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**Appendix A**  
**INRMP Annual Review Documents**

Final DRAFT

## Appendix A: INRMP Annual Review Documents

The annual review of the Integrated Natural Resources Management Plan (INRMP) allows for adaptive management by providing the opportunity for the parties (internal and external stakeholders) to review goals and objectives of the INRMP, as well as establish a realistic schedule for the proposed actions.

Appendix A includes the following attachments:

- Attachment A-1**      **Templates to Use for Documentation** (of Annual Review):  
Template – Annual Review Letter for Agencies  
Template – Annual Report  
Template – Summary of Changes  
Template – Work Plan Implementation Table  
Template – Meeting Minutes
- Attachment A-2**      **Checklist for Annual Reviews:** Table A-1 contains a list of documents, as applicable, to be sent to agencies for the annual INRMP review for the years 2016 through 2019. In the year 2020, it will be time for a 5-year update or revision of the INRMP. Table A-1 also provides a place to record/document: the date sent to agency/tribe, date reviewed by agency/tribe, and indication if agency/tribe responded to the annual review request. A line is also included for the required annual internal review of the BASH Plan.
- Attachment A-3**      **Summary of Past Projects** (4 tables, one for each 45 SW installation): A review of the Summary of Past Projects for each installation is part of the annual review process.
- Attachment A-4**      **Task Force Meeting Minutes:** Contains the 28 Feb 2014 task force meeting minutes to discuss the five-year INRMP update. Attachment A-4 is also a placeholder to file any future task force meeting minutes related to the INRMP, as appropriate.
- Attachment A-5**      **Correspondence with Agencies:** Contains a copy of the invitation sent to USFWS, NMFS, and FWC for the 28 Feb 2014 task force meeting, and a copy of documents included with that invitation. Attachment A-5 is also a placeholder to file future correspondence with agencies related to the INRMP, as appropriate.

### Acknowledge and Certify Annual Review and Coordination of INRMP

Also, see **Page i** of the main INRMP document (**Annual Review and Coordination Page**), which provides a record to acknowledge and certify that the annual review and coordination was completed for a specified year (requires internal signatures). .

### Requests for Annual Review

Requests to federal and state agencies for annual review of the INRMP should be sent to: US Fish and Wildlife (USFWS); the National Marine Fisheries Services (NMFS); the Florida Fish and Wildlife Conservation Commission (FWC); and Tribal Historic Preservation Officer (THPO) for applicable tribes, as appropriate.

**U.S. Fish and Wildlife Service (USFWS)**

The annual review will be reviewed by personnel at the USFWS North and South Florida field offices:

**For CCAFS, PAFB & MTA:**

North FL Ecological Services Office  
USFWS Southeast Region 4  
7915 Baymeadows Way, Suite 200  
Jacksonville, FL 32256-7517  
Telephone: (904) 731-3336  
Fax: (904) 731-3045  
Attn: John Milio or Jay Herrington

**National Marine Fisheries Service (NMFS)**

Rachel Sweeney  
PRD Branch Chief, South Atlantic  
National Marine Fisheries Service  
NOAA Southeast Regional Office  
263 13th Ave. South  
St. Petersburg, FL 33701  
Telephone: (727) 209-5953  
Rachel.Sweeney@noaa.gov

Pace Wilber  
HCD Branch Chief, South Atlantic  
National Marine Fisheries Service  
NOAA Southeast Regional Office  
219 Ft Johnson Road  
Charleston SC 29412  
Telephone: (843) 762-8500  
Pace.wilber@noaa.gov

**Florida Fish and Wildlife Conservation Commission (FWC):**

**Submit annual review request to this email address:**

[FWCConservationPlanningServices@myfwc.com](mailto:FWCConservationPlanningServices@myfwc.com)

**Copy annual review request to:**

Macky Thurman (*reviewed 2015 Five year INRMP update*)

[Mclin.thurman@MyFWC.com](mailto:Mclin.thurman@MyFWC.com)

(352) 732-1225

**Additional mailing address information for FWC, if needed:**

Landowner Assistance Program Manager (*signed 2015 Five year INRMP update*)  
Office of Conservation Planning Services  
620 S. Meridian Road  
Tallahassee, FL 32399-1600  
Telephone: (850) 487-3796

**Tribal Review**

As appropriate per the Sikes Act, notify/request review by THPO(s) as identified by the 45 SW Cultural Resources Manager.

## **Attachment A-1**

### **Templates to Use for Documentation**

- Template – Annual Review Letter for Agencies
- Template – Annual Report
- Template – Summary of Changes
- Template – Work Plan Implementation Table
- Template – Meeting Minutes



DEPARTMENT OF THE AIR FORCE  
AIR FORCE XXXXXXXX COMMAND

Dear XXXX:

In accordance with Sikes Act Improvement Act (16 USC § 670A as amended 2011) and Air Force guidance (AFI32-7064) requirements, we annually review our Integrated Natural Resources Management Plan (INRMP) with the cooperation of the U.S. Fish and Wildlife Service (Service), the Florida Fish and Wildlife Conservation Commission (State), and, where applicable, the National Oceanographic Atmospheric Administration National Marine Fisheries Service (NMFS).

I would like to submit the enclosed documents for your review at this time. I request your feedback on the effectiveness of the INRMP and invite you to meet with my staff to discuss these materials. Please contact XXXX at XXX-XXX-XXXX to schedule a meeting. If you are not available to meet with our natural resources staff, please review this letter and the enclosures.

Under the aforementioned guidance, an INRMP annual review shall verify the following:

- 1) We currently have/do not have sufficient professionally trained natural resources management staff available to implement the INRMP as summarized in the enclosed *Annual INRMP Report*.
- 2) We have/have not identified significant changes to the installation's mission requirements or its natural resources. We have/have not completed only minor updates and changes described in the enclosed *Summary of Changes*.
- 3) Projects identified in the INRMP have/have not been budgeted for and implementation is/is not on schedule as summarized in the enclosed *Work Plan Implementation Table*.
- 4) All required Federal, State and Installation coordination has occurred.
- 5) Progress toward meeting agreed upon goals for natural resources management is documented in the enclosed *Annual INRMP Report and Work Plan Implementation Table*.

I ask for your concurrence, by signature to the *Annual INRMP Report*, and any written questions, comments or concerns you may have related to the implementation of the *Installation* INRMP for calendar year 20XX. If you are currently unable to review this 20XX Annual INRMP Report package or meet with my staff, I ask that you sign and date the statement at the bottom of this letter and return to us via email or mail at: xxxxxx.

Sincerely,

*{Base Environmental  
Office/Appropriate Authority}*

Enclosure(s):

1. Annual INRMP Report (concurrence signature requested)
2. Summary of Changes
3. Work Plan Implementation Table

☐ *We are unable to review the Annual INRMP Summary at this time, but we intend to do so before \_\_\_\_\_*  
*Date*

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*Signature*

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*Date*

## **SUBJECT: 2013 ANNUAL INSTALLATION INRMP REPORT**

**Topic 1: Sufficient numbers of qualified natural resources management personnel and resources are available to oversee implementation of projects and activities identified in the *INRMP Work Plan* (enclosure). Implementation Status: Green**

The *Work Plan Implementation Table* (enclosure) outlines the activities required to achieve the goals and objectives of natural resource management on the installation. It also indicates by what means this activity was achieved, a.k.a with resources (funding) or installation natural resource professionals. The *Work Plan*, therefore, details the workload of qualified personnel and the level of funding required to implement the INRMP. In 2013, the number of qualified personnel required was one. Natural Resource Manager, Mr. Joe Duwap fulfilled this requirement. In 2013, a sufficient level of funding was available to complete projects proposed for completion in 2013. Project implementation is identified in the *Work Plan*. *{Explain here any discrepancies between what was proposed for completion and what was actually completed, which is summarized in the Work Plan Implementation Table.}*

*{Installation should create a Work Plan Implementation Table and ensure that INRMP goals, objectives, and projects sufficiently outline the duties of the natural resources management personnel on the installation. The Work Plan should then be able to outline how many management personnel are needed to complete these activities on an annual basis, thereby verifying this requirement. See example Work Plan Implementation table provided by IST. Base should complete the Accomplishments column to indicate which projects were actually completed as proposed. Table will help explain missed projects by showing that they are planned for out years or completed previously out of cycle (and should reduce the need for lengthy written explanations here). This section can be used to explain other reasons a project wasn't implemented, for instance why a project was no longer needed, weather, lack of \$ or staff, etc.}.*

**Topic 2: Significant changes to the installation's mission requirements or its natural resources have not been identified, therefore, the current INRMP and enclosed 2013 Summary of Changes are still current as to operation and effect per the Sikes Act. Implementation Status: Green**

The 2013 Summary of Changes document (enclosed) tracks all minor updates made to the INRMP in 2013. No changes in the installation mission have occurred over the previous year that adversely impact natural resource management requirements to a degree that requires a revision to the current plan.

**Topic 3: Projects identified in the INRMP have been budgeted for and implementation is on schedule as summarized in the attached *Work Plan Implementation Table* (enclosed). Implementation Status: Yellow**

The *Work Plan* lists the current year and four future fiscal years and indicates by which means the project will be accomplished (funding or personnel). The *Work Plan* also indicates whether the project has been programmed and is thus on schedule. The programmed project number is followed by a funding score (4-24), which indicates the funding priority of the project against all other environmental requirements. The funding line cut off for 2013 was a score of 12 thus projects scored at 12 or above are reasonably likely to get funded in the future. Budget cuts and sequester actions could raise this funding line in the future, thus actual funding is always unknown and subject to congressional decisions.

**Topic 4 - Coordination with the USFWS, CDFW, and NOAA NMFS has occurred. Implementation Status: Green**

Agency personnel and base natural resource personnel met on xxxxxxxx to review implementation of the INRMP, review the Annual INRMP Review documentation, and to concur that the INRMP is still current as to operation and effect

**Topic 5: Progress towards meeting the agreed upon goals and objectives for natural resources management was completed in 2013. Implementation Status: Green.**

*{Installations can either produce a written summary of actions here for projects they wish to highlight, or the IST suggests that installations simply refer back to the Work Plan Implementation Table which will indicate which projects have been accomplished. During the meeting, each project can be discussed with agency personnel in detail and agency questions can be answered}.*

**SUMMARY RATING FOR INSTALLATION INRMP IMPLEMENTATION AND COMPLIANCE: GREEN**

The overall rating for the implementation of the Installation AFB INRMP is green as all five above topics were met successfully during 2013.

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NAME  
Chief, Conservation Section  
XX CES  
Installation AFB

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NAME  
Assistant Field Supervisor  
U.S. Fish and Wildlife Service  
Ecological Services Office

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NAME  
Florida Fish and Wildlife Conservation Commission

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NAME  
National Oceanographic Atmospheric Administration  
National Marine Fisheries Service

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NAME  
Installation Commander (or designated authority)



## INRMP Summary of Changes

The final version of this plan was signed by the **xx xx** Commander in **Month Year**. All changes to this document after this date are tracked and summarized below.

