, and cost of installing multi-purpose boardwalks/docks that would provide additional fishing access. Consider if the structure would prevent erosion and impacts to shore vegetation. <i>Comment: During this planning period it was determined not feasible during this time to install any boardwalks/docks on the area to increase fishing access.</i></p>	0%
<p>Goal 14: Conduct operations and obtain and maintain facilities and staff to soundly manage, protect and make accessible the property</p>	
<p>Objective 1: Obtain funding for sufficient staffing [1.0 FTE, 0.5 OPS] and outsourced assistance to provide support for property development and operations. <i>Comment: The Indian River County was able to obtain funding for increased management of the shooting range facilities; however, staffing has not been increased for habitat management during this planning period.</i></p>	50%
<p>Objective 2: Pursue alternative funding sources, such as mitigation projects, grants and fundraising, to supplement baseline budget funds. <i>Comment: The Indian River County was able to obtain funding for increased management of the shooting range facilities; however, staffing has not been increased for habitat management during this planning period.</i></p>	50%
<p>Goal 15: Consider outsourcing those property operations that outside sources can conduct at less cost and with equivalent or better results than property staff</p>	

<p>Objective 1: On a continuing basis, analyze property operations and identify those activities for which property staff do not have the expertise or that can be completed at less cost with equivalent or better results by outside sources.</p> <p><i>Comment: The FWC and Indian River County continue to assess the needs of the area and have outsourced various activities as needed and appropriate.</i></p>	100%
<p>Objective 2: Consider outsourcing activities identified by Objective 15a.</p> <p><i>Comment: The FWC and Indian River County continue to assess the needs of the area and have outsourced various activities as needed and appropriate.</i></p>	100%
<p>Goal 16: Establish and maintain relationships with other agencies to enhance management, protection and use of the property</p>	
<p>Objective 1: Coordinate education and management efforts with other agencies.</p> <p><i>Comment: Coordination for the shooting range facilities have occurred, and a meeting was held in Spring, 2018 with St. Sebastian River Preserve State Park staff to facilitate coordination of management efforts.</i></p>	100%
<p>Objective 2: Establish an agreement with St. Sebastian River Preserve State Park to coordinate on natural resource management, such as for prescribed burns and invasive non-native species control.</p> <p><i>Comment: A meeting was held in Spring, 2018 with St. Sebastian River Preserve State Park staff to facilitate coordination of management efforts.</i></p>	100%
<p>Objective 3: Establish collaborative efforts with the DOF, FWC, DHR, DEP and others for the protection and management of the range property.</p> <p><i>Comment: Several efforts have occurred for the management of the shooting range facilities. A meeting was also held in Spring, 2018 with St. Sebastian River Preserve State Park staff to facilitate coordination of management efforts.</i></p>	100%
<p>Objective 4: Encourage use of the property by law enforcement agencies.</p> <p><i>Comment: The FWC and Indian River County provide several facilities open to law enforcement agencies for education/training opportunities.</i></p>	100%

<p>Objective 5: Contact school board about establishing an Archery in the Schools program and USA Junior Shooting Program. <i>Comment: Archery in the Schools occurred on the area during this planning period, however the program was moved to occur at the schools only. USA junior shooting sports have yet to occur on the area. Multiple other programs have utilized the area and the FWC and Indian River County continue to explore opportunities as appropriate.</i></p>	50%
<p>Goal 17: Establish and maintain relationships with organizations to enhance use, management and protection of the facilities and property</p>	
<p>Objective 1: Coordinate education and training efforts with local organizations such as shooting and hunting clubs/organizations <i>Comment: The FWC and Indian River County continue to explore further opportunities to increase awareness and utilization of the area.</i></p>	100%
<p>Objective 2: Evaluate including local natural areas organizations and local environmental organizations in natural resource management efforts. <i>Comment: To date no efforts have taken place to coordinate with local natural areas organizations or environmental organizations. However, in Spring, 2018, several expressed interests in assisting with management efforts.</i></p>	0%
<p>Objective 3: Provide community recognition and support for volunteers. <i>Comment: The FWC and Indian River County continue to recognize volunteers and the assistance they provide to the area.</i></p>	100%
<p>Goal 18: Review, define, and minimize impacts associated with planned and existing development near the property</p>	
<p>Objective 1: Address impacts associated with existing and future development concerning range use, fire management, exotic control and other issues. <i>Comment: Exotic treatments have occurred, one prescribed burn has also, and there is ongoing hog control occurring on the area.</i></p>	50%
<p>Objective 2: Continually review comprehensive plan amendments and land development regulations that govern proposed land use changes on properties adjacent to the property and coordinate with FWC headquarters and Indian River County on comments. Coordinate with neighboring landowners on the review. <i>Comment: The FWC continually reviews amendments and land use changes occurring on or around the area. The FWC also works with the DEP and Indian River County on these reviews and changes.</i></p>	100%

Goal 19: Ensure that use and management of the property complies with state and local government requirements	
<u>Objective 1:</u> Ensure that each planned use of the property complies with the State Lands Management Plan adopted by the Trustees. <i>Comment: The FWC and Indian River County ensure to utilize and abide by the State Lands Management Plan put in place for the area.</i>	100%
<u>Objective 2:</u> Ensure that each planned use of the property complies with the Local Government Comprehensive Plan. <i>Comment: The FWC and Indian River County ensure to utilize and abide by the Local Government Comprehensive Plan put in place for the area.</i>	100%

5 Management Activities and Intent

The following section provides a description of agency plans to locate, identify, protect, preserve or otherwise use fragile natural resources and nonrenewable historical resources. In general, the FWC management intent for the IRCPSR is to restore and maintain natural communities in a condition that sustains ecological processes and conserves biological diversity, especially fish and wildlife resources. In conjunction with this primary emphasis, it is the FWC’s intent to provide quality fish and wildlife resource based public outdoor recreational opportunities on the IRCPSR. The FWC will utilize the best available data, guidelines, natural resource management practices, and recreational management practices to achieve these outcomes in accordance with the original purposes for acquisition. Furthermore, as noted earlier, the management activities described in this section are in compliance with those of the Conceptual State Lands Management Plan.

5.1 Land Management Review

Pursuant to Chapter 259.036, FS, the DEP-DSL is required to “cause periodic management reviews to be conducted” on Board of Trustees conservation lands to determine if they “are being managed for the purposes for which they were acquired and in accordance with a land management plan adopted pursuant to s. 259.032.”

Due to the fact that the IRCPSR is less than the normal acreage threshold (1,000 acres) necessary to trigger an LMR, a LMR has not been conducted on the area. If a LMR for the IRCPSR is conducted in the future, the FWC will incorporate it into the IRCPSR Management Plan.

5.2 Adaptive Management

Adaptive management is “learning by doing”;¹ it is the adjustment or modification of conservation actions to achieve a desired conservation goal. In practice, adaptive

management is a rigorous process that includes sound planning and experimental design with a systematic evaluation process that links monitoring to management.^{1,2} Adaptive management requires flexibility for implementation, but should be fitted over a fundamentally sound, well-planned design.

An adaptive management process produces the strongest inference and most reliable results when experimental design components are incorporated into the monitoring process. Adaptive management is most rigorously applied in an active format when components of experimental design (i.e., controls, replication, and randomization) are included in the monitoring process.^{2,3} Incorporating valid statistical analyses of results will further enhance the value of the adaptive management process. However, in some situations, rigorous experimental design procedures can be relaxed without invalidating monitoring results. In a passive format, adaptive management can involve applying a conservation action at a site, observing the results and adjusting the action in the future if warranted.^{2,3}

Proposed adaptive management, monitoring and performance measures are developed through literature reviews and FWC staff meetings. Overall, a results-based approach is incorporated into this Management Plan, for which effective monitoring is an integral component. The FWC will monitor conservation actions, species, habitats, and major threats to the conservation of the natural and historical resources of the IRCPSR.

5.2.1 Monitoring

A well-developed monitoring protocol is also one of the principal, required criteria for the management of the ICRPSR. Monitoring and performance measures are important, but often overlooked elements of conservation planning. Monitoring provides the critical link between implementing conservation actions and revising management goals.

Monitoring is the systematic, repeated measurement of environmental characteristics to detect changes, and particularly trends, in those characteristics. Monitoring provides essential feedback, the data needed to understand the costs, benefits, and effectiveness of planned conservation actions and the management projects undertaken to address them.²

FWC staff may monitor additional fish and wildlife species when deemed appropriate. Exotic and invasive plant and animal species (Section 5.5) are also monitored as needed and appropriate. Recreational uses are monitored through the FWC's Public Access Services Office (PASO) program, and work in conjunction with the establishment and adjustment of public access carrying capacities (Section 5.6.2). Historical resources (Section 5.9) are monitored with guidance from the DHR.

5.2.2 Performance Measures

Performance measures include qualitative or quantitative measures used to provide an estimate or index of the characteristic of interest, and to chart the overall progress of

conservation actions towards specific goals. Successful monitoring programs and their associated performance measures provide natural resource professionals with valuable feedback on the effectiveness of conservation actions and make it possible to implement a more flexible adaptive management approach. An adaptive management approach ultimately will be more efficient and effective when it tracks inputs, incorporates an effective monitoring program that integrates performance measures, and evaluates results against desired goals.

5.2.3 Implementation

The IRCPSR Management Plan serves as the guiding framework to implement this adaptive management process. It serves as the underpinning for the integration of management programs underway to accomplish needed conservation actions that are planned to manage the natural resources of the IRCPSR and resolve conservation threats to fish and wildlife and the habitats they occupy. Based on evaluations of project results, the conservation actions are revised as necessary, and the adaptive management process is repeated.

5.3 Habitat Restoration and Improvement

On the IRCPSR, the FWC will focus on managing for native habitat diversity, emphasizing maintenance of high-quality natural communities, and restoration of disturbed areas. Restoration may be achieved on disturbed areas by the re-introduction of fire, restoring historic hydrological conditions and/or the use of mechanical or chemical forest management techniques as appropriate. Retention of the native old growth component of forests, while also providing for natural regeneration, remains an important consideration. The IRCPSR has high-quality native communities including mesic and wet flatwoods, mesic hammock, and freshwater marshes that the FWC will continue to manage and protect. On disturbed upland sites, the FWC intends to initiate ground cover and natural community restoration.

Utilizing the CLC, will help guide the mapping of the current vegetative communities on the IRCPSR. The FWC and Indian River County will use this information to guide and prioritize management and restoration efforts on the area.

5.3.1 Prescribed Fire and Fire Management

Periodic spring and summer fires occurred in fire-adapted communities under natural conditions. Plant species composition reflects the frequency and intensity of these fires. In the absence of fire, fallow fields on former longleaf sites follow a successional pattern through mixed pine-hardwood forests to an exclusively hardwood community rather than to the original plant community. The plant species composition may differ slightly on poorer soils of the slash pine flatwoods, but the dominant role of fire in controlling hardwoods is equally important in either ecosystem.

Timber removal, site preparation, drainage, and lack of fire have all combined to alter the plant species composition of the area resulting in a loss of fuel and inhibiting the return to a more “natural” fire management regime. Site-specific combinations of prescribed fire, mechanical and chemical vegetation control, reforestation, and restoration of natural water regimes are likely necessary actions needed to restore the area to historic natural communities.

The FWC employs a fire management regime to increase both species and habitat diversity and will continue a prescribed burning program on the IRCPSR in accordance with vegetative management objectives. As fire moves across a landscape, some areas carry fire better than others. Areas with higher vegetative fuel loads typically burn more evenly and with greater intensity. Areas with lower vegetative fuel loads or wetland areas inundated with water typically will not carry fire as evenly, and usually burn at a lower intensity. Employing a burning program with different burning frequencies, intensities, and seasonality (dormant season vs. growing season) of prescribed burns create habitat diversity and a mosaic of vegetation patterns. This mosaic is designed to have both frequently burned and infrequently burned aspects.

On some areas, prescribed burning is limited by the buildup of mid-story brush and a lack of pyrogenic groundcover fuels. This condition creates unsuitable habitat for many wildlife species. Mechanical control of brush on upland sites by roller chopping, logging, shredding, or incidentally by equipment during commercial thinning operations, can reduce shading and encourage the grasses and forbs that are necessary to sustain prescribed fire. However, roller chopping may damage the herbaceous ground cover, especially wiregrass. Therefore, its application will be limited to situations where burning can only be accomplished by first reducing woody vegetation by mechanical means.

Whenever possible, existing firebreaks such as roads and trails, as well as natural breaks such as creeks and wetlands, will be used to define burning compartments. Disk harrows, mowing, and foam lines will be used as necessary to minimize disturbance and damage created by fire plows.

The transitional areas between two adjacent but different vegetative cover types, such as forests and wetlands, are known as ecotones. With the possible exception of wildfire suppression, mechanical soil disturbance in ecotones will be avoided in order to protect habitats for important rare species that often occur between flatwoods and riparian drainages. Silvicultural site preparation and creation of firebreaks are avoided when possible in these zones. Additionally, fires are allowed to burn into the edges of marshes, swamps and other wetlands in order to maintain these habitats. Once fuel loads have been reduced and a more open appearance has returned, vegetative management objectives will

likely dictate a fire return interval that averages 1-4 years, preferably during the spring and early summer months.

In addition to the general prescribed fire management guidelines described above, an area-specific Prescribed Fire Plan has been developed for the IRCPSR (Appendix 12.11). This plan includes, but is not limited to, delineation of burn management units and detailed descriptions of prescribed fire methodology, safety, and smoke management guidelines.

During the previous 10-year planning period, the area's fire adapted communities were treated once with prescribed fire. As detailed in the goals and objectives in Section 6 below, the FWC plans to conduct prescribed burning on 100% of the area's fire adapted communities resulting in 100% of the area being maintained within the recommended fire return intervals during this planning period. Potential projected challenges with continuing to successfully implement prescribed fire on the area are described further in Section 7. The continuing benefits of prescribed fire on the area's wildlife habitats along with other ongoing habitat restoration activities that are being implemented on the IRCPSR are discussed in more detail below.

5.3.2 Habitat Restoration

Habitat management activities have taken place within the natural communities of the IRCPSR over the course of the previous management period beginning in 2008. Since 2008, the fire-adapted natural communities within the IRCPSR have been treated with prescribed fire. In addition to conducting prescribed burning, some mowing has been conducted to further improve the habitat value of the natural communities at the IRCPSR and specifically encourage better habitat conditions for listed wildlife.

In addition to prescribed burning activities, natural communities on the IRCPSR that may undergo some level of habitat restoration include mesic and wet flatwoods, mesic hammock, and freshwater marshes. Continuing habitat management activities on the IRCPSR will focus on enhancing natural communities, maintaining recommended fire return intervals for fire adapted communities, treating and removing exotic plant species, and controlling vegetation through mowing and roller chopping as needed. Chemical and mechanical treatments may also be implemented in some select hardwood habitats in the area in order to restore these areas to an earlier successional condition. Exotic species control is more extensively discussed in Section 5.5, below. Further specific habitat management and improvement objectives planned for the IRCPSR are described in Section 6 below.

5.4 Fish and Wildlife Management, Imperiled and Focal Species Habitat Maintenance, Enhancement, Restoration, or Population Restoration

5.4.1 Fish and Wildlife

Due to the variety of natural communities, a diversity of associated wildlife, including rare, imperiled, common game, and non-game species, can be found on the IRCPSR. In managing for wildlife species, an emphasis will be placed on conservation, protection and management of natural communities. As noted above, natural communities important to wildlife include mesic and wet flatwoods, mesic hammock, and freshwater marshes.

The size and natural community diversity of the IRCPSR creates a habitat mosaic for a wide variety of wildlife species. Resident wildlife will be managed for optimum richness, diversity and abundance. In addition to resident wildlife, the IRCPSR provides resources critical to many migratory birds including waterfowl, passerines, raptors, and others. Habitats important to migratory species will be protected, maintained or enhanced.

Wildlife monitoring emphasis is placed on documenting the occurrence and abundance of rare and imperiled species on the property. The FWC will continue to update inventories for certain species, with emphasis on rare and imperiled fish and wildlife species. Monitoring of wildlife species will continue as an ongoing effort for the area.

Concurrent with ongoing species inventory and monitoring activities, management practices are designed to restore, enhance or maintain rare and imperiled species, and their habitats. This will be further augmented by following approved Federal and FWC species recovery plans, guidelines, and other scientific recommendations for these species. Guided by these recommendations, land management activities including prescribed burning will address rare and imperiled species requirements and habitat needs.

5.5 Exotic and Invasive Species Maintenance and Control

The FWC will continue efforts to control the establishment and spread of Florida Exotic Pest Plant Council (FLEPPC) Category I and II plants on the IRCPSR. Control technologies may include mechanical, chemical, biological, and other appropriate treatments. Treatments utilizing herbicides will comply with instructions found on the herbicide label and employ the Best Management Practices for their application.

Exotic and invasive plant species known to occur on the IRCPSR and treated annually by FWC include Brazilian pepper, cogon grass, and old world climbing fern. Exotic and invasive plant species have been identified as occurring at varying densities on approximately 300 acres of the IRCPSR. However, the FWC's methodology for determining

the number of acres “infested” with invasive exotic plants only represents a cumulative acreage and does not reflect the degree of the invasive exotic occurrence. The degree of infestation among areas identified with invasive exotic plant occurrences often varies substantially by species, level of disturbance, environmental conditions, and the status of ongoing eradication and control efforts. The FWC will continue to focus treatments on areas identified as having invasive exotic plant occurrences, as well as treating any new occurrences as they are identified through continued monitoring.

Additionally, the FWC will continue efforts to control the introduction of exotic and invasive species, as well as pests and pathogens, on the IRCPSR by inspecting any vehicles and equipment brought onto the area by contractors and requiring that they be free of vegetation and dirt. If vehicles or equipment used by contractors are found to be contaminated, they will be referred to an appropriate location to clean the equipment prior to being allowed on the area. This requirement is included in every contract for contractors who are conducting any operational or resource management work on the area. In this way, the FWC implements a proactive approach to controlling the introduction of exotic pests and pathogens to the area.

An exotic animal species of concern on the IRCPSR is the feral hog. These animals have high reproductive rates, and when populations reach high densities, feral hogs can significantly degrade natural communities through foraging activity (rooting). The FWC will consult with other regional natural resource managing agencies and private landowners to coordinate feral hog control measures as necessary. Feral hog populations may also be controlled by trapping, as necessary, to aid in minimizing the negative impacts caused by feral hog populations on the area.

Currently, maintenance and control of invasive exotic plant species (Table 4) continues to be a significant management challenge at the IRCPSR. During the previous 10-year planning period, the FWC continued to implement exotic and invasive species control and maintenance activities throughout the IRCPSR. Several areas within the IRCPSR remains classified in an infested condition, thus requiring continued intensive treatments. The FWC will continue to focus control and maintenance activities on areas identified as having invasive exotic plant occurrences, as well as treating any new occurrences as they are identified through continued monitoring activities. Ongoing exotic plant species objectives and challenges for the IRCPSR are further detailed in Sections 6 - 8 below.

5.6 Public Access and Recreational Opportunities

5.6.1 Americans with Disabilities Act

When public facilities are developed on areas managed by the FWC, every effort is made to comply with the Americans with Disabilities Act (Public Law 101-336). As new facilities

are developed, the universal access requirements of this law are followed in all cases except where the law allows reasonable exceptions. Recreation facilities in semi-primitive or primitive zones will be planned to be universally accessible to the degree possible except as allowed by the ADA⁴ where:

1. Compliance will cause harm to historical resources, or significant natural features and their characteristics.
2. Compliance will substantially alter the nature of the setting and therefore the purpose of the facility.
3. Compliance would not be feasible due to terrain or prevailing construction practices.
4. Compliance would require construction methods or materials prohibited by federal or state statutes, or local regulations.

5.6.2 Public Access Carrying Capacity

Baseline carrying capacities for users on FWC-managed lands are established by conducting a site-specific sensitivity analysis using available data for the site. The intent of the carrying capacity analysis is to minimize wildlife and habitat disturbance and provide the experience of being “immersed in nature” that visitors to FWC-managed areas desire. Carrying capacities are just a first step; management of recreational use requires a means of monitoring visitor impacts. Responding to these impacts may require adjusting the carrying capacities as necessary. The carrying capacities generated through this process are used as a tool to help plan and develop public access, wildlife viewing, and fish and wildlife resource based public outdoor recreation opportunities.

Based on an analysis of the overall approved uses and supported public access user opportunities, and the anticipated proportional visitation levels of the various user groups, the FWC has determined that the IRCPSR can currently support 470 visitors per day.

Importantly, public access carrying capacities are not developed to serve as a goal for expanding the public use of a particular area to match the established carrying capacity. Rather, they are developed to establish maximum thresholds for public use of the respective area in order to protect the natural and historical resources on the IRCPSR and to ensure that visitors will have a high-quality visitor experience. The public access carrying capacity will be periodically reevaluated.

5.6.3 Hunting

Hunting is prohibited on the IRCPSR. However, hunting opportunities are offered on nearby public lands.

5.6.4 Fishing

Fishing opportunities are limited but authorized year-round at the IRCPSR.

5.6.5 Boating

The IRCPSR does not contain any surface or natural water bodies on the area, however, boating opportunities are offered on nearby public lands.

5.6.6 Hiking

Currently, the roads and trails on the IRCPSR are limited to the shooting range facilities, however hiking is available on nearby public lands.

5.6.7 Bicycling

Bicycling is prohibited on the IRCPSR. However, bicycling opportunities are offered on nearby public lands.

5.6.8 Equestrian

Horseback riding is prohibited on the IRCPSR. However, horseback riding opportunities are offered on nearby public lands.

5.6.9 Camping

Camping is prohibited on the IRCPSR. However, camping opportunities are offered on nearby public lands.

5.6.10 Geocaching

Geocaching, also known as Global Positioning System (GPS) Stash Hunt and GeoStash, is a contemporary combination of orienteering and scavenger hunting generally utilizing a GPS receiver unit. Geocache websites routinely promote good stewardship. However, the potential exists for resource damage, user conflicts, or safety issues caused by inappropriately placed caches and/or links that do not provide adequate information about the area.

It is the policy of the FWC to allow placement of geocaches only in those locations that do not present the potential for resource damage, user conflicts, or threats to the safety of the activity participants. The placement of geocaches on FWC-managed lands is governed by specific guidelines. These guidelines may be found on the following FWC website:

http://myfwc.com/media/1074886/FWC_Geocache_Guidelines.pdf.

5.6.11 Shooting Range Facilities

It is the mission of the FWC Hunter Safety and Public Shooting Range Section, to continue the heritage of hunting by developing safe, responsible, and knowledgeable hunters. Hunter education is essential to the success of many of the FWC's responsibilities. Education of the

hunting community about the proper use of firearms, protection afforded endangered species, and the importance of protection of wildlife habitat are all significant aspects of the FWC's duties.

There was a series of site analyses of prospective lands within the vicinity to determine potential areas where a shooting sports complex might be most appropriate. It was determined that the IRCPSR had a high level of feasibility due to its isolated location, facility requirements, and low impact on the IRCPSR natural communities.

Elements of the current shooting range facilities located on the IRCPSR include the following:

- 2-position 200-yard rifle range
- 29-position 100-yard rifle range
- 35-position 25-yard handgun range
- Automated 26-station sporting clays course
- Automated 5-stand sporting clays course
- 3 automated trap/skeet fields
- 5-position 15-yard air rifle range
- Stationary archery range out to 65 yards
- Walk-through archery course
- Multi-use classroom

The FWC will continue to work with Indian River County in order to operate and manage the shooting sports complex.

To facilitate recreational opportunities on the area, the FWC has continued to establish and maintain the shooting range facilities and fishing opportunities. During the previous 10-year planning period, the FWC completed several public accesses, recreational, and facility improvements on the IRCPSR, including the building of a multi-use classroom, the development of sporting clay courses, and a walk-through archery course. Further planned public access facility improvements are detailed in Section 6 below. Ongoing public access and recreational opportunity management challenges are addressed in Section 7 below. In addition, the FWC will continue to implement public access, recreational, and educational opportunities on the area in accordance with the Indian River County.

5.7 Hydrological Preservation and Restoration

5.7.1 Hydrological Assessment

The IRCPSR itself does not contain any surface or natural bodies of water, however the FWC and Indian River County will continue to work with the SJRWMD and the DEP on monitoring groundwater resources and water quality.

5.8 Forest Resource Management

There are no substantial timber resources found on the IRCPSR. As a result, the FWC and the FFS have determined that a professional forest assessment for the IRCPSR is unnecessary. The FWC will cooperate with the FFS or a qualified professional forestry consultant regarding any forest management activities should they become necessary or appropriate.

5.9 Historical Resources

Procedures outlined by the DHR will be followed to preserve the historical sites of the IRCPSR. The FWC will consult with the DHR in an attempt to locate any additional historical features on the area. In addition, the FWC will ensure management staff has the DHR Archaeological Resources Monitoring training. The FWC will refer to and follow DHR's Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Properties for management of these resources, prior to any facility development or other ground disturbing activities. Furthermore, as appropriate and necessary, the FWC will contact professionals from DHR for assistance prior to any ground-disturbing activity on the IRCPSR.

To date, the DHR Master Site File indicates no known historic sites on the IRCPSR. The FWC will submit subsequently located historic sites on the IRCPSR to the DHR for inclusion in their Master Site File.

5.10 Capital Facilities and Infrastructure

The FWC's land management philosophy is designed to conserve the maximum amount of wildlife habitat while providing the minimal number of capital facilities and infrastructure necessary to effectively conduct operational and resource management activities and provide ample opportunities for fish and wildlife resource based public outdoor recreation. For these reasons, planned capital facilities and infrastructure will focus on improving access, recreational potential, hydrology, or other resource and operational management objectives.

Current capital facilities and infrastructure on the IRCPSR include the Shooting Range Facility which contain a 2-position 200-yard rifle range, 29-position 100-yard rifle range, 35-position 25-yard handgun range, automated 26-station sporting clays course, automated

5-stand sporting clays course, 3 automated trap/skeet fields, 5-position 15-yard air rifle range, stationary archery range out to 65 yards, and walk-through archery course. The area also contains a multi-use classroom, shop building, multi-use building and parking area. Goals and objectives to improve or repair these facilities are further described in Section 6.9 of this Management Plan.

As described in Section 5.6.1 of this Management Plan, for any public facilities that are developed on areas managed by FWC, every effort is made to comply with the Americans with Disabilities Act (Public Law 101-336).

5.11 Land Conservation and Stewardship Partnerships

The FWC utilizes a three-tiered approach to identifying, acquiring or otherwise protecting important conservation lands adjacent to or in proximity to existing FWC-managed areas. This involves development of an Optimal Resource Boundary (ORB), Optimal Conservation Planning Boundary (OCPB) and associated Conservation Action Strategy (CAS).

Increasingly, cooperative land steward partnership efforts with private landowners plays an integral role in this effort as does ongoing land conservation, either through fee-simple or less-than-fee conservation easements. In combination, this tiered model helps the FWC to further the regional conservation of important fish and wildlife habitats through a proactive, comprehensive, and cooperative approach towards conservation.

5.11.1 Optimal Resource Boundary

This three-tiered model begins with the development of an ORB, which is a resource-based analysis on a regional scale that integrates important FWC conservation research and analysis into practical planning, acquisition, and management efforts through GIS analysis. The ORB focuses on critical and important wildlife species or habitat considerations such as rare and imperiled species habitat within a particular region or ecosystem-like area on a landscape scale within which an FWC managed area is contained while eliminating urban areas or lands that have already been conserved or protected.

5.11.2 Optimal Conservation Planning Boundary

The second tier is known as the OCPB. The OCPB combines the regional natural resources identified in the ORB, as well as regional and local area conservation planning, including habitat conservation and restoration, habitat linkages, management challenges, land use and zoning issues, infrastructure including roads and developments, improving access, eliminating inholdings, providing prescribed burn buffers, resolving boundary irregularities, water resource protection, and conserving other important natural and historical resources.

Although the OCPB provides the basis for potential future voluntary, willing-seller conservation acquisitions, it is designed to function primarily as a conservation planning boundary. The OCPB identifies surrounding lands and natural resources that may be

important to the continued viability of fish and wildlife populations in the region. As they are currently managed, these lands appear to contribute to regional conservation and may support conservation landscape linkages.

5.11.1 Conservation Action Strategy

The CAS is the third tier and implements the results of the ORB and OCPB tiers. This element of the process incorporates the conservation planning recommendations into an action strategy that prioritizes conservation needs. The CAS is integral to the development of conservation stewardship partnerships and also implements the current approved process for establishing the FWC Florida Forever Inholdings and Additions acquisition list.

Primary components of the CAS may include:

- FWC Landowner Assistance Program
- FWC conservation planning
- FWC Additions and Inholdings Program Land Conservation Work Plan
- Forest Stewardship Program proposals
- Florida Forever project proposals and boundary modifications
- Conservation easements
- Federal or State grant conservation proposals
- Regional or local conservation proposals
- Local, state, and federal planning proposals
- Non-governmental organization conservation proposals

Continued conservation of these lands may be aided by available voluntary landowner stewardship programs, conservation easements, and in some cases, potential voluntary conservation acquisitions. Participation in any FWC conservation effort is entirely voluntary and at the sole choice of willing landowners.

Private landowners seeking assistance with habitat management will likely find it offered within the FWC Landowner Assistance Program (LAP). The FWC employs biologists who are available to provide wildlife-related assistance with land-use planning and habitat management. There are many forms of assistance that include technical, financial, educational, and various forms of recognition that seek to award landowners who manage their wildlife habitat responsibly. More information on the FWC's LAP program and online habitat management tools are available online at: <http://myfwc.com/conservation/special-initiatives/lap/> .

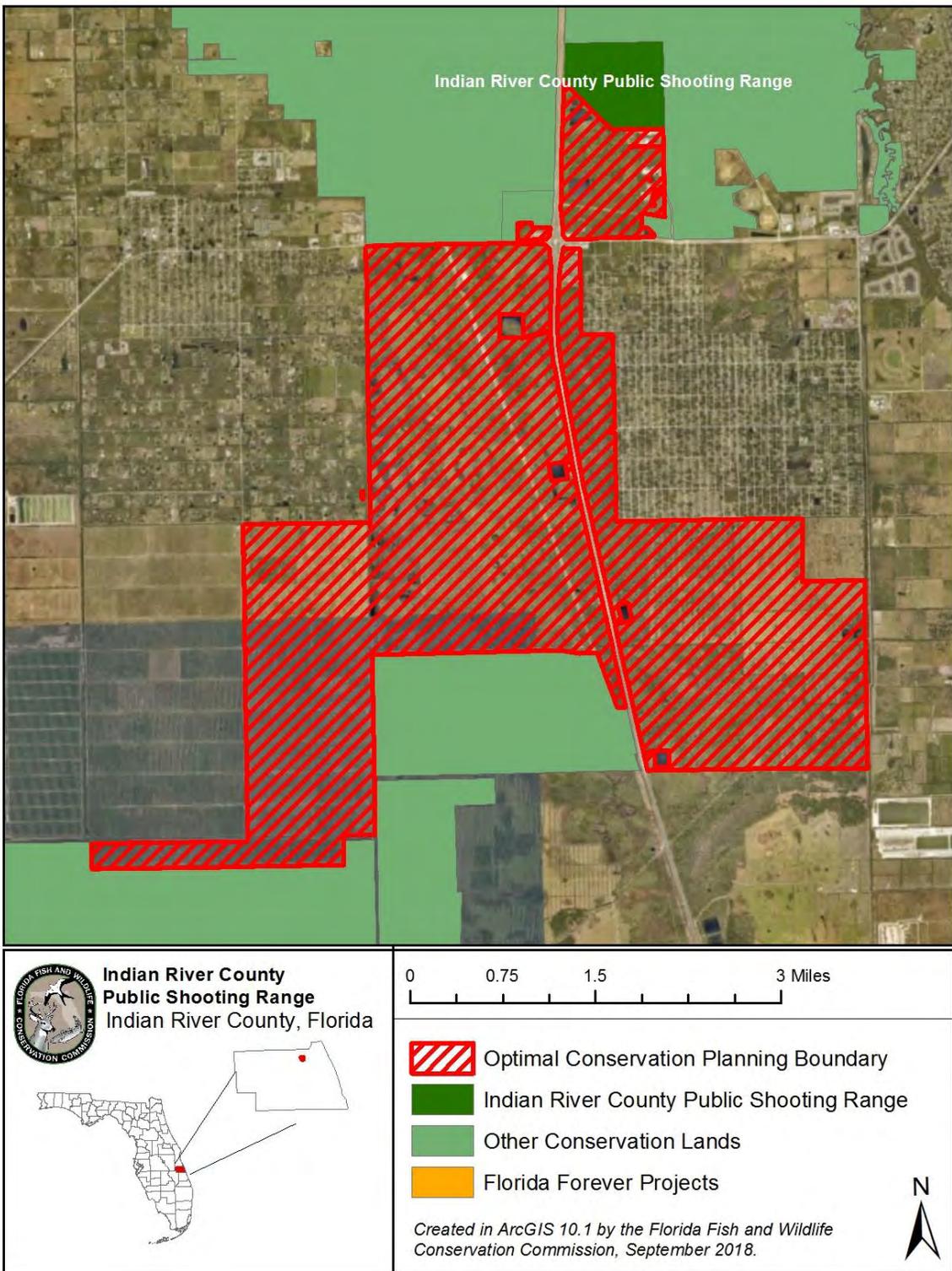


Figure 10. Optimal Conservation Planning Boundary for IRCPSR

5.11.1 FWC Florida Forever Additions and Inholdings Acquisition List

Currently, there are no parcels included on the FWC Florida Forever Additions and Inholdings list for the IRCPSR. If a CAS is considered necessary for the IRCPSR, additions to the FWC Florida Forever Additions and Inholdings acquisition list may be recommended for the area.

5.12 Research Opportunities

The FWC intends to cooperate with researchers, universities, and others as feasible and appropriate. For the IRCPSR, the FWC will continue to assess and identify research needs, and research and environmental education partnership opportunities as appropriate. Research proposals involving the use of the area are evaluated on an individual basis. All research activities on the IRCPSR must have prior approval by the FWC.

5.13 Cooperative Management and Special Uses

5.13.1 Cooperative Management

The FWC is responsible for the overall management and operation of the IRCPSR as set forth in the lease agreements with the Board of Trustees. However, as mentioned previously, through a concessionaire contract the Indian River County is responsible for operation and management of the shooting range facilities. In keeping with the agreements, and in order to conduct its management operations in the most effective and efficient manner, the FWC cooperates with other agencies to achieve management goals and objectives described in this management plan. These include cooperating with the DHR to ensure the requirements of the Management Procedures Guidelines - Management of Archaeological and Historical Resources document (Appendix 12.8) are followed with regard to any ground-disturbing activities. In addition, the FFS assists the FWC by providing technical assistance on forest resource management. Also, the FWC cooperates and consults with the SJRWMD and the DEP for the monitoring and management of both ground and surface water resources and the overall management of the IRCPSR.

5.13.2 First Responder and Military Training

First-responder (public governmental police department or agency, fire and emergency medical service personnel) training and military training are conditionally allowed on the IRCPSR. Such activities are considered allowable uses only when undertaken intermittently for short periods of time, and in a manner that does not impede the management and public use of the IRCPSR and causes no measurable long-term impact to the natural resources of the area. Additionally, FWC staff must be notified and approve the training through issuance of a permit prior to any such training taking place on the IRCPSR. Any first-responder or military training that is not low-impact, intermittent and occasional would require an amendment to this management plan, and therefore will be

submitted by the FWC to the DSL and the ARC for approval consideration prior to authorization.

5.13.3 Apiaries

Currently, there are no apiaries operating on the IRCPSR. However, use of apiaries is conditionally approved for the IRCPSR, and is deemed to be consistent with purposes for acquisition, is in compliance with the Conceptual State Lands Management Plan, and is consistent with the FWC agency mission, goals, and objectives as expressed in the Agency Strategic Plan and priorities document (Appendix 12.6). Location, management, and administration of apiaries on the IRCPSR will be guided by the FWC Apiary Policy (Appendix 12.5).

The FWC Apiary Policy (Appendix 12.7) will be followed with regards to site location, management, and administration of apiaries.

5.14 Climate Change

Because of Florida's unique ecology and topography, any potential impacts as a result of climate change may be particularly acute and affect multiple economic, agricultural, environmental, and health sectors across the state. The impact of climate change on wildlife and habitat may already be occurring, from eroding shorelines and coral bleaching to increases in forest fires and saltwater intrusion into inland freshwater wetlands.

The Intergovernmental Panel on Climate Change (IPCC), a multi-national scientific body, reports that climate change is likely proceeding at a rate where there will be unavoidable impacts to humans, wildlife, and habitat. Given current levels of heat-trapping greenhouse gas emissions, shifts in local, regional, and national climate patterns including changes in precipitation, temperature, increased frequency and intensity of extreme weather events, rising sea levels, tidal fluctuations, and ocean acidification are projected. The current trend of global temperature increase has appeared to accelerate in recent decades, and continued greenhouse gas emissions may result in projected global average increases of 2 –11.5°F by the end of the century.⁵

This apparent change in global climate has the potential to disrupt natural processes; in some areas, climate change may cause significant degradation of ecosystems that provide services such as clean and abundant water, sustainable natural resources, protection from flooding, as well as hunting, fishing and other recreational opportunities. Consequently, climate change is a challenge not only because of its likely direct effects, but also because of its potential to amplify the stress on ecosystems, habitats, and species from existing threats such as exponential increases in surface and ground water use, habitat loss due to increased urbanization, introduction of invasive species, and fire suppression.

Potential impacts that may be occurring as a result of climate change include: change in the timing of biological processes, such as flowering, breeding, hibernation, and migration;^{6, 7, 8} more frequent invasions and outbreaks of exotic invasive species;⁹ and loss of habitat in coastal areas due to sea level rise.¹⁰ Some species are projected to adjust to these conditions through ecological or evolutionary adaptation, whereas others are projected to exhibit range shifts as their distributions track changing climatic conditions. Those species that are unable to respond to changing climatic conditions are projected to go extinct. Some estimates suggest that as many as 20% - 30% of the species currently assessed by the IPCC are at risk of extinction within this century if global mean temperatures exceed increases of 2.7 – 4.5° F.¹¹ A number of ecosystems are projected to be affected at temperature increases well below these levels.