Section Number	Section Title	Sub-Section	Change Summary	Reason for Update	Date Completed	POC
1	Executive Summary		Changed “implemented over the next 5 to 10 years” to “implemented and reviewed annually.”	Plans do not expire and do not have to be revised every five years if reviewed annually with concurrence from partners and base Commander (AFI 32-7064).	7/1/13	Lauren Wilson
x	x	x	Added Project: “Project 2.1.6: Write and implement Tab 3 <i>Wildland Fire Management Plan</i> as required by DoDI 6055.06 and AFI 32-7064 and discussed in Chapter 7.10.”	FMP may be required.	7/1/13	Lauren Wilson
x	x	x	Added Project: “Project 5.1.3: Implement corrective actions if public access is negatively impacting natural resources and increasing soil erosion.”	Management action required	7/1/13	Lauren Wilson

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Work Plans are developed in five-year increments and organized by in Resource Section. Work will be completed either by trained Natural Resource Management staff designated by NRMx) or through contracts (designated by Levels) where appropriate. Funding classes are described below. It is important to note, that on a yearly basis, only Level 0 and 1 are generally considered for funding; Level 1s are less likely to get funded than Level 0s, which have a high likelihood of being funded.

☐ NRMx – Project is completed by the Station Natural Resource Manager and/or other base civilian natural resource professional; funding is not required. "x" indicates a numeral and refers to an individual staff position thus the highest number will indicate the number of civilian employees that represent adequate staffing levels at the Station

☐ Level 0 – Recurring conservation requirements that maintain compliance with federal laws and regulations; funding likely

☐ Level 1 – Non-recurring conservation requirements that fix noncompliance; funding possible

☐ Level 2 – Non-recurring conservation requirement that prevent noncompliance; generally not funded

☐ Level 3 – Non-recurring conservation requirement that enhance the environment; generally not funded

Table is organized by year. Plan 20xx refers to what was planned for a given year.

Acc 20xx refers to what was actually accomplished in a given year.

☐ NRM1 - project will be completed by Natural Resource Manager

☐ TFWY/XUMU##### - project number from Air Force programming and budgeting system that will accomplish the proposed project

Example Only - Use as Needed

45th Space Wing INRMP Implementation (Goals, Objectives, Mgmt Action/Projects)

Objective		Management Action	Installation				Timeframe	Planned Project/ Activity	Planned (PLA) and Accomplished (ACC) Actions						
			CCAFS	PAFB	MTA	JDMTA		(see Ch. 10)	PLA2014	ACC2014	PLA2015	ACC2015	2016	2017	2018
GOAL 1: Protect federally listed T&E species and their habitat while ensuring mission sustainability															
1.1	Conduct management of Florida scrub-jay and habitat	1.1.1: Conduct population census	✓			✓	Annual (June/July)	Mgt., Species, FL scrub-jay							
		1.1.2: Conduct banding of individuals	✓				Year-round								
		1.1.3: Monitor scrub-jay response to restoration activities	✓				Year-round								
		1.1.4: Restore / enhance / maintain scrub-jay habitat	✓				Year-round	Mgt., Species, T&E; Mgt., Habitat Readiness and Environmental Protection Integration (REPI) Lands							
		1.1.5: Conduct prescribed burning of an average 300 acres / yr over a 10-year period	✓				Year-round	Mgt., Wildland Fire							
		1.1.6: Complete annual BO reporting, as required	✓				Annual	In-house activity							
1.2	Conduct management of sea turtles and habitat	1.2.1: Monitor nesting / hatchling success through participation in State and Index Nesting Beach Surveys	✓	✓			Annual (May-Oct)	Mgt., Species, Sea Turtles							
		1.2.2: Complete annual report of all sea turtle monitoring activities	✓	✓			Annual								
		1.2.3: Conduct predator removal to decrease predation rates	✓	✓			Year-round	Mgt., Habitat, Coastal Dune							
		1.2.4: Issue annual reminders to base personnel regarding sea turtle nesting season and lighting requirements	✓	✓			Annual	Mgt., Species, Sea Turtles							
		1.2.5: Conduct light inspections to ensure compliance with Space Wing Instruction (SWI) 32-7001 and LMPs	✓	✓			Nesting season (minimum 5)								
		1.2.6: Conduct annual review of SWI 32-7001 to determine if revision is necessary	✓	✓			Annual	In-house activity							
		1.2.7: Complete BO reporting, as required	✓	✓			Annual	In-house activity							
		1.2.8: Restore / enhance sea turtle nesting habitat, as needed	✓	✓			As needed	Mgt., Habitat, Coastal Dune; Construct Back Dune							
		1.2.9: Monitor population of juvenile green sea turtles in Trident Basin	✓				Biannual	Mgt., Species, Sea Turtles							
1.3	Conduct management of SEBM and habitat	1.3.1: Conduct occupancy study in partnership with NASA and NPS	✓				Annual (Feb/Mar)	Mgt., Species, SEBM							
		1.3.2: Conduct Five Year Demography Study	✓				2017	Mgt., Species, SEBM							
		1.3.3: Conduct monitoring in select LMUs for SEBM occupation	✓				Year-round	In-house activity							
		1.3.4: Ensure pest control operations are IAW BO	✓				Year-round	In-house activity							
		1.3.5: Complete BO reporting, as required	✓				Annual or as required	In-house activity							
1.4	Conduct management of eastern indigo snake and habitat	1.4.1: Conduct eastern indigo snake survey	✓	✓	✓	✓	TBD	Herptile/Indigo Snake Survey							
		1.4.2: Implement indigo snake protection plan during construction activities	✓		✓	✓	As needed	In-house activity							
1.5	Conduct management of American alligator	1.5.1: Respond to alligator calls; relocate non-nuisance alligators; call alligator trapper to remove nuisance alligators	✓	✓			As needed	In-house activity							
		1.5.2: Conduct population surveys as needed	✓	✓	✓		As needed	In-house activity							

45th Space Wing INRMP Implementation (Goals, Objectives, Mgmt Action/Projects)

Objective		Management Action	Installation				Timeframe	Planned Project/ Activity	Planned (PLA) and Accomplished (ACC) Actions						
			CCAFS	PAFB	MTA	JDMTA		(see Ch. 10)	PLA2014	ACC2014	PLA2015	ACC2015	2016	2017	2018
1.6	Conduct management of federally-listed species and habitat	1.6.1: Document the presence of other federally listed T&E species	✓	✓	✓	✓	Year-round	In-house activity							
		1.6.2: Conduct annual shorebird survey to document the presence of ESA listed bird species	✓	✓			Annual	In-house activity							
		1.6.3: Review all BOs to determine if revisions are required	✓	✓		✓	Annual	In-house activity							
		1.6.4: Review NEPA documentation, designs, site plans, work orders to ensure no adverse impacts to listed species	✓	✓	✓	✓	Year-round	In-house activity							
		1.6.5: Conduct Section 7 consultations when actions have the potential to adversely impact a listed species	✓	✓	✓	✓	Year-round	In-house activity							
		1.6.6: Implement the Reasonable and Prudent Measures and Terms and Conditions from all active BOs	✓	✓	✓	✓	Year-round	In-house activity							
1.7	Conduct management of gopher tortoise and habitat	1.7.1: Conduct population survey / estimate	✓				TBD	Gopher Tortoise Survey							
		1.7.2: Complete report for CCA	✓	✓	✓	✓	Annual	Mgt., Species, Gopher Tortoise							
		1.7.3: Conduct gopher tortoise surveys and relocation to support various projects	✓	✓	✓	✓	Year-round								
		1.7.4: Conduct monitoring in select LMUs for gopher tortoise presence	✓				Year-round								
		1.7.5: Incorporate gopher tortoise relocation data into 45th Civil Engineering Geo Integration Office (GeoBase)	✓				2015	In-house activity							
1.8	Implement nuisance wildlife program	1.8.1: Remove coyotes and feral hogs	✓		✓		Year-round	Mgt., Habitat, Coastal Dune							
		1.8.2: Remove raccoons depredating sea turtle nests	✓	✓			Year-round								
		1.8.3: Complete steel trap reporting requirements and renew permit	✓				Biennial	In-house activity							
GOAL 2: Manage native plants and animals by promoting biodiversity and utilizing methods to enhance these species and their habitats															
2.1	Conduct management of herpetological species and habitat	2.1.1: Complete survey of herpetological species and determine management actions	✓	✓	✓	✓	TBD	Herptile/Indigo Snake Survey							
		2.1.2: Incorporate results of survey into INRMP	✓	✓	✓	✓	2017	In-house activity							
2.2	Conduct management of aquatic species and habitat	2.2.1: Review fishing rules to determine if revision is required	✓	✓			Annual								
		2.2.3: Review project actions to determine impacts to fish species and their habitat, and conduct essential fish habitat consultation as required	✓	✓			Year-round								
2.3	Conduct management of migratory birds and habitat	2.3.1: Participate in Bird Hazard Working Group and coordinate wildlife / habitat management near the airfield IAW the BASH plan	✓	✓			Year-round								
		2.3.2: Complete annual depredation permit reporting requirements and renewal of permit	✓	✓			Annual								
		2.3.3: Conduct surveys for migratory bird nests prior to mechanical and/or prescribed fire treatment and mark areas to avoid destruction of nests	✓				Year-round								
		2.3.4: Conduct osprey census to assist natural resource managers in determining impacts to species from project activities	✓	✓			Annual	In-house activity							
		2.3.5: Perform annual rooftop surveys for least terns and black skimmer	✓	✓			Annual								
		2.3.6: Perform annual shorebird surveys and submit data into Florida Shorebird Alliance database	✓	✓			Annual								
		2.3.7: Continue participation in PIF program	✓	✓	✓	✓	Year-round								
2.3.8: Incorporate protection measures for migratory bird species during NEPA review of projects	✓	✓	✓	✓	Year-round										

45th Space Wing INRMP Implementation (Goals, Objectives, Mgmt Action/Projects)

Objective		Management Action	Installation				Timeframe	Planned Project/ Activity	Planned (PLA) and Accomplished (ACC) Actions						
			CCAFS	PAFB	MTA	JDMTA		(see Ch. 10)	PLA2014	ACC2014	PLA2015	ACC2015	2016	2017	2018
2.4	Conduct management of white-tailed deer	2.4.1: Perform deer census as needed to determine if management actions are required	✓				As needed	In-house activity							
GOAL 3: Manage invasive plant species to minimize impacts to native ecosystems and to support mission sustainability															
3.1	Control invasive plant species and monitor effectiveness of treatment	3.1.1: Identify and prioritize areas for invasive plant removal	✓	✓	✓	✓	Year-round	In-house activity							
		3.1.2: Utilize mechanical methods and herbicide to remove and control invasive plant species	✓	✓	✓	✓	Year-round	Mgt., Habitat, T&E; Coastal Dune; REPI Lands; Invasive Species, Brazilian Pepper							
		3.1.3: Monitor all areas previously treated and re-treat as needed	✓	✓	✓	✓	As needed								
GOAL 4: Employ ecosystem management principles to manage 45 SW natural resources and promote biodiversity															
4.1	Maintain coastal habitat through restoration and/or enhancement of coastal dunes, strands, and swales	4.1.1: Determine the condition of the coastal habitat and prioritize areas for restoration and/or enhancement based on impacts from erosion, storm damage and the presence and health of dune vegetation	✓	✓			Annual	In-house activity							
		4.1.2: Re-nourish and replant coastal areas identified for restoration and/or enhancement	✓	✓			As needed	Mgt., Habitat, Coastal Dune; Construct Back Dune							
		4.1.3: Conduct biannual beach cleanups	✓	✓			Biannual	In-house activity							
4.2	Maintain wetland habitat through restoration and/or enhancement	4.2.1: Identify and analyze all impounded wetlands and manmade barriers inhibiting connections between estuarine wetlands and the Banana River	✓				Annual								
		4.2.2: Restore and/or enhance wetlands identified in 4.2.1 by removal of barriers, installing culverts, etc. to restore natural connections between estuarine wetlands and the Banana River	✓				As needed	Mgt., Habitat, Wetlands; Monitor wetlands							
		4.2.3: Prioritize and restore / enhance other wetland areas	✓	✓	✓		As needed								
4.3	Restore and/or enhance other disturbed or adversely impacted habitat	4.3.1: Identify and prioritize adversely impacted areas for restoration, such as abandoned lines of sight, spoil areas, staging areas and abandoned facilities / roads / pavement	✓	✓	✓	✓	As needed	In-house activity							
		4.3.2: Restore adversely impacted natural resource areas	✓	✓	✓	✓	As needed								
GOAL 5: Develop and maintain a comprehensive data collection and processing system for management of 45 SW natural resources															
5.1	Update, organize, and prioritize natural resources data sets and information	5.1.1: Conduct annual assessments of all data collection and storage activities with the Installation Management GIS manager and the GeoBase POC	✓	✓	✓	✓	Annual	In-house activity							
		5.1.2: Annually review natural resources hardware / software to ensure compatibility with USAF and GeoBase standards	✓	✓	✓	✓	Annual								
		5.1.3: Review GIS natural resources layers annually with base planners to ensure compatibility between base planning and natural resources conservation	✓	✓	✓	✓	Annual								
		5.1.4: Develop a list of data that is managed within GIS, data that is not managed but needs to be, and prioritize what data needs to be managed within GIS	✓	✓	✓	✓	2015								
5.2	Utilize natural resources data to support 45 SW decision-making	5.2.1: Use GIS in applicable NEPA analysis and project planning to identify, delineate and ensure protection to habitat required for long-term survival of wildlife	✓	✓	✓	✓	Year-round								
		5.2.2: Brief natural resources management annually to Wing leadership using GIS data	✓	✓	✓	✓	Annual								

45th Space Wing INRMP Implementation (Goals, Objectives, Mgmt Action/Projects)

Objective		Management Action	Installation				Timeframe	Planned Project/ Activity	Planned (PLA) and Accomplished (ACC) Actions						
			CCAFS	PAFB	MTA	JDMTA		(see Ch. 10)	PLA2014	ACC2014	PLA2015	ACC2015	2016	2017	2018
GOAL 6: Protect 45 SW natural resources through training, education, and outreach and ensure compliance with applicable environmental laws and regulations															
6.1	Provide natural resources awareness to base personnel	6.1.1: Develop and conduct training for natural resources awareness at newcomers briefings, to base security personnel, EOD personnel, engineers, etc.	✓	✓	✓	✓	As needed	In-house activity							
		6.1.2: Provide natural resources educational material such as brochures, posters, etc.	✓	✓	✓	✓	As needed								
		6.1.3: Educate base personnel through periodic articles in the base newspaper, website, EDASH, and global email notifications	✓	✓	✓	✓	As needed								
		6.1.4: Annual brief Wing leadership on natural resources including current active BOs and the requirements associated with each	✓	✓	✓	✓	Annual								
		6.1.5: Investigate how the 45 SW will re-establish and maintain a CLEP (full-time 45 SW CES/CEIE-C position lost)	✓	✓	✓	✓	2015								
6.2	Conduct educational outreach that promotes the 45 SW natural resources program	6.2.1: Participate in base and community events (turtle walks, bird and wildlife festival, briefings to schools, etc.)	✓	✓	✓	✓	As needed	In-house activity							

## 45th Space Wing INRMP Implementation

### **GOAL 1– Protect federally listed T&E species and their habitat while ensuring mission**

- Objective 1.1: Conduct management of Florida scrub-jay and habitat
- Objective 1.2: Conduct management of sea turtles and habitat
- Objective 1.3: Conduct management of SEBM and habitat
- Objective 1.4: conduct management of eastern indigo snake habitat
- Objective 1.5: Conduct management of American alligator
- Objective 1.6: Conduct management of federally-listed species and habitat
- Objective 1.7: Conduct management of gopher tortoise and habitat
- Objective 1.8: Implement nuisance wildlife program

### **GOAL 2 – Manage native plants and animals by promoting biodiversity and utilizing methods to enhance these species and their habitats**

- Objective 2.1: Conduct management of herpetological species and habitat
- Objective 2.2: Conduct management of aquatic species and habitat
- Objective 2.3: Conduct management of migratory birds and habitat
- Objective 2.4: Conduct management of white-tailed deer

### **GOAL 3 – Manage invasive plant species to minimize impacts to native ecosystems and to support mission sustainability**

- Objective 3.1: Control invasive plant species and monitor effectiveness of treatment

### **promote biodiversity**

- Objective 4.1: Maintain coastal habitat through restoration and/or enhancement of coastal dunes, strands, and swales
- Objective 4.2: Maintain wetland habitat through restoration and/or enhancement
- Objective 4.3: Restore and/or enhance other disturbed or adversely impacted habitat

### **GOAL 5 – Develop and maintain a comprehensive data collection and processing system for management of 45 SW natural resources**

- Objective 5.1: Update, organize, and prioritize natural resources data sets and information
- Objective 5.2: Utilize natural resources data to support 45 SW decision-making

### **GOAL 6 - Protect 45 SW natural resources through training, education, and outreach and ensure compliance with applicable environmental laws and regulations**

- Objective 6.1: Provide natural resources awareness to base personnel
- Objective 6.2: Conduct educational outreach that promotes the 45 SW natural resources program





**DEPARTMENT OF THE AIR FORCE**  
**AIR FORCE SPACE COMMAND**

**MEMORANDUM FOR RECORD**

**SUBJECT:** **Installation** Integrated Natural Resources Management Plan (INRMP) Annual Meeting, 2013

**Location and Date of Meeting:** **xxxxx, 15 December 2013**

**List of Attendees:**

**Mr. xxxxxxxxxx U.S. Air Force (Installation AFB)**  
**Ms. xxxxxxxxxx, U.S. Fish and Wildlife Service (USFWS)**  
**Mr. xxxxxxxxxx, National Marine Fisheries Service (NMFS)**  
**Ms. xxxxxxxxxx, Florida Fish and Wildlife Conservation Commission (FWC)**

**Purpose of Meeting:**

AFI 32-7064, *Integrated Natural Resources Management*, paragraph 2.5, directs the installation (**Installation AFB**), in coordination with the USFWS, State fish and wildlife agency, and where applicable, the National Marine Fisheries Service, to conduct an annual review of the INRMP and to document the findings of this review. An INRMP is considered approved and compliant with the Sikes Act if signed by the appropriate representative from each cooperating agency. INRMP approval is then sustained through the annual INRMP review and coordination process, and the INRMP is considered current until the annual review documents that a revision is required. By signature to the Annual INRMP Review, the collaborating agency representative asserts concurrence with the findings of the review.

This meeting will satisfy the coordinated annual INRMP review requirement of AFI 32-7064. Participants will review the Annual INRMP Report, the Summary of Changes, and the Work Plan Implementation Table. **Notes captured in these meeting minutes document agency feedback, concerns, and/or areas of improvement for INRMP implementation and management for integration in the coming years.** Signature to the Annual INRMP Report details agency concurrence on the Annual INRMP Review.

**Agency Feedback, Concerns, Areas of Improvement for Future Years:**

*{Installation should summarize important feedback from USFWS, CDFW, and NOAA NMFS here at conclusion of meeting. Installation should then update the INRMP and implementation plan for 2014 and annual review documents for the next year (2014) to show incorporation of this feedback. In future years you could include previous year's meeting minutes to remind agencies what they asked for (to show implementation).}*

## **Attachment A-2**

### **Checklist for Annual Reviews**

**Table A-1: 45<sup>th</sup> Space Wing CEC/CEIE-C, Checklist of Annual Reviews, Page 1 of 2 (Appendix A)**

YEAR: 2016	YEAR 1			
Document Name	Submitted to	Date Document Submitted	Date Reviewed	Agency Responded?
BASH Plan (a)	INTERNAL			
INRMP Letter to Agency	USFWS			
INRMP Annual Report	USFWS			
INRMP Summary of Changes (b)	USFWS			
INIRMP Work Plan Implementation Table (b)	USFWS			
Meeting Minutes (b)	USFWS			
INRMP Letter to Agency	NMFS			
INRMP Annual Report	NMFS			
INRMP Summary of Changes (b)	NMFS			
INIRMP Work Plan Implementation Table (b)	NMFS			
Meeting Minutes (b)	NMFS			
INRMP Letter to Agency	FWC			
INRMP Annual Report	FWC			
INRMP Summary of Changes (b)	FWC			
INIRMP Work Plan Implementation Table (b)	FWC			
Meeting Minutes (b)	FWC			
As above, as appropriate	Tribal			

YEAR: 2017	YEAR 2			
Document Name	Submitted to	Date Document Submitted	Date Reviewed	Agency Responded?
BASH Plan (a)	INTERNAL			
INRMP Letter to Agency	USFWS			
INRMP Annual Report	USFWS			
INRMP Summary of Changes (b)	USFWS			
INIRMP Work Plan Implementation Table (b)	USFWS			
Meeting Minutes (b)	USFWS			
INRMP Letter to Agency	NMFS			
INRMP Annual Report	NMFS			
INRMP Summary of Changes (b)	NMFS			
INIRMP Work Plan Implementation Table (b)	NMFS			
Meeting Minutes (b)	NMFS			
INRMP Letter to Agency	FWC			
INRMP Annual Report	FWC			
INRMP Summary of Changes (b)	FWC			
INIRMP Work Plan Implementation Table (b)	FWC			
Meeting Minutes (b)	FWC			
As above, as appropriate	Tribal			

(a) The BASH Plan can be found in Appendix K; see page ii of BASH Plan for review record.