At this time, the potential effects of climate change on Florida's conservation lands are just beginning to be studied and are not yet well understood. For example, the FWC has begun a process for currently developing climate change adaptation strategies for monitoring, evaluating, and determining what specific actions, if any, may be recommended to ameliorate the projected impacts of climate change on fish and wildlife resources, native vegetation, and the possible spread of exotic and invasive species. Currently, the FWC is continuing its work on the development of these potential adaptation strategies. However, as noted above, the effects of climate change may become more frequent and severe within the time period covered by this Management Plan.

For these reasons, there is a continuing need for increased information and research to enable adaptive management to cope with potential long-term climate change impacts. The most immediate actions that the FWC can take are to work with partners to gather the best scientific data possible for understanding natural processes in their current state, model possible impacts and subsequent changes from climate change, develop adaptive management strategies to enhance the resiliency of natural communities to adapt to climate change, and formulate criteria and monitoring for potential impacts when direct intervention may be necessary to protect a species. To this end, when appropriate, the FWC will participate in organizations such as the Peninsular Florida Land Conservation Cooperative or similar organizations so that the FWC continues to gain understanding and share knowledge of key issues related to potential climate change. In addition, the FWC will consider the need for conducting vulnerability assessments to model the potential effects of climate change, especially sea level rise and storm events, on imperiled species and their habitats on FWC managed land.

Elements of climate change that may potentially affect the IRCPSR include more frequent and more potent storm events, alteration of vegetation reproductive cycles, the spread of

exotic species, and changes in the fire regime. To address the potential impacts of climate change on the IRCPSR, Goals and Objectives have been developed as a component of this Management Plan (Section 6.12). Depending on the recommendations of the adaptive management strategies described above, additional specific goals and objectives to mitigate potential climate change impacts may be developed for the IRCPSR Management Plan in the future.

5.15 Soil and Water Conservation

Soil disturbing activities will be confined to areas that have the least likelihood of experiencing erosion challenges. On areas that have been disturbed prior to acquisition, an assessment will be made to determine if soil erosion is occurring, and if so, appropriate measures will be implemented to stop or control the effects of this erosion.

6 Resource Management Goals and Objectives

The management goals described in this section are considered broad, enduring statements designed to guide the general direction of management actions to be conducted in order to achieve an overall desired future outcome for the IRCPSR. The objectives listed within each management goal offer more specific management guidance and measures and are considered the necessary steps to be completed to accomplish the management goals. Many of the objectives listed have specific end-of-the-calendar-year target dates for completion and all of them are classified as having either short-term (less than two years) or long-term (up to ten years) timelines for completion.

6.1 Habitat Restoration and Improvement

Goal: Improve extant habitat and restore disturbed areas.

Short-term (UP TO TWO YEARS)

- 6.1.1 As part of the prescribed burn plan, conduct disking of new firelines in order to further carry out burn management objectives and delineate the units.

Long-term (UP TO 10 YEARS)

- 6.1.2 Conduct prescribed burning on 50 acres of fire adapted communities per year.
- 6.1.3 Continue to maintain 250 acres of fire adapted communities (100%) per year within target fire return interval.

6.1.4 Continue to implement prescribed burn plan.

6.2 Imperiled Species Habitat Maintenance, Enhancement, Restoration, or Population Restoration

Goal: Maintain, improve, or restore imperiled species populations and habitats.

Long-term

6.2.1 Monitor eight imperiled species. (American alligator, Eastern indigo snake, Florida sandhill crane, Gopher tortoise, Little blue heron, Southeastern American kestrel, Tricolored heron, Woodstork)

6.2.2 Continue to collect opportunistic wildlife species occurrence data.

6.3 Other Wildlife (Game and Nongame) Habitat Maintenance, Enhancement, Restoration, or Population Restoration

Goal: Monitor, maintain, improve, or restore game and non-game species populations and habitats.

Long-term

6.3.1 Continue to collect opportunistic wildlife occurrence data

6.4 Exotic and Invasive Species Maintenance and Control

Goal: Remove exotic and invasive plants and animals and conduct needed maintenance- control.

Long-term

6.4.1 Annually survey for FLEPPC Category I and Category II invasive exotic plant species and conduct treatments as necessary. (Brazilian pepper, cogon grass, Old-world climbing fern)

6.4.2 Continue to implement control measures on one exotic and nuisance animal species (feral hogs).

6.5 Public Access and Recreational Opportunities

Goal: Provide public access and recreational opportunities.

Long-term

- 6.5.1 Develop new informational signs, fishing opportunities, and youth hunter education challenge interpretive/education programs.
- 6.5.2 Maintain public access and recreational opportunities to allow for a recreational carrying capacity of 470 visitors per day.
- 6.5.3 Continue to provide website, archery classes, hunter education classes for interpretation and education.
- 6.5.4 Continue to provide recreational opportunities including archery, fishing opportunities, airgun, pistol, rifle, and shotgun facilities.
- 6.5.5 Expand and enhance fishing opportunities on the area, including feeders, stocking, and aerators.
- 6.5.6 Cooperate with other agencies, Indian River County, stakeholders, and regional landowners to investigate regional recreational opportunities.
- 6.5.7 Continue to identify partnerships, including the Florida Native Plant Society, that could provide for environmental educational programs and outreach.

6.6 Hydrological Preservation and Restoration

Goal: Protect water quality and quantity, restore hydrology to the extent feasible, and maintain the restored condition.

Long-term

- 6.6.1 Explore the feasibility of installing storm water management to improve range function.
- 6.6.2 To maintain and enhance natural hydrological functions, install and maintain low-water crossings and culverts as appropriate.
- 6.6.3 Continue to cooperate with the SJRWMD for the monitoring of surface and ground water quality and quantity.

6.7 Forest Resource Management

Goal: Manage timber resources to improve or restore natural communities for the benefit of wildlife.

Long-term

- 6.7.1 Consult with the FFS or a professional forestry consultant regarding forest management activities as appropriate.

6.8 Historical Resources

Goal: Protect, preserve and maintain historical resources.

Long-term

- 6.8.1 Cooperate with the DHR (or trained FWC Staff) in designing site plans for development of infrastructure.
- 6.8.2 Cooperate with the DHR to ensure all known sites are recorded in the Florida Division of Historical Resources Master Site file.

6.9 Capital Facilities and Infrastructure

Goal: Develop the capital facilities and infrastructure necessary to meet the goals and objectives of this Management Plan.

Short-term

- 6.9.1 Explore the feasibility of improving and repairing the sporting clay course by utilizing fill material to further elevate the course's trail.

Long-term

- 6.9.2 Continue to maintain seven facilities: clay facilities, rifle/pistol facilities, archery/airgun facility, classroom, office, maintenance building, and fencing.
- 6.9.3 To improve or repair 1 mile of roads existing on site (as applicable).

6.10 Land Conservation and Stewardship Partnerships

Goal: Enhance fish and wildlife conservation, resource, and operational management through development of an optimal boundary.

Long-term

- 6.10.1 Continue to identify and evaluate potential important wildlife habitat, landscape-scale linkages, wildlife corridors, and operational management needs, and update the OCPB for the IRCPSR as appropriate and necessary.
- 6.10.2 Continue to contact and inform adjoining private landowners about the FWC Landowners Assistance Program, and coordinate with public entities to pursue conservation stewardship partnerships.
- 6.10.3 Continue to evaluate and identify FWC inholdings and additions priority parcels for potential conservation acquisition and pursue acquisitions as funding allows.
- 6.10.4 Continue to maintain a GIS shapefile and other necessary data to facilitate nominations within the FWC OCPB for the FWC landowner assistance and conservation acquisition programs.
- 6.10.5 Continue to identify potential non-governmental land stewardship organization partnerships and grant program opportunities.
- 6.10.6 Determine the efficacy of conducting a landowner assistance/conservation stewardship partnership workshop(s) and pursue as necessary and appropriate.
- 6.10.7 Continue to evaluate and determine if any portions of the IRCPSR are no longer needed for conservation purposes, and therefore may be designated as surplus lands.

6.11 Cooperative Management, Special Uses, and Research Opportunities

Goal: Provide access and use of the IRCPSR to current cooperative managers and continue collaborative management efforts.

Long Term

- 6.11.1 Continue to cooperate with Indian River County for management of shooting range facility.
- 6.11.2 Explore the feasibility of private and public partnerships for special uses on the area.
- 6.11.3 Continue to cooperate with the DEP regarding habitat management activities.

- 6.11.4 Coordinate and cooperate with Department of Defense military branches to allow for training opportunities for military personnel and other initiatives as appropriate and compatible with the conservation of the IRCPSR.
- 6.11.5 Explore and pursue cooperative research opportunities through universities, Fish and Wildlife Research Institute, etc.
- 6.11.6 Continue to assess the need for research and environmental education partnership opportunities as appropriate.

6.12 Climate Change

Goal: Develop appropriate adaptation strategies in response to projected climate change effects and their potential impacts on natural resources, including fish and wildlife, and the operational management of the IRCPSR.

Long-term

- 6.12.1 Coordinate with the FWC-FWRI Climate Change Adaptation Initiative to identify potential impacts of projected climate change on fish and wildlife resources and operational management of the ICRPSR.
- 6.12.2 As appropriate, update the ICRPSR Prescribed Fire Plan to incorporate new scientific information regarding projected climate change, such as increased frequency of drought, on the fire regime of the ICRPSR's fire-adapted habitats.
- 6.12.3 As science, technology, and climate policy evolve, educate natural resource management partners and the public about the agency's policies, programs and efforts to study, document and address potential climate change.

7 Resource Management Challenges and Strategies

The following section identifies and describes further management needs and challenges associated with IRCPSR and provides solution strategies that will address these challenges. These specific challenges may not be fully addressed in the broader goals and objectives section above and are thereby provided here.

7.1 Challenge 1: Currently, the FWC aims to meet FWC law enforcement and management staff standards and needs.

- 7.1.1 Strategy: Agency staff levels will continue to be evaluated to determine if increased staffing or other alternatives can improve management needs.
- 7.1.2 Strategy: Pursue funding for increased law enforcement, management staffing and additional private sector contract services as appropriate.
- 7.1.3 Strategy: Explore potential volunteer resources for assisting with management.

7.2 Challenge 2: The IRCPSR is not a widely known recreational destination.

- 7.2.1 Strategy: Continue to coordinate and communicate with existing and future partnerships
- 7.2.2 Strategy: Cross promote the IRCPSR with other regional conservation lands.

7.3 Challenge 3: Certain areas are difficult to access due to wet conditions.

- 7.3.1 Strategy: Utilize stabilization material to improve access.

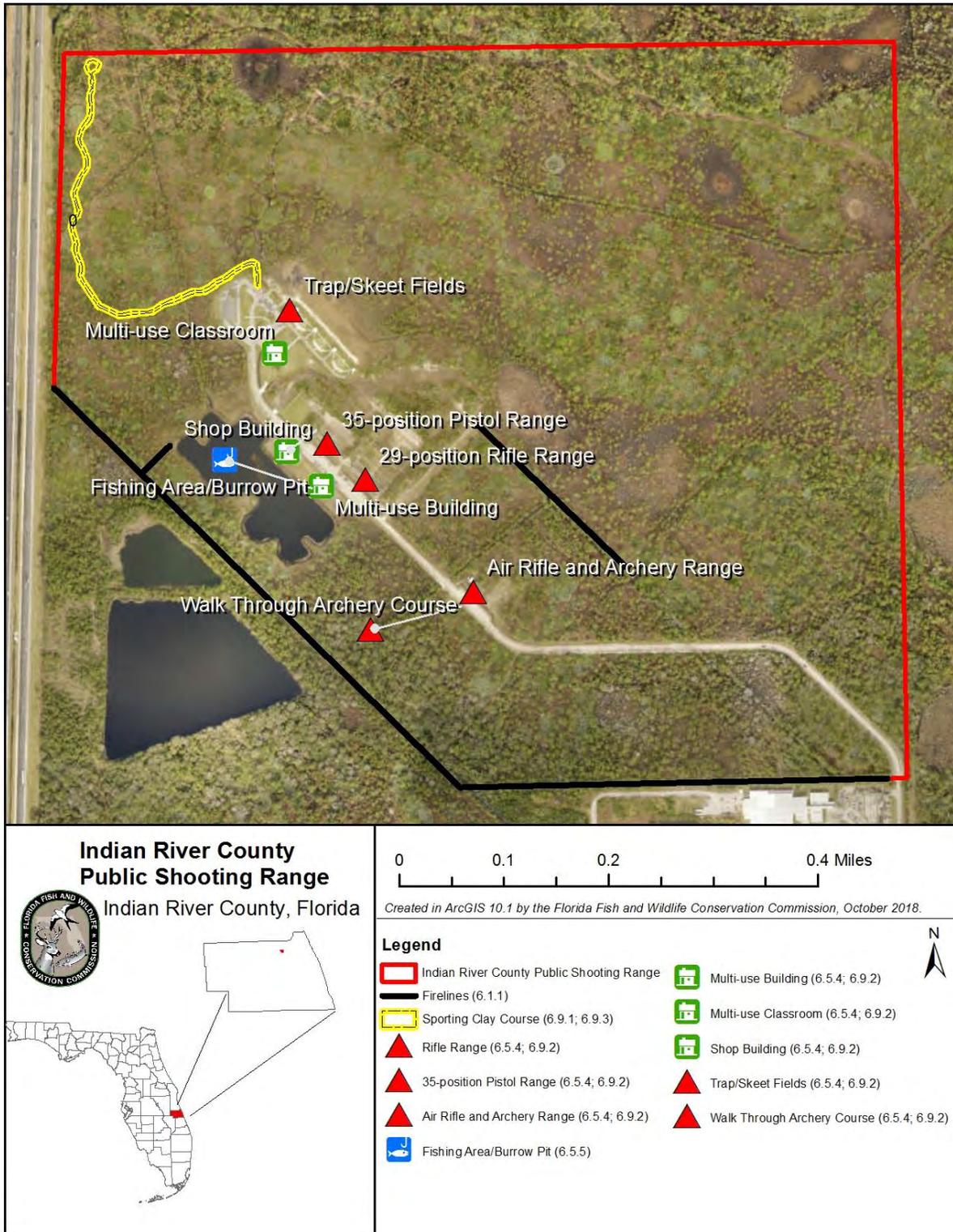


Figure 11. Project Locations on the IRCPSR

8 Cost Estimates and Funding Sources

The following represents the actual and unmet budgetary needs for managing the lands and resources of the IRCPSR. This cost estimate was developed using data developed by the FWC and other cooperating entities and is based on actual costs for land management activities, equipment purchase and maintenance, and for development of fixed capital facilities. Funds needed to protect and manage the property and to fully implement the recommended program are derived primarily from the Land Acquisition Trust Fund and from State Legislative appropriations. However, private conservation organizations may be cooperators with the agency for funding of specific projects. Alternative funding sources, such as monies available through grants and potential project-specific mitigation, may be sought to supplement existing funding as needed.

The cost estimate below, although exceeding what FWC typically receives through the appropriations process, is estimated to be what is necessary for optimal management and is consistent with the current and planned resource management and operation of the IRCPSR. Cost estimate categories are those currently recognized by the FWC and the Land Management Uniform Accounting Council. More information on these categories may be found in Appendix 12.10.

IRCPSR Management Plan Cost Estimate
Maximum expected one-year expenditure

<u>Resource Management</u>	<u>Expenditure</u>	<u>Priority</u>	Priority schedule:
Exotic Species Control	\$28,884	(1)	(1) Immediate (annual)
Prescribed Burning	\$11,453	(1)	(2) Intermediate (3-4 years)
Cultural Resource Management	\$0	(1)	(3) Other (5+ years)
Timber Management	\$0	(1)	
Hydrological Management	\$7,081	(1)	
Other (Restoration, Enhancement, Surveys, Monitoring, etc.)	\$27,904	(1)	
Subtotal	\$75,322		
<u>Administration</u>			
General administration	\$136,614	(1)	
<u>Support</u>			
Land Management Planning	\$21,563	(1)	
Land Management Reviews	\$28,249	(3)	
Training/Staff Development	\$12,546	(1)	
Equipment Purchase	\$931	(2)	
Vehicle Operation and Maintenance	\$0	(1)	
Other (Technical Reports, Data Management, etc.)	\$16,301	(1)	
Subtotal	\$79,590		
<u>Capital Improvements</u>			
New Facility Construction	\$96,871	(2)	
Facility Maintenance	\$5,855	(1)	
Subtotal	\$102,726		
<u>Visitor Services/Recreation</u>			
Info./Education/Operations	\$635,915	(1)	
<u>Law Enforcement</u>			
Resource protection	\$292	(1)	
<u>Total</u>	\$1,030,459	*	

* Based on the characteristics and requirements of this area, 15 FTE positions would be optimal to fully manage this area. All land management funding is dependent upon annual legislative appropriations.

IRCPSR Management Plan Cost Estimate
Ten-year projection

<u>Resource Management</u>	<u>Expenditure</u>	<u>Priority</u>	Priority schedule:
Exotic Species Control	\$253,774	(1)	(1) Immediate (annual)
Prescribed Burning	\$100,628	(1)	(2) Intermediate (3-4 years)
Cultural Resource Management	\$0	(1)	(3) Other (5+ years)
Timber Management	\$0	(1)	
Hydrological Management	\$62,219	(1)	
Other (Restoration, Enhancement, Surveys, Monitoring, etc.)	\$245,166	(1)	
Subtotal	\$661,786		
<u>Administration</u>			
General administration	\$1,200,305	(1)	
<u>Support</u>			
Land Management Planning	\$189,452	(1)	
Land Management Reviews	\$80,866	(3)	
Training/Staff Development	\$110,232	(1)	
Equipment Purchase	\$3,277	(2)	
Vehicle Operation and Maintenance	\$0	(1)	
Other (Technical Reports, Data Management, etc.)	\$143,223	(1)	
Subtotal	\$527,051		
<u>Capital Improvements</u>			
New Facility Construction	\$279,810	(2)	
Facility Maintenance	\$51,442	(1)	
Subtotal	\$331,252		
<u>Visitor Services/Recreation</u>			
Info./Education/Operations	\$5,587,217	(1)	
<u>Law Enforcement</u>			
Resource protection	\$2,568	(1)	
<u>Total</u>	\$8,310,178	*	

* Based on the characteristics and requirements of this area, 15 FTE positions would be optimal to fully manage this area. All land management funding is dependent upon annual legislative appropriations.

9 Analysis of Potential for Contracting Private Vendors for Restoration and Management Activities

The following management and restoration activities have been considered for outsourcing to private entities. It has been determined that items selected as “approved” below are those that the FWC either does not have in-house expertise to accomplish or which can be done at less cost by an outside provider of services. Those items selected as “conditional” items are those that could be done either by an outside provider or by the agency at virtually the same cost or with the same level of competence. Items selected as “rejected” represent those for which the FWC has in-house expertise and/or which the agency has found it can accomplish at less expense than through contracting with outside sources:

Approved Conditional Rejected

- | | |
|---|---|
| • Dike and levee maintenance | ✓ |
| • Exotic species control | ✓ |
| • Mechanical vegetation treatment | ✓ |
| • Public contact and educational facilities development | ✓ |
| • Prescribed burning | ✓ |
| • Timber harvest activities | ✓ |
| • Vegetation inventories | ✓ |

10 Compliance with Federal, State, and Local Governmental Requirements

The operational functions of FWC personnel are governed by the agency's Internal Management Policies and Procedures (IMPP) Manual. The IMPP Manual provides internal guidance regarding many subjects affecting the responsibilities of agency personnel including personnel management, safety issues, uniforms and personal appearance, training, as well as accounting, purchasing, and budgetary procedures.

When public facilities are developed on areas managed by the FWC, every effort is made to comply with Public Law 101 - 336, the Americans with Disabilities Act. As new facilities are developed, the universal access requirements of this law are followed in all cases except where the law allows reasonable exceptions (e.g., where handicap access is structurally impractical or where providing such access would change the fundamental character of the facility being provided).

Uses planned for the IRCPSR are in compliance with the Conceptual State Lands Management Plan and its requirement for "balanced public utilization," and are in compliance with the mission of the FWC as described in its Agency Strategic Plan (Appendix 12.6). Such uses also comply with the authorities of the FWC as derived from Article IV, Section 9 of the Florida Constitution as well as the guidance and directives of Chapters, 253, 259, 327, 370, 379, 403, 870, 373, 375, 378, 487, and 597 FS.

The FWC has developed and utilizes an Arthropod Control Plan for the IRCPSR in compliance with Chapter 388.4111 F.S. (Appendix 12.12). This plan was developed in cooperation with the local Indian River County arthropod control agency. This plan is also in conformance with the Local Government Comprehensive Plan as approved and adopted for Indian River County, Florida, (Appendix 12.13).

11 Endnotes

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- ¹³ Emanuel, K.A. 2005. Increasing Destructiveness of Tropical Cyclones Over the Past 30 Years.
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- ¹⁶ Stanton, E.A. and F. Ackerman. 2007. Florida and Climate Change: The Costs of Inaction. Tufts University Global Development and Environment Institute and Stockholm Environment Institute–US Center, Tufts University, Medford, MA.
- ¹⁷ Clough, J.S. 2008. Application of the Sea-Level Affecting Marshes Model (SLAMM 5.0) to Crystal River NWR. Warren Pinnacle Consulting, Inc. for U.S. Fish and Wildlife Service. 46 pp.

12 Appendices

12.1 Lease Agreement 4148

DEP. DOC # 004148

(1) 4148

CUL
Shooting Range
in Indian Co.
(Indian River
Public Shooting
Range)

SAL3

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

LEASE AGREEMENT

Lease Number 4148

This lease is made and entered into this 22nd day of January 1998 between the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, hereinafter referred to as "LESSOR", and the FLORIDA GAME AND FRESH WATER FISH COMMISSION, hereinafter referred to as "LESSEE".

WITNESSETH:

WHEREAS, the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA holds title to certain lands and property being utilized by the State of Florida for public purposes, and

WHEREAS, the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA is authorized in Section 253.03, Florida Statutes, to enter into leases for the use, benefit and possession of public lands by State agencies which may properly use and possess them for the benefit of the people of the State of Florida;

NOW, THEREFORE, for and in consideration of the mutual covenants and agreements hereinafter contained, LESSOR leases the below described premises to LESSEE subject to the following terms and conditions:

sec. 99 -
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38 E

1. DELEGATIONS OF AUTHORITY: LESSOR'S responsibilities and obligations herein shall be exercised by the Division of State Lands, Department of Environmental Protection.

2. DESCRIPTION OF PREMISES: The property subject to this lease, is situated in the County of Indian River, State of Florida and is more particularly described in Exhibit "A" attached hereto and hereinafter called the "leased premises".

3. TERM: The term of this lease shall be for a period of fifty years, commencing on Jan. 22nd, 1998 and ending on Jan. 21st, 2048, unless sooner terminated pursuant to the provisions of this lease.

4. PURPOSE: LESSEE shall manage the leased premises for the conservation and protection of natural and historical resources and resource based public outdoor recreation which is compatible with the conservation and protection of these public lands, as set forth in subsection 259.032(11), Florida Statutes, along with other related uses necessary for the accomplishment of this purpose as designated in the Management Plan required by paragraph 7 of this lease. LESSOR and LESSEE acknowledge that LESSEE'S use of the leased premises may result in the placement of lead shot thereon, and LESSOR acknowledges that this use will not constitute a breach of this lease. Notwithstanding the forgoing, LESSEE will make every effort to prevent soil or water contamination by lead exceeding any applicable federal, state or local standards and, if such contamination occurs, LESSEE agrees to bear all responsibility and liability for remediation and cleanup in accordance with paragraph 26 below.

5. QUIET ENJOYMENT AND RIGHT OF USE: LESSEE shall have the right of ingress and egress to, from and upon the leased

premises for all purposes necessary to the full quiet enjoyment by said LESSEE of the rights conveyed herein.

6. UNAUTHORIZED USE: LESSEE shall, through its agents and employees, prevent the unauthorized use of the leased premises or any use thereof not in conformance with this lease.

7. MANAGEMENT PLAN: LESSEE shall prepare and submit a Management Plan for the leased premises, in accordance with Section 253.034, Florida Statutes, and Chapter 18-2, Florida Administrative Code, within twelve months of the effective date of this lease. The Management Plan shall be submitted to LESSOR for approval through the Division of State Lands. The leased premises shall not be developed or physically altered in any way other than what is necessary for security and maintenance of the leased premises without the prior written approval of LESSOR until the Management Plan is approved. The Management Plan shall emphasize the original management concept as approved by LESSOR at the time of acquisition which established the primary public purpose for which the leased premises were acquired. The approved Management Plan shall provide the basic guidance for all management activities and shall be reviewed jointly by LESSEE and LESSOR at least every five years. LESSEE shall not use or alter the leased premises except as provided for in the approved Management Plan without the prior written approval of LESSOR. The Management Plan prepared under this lease shall identify management strategies for exotic species, if present. The introduction of exotic species is prohibited, except when specifically authorized by the approved Management Plan.

8. RIGHT OF INSPECTION: LESSOR or its duly authorized agents shall have the right at any and all times to inspect the leased

premises and the works and operations thereon of LESSEE, in any matter pertaining to this lease.

9. INSURANCE REQUIREMENTS: LESSEE shall procure and maintain adequate fire and extended risk insurance coverage for any improvements or structures located on the leased premises in amounts not less than the full insurable replacement value of such improvements by preparing and delivering to the Division of Risk Management, Department of Insurance, a completed Florida Fire Insurance Trust Fund Coverage Request Form immediately upon erection of any structures as allowed by paragraph 4 of this lease. A copy of said form and immediate notification in writing of any erection or removal of structures or other improvements on the leased premises and any changes affecting the value of the improvements shall be submitted to the following: Bureau of Land Management Services, Division of State Lands, Department of Environmental Protection, Mail Station 130, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

10. LIABILITY: LESSEE shall assist in the investigation of injury or damage claims either for or against LESSOR or the State of Florida pertaining to LESSEE'S respective areas of responsibility under this lease or arising out of LESSEE'S respective management programs or activities and shall contact LESSOR regarding the legal action deemed appropriate to remedy such damage or claims.

11. ARCHAEOLOGICAL AND HISTORIC SITES: Execution of this lease in no way affects any of the parties' obligations pursuant to Chapter 267, Florida Statutes. The collection of artifacts or the disturbance of archaeological and historic sites on state-owned lands is prohibited unless prior authorization has been

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Lease No. 4148

obtained from the Department of State, Division of Historical Resources. The Management Plan prepared pursuant to Section 253.034, Florida Statutes, shall be reviewed by the Division of Historical Resources to insure that adequate measures have been planned to locate, identify, protect and preserve the archaeological and historic sites and properties on the leased premises.

12. EASEMENTS: All easements including, but not limited to, utility easements are expressly prohibited without the prior written approval of LESSOR. Any easement not approved in writing by LESSOR shall be void and without legal effect.

13. SUBLEASES: This lease is for the purposes specified herein and subleases of any nature are prohibited, without the prior written approval of LESSOR. Any sublease not approved in writing by LESSOR shall be void and without legal effect.

14. SURRENDER OF PREMISES: Upon termination or expiration of this lease LESSEE shall surrender the leased premises to LESSOR. In the event no further use of the leased premises or any part thereof is needed, written notification shall be made to the Bureau of Land Management Services, Division of State Lands, Department of Environmental Protection, Mail Station 130, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, at least six months prior to the release of all or any part of the leased premises. Notification shall include a legal description, this lease number and an explanation of the release. The release shall only be valid if approved by LESSOR through execution of a release of lease instrument with the same formality as this lease. Upon release of all or any part of the leased premises or upon expiration or termination of this lease, all improvements, including both physical structures and

modifications to the leased premises, shall become the property of LESSOR, unless LESSOR gives written notice to LESSEE to remove any or all such improvements at the expense of LESSEE. The decision to retain any improvements upon termination of this lease shall be at LESSOR'S sole discretion. Prior to surrender of all or any part of the leased premises, a representative of the Division of State Lands shall perform an on-site inspection and the keys to any buildings on the leased premises shall be turned over to the Division. If the leased premises and improvements located thereon do not meet all conditions set forth in paragraphs 17 and 20 herein, LESSEE shall pay all costs necessary to meet the prescribed conditions.

15. BEST MANAGEMENT PRACTICES: LESSEE shall implement applicable Best Management Practices for all activities conducted under this lease in compliance with paragraph 18-2.018(2)(h), Florida Administrative Code, which have been selected, developed, or approved by LESSOR, LESSEE or other land managing agencies for the protection and enhancement of the leased premises.

16. PUBLIC LANDS ARTHROPOD CONTROL PLAN: LESSEE shall identify and subsequently designate to the respective arthropod control district or districts within one year of the effective date of this lease all of the environmentally sensitive and biologically highly productive lands contained within the leased premises, in accordance with Section 388.4111, Florida Statutes and Chapter 5E-13, Florida Administrative Code, for the purpose of obtaining a public lands arthropod control plan for such lands.

17. UTILITY FEES: LESSEE shall be responsible for the payment of all charges for the furnishing of gas, electricity, water and

other public utilities to the leased premises and for having all utilities turned off when the leased premises are surrendered.

18. ASSIGNMENT: This lease shall not be assigned in whole or in part without the prior written consent of LESSOR. Any assignment made either in whole or in part without the prior written consent of LESSOR shall be void and without legal effect.

19. PLACEMENT AND REMOVAL OF IMPROVEMENTS: All buildings, structures, improvements, and signs shall be constructed at the expense of LESSEE in accordance with plans prepared by professional designers and shall require the prior written approval of LESSOR as to purpose location, and design. Further, no trees, other than non-native species, shall be removed or major land alterations done without the prior written approval of LESSOR. Removable equipment and removable improvements placed on the leased premises by LESSEE which do not become a permanent part of the leased premises will remain the property of LESSEE and may be removed by LESSEE upon termination of this lease.

20. MAINTENANCE OF IMPROVEMENTS: LESSEE shall maintain the real property contained within the leased premises and any improvements located thereon, in a state of good condition, working order and repair including, but not limited to, keeping the leased premises free of trash or litter, maintaining all planned improvements as set forth in the approved Management Plan, meeting all building and safety codes in the location situated and maintaining any and all existing roads, canals, ditches, culverts, risers and the like in as good condition as the same may be at the date of this lease; provided, however, that any removal, closure, etc., of the above improvements shall

be acceptable when the proposed activity is consistent with the goals of conservation, protection, and enhancement of the natural and historical resources within the leased premises and with the approved Management Plan.

21. ENTIRE UNDERSTANDING: This lease sets forth the entire understanding between the parties and shall only be amended with the prior written approval of LESSOR.

22. BREACH OF COVENANTS, TERMS, OR CONDITIONS: Should LESSEE breach any of the covenants, terms, or conditions of this lease, LESSOR shall give written notice to LESSEE to remedy such breach within sixty days of such notice. In the event LESSEE fails to remedy the breach to the satisfaction of LESSOR within sixty days of receipt of written notice, LESSOR may either terminate this lease and recover from LESSEE all damages LESSOR may incur by reason of the breach including, but not limited to, the cost of recovering the leased premises or maintain this lease in full force and effect and exercise all rights and remedies herein conferred upon LESSOR.

23. NO WAIVER OF BREACH: The failure of LESSOR to insist in any one or more instances upon strict performance of any one or more of the covenants, terms and conditions of this lease shall not be construed as a waiver of such covenants, terms and conditions, but the same shall continue in full force and effect, and no waiver of LESSOR of any one of the provisions hereof shall in any event be deemed to have been made unless the waiver is set forth in writing, signed by LESSOR.

24. PROHIBITIONS AGAINST LIENS OR OTHER ENCUMBRANCES: Fee title to the leased premises is held by LESSOR. LESSEE shall not do or permit anything which purports to create a lien or encumbrance of any nature against the real property contained in

the leased premises including, but not limited to, mortgages or construction liens against the leased premises or against any interest of LESSOR therein.

25. CONDITIONS AND COVENANTS: All of the provisions of this lease shall be deemed covenants running with the land included in the leased premises, and construed to be "conditions" as well as "covenants" as though the words specifically expressing or imparting covenants and conditions were used in each separate provision.

26. DAMAGE TO THE PREMISES: (a) LESSEE shall not do, or suffer to be done, in, on or upon the leased premises or as affecting said leased premises or adjacent properties, any act which may result in damage or depreciation of value to the leased premises or adjacent properties, or any part thereof. (b) LESSEE shall not generate, store, produce, place, treat, release or discharge any contaminants, pollutants or pollution, including, but not limited to, hazardous or toxic substances, chemicals or other agents on, into, or from the leased premises or any adjacent lands or waters in any manner not permitted by law. For the purposes of this lease, "hazardous substances" shall mean and include those elements or compounds defined in 42 USC Section 9601 or which are contained in the list of hazardous substances adopted by the United States Environmental Protection Agency (EPA) and the list of toxic pollutants designated by the United States Congress or the EPA or defined by any other federal, state or local statute, law, ordinance, code, rule, regulation, order or decree regulating, relating to, or imposing liability or standards of conduct concerning any hazardous, toxic or dangerous waste, substance, material, pollutant or contaminant. "Pollutants" and "pollution" shall mean those products or

substances defined in Chapters 376 and 403, Florida Statutes, and the rules promulgated thereunder, all as amended or updated from time to time. In the event of LESSEE'S failure to comply with this paragraph, LESSEE shall, at its sole cost and expense, promptly commence and diligently pursue any legally required closure, investigation, assessment, cleanup, decontamination, remediation, restoration and monitoring of (1) the leased premises, and (2) all off-site ground and surface waters and lands affected by LESSEE'S such failure to comply, as may be necessary to bring the leased premises and affected off-site waters and lands into full compliance with all applicable federal, state or local statutes, laws, ordinances, codes, rules, regulations, orders and decrees, and to restore the damaged property to the condition existing immediately prior to the occurrence which caused the damage. LESSEE'S obligations set forth in this paragraph shall survive the termination or expiration of this lease. Nothing herein shall relieve LESSEE of any responsibility or liability prescribed by law for fines, penalties and damages levied by governmental agencies, and the cost of cleaning up any contamination caused directly or indirectly by LESSEE'S activities or facilities. Upon discovery of a release of a hazardous substance or pollutant, or any other violation of local, state or federal law, ordinance, code, rule, regulation, order or decree relating to the generation, storage, production, placement, treatment, release or discharge of any contaminant, LESSEE shall report such violation to all applicable governmental agencies having jurisdiction, and to LESSOR, all within the reporting periods of the applicable governmental agencies.

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Lease No. 4148

27. ENVIRONMENTAL AUDIT: At LESSOR'S discretion, LESSEE shall provide LESSOR with a current Phase I Environmental Audit conducted in accordance with the Division of State Land's standards prior to termination of this lease, and if necessary a Phase II Environmental Audit in compliance with paragraph 26 of this lease agreement.

28. PAYMENT OF TAXES AND ASSESSMENTS: LESSEE shall assume full responsibility for and shall pay all liabilities that accrue to the leased premises or to the improvements thereon, including any and all drainage and special assessments or taxes of every kind and all mechanic's or materialman's liens which may be hereafter lawfully assessed and levied against the leased premises.

29. RIGHT OF AUDIT: LESSEE shall make available to LESSOR all financial and other records relating to this lease and LESSOR shall have the right to audit such records at any reasonable time. This right shall be continuous until this lease expires or is terminated. This lease may be terminated by LESSOR should LESSEE fail to allow public access to all documents, papers, letters or other materials made or received in conjunction with this lease, pursuant to Chapter 119, Florida Statutes.

30. NON-DISCRIMINATION: LESSEE shall not discriminate against any individual because of that individual's race, color, religion, sex, national origin, age, handicap, or marital status with respect to any activity occurring within the leased premises or upon lands adjacent to and used as an adjunct of the leased premises.

31. COMPLIANCE WITH LAWS: LESSEE agrees that this lease is contingent upon and subject to LESSEE obtaining all applicable permits and complying with all applicable permits, regulations, ordinances, rules, and laws of the State of Florida or the United States or of any political subdivision or agency of either.

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Lease No. 4148

32. TIME: Time is expressly declared to be of the essence of this lease.

33. GOVERNING LAW: This lease shall be governed by and interpreted according to the laws of the State of Florida,

34. SECTION CAPTIONS: Articles, subsections and other captions contained in this lease are for reference purposes only and are in no way intended to describe, interpret, define or limit the scope, extent or intent of this lease or any provisions thereof.

35. ADMINISTRATIVE FEE: LESSEE shall pay LESSOR an annual administrative fee of \$300. The initial annual administrative fee shall be payable within thirty days from the date of execution of this lease agreement and shall be prorated based on the number of months or fraction thereof remaining in the fiscal year of execution. For purposes of this lease agreement, the fiscal year shall be the period extending from July 1 to June 30. Each annual payment thereafter shall be due and payable on July 1 of each subsequent year.

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

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

Patricia Toleday
Witness
PATRICIA TOLEDAY
Print/Type Witness Name
Sonia Chester
Witness
Sonia Chester
Print/Type Witness Name

By: Daniel T. Crabb (SEAL)
DANIEL T. CRABB, CHIEF,
BUREAU OF LAND MANAGEMENT
SERVICES, DIVISION OF STATE
LANDS, DEPARTMENT OF
ENVIRONMENTAL PROTECTION

"LESSOR"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 22nd day of January, 1998, by Daniel T. Crabb, as Chief, Bureau of Land Management Services, Division of State Lands, Florida Department of Environmental Protection, acting as agent on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. He is personally known to me.

Patricia Toleday
Notary Public, State of Florida



Print/Type Notary Name

Commission Number:

Commission Expires:

Approved as to Form and Legality

By: Sam H. Vesi
DEP Attorney

FLORIDA GAME AND FRESH WATER
FISH COMMISSION

Rosemary Maza
Witness
Rosemary Maza
Print/Type Witness Name
Kim Wright
Witness
Kim Wright
Print/Type Witness Name

By: [Signature] (SEAL)
Allan L. Egbert
Print/Type Name
Title: Executive Director

"LESSEE"

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

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this
14th day of January, 1998, by Allan L. Egbert,
as Executive Director, Florida Game and Fresh
Water Fish Commission. He/she is personally known to me or
produced _____ as identification.

Jimmie C. Bevis
Notary Public, State of Florida
JIMMIE C. BEVIS
Print/type Notary Name

Commission Number: [Seal]
Commission Expires: December 28, 2001
MY COMMISSION # CC07287 EXPIRES
December 28, 2001
BONDED THROUGH FISH INSURANCE, INC.