(b) If applicable

**Table A-1: 45<sup>th</sup> Space Wing CEC/CEIE-C, Checklist of Annual Reviews (Page 2 of 2) (Appendix A)**

YEAR: 2018		YEAR 3		
Document Name	Submitted to	Date Document Submitted	Date Reviewed	Agency Responded?
BASH Plan (a)	INTERNAL			
INRMP Letter to Agency	USFWS			
INRMP Annual Report	USFWS			
INRMP Summary of Changes (b)	USFWS			
INIRMP Work Plan Implementation Table (b)	USFWS			
Meeting Minutes (b)	USFWS			
INRMP Letter to Agency	NMFS			
INRMP Annual Report	NMFS			
INRMP Summary of Changes (b)	NMFS			
INIRMP Work Plan Implementation Table (b)	NMFS			
Meeting Minutes (b)	NMFS			
INRMP Letter to Agency	FWC			
INRMP Annual Report	FWC			
INRMP Summary of Changes (b)	FWC			
INIRMP Work Plan Implementation Table (b)	FWC			
Meeting Minutes (b)	FWC			
As above, as appropriate	Tribal			

YEAR: 2019		YEAR 4		
Document Name	Submitted to	Date Document Submitted	Date Reviewed	Agency Responded?
BASH Plan (a)	INTERNAL			
INRMP Letter to Agency	USFWS			
INRMP Annual Report	USFWS			
INRMP Summary of Changes (b)	USFWS			
INIRMP Work Plan Implementation Table (b)	USFWS			
Meeting Minutes (b)	USFWS			
INRMP Letter to Agency	NMFS			
INRMP Annual Report	NMFS			
INRMP Summary of Changes (b)	NMFS			
INIRMP Work Plan Implementation Table (b)	NMFS			
Meeting Minutes (b)	NMFS			
INRMP Letter to Agency	FWC			
INRMP Annual Report	FWC			
INRMP Summary of Changes (b)	FWC			
INIRMP Work Plan Implementation Table (b)	FWC			
Meeting Minutes (b)	FWC			
As above, as appropriate	Tribal			

(a) The BASH Plan can be found in Appendix K; see page ii of BASH Plan for review record.

(b) If applicable

### **Attachment A-3**

#### **Implementation of Proposed Management Actions from 2008 45 SW INRMP**

**Tables for each installation: CCAFS, PAFB, MTA, and JDMTA**

## Implementation of Proposed Management Actions from 2008 45 SW INRMP - CCAFS

T&E Species Projects				
Project Type	Planned Fiscal Year	Action	Description	Implementation Status
In-House	Annually	Conduct Daily sea turtle monitoring during season	Conduct monitoring as part of participation in Sea Turtle Index Nesting Beach Survey	Complete
In-House	Annually	Conduct educational sea turtle walks	Conduct sea turtle walks for Wing leadership and other interested parties	Complete
In-House	Annually	Distribute 45 SWI on Light Management prior to nesting season	Distribute 45 SWI on Light Management prior to nesting season and educate base populace via base newspaper and email notifications	Complete
In-House	Annually	Conduct Light Inspections	Frequency per current Biological Opinion	Complete
In-House	Annually	Note facilities which are non-compliant	Determine facilities which are non-compliant and notify facility managers	Complete
In-House	Annually	Survey project sites for presence of active gopher tortoises	Surveys done as needed. Identify recipient sites, tag and record tortoises prior to relocation.	Complete
In-House	Annually	Prepare Annual Sea Turtle Nesting Summary Report	Prepare and submit Annual Sea Turtle Nesting Summary Report	Complete
In-House	Annually	Perform annual osprey nesting census	Perform annual osprey nesting census	Complete
In-House	2009	Identify other species of concern regarding Sea Turtle nest predation	Identify other species of concern regarding Sea Turtle nest predation	Complete
In-House	2009	Identify T&E species of concern not specifically addressed in this document	Identify T&E species of concern not specifically addressed in this document	Complete
In-House	2009	Research avenues to obtain capability to examine tortoises for URTDs	Research avenues to obtain capability to examine tortoises for URTDs; obtain permits if feasible	Incomplete
In-House	2011	Develop Recommendations for other T&E species, if applicable	Develop Recommendations for other T&E species, if applicable	Complete
In-House	2011	Coordinate with appropriate agencies any management recommendations for "other" T&E species	Set up meeting w/ FWC and FWS, if needed	Complete
Funded	Annually	MGT, HABITAT, SCRUB JAY, RESTORATION	Restore and enhance scrub habitat using mechanical methods and prescribed burns to mimic natural fire-maintained ecosystem.	Complete
Funded	Annually	MONITOR, SPECIES, SCRUB JAY	Comply with the Biological Opinion and Florida Scrub-jay recovery plan goals by annually monitoring the Scrub-jay population and its reproductive success.	Complete
Funded	Annually	MONITOR JUVENILE GREEN SEA TURTLES, TRIDENT	Monitor the sea turtle population by quarterly sampling at the Trident Basin.	Complete
Funded	Annually	MONITOR, SPECIES, SEA TURTLE	Provide equipment and supplies to effectively monitor sea turtle population per the current Biological Opinion.	Complete
Funded	Annually	MONITOR, SPECIES, SE BEACH MOUSE	Provide equipment and supplies to manage the Southeastern Beach Mouse.	Complete
Funded	2006	SCRUB JAY HABITAT STUDY, PH1	This habitat study is for mitigation for the EPF and was funded by the NRO	Complete
Funded	2007	CONS-SCRUB JAY HABITAT STUDY, PH2	This habitat study is for mitigation for the EPF and was funded by the NRO	Complete
Funded	2008	CONS-SCRUB JAY HABITAT STUDY, PH3	This habitat study is for mitigation for the EPF and was funded by the NRO	Complete
Funded	2009	CONS-SCRUB JAY HABITAT STUDY, PH4	This habitat study is for mitigation for the EPF and was funded by the NRO	Complete
Funded	2010	CONS-SCRUB JAY HABITAT STUDY, PH5	This habitat study is for mitigation for the EPF and was funded by the NRO	Complete
Funded	2008	CONS-GOPHER TORTOISE MONITOR & RELOCATION	Provide support to monitor the gopher tortoise population and relocate on an as needed basis	Complete
Funded	2010	CONS- RE-ESTABLISH WOOD STORK ROOKERY	Re-establish Wood Stork Rookery	Cancelled
Funded	2010	CONS- SCRUB JAY SNAKE PREDATION STUDY	Determine extent of snake predation on the Florida Scrub-jay	Cancelled
Funded	2011	CONS- ENHANCE LEAST TERN NESTING HABITAT	Enhance least tern habitat at CCAFS to sustain migratory/resident bird populations	Complete
Other Wildlife Projects				
Project Type	Planned Fiscal Year	Action	Description	Implementation Status
In-House	Annually	Conduct Annual deer census	Conduct Annual deer census	Incomplete
In-House	Annually	Participate in the Bird Haz Working Group and provide natural resource information as required.	Participate in the Bird Haz Working Group and provide natural resource information as required.	Complete
Funded	2006	RESIDENT & MIGRATORY BIRD SURVEY, PH I	Provide first phase of a 45 SW resident & migratory bird survey to provide data to support bird management recommendations	Complete
Funded	2007	RESIDENT & MIGRATORY BIRD SURVEY, PH II	Provide second phase of a 45 SW resident & migratory bird survey to provide data to support bird management recommendations	Complete

## Implementation of Proposed Management Actions from 2008 45 SW INRMP - CCAFS

Project Type	Planned Fiscal Year	Action	Description	Implementation Status
Funded	2007, 2009	BIOLOGICAL SURVEY OF TRIDENT BASIN	Provide a comprehensive inventory of sea life in the Trident basin and document seasonal changes.	Complete
Funded	2012	DEMOGRAPHIC STUDY, ALLIGATORS	Provide demographic survey to develop management recommendations for CCAFS's alligator population	Cancelled
<b>Habitat Management/Restoration Projects</b>				
Project Type	Planned Fiscal Year	Action	Description	Implementation Status
In-House	Annually	Prioritize Land Management Units (LMUs) for restoration	Meet periodically (in house biologists and contractors) to prioritize scrub LMUs to restore based on previously-prepared LMUs and mission requirements	Complete
In-House	Annually	Conduct Prescribed Burning	Whenever mission requirements allow.	Complete
In-House	Annually	Analyze scrub habitat management techniques	Meet annually to evaluate data and determine plan for next FY	In progress
In-House	Annually	Review Biological Opinions	Review active Biological Opinions annually and program actions if necessary	Complete
In-House	Annually	Evaluate coastal habitat	Meet annually to evaluate coastal habitats and identify new projects	Complete
In-House	Annually	Review wetlands and Impoundments	Review to identify new wetlands and/or projects and prioritize	Complete
In-House	Annually	Incorporate any new wetland data into GIS	Incorporate any new wetland data into GIS	Complete
In-House	Annually	Coordinate wetland restoration plans, if applicable	Hold meeting with regulators to discuss/approve any wetland restoration proposals or wetland issues.	Complete
In-House	Annually	Identify adversely impacted natural resource areas	Identify, prioritize and program areas to restore. (i.e. abandoned lines of sight, staging areas,	Complete
In-House	Annually	Add any adversely impacted natural resource areas to GIS	Add any adversely impacted natural resource areas to GIS	Complete
In-House	Annually	Conduct inland and beach trapping of raccoons, feral hogs and other predators.	Obtain services of professional trapper with in-house assistance to trap predators	Complete
In-House	Annually	Conservation Law Enforcement Patrols	45 SW Conservation Officer will patrol acreage on a routine basis to ensure compliance with State, Federal and local natural resource laws and regulations	Complete
In-House	2009	Develop a SOW to monitor diversity and health of vegetative communities.	SOW to include use of GPS/GIS, final report requirements and management recommendations for future implementation	Incomplete
In-House	2009	Incorporate SEBM data into GIS	Incorporate SEBM data into GIS	Complete
In-House	2009	Discuss dynamics and trends of SEBM and re-address permit	Meet with UCF and FWS to discuss and coordinate recommendations for the SEBM	Complete
In-House	2009	Identify all aquatic habitats	Identify all aquatic habitats	Complete
In-House	2009	Identify all reptile/amphibian habitats	Identify all reptile/amphibian habitats	Incomplete
In-House	2010	Develop SEBM management recommendations	Develop SEBM management recommendations and coordinate with FWS	Complete
In-House	2010	Incorporate aquatic habitat data into GIS	Incorporate aquatic habitat data into GIS	Complete
In-House	2010	Incorporate reptile/amphibian habitat data into GIS	Incorporate reptile/amphibian habitat data into GIS	Incomplete
Funded	Annually	INVASIVE VEG CONTROL, BRAZ PEPPER	Remove and control invasive plant species by mechanical methods and herbicides.	Complete
Funded	Annually	INVASIVE VEG CONTROL, COGON GRASS	Remove and control invasive plant species by mechanical methods and herbicides.	Complete
Funded	Annually	MGT HABITAT, WILDLAND FIRE	Provide prescribed burn support by professional foresters	Complete
Funded	Annually	MONITOR HABITAT, INVASIVE SPECIES	Assess the effectiveness of invasive plant eradication and removal and retreat as necessary. Incorporate into GIS.	Complete
Funded	2006	SCRUB HABITAT RESTORATION, COMPARTMENT 6	Restoration of this compartment is for mitigation for the EPF and was funded by the NRO	Complete
Funded	2006-2008, 2010-2013	MANAGEMENT HABITAT, BARRIER ISLAND	Restore and enhance 45 SW properties thru invasive species removal and/or enhancement of coastal habitat.	Complete
Funded	2007-2009	REVEGETATE SAND BARRIERS	Restore, enhance and maintain coastal habitat through dune construction, dune plantings and sand fencing as needed.	Complete
Funded	2007	INVASIVE CONTROL, AERIAL APPLICATION	Spray Trident and Poseidon Spoil Areas for invasive vegetation to prevent further spread	Complete
Funded	2007	Air Quality Monitoring Equipment, Burn Support	Purchase equipment to be able to monitor air quality (smoke, particulates) to ensure protection of Wing assets.	Complete
Funded	2008	CONS-ENHANCE WILD LAND FIREFIGHTING CAPABILITY	Provide training, equipment, materials to enhance wild land fire fighting capabilities	Complete
Funded	2008	CONS-INVASIVE CONTROL, BURNS MOUND & CX 18	Remove and control invasive plant species by mechanical methods and herbicides.	Complete
Funded	2008	CONS-HABITAT RESTORATION, PRESCRIBED BURNS	Restore and enhance scrub habitat using mechanical methods and prescribed burns to mimic a natural fire-maintained ecosystem.	Complete
Funded	2008	Exotic Veg Removal, Protection of Cultural Resources	Remove exotic vegetation from the areas where they are impacting our historic assets.	Complete
Funded	2009	RECONNECT LAKE BEHIND CX 16 TO CANAL, HABITAT ENHANCEMENT	Restore wetland area by removing man-made obstructions.	Complete