EXHIBIT "A"

LEGAL DESCRIPTION OF THE LEASED PREMISES

LEGAL DESCRIPTION

A portion of Sections 25 and 26 of the Fleming Grant, Indian River County, Florida, being more particularly described as follows:

25, 26

Begin at an iron rod marking the Northeast corner of the lands described in O.R. Book 678, Page 339 of the Public Records of Indian River County, Florida, and run N 89°26'16" W along the North line of the lands described in said O.R. Book 678, Page 339, a distance of 2172.65 feet to a point in the South line of Section 26, Fleming Grant. Then run

Along the Southwest line of Section 26 and Section 25 of Fleming Grant, N 44°39'18" W a distance of 2900 feet, more or less, to a point lying in the East right-of-way line of State Road 5 (Interstate 95). Then run

N 1°50'02" E, along the East right-of-way line of Interstate 95, a distance of 1688 feet, more or less to a point. Then run

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S 89°26'16" E, parallel with the North line of the lands described in O.R. Book 678, Page 339, a distance of 4259 feet, more or less, to a point lying in the Northerly extension of the East right-of-way line of 102nd Terrace. Then run

31S
38E

S 0°20'14" W, along the Northerly extension of the East right-of-way line of 102nd Terrace as recorded in Plat Book 12, Page 59 of the Public Records of Indian River County, Florida, a distance of 3730 feet, more or less, to the Northeast corner of 102nd Terrace, according to the said plat. Then run

N 89°26'16" W a distance of 80 feet to a point on the West right-of-way of 102nd Terrace and the POINT OF BEGINNING.

parcel # 31-00511

12.2 Indian River County Concessionaire Contract

Contract Number 00252

CONCESSIONAIRE CONTRACT FOR FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION INDIAN RIVER COUNTY PUBLIC SHOOTING RANGE

Between Florida Fish and Wildlife Conservation Commission
and
Indian River County Board of County Commissioners

The Florida Fish and Wildlife Conservation Commission, 620 S. Meridian Street, Tallahassee, Florida 32399-1600 (hereinafter Commission), hereby enters into a Concessionaire Contract with the Indian River County Board of County Commissioners, 1840 25th St., Vero Beach, Florida 32960 (hereinafter Concessionaire) on this 13th day of March, 2001.

WITNESSETH:

Whereas the Commission is authorized by the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida, owner of real property located at 10455 102nd Terrace, Vero Beach, FL 32967, and more particularly described as denoted on attached Exhibit A, and wishes to make available, under a Concessionaire Contract with the Indian River County Board of County Commissioners, the Florida Fish and Wildlife Conservation Commission Indian River Public Shooting Range (Range) located at the above address and expressly limited to the present range area (rifle/pistol, airgun and archery ranges), sporting clays range (and anticipated walk-through archery range) and associated impact area, office building and storage shed, all in Indian River County, Florida, to support Hunter Education training programs and recreational firearms shooting opportunities for the general public.

Now, therefore, it is mutually agreed that upon the full execution of this Concessionaire Contract, the provisions of the Concessionaire's Operational Plan, attached hereto as Exhibit B, and this Concessionaire Contract shall comprise the total contractual agreement between the parties. In the event of conflict between this Contract and the exhibit(s), the terms of this Contract shall govern. Changes, modifications, approvals, and amendment requests referenced herein shall be addressed in writing to the Director, Office of Informational Services, Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Tallahassee, Florida 32399-1600.

TERM OF THE CONTRACT

This Contract shall be in full force for a period of fifteen (15) years commencing as of the above date and expiring fifteen (15) years from that date, unless terminated as provided herein.

The amount of rent paid to the Commission and the fees charged to shooters may be adjusted through renegotiation of that portion of the Contract after the first year of operation

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and thereafter no more often than annually with the approval of the Commission. Other amendments to this Contract shall be considered if mutually agreed to in writing by both parties.

RENEWAL

This Contract may be renewed for an additional term of ten years at the sole option of the Commission. No later than three months prior to the termination of the Concessionaire Contract, the Concessionaire may request to renew the Contract. The request to renew shall be made in writing to the Commission and is subject to the approval of the Commission. Any renewal of the Contract is subject to the express written approval of the Commission and must be in compliance with applicable laws.

OTHER CONTRACTS

This Concessionaire Contract and exhibit(s) shall contain the complete Contract between the Commission and the Concessionaire and, as of the effective date thereof, shall supersede all other contracts, communications or representations, either verbal or written, between the Commission and the Concessionaire relating to the subject matter hereof.

RENTAL PAYMENTS

The agreed upon annual fee for rental of the facility shall be 50% percent of the net profit of the total operation of the facility.

The annual rental payment for the range shall be due to the Commission within one hundred and twenty (120) days following the end of the Concessionaire's fiscal year which shall be September 30, accompanied by a certified copy of the profit/loss statements as required by this Contract.

The Concessionaire shall be entitled to retain 50% of all profit generated by the operation of the range.

LATE FEE

Should the Concessionaire fail to make the annual Rental payment, Concessionaire shall be charged interest at the rate of one and one-half percent (1 ½%) per month, or pro rata share thereof, on the amount of the delinquent payment commencing the first day following the due date of the Contract until paid.

COMPLIANCE WITH LAWS

The Concessionaire shall comply with all local, state and federal laws, codes, requirements, and regulations relative to the taking of wild animal life or freshwater aquatic life, use of the lands for outdoor recreational purposes as herein after provided, construction, safety, sanitation, permits, licenses, operation of the Range and all other matters pertaining to the activities conducted on the premises.

NON-ASSIGNMENT

The Concessionaire shall neither transfer nor assign the Concessionaire Contract nor sublet the premises or any part thereof nor grant any interest, privilege or license whatsoever in connection with the Concessionaire Contract or the real property without written approval of the Commission.

The parties agree that the Commission has entered into the Concessionaire Contract with the Concessionaire because of the special and peculiar fitness and exceptional experience of the Concessionaire in carrying out the duties and covenants to which binds himself thereunder; and therefore, any assignment or delegation of the Concessionaire's covenants or duties thereunder, other than to employees of the Concessionaire or agents for the Concessionaire in the usual course of the Concessionaire's business, or approved in advance by the Commission, shall be without any binding effect whatsoever on either party and shall be null and void.

SCOPE OF RANGE OPERATIONS

The Indian River Public Shooting Range shall be occupied and used by the Concessionaire, or his duly authorized agents or employees, solely to conduct business in connection with recreational shooting activities by the general public and Commission sponsored shooting activities. Said business may include but is not limited to the following activities;

- a) A concession operation, providing items and services that are related to the approved shooting activities, such as firearms and ammunition and fishing-related items such as tackle, license and bait. Additional items such as soft drinks (no alcoholic beverages), snacks and related refreshment items may also be sold.
- b) The Range shall be open for public shooting a minimum of five (5) days per week, a minimum of forty (40) hours per week. The Range may be closed to the public up to two days per week. The Concessionaire is encouraged to open the range for public use on holidays. Changes in the Concessionaire's operational plan shall be submitted to and approved by the Commission's Hunter Education Administrator in advance of any operational changes being implemented.
- c) The Range shall be available at no charge to the Commission for Hunter

Education training and other educational and professional training as needed. Hunter Education use will be scheduled with the Concessionaire by the Commission's Regional Hunter Education Administrator. Additional use by the Commission shall be scheduled with the Concessionaire so as to have minimal impact on public use of the facility.

- d) Recreational firearms, archery and airgun shooting by the general public.
- e) Competitive shooting events may be scheduled during open shooting hours for the general public when minimal impact of public access will occur. Such events shall not be scheduled on the dates or times when Hunter Education use is scheduled.
- f) Two (2) free hunter sight-in days shall be offered per year with the dates established by the Commission.
- g) Firearms training by groups or organizations, during hours/days when Range is not open for public shooting activities.
- h) Other activities as authorized in writing by the Commission.

OPERATIONAL COSTS/PROCEDURES

Except as otherwise provided in this Concessionaire Contract, operating costs, target frame replacement, routine maintenance and repairs caused by normal use of the Range shall be the responsibility of the Concessionaire. The Commission shall be responsible for repairs or replacement of major components of the Range necessitated as a result of natural disasters or other acts not related to wear and tear caused by normal use of the Range unless such damage occurs through the willful negligence of the Concessionaire. Major components of the Range consist of the covered shooting sheds, berms, sidewalks, restrooms, office building.

- a) The Concessionaire shall maintain the premises and all appurtenant structures and improvements in clean, sanitary, and good order and in a safe condition, all grass, shrubs and landscaping shall be trimmed and maintained, satisfactory to the Commission, and all such costs related thereto shall be borne by the Concessionaire.
- b) The Concessionaire shall provide, at its expense, a telephone for emergency use during operating hours. The Concessionaire shall operate its business as outlined in the Operational Plan (Exhibit B). Supervision of Range use shall enhance safety and provide efficient and effective services to promote return user visits. Staffing may be adjusted to meet service requirements.
- c) Maintenance, repairs, and financial loss through insurance protection from theft or vandalism of the automatic target throwing machines and their components shall be the responsibility of the Concessionaire. All equipment is being

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provided to the Concessionaire in new condition:

- d) The Concessionaire shall be responsible for all costs related to the maintenance and upkeep of the office/pro shop and providing the services outlined in Exhibit B (Operational Plan) and this Concessionaire Contract.
- e) The Concessionaire shall not rent to or allow the use of equipment by persons under the influence of alcohol or drugs or disorderly persons, nor shall such persons be permitted to enter or remain upon the premises. The Concessionaire shall be responsible for administering a range safety introduction to all range patrons (while operating under normal operating hours, when the Range is open to public use).
- f) The Concessionaire shall not engage in any activities or allow anyone to engage in activities on the premises which are contrary to the full and orderly public utilization of the Range premises except as otherwise provided herein.
- g) The Concessionaire shall not commit waste on the premises; shall not conduct mining operations or drill for oil or gas upon the premises; shall not remove sand, gravel, or kindred substance from the ground; and shall not, in any manner, substantially change the contour or condition of the premises unless approved in writing by the Commission. The Commission shall be responsible for lead removal should it become necessary for such action. The Concessionaire shall collect an impact fee of \$1 per shooter for rifle and pistol ranges, and .50 cents per 25 rounds of sporting clays.
- h) The Concessionaire shall obtain prior written approval from the Commission for any utility easements which are necessary to service authorized facilities on the premises. All other easements are prohibited and shall be void and without legal effect.
- i) The Concessionaire shall have the responsibility to maintain all notices posted at the Range by the Commission including, but not limited to, the Notice of Range Rules and the Notice of User Liability. Additional rules may be established by the Concessionaire subject to approval of the Commission.
- j) It is expressly understood and agreed that any articles which are the subject of, or required to carry out this Concessionaire Contract shall be purchased from the Corporation identified under Chapter 946, F.S. if available, in the same manner and under the same procedure set forth in Section 946.515 (2), (4), F.S.; and for purposes of this Contract the person, firm or other business entity carrying out the provisions of the Contract, shall be deemed to be substituted for the Commission insofar as dealing with said corporations are concerned.

The "Corporation identified" is PRISON REHABILITATIVE INDUSTRIES & DIVERSIFIED ENTERPRISES, INC. (P.R.I.D.E.), which may be contacted

at:

P.R.I.D.E.
5540 Rio Vista Drive
Clearwater, Florida 34620-3107
Telephone Number: (727) 535-4900

FEE STRUCTURE/ IMPACT FEES

A fee shall be charged to the users of the Range. The fee structure may include a daily fee, an annual fee and/or a family fee. However, the amount charged may not exceed the amount indicated in the Concessionaire's Operational Plan (Exhibit B), unless amended through the established procedures. The fee structure includes the amount to be charged for use of the rifle, pistol, airgun, archery ranges and shotgun shooting facilities and/or a combination of all the ranges.

Range use fees for non-public shooting during times when the Range is scheduled to be closed to public shooting activities shall be established by the Concessionaire. These activities may include renting the Range to a public or private entity for in-service firearms training. All fees shall be included in the range operation and be part of the Concessionaire's gross range operating revenue. The fee structure proposed by the Concessionaire in Exhibit B (Operational Plan), reflects the amount charged to the shooter plus one dollar per shooter on the rifle and pistol range and .50 cents per twenty-five (25) round target shotgun shooting impact fee, all of which shall be deposited in an interest bearing account to be paid with interest to the Commission quarterly (collectively, range shooting impact fees). Upon termination or completion of the Contract, any remaining funds in the account, including interest, shall be immediately remitted to the Commission.

During the time the Range is open to the public all Range patrons must have a valid permit on their person when engaged in the respective shooting activities on the Range, except those users for whom no charge is assessed pursuant to Commission-sponsored events and as elsewhere denoted in this Contract. It shall be the Concessionaire's responsibility to issue permits and to maintain records that provide a clear audit trail of Range use. The Commission shall approve the design of Range use permits issued by the Concessionaire.

Commission representatives may, at their discretion, check patrons' permits. Five (5) verified and recorded failures per year of the Concessionaire to insure compliance by persons engaged in shooting activities on the Range may constitute breach of Concessionaire Contract at the sole discretion of the Commission.

IMPROVEMENTS/EXPANSION OF RANGE

At the Commission's discretion, the Concessionaire may have the opportunity, during the term of this Concessionaire Contract, to erect such structures and provide such equipment and materials upon the premises as may be desired to enhance the activities and services

authorized under this Concessionaire Contract, provided no structures may be erected, altered, placed upon or removed from the premises unless and until the design and proposed location, alteration, placement or removal thereof is approved in writing by the Commission.

Any and all structures, which shall constitute fixtures, shall at the option of the Commission remain upon the premises at the expiration of the term of this Concessionaire Contract and become the sole property of the Commission. At the Commission's option the Concessionaire may be required to remove unwanted structures or fixtures at the Concessionaire's expense. In the event this Concessionaire Contract or any material term or condition thereof is breached by the Concessionaire and this Concessionaire Contract is terminated, any and all structures, buildings, or fixtures shall at the Commission's discretion remain upon the premises as part of the recreation site and become the sole property of the Commission. In the event this Contract is terminated for reasons other than expiration or breach by the Concessionaire, Concessionaire shall have the option, at its own expense, within thirty (30) days of termination, of removing fixtures or structures which it has installed.

- a) Expansion: Any expansion or modification to the facility must be approved by the Commission in writing prior to any work being done and shall be at the sole discretion of the Commission as evidenced in writing.
- b) Cost of Expansion: Any cost associated with expansion of the Range beyond its present facilities and services shall be the responsibility of the CONCESSIONAIRE unless approved otherwise in writing by the Commission.

PERMITS AND LICENSES

The Concessionaire shall obtain all permits and licenses necessary to conduct the business related to the Concessionaire Contract and agrees to comply with all laws governing the responsibility of an employer with respect to persons employed by the Concessionaire. All required permits and licenses must be obtained prior to commencement of any operation by the Concessionaire. A copy of each permit or license shall be provided to the Commission on or before the date the Concessionaire opens for business.

PAYMENT OF TAXES, ASSESSMENTS, AND UTILITY FEES

The Concessionaire shall have responsibility for all liabilities that accrue to the leased premises or improvements thereon, including any and all drainage and special assessments or taxes of every kind which may hereafter be lawfully assessed and levied against the premises during the term of the Concessionaire Contract. In addition, Concessionaire shall pay all charges for the furnishing of gas, electricity, water, or other public utilities to the Range premises.

RELATIONSHIP OF PARTIES

It is understood that no employer-employee relationship exists between the Commission and the Concessionaire, and the Commission is not responsible for providing Workers' Compensation insurance and withholding services for the Concessionaire or his employees.

There is no conflict of interest or any other prohibited relationship between the Concessionaire and the Commission.

REPRESENTATIONS

The Commission and the Concessionaire stipulate that neither of them has made any representations except such representations as are specifically contained within this Concessionaire Contract and each party acknowledges reliance on its own judgement in entering into the Concessionaire Contract. The Commission and the Concessionaire further acknowledge that any payments or any representations that may have been made outside of those specifically contained in this Concessionaire Contract are of no binding effect and have not been relied upon by either party in its dealings with the other in entering into this Concessionaire Contract.

This Concessionaire Contract will be binding upon each of the parties thereto, their heirs, or successors, and shall be assignable only upon the written consent of the Commission.

BREACH AND TERMINATION

The Commission and Concessionaire agree to faithfully execute the covenants and contracts as set forth in this Concessionaire Contract. The Concessionaire Contract may be terminated in accordance with the following:

- a) The Commission or the Concessionaire may terminate this contract with 90 days written notice without cause.
- b) The Concessionaire Contract shall terminate if mutually agreed upon by both parties that such action would be in the best interest of the Commission and the Concessionaire.
- c) The Concessionaire Contract shall terminate immediately upon the Commission giving written notice to the Concessionaire in the event the premises are used for criminal purposes with the knowledge or consent of the Concessionaire. This Contract shall terminate immediately upon the Commission given written notice to the Concessionaire in the event of fraud or willful misconduct or material breach of this Contract. The Commission shall allow sixty (60) calendar days to correct a breach of this Contract.

- d) In the event of material breach of any of the covenants, terms or conditions hereof by Concessionaire, the Commission shall provide Concessionaire written notice to remedy such material breach. If Concessionaire fails to remedy such material breach within 60 days of written notice, the Commission may terminate the Concessionaire Contract effective immediately and all of Concessionaire rights hereunder, and recover from Concessionaire all damages the Commission may incur by reason of the breach and termination of the Concessionaire Contract.
- e) This Contract shall terminate upon the Commission given written notice to the Concessionaire in the event the annual Contract payment is not paid when due. Such termination is at the sole option of the Commission.
- f) This Contract shall terminate upon the Commission given written notice to the Concessionaire, in the event the Concessionaire, his agents or employees fail to abide by all laws, rules and regulations relating to the taking of wild animal life or freshwater aquatic life, on the Range premises.

NO WAIVER OF BREACH

The failure of the Commission to insist in any one or more instances upon strict performance of any one or more of the covenants, terms and conditions of this Concessionaire Contract shall not be construed as a waiver of such covenants, terms and conditions, but the same shall continue in full force and effect, and no waiver by the Commission of any of the provisions of this Concessionaire Contract shall in any event be deemed to have been made unless the waiver is set forth in writing by the Commission.

MODIFICATION OR AMENDMENT OF AGREEMENT

No waiver, modification, or amendment of this Concessionaire Contract, or of any covenant, condition, or limitation contained herein shall be valid unless in writing and lawfully executed by both parties. It is the intention of the Commission and the Concessionaire that no evidence of any waiver, or modification or amendment shall be offered or received in evidence in any proceeding or litigation between the parties arising out of or affecting this Concessionaire Contract unless such waiver, or modification, or amendment is in writing and executed as aforesaid. The provisions of this section shall not be waived without compliance with said writing and execution requirements.

ASSIGNMENT

The Concessionaire shall not assign any or all of the rights, liabilities, duties or obligations of the Contract nor subcontract any part of the Contract without the written

consent of the Commission.

LIABILITY OF THE PARTIES

Except as prohibited by law, the Concessionaire shall indemnify and hold harmless the Commission from any and all claims or demands for any personal injury or property damage resulting from, or arising out of the Concessionaire's use, operation or occupancy of the Range premises. The Concessionaire shall investigate any and all claims of every nature, at its own expense, relating to the Concessionaire's use, operation or occupancy of the Range premises. Nothing contained in the Concessionaire Contract shall be deemed to constitute a waiver of sovereign immunity on the part of either party or to affect, limit or reduce the protection afforded the Commission under the provisions of §375.251 and §768.28, F.S., or to effect, limit or reduce the protection afforded the landowner under the provisions of §375.251, F.S., or to protect Concessionaire from liability for any deliberate willful or malicious act of the Concessionaire.

INSURANCE REQUIRED

During the term hereof, the Concessionaire shall maintain a modified self-insurance program in keeping with Indian River County Board of County Commissioners' administrative policy and under provision of Section 768.28, Florida Statutes. Additionally, the Concessionaire shall provide written proof of insurance for commercial general liability for personal injury, death and property damage as well as workers' compensation insurance as required by the Florida Workers' Compensation Law.

INDEMNITY

Except as prohibited by law, the Concessionaire shall indemnify and hold the Commission harmless from and against all cost, judgements, attorney's fees, expenses, obligations and liabilities of any kind and nature which the Commission may incur or sustain in connection with or arising from the Contract or any court actions arising hereunder. In addition, the Concessionaire hereby agrees to be responsible for any injury or property damage resulting from any activities conducted under this Contract.

PROHIBITION AGAINST LIENS

The Concessionaire will not cause any lien to be filed against the premises or Concessionaire. If any mechanics lien is filed for labor or materials furnished or to be furnished to the Concessionaire, such lien shall be discharged by the Concessionaire within thirty (30) days after the date of filing.

RIGHT OF INSPECTION AND ACCESS

The Range premises and the operation of the facilities and services thereon will be subject to inspection by duly authorized assigns of the Commission to insure strict compliance with the terms of the Concessionaire Contract. The Concessionaire agrees to permit travel through and across the leased premises by representatives of state, federal or local governments at any reasonable time for any reason.

RECORDS AND RIGHT OF AUDIT

The Concessionaire shall maintain complete and accurate records that provide a clear audit trail of all receipts and disbursements and such additional records as the Commission deems necessary to adequately reflect the operations conducted on the Range premises. The Concessionaire shall be required to furnish the Commission certified copies of his statement of gross revenues including receipts of adjustments for returns and allowances, and profit/loss from the operations authorized by the Concessionaire Contract, within one hundred and eighty (180) days after the end of each Concessionaire fiscal year.

- a) The Commission shall have the right and authority to audit all records, documents, automated records, and books pertaining to the Concessionaire operation. Such audit shall be conducted at locations and at a frequency determined by the Commission and communicated to the Concessionaire. Concessionaire agrees to provide all necessary documentation for the audit at the designated place within fifteen (15) days after the Commission's notice is received and any additional documentation requested during the audit. The Concessionaire will be required to furnish the Commission audited annual financial statements within one hundred and eighty (180) days after the end of each Concessionaire fiscal year. The audit shall be conducted by an independent certified public accountant in accordance with Section 215.97, Florida Statutes, the Florida Single Audit Act.
- b) Records of original entry, source documents and all records pertaining to revenues and expenditures of this Contract shall be retained for a period of three (3) years in auditable condition, except that such records shall be retained until final resolution of matters resulting from any litigation, claim, or audit that started prior to the expiration of the three (3) year retention period. The retention period commences from the date of submission of the annual audited financial statement required above.

PUBLIC RECORDS

The Concessionaire Contract may be terminated by the Commission should Concessionaire fail to allow public access pursuant to Chapter 119, Florida Statutes, to all documents, papers, letters or other materials made or received in conjunction with the

Concessionaire Contract. If the Concessionaire seeks or is subject to a judicial determination as to the scope of records required to be disclosed under Chapter 119, F.S. and such judicial determination is sought or defended by the Concessionaire in good faith, the Concessionaire shall abide by the judicial determination and, in such a case, shall not be considered to have breached the Concessionaire Contract.

NO THIRD PARTY BENEFICIARIES

This Contract in no way affords to any third party legal benefits or otherwise the ability to enforce provisions of this Contract.

NON-DISCRIMINATION

As a condition of this agreement, the Concessionaire hereby covenants and agrees not to discriminate against any individual because of that individual's race, color, religion, sex, national origin, age, handicap, or marital status with respect to any activity occurring pursuant to this agreement.

UNAUTHORIZED ALIEN WORKERS

In accordance with Executive Order 96-236, the Commission shall consider the employment by any Concessionaire of unauthorized aliens a violation of section 274A(e) of the Immigration and Nationalization Act. Such violation shall be cause for unilateral cancellation of this Contract, if the Concessionaire knowingly employs unauthorized aliens.

PUBLIC ENTITY CRIMES

In accordance with §287.133(2)(a), Florida Statutes, a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a Contract to provide any goods or services to a public entity, may not submit a bid on a Contract with a public entity for the construction or repair of a public entity or a public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in §287.017, Florida Statutes, for CATEGORY II for a period of 36 months from the date of being placed on the convicted vendor list.

JURY TRIAL WAIVER

The parties hereto, for the considerations herein, expressly waive the right of jury trial in any legal or equitable matters stemming from this Concessionaire contract.

12.2.1 Amendment 1 to Contract

FWC Contract No. 00252 A-1

STATE OF FLORIDA
FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
AMENDMENT NO. 1 TO CONTRACT

This Amendment to Contract No. 00252 , referred to as the Original Contract, is entered into by and between the FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, whose address is 620 South Meridian Street, Tallahassee, Florida 32399-1600, hereafter "Commission," and Indian River County Board of County Commissioners, F596000674-006, whose address is 1801 27th Street, Building A, Vero Beach, FL 32960, hereinafter "County", collectively, "Parties".

WHEREAS, the Commission and the County entered into a Concessionaire Contract on March 13th, 2001 for the operation of the Florida Fish and Wildlife Conservation Commission Indian River Public Shooting Range.

WHEREAS, the Parties desire to renew that Contract.

Now, therefore, in consideration of the mutual benefits set forth herein, the parties agree to amend the Original Contract, as follows, which amendments shall govern to the exclusion of any provision of the Original Contract to the contrary:

In accordance with Provision two (2) thereof, the Original Contract, is hereby renewed for an additional 10 (ten) year term, commencing March 13, 2016, and terminating March 12, 2026.

An updated 2016 Operations and Shooting Plan is attached to this Amendment as Exhibit B.

All provisions of the ORIGINAL CONTRACT not specifically amended herein shall remain in full force and effect.

The Remainder of This Page Left Blank

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

INDIAN RIVER COUNTY
BOARD OF COUNTY
COMMISSIONERS

FLORIDA FISH AND WILDLIFE
CONSERVATION COMMISSION

Bob Solari
Bob Solari, Chairman

Eric Sutton



Name: Eric Sutton

Title: Assistant Executive Director

Date approved: 2-2-16

Date: 25 Feb 2016

ATTEST:
Jeffrey R. Smith, Clerk of the
Circuit Court and Comptroller

By: [Signature]
Deputy Clerk

Approved as to form and
legal sufficiency:

Approved as to form and legality by FWC Attorney:

By: [Signature]
William K. DeBaal
Deputy County Attorney

[Signature]
Name: Carla Ogilvie
Date: 2/23/16

EXHIBIT B

INDIAN RIVER COUNTY SHOOTING RANGE
10455 102ND Terrace
Vero Beach, FL 32967
772-581-4944

1. Operational Plan 2016

Hours of Operation

The Indian River County Shooting Range (hereinafter referred to as “Range”) will be open to the public a minimum of 40 hours per week as per the Concessionaire Contract requirement for public use.

The Range will be available to groups, organizations, or individuals on an appointment basis during the days and hours not open to the public. Shooting activities will not begin prior to 6:00 a.m. nor continue past 9:00 p.m. The Range will be open on weekends.

Marketing Plan

As a governmental agency, Indian River County (County) will continue to market the Range through County press releases, in County Parks & Recreation brochures, newsletters and through social media to our patrons. We will have our brochure available at all area gun shops, pawnshops and other businesses related to shooting. The informational brochure and price sheet will be sent to area law enforcement and military organizations.

Direct Marketing

Direct Marketing will occur via mail or email blasts with previous customers based on their shooting interests. The time honored “word of mouth” recommendations from previous patrons has proven to be a benefit to our direct marketing efforts.

Trade Show Marketing

The County’s Shooting Range Manager is a member of the National Association of Shooting Ranges and will attend and promote the Range at several large trade and industry events around the country. The Range will host a table at most local gun shows to promote the Range and talk to interested attendees.

Organizational Marketing

Indian River County Shooting Range management will continue to work closely with the Florida Wildlife Conservation Commission to improve on this unique partnership. Once the classroom is completed, regularly scheduled FWC Hunter Education courses will bring interested groups to our doorstep. Local groups such as Boy Scouts, 4-H and ROTC groups will continue their involvement with the Range on a regular basis. The Range management will continue its

EXHIBIT B

memberships in national organizations including the National Rifle Association, National Skeet Shooting Association, National Sporting Clays Association, Amateur Trapshooting Association, National Shooting Sports Foundation and Rocky Mountain Elk Foundation to offer their programs and to promote the Range.

Print Ad Marketing

The Range will continue marketing in the National Shooting Sports Foundation list of ranges, National Rifle Association list of ranges, as well as several State of Florida publications that feature recreation or shooting. Indian River County Shooting Range staff has worked with DOT for signage on I-95 and placement of entrance signs.

Web Based Marketing

The Range is featured on Indian River County's website at ircgov.com. The Range now has its own website: www.goshootingirc.com. We actively promote the Range through social media with Facebook page and Twitter accounts. These social media accounts offer all types of information such as events, promotions, hours and upcoming classes. The Range is listed on the National Shooting Sports Foundation's "Where to Shoot" member ranges, as well as links from many other shooting and recreation sites.

Promotional Activities

Staff will work with manufacturer representatives to have sponsored shoots at the Range. These events are frequently lucrative for the Range as manufacturers and vendors pay for the cost of advertising for the event which brings new patrons to the Range. The Range intends to develop strategic relationships with major firearms industry vendors. The Range management team is highly in tune with the motivations of manufacturers and the various ways the two entities can help each other. This inside industry experience will be called upon to promote the Range and its services. We are the first range in Florida to host a major shooting industry event in the last 20 years. We intend to continue to showcase the Range, County and community with more of these types of events.

EXHIBIT B

II. Shooting Opportunities

Leagues

The Range will organize and promote clubs to be based from the Indian River County Shooting Range. Staff will also run registered tournaments of all types. Leagues and clubs provide a great initial customer base to the Range. Industry experience has shown that when gone unchecked, leagues have the capacity to financially damage retail ranges. League members often expect unrealistic discounts and can direct business away from the Range by selling to new initiates “out of their garage” Leagues also tend to occupy the Range during high usage periods, restricting the availability of the facilities for other shooters. The Range is not averse to allowing the formation of shooting leagues and management is a strong supporter of these activities, but the leagues will be strictly limited to ensure there is no negative impact to the perception of other range patrons or the Range business entity.

Shooting Types

The Indian River County Shooting Range will offer pistol, rifle and shotgun shooting of all types including air gun and archery. The types of shooting allowed on the Range have been identified in previous sections. These activities are consistent with the engineering and safety design specifications of the Range. The engineered range safety features will not be by passed during specialized shooting activities such as action pistol, cowboy or plinking. Any activity forward of the static shooting lines will be closely monitored and controlled by the range management. All courses of fire will need to be pre-approved by the range management before any firing can commence.

Training

The Range will offer Florida Wildlife Conservation Commission Hunter Education and Bow Hunting courses as well as National Rifle Association safety classes. Indian River County Shooting Range’s commitment to safety and training opportunities has been accentuated throughout the plan. The Range will constantly strive to offer the latest and most effective training opportunities to the patrons. As with the shooting opportunities listed above, no training program or class will undermine the safety features engineered into the Range.

Facility Improvements

Since the opening of the Range, Indian River County has added the following improvements:

- Large storage building with roll door for clay and equipment storage
- Replaced and upgraded the clay traps on the 5-Stand
- Built a walk through 14 station NFA archery course
- Lighting has been installed on the rifle range, pistol range, airgun range, field archery and 5-Stand clays field

EXHIBIT B

- Baffle replacement on both the pistol and rifle ranges
- A new action pistol range is now open for classes, clubs and events
- A 15 station walkthrough sporting clays course

Perhaps the most exciting improvements are currently under construction:

- ✓ A \$1,300,000 project to install three lighted combination skeet and trap fields with storage building including improvements to the walkthrough sporting clays course

In the future, with funding and expertise from the Florida Wildlife Conservation Commission, the County plans to build a new classroom to be constructed near the new clays facilities.

As an advocate of Total Quality Management, the Range has a strong commitment towards constantly evaluating our facility, operations and customer's needs to make sure we are doing everything possible to further the needs of state, county and the shooting public using our ranges.

Maintenance will be a County function. We have made a substantial investment in equipment, and this equipment is vital to the Range and the services we offer. We will continue to maintain, replace and upgrade the buildings and equipment to provide a first class range and shooter experience.

Indian River County Shooting Range has added rear ready areas on both pistol and rifle ranges. Plus we added sliding safety gates at the entrance to each range. Range booths on each of the pistol and rifle ranges provide on-range storage and bottled water for patrons.

Safety is a paramount concern of the Indian River County Shooting Range. In the range office shooters will be required to read with staff the range rules and information. Range staff will continue to be on hand to answer questions. Shooters will continue to be required to sign a waiver and then will be issued a "waiver/rules acknowledgment card before they can purchase a range pass for any use of our ranges. As mentioned in previous sections, our goal is to continue to exercise positive control over every shooting situation. Our Range Officers will be expected to be on the shooting lines during all shooting activities. Each shooter must check in with the Range Officer who will conduct a safety inspection of all firearms and answer any rules or safety questions. Normal commands on the firing line will be communicated via loudspeaker system. A Range Officer will be walking the firing line aiding shooters and providing safety.

Dated: January 1, 2016

12.3 Public Input

12.3.1 Management Advisory Group Meeting Results

Indian River County Public Shooting Range
Management Advisory Group (MAG)
Consensus Meeting Results

January 31, 2018 in Sebastian, 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 MAG consensus meeting was held on the morning of January 31, 2018 at the Indian River County Public Shooting Range, in Sebastian, Florida in Indian River County. The ideas found below were provided by stakeholders for consideration in the 2018-2028 Management Plan (MP) 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 Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees), the 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.	[5]	[14]	19. Expand and upgrade archery opportunities. Archery is a growing sport. The area has archery facilities, but they are in need of some improvements and upgrades. Explore providing 3D targets for archery users.
2.	[4]	[7]	1. Water control improvement. We want to be good stewards of the water resources on the property. The sporting clays course can become wet at times. Sporting clays is a fast growing sport, but currently can not be conducted year round on the area. A hydrological assessment should be conducted.

Two items of equal rank:

3.	[4]	[14]	5. Exotic animal control with youth hunts. If hogs become an issue, explore using youth hunts to control hogs and to provide hunting education opportunities for the youth. Possibly tie it in to a hunter safety course.
	[4]	[14]	9. Add a 300 yard range. Groups are looking to hold events at the IRCPSR, and they would like to see a 300 yard rifle range. This could be used to hold tournaments and other events.
5.	[4]	[15]	11. Improve interpretive signage. Install signage that inform shooting range users about FWC's conservation efforts, wildlife, neighboring conservation lands, hunting, and other educational information.

<u>Rank</u>	<u># of Votes</u>	<u>Score</u>	<u>Idea</u>
6.	[3]	[5]	8. Baseline inventory of resources. Create an inventory of plants, animals, and hydrological features. Explore ways to fund the creation of inventories.
7.	[3]	[6]	14. Restore natural communities. Native vegetation should be installed in the landscaped areas around the shooting range. Keep the natural areas well maintained. Conduct proper burning and invasive species control.
8.	[3]	[10]	6. Invasive plant control. There should be some education and interpretation regarding invasive plants. Explore using volunteers to pluck invasive species.
9.	[3]	[11]	10. Promotional opportunities. Look at cross-promoting the shooting range with the whole county and nearby conservation areas. Also look at putting up signs along the Interstate 95 frontage.
10.	[2]	[4]	3. Land buffer connection and education. Work with the preserve to address connectivity for wildlife, recreation, and education. Many trail users of the preserve come up to the boundary of the IRCPSR without knowing it is a shooting range.
11.	[2]	[5]	4. Sound management. Explore ways to mitigate and reduce sound levels. Identify the impacts of noise on wildlife.

<u>Rank</u>	<u># of Votes</u>	<u>Score</u>	<u>Idea</u>
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Two items of equal rank:

- | | | | |
|-----|-----|-----|---|
| 12. | [2] | [8] | 2. Fishing enhancements. There are holding ponds on the area that can hold fish if improvements are made. It can be a great opportunity for people who are learning how to fish. |
| | [2] | [8] | 16. Best management practices for the range. Look at safety aspects of managing the shooting range. |
| 14. | [1] | [2] | 12. Assess impacts on wildlife. The FWC should examine if the shooting range has a negative impact on wildlife. Funding should be made available for wildlife restoration. |
| 15. | [1] | [3] | 15. Assess user impacts. Determine how much of an impact on the property will we be comfortable with and set a cap on the number of users. Identify the impacts of heavy foot traffic and other use issues on natural communities. |
| 16. | [1] | [4] | 20. Explore acquisition opportunities. Acquiring nearby land may help with some of the hydrological issues at the shooting range. |
| 17. | [1] | [5] | 17. Land management connectivity. Explore connecting trail systems and cooperate with neighboring conservation areas to manage habitat. |

<u>Rank</u>	<u># of Votes</u>	<u>Score</u>	<u>Idea</u>
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The following item received no votes. All ideas represent valuable input, and are considered in development of the Management Plan, but carry no rank with regard to the priority perceptions of the MAG.

- | | | | |
|-----|---|---|---|
| 18. | 0 | 0 | 7. Consider regional and local context. Try to figure out what features and amenities are in the area. Explore adding amenities that are not found in the region. |
| 19. | 0 | 0 | 13. Develop plan based nature study opportunities. The local Native Plants Society chapter will be available to help with plant surveys, invasive plant treatment, and other plant related issues. |
| 20. | 0 | 0 | 18. Assess management approaches. Once there is a baseline assessment of resources on the area, form a consensus about the best way to manage the area's resources. |
| 21. | 0 | 0 | 21. Reevaluate carrying capacity. Determine the maximum occupancy of the area. |

Indian River County Public Shooting Range

MAG Meeting Participants

Name

Affiliation

Active Participants

Bill Cline	FWC Hunter Safety and Public Shooting Ranges
Hoden Kriss	Indian River County Shooting Range Manager
Chase Platt	FWC Law Enforcement
Susan Adams	Indian River County Commissioner, District 1
Steven Hitt	Indian River County Planning Department
Calin Ionita	Florida Forest Service
Dylan Gavagni	Department of Environmental Protection
Janice Broda	Florida Native Plants Society, Eugenia Chapter
Dr. Richard Baker	Pelican Island Audubon Society

Supportive Participants

Steve Glass	FWC HSC, District Biologist
Katherine Burke	FWC Public Access and Services Office (PASO)
Tom M. Matthews	FWC PASO
William Burnett	FWC HGM
George Warthen	FWC HGM
Tim Towles	FWC Landowner Assistance Program
Michael Hudon	Indian River County Mosquito Control District
Michael Zito	Indian River County
Judy Avril	Florida Native Plants Society, Eugenia Chapter

Invited but Unable to Attend

Jason O'Donoghue	Division of Historical Resources*
Dan Hipes	Florida Natural Areas Inventory

Jennifer Abbey	NRCS
Jim Escoffier	Florida Trail Association
Peter Henn	St. Johns River Water Management District
Ricky Lackey	National Wild Turkey Federation
Brett Bainter	Ducks Unlimited
Tom Knight	National Rifle Association
Dr. Gerald Culen	4H Shooting Sports
Tycee Prevatt	4H Shooting Sports
Scott Cobb	Florida Sporting Clays Association
Rollins Brown	Florida Sporting Clays Association

*Provided comments prior to MAG Meeting

FWC Planning Personnel

Dylan Imlah	Lead Planner, Facilitator
Lance Jacobson	Recorder
Lindsay Slautterback	Recorder

NOTICE

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

PUBLIC HEARING

for the

Indian River County Public Shooting Range

Management Plan

Indian River County, Florida

7:00 P.M. Thursday, March 29th, 2018

Indian River County Administration Complex
Commission Chambers-Building A
1801 27th Street
Vero Beach, FL 32960

PURPOSE: To receive public comment regarding considerations for the FWC ten-year Land Management Plan for the Indian River County Public Shooting Range (IRCPSR). This hearing is being held **EXCLUSIVELY** for discussion of the **DRAFT** Indian River County Public Shooting Range 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:

<http://myfwc.com/about/rules-regulations/>

or call (850) 487-7063.

A Management Prospectus for the Indian River County Public Shooting Range is available upon request. For a copy, please contact Dylan Imlah, Florida Fish and Wildlife Conservation Commission, Land Conservation and Planning, 620 South Meridian Street, Tallahassee, Florida 32399-1600. Telephone: (850) 487-9102.

Treasure Coast Newspapers

TCPALM

Indian River Press Journal
1801 U.S. 1, Vero Beach, FL 32960
AFFIDAVIT OF PUBLICATION

STATE OF FLORIDA
COUNTY OF INDIAN RIVER

Before the undersigned authority personally appeared, Natalie Zollar, who on oath says that she is Classified Inside Sales Manager of the Indian River Press Journal, a daily newspaper published at Vero Beach in Indian River County, Florida: that the attached copy of advertisement was published in the Indian River Press Journal in the following issues below. Affiant further says that the said Indian River Press Journal is a newspaper published in Vero Beach in said Indian River County, Florida, and that said newspaper has heretofore been continuously published in said Indian River County, Florida, daily and distributed in Indian River County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid or promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper. The Indian River Press Journal has been entered as Periodical Matter at the Post Offices in Vero Beach, Indian River County, Florida and has been for a period of one year next preceding the first publication of the attached copy of advertisement.

Customer	Ad Number	Copyline	PG #
955142 - FLORIDA FISH AND WILDLIFE CONSERVATION	1942374		The Florida Fish and Wildlife Conser

Pub Dates
March 22, 2018

Sworn to and subscribed before me this day of, March 22, 2018, by

Natalie Zollar

_____, who is
Natalie Zollar
(X) personally known to me or
() who has produced _____ as identification.

Karol E Kangas

Karol Kangas Notary Public



Public Notices

Effective February 9, 2018, Dr. Leighan Talton will no longer be employed by Martin Heath Physician Group. Patient records will be maintained at 2392 East Ocean Blvd., Stuart, FL 34996, telephone (772) 223-4999. You may have a copy of your medical record transferred to a physician of your choice at no charge with a signed authorization. Publication dates: March 1, 8, 15 and 22, 2018. TCN 1938773

INTENT OF ACTION

The following veterans and/or spouses will be interred at the South Florida National Cemetery on Saturday, April 14, 2018 @ 11:00am unless otherwise notified by next of kin. Please call the Missing in America project at (904) 93-3035. Donald Patrick Bennett, Edward W. Chambers, Alexander Furno, Shirley Watson Gray, William J. Griffith, Earl Gene Hart, Ronald Cornell Hicks, Eugene Arnold Kittelson, Mary Ann Lach, George Burlingame Marcus, Williams Shaw Nagata, Sakelika Perone, Peter Quay Phebus, Robert Petrowic, Jr. and Walter Romanowski. Pub. March 21, 22, 23, 2018 TCN.1961922

FLORIDA DEPARTMENT OF LAW ENFORCEMENT, Petitioner

vs.

KAREN M. SMITH, Case #41724 Respondent

NOTICE OF ACTION

YOU ARE NOTIFIED that an Administrative Complaint has been filed against you seeking to revoke your CORRECTIONAL Certificate in accordance with Section 943.1395, F.S., and any rules promulgated thereunder.

You are required to serve a written copy of your intent to request a hearing pursuant to Section 120.57, F.S. upon Dean Registrar, Director, Criminal Justice Professionalism Program, Florida Department of Law Enforcement, P. O. Box 1489, Tallahassee, Florida 32302-1489, on or before May 14, 2018. Failure to do so will result in a default being entered against you to revoke said certification pursuant to Section 120.60, F.S., and Rule 11B-27, F.A.C.

Dated: March 14, 2018
Dean Registrar, Professionalism Director
FLORIDA DEPARTMENT OF LAW ENFORCEMENT
By: s- Anjani Torres, Division Representative
March 22, 29 and April 5 & 12, 2018
TCN 1957978

NOTICE OF MEETING
Notice of Meeting
Announcement

Neighborhood Workshop will be held on Thursday, April 5, 2018 at 6 pm to present the proposed site plan for the property located at 615 Azalea Lane; Vero Beach, Florida. Contact the office of Binini Capital Management, Inc. at 772-231-1400 for more information. Pub. March 22, 2018 TCN.1962674

Public Notices

NOTICE OF PUBLIC HEARING

PLEASE TAKE NOTICE that the Town Commission of the Town of Sewall's Point, Florida, proposes to adopt the following ordinance on second reading and will hold a public hearing on the ordinance in the Town Commission Chambers, at or after 7:00 PM on March 27, 2018:

ORDINANCE NO. 415 AN ORDINANCE OF THE TOWN COMMISSION OF THE TOWN OF SEWALL'S POINT, FLORIDA AMENDING CHAPTER 82 ZONING, ARTICLE I IN GENERAL, SECTION 82-1 DEFINITIONS, ARTICLE II DISTRICTS AND DISTRICT REGULATIONS, DIVISION 3 BUSINESS DISTRICT, 8-1, SECTION 82-302 PERMITTED PROHIBITED AND SPECIAL EXCEPTION USES AND ARTICLE V SUPPLEMENTARY REGULATIONS, DIVISION 1 GENERALLY, SECTION 82-398 MEDICAL MARIJUANA DISPENSARIES TO PROHIBIT MEDICAL MARIJUANA TREATMENT CENTER DISPENSING FACILITIES WITHIN THE TOWN OF SEWALL'S POINT; TERMINATING THE MEDICAL MARIJUANA USE MORATORIUM; PROVIDING FOR SEVERABILITY, THE REPEAL OF LAWS IN CONFLICT, CODIFICATION, AND AN EFFECTIVE DATE.

At said meeting interested persons may appear and be heard with respect to the proposed ordinance.

The proposed ordinance may be inspected by the public Monday-Friday from 8:00 AM to 4:00 PM, at the Town Clerk's Office, One South Sewall's Point Road, Sewall's Point, Florida.

If a person decides to appeal any decision made by the Commission with respect to any matter considered at such meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based (section 286.0105, Florida Statutes).

Town of Sewall's Point, Florida
Lakisha Q. Burch, CMC,
Town Clerk
March 22, 2018 TCN 1962921

NOTICE OF PUBLIC HEARING DISTRICT SCHOOL BOARD OF INDIAN RIVER COUNTY, FLORIDA

At the District School Board business meeting held March 20, 2018, the District School Board voted to hold a Public Hearing to consider adoption of the following updated policy to the District School Board Policies:

Purpose: Be Consistent with present practice, new practice, and legislation.

Action Initiated by: District School Board

Action Approved by: Dr. Mark J. Rendell, Superintendent of Schools

Estimated Economic Impact: None

Implemented: None

Policy:

Volume 18, Number 1

0172 Visitation of Schools by Individual School Board Members REVISED

1220 Evaluation of Administrative Personnel REVISED

Public Notices

- 1242 Professional Development REVISED
- 2111 Parent and Family Involvement in the School Program REVISED
- 2120 School Improvement REVISED
- 2252 Digital Classrooms REPEALED
- 2261 Title I Services REVISED
- 2280 Physical Education REVISED
- 2270.01 Virtual Instruction REVISED
- 2431 Interscholastic Athletics REVISED
- 2520 Selection of Instructional Materials and Equipment Program REVISED
- 3128 Contracts: Instructional Personnel REVISED
- 3220 Evaluation of Instructional Personnel REVISED
- 3242 Professional Development REVISED
- 5200 Attendance REVISED
- 5410 Student Progression TECHNICAL CORRECTION REVISED
- 5461 Graduation Requirements REVISED
- 5760 Student/Parent Rights REVISED
- 7540 Technology REVISED
- 8510 Wellness REVISED
- 9130 Public Complaints REVISED
- 9150 School Visitors REVISED
- TBD Political Activities NEW
- 9270 Equivalent Education Outside the Schools (Home-Education) REVISED
- 9800 Charter Schools REVISED

The public hearing will be held during the District School Board business meeting on Tuesday, April 24, 2018, at 6 p.m. at the J.A. Thompson Administrative Center, 6500 57th St, Vero Beach, Florida, 32967 in the Joe N. Idette, Jr. Teacher Education Center (TEC). The last date for filing a written objection is April 17, 2018. A copy of the proposed changes is available for review on the District website at www.indianriverschools.org, click on School Board. Contact number is (772) 564-3149.

Advice is hereby given that if a person decides to appeal any decision made by the Board with respect to any matter considered at such hearing, he/she will need a record of the proceedings; and for such purpose he/she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. Anyone who needs a special accommodation for this meeting may contact the School District's American Disabilities Act Coordinator, at (772) 564-3071 (TTY 772-564-8507) at least 48 hours in advance of meeting. March 22, 2018 TCN 1957549

PUBLIC NOTICE

NOTICE IS HEREBY GIVEN THAT THE FOLLOWING COMMITTEES OF THE DISTRICT BOARD OF TRUSTEES OF INDIAN RIVER STATE COLLEGE WILL MEET TUESDAY, MARCH 27, 2018 IN ROOM 108 OF THE BROWN CENTER FOR INNOVATION AND ENTREPRENEURSHIP AT 2309 VIRGINIA AVENUE, FORT PIERCE, FLORIDA 34981-6596.

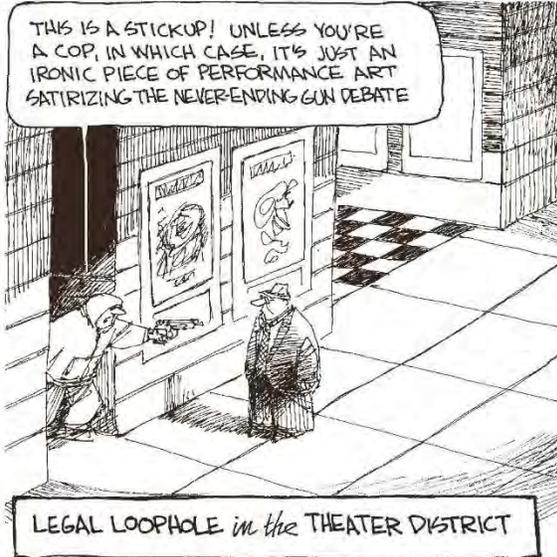
FINANCE & AUDIT COMMITTEE - 2:00 P.M.

PHYSICAL PLANT COMMITTEE - 2:15 P.M.

LEGISLATIVE COMMITTEE - 2:45 P.M.

ANY PERSONS SEEKING TO

NON SEQUITUR



©2018 WILEY INK, LTD. 7-22
DIST. BY ANDREW WHEEL BROADCAST WILEYINK@EARTHINK.NET GCOMICS.COM

Public Notices

APPEAL THE DECISIONS OF THE BOARD WITH RESPECT TO ANY MATTER CONSIDERED AT SUCH MEETING WILL NEED A RECORD OF THE PROCEEDINGS, AND FOR SUCH PURPOSE MAY NEED TO ENSURE THAT A VERBATIM RECORD OF THE PROCEEDING IS MADE. Pub. March 22, 2018 TCN.1963436

South Florida Water Management District 3301 Gun Club Road, West Palm Beach, FL 33406 permits@sfwmd.gov NOTICE OF RECEIPT OF APPLICATION

Notice is hereby given, pursuant to Chapter 373, Florida Statutes, that the application(s) for permit described below has been received for project(s) in St. Lucie County. The application(s) and future additional application documents can be obtained by any of the following methods: 1) Accessing the District's website (www.sfwmd.gov) and clicking on Application/Permit Search on the ePermitting page; 2) Submitting a written request to the South Florida Water Management District, Attn: Regulation Division, 3301 Gun Club Road, West Palm Beach, FL 33406; or 3) Submitting an electronic request at permits@sfwmd.gov.

Remnant Construction (Innovation Retail Center) 201 South 2nd Street, Suite 207, Fort Pierce, FL 34950, has submitted Application 180213-12 for a new Water Use Permit 56-03623-W to dewater on undeveloped lands. The water will be withdrawn from the

Public Notices

Water Table Aquifer and the project is located in Section 15, Township 37 South, Range 39 East.
Stewart Materials Inc (Capron Trails Mine) 2875 Jupiter Park Drive, Suite 1100, Jupiter, FL 33458, has submitted Application 180219-6 for modification of Water Use Permit 56-0765-W to dewater on undeveloped lands. The water will be withdrawn from the Water Table Aquifer and the project is located in Sections 1,6,7,12,13,18, Township 34 South, Ranges 38,39 East. March 22, 2018 TCN 1957630

South Florida Water Management District 3301 Gun Club Road West Palm Beach, FL 33406 permits@sfwmd.gov

NOTICE OF RECEIPT OF APPLICATION

Notice is hereby given, pursuant to Chapter 373, Florida Statutes, that the application(s) for permit described below has been received for project(s) in Martin County. The application(s) and future additional application documents can be obtained by any of the following methods: 1) Accessing the District's website (www.sfwmd.gov) and clicking on Application/Permit Search on the ePermitting page; 2) Submitting a written request to the South Florida Water Management District, Attn: Regulation Division, 3301 Gun Club Road, West Palm Beach, FL 33406; or 3) Submitting an electronic request at permits@sfwmd.gov.

Public Notices

Indian Natural Gas Storage Company LLC (Floridian Natural Gas Storage) 1000 Louisiana Street, Suite 4300, Houston, TX 77002, has submitted Application 180205-6 for a new Water Use Permit 43-02186-W to dewater on undeveloped lands. The water will be withdrawn from South Florida Water Management District C-44 canal and the project is located in Sections 26,35, Township 39 South, Range 38 East. Pub. March 22, 2018 TCN 1956022

The Martin County School Board has scheduled a Policy Workshop for Tuesday, March 27, 2018 at 11:00 A.M. The Workshop will be held in the School Board Meeting Room, 500 E. Ocean Blvd., Stuart, Florida 34994. Pub: March 22, 2018 TCN 1963923

7:00 P.M. Thursday, March 29th, 2018 Indian River County Administration Complex Commission Chambers 1801 27th Street, Vero Beach, FL 32960 - Building A

The Florida Fish and Wildlife Conservation Commission (FWC) announces a PUBLIC HEARING for the FWC Lead Managed Portions of Indian River County Public Shooting Range located in Indian River County, Florida.

7:00 P.M. Thursday, March 29th, 2018 Indian River County Administration Complex Commission Chambers 1801 27th Street, Vero Beach, FL 32960 - Building A

PURPOSE: To receive public comment regarding considerations for FWC's ten-year Management Plan for the FWC Lead Managed Portions of Indian River County Public

Public Notices

Shooting Range. This hearing is being held EXCLUSIVELY for discussion of the DRAFT Indian River County Public Shooting Range 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: <http://myfwc.com/about/rules-regulations/changes/>

A Management Prospectus for Indian River County Public Shooting Range and copy of the agenda is available upon request from the Florida Fish and Wildlife Conservation Commission, Land Conservation and Planning Group, 620 South Meridian Street, Tallahassee, Florida 32399-1600. Telephone: (850) 487-9102 or by e-mail at Dylan.lmlah@myfwc.com
 Pub: March 22, 2018
 TCN 1942374

Request for Bids

ADVERTISEMENT FOR BID

Notice is hereby given that the Indian River County Board of County Commissioners is calling for and requesting bids for the following:

Indian River County Bid # 2018052 Demolition of County Owned Structures

Detailed specifications are available at: www.demandstar.com or by contacting the Purchasing Division at purchasing@ircgov.com.

Deadline for receipt of bids has been set for **2:00 P.M. on April 13, 2018**. Only bids received on or before the time and date listed will be considered. Bids should be addressed to Purchasing Division, 1800 27th Street, Vero Beach, Florida 32960. All bids will be opened publicly and read aloud at 2:00 PM. Bids submitted after 2:00 PM on the day specified above, will not be opened or considered.

BID SECURITY in the sum of not less than five percent (5%) of the total bid must accompany each bid over \$25,000.

The Board of County Commissioners reserves the right to accept or reject any and all bids in whole or in part and to waive any technicality or irregularity.

PURCHASING MANAGER
 INDIAN RIVER COUNTY
 March 22, 2018 TCN 1960104

CITY OF FORT PIERCE

FORT PIERCE, FLORIDA

CALL FOR BIDS NO. 2018-019

Sealed bids will be received by the City of Fort Pierce, Fort Pierce, Florida, in the Purchasing Division, until:

**3:00 PM, TUESDAY,
 APRIL 17, 2018**

for furnishing:

**HOUSING REHABILITATION
 PROJECT - 706 NORTH 27TH
 STREET**

Request for Bids

to be properly licensed in the City of Sebastian and shall provide proof of insurance to conduct its business, with all licenses, permits, & certificates as may be required by all local, State of Florida, and Federal Agencies. The Contractor shall submit a current license from the State of Florida and must be capable of obtaining the appropriate licenses and certificates to perform the project in the City of Sebastian.

A Bid Bond is required in an amount not less than 5% of the base bid amount as well as Payment and Performance Bond on any resulting contract.

Bidding details are available from www.demandstar.com or by contacting Jean Tarbell at jtARBELL@cityofsebastian.org or telephone at 772-388-8203.

All items bid shall conform to the Bid Documents unless specifically approved in advance in writing by the City or identified in any addendums.

Any person or affiliate who has been placed on the convicted vendor list following conviction for a public entity crime may not submit a bid as proscribed by Section 287.133, F.S. Any bids received without the signed Bid Proposal, Proof of Contractor's License, Public Entity Crime Form, the Drug Free Workplace Form and Construction Service Agreement will be considered incomplete and bid will be disqualified.

A mandatory pre-bid conference is scheduled for Friday, April 6, 2018 at 2:00 p.m., in the Sebastian City Hall, City Council Chambers, located at 1225 Main Street, Sebastian, FL. Any technical comments are to be emailed to jtARBELL@cityofsebastian.org and the City will respond with an addendum.

Bids duly submitted will be publicly opened and read aloud at the date and time specified above in City Hall. The City reserves the right to reject any and all bids, or to accept any bid or portion thereof deemed to be in the best interest of the City, and to waive any non-substantial irregularities. The winning bid will be the lowest responsible and responsive bidder.

By: Joe Griffin, City Manager
 March 22, 2018 TCN 1959684

Real Estate Sales 

Condos-Furn

VISTA ROYALE 1ST. FLOOR
 Vista Royale 2 bed,2 bath First Floor. Excellent Condition, fully furnished.\$117,000 Call (508)523-3573

VISTA HARBOR - Waterfront! 1st floor, 2BR/2BA fully furnished. (772)584-3796

Condos-Unfurn

Real Estate Rentals 

Apartments - Unfurn.

FORT PIERCE
 1BR/1BA 2BR/2.5BA
www.CortezVillage.net
 (772) 466-1505

WHITE CITY
 Townhome Community
 2 Bedroom, Pool
 772-466-0091
www.WeatherbeeTownhomes.net

Homes Furnished

MARTIN CO. INDIANTOWN 3/2 in 55+ MH Golf community, all amenities, incl. rest., golf carts, pools, tennis, exercise, walk-in Jacuzzi 1762SF \$1190/mo+ utils. F/L/S Year lease. (772)678-1929

PORT SALERNO - Waterfront! Best view on the Manatee Pocket! 7 boat slips! Furnished 4bd/2ba/1cg+ covered parking. Reduced! \$695,000 Doug 561-308-3488 ID 1915608

Homes Unfurnished

HOUSE FOR RENT - 473 Tunison Lane, 3 bed, 1 bath, 2 car garage, fenced in yard, nice area of town, near parks and shopping. \$1,200.00 a month, FLS (772)321-1621

JENSEN BEACH - newly remod 2bd/2ba on quiet street off Indian River Dr. lg kitch SS appls. Scrn patio w/beautiful river view. 1-car gar, water & lawn maint incl. Unlimited parking F/L/S (586) 212-0972

ST JAMES GOLF COURSE - PT ST LUCIE - Immaculate 4/3/2 w/golf view in gated community. Tile, wood, lg screen patio, club incl w/pool, cable TV, tennis. \$1850 F/L/S No pets/smoking (518)459-3826

STUART - SUMMERFIELD 3/2/2 Tile, SS, lg scrn porch on 7th tee, lawn serv, W/D, no pets. \$1900/mo F/L/S (772)323-8915 Web ID 1961210

Condos Furnished

55+ FREE GOLF - Stuart: 55+ 2 BDR/1 BTH Free golf: MYYCC. No smoking/pets. Call Rob (631)880-1074

HUTCHINSON ISLAND - IRP 2/2 ground flr, furn, pool, tennis, golf, beach. Avail. 4/5 \$1800/mo F/L/S (772)285-7917

Duplx/Multplx UnFurn

South Stuart, New, backs to preserve. 2/2, one car gar, laundry hookup, all tile, stainless steel appl., screen porch, no pets/smoking, free cable. \$1500/mo F/L/S (772)260-9618.

Beach Rentals

VERO BEACH - Beautiful 2nd flr. 2/2+porch, 1/2 blk to South Beach. Gorgeous grounds, stainless, granite, porcelain tile. Pool, clubhouse, W/D in unit. Unfurn. Annual lease. \$1800/mo. (772)696-3169

VERO BEACH OCEAN DRIVE - Luxury condo, oceanfront, gated, fully furn, 2/2, garage. Close to everything! Avail.

Trucks

TOYOTA TACOMA - 2002. 180K mi, new tires, runs great, cold AC \$7K obo (352)843-1145.

Vehicles Wanted

AAA AUTO ANALYSIS
 All Makes • All Price Ranges • We buy Cars, Trucks & Motorcycles; Est. 1981
772-260-9707

\$\$ CASH \$\$
 for your unwanted or junk car or truck - running or not; Free pick up!
772-579-5983

Recreation 

Aircraft/Aviation

AIRPLANE HANGAR - For sale. Vero Beach. \$27,500 (772)559-4041.

Boats/Motors/Marine

'05 GRADY-WHITE - Tournament (20") Yamaha 200hp, 4S, Svc records. Dual axle trlr. Ex cond! \$22,500. (772)778-4741.

BOSTON WHALER BOAT - boston whaler 86- 17ft., 96- 90hp. johnson, 2011 trl. - \$6900.00 (516)448-9452.



FISHING SHOW - Indian River Marine Flea Market and Fishing Show April 14-15 Indian River Fairgrounds Vero Beach FLNauticalFleaMarket.com (954)205-7813.

GRADY-WHITE, TOURNAMENT - 22 ft. 200 hp 4S '07 Suzuki 280 hrs, w/trlr.(609)713-9222.

The key to selling your car starts here



Wheels/Recreation

ID 20121406

Notice of Meeting/Workshop Hearing

FISH AND WILDLIFE CONSERVATION COMMISSION

Freshwater Fish and Wildlife

The Fish and Wildlife Conservation Commission announces a public meeting to which all persons are invited.

DATE AND TIME: Thursday, March 29, 2018, 7:00 p.m.

PLACE: Indian River County Administration Complex Commission Chambers, 1801 27th Street, Vero Beach, FL 32960 – Building A

GENERAL SUBJECT MATTER TO BE CONSIDERED: To receive public comment regarding considerations for FWC's ten-year Management Plan for the FWC Lead Managed Portions of Indian River County Public Shooting Range.

This hearing is being held exclusively for discussion of the draft Indian River County Public Shooting Range 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: <http://myfwc.com/about/rules-regulations/changes/>.

A copy of the agenda may be obtained by contacting The Florida Fish and Wildlife Conservation Commission, Land Conservation and Planning Group, 620 South Meridian Street, Tallahassee, Florida 32399-1600, (850)487-9102 or email to Dylan.Imlah@MyFWC.com.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 14 days before the workshop/meeting by contacting Dylan.Imlah@MyFWC.com. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

For more information, you may contact Jessica Larimer, (850)487-7063, Jessica.Larimer@MyFWC.com.

For immediate release: March 22, 2018

Contact: Diane Hirth, 850-410-5291; Greg Workman, 352-620-7335

Photos available on FWC's Flickr site: Go to <https://www.flickr.com/gp/myfwcmedia/93t357>

Suggested Tweet: Help plan the future of Indian River County Public Shooting Range.

[[VIEW_THIS_URL]] #Florida

Help plan the future of Indian River County Public Shooting Range

A 10-year plan for the [Indian River County Public Shooting Range](#) will be presented at a public hearing on Thursday, March 29.

People are invited to the 7 p.m. [public hearing](#) at the Indian River County Administration Complex Commission Chambers, Building A, 1801 27th Street, Vero Beach.

Florida Fish and Wildlife Conservation Commission (FWC) staff will present the draft land management plan for the FWC-managed area, and people will be encouraged to comment and ask questions. For more information on the [upcoming local public hearing](#), go to [MyFWC.com/Conservation](#) and select "Terrestrial Programs" then "Management Plans."

The Indian River County Public Shooting Range, located in the city of Sebastian, is a shooting range managed by Indian River County. Also on site is an FWC-managed facility for the public to gain the skills and knowledge for safe, responsible shooting, including hunter safety education. The area surrounding the range conserves habitat for wildlife such as gopher tortoises, sandhill cranes and deer.

The shooting range, which has a five-star rating from the National Association of Shooting Ranges, offers stations for rifles, handguns and shotguns, and an archery range.

People also enjoy other outdoor activities here, including fishing, wildlife viewing and picnicking.

"The Indian River County Public Shooting Range was purchased to ensure the conservation of fish and wildlife resources, other natural and cultural resources, and for fish- and wildlife-based public outdoor recreation," said Dylan Imlah, FWC land conservation planner. "This draft plan will specify how we intend to do that."

All lands purchased with public funds must have a management plan that ensures the property will be managed in a manner that is consistent with the intended purposes of the purchase.

Hunting and fishing regulations are not included in this plan or meeting; those are addressed through a separate public process.

To obtain a copy of the land management prospectus for Indian River County Public Shooting Range, call Dylan Imlah at 850-487-9102 or email Dylan.Imlah@MyFWC.com.

For more information and background on [management plans](#) and their goals, visit MyFWC.com/Conservation and select “Terrestrial Conservation Programs” then “Management Plans.”

For more on the Indian River County Public Shooting Range, go to MyFWC.com/Hunting and select “Safety and Education” then “FWC-Managed Public Shooting Ranges.”

DH/SG/THJC//DJ/KF/HSC

TS/BC/HGM

JF/FF

CLP/KP/SS/CR

12.3.3 Public Hearing Report

**PUBLIC HEARING REPORT
FOR
INDIAN RIVER COUNTY PUBLIC SHOOTING RANGE
MANAGEMENT PLAN
HELD BY THE
INDIAN RIVER COUNTY PUBLIC SHOOTING RANGE MANAGEMENT ADVISORY
GROUP
AND THE
FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
MARCH 29, 2018 – INDIAN RIVER COUNTY, FLORIDA**

The following report documents the public input that was received at the Indian River County Public Shooting Range (IRCPSR) Management Advisory Group's (MAG) public hearing for the update to the Management Plan for the Indian River County Public Shooting Range that was held at 7:00-9:00 PM, on March 29, 2018 at the Indian River County Administration Complex in Vero Beach, Florida.

IRCPSR Management Advisory Group Introduction:

The meeting was introduced by Commissioner Susan Adams, a IRCPSR Management Advisory Group participant, who represented the IRCPSR MAG. Commissioner Adams indicated that she was one of nine stakeholders that attended the Florida Fish and Wildlife Conservation Commission (FWC) facilitated IRCPSR MAG meeting held on January 31, 2018. Commissioner Adams stated that the Draft Management Plan was being presented tonight by FWC staff, and that hardcopies of the draft plan and the IRCPSR MAG meeting report were available at the front door for the public's review. Commissioner Adams thanked everyone for attending and then introduced Ms. Dylan Imlah, FWC, to facilitate and coordinate the presentation of an overview of IRCPSR, FWC's planning process, and the draft components of the IRCPSR Draft Management Plan.

Presentation on an Overview of IRCPSR and the FWC Planning Process:

Ms. Dylan Imlah welcomed everyone and thanked the public for their attendance. Ms. Imlah then went over an orientation of the material and explained that the purpose of the

public hearing was to solicit public input regarding the Draft Management Plan for IRCPSR, and not hunting and fishing regulations, indicating there is a separate public input process for FWC rule and regulation development. Ms. Imlah then described the materials that were available at the door for public review, including the IRCPSR Draft Management Plan and the MAG Meeting Report and Accomplishment Report. Ms. Imlah then presented the agenda for the public hearing and facilitated the introduction of all FWC staff in attendance to the audience. Ms. Imlah then presented an overview and orientation of IRCPSR, including a description of the natural communities, data about IRCPSR visitation, revenue and economic benefits generated for the state and region by the area, wildlife species, recreational opportunities found on the area, surrounding conservation lands, surrounding Florida Forever Program Land Acquisition Projects, acquisition history, etc. She also explained FWC's planning process for the management of the public conservation land and asked if there were any questions regarding that process.

Questions, Answers and Discussion on the IRCPSR Overview and FWC's Planning Process:

Ms. Imlah facilitated an informal question and answers session where members of the public in attendance, without necessarily identifying themselves, could ask questions of the FWC staff, and discuss the answers. Ms. Imlah again emphasized that the exclusive purpose for the public hearing was to collect public input regarding the Draft Management Plan for IRCPSR, and not to discuss area hunting, fishing and use regulations since, as was noted earlier, FWC has a separate process for input on hunting and fishing regulations.

No questions or comments were received at this stage of the IRCPSR public hearing meeting.

Presentation of the IRCPSR Draft Management Plan:

At this point, Mr. George Warthen, the FWC IRCPSR Manager began the presentation of the IRCPSR Draft Management Plan. Mr. Warthen then completed and concluded the presentation of the IRCPSR Draft Management Plan.

Questions and Comments on the IRCPSR Draft Management Plan Presentation:

Mr. Warthen asked if there were any comments or questions from the public regarding the Draft Management Plan and encouraged everyone to fill out a speaker card for public testimony. He informed them that all comments, questions, and public testimony will be duly considered equally by FWC.

Public Question 1: An unidentified member of the audience provided the following comments and questions:

1. *The only thing I could mention is that the county has submitted for a county-wide grant for wildfire notification and they did it along some of the corridors of I-95. I work in a conservation lands division so the properties for our conservation lands, other county properties and the third tiers are included along with miscellaneous lands, and a lot of the I-95 corridor is included in that. So we'll keep you abreast. They just came out with public comment. It's moving through the pipeline, we don't know if we'll get funded, but we're definitely trying.*

FWC Response: Ms. Dylan Imlah, Conservation Planner, responded:

Ok, great. I'll give you my card if you could send me more information.

No further questions or comments were received at this stage of the IRCPSR public hearing meeting.

Public Testimony on the IRCPSR Draft Management Plan:

No member(s) of the public audience submitted speaker card(s) indicating their intention to provide formal public testimony.

Adjournment:

Ms. Imlah asked if there were any other members of the public that wished to give public testimony.

No other speakers offered further comments.

Then Ms. Imlah declared the public hearing adjourned.

12.3.4 Management Prospectus

Management Prospectus

Indian River County Public Shooting Range

March 2018

Florida Fish and Wildlife Conservation Commission



Introduction

The Indian River County Public Shooting Range (IRCPSR) is located in northeastern Indian River County, approximately three miles south of the Brevard County line. The IRCPSR conserves approximately 320 acres of important habitat. Although the area is known for its public shooting range, it also consists of pineland and wet prairie habitat. Set within an increasingly urbanized region, visitors to the IRCPSR have opportunities to find solace from the nearby bustle and see a diverse assemblage of Florida's wildlife and landscape.

The IRCPSR is managed by the Florida Fish and Wildlife Conservation Commission (FWC) and Indian River County for the conservation of imperiled and more common wildlife, and for fish- and wildlife-based public outdoor recreation. The area is managed to provide a variety of recreation opportunities and to conserve the important natural communities on site that provide habitat for several wildlife species.

The IRCPSR is owned by the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees). The FWC holds the lease and has lead management authority for all resources within the established boundary. The FWC also holds a concessionaire contract with Indian River County for operation and management of the shooting range facilities. The IRCPSR is managed to conserve and restore natural wildlife habitats, and to provide high-quality opportunities for the shooting range facilities, fishing, wildlife viewing, environmental education, and other fish- and wildlife-based public outdoor recreation opportunities.

This resource and management prospectus has been developed in conformance with the requirements of Section 259. 032, Florida Statutes, to provide the Management Advisory Group stakeholders and the general public with a general understanding of, and purpose for the IRCPSR, prior to the required public hearing to solicit public input on the IRCPSR management plan.

Nearby Conservation Lands and Florida Forever Projects

Florida Fish and Wildlife Conservation Commission | Indian River County Public Shooting Range Management Plan

The IRCPSR is located in the vicinity of an extensive network of conservation lands, including lands managed by the St. John’s River Water Management District (SJRWMD), Department of Environmental Protection-Division of Recreation and Parks (DEP-DRP), Indian River County and Brevard County. Several Florida Forever projects (Figure 4), are also located in the vicinity of the area.

Tables 1 and 2 list the Florida Forever projects and conservation lands within a 10-mile radius of the IRCPSR, 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 within a 10-mile Vicinity

Project Name	GIS Acres
Archie Carr Sea Turtle Refuge	1,059.52
Brevard Coastal Scrub Ecosystem – Malabar Expansion and Walkaria/Micco Expansion	10,682.05
Brevard Coastal Scrub Ecosystem – Micco Expansion	823.54
Brevard Coastal Scrub Ecosystem – Scrub Jay Refugia - Micco	1,277.15
Brevard Coastal Scrub Ecosystem – Scrub Jay Refugia – South Babcock	619.24
Brevard Coastal Scrub Ecosystem – Scrub Jay Refugia - Valkaria	1,621.63
Brevard Coastal Scrub Ecosystem – St. Sebastian – St. Johns River Greenway	7,276.74
Indian River Lagoon Blueway	28,060.13

Table 2. Conservation Lands within a 10-mile Vicinity

Water Management District	Managing Agency
Blue Cypress Conservation Area	SJRWMD
Fellsmere Water Management Area	SJRWMD
Met Life and Wheeler Farms Parcels	SJRWMD
Sand Lakes Conservation Area	SJRWMD
Sebastian Stormwater Park	SJRWMD
Sembler Conservation Easement	SJRWMD
Three Forks Conservation Area	SJRWMD
Willowbrook Conservation Easement	SJRWMD
County/City	Managing Agency

Table 2. Conservation Lands within a 10-mile Vicinity

Ansin Tract	Indian River County
Barrier Island Ecosystem Center	Brevard County
Captain Forster Hammock Preserve	Indian River County
Fellsmere Trailhead Preserve	City of Fellsmere
Grant Flatwoods Sanctuary	Brevard County
Golden Sands Park	Indian River County
Hardwood Hammock Sanctuary	Brevard County
Louis Bonsteel III Memorial Park	Brevard County
Micco Scrub Sanctuary	Brevard County
North Sebastian Conservation Area	Indian River County
Rodney Kroegel Homestead	Indian River County
Russell Grove	Indian River County
Sebastian Harbor Preserve	Indian River County
Sebastian Scrub Conservation Area	Indian River County
Sexton Ranch Conservation Easement	Indian River County
South Babcock	Brevard County
Treasure Shores Park	Indian River County
Valkaria Expansion	Brevard County
Valkaria Scrub Sanctuary	Brevard County
Wabasso Scrub Conservation Area	Indian River County
Windmillers Parcel	Indian River County
Federal Government	Managing Agency
Archie Carr National Wildlife Refuge	USFWS
Pelican Island National Wildlife Refuge	USFWS
State of Florida	Managing Agency
Indian River Lagoon Preserve State Park	DEP-DRP
Micco Expansion	FWC
Sebastian Inlet State Park	DEP-DRP
St. Sebastian River Preserve State Park	DEP-DRP
T.M. Goodwin Waterfowl Management Area	FWC
Private/Public Conservation Organization	Managing Agency
Basin 22 Mitigation Bank	J. Pat Corrigan Family LLLP & Hugh Corrigan III Family LLLP
Mary A Ranch Mitigation Bank	B.K.I., Inc., Consulting Ecologists
Pine Island	Indian River Land Trust

Table 2. Conservation Lands within a 10-mile Vicinity

Quay Dock Road	Indian River Land Trust
Reed Cut	Indian River Land Trust
Toni Robinson Waterfront Trail	Indian River Land Trust
Winter Beach Salt Marsh	Indian River Land Trust

Acronym Key	Agency Name
DEP-DRP	Department of Environmental Protection
FWC	Florida Fish and Wildlife Conservation Commission
SJRWMD	St. Johns River Water Management District
USFWS	United States Department of Interior's Fish and Wildlife Service

Acquisition History

The IRCPSR was acquired on February 16, 1996 by the Conservation and Recreation Lands (CARL) program using Preservation 2000 funds; and the Board of Trustees currently holds the title. The FWC holds a 50-year lease on the property from the Board of Trustees (Lease No. 4148), entered into on January 22, 1998.

FWC also has a concessionaire contract with Indian River County for the operation and management of the shooting range facilities, which was entered into in March 2001, and subsequently renewed in 2016.