## Implementation of Proposed Management Actions from 2008 45 SW INRMP - CCAFS

Project Type	Planned Fiscal Year	Action	Description	Implementation Status
Funded	2009	CONS- COASTAL MARITIME HAMMOCK EVALUATION/DELINEATION	Evaluate and delineate Coastal Marine Hammock areas	Complete
Funded	2009	CONS- INVASIVE VEG CONTROL, LC 9, 10, 31, 32	Remove and control invasive plant species by mechanical methods and herbicides.	Complete
Funded	2010	CONS- RECONNECT CANALS, CX 12/13	Restore wetland area by removing man-made obstructions.	Complete
Funded	2010	CONS-INVASIVE SPECIES CONTROL, LC 14	Removal and herbicide treatment of invasive vegetation species	Complete
Funded	2010	CONS- SCRUB HABITAT RESTORATION/RUBBLE REMOVAL, OBSERV RD	Remove rubble and restore scrub habitat with native vegetation for FL scrub-jay use.	Complete
<b>Habitat Management/Restoration Projects</b>				
Project Type	Planned Fiscal Year	Action	Description	Implementation Status
In-House	2011	Develop SOW for Aquatic resources management plan or develop the plan	Develop SOW for Aquatic resources management plan or develop the plan	Incomplete
In-House	2011	Develop SOW for Reptile/amphibian management plan or develop the plan	Develop SOW for Reptile/amphibian management plan or develop the plan	Incomplete
Funded	2010	CONS- SURVEYS OF BORROW PITS, PONDS, CANALS & DITCHES	Biological survey of CCAFS surface waters to develop management recommendations if required.	Complete
Funded	2011	CONS- WETLAND RESTORATION, FSA 1 West	Restore wetland area	Complete
Funded	2011	CONS-INVASIVE VEG CONTROL, LC 19	Remove and control invasive plant species by mechanical methods and herbicides.	Complete
Funded	2011	CONS- SELECTIVE OAK REMOVAL, SCRUB RESTORATION	Remove select large oak trees to enhance FI Scrub Jay habitat.	Complete
Funded	2012	CONS-INVASIVE VEG CONTROL, LC 19 EAST	Remove and control invasive plant species by mechanical methods and herbicides.	Complete
Funded	2012	CONS-EVAL & RESTOR OF ISOLATED WETLANDS, HIF, CMPT 6	Evaluate wetland restoration and provide wetland enhancement at the HIF, Compartment 6	Cancelled
Funded	2012	CONS- NATURAL INFRASTRUCTURE MGMT, WETLAND RESTORATION, CX-40	Restore wetland area by removing man-made obstruction and replacing with a culvert.	Complete
<b>Training and Community Projects</b>				
Project Type	Planned Fiscal Year	Action	Description	Implementation Status
In-House	Annually	Conduct Annual Natural Resource & EIAP Training	Conduct Annual NEPA and Natural Resource Training for design engineers and determine other training needs for base personnel. Update training materials.	Complete
In-House	Annually	Maintain Training for CEVP personnel	Ensure NR personnel maintain proficiency as needed (i.e. annual burn training, sea turtle workshop, etc. )	Complete
In-House	Annually	Participate in Community Natural Resource Events	Participate in events to educate public on natural resource protection and 45 SW activities (i.e. Bird Festival, Boy Scouts, conferences, etc.)	Complete
Funded	2008	CONS- RECORDKEEPING, SDSFIE COMPLIANCE	Update natural resource databases in GIS, collect new data using GPS and integrate into SDSFIE GIS geodatabases	Complete



# Implementation of Proposed Management Actions from 2008 45 SW INRMP - PAFB

T&E Species Projects				
Project Type	Planned Fiscal Year	Action	Description	Implementation Status
In-House	Annually	Review Annual Sea Turtle Nesting Summary Report and Contract	Review Annual Sea Turtle Nesting Summary Report and Contract	Complete
In-House	Annually	Distribute 45 SWI on Light Management prior to nesting season	Distribute 45 SWI on Light Management prior to nesting season and educate base populace via base newspaper and email notifications	Complete
In-House	Annually	Conduct Light Inspections	Frequency per current Biological Opinion	Complete
In-House	Annually	Note facilities which are non-compliant	Determine facilities which are non-compliant and notify facility manager	Complete
In-House	Annually	Perform annual osprey nesting census	Perform annual osprey nesting census	Incomplete
Funded	Annually	MONITOR, HABITAT, SEA TURTLE NEST	Conduct annual sea turtle monitoring to comply with the current Biological Opinion.	Complete
Other Wildlife Projects				
Project Type	Planned Fiscal Year	Action	Description	Implementation Status
In-House	Annually	Participate in the Bird Hazard Working Group and provide natural resource data as required	Participate in the Bird Hazard Working Group and provide natural resource data as required	Complete
Funded	2006	RESIDENT & MIGRATORY BIRD SURVEY, PH I (45 SW)	Provide first phase of a 45 SW resident & migratory bird survey to provide data to support bird management recommendations	Complete
Funded	2007	RESIDENT & MIGRATORY BIRD SURVEY, PH II (45th SW)	Provide second phase of a 45 SW resident & migratory bird survey to provide data to support bird management recommendations	Complete

# Implementation of Proposed Management Actions from 2008 45 SW INRMP - PAFB

Habitat Management/Restoration Projects				
Project Type	Planned Fiscal Year	Action	Description	Implementation Status
In-House	Annually	Evaluate coastal habitat	Meet annually to evaluate coastal habitats and identify new projects	Complete
In-House	Annually	Survey wetlands and Impoundments	Survey to identify new wetlands and/or projects and prioritize	Incomplete
In-House	Annually	Incorporate any new wetland data into GIS	Incorporate any new wetland data into GIS	Complete
In-House	Annually	Coordinate wetland restoration plans, if applicable	Hold meeting with regulators to discuss/ approve any wetland restoration proposals.	Incomplete (need wetland bank)
In-House	Annually	Identify adversely impacted natural resource areas	Identify, prioritize and program areas to restore. (ie. abandoned lines of sight, staging areas, etc.)	Incomplete (General Plan)
In-House	Annually	Add any adversely impacted natural resource areas to GIS	Add any adversely impacted natural resource areas to GIS	Incomplete
In-House	Annually	Evaluate PAFB east of A1A for SEBM	Evaluate PAFB east of A1A for SEBM	N/A (no SEBM found w/survey)
In-House	Annually	Evaluate 45 SW Natural Resource geodatabases and update as needed (new data, SDSFIE, Environmental Mission Dataset requirements, etc.)	Evaluate 45 SW Natural Resource geodatabases and update as needed (new data, SDSFIE, Environmental Mission Dataset requirements, etc.)	Incomplete
Funded	Annually	MONITOR HABITAT, INVASIVE SPECIES	Annually remove and control 10% of the total invasive plant species acreage on the installation.	Complete
Funded	2006	INVASIVE VEGETATION CONTROL	Annually remove and control 10% of the total invasive plant species acreage on the installation.	Complete
Funded	2007	INVASIVE REMOV/HABITAT RESTOR- PH I	Annually remove and control 10% of the total invasive plant species acreage on the installation. Restore for wildlife and low impact recreation.	Complete
Funded	2008	CONS-INVASIVE REMOV/HABITAT RESTORATION-PH II	Annually remove and control 10% of the total invasive plant species acreage on the installation. Restore for wildlife and low impact recreation.	Complete
Funded	2008	CONS - INVASIVE REMOV/HABITAT RESTORATION-PH III	Annually remove and control 10% of the total invasive plant species acreage on the installation. Restore for wildlife and low impact recreation.	Complete

### Implementation of Proposed Management Actions from 2008 45 SW INRMP - PAFB

Funded	2010	CONS – MGT, INVASIVE SPECIES & HABITAT RESTORATION-PH IV	Annually remove and control 10% of the total invasive plant species acreage on the installation. Restore for wildlife and low impact recreation.	Complete
Funded	2012	CONS – MGT, INVASIVE SPECIES & HABITAT RESTORATION-PH V	Annually remove and control 10% of the total invasive plant species acreage on the installation. Restore for wildlife and low impact recreation.	Complete
Funded	2008	CONS-SHORELINE RESTORATION, PH I, PAFB	Restore, enhance and maintain coastal habitat through the restoration and/or enhancement of 500 linear feet per year of river (wetland) shoreline.	Complete
Funded	2012	CONS-SHORELINE RESTORATION, PH II, PAFB	Restore, enhance and maintain coastal habitat through the restoration and/or enhancement of 500 linear feet per year of river/estuarine (wetland) shoreline.	Complete
Funded	2007	CONS-NOXIOUS WEED CONTROL & AQUATIC HABITAT IMPROVEMENT	Annually remove and control 10% of the total invasive plant species acreage on the installation. Remove invasives from aquatic resource areas.	Complete
Funded	2007	CONS-AQUATIC WEED MANAGEMENT	Annually remove and control 10% of the total invasive plant species acreage on the installation. Utilize triploid grass carp biocontrol.	Complete
Funded	2007	CONS-PLANT DUNE VEGETATION	Restore, enhance and maintain coastal habitat through the restoration and/or enhancement of 800 linear feet per year of dunes, coastal berms, or coastal strand.	Complete
Funded	2007	CONS- SDSFIE 2.6 CONVERSION (DATA MANAGEMENT SUPPORT)	Create, utilize and maintain accurate GIS data in natural resource management activities at PAFB.	Complete
Funded	2009	CONS- INVASIVE REMOVAL/MONITOR & CONTROL, PAFB	Restore improved, semi-improved, and unimproved areas to near natural conditions.	Complete
<b>Habitat Management/Restoration Projects</b>				
<b>Project Type</b>	<b>Planned Fiscal Year</b>	<b>Action</b>	<b>Description</b>	<b>Implementation Status</b>
In-House	2009	Identify all aquatic habitats	Identify all aquatic habitats	Incomplete
In-House	2009	Identify all reptile/amphibian habitats	Identify all reptile/amphibian habitats	Incomplete
In-House	2010	Incorporate aquatic habitat data into GIS	Incorporate aquatic habitat data into GIS	Incomplete