Purpose for Acquisition

The ISCPSR was part of the Sebastian Creek CARL project, acquired in a partnership between the CARL program and the SJRWMD. Sebastian Creek is an important aggregation site for the endangered West Indian manatee. The surrounding lands provide important buffers and contain important habitat and natural communities. The CARL project was intended to help protect the manatee and the water quality of its habitat by protecting the Sebastian Creek as well as providing substantial upland buffer. The Sebastian Creek project was originally designated as a state buffer preserve and was also intended to provide the public a large area for camping, fishing, hiking, and other pursuits. The major project area is now the St. Sebastian River Preserve State Park. The shooting range site is approximately two miles west of Sebastian Creek. The area containing the Indian River County Public Shooting Range was added to the original CARL project boundary because the owner did not want to sell just the eastern portion of his property. Use of the site adjacent to I-95 as a shooting range sustains the original intent of providing

an upland buffer for Sebastian Creek while enhancing the diversity of recreational opportunities of the overall project.

The IRCPSR is managed by the FWC and Indian River County for the purpose of operating a Public Shooting Range, providing ecological diversity, providing managed habitats for both common and imperiled wildlife, and for providing the public with fish- and wildlife-oriented outdoor recreational opportunities.

Title and Encumbrances

The Board of Trustees holds the fee title interest to all lands within the IRCPSR. The FWC is the lead management authority on all lands established within the boundary of IRCPSR, with the Indian River County as the operational manager for the public shooting range facilities. The IRCPSR has only one encumbrance, a utility easement to BellSouth Communications, Inc. (Instrument No. 30694), located near the roadway. Florida Power and Light uses the same utility easement area. Futhermore, there are no outstanding mineral rights or other interests within the established boundary.

Additional FWC management authority derives from Article IV, Section 9 of the Florida Constitution as well as the guidance and directives of Chapters 253, 259, 327, 370, 372, 375, 378, 379, 403, 487, 597, and 870 of the Florida Statutes. These laws establish the authority of the FWC with regard to protection and management of the State’s fish and wildlife resources. IRCPSR is documented as having an area of 320 acres.

Natural Resources

The natural communities for the IRCPSR were mapped using the Florida Cooperative Land Cover Map (CLC). The CLC is a cooperative effort between the FWC and the Florida Natural Areas Inventory (FNAI) to develop ecologically-based statewide land cover from existing sources and expert review of aerial photography. The CLC describes ten natural and anthropogenic community types existing on the IRCPSR, (Table 3, and Figure 5). FWC biologists, have also documented two invasive exotic plant species (Table 4) as occurring on the IRCPSR, and are currently working on compiling a native plant species list for the area. There are currently no known rare plant species occurring on the area.

Table 3. Natural Community Types on the IRCPSR

Community Type	GIS Acres	Percentage
Freshwater Forested Wetlands	13.35	4.2%
Freshwater Marshes	9.94	3.1%
Mesic Flatwoods	117.99	37.2%
Mixed Hardwood-Coniferous	12.56	4.0%
Mixed Scrub-Shrub Wetland	7.54	2.4%

Community Type	GIS Acres	Percentage
Ruderal	38.41	12.1%
Scrub	41.74	13.2%
Semi-improved pasture	0.85	>1%
Wet Flatwoods	73.23	23.1%
Wet Prairie	1.40	>1%

Table 4. Exotic Invasive Plant Species Known to Occur on the IRCPSR

Common Name	Scientific Name	FLEPPC Category
Brazilian peppertree	<i>Schinus terebinthifolius</i>	I
Cogon grass	<i>Imperata cylindrica</i>	I
Old-world climbing fern	<i>Lygodium microphyllum</i>	I

Natural Community Descriptions

Freshwater Forested Wetlands (~13.35 acres)

Freshwater forested wetlands are floodplains or depressions primarily dominated by hydrophytic trees. This type of community can include dome, basin, and floodplain swamps, baygall, hydric hammock, bottomland forest, and alluvial forest. This community on the IRCPSR has not yet been surveyed.

Freshwater Marshes (~9.94 acres)

Freshwater marshes are associated with freshwater non-forested wetlands which are herbaceous or shrubby palustrine communities in floodplains or depressions, and sometimes include canopy trees, but are often sparse and stunted. Freshwater marshes have a long hydroperiod and are dominated by grasses, sedges, broadleaf emergent, floating aquatics or shrubs.

Mesic Flatwoods (~117.99 acres)

Mesic flatwoods historically were the most widespread natural community in Florida, covering the flat sandy terraces left behind by former high sea levels. Mesic flatwoods are open, pine forests with a diverse understory of shrubs and herbs occurring on low, flat terrain. Soils are acidic, nutrient-poor, fine sands with upper layers darkened by organic matter. Drainage in this flat terrain can be impeded by a loosely cemented organic layer (spodic horizon) formed within several feet of the soil surface. The soils may be alternately xeric during dry periods, and saturated or even inundated after heavy rain events. Fire is an important factor in maintaining high plant diversity and naturally occurs primarily during the late spring/early summer lightning season.

At IRCPSR, mesic flatwoods make up about a third of the area. To the north, the mesic flatwoods are commonly restricted to wide borders around marshes. The canopy is dominated by longleaf pine or slash pine, although pines may be sparse or even absent in some areas. In addition to saw palmetto, the herbaceous layer is diverse.

Mixed Hardwood – Coniferous (~12.56 acres)

Mixed hardwood can be classified within several natural community types such as successional hardwood forest, upland hardwood forest, mesic hammock, baygall, and others. Since there has not been any community mapping on the area, the natural communities are distinguished based on aerial data. This community is primarily found on the western boundary of the area. This type of area may occur on high ground within basin or floodplain wetlands, as patches of oak/palm forest in dry prairie or flatwoods communities, on river levees, or in ecotones between wetlands and upland communities. Historically, mesic hammocks were likely restricted to naturally fire-protected areas such as islands and peninsulas of lakes.

Other landscape positions that can provide protection from the spread of fire from one or more directions are thus likely places for this type of community development. These include edges of lakes, sinkholes, other depressional or basin wetlands, and river floodplains. Soils of this type of community are sands mixed with organic matter and may have a thick layer of leaf litter. Rock outcrops are common in some hammocks, especially where limestone is near the surface, and occupy soils that, although well-drained, maintain high moisture by heavy shading of the ground layer and accumulation of litter.

Mixed Scrub-Shrub Wetland (~ 7.54 acres)

Similar to the scrub community, this area composed of evergreen, xerophytic shrubs, with or without a canopy of pines, and is found on dry, infertile, sandy ridges. Found in a small area just west of the shooting range facilities, this community on the IRCPSR has not yet been surveyed.

Scrub (~ 41.74 acres)

Scrub is a community composed of evergreen, xerophytic shrubs, with or without a canopy of pines, and is found on dry, infertile, sandy ridges. Scrub communities dominated by a canopy of sand pine are usually found on the highest sandy ridgelines. The pine canopy may range from widely scattered trees with a short, spreading growth form, to tall thin trees forming a dense canopy of uniform height. Scrub is located on dry, infertile, sandy ridges which often mark the location of former shorelines. Scrub occurs in many forms, but is often characterized by thickets of scrub oaks and other shrubs occurring on xeric, sandy

soils with numerous open patches of barren sand. The ground cover is generally very sparse, and is typically dominated by ground lichens or, rarely, herbs. At IRCPSR, saw palmetto may be common as well as other, more scrubby, shrubs.

Wet Flatwoods (~ 73.23 acres)

Wet flatwoods occur in broad, low flatlands, often in a mosaic with these communities. They are found in the ecotones between mesic flatwoods, shrub bogs, wet prairies, dome swamps, or strand swamps. Wet flatwoods are pine forests with a sparse or absent midstory and a dense groundcover of hydrophytic grasses, herbs, and low shrubs. The relative density of shrubs and herbs varies greatly in wet flatwoods. Shrubs tend to dominate where fire has been absent for a long period or where cool season fires predominate; herbs are more abundant in locations that are frequently burned. Soils and hydrology also influence the relative density of shrubs and herbs. Soils of shrubby wet flatwoods are generally poorly to very poorly drained sands. These soils generally have a mucky texture in the uppermost horizon. Loamy sands are typical of soils in grassy wet flatwoods.

At IRCPSR, wet flatwoods make up about 20% of the area. They are found in the ecotones between mesic flatwoods. Wet flatwoods are pine forests with a sparse or absent midstory and a dense groundcover of hydrophytic grasses, herbs, and low shrubs. The relative density of shrubs and herbs varies greatly in wet flatwoods. Shrubs tend to dominate where fire has been absent for a long period or where cool season fires predominate; herbs are more abundant in locations that are frequently burned. Soils and hydrology also influence the relative density of shrubs and herbs. Soils of shrubby wet flatwoods are generally poorly to very poorly drained sands. These soils generally have a mucky texture in the uppermost horizon. Loamy sands are typical of soils in grassy wet flatwoods. Wet flatwoods typically have an open pine canopy with an understory of hydrophytic herbs and shrubs. Wet flatwoods that burn frequently typically have a sparse understory and a dense complement of herbs and smaller shrubs. Conversely, thick, shrubby understory layers tend to suppress groundcover plants.

Wet Prairie (~ 1.40 acre)

Wet prairies are nearly treeless flatlands dominated by wiregrass or wiry beaksedges with a diverse assemblage of hydrophytic herbs, grasses, and dwarf shrubs. Wet prairie is an herbaceous community found on continuously wet, but not inundated, soils of gentle slopes between lower lying depression marshes, shrub bogs, or dome swamps, and slightly higher wet or mesic flatwoods, or dry prairie. Wet prairies are grass- and sedge-dominated wetlands maintained by a high or perched ground water table and frequent fires. They also occur in narrow seepage zones of saturated soil at the base of gentle slopes of stream

drainages and in flat lowlands. Wet prairie usually occurs on acidic, nutrient-deficient, saturated soils.

At IRCPSR, only one area of wet prairie was located. This small patch (~1.40 acre) of prairie vegetation was located on the southern portion of the area.

Altered Community Descriptions

Ruderal (~38.41)

Ruderal can also be referred to as developed area. This can include check stations, parking lots, buildings, maintained lawns (as part of recreational, business, or residential areas), botanical or ornamental gardens, campgrounds, and recreational, industrial and residential areas. Ruderal communities are primarily found on the shoreline access parcels associated with the area, and include offices, parking lots, and maintained areas.

Pasture – Semi-improved (<1 acres)

Semi-improved pasture areas include a mix of pasture grasses and native groundcover species. The sparse and infrequent canopy layer includes sand pine, South Florida slash pine, longleaf pine, and sand live oak. The latter was also the primary subcanopy species. Semi-improved pasture occupies what was historically mesic flatwoods, scrubby flatwoods, and wet flatwoods at IRCPSR.

Fish and Wildlife

Integrated Wildlife Habitat Ranking System

The FWC has developed the Integrated Wildlife Habitat Ranking System (IWHRS) as a Geographic Information Systems (GIS)-based assessment tool that incorporates a wide variety of land cover and wildlife species data. The IWHRS evaluates the Florida landscape based upon the habitat needs of wildlife as a way to identify ecologically significant lands in the state, and to assess the potential impacts of management and land-use changes. The IWHRS was developed to provide technical assistance to various local, regional, state, and federal agencies, and entities interested in wildlife needs and conservation in order to: (1) determine ways to avoid or minimize project impacts by evaluating alternative placements, alignments, and transportation corridors during early planning stages, (2) assess direct, secondary, and cumulative impacts to habitat and wildlife resources, and (3) identify appropriate parcels for public land acquisition for wetland and upland habitat mitigation purposes. The IWHRS (2009) indicates that the IRCPSR has a mean wildlife value of 5.8. The FWC's IWHRS map for the IRCPSR is shown in Figure 8.

Rare and Imperiled Species

As described above, the IRCPSR has a variety of natural communities and habitat types that support a wide array of imperiled, rare, and more common wildlife species. Active wildlife management practices and the high quality of habitat make the IRCPSR an excellent place to view wildlife. The IRCPSR’s mesic and wet flatwoods, marshes, and other communities provide critical habitat for resident and migratory wildlife.

Table 5 lists the focal and imperiled wildlife species that have been documented on the area or have been documented on adjacent areas and have the potential to occur on the IRCPSR. Figure 6 displays FWC wildlife observations and FNAI element occurrences that have been documented within the IRCPSR. 19 imperiled animal species have been documented at the IRCPSR or on adjacent lands.

Additionally, the FWC is working to compile an inventory of native fauna, amphibians and reptiles, birds, and mammals occurring on or near the IRCPSR. Table 7 contains an inventory of the exotic wildlife species that have been documented on or near the IRCPSR.

At its November, 2016, Commission meeting, the FWC approved Florida’s Imperiled Species Management Plan (<http://myfwc.com/wildlifehabitats/imperiled/plan/>), which included changes to the listing status for many wildlife species. Subsequent rule changes (68A-27.003 and 68A-27.005 FAC) reflecting changes came into effect in January, 2017. All federally listed species that occur in Florida are included in Florida’s Endangered and Threatened Species list (<http://myfwc.com/media/1515251/threatened-endangered-species.pdf>) as federally-designated Endangered or federally-designated Threatened. Species that are not federally listed, but which have been identified by FWC as being at some level of risk of extinction, are listed as state-designated Threatened. Additionally, the FWC continues to maintain a separate Species of Special Concern category. This category was reviewed as part of Florida’s Imperiled Species Management Plan, with the majority of the species previously contained within the category either being removed from Florida’s Endangered and Threatened Species list due to conservation success, or had their status changed to state-designated Threatened.

Table 6. Imperiled and Focal Wildlife Species occurring on or near the IRCPSR

Common Name	Scientific Name	Status
American alligator	<i>Alligator mississippiensis</i>	FT (S/A)
Audubon's crested caracara	<i>Polyborus plancus audubonii</i>	FT
Bald eagle	<i>Haliaeetus leucocephalus</i>	NL
Black skimmer	<i>Rynchops</i>	ST
Florida burrowing owl	<i>Athene cunicularia floridanus</i>	ST

Table 6. Imperiled and Focal Wildlife Species occurring on or near the IRCPSR

Eastern indigo snake	<i>Drymarchon corais couperi</i>	FT
Everglade snail kite	<i>Rostrhamus sociabilis plumbeus</i>	FE
Florida brown snake	<i>Storeria victa</i>	ST
Florida sandhill crane	<i>Antigone canadensis pratensis</i>	ST
Florida scrub-jay	<i>Aphelocoma coerulescens</i>	FT
Gopher tortoise	<i>Gopherus Polyphemus</i>	ST
Florida grasshopper sparrow	<i>Ammodramus savannarum floridanus</i>	FE
Least tern	<i>Sternula antillarum</i>	ST
Little blue heron	<i>Egretta caerulea</i>	ST
Roseate spoonbill	<i>Platalea ajaja</i>	ST
Southeastern American kestrel	<i>Falco sparverius paulus</i>	ST
Swallow-tailed kite	<i>Elanoides forficatus</i>	NL
Tricolored heron	<i>Egretta tricolor</i>	ST
Woodstork	<i>Mycteria americana</i>	FT

Abbreviation	Status
FE	Federal Endangered
FT	Federal Threatened
F(XN)	Federally Listed as an experimental population in Florida
FT(S/A)	Federally Threatened due to similarity of appearance
SSC	State Species of Special Concern
ST	State Threatened
NL	Not Listed

Table 7. Exotic Animal Species Known or Expected to Occur on the IRCPSR

Common Name	Scientific Name
Feral hog	<i>Sus scrofa</i>

Management Intent

The IRCPSR is managed by the FWC and Indian River County in conformance with the original purpose for acquisition to conserve, protect, and restore cultural resources, landscapes, forests, watershed and water resources, and other elements important to ecosystem functions of the area, and maintain the shooting range activities on the area.

Also, to provide recreational opportunities that are compatible with the primary purpose of conservation and management of the area's natural resources. Management of wildlife on the IRCPSR includes efforts designed to perpetuate all species of wildlife native to the area. The FWC uses a comprehensive resource management approach to managing FWC-managed areas. Restoring the form and function of Florida's natural communities is the foundation of this management philosophy. Management can be adapted to best accomplish the management objective for each natural community. Management objectives, which apply to several vegetation communities, or the entire management area, may also be developed through a similar process.

Conditions Affecting Intensity of Management

The natural and historical resources described in this management prospectus that occur at the IRCPSR exemplify varying conditions and composition that affect the ongoing intensity and frequency of management activities necessary to effectively manage the area. 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 have been identified, and are being appropriately managed, and protected.

Ecological restoration of ground cover and control of invasive species will be used as determined appropriate, as such, resource management projects may be necessary to accomplish restoration objectives established 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 the IRCPSR may also affect the attainment of resource conservation goals for the area, and the application and overall effectiveness of necessary ongoing resource management projects such prescribed burning and exotic species treatments.

IRCPSR Management Plan

The IRCPSR management plan focuses on ecosystem management, the protection and management of focal species, species of special concern, and rare and imperiled species, and the maintenance of the recreational activities. 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 IRCPSR. The use of prescribed fire and other resource management activities shall continue to be implemented in order to maintain and restore natural communities and vegetation types to benefit native wildlife resources. Hydrological restoration may also be implemented where it is appropriate and feasible.

Timetable for Implementing Management Provisions

A Habitat Management Plan was complete for IRCPSR in August 2008. An updated management plan is being developed for the area, which will establish 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 actions on the IRCPSR. The management plan also establishes the current and future roles of cooperating entities including governmental agencies, non-governmental organizations, and other stakeholders.

Estimate of Economic Potential

An FWC economic analysis indicates that the IRCPSR could generate an estimated annual economic impact, primarily through visitation, of \$13,424,375 for the State and Northcentral Florida region if the visitation levels were to ever reach the carrying capacity of 470 visitors per day. If that level of visitation occurred, the estimated annual economic impact has aided in the creation of an estimated 234 jobs. However, it should be noted that the FWC and Indian River County are working to update the current carrying capacity to better reflect visitation.

Further potential of the IRCPSR will depend upon future uses to be approved in the management plan. Additional economic impact from environmental lands such as the IRCPSR might include sales of various permits and recreational user fees and ecotourism activities, if such projects could be economically developed. 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, through the protection of air and water quality are expected to be significant. The legislature appropriates funds for land management.

Recommendations as to Other Governmental Agency Involvement

The FWC and Indian River County will continue to cooperate with other state and local governmental agencies including the Department of Environmental Protection, the St. Johns River Water Management District, City of Fellsmere, and the Indian River County School Board in management and utilization of the property.

Estimate of Costs

The following is an estimate of costs to optimally operate and manage the IRCPSR under the IRCPSR Management Plan. Given the types of management activities required for the area and the total number of acres within the area, 15 full-time equivalent (FTE) positions would be necessary to optimally manage the IRCPSR. Salary requirements for this FTE position, as well as those of other needed FWC staff, and costs to operate and manage the IRCPSR are reflected in the cost estimates below. All land management funding is dependent upon annual legislative appropriations.

IRCPSR Management Plan Cost Estimate
Maximum expected one year expenditure

<u>Resource Management</u>	<u>Expenditure</u>	<u>Priority</u>	Priority schedule:
Exotic Species Control	\$28,884	(1)	(1) Immediate (annual)
Prescribed Burning	\$11,453	(1)	(2) Intermediate (3-4 years)
Cultural Resource Management	\$0	(1)	(3) Other (5+ years)
Timber Management	\$0	(1)	
Hydrological Management	\$7,081	(1)	
Other (Restoration, Enhancement, Surveys, Monitoring, etc.)	\$27,904	(1)	
Subtotal	\$75,322		
<u>Administration</u>			
General administration	\$136,614	(1)	
<u>Support</u>			
Land Management Planning	\$21,563	(1)	
Land Management Reviews	\$28,249	(3)	
Training/Staff Development	\$12,546	(1)	
Equipment Purchase	\$931	(2)	
Vehicle Operation and Maintenance	\$0	(1)	
Other (Technical Reports, Data Management, etc.)	\$16,301	(1)	
Subtotal	\$79,590		
<u>Capital Improvements</u>			
New Facility Construction	\$96,871	(2)	
Facility Maintenance	\$5,855	(1)	
Subtotal	\$102,726		
<u>Visitor Services/Recreation</u>			
Info./Education/Operations	\$635,915	(1)	
<u>Law Enforcement</u>			
Resource protection	\$292	(1)	
<u>Total</u>	\$1,030,459	*	

* Based on the characteristics and requirements of this area, 15 FTE positions would be optimal to fully manage this area. All land management funding is dependent upon annual legislative appropriations.

IRCPSR Management Plan Cost Estimate

Ten-year projection

<u>Resource Management</u>	<u>Expenditure</u>	<u>Priority</u>	Priority schedule:
Exotic Species Control	\$253,774	(1)	(1) Immediate (annual)
Prescribed Burning	\$100,628	(1)	(2) Intermediate (3-4 years)
Cultural Resource Management	\$0	(1)	(3) Other (5+ years)
Timber Management	\$0	(1)	
Hydrological Management	\$62,219	(1)	
Other (Restoration, Enhancement, Surveys, Monitoring, etc.)	\$245,166	(1)	
Subtotal	\$661,786		
<u>Administration</u>			
General administration	\$1,200,305	(1)	
<u>Support</u>			
Land Management Planning	\$189,452	(1)	
Land Management Reviews	\$80,866	(3)	
Training/Staff Development	\$110,232	(1)	
Equipment Purchase	\$3,277	(2)	
Vehicle Operation and Maintenance	\$0	(1)	
Other (Technical Reports, Data Management, etc.)	\$143,223	(1)	
Subtotal	\$527,051		
<u>Capital Improvements</u>			
New Facility Construction	\$279,810	(2)	
Facility Maintenance	\$51,442	(1)	
Subtotal	\$331,252		
<u>Visitor Services/Recreation</u>			
Info./Education/Operations	\$5,587,217	(1)	
<u>Law Enforcement</u>			
Resource protection	\$2,568	(1)	
<u>Total</u>	\$8,310,178	*	

* Based on the characteristics and requirements of this area, 15 FTE positions would be optimal to fully manage this area. All land management funding is dependent upon annual legislative appropriations.

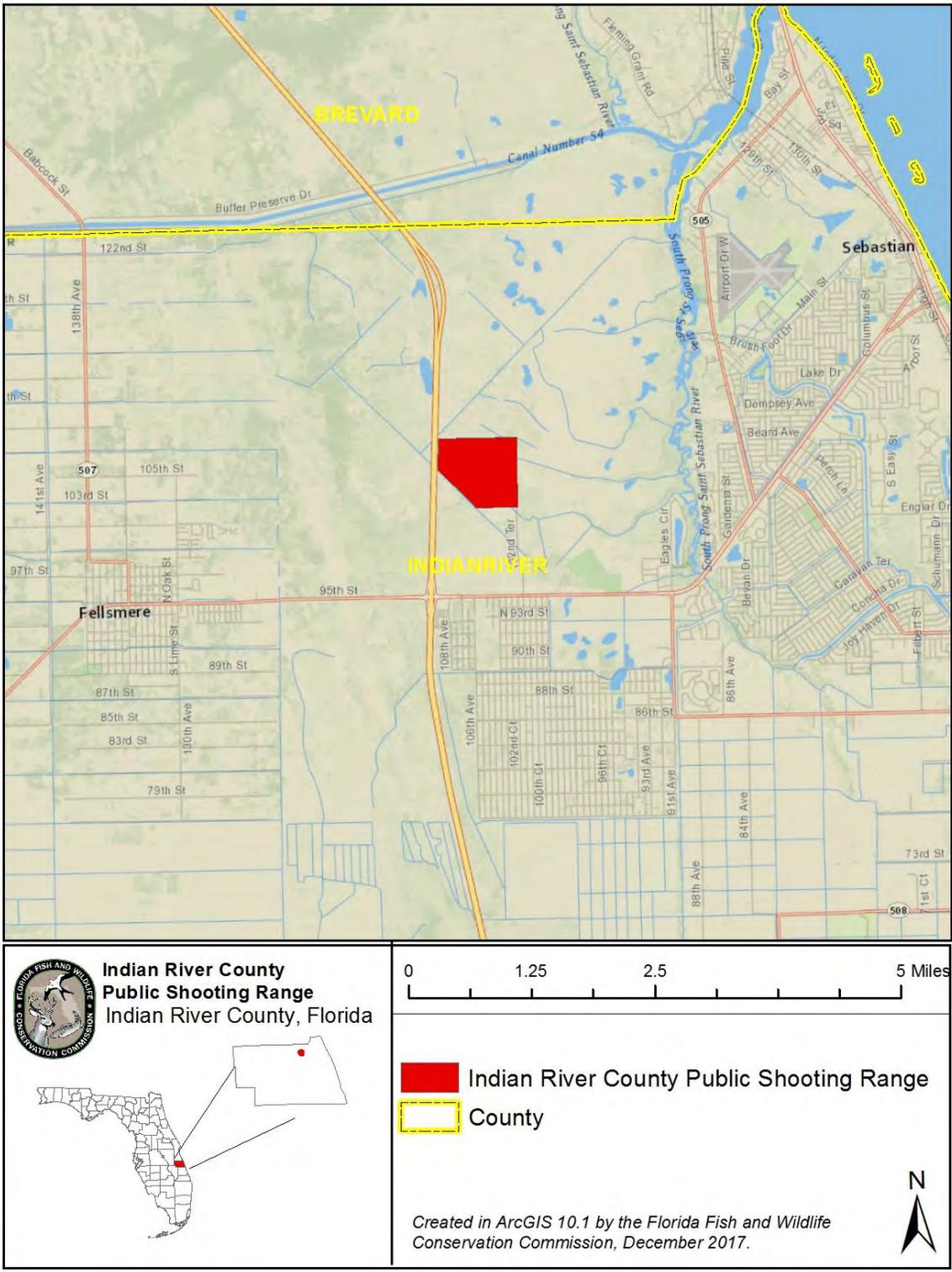


Figure 1. General Location of the IRCPSR

Florida Fish and Wildlife Conservation Commission | Indian River County Public Shooting Range Management Plan

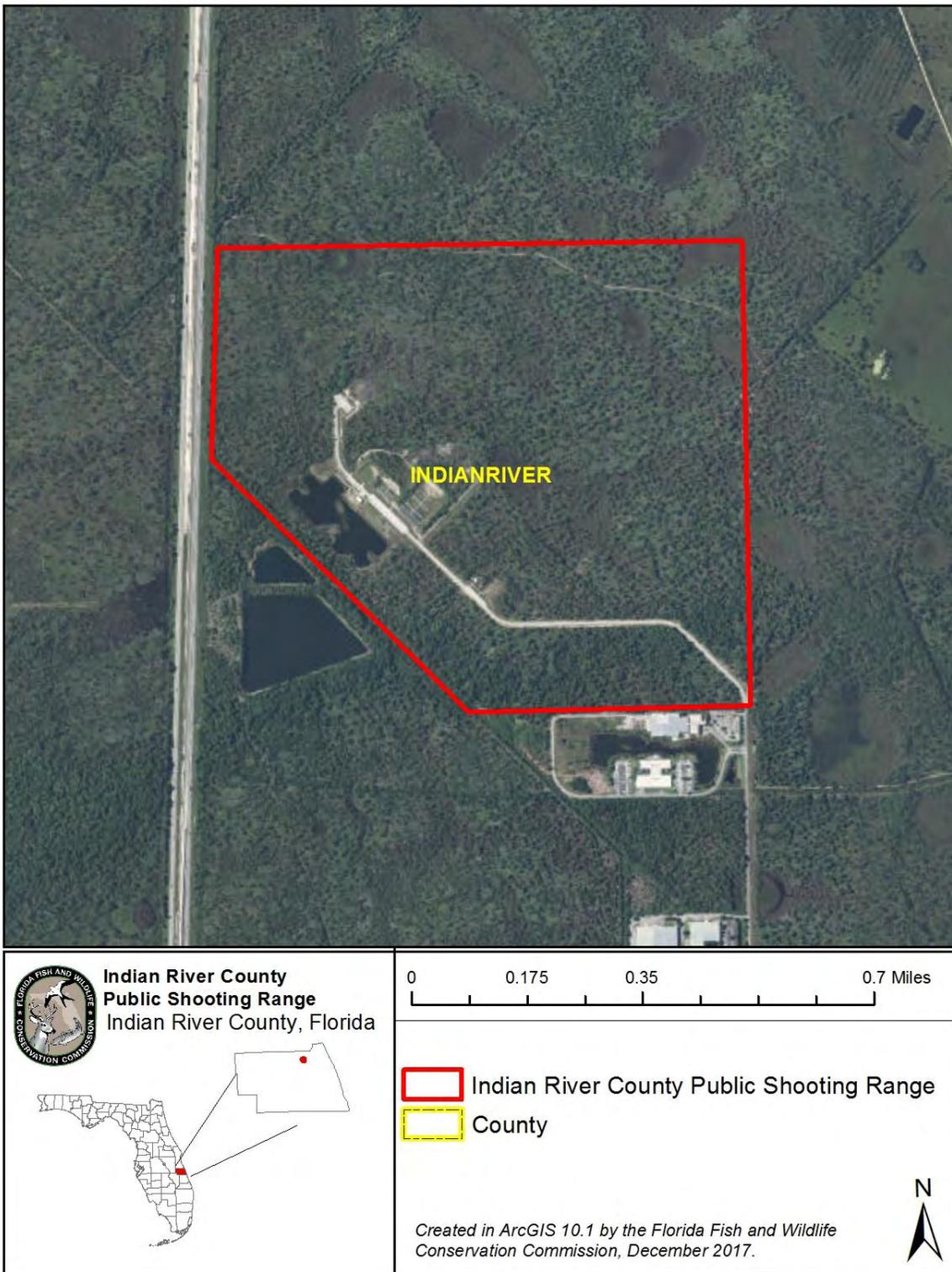


Figure 2. Aerial Boundary of the IRCPSR

Florida Fish and Wildlife Conservation Commission | Indian River County Public Shooting Range Management Plan

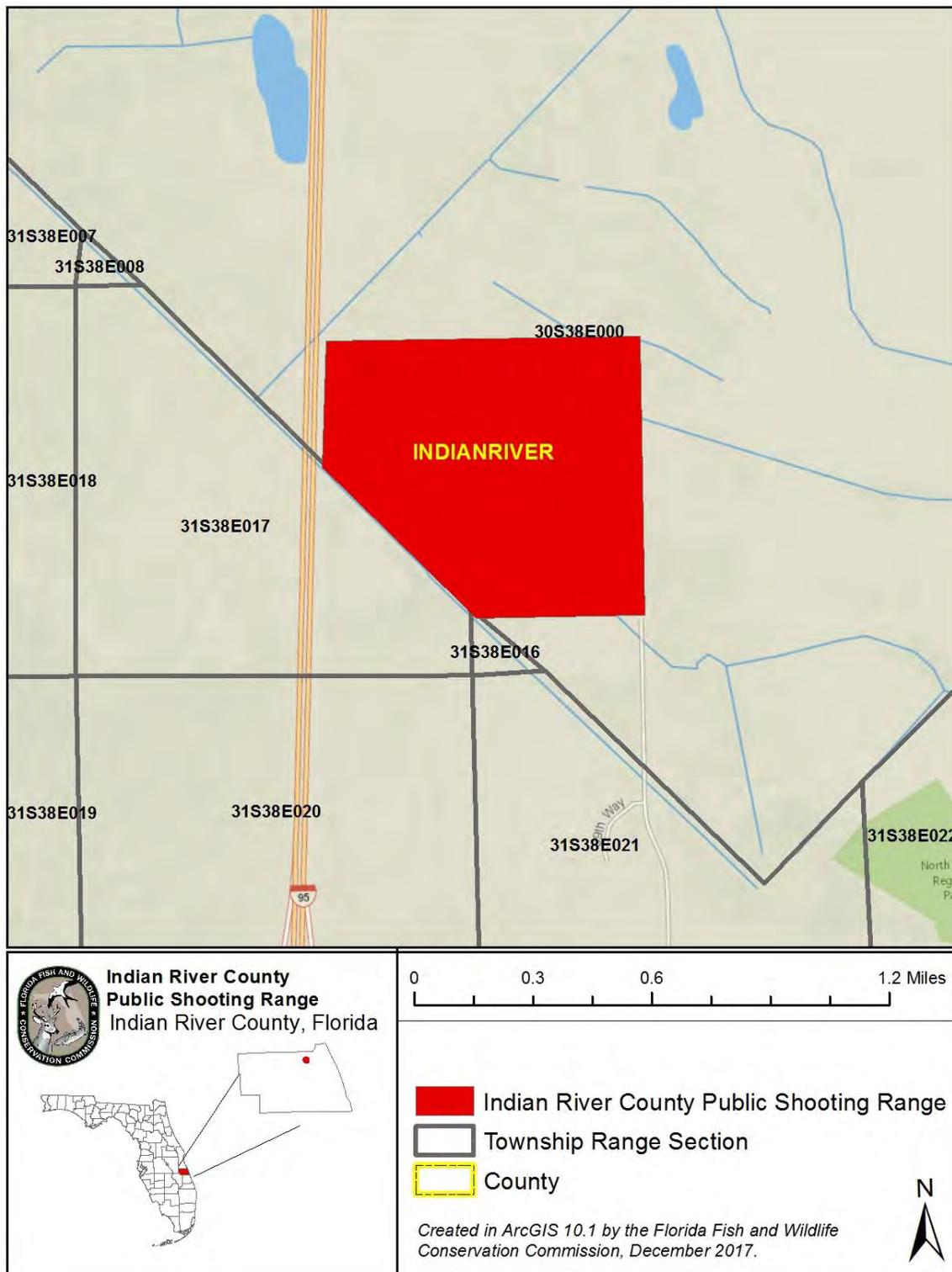


Figure 3. IRCPSR Proximity Map with Section, Township, and Range

Florida Fish and Wildlife Conservation Commission | Indian River County Public Shooting Range Management Plan

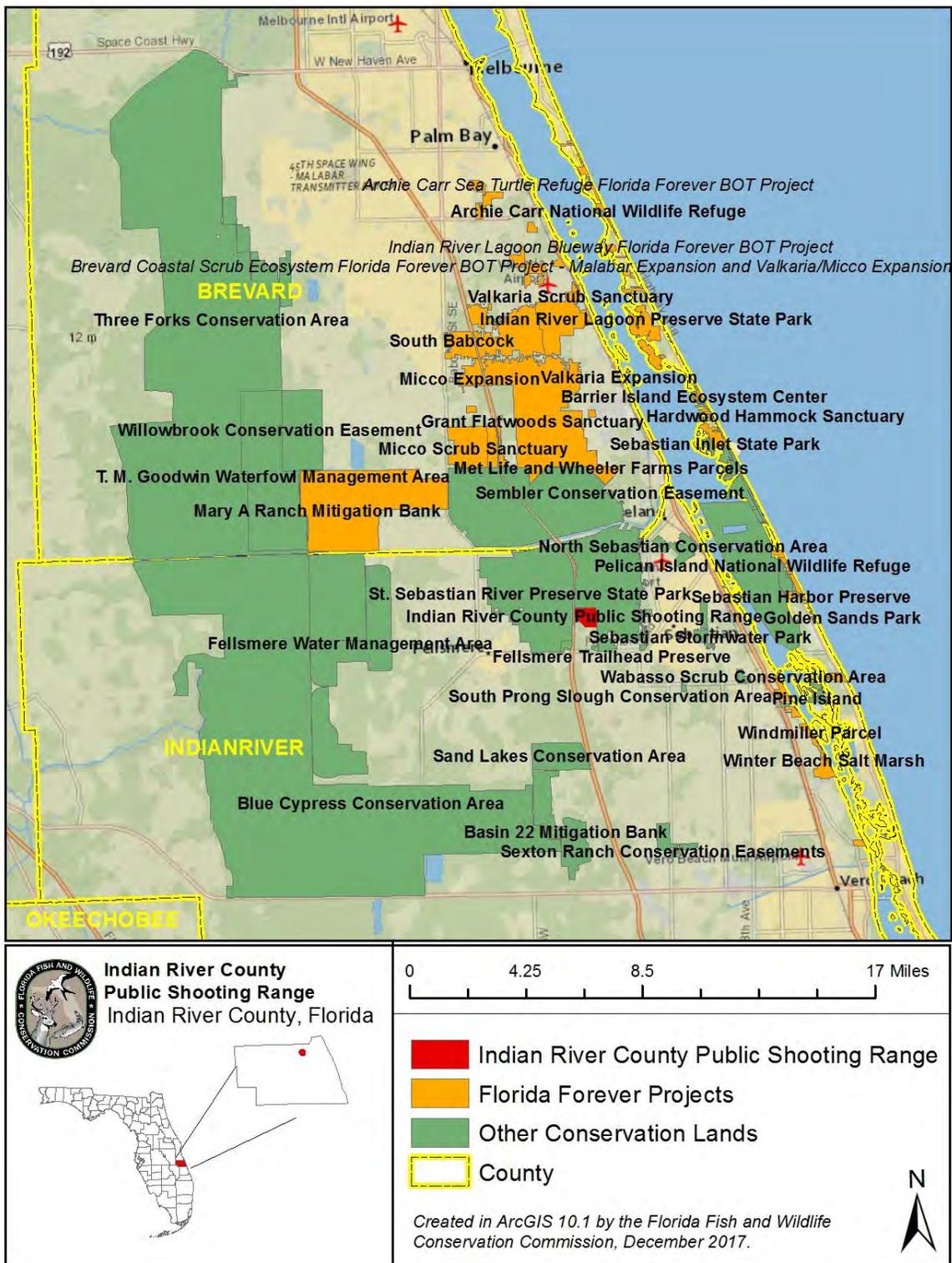


Figure 4. Nearby Conservation Land and Florida Forever Projects

Florida Fish and Wildlife Conservation Commission | Indian River County Public Shooting Range Management Plan