### Implementation of Proposed Management Actions from 2008 45 SW INRMP - PAFB

In-House	2010	Incorporate reptile/amphibian habitat data into GIS	Incorporate reptile/amphibian habitat data into GIS	Incomplete
Funded	2009	CONS-MGT, INVASIVE SPECIES, DUNE PH I, PAFB	Annually remove and control 10% of the total invasive plant species acreage on the installation. Restore sea turtle nesting habitat and vegetative barrier that blocks artificial lighting.	Complete
Funded	2011	CONS- MGT, INVASIVE SPECIES, DUNE PH II	Restore, enhance and maintain coastal habitat through the restoration and/or enhancement of 800 linear feet per year of dunes, coastal berms, or coastal strand.	Complete
Funded	2009-2014	CONS- MAINTENANCE, ENV MDL/MDS (NATURAL/ CULTURAL DATA)	Create, utilize and maintain accurate GIS data in natural resource management activities at PAFB.	Complete
Funded	2007-2014	CONS- MGT, HABITAT, INVASIVE SPECIES	Restore, enhance, and maintain habitat by removing invasive vegetation.	Complete
	2010-2014	CONS- MGT, HABITAT, COASTAL DUNE	Restore, enhance, and maintain sea turtle nesting habitat by planting dune vegetation in sparse or storm impacted areas to reduce disorientations.	Complete
Funded	2007, 2011, 2013	CONS- MGT, HABITAT, AQUATIC	Restore, enhance and maintain aquatic resources and provide management recommendations for prolonged quality.	Complete
Funded	2011	CONS-CONSTRUCT 'BACK DUNE'	Restore, enhance and maintain coastal habitat through the restoration and/or enhancement of 800 linear feet per year of dunes, coastal berms, or coastal strand	Moved to 2020 (emergency contingency)
Funded	2011	CONS- BIOCONTROL STUDY FOR GOLF COURSE PESTS	Annually remove and control 10% of the total invasive plant species acreage on the installation.	Cancelled
Funded	2011	CONS- BIOCONTROL STUDY FOR CATTAIL OVERGROWTH IN CANALS	Annually remove and control 10% of the total invasive plant species acreage on the installation.	Cancelled
Funded	2014	CONS-NEAR SHORE ROCK BOTTOM EVALUATION	Develop Sikes Act Cooperative Agreement and review Sabellarid worm rock reports provided through PAFB beach restoration monitoring and determine if additional data is required (NOAA and FDEP are nearshore reef resource managers). Develop management recommendations for PAFB actions that may affect nearshore rock reef.	On hold (considered baseline for mitigation for full template beach restoration- not necessary unless severe storm damage)
<b>Training and Community Projects</b>				

# Implementation of Proposed Management Actions from 2008 45 SW INRMP - PAFB

Project Type	Planned Fiscal Year	Action	Description	Implementation Status
In-House	2009	Participate in Partners in Flight	45 SW participation in Partners in Flight	Complete

## Implementation of Proposed Management Actions from 2008 45 SW INRMP - MTA

Other Wildlife Projects				
Project Type	Planned Fiscal Year	Action	Description	Implementation Status
In-House	Annually	Conduct Deer Health Census	Conduct Deer Health Census	Incomplete
SXHT057046	2006	RESIDENT & MIGRATORY BIRD SURVEY, PH I (45th SW)	Provide first phase of a 45 SW resident & migratory bird survey to provide data to support bird management recommendations	Complete
SXHT057037	2007	RESIDENT & MIGRATORY BIRD SURVEY, PH II (45th SW)	Provide second phase of a 45 SW resident & migratory bird survey to provide data to support bird management recommendations	Complete
Habitat Management/Restoration Projects				
Project Type	Planned Fiscal Year	Action	Description	Implementation Status
In-House	Annually	Survey wetlands and Impoundments	Survey to identify new wetlands and/or projects and prioritize	Incomplete
In-House	Annually	Incorporate any new wetland data into GIS	Incorporate any new wetland data into GIS	Incomplete
In-House	Annually	Coordinate wetland restoration plans, if applicable	Hold meeting with regulators to discuss/ approve any wetland restoration proposals.	Incomplete
In-House	Annually	Identify adversely impacted natural resource areas	Identify, prioritize and program areas to restore, (i.e. abandoned lines of sight, staging areas, etc.)	Incomplete
In-House	Annually	Coordinate with PB Fire Dept and Dept of Forestry on Prescribed Burning	Coordinate with PB Fire Dept and Dept of Forestry on Prescribed Burning schedules and plans	Incomplete (not priority for PB)
NYRL067301	2007	INVASIVE VEGETATION CONTROL	Annually remove and control 10% of the total invasive plant species acreage on the installation.	Complete
NYRL087271	2007, 2011, 2013	CONS- MGT, INVASIVE VEGET CONTROL & FIRE FUEL REDUCTION	Conduct monitoring/treatment of all acreage where invasive plant species have been removed while reducing hazardous fuel loads.	Complete
NYRL097287	2008, 2010, 2012	CONS-MGT, INVASIVE SPECIES & WETLAND ENHANCEMENT	Restore, enhance and maintain depression marsh/wetland areas by creating/improving 0.5 acres/ year or biannually of wetlands.	Complete
NYRLOS673709	2009-2013	CONS- MGT, INVASIVE SPECIES	Conduct annual monitoring/re-treatment of all acreage where invasive plant species have been removed.	Complete

## Implementation of Proposed Management Actions from 2008 45 SW INRMP - JDMTA

T&E Species Projects				
Project Type	Planned Fiscal Year	Action	Description	Implementation Status
In-House	Annually	Survey fence clear zone to ensure it is managed for the FL scrub jay per BO	Survey clear zone area to assess mowed and/or disc harrowing (semi-annual) the 30-ft clear zone fenced perimeter per BO to maintain security zone/fire break and possible Scrub Jay caching area	Complete
In-House	Annually	Scrub Jay surveying	At least annually, survey JDMTA for presence of Scrub Jays and obtain Jonathan Dickinson State Park survey data for surrounding habitat	Complete
Funded	2010, 2015	CONS- MGT, HABITAT, SCRUB JAY, ENHANCEMENT	Enhance scrub habitat to comply with the Biological Opinion to rotationally cut (5-year cycle) the 70-ft zone beyond the clear zone for a mosaic, preferred SJ nesting habitat treatment.	2010 Complete (Reassessing 2015)
Other Wildlife Projects				
Project Type	Planned Fiscal Year	Action	Description	Implementation Status
Funded	2006	RESIDENT & MIGRATORY BIRD SURVEY, PH I (45 SW)	Provide first phase of a 45 SW resident & migratory bird survey to provide data to support bird management recommendations	Complete
Funded	2007	RESIDENT & MIGRATORY BIRD SURVEY, PH II (45th SW)	Provide second phase of a 45 SW resident & migratory bird survey to provide data to support bird management recommendations	Complete
Habitat Management/Restoration Projects				
Project Type	Planned Fiscal Year	Action	Description	Implementation Status
In-House	Annually	Identify adversely impacted natural resource areas	Identify, prioritize and program areas to restore. (I.e. abandoned lines of sight, staging areas, etc.). Develop a site restoration strategy and implement.	Incomplete
In-House	Annually	Assess lichen areas	Assess lichen areas and relocation plots (BO) and make management recommendations if applicable	Complete to 2012
Funded	2007	CONS- INVASIVE VEG CONTROL, COGON GRASS, JDMTA	Annually remove and control 10% of the total invasive plant species acreage on the installation.	Complete
Funded	2008-2009, 2011-2013	RETREATMENT OF SECURITY CLEAR ZONE/FIRE BREAK	Mow and/or disc harrow(semi-annual) the 30-ft clear zone fenced perimeter per BO to maintain security zone/fire break and possible Scrub Jay caching area	Complete to 2012
Funded	2009-2013	CONS- MGT, INVASIVE SPECIES, JDMTA	Annually remove and control 10% of the total invasive plant species acreage on the installation.	Complete
Training and Community Projects				
Project Type	Planned Fiscal Year	Action	Description	Implementation Status
In-House	Annually	Maintain successful relationship with Jonathan Dickinson State Park neighbor	Correspond (by phone or E-mail) or hold annual meetings with JDSP personnel to maintain a relationship that allows for data sharing	Complete

## **Attachment A-4**

### **Task Force Meeting Minutes**



**Location: Cape Canaveral AFS - Fac 60600 - 1st Floor Conf Room**

Task Order No. 0007

[illegible]

**TASK FORCE MEETING MINUTES; Meeting Held at CCAFS**  
**INRMP 5-Year Update for 45<sup>th</sup> Space Wing (SW)**  
**Cape Canaveral AFS (CCAFS), Patrick AFB (PAFB), Malabar Transmitter Annex (MTA), and**  
**J. Dickinson Missile Tracking Annex (JDMTA), Florida**

**Task Order 0007**  
**Contract Number W91278-12-D-0022**

In accordance with the above-referenced Task Order (TO), AMEC Environment & Infrastructure, Inc. (AMEC) participated in an on-site meeting at CCAFS with task force members including Florida Fish and Wildlife Conservation Commission (FWC), National Marine Fisheries Service (NMFS), US Fish and Wildlife Service (USFWS) staff members and the US Air Force (USAF) internal stakeholders related to the installations: CCAFS, PAFB, MTA, and JDMTA. The task force meeting was held on 28 February 2014 at 1000 in Building 60600, CCAFS. The objectives of the meeting were (1) to discuss the 5-year review for operation and effect for the INRMP that includes four installations: CCAFS, PAFB, MTA, and JDMTA; (2) to review changes in mission and the facilities since 2008 (and identify anticipated changes in the next five years for the facilities); (3) to review accomplishments since 2008 and identify potential future requirements and projects; (4) to gather input from FWC, NMFS, and USFWS regarding updating the INRMP; and (5) to familiarize all parties with the four installations and the INRMP process and requirements. A copy of the Meeting Agenda is included as **Attachment 1**. An attendance list for the meeting is provided in **Table 1**.

**Table 1.** List of Meeting Attendees

Name	Affiliation	Phone Number	Email
Angy Chambers	Installation Point of Contact, 45 CES/CEIE	321-853-6822	Angy.chambers@us.af.mil
Michael Blaylock	Chief, Natural Assets, 45 CES/CEIE	321-853-0964	Michael.blaylock.4@us.af.mil
Martha Carroll	45 CES/CEIE	321-853-6858	Martha.carroll@us.af.mil
Keitha Dattilo-Bain	45 CES/CEIE	321-853-6438	Keitha.datillobain@us.af.mil
Don George	45 CES/CEIE	321-853-6823	Don.george@us.af.mil
Mabel O'Quinn	AFCEC/C2O	321-494-9241	Mabel.oquinn@us.af.mil
Richard Brust	45 CES/CEIE (CSU)	321-853-6638	richard.brust.ctr@us.af.mil
Rachel Mandel	45 CES/CEIE (CSU)	321-853-6642	rachel.mandel@colostate.edu
Adam Brame (via teleconference)	NMFS Protected Resources	727-209-5958	Adam.brame@noaa.gov
George Getsinger	NMFS Habitat Conservation	904-461-8674	George.getsinger@noaa.gov
John Milio	USFWS	904-731-3098	John_milio@fws.gov
Macky Thurman	FWC Conservation Planning	352-304-1682	McLin.Thurman@myfwc.com
Joy Ryan	AMEC	352-333-1629	Joy.ryan@amec.com
Sara Miller	AMEC	352-333-2639	Sara.miller@amec.com

The following sections provide summaries of topics discussed at the task force meeting. Action items for meeting participants are included at the end of the minutes.