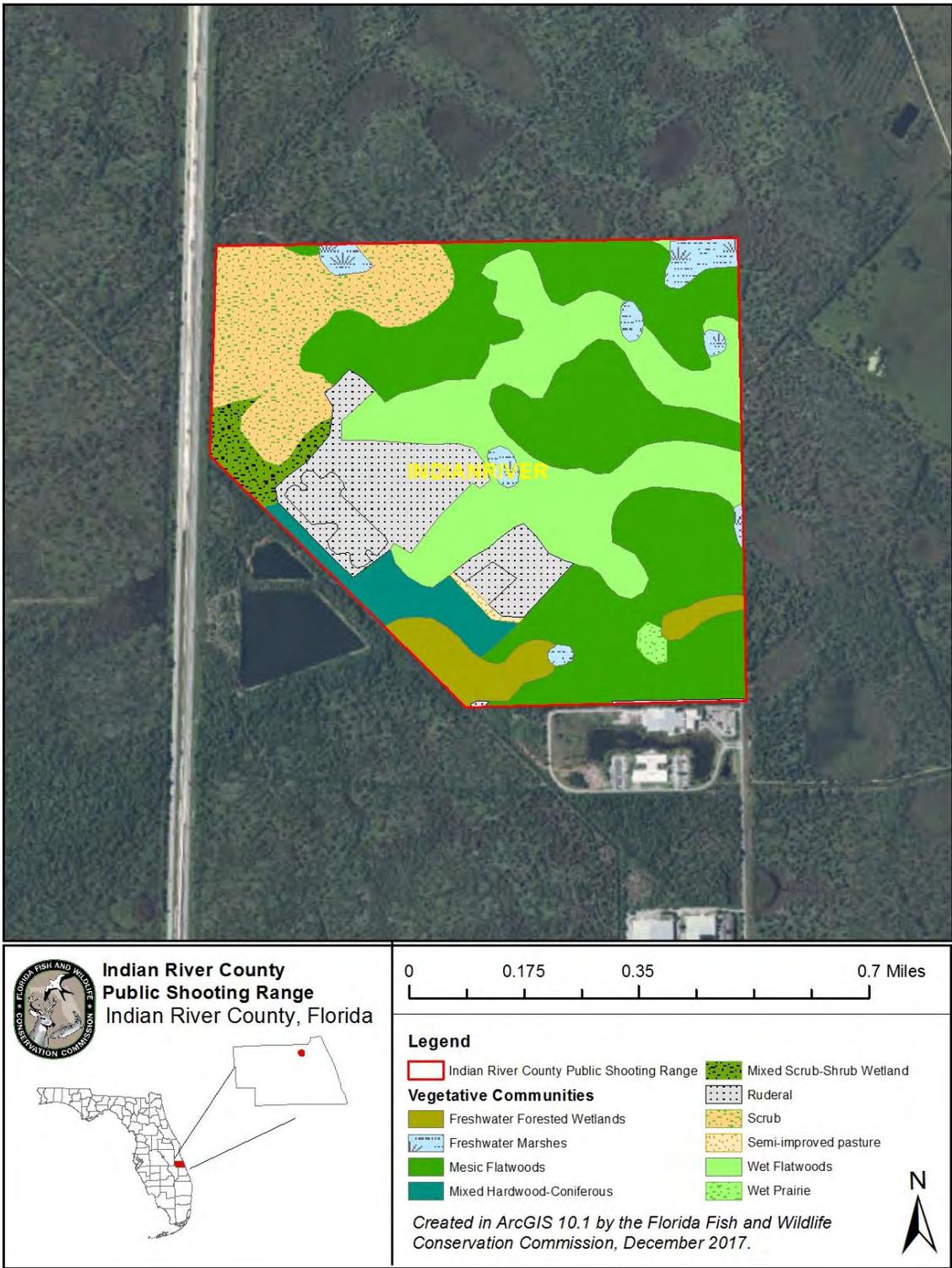


Figure 5. Natural Communities Found on the IRCPSR

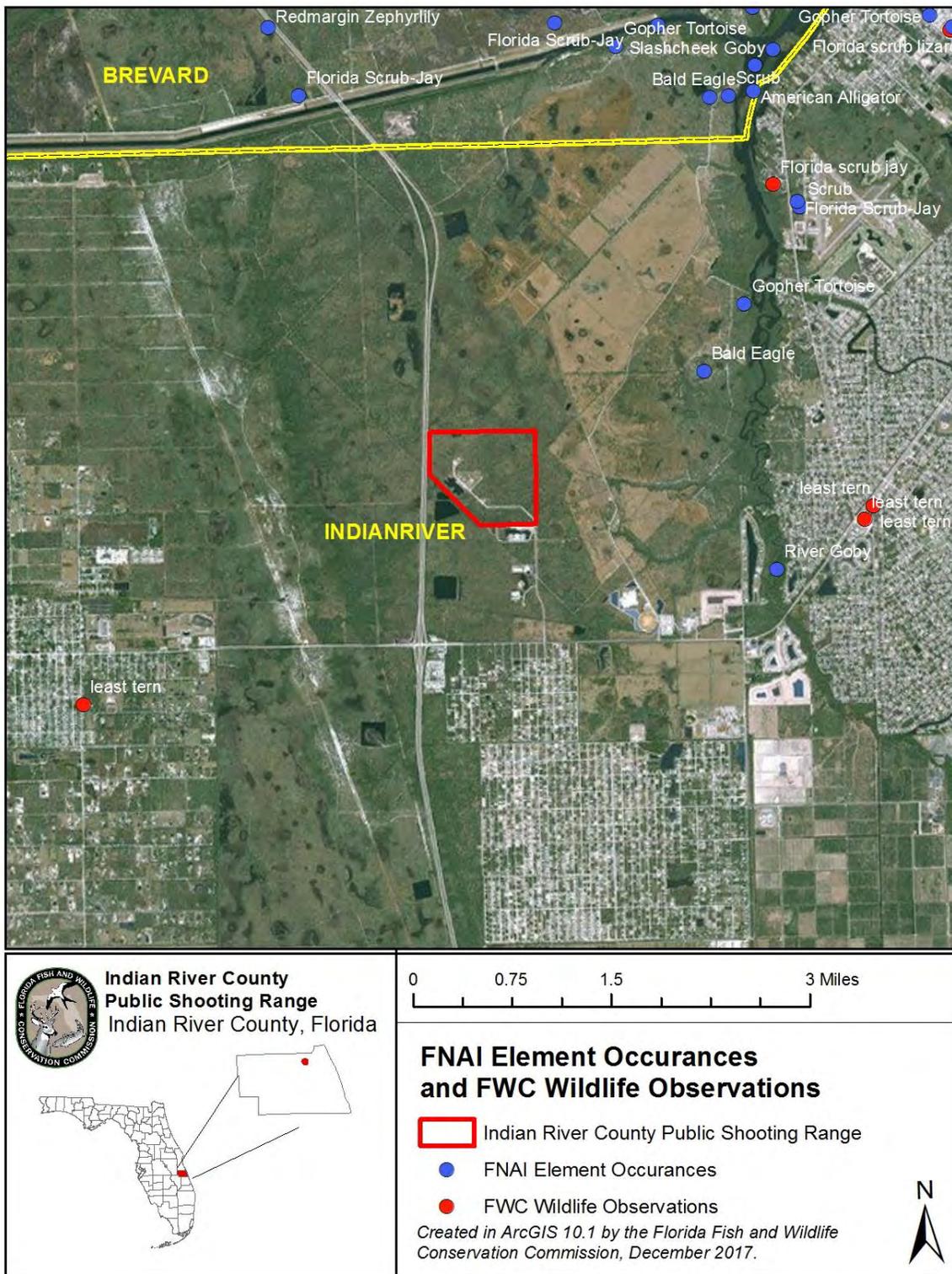


Figure 6. FWC Wildlife Observations and FNAI Element Occurances

Florida Fish and Wildlife Conservation Commission | Indian River County Public Shooting Range Management Plan

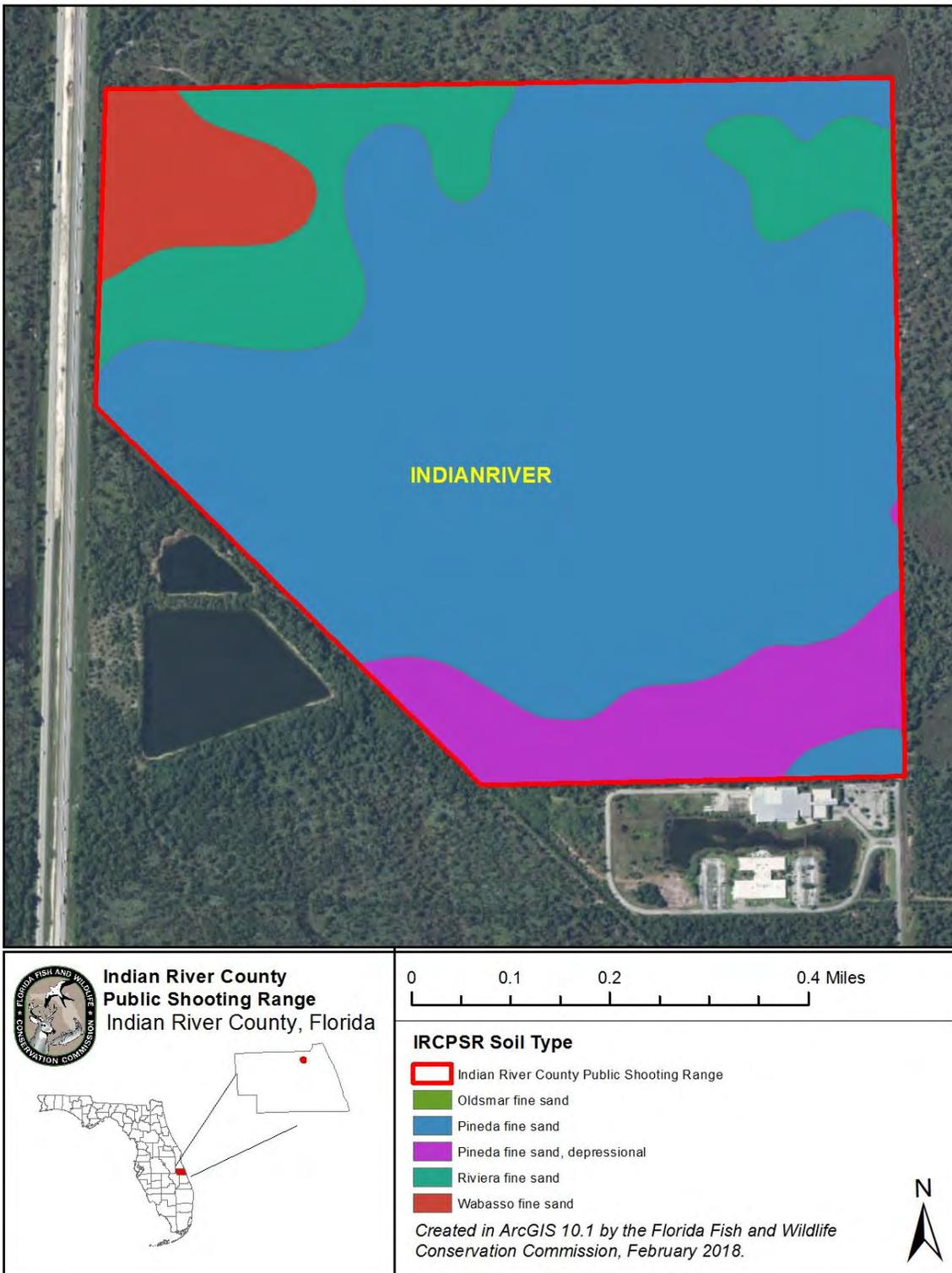


Figure 7. IRCPSR Soil Types

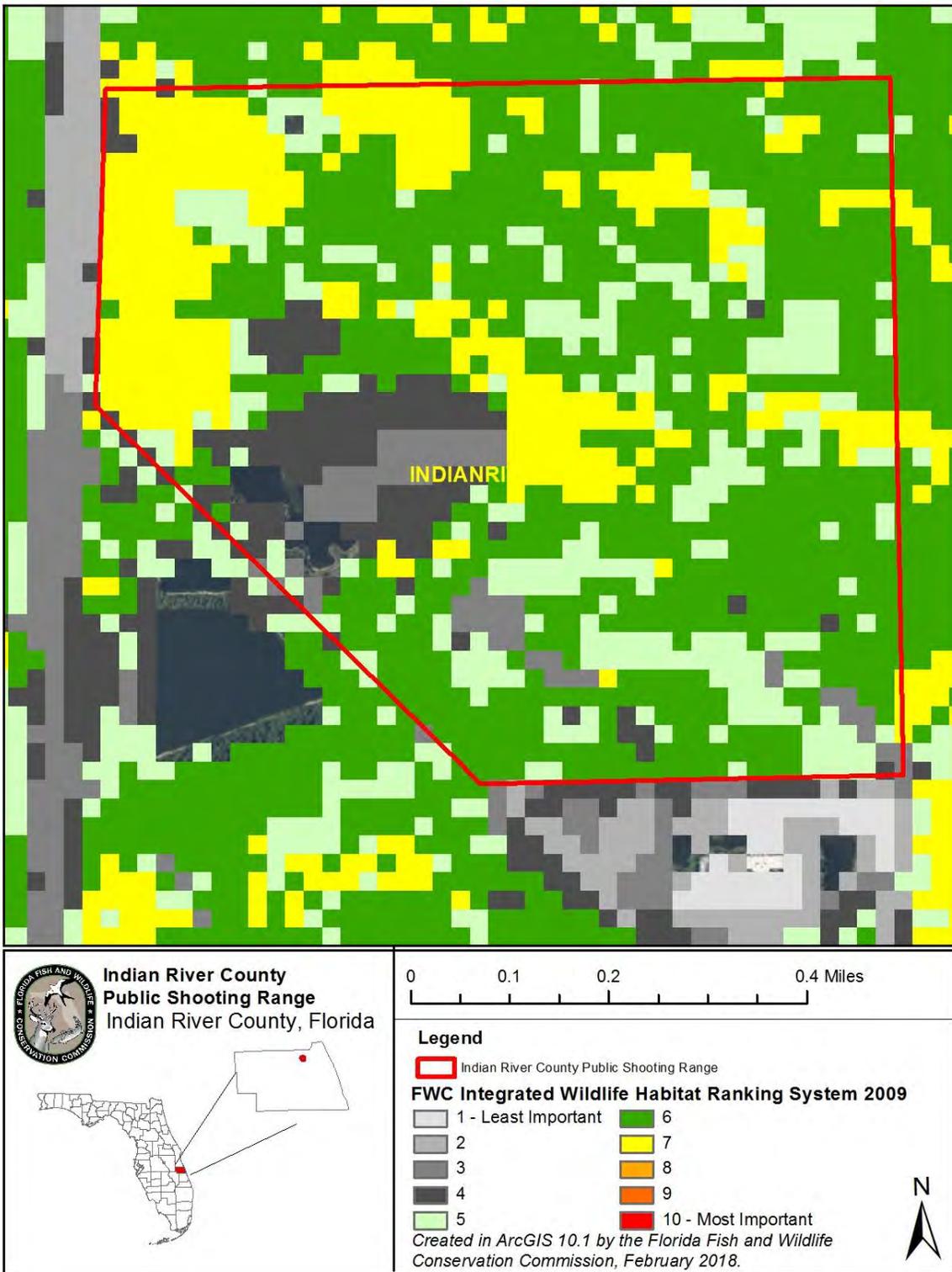


Figure 8. IRCPSR Integrated Wildlife Habitat Ranking

Florida Fish and Wildlife Conservation Commission | Indian River County Public Shooting Range Management Plan

12.4 Soil Series Descriptions

Map Unit Description

Indian River County, Florida

[Minor map unit components are excluded from this report]

Map unit: 6 - Oldsmar fine sand

Component: Oldsmar, non-hydric (80%)

The Oldsmar, non-hydric component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 3 percent. This component is in the R155XY003FL South Florida Flatwoods ecological site. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: Oldsmar, hydric (10%)

The Oldsmar, hydric component makes up 10 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during June, July, August, September. Organic matter content in the surface horizon is about 3 percent. This component is in the R155XY003FL South Florida Flatwoods ecological site. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 10 - Riviera fine sand

Component: Riviera (85%)

The Riviera component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on drainageways on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 3 inches during June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 1 percent. This component is in the R155XY005FL Cabbage Palm Flatwoods ecological site. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 13 - Wabasso fine sand

Component: Wabasso, non-hydric (70%)

The Wabasso, non-hydric component makes up 70 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 2 percent. This component is in the R155XY003FL South Florida Flatwoods ecological site. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Component: Wabasso, hydric (20%)

The Wabasso, hydric component makes up 20 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August. Organic matter content in the surface horizon is about 2 percent. This component is in the R155XY003FL South Florida Flatwoods ecological site. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map Unit Description

Indian River County, Florida

Map unit: 16 - Pineda fine sand

Component: Pineda (85%)

The Pineda component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on drainageways on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 3 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 4 percent. This component is in the R155XY011FL Slough ecological site. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 56 - Pineda fine sand, depressional

Component: Pineda, depressional (90%)

The Pineda, depressional component makes up 90 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 3 inches during June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 5 percent. This component is in the R155XY010FL Freshwater Marshes And Ponds ecological site. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map Unit Description

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

12.5 FNAI Element Occurrence Data Usage Letter



1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
850-224-8207
fax 850-681-9364
www.fnai.org

April 11, 2014

David Alden
Land Conservation & Planning
Florida Fish and Wildlife Conservation Commission
Tallahassee, FL

Dear David,

By virtue of this letter we are updating and continuing our agreement that it is unnecessary for your office to request FNAI element occurrence data for each land management plan you prepare, under the following conditions:

- FNAI will continue to provide our Florida Element Occurrence GIS database to FWC on a quarterly update basis;
- The FNAI GIS data will be available to FWC staff for reference and incorporation as required in management plan review and preparation.

Our database manager, Frank Price, currently provides this update via ftp to FWC staff on a quarterly basis. Current FWC contacts for the quarterly update are Beth Stys and Ted Hoehn. We are pleased to continue this beneficial collaboration with the Florida Fish and Wildlife Conservation Commission.

Sincerely,

Gary Knight
Director
Florida Natural Areas Inventory



Florida Resources
and Environmental
Analysis Center

Institute of Science
and Public Affairs

The Florida State University

Tracking Florida's Biodiversity

Florida Fish and Wildlife Conservation Commission | Indian River County Public Shooting
Range Management Plan

12.6 FWC Agency Strategic Plan

Florida Fish and Wildlife Conservation Commission Agency Strategic Plan 2014 – 2019

Theme One – Florida’s Fish and Wildlife Populations and Their Habitats

Goal 1: Ensure the sustainability of Florida’s fish and wildlife populations.

Strategies:

1. Manage listed species so they no longer meet Florida’s endangered and threatened listing criteria.
2. Manage species to keep them from meeting Florida’s endangered and threatened listing criteria.
3. Anticipate and address fish and wildlife species’ conservation needs in light of adaptation to long-term environmental changes.
4. Develop, acquire and apply the appropriate biological and sociological science to inform fish and wildlife conservation decisions.
5. Inform and guide partners regarding how their regulations, policies, procedures and other actions affect fish and wildlife conservation.
6. Protect fish and wildlife species through effective outreach and enforcement.

Goal 2: Ensure sufficient habitats exist to support healthy and diverse fish and wildlife populations.

Strategies:

1. Use science to determine quantity, quality and location of the habitats most critical to sustain healthy and diverse fish and wildlife populations.
2. Protect lands and waters critical to sustaining healthy and diverse fish and wildlife populations through diverse incentive programs.
3. Manage habitats to sustain healthy and diverse fish and wildlife populations.

Theme Two – Interactions with Fish and Wildlife, including Fishing, Hunting, Boating and Wildlife Viewing Opportunities

Goal 1: Provide residents and visitors with quality fishing, hunting, boating and wildlife viewing opportunities that meet their needs and expectations while providing for the sustainability of those natural resources.

Strategies:

1. Develop, acquire and use the appropriate biological and sociological science necessary to provide sustainable fishing, hunting, boating and wildlife viewing opportunities that meet the needs and expectations of user groups while providing for the sustainability of those resources.
2. Manage fish and wildlife populations to provide sustainable fishing, hunting, and wildlife viewing opportunities.
3. Develop and maintain widely available, diverse and accessible fishing, hunting, boating and wildlife viewing opportunities that meet the needs and expectations of residents and visitors while providing for the sustainability of those resources and emphasizing partnerships with both public and private landowners.
4. Recruit and manage sustainable levels of resident and visitor participation in fishing, hunting, boating and wildlife viewing.
5. Provide targeted fishing, hunting, boating and wildlife viewing programs for youth, the disabled and veterans.

Goal 2: Enhance the safety and outdoor experience of those who hunt, fish, boat and view wildlife.

Strategies:

1. Provide and promote opportunities for residents, and visitors to learn safety practices for fishing, hunting, boating and wildlife viewing.
2. Enhance the boating safety and waterway experience of residents and visitors through improved access, management, education and enforcement.
3. Promote Florida's outdoor environment as a safe and healthy recreational option for residents and visitors.
4. Address the growing disconnect between people and nature by marketing and providing opportunities and education for diverse age, race, gender, ethnic and other demographic sectors.

Goal 3: Use minimal regulations to manage sustainable fish and wildlife populations, manage access to fish and wildlife resources, and protect public safety.

Strategies:

1. Continually evaluate proposed and existing regulations, based on resource management benefits, public safety concerns, and economic and social impacts, to improve or eliminate regulations as warranted.
2. Coordinate with partners and stakeholders to ensure that appropriate authorities and regulations exist to maintain sustainable fish and wildlife populations.
3. Implement and enforce regulations in an informative, proactive and influential manner to enrich resident and visitors' outdoor experience while safeguarding the natural resources.

Goal 4: Minimize adverse environmental, social, economic and health and safety impacts from fish, wildlife and plants that are known, or have a potential, to cause adverse impacts.

Strategies:

1. Manage species and their habitats, as well as species and human interactions, to eliminate or reduce the adverse environmental, social, economic and health and safety impacts from native and non-native fish, wildlife and plants.
2. Effectively communicate to residents, visitors and businesses how to be safe and act responsibly when interacting with or possessing fish, wildlife and plants.
3. Manage captive and non-native wildlife movement and trade through proactive and responsive enforcement, regulation and education, with an emphasis on species that pose a high risk to our native fish and wildlife.
4. Enhance partnerships to address adverse environmental, social, economic and health and safety impacts from fish, wildlife and plants and ensure a consistent and integrated approach with FWC.

Theme Three – Sharing Responsibility for Fish and Wildlife Conservation and Management with an emphasis on developing conservation values in our youth

Goal 1: Ensure current and future generations support fish and wildlife conservation.

Strategies:

1. Expand and promote the Florida Youth Conservation Centers Network through leveraging FWC programs and staff, and developing public and private partnerships and sponsorships.

2. Develop and deliver standardized youth conservation curricula and fishing, hunting, boating and wildlife viewing outdoor activity programs, and assist with adapting programs and curricula to meet the needs of diverse communities.
3. Foster stewardship and shared responsibility for fish and wildlife conservation through conservation education programs.
4. Expand marketing and outreach to reach diverse audiences and engage all staff in priority outreach initiatives.

Goal 2: Ensure residents, visitors, stakeholders and partners are engaged in the processes of developing and implementing conservation programs.

Strategies:

1. Foster a common vision among partners and the FWC to maintain and enhance fish and wildlife populations and their habitats through interagency coordination, mutually beneficial goals and initiatives.
2. Engage residents, visitors, stakeholders and partners to understand their perspectives, develop and implement conservation programs, and implement fishing, hunting, boating and wildlife viewing management activities.
3. Use citizen science to enhance conservation programs.

Goal 3: Increase opportunities for residents and visitors, especially youth, to actively support and practice fish and wildlife conservation stewardship.

Strategies:

1. Inform residents and visitors about conservation stewardship and encourage their active involvement in achieving conservation of fish and wildlife.
2. Provide and promote opportunities for residents and visitors, especially youth, to participate in conservation stewardship activities, including FWC volunteer opportunities.

Goal 4: Encourage communities to conserve lands and waters critical to sustaining healthy and diverse fish and wildlife populations.

Strategies:

1. Provide communities with the necessary assistance to help them obtain the social and economic benefits of local conservation lands.

2. Provide residents and visitors with relevant information on the social and economic benefits of conservation, fishing, hunting, boating, and wildlife viewing.
3. Support community events and programs that promote fish and wildlife conservation.

Theme Four – Responsive Organization and Quality Operations

Goal 1: Integrate our commitment to benefit the community and enhance the economy through our conservation efforts and public service.

Strategies:

1. Identify and implement ways to support Florida businesses and job growth while managing fish and wildlife.
2. Identify and promote opportunities for staff to benefit local communities through participation in approved activities where FWC resources can be used (for example, the Florida State Employees' Charitable Campaign, the Guardian ad Litem Program, mentoring programs, FWC Disaster Response Teams, and American Red Cross Disaster Services).
3. Provide residents and visitors with reliable and current information on Florida's fish and wildlife.
4. Continue to attract visitors by providing top-quality fishing, hunting, boating and wildlife viewing opportunities.

Goal 2: Provide resources and support for the safety and protection of residents and visitors, our natural and cultural resources, and for emergency responses to critical incidents and environmental disasters.

Strategies:

1. Identify existing and emerging risks to the safety of residents and visitors and foster internal collaboration and external partnerships necessary to effectively manage, reduce or eliminate those risks.
2. Provide immediate and effective disaster response and recovery through mutual-aid efforts with local, state and federal partners.
3. Provide search, rescue, and recovery services in coordination with local, state and federal entities to ensure the safety of residents and visitors.
4. Protect natural and cultural resources through proactive and responsive enforcement efforts.

Goal 3: Ensure the FWC has highly effective and adaptive business practices.

Strategies:

1. Address emerging biological, social and economic trends, anticipate impacts and take advantage of opportunities to accomplish FWC's mission.
2. Expect each employee to be an ambassador for FWC and its mission to Florida's diverse residents and visitors.
3. Provide efficient and effective service to Florida's diverse residents, visitors, and FWC staff.
4. Foster a diverse, accountable, responsive and skilled workforce who effectively serves Florida's residents and visitors.
5. Manage existing and secure additional resources necessary to achieve fish and wildlife conservation and meet residents, visitor and stakeholder needs.
6. Create and maintain an effective business model that supports the FWC's mission by using continuous improvement approaches that foster a collaborative and professional culture.

12.7 FWC Apiary Policy

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

Apiary Policy

Division of Habitat and Species Conservation

Issued by:
Terrestrial Habitat Conservation and Restoration Section
9/1/2010

DIVISION OF HABITAT AND SPECIES CONSERVATION POLICY

Issued September 2010

SUBJECT: APIARY SITES ON FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION WILDLIFE MANAGEMENT AREAS AND WILDLIFE AND ENVIRONMENTAL AREAS

STATEMENT OF PURPOSE: It is the intent of this policy to determine which Florida Fish and Wildlife Conservation Commission (FWC) Wildlife Management Areas or Wildlife and Environmental Areas (WMA/WEA) may have apiary sites, and provides direction on site location, management and administration of said apiaries.

Definitions

Apiary – A place where bees and beehives are kept, especially a place where bees are raised for their honey.

Apiary Site – An area set aside on a WMA/WEA for the purpose of allowing a beekeeper to locate beehives in exchange for a fee as established by contract between the beekeeper and FWC.

Apiary Wait List – An apiary wait list will be maintained by the Terrestrial Habitat Conservation and Restoration (THCR) Section Leader’s Office based on applications received from interested beekeepers. Only qualified apiarists will be added to the list. To become qualified the new apiarist must submit an application form and meet the criteria below under the section titled “Apiary Wait List and Apiary Application.”

Beekeeper/Apiarist – A person who keeps honey bees for the purposes of securing commodities such as honey, beeswax, pollen; pollinating fruits and vegetables; raising queens and bees for sale to other farmers and/or for purposes satisfying natural scientific curiosity.

Best Management Practices – The Florida Department of Agriculture & Consumer Services (FDACS; Division of Plant Industry (DPI), Apiary Inspection Section, P.O. Box 147100, Gainesville, FL 332614-1416) provides Best Management Practices (BMP) for maintaining European Honey Bee colonies and FWC expects apiarists to follow the BMP.

Hive/Colony – Means any Langstroth-type structure with movable frames intended for the housing of a bee colony. A hive typically consists of a high body hive box with cover, honey frames, brood chambers and a bottom board and may have smaller super hive boxes stacked on top for the excess honey storage. A hive/colony includes one queen, bees, combs, honey, pollen and brood and may have additional supers stacked on top of a high body hive box.

Establishment of Apiary Sites on WMA/WEA

During the development of an individual WMA/WEA Management Plan, apiaries will be considered under the multiple-use concept as a possible use to be allowed on the area. "Approved" uses are deemed to be in concert with the purposes for state acquisition, with the Conceptual State Lands Management Plan, and with the FWC agency mission, goals, and objectives as expressed in the agency strategic plan and priorities documents. Items to consider when making this determination can also include:

- Were apiaries present on the area prior to acquisition?
- Are there suitable available sites on the WMA/WEA?
- Will the apiary assist in pollination of an onsite FWC or offsite (adjacent landowner) citrus grove or other agricultural operation?

For those WMA/WEAs that have not considered apiaries in their Management Plan, upon approval of this policy Regional Staff will work with the Conservation Acquisition and Planning (CAP) staff and THCR Section leadership to determine if apiaries are an approved use on the area. If apiaries are considered an approved use then a request will be made to the Division of State Lands to allow this use as part of an amended Management Plan. This request will be made through the THCR's Section Leader's office and coordinated by the CAP.

Determination of apiary site locations on WMA/WEAs should be done using the following guidelines:

- Apiary sites should be situated so as to be at least one-half mile from WMA/WEA property boundary lines, and at least one mile from any other known apiary site. Exceptions to this requirement must be reviewed by the Area Biologist and presented to the THCR Section Leader for approval.
- Site should be relatively level, fairly dry, and not be prone to flooding when bees would normally be present.
- Site should be accessible by roads which allow reasonable transfer of hives to the site by vehicle.
- If a site is to be located near human activity, such as, an agricultural field, food plot, wildlife opening, campsites, etc., or if the site may be manipulated by machinery at a time when bees would be present, then the apiary site should be located at a minimum of 150 to 200 yards from the edge of that activity. This will ensure minimal disturbance to the bees and minimize incidents with anyone working in the area.

- It is preferable to have apiary sites located adjacent to or off roads whenever possible. If traditional apiary sites were located on roads and the Area Biologist determines that the site will not impact use of the road by visitors then it will be allowed.
- FWC Area Biologist shall select apiary site(s) and the site(s) selected should not require excessive vegetation clearing (numerous large trees, dense shrubs) or ground disturbance (including fill).

WMA/WEA Staff Responsibilities

Area Biologist on WMAs/WEAs with approved apiary sites will forward a GIS shapefile depicting all the apiary site polygon(s), including a name or number with coordinates for each apiary site, to the THCR Contract Manager.

Area Biologist will monitor each apiary site no less than once a year to determine if the beekeeper is abiding by the contract requirements. If violations are noted, staff should bring them to the attention of the beekeeper for correction. If violations continue staff should notify the THCR Contract Manager who will determine if or what additional action is warranted.

Area Biologist will establish and maintain firelines around the apiary site to ensure the apiary site is ready when a planned burn is scheduled.

Area Biologist will advise the beekeeper of burn plans, road work, gate closures, or other site conditions and management activities that may affect the beekeeper's ability to manage or access the apiary site.

Area Biologist is not responsible to ensure access roads are in condition suitable for beekeepers to access their hives with anything other than a four wheeled drive vehicle. (The site of the apiary may be high and dry, but the roads accessing them may be difficult to impossible to get a two wheeled drive vehicle into during extreme weather, e.g., heavy rainfall events.)

Apiary Wait List and Apiary Application

An electronic waiting list for apiary sites will be maintained by the THCR's Contract Manager for each WMA/WEA. To be placed on the waiting list an interested beekeeper must submit an apiary application form to the contract manager (See Enclosed Application Form). Each applicant will be considered based on the following criteria:

- Proof of a valid registration with the FDACS/DPI.
- Proof of payment of outstanding special inspection fees for existing sites.
- A validated history of being an apiary manager.

- Three references that can attest to the applicant's beekeeping experience.

If an apiary site becomes available on a WMA/WEA and there are beekeepers on the waiting list interested in that particular area, those individuals meeting the criteria above will be given preference. If there is more than one beekeeper meeting the criteria with their name on the list then a random drawing will be held by the THCR Contract Manager to determine who will receive the site. Beekeepers on the waiting list will be notified in writing of the random drawing's date/location and will be invited to attend. The individual's name selected during this drawing will be awarded the contract.

Apiary agreements are non-transferable. Each agreement serves as a contract between a specific individual or company and FWC, and the rights and responsibilities covered by an individual agreement cannot be transferred.

Contracts

Apiary contracts are for five (5) years and renewals are contingent upon a satisfactory performance evaluation by Area Biologist and concurrence of the THCR Section Leader. Approval is based on apiarist performance, adherence to rules and regulations and general cooperation. If an Area Biologist decides an apiarist whose contract is expiring is unacceptable he may recommend not approving the new contract. If this transpires then the wait list process using random selection will be used. If there is no apiarist on a current wait list then the apiarists who are in good standing with existing contracts will be notified to see if any want to be put on the wait list for the drawing. If none are interested then the site will be put on hold pending a valid request.

Pricing of Apiary Site(s)

Cost of each apiary site will be \$40 annually which will include up to 50 beehives. Additional beehives will be charged at the rate of \$40 per 50 beehives.

Pricing examples:

- A beekeeper is leasing 2 apiary sites with up to 100 beehives - the fee per year is \$80.
- A beekeeper is leasing 3 apiary sites with up to 200 beehives - the fee per year is \$160.

Note: The maximum number of hives/colonies allowed on an apiary site will be at the discretion of the apiarist. However, the apiarist is strongly recommended to follow the BMP as recommended by the FDACS/DPI. In addition to providing the BMP, FDACS/DPI's management has recommended 50 hives per site in pineland communities and no more than 100 hives per site in areas with bountiful resources. However, FWC will not dictate the number of hives on a site unless they create land management issues.

Bear Depredation Control at Apiary Site(s)

Beekeepers are required to consult with the WMA/WEA Area Biologist to see if electric fencing is required for their apiary sites. If the Area Biologist requires electric fencing then the Beekeeper shall construct and maintain electric fences for each apiary site. Numerous electric fence designs have been used to varying success and FWC as a courtesy provides an electric fence technical information bulletin with each Agreement. This bulletin is attached in order to assist the Beekeeper and/or provide a design that has been proven to be reasonable effective.

SUBJECT MATTER REFERENCES

Apiary Inspection Law - Chapter 586, Florida Statutes (see <http://www.leg.state.fl.us/Statutes/>), Rule Chapter 5B-54, Florida Administrative Code (see www.flrules.org).

The Board of Trustees of the Internal Improvement Trust Fund – Recommended Apiary Agreement Guidelines For Apiaries & Revisions to an Agreement for Apiary Activities on State Lands on September 23, 1986

S:\HSC\THCR\APIARY.BACKUP.POLICY\dlissupport@dos.state.fl.us_20100903_111446.pdf

Senate Resolution 580, September 21, 2006: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_bills&docid=f:sr580ats.txt.pdf

Attachments

Sample Apiary Agreement W/Attachments (Map Placeholder & Electric Fence Bulletin)

Sample Apiary Site Application Form W/Mission Statement

Best Management Practices for Maintaining European Honey Bee Colonies

Sample of Random Selection Process Procedure

APPROVED:

Division Director or Designee

DATE: _____

APIARY AGREEMENT

AGREEMENT FOR APIARY ACTIVITIES ON STATE LANDS

THIS AGREEMENT is made by and between the Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Tallahassee, FL 32399-1600, hereinafter known as “the COMMISSION,” and (Insert Name and Address of Apiarist Here), telephone number (Insert Phone Number of Apiarist Here), hereinafter known as “the USER.”

WITNESSETH

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

1. TERM: This Agreement will begin (Insert date here) or the date signed by both parties, whichever is later, and will end five (5) years from the date of execution. Issuance of a new five (5) year Agreement is contingent upon satisfactory performance evaluation by the Area Biologist and approval of the THCR Section Leader.
2. The COMMISSION Agrees:
 - a. To provide apiary sites on state lands, which will be identified by the COMMISSION staff and located on the property identified in (4)(f) below.
 - b. To provide technical assistance for bear-proofing, if required by Area Biologist, of sites made available under this Agreement.
 - c. To allow the USER to place a total number of (insert number of hive boxes here) hive boxes on the COMMISSION-managed property at the apiary site(s).
3. The USER Agrees:
 - a. To pay (Insert Total Dollars Here) on or before the execution date of this Agreement and each year thereafter on or before anniversary date of the original contract execution date, with check or money order payable to the Florida Fish and Wildlife Conservation Commission. All payments shall be remitted to The Florida Fish and Wildlife Conservation Commission, Finance and Budgeting, Accounting Section, PO Box 6150, Tallahassee, FL 32399-6150, and a copy of the check to The Florida Fish and Wildlife Conservation Commission, Terrestrial Habit Conservation and Restoration Section, Attn: Section Leader, 620 South Meridian Street, Tallahassee, Florida 32399-1600.

Florida Fish and Wildlife Conservation Commission | Indian River County Public Shooting
Range Management Plan

- b. To have no more than (Insert Number of Hive boxes here) hive boxes on the property at one time.
- c. To comply with the Florida Honey Certification and Honeybee Law, Chapter 586, Florida Statutes, and Rule 5B-54, Florida Administrative Code, and all other applicable federal, state, or local laws, rules or ordinances.
- d. To not damage, cut or remove any trees in the course of preparing for or conducting operations under this Agreement.
- e. To repair within 30 days of occurrence any damage to roads, trails, fences, bridges, ditches, or other public property caused by USER'S operations under this Agreement based on discretion of the COMMISSION to ensure the WMA/WEA management goals are met. All repairs will be coordinated with the Area Biologist to ensure management goals are met. If USER does not comply within the 30 day requirement, then the COMMISSION may use a third party to perform the repairs and charge the USER accordingly.
- f. To report any forest fires observed and to prevent forest fires during the course of operations under this Agreement.
- g. To abide by all WMA/WEA rules and regulations in addition to items in this Agreement.
- h. To notify the Area Biologist within 24 hours when a bear depredation event occurs.
- i. To post their name in an agreed upon location at each site covered by this Agreement or otherwise use an identifying system that is approved by the Area Biologist.
- j. To furnish proof of general liability insurance prior to starting apiary activities on state property or within 30 days of execution of this Agreement, whichever is earlier, and proof of annual renewal of the general liability insurance policy prior to or upon expiration date of the policy. The USER shall maintain continuous general liability insurance throughout the term of this Agreement for no less than \$300,000 for bodily injury and \$100,000 for property damage for each occurrence. Such a policy shall name the COMMISSION as the Certificate Holder. The USER's current certificate of insurance shall contain a provision that the

insurance will not be canceled for any reason during the term of this Agreement except after thirty (30) days written notice to the COMMISSION.

- k. To be liable for all damage to persons or property resulting from operations under this Agreement, and to release, acquit, indemnify, save and hold harmless the COMMISSION, its officers, agents, employees and representatives from any and all claims, losses, damages, injuries and liabilities whatsoever, whether for personal injury or otherwise, resulting from, arising out of or in any way connected with activities under this Agreement or activities occurring from any other source not under this Agreement and the USER further agrees to assume all risks of loss and liabilities incidental to any natural or artificial condition occurring on state lands cover by this Agreement.
 - l. To construct and maintain electric fences, if required by the Area Biologist at the Area Biologist's discretion, to provide protection of apiaries from black bear depredation consistent with the technical information bulletin attached to this agreement, and, if so required, to maintain an open buffer around the fencing of five (5) feet or more. (See Attachment 1)
 - m. To remove all personal property from the site within thirty (30) days of termination or expiration of this Agreement. The USER understands that after this time, all the USER'S personal property remaining on the WMA/WEA shall be deemed abandoned and become the property of the COMMISSION, which will be utilized or disposed of at the sole discretion of the COMMISSION, and that reasonable storage and/or disposal fees and/or costs may be charged to the USER.
4. The parties mutually agree:
- a. This Agreement is not transferable.
 - b. The USER's failure to submit payment by the due date established herein may result in cancellation of the Agreement by the COMMISSION.
 - c. The USER's failure to submit proof of general liability insurance or proof of annual renewal in compliance with (3) (j) above may result in cancellation of this Agreement by the COMMISSION.

- d. This Agreement shall be in effect for a period of five (5) years and issuance of a new agreement will be contingent upon a satisfactory performance evaluation and approval of the Area Biologist and THCR Section Leader.
- e. Each apiary site shall be situated so as to be at least one-half (1/2) mile inward from state property lines and there shall be at least one (1) mile separation between sites. Exceptions to this rule must be reviewed by Area Biologist presented to and approved by the Terrestrial Habitat Conservation and Restoration Section Leader.
- f. The property covered by this Agreement is described as follows: That the property sites (Insert Area Name) Wildlife Management Area are represented by Attachment 2.
- g. In accordance with Section 287.134, Florida Statutes, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal or reply on a contract to provide goods or services to any public entity; may not submit a bid, proposal or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant with any public entity; and may not transact business with a public entity.
- h. As part of the consideration of this Agreement, the parties hereby waive trial by jury in action brought by either party pertaining to any matter whatsoever arising out of or in any way connected with this Agreement. Exclusive venue for all judicial actions pertaining to this Agreement is in Leon County, Florida.
- i. This Agreement may be terminated by the COMMISSION upon thirty (30) days written notice to the USER in the event the continuation of the apiary activities are found to be incompatible with the COMMISSION'S management plans or for any other reason at the sole discretion of the COMMISSION.

This Area Intentionally Left Blank

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

USER SIGNATURE

Date: _____

Witness

Witness

FLORIDA FISH AND WILDLIFE
CONSERVATION COMMISSION

Mike Brooks, Section Leader
Terrestrial Habitat Conservation and
Restoration

Date: _____

Approved as to form and legality

Commission Attorney

Date: _____

AGREEMENT

ATTACHMENT 1

Use of Electric Fencing to Exclude Bears And Prevent Property Damage

Florida Fish and Wildlife Conservation Commission
Technical Information Bulletin (2001)

Electric fencing has proven effective in deterring bears from entering landfills, apiaries (beehives), livestock pens, gardens, orchards, and other high-value properties. Numerous electrical fence designs have been used with varying degrees of success. Design, quality of construction, and proper maintenance determine the effectiveness of an electric fence. The purpose of this technical bulletin is to assist the property owner in understanding and implementing electrical fencing as a tool to exclude and prevent damage caused by black bears.

Understanding Electric Fencing

Electric fencing provides an electrical shock when an animal comes into contact with the electrically charged wires of the fence. People unfamiliar with electric fencing often are afraid that it will injure, permanently damage, or kill an individual or pet that contacts the fence. **This is not true!** A properly constructed electric fence is safe to people, pets, and bears.

Components of Electric Fencing

An electric fence is composed of four main elements: a charger, fence posts, wire, and the ground rod.

Fence Charger. On a small scale electric fence (like that typically needed for bear exclusion), the largest cost is normally the fence charger. A fence charger's job is to send an electrical pulse into the wire of the fence. Contrary to popular belief, there is not a continuous charge of electricity running through the fence. Instead the charger emits a short pulse or burst of electricity through the fence. The intensity and duration of the electrical pulse varies with the type of charger or controller unit. Chargers with a high-voltage, short duration burst capacity are the best because they are harder to ground out by tall grass and weeds. These types are also the safest, because, even

though the voltage is high (5 kilovolts) the duration of the burst is very short (2/10,000 of a second) (FitzGerald, 1984).

Two basic energy sources for chargers are batteries (12-volt automotive type) and household current (110 volt). Battery-type chargers are typically cheaper to purchase but require more maintenance because of the necessity of charging the battery. The advantage of a battery powered charger is that it can be used in a remote location where 110-volt current is not available. Most units that are powered by a fully charged 12-volt deep-cycle batteries can last three weeks before needing a charge. Addition of a solar trickle charger will help prolong the duration of effective charge in 12-volt batteries.

Fence Posts. On small scale fences, the posts are normally the second largest expense involved in construction. Therefore, when planning an electric fence it is a good idea to utilize existing fencing in order to save money. If no existing fence is available, posts will need to be placed around the area needing protection. Posts may be wood, metal, plastic, or fiberglass. Wood and metal posts will need to have plastic insulators attached to them which prevent the electric wire from touching the post causing it to ground out. Plastic and fiberglass posts do not need insulators, the wire may be affixed directly to these posts. Wood and metal posts are typically more expensive and require the added expense of insulators, however, they are more durable and generally require less maintenance.

Wire. Fourteen to seventeen gauge wire is the most common size range used in electric fencing. Heavier wire (a lower gauge number) is more expensive but carries current with less resistance and is more durable (FitzGerald, 1984).

The two most common types of wire are galvanized and aluminum. Galvanized wire is simply a steel wire with a zinc coating to prevent rust, which makes the wire last longer. Some wire is more galvanized than others. The degree or amount of zinc coating that is around the core steel wire is measured in three classes. A class I galvanization means the wire has a thinner coating of zinc than a class II galvanization. Class III galvanized wire has the heaviest zinc coating and will last longer than the class I and class II wire (FitzGerald, 1984). In general, the cost of galvanized wire increases as the class or amount of galvanization increases.

Aluminum wire is typically more expensive than the galvanized wire. Some advantages of aluminum wire are: it will not rust, it conducts electricity four times better, and it weighs one-third less than steel wire.

The Ground Rod. The ground is an often overlooked, but critical part of an

electric fence. Without a good ground, electricity will not flow through the wire. When an animal touches a charged wire, the body of the animal completes the electrical circuit and the animal feels the “shock”. The current must travel from the charger through the wire to the animal and then back through the ground to the charger if the animal is to feel the shock. The soil acts as the return “wire” (ground) in the circuit. However, if a bird was to land on a charged wire without touching the soil the bird would not complete the circuit and would be unaffected (FitzGerald, 1984). Some fence configurations use actual grounded wires within the fence to enhance the grounding system.

The ground may be a commercial ground rod or a copper tube or pipe driven six to eight feet in moist soil. Copper is expensive, so a copper coated steel pipe or any other good conducting metal pipe will work also. Very dry soil can effect the ability to create a good ground and has sometimes been a problem during drought conditions. Pipe may be a better choice than a solid rod during drought conditions, because water may be poured down the ground pipe to improve the ground. Some fence configurations use wires as the grounding system, rather than relying solely on the soil as a ground.

Recommended Electric Fence to Deter Black Bears

Conditions at fence sites will vary and will determine what the most effective fence configuration will be. Commission biologists welcome the opportunity to visit sites and provide custom tailored advice on constructing an effective electric fence. The following recommendation will cover most situations with low to moderate pressure from black bears. Use a five strand aluminum wire fence that is 40 inches high with wire spacing every eight inches apart using the previously mentioned wired grounding system (see Figure 1). The wire closest to the ground level (the lowest wire) should be a charged or “hot” wire. The second wire should be grounded. The third wire should be hot. The fourth wire should be grounded and the fifth wire should be hot. If using metal or wood posts, insulators must be used to keep the hot wires from grounding out. The cost of this type of electric fence utilizing fiberglass posts and a 110 volt fence charger is approximately \$200 for a 40' x 40' area (160 linear feet of fence).

Materials:

- 1 - 1, 312 foot roll (1/4 mile) 14 gauge aluminum electric fence wire
- 1 - 50 foot roll 12 gauge insulated wire
- 20 - 5 foot 5/8 inch dia fiberglass fence posts
- 5 - plastic gate handles
- 1 - 110 volt fence charger
- 1 - 10 foot ground pipe
- 4 - plastic electric fence signs

Installation. These instructions are for a square shape fence exclusion, but the

process would be very similar for other applications. Drive 4 corner posts 1-foot deep into ground and stake with guy wires. Clip, rake, and keep clear any vegetation in a 15-inch wide strip under the fence and apply herbicide. Attach and stretch the aluminum wire at 8-inch increments starting 8 inches from ground level. A loop of wire should be left on each wire at the first corner post. Once the wire has been stretched around the outside of all the corner posts back to the first post a plastic gate handle should be attached to each wire and the gate handles should be attached to each corresponding loop on the first corner post. Drive in the remaining 16 posts to the same depth at 8-foot intervals between corner posts. Secure each of the five wires to each of the posts with additional wire. Attach four plastic electric fence signs (one on each side) to the top wire of the fence. Attach a 12-gauge strand of insulated wire to the positive terminal of the fence charger and attach it to the first, third, and fifth wires of the fence. Attach another 12 gauge insulated wire to the negative terminal of the charger and attach this wire to the ground pipe which has been driven into the ground 6 to 8-feet deep. Attach another 12 gauge insulated wire from the negative terminal of the charger to the second and fourth wires on the fence. Plug the charger into a 110 volt power supply and the fence is in operation.

Tips to improve the effectiveness of your electric fence to deter black bears:

1. If using a 12-volt fence charger, ensure that the battery is charged; check every two weeks.
2. Make sure terminals on the charger and battery are free of corrosion.
3. Make sure hot wires are not being grounded out by tall weeds, fallen tree branches, broken insulators, etc.
4. If fence wires have been broken and repaired, make sure wires are corrosion free where they have been spliced together. Also, tighten the fence at each corner post as wires that have been spliced and are loose make poor connections.
5. Be sure to rake vegetation from under and around the outside of the fence as this may act as an insulator.
6. To improve the ground around the perimeter of the fence add a piece of 24 inch chicken wire laying on the ground around the outside of the fence. This should be connected to ground.
7. During periods of drought pour water down the ground pipe and around the ground pipe to improve the ground. Digging a 6 inch deep 6 inch diameter hole around the ground pipe and back filling with rock salt will also improve the ground. Additional ground pipes may also be added to portions of the fence farthest from the charger.
8. To ensure that the bear solidly contacts the charged portion of the fence, a bait like bacon strips, a can of sardines, or tin foil with peanut butter may be attached

to one of the top hot wires. Make sure these do not contact the ground, thus shorting out the fence.

9. When protecting a specific structure (like a shed or rabbit hutch), the fence should be placed 3 to 5 feet away from the structure (rather than on it) so that the bear encounters the fence before reaching the attractant.

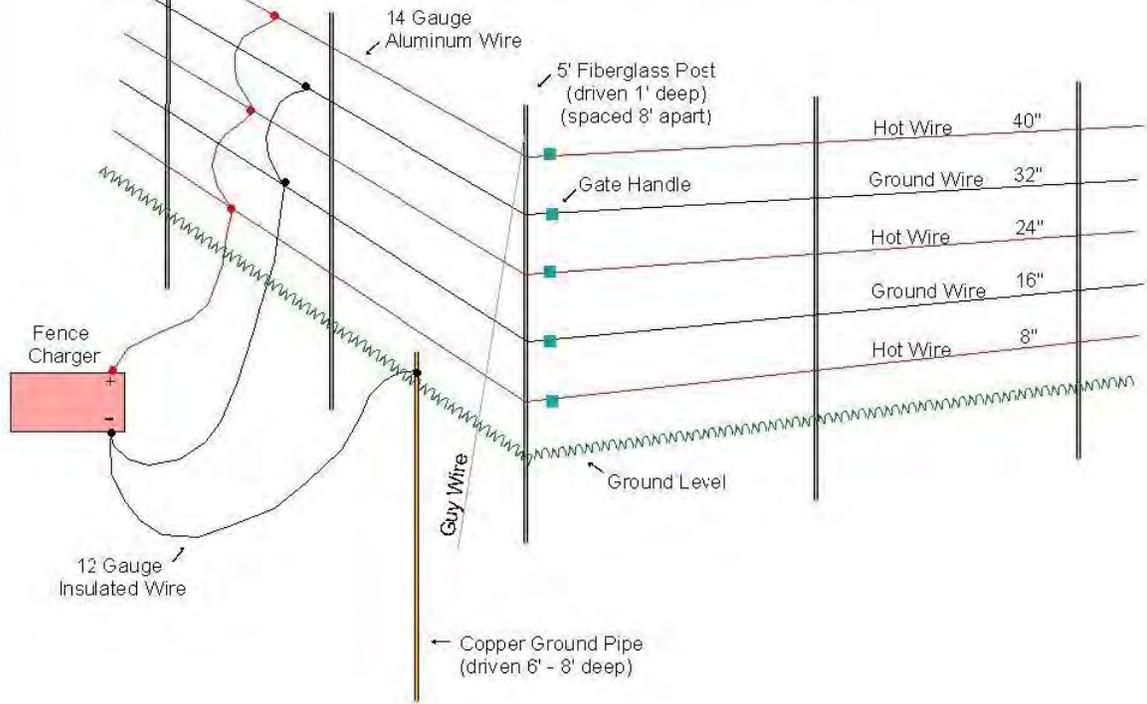
10. Protect the fence charger from the elements by covering it with a plastic bucket or a wooden box.

11. Place plastic electric fence signs around the perimeter of your fence to improve visibility and to warn other people.

LITERATURE CITED

FitzGerald, James (1984), *The Best Fences*. Storey Publishing Bulletin A-92, Pownal, Vermont. p. 14-16.

⚡ Exclusionary Electric Fencing ⚡



AGREEMENT ATTACHMENT 2

Place Holder for Map

Of

Apiary Locations

At

WMA/WEA

APIARY SITE APPLICATION FORM

Florida Fish and Wildlife Conservation Commission

RETURN TO: The Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Tallahassee, FL 32399-1600. Please print or type all information. Attach additional sheets if necessary.

Name _____ Telephone Number _____

Mailing Address _____

City or Town _____ County _____ Zip Code _____

Physical Address (If Different from Mailing Address)

Company Name:

Email Address

Requested Wildlife Management or Wildlife and Environmental Area(s)(see attached list of WMA/WEAs with apiary sites):

WMA/WEA _____ County _____ # of Sites _____

WMA/WEA _____ County _____ # of Sites _____

WMA /WEA _____ County _____ # of Sites _____

WMA /WEA _____ County _____ # of Sites _____

Planned Number of Hives Per Site: _____ Permanent: ____ Seasonal: _____

Member of Beekeepers Association: Yes ____ No ____

Number of Years a Member _____

Name of Beekeepers Association: _____

Are you registered with Florida Department of Agriculture and Consumer Services/Division of Plant Industry (FDACS/DPI): _____ Yes _____ No _____ N/A If yes, please provide proof.

Are you current with any and all special inspection fees: _____ Yes _____ No _____ N/A. If yes, please provide proof.

Do you follow all recommended Best Management Practices from FDACS/DPI?: _____ Yes _____ No

If no, then please explain on a separate piece of paper.

Please provide below a chronological history of your beekeeping experience. If you need more space, please provide additional sheets:

References: If a new apiary contractor, please provide on a separate piece of paper at least 3 references who can verify your apiary experience. Provide each reference's name, address, phone number and email address (if applicable). Please attach reference sheet to this document and submit.

MISSION STATEMENT

Management

Of

Florida Fish and Wildlife Conservation Commission's

Wildlife Management Areas

And

Wildlife and Environmental Areas

The mission of the Florida Fish and Wildlife Conservation Commission (FWC) is to manage fish and wildlife resources for their long-term well-being and the benefit of the people. To aid in accomplishing this mission, one of FWC's management goals is to manage fire-adapted natural communities on our Wildlife Management and Environmental Areas (WMA/WEA) to support healthy populations of the plants and animal's characteristic of each natural community. In order to achieve this goal various habitat management techniques are used. These include prescribed burning, applications of herbicides and mechanical treatment of vegetation. These management efforts will take place at various times and locations on each of the FWC's WMA/WEAs. Staff on each WMA/WEA will work with and make users aware of these activities when necessary. Users must be aware and accept that these activities are necessary for the proper management of the area.

Note: This document is included as an attachment with each Application and executed Contract.

FDACS/DPI's BMP

Florida Department of Agriculture & Consumer Services BEST MANAGEMENT PRACTICES FOR MAINTAINING EUROPEAN HONEY BEE COLONIES

1. Beekeepers will maintain a valid registration with the Florida Department of Agriculture and Consumer Services/Division of Plant Industry (FDACS/DPI), and be current with any and all special inspection fees.
2. A Florida apiary may be deemed as European Honey Bee with a minimum 10% random survey of colonies using the FABIS (Fast African Bee Identification System) and/or the computer-assisted morphometric procedure (i.e., Universal system for the detection of Africanized Honey Bees (AHB) (USDA-ID) or other approved methods by FDACS on a yearly basis or as requested.
3. Honey bee colony divisions or splits should be queened with production queens or queen cells from EHB breeder queens following Florida's Best Management Practices.
4. Florida beekeepers are discouraged from collecting swarms that cannot be immediately re-queened from EHB queen producers.
5. Florida Beekeepers should practice good swarm-prevention techniques to prevent an abundance of virgin queens and their ready mating with available AHB drones that carry the defensive trait.
6. Maintain all EHB colonies in a strong, healthy, populous condition to discourage usurpation (take over) swarms of AHB.
7. Do not allow any weak or empty colonies to exist in an Apiary, as they may be attractive to AHB swarms.
8. Recommend re-queening with European stock every six months unless using marked or clipped queens and having in possession a bill of sale from an EHB Queen Producer.
9. Immediately re-queen with a European Queen if previously installed clipped or marked queen is found missing.
10. Maintain one European drone source colony (250 square inches of drone comb) for every 10 colonies in order to reduce supercedure queens mating with AHB drones.
11. To protect public safety and reduce beekeeping liability, do not site apiaries in proximity of tethered or confined animals, students, the elderly, general public, drivers on public roadways, or visitors where this may have a higher likelihood of occurring.
12. Treat all honey bees with respect.

RANDOM
SELECTION PROCESS
FOR VACANT APIARY SITE

When an apiary site becomes available the following procedure is used to randomly select the next apiarist (beekeeper) for an available apiary site on a WMA or WEA. Only those who have been evaluated and deemed qualified to be an apiarist on a WMA/WEA through the Apiary Application process will be eligible for this selection process. The steps below will be followed by the THCR Contract Manager when a site becomes available to be filled by a qualified apiarist:

1. The THCR Contract Manager will maintain an “Apiary Wait List Folder” on the THCR SharePoint for each WMA/WEA with apiary sites.
2. A wait list is either created or updated when an Apiary Application(s) is received by the THCR Contract Manager from a qualified apiarist.
3. Upon receipt of an apiary site application, the THCR Contract Manager will review the WMA/WEA folder to see if there is an “Apiary Wait List”.
4. If a list exists then the qualified applicant will be added to the list.
5. When an apiary site becomes available if there are more than one qualified apiarist then these apiarists will be contacted by certified letter to determine their interest.
6. The letter will request a response within 10 working days to make them eligible for the random drawing.
7. If there is no response or is negative then that apiarist will not be included in the random drawing and the name will be removed from the waiting list*.
8. If only one apiarist responds positively to the certified letter then the available site will be awarded to that interested apiarist.
9. If there are no apiarists on a wait list or all responses are negative then apiarists who currently have site(s) under Agreement and where not on the waiting list will be contacted to see if any have interest in the available site. If more than one responds

then the random drawing process will be used to determine who will be awarded the site.

10. Steps to be performed by the THCR Contract Manager to execute the random selection for an available apiary site are listed below:

- a. The names of each interested apiarist will be noted on a 1" X 2" piece of paper and folded in half.
- b. The pieces of paper will be inserted into a "black film canister" which has a snap top and placed into a container and stirred up prior to the selection.
- c. A non-biased person will be selected to reach into the bowl (which will be held above the selection person's eyesight) and randomly select one of the canisters.
- d. The canister will be opened by the person performing the selection and the name is read aloud for those in attendance. Everyone in attendance will sign a witness sheet.
- e. The apiarist whose name is selected will be awarded the available site.
- f. A new Agreement will be developed by the THCR Contract Manager.

*A new apiary application must be submitted once requestor's name is removed from a waiting list.

12.8 Management Procedures Guidelines - Management of Archaeological and Historical Resources

Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Properties (revised March 2013)

These procedures apply to state agencies, local governments, and non-profits that manage state-owned properties.

A. General Discussion

Historic resources are both archaeological sites and historic structures. Per Chapter 267, Florida Statutes, *'Historic property' or 'historic resource' means any prehistoric district, site, building, object, or other real or personal property of historical, architectural, or archaeological value, and folklife resources. These properties or resources may include, but are not limited to, monuments, memorials, Indian habitations, ceremonial sites, abandoned settlements, sunken or abandoned ships, engineering works, treasure trove, artifacts, or other objects with intrinsic historical or archaeological value, or any part thereof, relating to the history, government, and culture of the state.'*

B. Agency Responsibilities

Per State Policy relative to historic properties, state agencies of the executive branch must allow the Division of Historical Resources (Division) the opportunity to comment on any undertakings, whether these undertakings directly involve the state agency, i.e., land management responsibilities, or the state agency has indirect jurisdiction, i.e. permitting authority, grants, etc. No state funds should be expended on the undertaking until the Division has the opportunity to review and comment on the project, permit, grant, etc.

State agencies shall preserve the historic resources which are owned or controlled by the agency.

Regarding proposed demolition or substantial alterations of historic properties, consultation with the Division must occur, and alternatives to demolition must be considered.

State agencies must consult with Division to establish a program to location, inventory and evaluate all historic properties under ownership or controlled by the agency.

C. Statutory Authority

Statutory Authority and more in depth information can be found at:

<http://www.flheritage.com/preservation/compliance/guidelines.cfm>

D. Management Implementation

Florida Fish and Wildlife Conservation Commission | Indian River County Public Shooting
Range Management Plan

Even though the Division sits on the Acquisition and Restoration Council and approves land management plans, these plans are conceptual. Specific information regarding individual projects must be submitted to the Division for review and recommendations.

Managers of state lands must coordinate any land clearing or ground disturbing activities with the Division to allow for review and comment on the proposed project. Recommendations may include, but are not limited to: approval of the project as submitted, cultural resource assessment survey by a qualified professional archaeologist, modifications to the proposed project to avoid or mitigate potential adverse effects.

Projects such as additions, exterior alteration, or related new construction regarding historic structures must also be submitted to the Division of Historical Resources for review and comment by the Division's architects. Projects involving structures fifty years of age or older, must be submitted to this agency for a significance determination. In rare cases, structures under fifty years of age may be deemed historically significant. These must be evaluated on a case by case basis.

Adverse impacts to significant sites, either archaeological sites or historic buildings, must be avoided. Furthermore, managers of state property should make preparations for locating and evaluating historic resources, both archaeological sites and historic structures.

E. Minimum Review Documentation Requirements

In order to have a proposed project reviewed by the Division, certain information must be submitted for comments and recommendations. The minimum review documentation requirements can be found at: http://www.flheritage.com/preservation/compliance/docs/minimum_review_documentation_requirements.pdf.

* * *

Questions relating to the treatment of archaeological and historic resources on state lands should be directed to:

Deena S. Woodward
Division of Historical Resources
Bureau of Historic Preservation
Compliance and Review Section
R. A. Gray Building
500 South Bronough Street
Tallahassee, FL 32399-0250
Phone: (850) 245-6425
Toll Free: (800) 847-7278
Fax: (850) 245-6435

12.9 Management Plan Terms and Definitions

Management Plan Goals and Objectives

Terms and Definitions

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

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

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

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

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

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

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

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

Imperiled species: A species or subspecies that is listed by the U.S. Fish and Wildlife Service as Endangered or Threatened; Florida Fish and Wildlife Conservation Commission (FWC) as Endangered, Threatened, or Special Concern; Florida Department of Agriculture and Consumer Services (FDACS) as Endangered or Threatened; or is tracked by Florida Natural Areas Inventory (FNAI) as globally or state Critically Imperiled or Imperiled. Imperiled Species does NOT refer to species that are on the FDACS list of commercially exploited plants that are not Endangered or Threatened.

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

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

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

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

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

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

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

Population survey: Using broadly accepted methodologies to detect changes in population trends over time.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

12.10 Land Management Uniform Cost Accounting Categories

Land Management Uniform Cost Accounting Council

Uniform Land Management Cost Categories and Subcategories

1. Resource Management

- a. Exotic Species Control. -- Invasive exotic plant and animal removal activities and costs for inventorying, planning, preparing, executing, evaluating, monitoring and reporting. Also includes equipment, chemicals, protective clothing and supplies. Includes nuisance native feral animal and plant control.
- b. Prescribed Burning. -- Prescribed burning activities and costs for assessing, planning, preparing, executing, evaluating and reporting. Also includes equipment, protective clothing and supplies.
- c. Cultural Resource Management. -- Management activities and costs for assessing, planning, executing, evaluating and reporting, and for all maintenance, restoration or monitoring activities for prehistoric and historic sites, features and collection objects.
- d. Timber Management. -- Activities and costs related to the establishment of a stand of potentially merchantable timber, harvest of merchantable timber, and cultural treatments intended primarily to improve the growth and overall health of a stand of merchantable timber. Also includes activities and costs related to the cutting of merchantable timber in natural community and habitat restoration projects.
- e. Hydrological Management. -- Hydrological management and restoration activities and costs for assessing, monitoring, planning, preparing, executing, evaluating and reporting. Includes water level management, repair, removal or back-filling of ditches, canals, berms and dams. Also includes water quality and water quantity monitoring.
- f. Other. -- All other resource management activities and costs not captured in other specific subcategories. Examples include natural community and habitat restoration through other techniques; plant, animal or biological community survey, monitoring and research; listed species management; technical assistance; and evaluating and commenting on resource impacts to parks.

2. Administration

- a. Central Office/Headquarters. -- Headquarters units conducting general administration of land under management by the agency. Includes upper management direction, administration and fiscal, budget, personnel, purchasing and record keeping required for operations oversight and specific programs. Includes all duties unless they specifically relate to other categories or subcategories.
- b. Districts/Regions. -- Sub-state administrative districts or regions conducting general administration of the properties under their management. Includes all duties, unless they specifically relate to other categories or subcategories. General operating costs of district or region administrative facilities are included.
- c. Units/Projects. -- Conducting general administration duties at a specific management unit (state park, state forest, state wildlife management area, etc.). Includes supervisory duties, fiscal and record keeping duties, and any other duties that do not specifically relate to other categories or subcategories. General operating costs for the property, such as utilities, telephones and garbage collection, are included.

3. Support

- a. Land Management Planning. -- Developing land management plans required by Sec. 253.034, F.S. Includes researching and compiling plan information, materials and maps, coordinating planning activities, conducting review activities (internal reviews, public meetings, advisory group meetings, ARC, etc.), and promulgating draft plans and final plans.
- b. Land Management Reviews. -- Planning, organizing and conducting land management reviews by teams created under Sec. 259.036, F.S. Includes preparing and responding to land management review reports. Also includes similar work conducted as part of internal agency land management reviews.
- c. Training/Staff Development. -- Staff training and development costs incurred in any facet of the agency's land management activities.
- d. Vehicle Purchase. -- Acquisition of any vehicle purchased primarily for land management purposes or to support any category of land management activity by the agency.
- e. Vehicle Operation and Maintenance. -- Costs of operating and upkeep of any vehicle used by the agency to support any category of land management activity.
- f. Other. -- Any other support activity or cost not captured by other categories or subcategories.

4. Capital Improvements

- a. New Facility Construction. -- Use of Fixed Capital Outlay (FCO) or other budget authority for all new facility design and construction activities. Includes new roads, parking and all other infrastructure.
- b. Facility Maintenance. -- Use of Fixed Capital Outlay (FCO) or other budget authority for all repairs or renovations to existing facilities, roads or other infrastructure. Also includes ADA accessibility improvements and renovations.

5. Visitor Services/Recreation

- a. Information/Education Programs. -- Interpretive, environmental education and marketing programs that explain or promote the agency's mission or instill in visitors an understanding and appreciation for Florida's natural and cultural resources and their proper use and care. Includes signs, brochures, maps and other public information materials that are produced or disseminated.
- b. Operations. -- Includes the non-administrative and non-support costs involved in providing public access to lands. Includes all actions required to manage visitor activities in a way to ensure safe and enjoyable use by the public. Includes routine maintenance, cleaning and other work required to provide safe and efficient utilization of facilities and resources that support visitor use and recreation. Includes protection activities required by staff to safeguard natural and cultural resources, facilities, material, staff and visitors.

6. Law Enforcement

The provision of all activities for enforcing criminal, conservation and boating laws on land, freshwater and marine environments and all costs associated with these services. Includes the provision of uniform patrol. Includes overt and covert criminal investigations. Includes regulation of commercial wildlife trade. Also includes the direction and administration of all law enforcement programs and activities, and all associated costs.

Land Management Uniform Accounting Council and FWC Activity Code Groupings

Resource Management

Exotic Species Control

- 210 Exotic species control
- 211 Exotic plant control (mechanical)
- 212 Exotic plant control (chemical)

Prescribed Burning

- 205 Prescribed burning
- 206 Prescribed burning C growing season (April 1 to September 30)
- 207 Prescribed burning C dormant season (October 1 to March 31)
- 208 Firebreaks

Cultural Resource Management

- 201 Cultural resource management

Timber Management

- 202 Timber management

Hydrological Management

- 215 Hydrology management
- 216 Dams, dikes, levees
- 217 Canals
- 218 Water level management
- 194 Lake restoration

Other

- 185 GIS
- 186 Biometrics
- 200 RESOURCE MANAGEMENT
- 203 Tree and shrub planting
- 213 Wildlife management
- 214 Listed Species management
- 219 Upland restoration
- 282 Herbaceous seeding
- 283 Clearings
- 289 Native vegetation management (mechanical)
- 290 Native vegetation management (chemical)
- 221 Animal surveys
- 228 Inland aerial surveys
- 235 Vegetation and plant surveys
- 250 MONITORING AND ASSESSMENTS
- 252 Biomedical monitoring
- 253 Ecological monitoring
- 256 Habitat monitoring analysis
- 263 Nest box monitoring
- 264 Population demographics

- 295 Biological data collection, analysis, and reporting
- 275 Permits and authorizations
- 276 Commission rule development and review
- 277 Relocation
- 278 CITES tags
- 281 Other resource management
- 284 Feeding/watering
- 285 Nest structures
- 286 Population control
- 287 Stocking enhancements/population augmentation
- 288 Nuisance animal complaints
- 293 Mortality investigations
- 294 Program coordination and implementation C inter- and intra-agency coordination and program implementation at the section, bureau, or division level
- 296 Habitat protection technical assistance
- 750 URTD assessment
- 789 Site Preparation – GCR
- 790 Irrigation – GCR
- 791 Seed Collection – Hand
- 792 Seed Collection – Mechanical
- 793 Herbicide Maintenance Treatment

Administration

Central Office/Headquarters

- 100 ADMINISTRATION C administrative tasks, including preparation of forms, word processing, photocopying, filing, and other clerical/secretarial duties.
- 104 Budget/purchasing/accounting

Districts/Regions

See Location code

Units/Projects

See Location code

Support

Land Management Planning

- 103 Meetings C includes workshops, conferences, staff, and other meetings.
- 204 Resource planning

Land Management Reviews

- 209 Land Management Reviews
- 101 Project inspection C field inspections of projects.

Training/Staff Development

150 PERSONNEL MANAGEMENT C recruitment, hiring, training, counseling, and supervising.

Vehicle Purchase

128 New Vehicle and Equipment Purchase
Vehicle Operation and Maintenance

923 FEM C vehicles/equipment

Other

140 REPORT WRITING/EDITING/MANUSCRIPT PREPARATION

141 Grant applications

180 SYSTEMS ADMINISTRATION AND MANAGEMENT

182 Data management

184 Metadata development and management

187 IT

188 Web development

721 Geospatial analysis techniques

191 Stamp design coordination

226 Human dimensions surveys

Capital Improvements

New Facility Construction

910 New facility construction C buildings/structures

912 New construction C roads/bridges

913 New construction C trails

914 New construction C fences

Facility Maintenance

920 Facility and equipment maintenance (FEM) C buildings/structures

921 FEM C utilities

922 FEM C custodial functions

925 FEM C boating access

926 FEM C roads/bridges

927 FEM C trails

928 FEM C fences

Visitor Services/Recreation

Information/Education Programs

145 Technical bulletin

Operations

311 Boundary signs

312 Informational signs

320 Outreach and education C attending or developing educational or informational materials or events for the public

327 Becoming an Outdoor Woman C enhancement

331 Wings Over Florida

339 Range safety operations

341 Public use administration (hunting)

342 Public use administration (non-hunting)

- 350 Customer service support C disseminating written or verbal information or assistance to the public
- 700 STUDIES
- 740 EVALUATIONS AND ASSESSMENTS

Law Enforcement

FWC Activity Code Numeric Listing

- 100 ADMINISTRATION C administrative tasks, including preparation of forms, word processing, photocopying, filing, and other clerical/secretarial duties.
- 101 Project inspection C field inspections of projects.
- 103 Meetings C includes workshops, conferences, staff, and other meetings.
- 104 Budget/purchasing/accounting
- 128 New Vehicle and Equipment Purchase
- 140 REPORT WRITING/EDITING/MANUSCRIPT PREPARATION
- 141 Grant applications
- 145 Technical bulletin
- 150 PERSONNEL MANAGEMENT C recruitment, hiring, training, counseling, and supervising.
- 180 SYSTEMS ADMINISTRATION AND MANAGEMENT
- 182 Data management
- 184 Metadata development and management
- 185 GIS
- 186 Biometrics
- 187 IT
- 188 Web development
- 191 Stamp design coordination
- 194 Lake restoration
- 200 RESOURCE MANAGEMENT
- 201 Cultural resource management
- 202 Timber management
- 203 Tree and shrub planting
- 204 Resource planning
- 205 Prescribed burning
- 206 Prescribed burning C growing season (April 1 to September 30)
- 207 Prescribed burning C dormant season (October 1 to March 31)
- 208 Firebreaks
- 209 Land Management Reviews
- 210 Exotic species control
- 211 Exotic plant control (mechanical)
- 212 Exotic plant control (chemical)
- 213 Wildlife management

214	Listed Species management
215	Hydrology management
216	Dams, dikes, levees
217	Canals
218	Water level management
219	Upland restoration
221	Animal surveys
226	Human dimensions surveys
228	Inland aerial surveys
235	Vegetation and plant surveys
250	MONITORING AND ASSESSMENTS
252	Biomedical monitoring
253	Ecological monitoring
256	Habitat monitoring analysis
263	Nest box monitoring
264	Population demographics
275	Permits and authorizations
276	Commission rule development and review
277	Relocation
278	CITES tags
281	Other resource management
282	Herbaceous seeding
283	Clearings
284	Feeding/watering
285	Nest structures
286	Population control
287	Stocking enhancements/population augmentation
288	Nuisance animal complaints
289	Native vegetation management (mechanical)
290	Native vegetation management (chemical)
293	Mortality investigations
294	Program coordination and implementation C inter- and intra-agency coordination and program implementation at the section, bureau, or division level
295	Biological data collection, analysis, and reporting
296	Habitat protection technical assistance
311	Boundary signs
312	Informational signs
320	Outreach and education C attending or developing educational or informational materials or events for the public
327	Becoming an Outdoor Woman C enhancement
331	Wings Over Florida
339	Range safety operations
341	Public use administration (hunting)
342	Public use administration (non-hunting)

- 350 Customer service support C disseminating written or verbal information or assistance to the public
- 700 STUDIES
- 721 Geospatial analysis techniques 740 EVALUATIONS AND ASSESSMENTS
- 750 URTD assessment
- 789 Site Preparation – GCR
- 790 Irrigation – GCR
- 791 Seed Collection – Hand
- 792 Seed Collection – Mechanical
- 793 Herbicide Maintenance Treatment
- 910 New facility construction C buildings/structures
- 912 New construction C roads/bridges
- 913 New construction C trails
- 914 New construction C fences
- 920 Facility and equipment maintenance (FEM) C buildings/structures
- 921 FEM C utilities
- 922 FEM C custodial functions
- 923 FEM C vehicles/equipment
- 925 FEM C boating access
- 926 FEM C roads/bridges
- 927 FEM C trails
- 928 FEM C fences

12.11 Prescribed Burning Plan

Indian River County Public Shooting Range Prescribed Burning Plan

INTRODUCTION

Many ecosystems in Florida evolved with fire and rely on its frequent return to sustain their unique structure and species assemblages (Myers and Ewel 1990). The Florida landscape is barraged with lightning storms more frequently than most parts of the country (Abrahamson et al., 1984), and many fires have spawned from these storms for thousands of years. Native Americans also started fire frequently for a variety of reasons (Van Lear and Harlow 2000); these fires released fire-tolerant plants from competitors that could not withstand burns and some fire-tolerant plants actually “encourage” fires by possessing flammable oils (Mutch 1970). Removing fire from the landscape has far-reaching effects and can cause successional change in fire-adapted ecosystems (Monk 1968) often culminating in a climax hardwood community. This shift results in degraded or unsuitable conditions for species that rely on fire (Gilliam and Platt 1999).

Lightning-sparked wildfires still occur annually in Florida but are usually suppressed to protect public safety. To continue the important effects that fire has on the landscape, prescribed fires are conducted. These fires mimic “natural” fires but are carefully planned and controlled.