## **Introductions**

Ms. Ryan provided an introduction to the meeting and introductions by meeting attendees were made.

## **INRMP Process and Required Elements**

Ms. Ryan referred to the "INRMP Process Overview" handout (attached) and reviewed the INRMP process and goals, why the INRMP is required, and the difference between an update and a revision of the current INRMP. Discussion at previous meetings concluded the current INRMP will be updated (does not require public comment).

## **CCAFS/PAFB, MTA and JDMTA Brief History and Mission Overview**

Mr. Blaylock reviewed the agenda and provided an overview of the meeting format. Using a PowerPoint presentation (attached), he then reviewed installation locations, operations, range of rockets launched, and launches that take place at the CCAFS. Also reviewed were natural resource concerns at each installation including protected species: scrub jay, gopher tortoise, sea turtles, and the Southeastern beach mouse. The prescribed burning program was reviewed; and the very narrow window for burning. Prescribed burning activities are challenging due to payloads that sit at the installation that cannot be exposed to any contamination (smoke) and other sensitive equipment. Mr. Blaylock then discussed the Readiness and Environmental Protection Integration program that provides DoD money for conservation easements and projects like those that help manage habitat for the scrub jay. The resources at PAFB, MTA and JDMTA were also identified. Mr. Blaylock also mentioned there is a future plan to widen Port Canaveral adjacent to CCAFS.

## **Review of 2008 INRMP Goals, Objectives, and Project Implementation by Installation**

### CCAFS

Ms. Chambers reviewed Biological Opinions (BOs) at the sites, and identified activities that have been completed such as light management, pest management activities, and routine construction activities. Ms. Chambers discussed with Mr. Milio the possibility of continuing an annual tube study with the Southeastern beach mouse versus doing a 5-year study as is currently required; Mr. Milio agreed that further discussion with USFWS staff was warranted. Mr. Blaylock commented that it is easier for their department to obtain small increments of money every year, rather than receiving large amounts of money every five years. Mr. Milio commented that making the tube study part of the BO requirements would be a good idea. Ms. Chambers explained that expanding the study to inland areas would duplicate the efforts of the five year study; Mr. Blaylock added that a yearly review would be more beneficial than a five year review.

Ms. Chambers then discussed Airfield Clear Zones, Sand Borrow Source and Beach/Dune Restoration projects:

- Airfield Clear Zones: Mr. Blaylock explained that the CCAFS airfield clear zones have not met clear zone criteria for years, and this was waived since the airfield was not routinely used. However, the criteria are no longer being waived; there has been a massive effort of physical and mechanical clearing around the airfield (down to mowed grass) as well as filling culverts to

meet the requirements. Mitigation money for the airfield clearing is being used to create the habitat corridors.

- Sand Borrow Source: The Air Force received an amended BO for this work.
- Beach/Dune Restoration: A dredging event using Canaveral Shoals offshore sand for PAFB beach restoration has not occurred since 2005. The NMFS dredging/Beach restoration project BO (Dated 30 April 2010) was developed in anticipation of future use of Canaveral Shoals. Ms. Dattilo-Bain shared that storm events and sand volume deficits will determine if there is a need for this sand since critical areas with smaller volume deficits have been restored without it.

Ms. Chambers shared that most of the goals listed in the 2008 INRMP have been accomplished over the past 5 years. Projects that have not been completed include deer surveys; these have not been conducted in a few years because there have not been any problems/justification warranting their completion. Ms. Chambers commented that herptile surveys have not been completed, and that an osprey census was not conducted last year. Ms. Chambers commented that all T&E objectives have been met.

At this time, projects are now more general/less specific because of budget issues, and are mostly driven by BOs. CCAFS needs a BO for the scrub restoration program to cover any potential take to T&E during mechanical and burning operations. Mr. Milio asked if this has been discussed in the past, Ms. Chambers replied that it has not. Ms. Chambers further explained that this was always an issue that USFWS was not particularly concerned about due to the importance of burning; but that she thinks a BO would protect the installation and assist with funding. Mr. Milio said it can be made a BO requirement, but the restricted burning schedule makes it difficult. Ms. Chambers explained that the current burning requirement has been met, to date. Ms. Chambers explained that recent conversations with USFWS will require CEIE to explore the carrying capacity for scrub jay groups on CCAFS, and CEIE is trying to determine cost for a tiered approach to meet this requirement. Ms. Chambers wants to find a middle ground where USFWS is on board with what the installation is able to handle, and the internal budget can agree with it as well. Mr. Blaylock explained that much of the new habitat area that has been created is due to mitigation for the airfield project.

Ms. O'Quinn shared that the structure for project money allocation has changed; projects that are "must-haves" and have legal requirements will be funded in the future. Mr. Milio asked where the funds come from; Ms. O'Quinn replied funds are not legacy funds, but are operational funds of the installation. Legacy funds are still available, but they require submittal, and the rules are very specific about what can be submitted. Mr. George explained that in the past, fund requests for scrub jay and other species research through DoD has been denied. Mr. Blaylock concluded that while legacy funds exist, they are very difficult to get. Projects using the legacy funds must benefit several regions, not just a single installation.

Mr. Milio then asked about lighting issues; Ms. Chambers and Ms. Dattilo-Bain confirmed that replacements to amber LED lights have been made. A new Navy program currently under construction near the beach will require a Light Management Plan, which will be submitted to USFWS for approval. Mr. Getsinger asked about the nature of Navy project, Mr. Blaylock explained

it was a sub ballistic simulation facility that will be built (away from the beach), with no dune or in-water impacts. The Trident Basin area and projects were discussed. Ms. Chambers confirmed that pile driving and the flora and fauna surveys in brackish waters are complete. Upon request from Mr. Getsinger, Ms. Chambers agreed to send him copies of these reports. The biological monitoring (benthic) at the shoals was discussed. Ms. Chambers indicated justification for the juvenile sea turtle monitoring study at Trident Basin is becoming difficult and asked Mr. Brame for his assistance with justification.

Ms. Chambers continued to review past accomplishments, and indicated that she provides gopher tortoise data every year via a Candidate Conservation Agreement Annual Report which is then forwarded to FWC. Ms. Chambers further explained any information needed by Deborah Burr (FWC) can be provided to show that requirements are being met. Recent conversations with FWC indicate that they had concerns over how gopher tortoise protection/management is being implemented.

Ms. Chambers asked if Mr. Milio knows of any changes to indigo snake regulation as they are trying to get an indigo snake/herptile study completed since there have not been many observations in the past few years. Mr. Milio said he is reluctant to share indigo snake information because FWS is attempting to get a Section 6 agreement with the State to handle T&E species in the same manner as sea turtles. The indigo snake is the experiment species for consideration with different statutes and regulations. The State may take over Section 6 regulation, that is their goal, but they are unsure at this point if this will work or go through. Mr. Milio stated that ground information from CCAFS would be helpful and that any data collection, etc. would be supported by FWS (for example, a BO).

Mr. Getsinger inquired about the ITL wetlands restoration; Mr. George confirmed that this is an ongoing project at the entrance to the installation. Culverts are installed and breaching of old mosquito control dikes (to re-connect wetlands) is in process. Invasive species removal and monitoring has been completed, and swales have been hardened in order to remove Brazilian pepper from wetlands mechanically. Mr. George later escorted Mr. Getsinger to the project site.

In review of CCAFS INRMP accomplishments/actions, Mr. Getsinger asked about BASH because of concerns with FAA proposed policy to remove wetlands/wetland vegetation near airports at other sites. Ms. Chambers explained BASH and the requirements included in the INRMP that require non-lethal control to reduce bird aircraft strike incidents with lethal methods being used as a last resort. Ms. Dattilo-Bain mentioned that we could encourage mangrove trimming over removal for wetland/EFH areas in the vicinity of the PAFB airfield where there are pilot/aircraft safety concerns.

### PAFB

Ms. Dattilo-Bain reviewed PAFB accomplishments. One accomplishment included shoreline protection without destruction of wetlands/seagrasses through use of upland rip-rap and buried gabion baskets. However erosion is still an issue because of wave energy in this area. Mr. Getsinger provided a map of the area along the south end of the PAFB airfield (parallel to the N/S directional runway) and noted it would be a good candidate as it is critical shoreline due to its proximity to infrastructure, and has eroded very rapidly in the past few years. Mr Getsinger indicated

there are many designs for living shorelines and NMFS would review proposed projects and provide advice.

In reference to another accomplishment at PAFB to reduce fish kill incidents with bottom aeration systems, Mr. Getsinger requested additional details. Ms. Dattilo-Bain explained how the diffusers increased dissolved oxygen and fish kill events have virtually stopped within the golf course canals where the systems have been installed; the systems were being considered for the marina, an upland cut system with poor circulation, but utilized by dolphin and manatees and occasionally sea turtles. Mr. Getsinger asked about muck and Ms. Dattilo-Bain confirmed there is significant muck with longer timeframe between marina and canal dredge maintenance cycles and the much could affect DO levels unless the diffuser systems are regularly maintained.

Mr. Milio asked about lighting, Ms. Dattilo-Bain confirmed that disorientation surveys are part of the sea turtle monitoring and is ongoing. Mr. Blaylock confirmed there have been minimal disorientations (2-4/yr) at PAFB, and Ms. Dattilo-Bain stated that planting and maturation of sea grape along the dune has significantly reduced disorientation at PAFB.

#### MTA

Species utilizing MTA were discussed: known wildlife species include fox, deer, and owl. The only T&E species is the gopher tortoise. Feral hog removal has also been performed to prevent wetlands destruction. Burning for habitat management is logistically difficult due to the surrounding residential areas and coordination/prioritization with the local Palm Bay Fire Dept and the FL Division of Forestry, who would manage the prescribed burn because of public concern. Therefore, mechanical treatment is utilized so that the Air Force can manage the habitat and fuel load.

#### JDMTA

Species at JDMTA were discussed: gopher tortoise and scrub jay. Avoidance and buffers are used to prevent gopher tortoise impacts, and Ms. Dattilo-Bain explained that scrub jays do not nest on JDMTA but are present on Jonathan Dickinson State Park (JDSP), which surrounds JDMTA. Ms. Dattilo-Bain indicated that the AF maintains a good relationship with the JDSP manager.

### **Mission and Facilities Changes and Approach and Anticipated Goals and Objectives for Next Five Years**

#### CCAFS, PAFB, MTA, and JDMTA

Regarding the gopher tortoise, Mr. Thurman commented that the main issue for the gopher tortoise is habitat management; he agreed that all they can do at CCAFS is to use best professional judgment for burning timing, etc. as the best management practices to be incorporated into the updated INRMP. Mr. Blaylock commented that gopher tortoises are present throughout CCAFS, and alternatives to burning such as mechanical removal are the best way to address management. Mr. Thurman shared that FWC's main concern is relocation activities. Ms. Chambers explained that relocated gopher tortoises are kept on-site and they are not penned or kept in a small parcel.