The Indian River Public Shooting Range (IRCPSR) is located within the Eastern Flatwoods District of Florida, a physiographic area characterized by pine flatwoods, prairies, and cypress domes (Brooks 1982). These communities are all shaped by fire and prescribed fire should be used to maintain them. In addition, prescribed fire provides the following benefits on the area as well:

- 1) Reduction of fuel loads, which will help to prevent or mitigate effects of wildfires.
- 2) Enhancement of the areas aesthetics by controlling undesirable vegetation.
- 3) Control of exotic plant species.
- 4) Improved public access.
- 5) Increased success of pine regeneration.

BURN OBJECTIVES

Prescribed fire will be used on IRCPSR as a habitat management tool exclusively or in conjunction with other management techniques to accomplish a variety of objectives. The primary objective for using prescribed fire on IRCPSR is to maintain

fire-dependent native natural communities. This will result in preserving native plant communities and improving wildlife habitat for species that require a fire-maintained landscape. Secondary objectives for the use of prescribed fire include the maintenance of early successional habitats, control of exotic species, and reduction in wildfire risk.

DESCRIPTION OF AREA

The IRCPSR is located in northeastern Indian River County, approximately three miles south of the Brevard County line. The IRCPSR contains 320 acres of land with about 40 acres being developed or ruderal. Set within an increasingly urbanized region, visitors to the IRCPSR have opportunities to find solace from the nearby bustle and see a diverse assemblage of Florida's wildlife and landscape.

The IRCPSR contains 320 acres of land, comprised of the following natural communities: Depression Marsh, Hydric Hammock, Mesic Flatwoods, Open Water, Ruderal, and Wet Flatwoods. Full descriptions of these communities, including the importance and recommended frequency of fire, are found in Appendix A.

PRESCRIBED BURNING PROGRAM

A. Firelines

On IRCPSR, the lack of natural features (e.g. drains, creeks and rivers) that can act as fire breaks necessitates the creation and maintenance of firelines. Existing roads are used as firelines whenever possible. Lines disked to mineral soil will be used when necessary. Nearby vegetation may be mowed or chopped to reduce fire intensity along firelines.

B. Size and Arrangement of Compartments

Eight burn units have been delineated on IRCPSR, ranging from 1 acre to 160 acres (Figure 1). Burns will be conducted at 2-5 year intervals for most units. The size and arrangement of compartments has been determined by the existing facilities and existing firelines. The creation of new firelines around the shooting range facilities and the eastern and southern boundaries is required to protect the facilities and prevent fire from crossing onto private property to the south. Burn units may be burned individually or combined to take advantage of short windows of suitable weather constraints.

C. Type of Burn

Most burns will begin with a backfire along the downwind side of the unit. The rest of the unit will be burned with spot, flank, or headfires depending on

fuel loads and desired fire intensity. Due to small size and easy access on IRCPSR, all burns will be ignited using ground crews instead of aerial ignition.

D. Season and Time of Day

Burning will be conducted during both the growing and dormant seasons. Due to heavier than normal amount of fuels currently on the area, the first burns on each unit will likely be during the dormant season. Once fuel levels are lower, both dormant and growing season burns can be used as appropriate. In general, fire conditions become most volatile in the mid-afternoon hours, so burns will be planned accordingly.

E. Optimal Weather Conditions

Natural communities within burn units will be evaluated beforehand to determine the desired wind direction. Areas to be burned at a low intensity should be on the downwind side of the unit, and high intensity (areas of encroaching hardwoods) on the upwind side whenever possible.

Areas surrounding the burn unit will also be used to determine the best wind direction. In general, winds will be favored that blow away from I-95 to the west, private property to the south, and areas where containment would be difficult.

Other parameters, such as time since last rain and desired relative humidity, will be prescribed based on fire objectives within the unit and containment concerns. Burning will not occur on days that are deemed too volatile or days in which objectives cannot be met.

F. Smoke Management

Direction, volume and dissipation of smoke from prescribed burning on IRCPSR are of primary concern due to the proximity of smoke-sensitive areas. The primary area that may be affected by smoke (or particulates carried by smoke) is Interstate 95 on the western boundary.

To minimize smoke problems, preferred conditions will include a minimum mixing height of 1,700 feet and transport wind speed of 9 mph or more. Winds that blow away from smoke-sensitive areas will be favored. Additionally, the use of backfires, as prescribed, will produce less smoke and consume fuel more completely than headfiring. Residual smoke problems (such as stumps, snags, or logs near I-95) will be promptly mopped-up and monitored to minimize smoke hazards.

G. Personnel

Under ideal conditions, burning can be conducted with a minimum crew of four. Most burns will be conducted with a crew size range of 4-12. Burn crew members will be assigned tasks according to their training, equipment, and burn requirements. Staff from St. Sebastian State Park have expressed interest in assisting with burning and may possibly burn adjacent land in conjunction with burns on IRCPSR. Personnel from other state and federal agencies (FFS, DEP, SJRWMD) or strike teams will be used if needed.

H. Equipment

All members of the fire crew will wear, at a minimum, the PPE required by FWC's Prescribed Burning and Wildfire Suppression Standards (Appendix B). Type VI engines, tractor-plows, farm tractors, 4-wheelers, and other equipment may be used as conditions require. Smoke caution signs for nearby roads will be deployed as necessary.

I. Permits and Notifications

A permit will be obtained from FFS on the afternoon before or the morning of the burn in accordance with the provisions of FS 590.125. Adjacent landowners near the planned burn may also be contacted.

Florida Highway Patrol (FHP) will be informed prior to the initiation of any prescribed burns on IRCPSR so that proper signage can be posted on I-95 to reduce risk of accidents. The FHP can also be better prepared to schedule additional patrols on I-95 if deemed necessary.

J. Evaluation of Burn

Burns will be evaluated informally during and shortly after each burn by comparing burn objectives with burn effects. No other monitoring is recommended.

K. Special Considerations

Special attention will be given to ensure burns do not adversely affect adjacent landowners and nearby roads. Smoke impacts on nearby roads and residents will be minimized by utilizing the FFS's smoke screening tool and responding to changing weather conditions during the burn.

Sensitive wildlife resources, if known, will be depicted on burn maps and protected. Infrastructure within the burn unit such as power poles,

informational signs, and gates will be depicted on burn maps and protected as well.

When possible, IRCPSR staff will be given advance notice of prescribed burns, to minimize negative impacts on infrastructure associated with the shooting range. If sufficient advance notice cannot be provided, prescribed burn crews will assist with the movement of IRCPSR mobile infrastructure or will protect infrastructure via wet lines.

Prescribed burns should be conducted on Tuesdays or Wednesdays when IRCPSR is closed, whenever possible, to avoid negatively impacting shooting range clientele.

Indian River Public Shooting Range Management Units

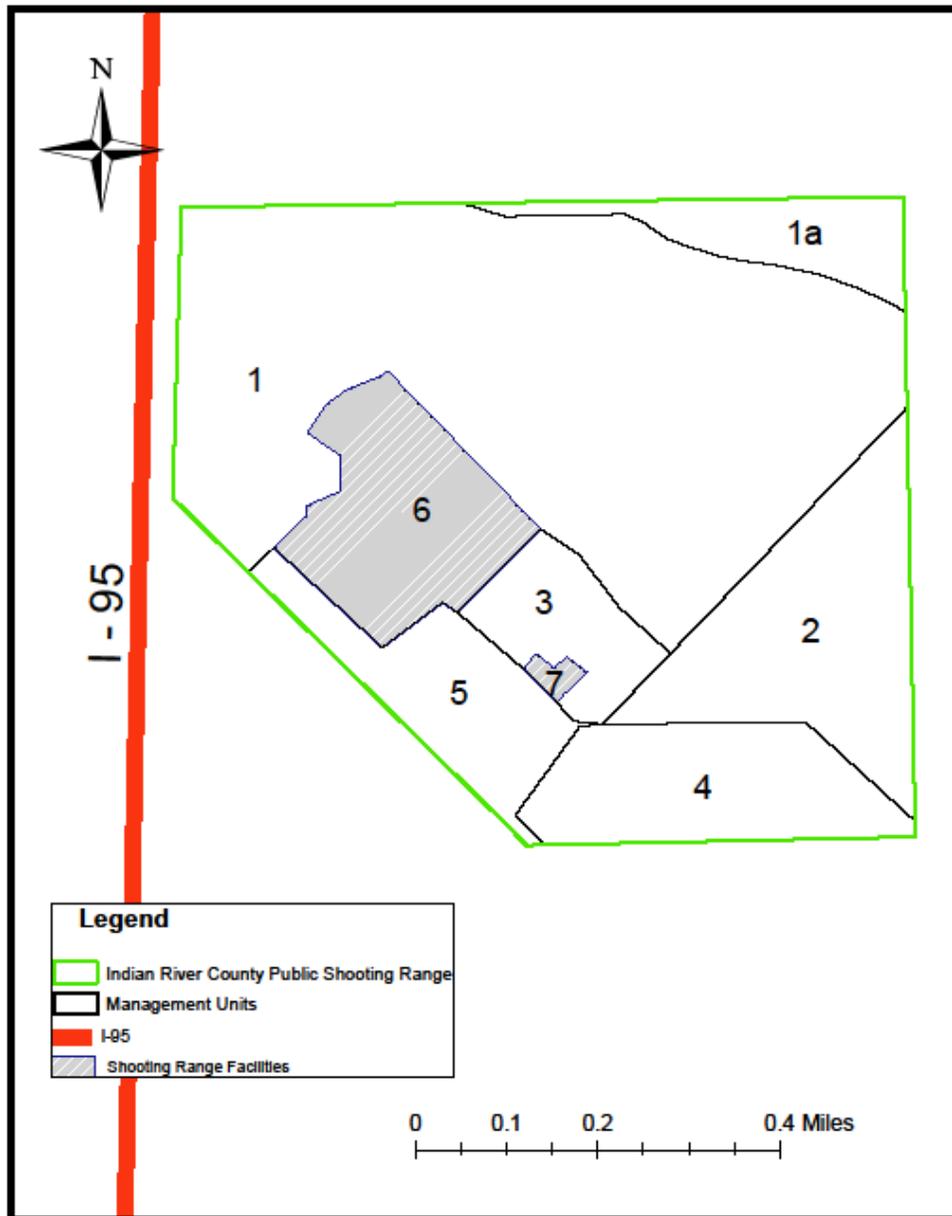


Figure 1. Defined management units on Indian River County Public Shooting Range, Indian River County, FL.

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Appendix A. Natural Community Descriptions from Guide to the Natural Communities of Florida, Florida Natural Area Inventory and Florida Department of Natural Resources, 1990).

Depression Marsh

Depression Marsh is characterized as a shallow, usually rounded depression in sand substrate with herbaceous vegetation often in concentric bands. Depression Marshes are similar in vegetation and physical features to, but are generally smaller than, Basin Marshes. Typical plants

include St. John's wort, spikerush, yellow-eyed grass, chain fern, willows, maidencane, wax myrtle, swamp primrose, bloodroot, buttonbush, fire flag, pickerelweed, arrowheads, and bladderwort.

Larger and more permanent Depression Marshes may have many of the same plants and animals listed as typical of Basin Marshes. However, because of their isolation and small size, many Depression Marshes support a very different assemblage of species than that found in larger, more permanent wetlands. Depression Marshes are considered extremely important in providing breeding or foraging habitat for such species as the flatwoods salamander, mole salamander, tiger salamander, dwarf salamander, striped newt, oak toad, cricket frog, pinewoods treefrog, barking treefrog, squirrel treefrog, little grass frog, southern chorus frog, ornate chorus frog, narrowmouth toad, eastern spadefoot toad, gopher frog, white ibis, wood stork and sandhill crane. Depression Marshes occurring as isolated wetlands within larger upland ecosystems are of critical importance to many additional wetland and upland animals.

Depression Marshes are typical of karst regions where sand has slumped around or over a sinkhole and thereby created a conical depression subsequently filled by direct rain fall, runoff, or seepage from surrounding uplands. The substrate is usually acid sand with deepening peat toward the center. Some depressions may have developed or be maintained by a subsurface hardpan. Hydrological conditions vary, with most Depression Marshes drying in most years. Hydroperiods range widely from as few as 50 days or less to more than 200 days per year.

Fire is important to maintaining this community type by restricting invasion of shrubs and trees and the formation of peat. Fire frequency is often greatest around the periphery of the marsh and least toward the center. A severe peat fire can lower the ground surface and create a pond at the center of the marsh.

Depression Marshes are often associated with and grade into Wet Prairie, Seepage Slope, Wet Flatwoods, Mesic Flatwoods, Dome Swamp or Bog. They also may occur in association with various types of lakes, such as Sandhill Lake or Flatwoods Lake.

Depression Marshes are threatened by drainage, agriculture, pollution, fire suppression, and invasion of exotic species. Depression Marshes may be filled and converted to other uses. A regional lowering of the water table as a result of overuse may eliminate many Depression Marshes. Depression Marshes on some public lands have been deepened by explosives to allow for stocking with game fish. By preying upon the eggs and larvae of frogs and salamanders, these fish may eliminate the amphibians that depend on such seasonal wetlands for successful reproduction. Likewise, many species of invertebrates not adapted to predation by fishes may be

eliminated.

Hydric Hammock

Hydric Hammock is characterized as a well-developed hardwood and cabbage palm forest with a variable understory often dominated by palms and ferns. Typical plants include cabbage palm, diamond-leaf oak, red cedar, red maple, swamp bay, sweetbay, water oak, southern magnolia, wax myrtle, saw palmetto, bluestem palmetto, needle palm, poison ivy, dahoon holly, myrsine, hackberry, sweetgum, loblolly pine, Florida elm, swamp chestnut oak, American hornbeam, Walter viburnum, royal fern, peppervine, rattanvine, yellow jessamine, and Virginia creeper. Typical animals include green anole, flycatchers, warblers, and gray squirrel.

Hydric Hammock occurs on low, flat, wet sites where limestone may be near the surface and frequently outcrops. Soils are sands with considerable organic material that, although generally saturated, are inundated only for short periods following heavy rains. The normal hydroperiod is seldom over 60 days per year. Because of their generally saturated soils and the sparsity of herbaceous ground cover, Hydric Hammocks rarely burn.

Hydric Hammock occurs as patches in a variety of lowland situations, often in association with springs or karst seepage, and in extensive forests covering lowlands just inland of coastal communities. Hydric Hammock generally grades into Floodplain Swamp, Strand Swamp, Basin Swamp, Baygall, Wet Flatwoods, Coastal Berm, Maritime Hammock, Slope Forest, Upland Mixed Forest, or Upland Hardwood Forest. Hydric Hammock is often difficult to differentiate from Bottomland Forest, Prairie Hammock, and Floodplain Forest.

The normal hydrological regime must be maintained in Hydric Hammock. If the water table is lowered, Hydric Hammock will gradually change to mesic conditions. If the hammock is flooded, many trees will die and eventually be replaced by more hydrophytic species.

Mesic Flatwoods

Mesic Flatwoods are characterized as an open canopy forest of widely spaced pine trees with little or no understory but a dense ground cover of herbs and shrubs. Several variations of Mesic Flatwoods are recognized, the most common associations being longleaf pine - wiregrass - runner oak and slash pine - gallberry - saw palmetto. Other typical plants include: St. Johns-wort, dwarf huckleberry, fetterbush, dwarf wax myrtle, stagger bush, blueberry, gopher apple, tar flower, bog buttons, blackroot, false foxglove, white-topped aster, yellow-eyed grass, and cutthroat grass. Typical animals of Mesic Flatwoods include: oak toad, little grass frog, narrowmouth toad, black racer, red rat snake, southeastern kestrel, brown-headed nuthatch, pine warbler, Bachman's sparrow, cotton rat, cotton mouse, black bear, raccoon, gray fox, bobcat, and white-tailed deer.

Mesic Flatwoods occur on relatively flat, moderately to poorly drained terrain. The soils typically consist of 1-3 feet of acidic sands generally overlying an organic hardpan or clayey subsoil. The hardpan substantially reduces the percolation of water below and above its surface. During the rainy seasons, water frequently stands on the hardpan's surface and briefly inundates much of the flatwoods; while during the drier seasons, ground water is unobtainable for many plants whose roots fail to penetrate the hardpan. Thus, many plants are under the stress of water saturation during the wet seasons and under the stress of dehydration during the dry seasons.

Another important physical factor in Mesic Flatwoods is fire, which probably occurred every 1 to 8 years during pre-Columbian times. Nearly all plants and animals inhabiting this community are adapted to periodic fires; several species depend on fire for their continued existence. Without relatively frequent fires, Mesic Flatwoods succeed into hardwood-dominated forests whose closed canopy can essentially eliminate the ground cover herbs and shrubs. Additionally, the dense layer of litter that accumulates on unburned sites can eliminate the reproduction of pines which require a mineral soil substrate for proper germination. Thus, the integrity of the Mesic Flatwoods community is dependent on periodic fires. However, fires that are too frequent or too hot would eliminate pine recruitment and eventually transform Mesic Flatwoods into Dry Prairie.

Mesic Flatwoods are closely associated with and often grade into Wet Flatwoods, Dry Prairie, or Scrubby Flatwoods. The differences between these communities are generally related to minor topographic changes. Wet Flatwoods occupy the lower wetter areas, while Scrubby Flatwoods occupy the higher drier areas.

Mesic Flatwoods are the most widespread biological community in Florida, occupying an estimated 30 to 50% of the state's uplands. However, very few undisturbed areas of Mesic Flatwoods exist because of habitat mismanagement and silvicultural, agricultural, or

residential development. Mesic Flatwoods are often fairly resilient, and with proper management they can generally be restored.

Wet Flatwoods

Wet Flatwoods are characterized as relatively open-canopy forests of scattered pine trees or cabbage palms with either thick shrubby understory and very sparse ground cover, or a sparse understory and a dense ground cover of hydrophytic herbs and shrubs. Several variations exist

between these extremes. Typical plants include pond pine, slash pine, sweetbay, spikerush, beakrush, sedges, dwarf wax myrtle, gallberry, titi, saw palmetto, creeping beggarweed, deer tongue, gay feather, greenbrier, bluestem, and pitcher plants. Typical animals include oak toad, cricket frog, chorus frog, black racer, yellow rat snake, diamondback rattlesnake, pygmy rattlesnake, red-shouldered hawk, bobwhite, opossum, cottontail rabbit, cotton rat, cotton mouse, raccoon, striped skunk, bobcat, and white-tailed deer.

Wet Flatwoods occur on relatively flat, poorly drained terrain. The soils typically consist of 1 to 3 feet of acidic sands generally overlying an organic hardpan or clay layer. Cabbage palm flatwoods tend to occur on more circumneutral sands (pH 6.0 - 7.5) underlain by marl or shell beds. The hardpan substantially reduces the percolation of water below and above its surface. During the rainy season, water frequently stands on the surface, inundating the flatwoods for 1 or more months per year. During the drier seasons, ground water is less accessible for many plants whose roots fail to penetrate the hardpan. Thus, many plants are under the stress of water saturation during the wet seasons, and under the stress of dehydration during the dry seasons.

Another important physical factor in Wet Flatwoods is fire. Natural fires probably occurred every 3 to 10 years during pre-Columbian times. Nearly all plants and animals inhabiting this community are adapted to periodic fires, and several species depend on fires for their continued existence. Without relatively frequent fires, Wet Flatwoods succeed into hardwood dominated forests whose closed canopy would essentially eliminate the ground cover herbs and shrubs. In fact, much of the variation in community structure is probably associated with fire frequency. Thus, the longer the period of time since the last fire, the more developed will be the understory shrubs. If the understory is allowed to grow for too long, the accumulation of needle drape and the height of flammable understory shrubs will increase the probability of a catastrophic canopy fire.

Wet Flatwoods are closely associated with and often grade into Hydric Hammock, Mesic Flatwoods, Wet Prairie, or Basin Swamp. Wet Flatwoods may also grade into Dome Swamp or Strand Swamp, but the absence of a Wet Prairie ecotone suggests that the hydrology has been disturbed.

Although Wet Flatwoods may have been an abundant biological community of the Coastal Plain at one time, examples with an intact overstory and understory, without exotics, and with the potential for future maintenance by fire are rare. They are relatively resilient to overstory damage but recover poorly when the ground cover or hydrology has been disturbed. Wet Flatwoods are vulnerable to disruptions of fire and hydrological regimes. Exotic plants readily invade Wet Flatwoods in south Florida and must be controlled promptly.

Wet Prairie

Wet Prairie is characterized as a treeless plain with a sparse to dense ground cover of grasses and herbs, including wiregrass, toothache grass, maidencane, spikerush, and beakrush. Other typical plants include hatpins, marsh pinks, crownbeard, sundews, black-eyed susan, stargrass, white-top sedge, meadowbeauty, yellow-eyed grass, sneezeweed, sunflower, wax myrtle, pitcher plants, tickseed, St. John's wort, and panicums. Typical animals include cricket frog, chorus frog, little grass frog, black racer, yellow rat snake, cottonmouth, pygmy rattlesnake, northern harrier, caracara, southeastern kestrel, killdeer, long-billed marsh wren, red-winged blackbird, marsh rabbit, cotton rat, and cotton mouse.

Wet Prairie occurs on low, relatively flat, poorly drained terrain of the coastal plain. Soils typically consist of sands often with a substantial clay or organic component. The most important physical factors are hydrology and fire. Wet Prairie is seasonally inundated or saturated for 50 to 100 days each year and burns every 2 to 4 years. Wax myrtle quickly invades and will dominate Wet Prairies with longer fire intervals. In south Florida, melaleuca invasions can seriously impact Wet Prairies. Generally, Wet Prairies have a much shorter hydroperiod than other herbaceous wetlands and are subject to regular and prolonged desiccation during the dry season due to their flat topography.

Wet Prairie is closely associated with and often grades into Wet Flatwoods, Depression Marsh, Seepage Slope, Mesic Flatwoods, or Dry Prairie. Several other biological communities have somewhat similar species compositions or overlap in characteristics, including Swale, Seepage Slope, Basin Marsh, Floodplain Marsh, and Marl Prairie.

Wet Prairies were probably common throughout the Coastal Plain at one time. Few good quality, intact examples remain and some types, e.g. pitcher plant prairies, are becoming increasingly rarer. Wet Prairie is vulnerable to hydrological and fire regime alterations, overgrazing, and soil disturbances by off-road vehicles. Recovery from disturbances is often poor and slow.

Appendix B. FWC's Prescribed Burning and Wildfire Suppression Standards.

DIVISION OF HABITAT AND SPECIES CONSERVATION
Internal Operating Policy
Revised March 2011

Subject: Prescribed Burning and Wildfire Suppression Standards

Policy:

The following policy shall apply to all Division of Habitat and Species Conservation (DHSC) employees engaged in prescribed burning or wildfire suppression activities.

General Guidelines:

This policy establishes minimum standards for participation in prescribed burning and wildfire suppression activities. In addition to conducting prescribed burning on Commission-managed lands, DHSC employees are periodically asked to assist the Florida Division of Forestry with wildland fire suppression efforts, particularly during declared wildfire emergencies. Working on prescribed fires or wildfires is an inherently dangerous and risky activity that can result in significant property damage, personal injury, or loss of life. Therefore, it is necessary to establish minimum standards for training and certification to insure DHSC employees have the appropriate skills and knowledge to perform these activities safely and effectively. Employees are encouraged to obtain higher levels of training and certification as warranted and approved through supervisory channels.

Chapter 1 Prescribed Burning

1.1 Prescribed Burn Participation: This section establishes minimum training, certification, and experience required for members of a prescribed burn team. These same standards apply to non-DHSC employees, volunteers, and contractors participating on a burn on FWC-managed state lands.

- A. **Crew Member Trainee:** Employees who do not meet the requirements for Crew Member shall be classified as a Crew Member Trainee. A Crew Member Trainee may participate in prescribed burning activities provided that they are under the direct supervision of a Crew Member. A Crew Member may supervise no more than one Crew Member Trainee. It is recommended that no more than 40% of the burn crew be Crew Member Trainees.

Note: Crew members may supervise more than one Crew Member Trainee, and more than 40% of the burn crew may be Crew Member Trainees during prescribed burns conducted during training classes.

- B. **Crew Member:** May participate independently in prescribed burning activities. Shall have successfully completed the following level of training:

1

- 1) Interagency Basic Prescribed Fire Course; *or*
- 2) Basic Wildland Firefighter Training (S-130) **and** Introduction to Wildland Fire Behavior (S-190).

C. **Burn Manager Trainee:** May serve as burn manager to fulfill the responsibilities of acquiring certified prescribed burn manager status. Burn Manager Trainee must be under the direct supervision of a Certified Burn Manager on prescribed burns that will be used to qualify them for certified prescribed burn manager status. Shall have successfully completed the following level of training and have the specified level of experience:

- 1) Interagency Basic Prescribed Fire Course;
- 2) S-130/S-190; **and**
- 3) Participated on at least five prescribed burns.

D. **Certified Burn Manager:** May request prescribed burn authorizations and serve as burn manager. Shall have successfully completed the following level of training, and have the specified certification and level of experience:

- 1) Interagency Basic Prescribed Fire Course;
- 2) S-130/S-190;
- 3) Prescribed Burn Manager Certification; **and**
- 4) Participated on at least ten prescribed burns.

1.2 Prescribed Burn Engine (Pumper Unit/Brush Truck) Operator: Before an employee may independently operate a water-delivery engine in support of active prescribed burns, they shall have successfully completed the following level of training and have the specified level of experience:

- A. S-130/S-190;
- B. On-the-job training for operation of water-delivery engines by a trained and/or experienced engine operator; *or* successful completion of Southern Area Engine Academy or Engine Operator (PMS 419); **and**
- C. Participated on at least five prescribed burns.

1.3 Prescribed Burn Tractor/Bulldozer Plow Unit Operator: Before an employee may independently operate tractor/dozer fire-plow during prescribed burns, they shall have successfully completed the following level of training and have the specified level of experience:

- A. The wildland fire portion of Basic Fire Control Training; **and**
- B. Participated on at least five prescribed burns.

1.4 Prescribed Burn Aerial Ignition Dispenser (AID) Operator: Before an employee may independently operate an AID during a prescribed burn, they shall have successfully completed the following level of training and have the specified level of experience:

- A. Qualified at or above Crew Member level for prescribed burning;
- B. Completed an FWC AID training workshop or other courses that provide an equivalent level of training; *and*
- C. Participated on at least five prescribed burns.

1.5 General: All prescribed burns shall be conducted in complete compliance with all laws regulating the use of prescribed fire; specifically Chapter 590.125(3) F.S. and Chapter 5I-2 F.A.C. Burn plans shall have all the required elements as specified in Chapter 5I-2.006 as well as a contingency plan, mop-up standards, and standards for declaring the fire out. All prescribed burns shall be conducted as a certified prescribed burn, and managed by a certified prescribed burn manager.

Chapter 2 Wildfire Suppression

2.1 General: The Division of Forestry, or other firefighting entity, may request assistance from DHSC staff during a wildfire suppression incident. This request will usually be for a wildfire strike team. A wildfire strike team consists of one wildfire strike team leader, and two wildfire strike team members per Type V or VI engine. Standards for strike team members and leaders are outlined below. In addition, requests may be made for personnel to fill positions on a suppression incident that are not covered by the following standards. The decision to assist, and the level of assistance provided, on fire suppression incidents will be made by DHSC leadership (includes Division Director, Deputy Division Director, Section Leaders and/or Assistant Section Leaders) and the Wildland Fire Coordinator.

2.2 Wildfire Strike Team Member: Before an employee may participate on wildfire strike teams in support of wildfire suppression efforts, they shall have successfully completed the following level of training and have the specified level of experience:

- A. S-130/S-190;
- B. Southern Area Engine Academy;
- C. Experience and demonstrated proficiency operating a Type V or VI engine; *and*
- D. Participated on at least ten prescribed burns and/or wildfire suppression incidents.

* Exception - Employees who do not meet the above standards can be approved by DHSC leadership and the Wildland Fire Coordinator to serve on a wildfire strike team. Exceptions can be granted when available strike team personnel are not sufficient to meet the requested need. Training and experience levels should be considered when approving exceptions.

2.3 Wildfire Strike Team Leader: Before an employee may serve as team leader for wildfire strike teams in support of wildfire suppression efforts, they shall have completed the following

level of training and have the specified level of experience **in addition to that required to participate on a wildfire strike team:**

- A. Basic Incident Command System (I-200); **and**
- B. Experience as burn manager, crew boss, or strike team leader on at least ten prescribed burns or wildfire suppression incidents.

2.4 Wildfire Tractor/Bulldozer Plow Unit Operator: Before an employee may independently operate tractor/dozer fire-plow units in support of wildfire suppression efforts, they shall have completed the following level of training and have the specified level of experience:

- A. The wildland fire portion of Basic Fire Control Training;
- B. Experience and demonstrated proficiency operating a tractor/bulldozer plow unit; **and**
- C. Participated on at least ten prescribed burns or wildfire suppression incidents.

Chapter 3 Safety

3.1 Personal Protective Equipment: Required items of Personal Protective Equipment for all wildland fire activities include:

- o Flame Resistant Shirt and Pants, or Jumpsuit
- o Wildland Fire Hard Hat
- o Leather Gloves
- o Leather Boots – 8” Lace-up
- o Eye Protection
- o Bandana or Dust Mask
- o Hand-held Radio
- o Fire Shelter

Safety considerations and/or vegetative types may dictate that crew members wear additional equipment or in some cases deviate from the above required equipment. The burn manager/strike team leader shall determine what Personal Protective Equipment will be worn by their crew to maximize safety, and shall document justifications for any deviations of the required equipment.

3.2 Physical Standards: Prescribed burning and firefighting are physically demanding activities. Each prescribed burn crew/strike team member shall maintain a level of fitness that will allow full participation in these activities. It is the burn crew/strike team member's responsibility to make the burn manager/strike team leader aware of any limitations that may restrict their activities so that they can be assigned an appropriate role.

3.3 Mobile Equipment: The following is a list of required items for mobile equipment used during wildland fire activities. Mobile equipment includes all-terrain vehicles, utility vehicles, airboats, swamp buggies, trucks, tractors, and bulldozers.

- An ABC fire extinguisher that has been inspected, serviced, and maintained in accordance with the manufacturer's maintenance procedures shall be in or on all mobile equipment. Below are minimum sizes:
 - All-terrain and utility vehicles – 2.5 pound extinguisher
 - Trucks and tractors – 5 pound extinguisher
 - Bulldozers and Swamp Buggies– 10 pound extinguisher
 - Vessels – 5 pounds (could be two, 2.5 pound extinguishers)
- An operational winch shall be installed on all-terrain vehicles, utility vehicles, swamp buggies, and trucks used in the interior of a burn unit.
- An operational water delivery system with at least five gallons of water shall be installed in or on any mobile equipment used in the interior of a burn unit.

Chapter 4 Incident Reviews

4.1 Incident Reviews: This section outlines a mechanism for how DHSC will respond to and review a prescribed fire that had unintended negative consequences. The purpose of a fire-related incident review is to gather facts regarding the incident, and if necessary, recommend actions that may help minimize the chance of reoccurrence.

4.2 Fire-related Incident: A fire or smoke related incident that includes any of the following:

- A. Notice of Violation;
- B. Conducting a burn outside of the prescription;
- C. Fire leaves the prescribed burn area;
- D. Fire leaves the WMA or WEA; or
- E. Fire causes property damage, personal injury, or loss of life.

4.3 Reporting of Fire-related Incidents: The burn manager shall notify their Regional Wildlife Management Biologist as soon as possible but no later than 8:00 am the day after the fire-related incident occurred. The Regional Wildlife Management Biologist shall notify THCR leadership and the Wildland Fire Coordinator of the incident as soon as possible. The notification should include the following:

- A. Date, Time and Location of Incident
- B. Brief Description of the Incident and Current Status
- C. Other Agencies or Entities Assisting

THCR leadership will notify Division leadership and the Executive and Assistant Executive Director of any incidents involving escapes from the WMA, escapes requiring unplanned

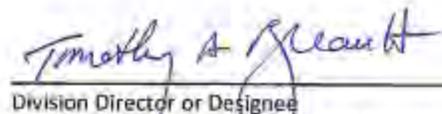
suppression assistance, or any incidents resulting in private property damage or injury to a member of the public.

4.4 Fire-related Incident Review: A review of a fire-related incident initiated by the Wildland Fire Coordinator resulting in a written finding of facts and recommendations. The following guidelines should be used to determine the type of review conducted:

- A. **No Review** – No review is required if the prescribed fire escaped from the burn unit, stayed on the WMA/WEA, and was suppressed. These incidents, however, need to be reported to the Regional Wildlife Management Biologist and the Wildland Fire Coordinator if Division of Forestry or other entity assisted with suppression efforts.
- B. **Level 1 Review** – Review to be conducted by the Wildland Fire Coordinator or alternate if one or more of the following occurred and no Level 2 review criteria were met:
 - 1) A Notice of Violation was issued to the burn manager.
 - 2) Motorized equipment was damaged requiring the completion of an Equipment Damage Report.
 - 3) A Level 1 review is requested by DHSC leadership.
- C. **Level 2 Review** – Review to be conducted by the Wildland Fire Coordinator or alternate, and one representative from at least three of the administrative regions if one or more of the following occur:
 - 1) Prescribed fire escaped from the burn unit and from the WMA/WEA.
 - 2) Injury or private property damage resulted from the fire or smoke. If an injury occurs to a member of the burn crew, the need to convene a review team will be determined by DHSC leadership.
 - 3) A Level 2 review is requested by DHSC leadership.

4.5 Fire-related Incident Report: Within 45 days of completing a Fire-related Incident Review, the Wildland Fire Coordinator shall submit a report to DHSC leadership for approval. The report should include: 1) a summary of the incident; 2) a review of the weather forecast and observed weather conditions; 3) a review of the burn prescription; 4) a summary of the execution of the burn and the suppression of the escape, if applicable; and 5) recommendations for future burns. After being approved, the report will be made available to appropriate personnel via e-mail and by being posted on the Terrestrial Habitat and Conservation's Wildland Fire Sharepoint site.

Approved:



Division Director or Designee
Division of Habitat & Species Conservation
Florida Fish and Wildlife Conservation Commission

3-2-2011

Date

12.12 Arthropod Control Plan



ADAM H. PUTNAM
COMMISSIONER

Florida Department of Agriculture and Consumer Services
Division of Agricultural Environmental Services

ARTHROPOD MANAGEMENT PLAN - PUBLIC LANDS

Section 388.4111, F.S.
Telephone: (850) 617-7995

Return to:
Mosquito Control Program
3125 Conner Blvd, Bldg 6,
Tallahassee, Florida 32399-1650

For use in documenting an Arthropod Control Pan for lands designated by the State of Florida or any political subdivision thereof as being environmentally sensitive and biologically highly productive therein. Fill this form out if control work is necessary or planned.

Name of Designated Land: Indian River County Public Shooting Range

Is Control Work Necessary: Yes No
On request.

Location: Indian River County

Land Management Agency: Florida Fish and Wildlife Conservation Commission

Are Arthropod Surveillance Activities Necessary? Yes No

If "Yes", please explain:

If ground aduenticiding is requested, need will be verified by landing rate counts.

Which Surveillance Techniques Are Proposed?
Please Check All That Apply:

- Landing Rate Counts
- Light Traps
- Sentinel Chickens
- Citizen Complaints
- Larval Dips
- Other

If "Other", please explain: N/A

Arthropod Species for Which Control is Proposed:

Proposed Larval Control:

Proposed larval monitoring procedure:

Are post treatment counts being obtained: Yes No

Biological Control of Larvae:

Might predacious fish be stocked: Yes No

Other biological controls that might be used:

Material to be Used for Larvaciding Applications: N / A

(Please Check All That Apply:)

- Bti
- Bs
- Methoprene
- Non-Petroleum Surface Film
- Other, please specify:

Please specify the following for each larvacide: N / A

Chemical or Common name: N/A

Ground Aerial

Rate of application:

Method of application:

Proposed Adult Mosquito Control:

Aerial adulticiding Yes No

Ground adulticiding Yes No

Please specify the following for each adulticide:

Chemical or common name: Permanone 30-30

(permethrin)

Rate of application:

0.005lbs ai/acre

Method of application:

Truck with ULV

sprayer

Proposed Modifications for Public Health Emergency Control: In the event of a declared public health emergency, control may be performed by the arthropod control agency, as part of a larger treatment plan to safeguard public health. Land managers of the area will be notified prior to treatment.

Proposed Notification Procedure for Control Activities:

Manager of the area will be notified by e-mail when treatment of the area will occur. The notice should include a map of the area being treated, the material to be used and the general time of day the treatment will occur.

Records:

Are records being kept in accordance with Chapter 388, F.S.:

Yes No

Records Location:

How long are records maintained:

5 years

Vegetation Modification:

What trimming or altering of vegetation to conduct surveillance or treatment is proposed?

None

Proposed Land Modifications:

Is any land modification, i.e., rotary ditching, proposed:

None

Include proposed operational schedules for water fluctuations:

None

List any periodic restrictions, as applicable, for example peak fish spawning times.

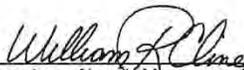
None

Proposed Modification of Aquatic Vegetation:

None

Land Manager Comments:

Arthropod Control Agency Comments: Treatments will be done only when requested by the land manager.


Signature of Lands Manager or Representative 10/23/2018
Date


Signature of Mosquito Control Director / Manager 10/23/18
Date

12.13 Indian River County Letter of Compliance with Local Government Comprehensive Plan



INDIAN RIVER COUNTY
Environmental Planning & Code Enforcement Section
1801 27th Street, Vero Beach FL 32960
772-226-1249 / 772-978-1806 fax
www.ircgov.com

November 15, 2018

Dylan Imlah
Florida Fish and Wildlife Conservation Commission
620 S. Meridian Street
Tallahassee, Florida 32399

Dear Ms. Imlah:

Per our recent correspondence, County staff have reviewed the management plan for the Indian River County Public Shooting Range (IRCPSR) and have determined that it is consistent with the approved Indian River County Comprehensive Plan.

Thank you for the opportunity to review the referenced documents. If you have any further questions, please do not hesitate to contact me at (772) 226-1240.

Sincerely,

A handwritten signature in blue ink that reads "Steven S. Hitt".

Steven S. Hitt, M.S.
Senior Environmental Planner
Environmental Planning and Code Enforcement Section

Cc: Stan Boling, AICP (via e-mail)
Roland M. Deblois, AICP (via e-mail)

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