Ms. Chambers stated that manatees are not currently on the list of goals and objectives, but will be added before the list is finalized. Ms Dattilo-Bain explained that the AF doesn't have jurisdiction over most of the waters that manatees are found in (that could be affected by 45 SW activities). However, the INRMP includes manatee protection language related to "Standard Manatee Conditions for In-Water Work/Construction" and existing manatee speed protection measures. Mr. Milio agreed that this is a good approach and stated a goal for manatees should be added to the INRMP. Mr. Milio added that with any activities that involve in-water work or marinas, etc. - signs and other educational materials should be used so that CCAFS can show regulators that measures are being taken to protect the manatee.

Mr. Getsinger asked if coastal habitat focuses just on the beach or estuarine habitats; justification can be under the Magnuson-Stevens Act for all coastal/wetland habitat projects and NMFS would consult. Mr. Milio commented that "management of Federally Listed Species and Habitat" will help to encompass all T&E concerns. Mr. Getsinger also asked about Johnson seagrass, Ms. Dattilo-Bain confirmed that Johnson seagrass is not present in/near the installations.

Ms. Chambers asked Mr. Brame if he has any verbiage to add to the updated INRMP for the Atlantic sturgeon critical habitat listing; Mr. Brame replied that they will work together offline to come up with language for this. He cautioned that borrow material that comes from in-water areas for restoration projects requires consultation with NMFS; the current BO does not include the Atlantic sturgeon, and therefore a re-consult may be required to add the Atlantic sturgeon to the BO. Some SpaceX activities did not consider the Atlantic sturgeon; Mr. Brame will speak to the coordinator to confirm, but this does not seem to be as much of an issue as the dune restoration/beach renourishment BO.

Mr. Thurman stated that deer management is only a concern of FWC if there were issues such as blue tongue disease or if dead deer were observed. This species is not a high priority since the deer population on the installation is isolated. Mr. Thurman commented that report tracking is sufficient for non-T&E species and the maintenance of good practices for these species. Ms. Chambers asked about any additional State-listed species; Mr. Thurman said that adding the burrowing owl and gopher tortoise is always suggested, but stakeholder involvement has made their addition difficult.

There will be more revisions made to the updated INRMP goals before the draft is created. Ms. Chambers asked Mr. Milio about migratory birds and the depredation permit; the current permit covers airport-related issues only. Every year birds nest on structures that support launch operations (fire trucks, weather towers, etc.), and in accordance with the existing permit, these nests cannot be removed because they do not pose a threat to human safety. Mr. Milio replied that there is debate on what constitutes a safety or mission critical concern. Due to the numerous take requests, the general tendency is to not issue take permits for activities such as this. Mr. Milio explained there is an attempt to come up with a programmatic take to address issues like this, but it is still in the works. Ms. Chambers shared that every wildlife response is documented. Issues arise when CEIE staff are requested to move a nest and do not have a permit. If CEIE staff members deny the request, then the requestor will likely not take proper action in the future. It then becomes a question of what is in the best interest of the species. Ms. Chambers proposed adding language to the updated INRMP

about this issue, and when USFWS signs the INRMP, the procedure could then be implemented without a take permit. Mr. Milio agreed and recommended including a Standard Operating Procedure in the INRMP.

### **Discussion of Working Relationships with State and Federal Agencies**

Mr. Milio said that there are no concerns regarding the issues he handles; but in regards to other issues there may be some Southeastern beach mouse concerns that need facilitation towards a better sense of agreement (pest trapping that accidentally trap Southeastern beach mice, for example). Scrub jay conflicts with USFWS continue - Mr. Milio is hoping that conversations will continue to help get beyond conflicts, as well as categorizing different levels of scrub. USFWS would like to see a realistic objective based upon requirements, limitations, and restrictions; and most importantly, see the objective successfully carried out. This is where annual reviews come into play, and circumstances need to be explained and addressed so that things can be adjusted or handled differently in a timely manner.

Gopher tortoises have been well-addressed, and Eastern indigo snake issues can be addressed simultaneously with gopher tortoise projects.

Mr. Brame said that there are no NMFS issues, but any projects that need consultation should come in early due to the current NMFS workload; NMFS is very behind (they have 600+ consultations in the works right now). SpaceX operations always have timeliness issues - Mr. Brame suggested that a programmatic opinion would be very helpful to get their new actions through. Ms. Chambers said she will discuss this with SpaceX. Mr. Getsinger commented that anything estuarine should be consulted with NMFS.

Mr. Thurman said that submitting to the FWC commenting section works well. He added that if the project is similar to another project that has been previously submitted to the commenting section, responses typically include the same concerns and requirements.

### **Special Topics to Discuss with USFWS, NMFS, and FWC**

Ms. Ryan discussed that CEIE would like to implement some sort of process for the INRMP annual review that makes it easier for all parties concerned. FWC has a defined process for addressing the annual review of the INRMP. The process can be implemented through a letter, etc. that is sent to agencies on a timeline following a process. Mr. Blaylock explained that a process will make the yearly review as easy as possible, and better implemented. Ms. O'Quinn explained that the installations will be working to coordinate a timeline for annual reviews. Mr. Milio commented that for USFWS, signatory responsibility falls to field offices; Mr. Getsinger explained that for NMFS the responsibility is designated to the Atlantic Branch in Charleston, SC. Mr. Getsinger stated there should be two approvers, one for Essential Fish Habitat (EFH) and one for Environmentally Sensitive Habitat, the final signatory is the Regional Manager (Crabtree), with Pace Wilbur (and Mr. Getsinger copied). For the annual review, the field offices can sign off for NMFS; then the review should be sent to branch chief (this position is currently vacant so for now the report can be sent to Mr. Brame).



### Essential Fish Habitat

Concerning EFH requirements for NMFS, Mr. Getsinger said that for individual projects, a pre-application meeting with NMFS should be conducted before going to the USACE; the USACE permit will require consultation with NMFS or USACE. Usually, there is a 30-day timeline to get a response, then 30 to 40 days depending on the type of project. If the project requires an Environmental Assessment, the timeline is usually 45 days; for simple projects like replacing culverts it takes 30 days. After consultation, the response letter can be accepted or rejected. If accepted, a 10-day letter should be sent and then the suggestions will be implemented; or if rejected, a 10-day letter should be returned and NMFS will respond. Issues before have been a No Effect Determination, and then USACE will in turn consult with NMFS. Usually, they consult before the design phase. Any habitat below the highest high water level would be a good idea to consult with Mr. Getsinger on, since anything within the estuarine water column is considered EFH for juveniles, and there are BMPs for best time to do dredging, etc.

### Programmatic BO for Southeastern Beach Mouse

Ms. Chambers will work with Mr. Milio on updating the two BOs for the Southeastern beach mouse.

### BO for Scrub Jay Restoration

Ms. Chambers asked about receiving credit toward the scrub jay 300-acre burn requirement from mechanical cutting and trench burning the material. As part of the airfield mitigation, several units were completely cut and the material was burned via an air curtain; therefore there was burn of a unit, but not a maintenance-type burn. Prescribed burning cannot be conducted immediately after this treatment because there is not enough fuel to carry a fire. Mr. Milio said he cannot speak for scrub jay regulators at USFWS, but he has heard a lot about similar issues, and asked that this be better explained to him so there could be a meeting with USFWS concerning this topic. Mr. Thurman said that as long as they're doing something, then FWC does not have an issue. Mr. Milio indicated that this issue and the language for the requirements need to be revisited by USFWS. Mr. Milio also commented that the BO needs to be modified to clearly stipulate what type of restoration activities can be included, so that there is no debate about following requirements.

### Prescribed Burning and Scrub Jay Habitat – Species Not Found on Installation

Ms. Chambers and Ms. Dattilo-Bain asked why the installations are required to consult on species not found within the installation boundaries (i.e. indigo snakes). Mr. Milio clarified that anywhere there are gopher tortoise burrows; the assumption is made that indigo snakes could be present. Mr. Milio commented that USFWS cannot say they are assuming presence, but expectations need to be based on site specific conditions and the likelihood of species presence. Mr. Milio will bring this up with USFWS since the presence of a species is not reasonably certain to occur within the installation boundaries. Ms. Chambers asked about requirements that put species concerns in opposition, like piping plover and sea turtle requirements. Mr. Milio responded that reason dictates what you should do based on what species present the greatest concern and likelihood. Mr. Milio stated that they will try to make it clearer on how USFWS will be regulating in this part of the state (as opposed to the panhandle). If there is an apparent conflict, the Air Force should come to USFWS. Mr. Blaylock

added that there is a credibility issue with clients and they need to make sure that missions can move forward.

### **Meeting Close**

Ms. Ryan reviewed the following action items:

- The installations will send canal borrow pit study to Mr. Getsinger (done, post meeting).
- The installations will send pile driving study to Mr. Milio, Mr. Getsinger and Mr. Brame (done, post meeting).
- Ms. Chambers will consult with Mr. Brame on juvenile green sea turtles and Atlantic sturgeon.
- Mr. Blaylock or Ms. Chambers will schedule a meeting with USFWS to further discuss some of the issues brought up.
- Ms. Chambers will work with Mr. Milio on updating the two beach mouse BOs.
- Ms. Chambers will work with USFWS to develop a BO for scrub restoration activities.

### **Outcomes**

Mr. Blaylock reviewed the outcomes from the meeting:

- Went through mission overview;
- Projects;
- Funding limitations; and
- Communication issues.

### **Meeting Adjourned**

Meeting ended at ~1415, Friday, February 28, 2014.

## **Attachment A-5**

### **Correspondence with Agencies**



DEPARTMENT OF THE AIR FORCE  
45TH SPACE WING (AFSPC)

FEB 24 2014

MEMORANDUM FOR NATIONAL MARINE FISHERIES SERVICE  
NOAA SOUTHEAST REGIONAL OFFICE  
PROTECTED RESOURCES DIVISION  
263 13TH AVENUE SOUTH  
ST. PETERSBURG FL 33701  
ATTN: ADAM BRAME

FROM: 45 CES/CEIE  
1224 Jupiter Street  
Patrick AFB FL 32925-3343

SUBJECT: Task Force Meeting Request, Integrated Natural Resources Management Plan (INRMP) for Cape Canaveral Air Force Station (CCAFS), Patrick Air Force Base (PAFB), Malabar Transmitter Annex (MTA), and Jonathan Dickinson Missile Tracking Annex (JDMTA) in Brevard and Martin Counties, Florida

1. The U.S. Air Force (AF), including the 45th Civil Engineer Squadron, Environmental Conservation (45 CES/CEIE), would like to conduct an INRMP Task Force Meeting for the above referenced installations located in Brevard and Martin counties, Florida. An INRMP is required by the Sikes Act to reflect the mutual agreement of the U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and Florida Fish and Wildlife Conservation Commission (FWC), and is required to undergo a review for operation and effect at least every five years. The purpose of this meeting would be to conduct the review for operation and effect and determine if a revision, or just an update, of the existing INRMP is merited. An overview of the current mission and installation parcels will be presented. A review of the implementation of the 2009 INRMP will be presented along with discussion of future projects and priorities. The final result (likely in summer of 2014) will be a signed review for operation and effect and either an updated or revised INRMP.
2. The AF is responsible for the prudent management and use of CCAFS, PAFB, MTA, and JDMTA. As described in the existing INRMP, management of rare species and their habitat are the most critical natural resource management concerns. The 45 CES/CEIE provides support for federal, state, and community interests by providing highly trained personnel and mission-ready equipment for federal contingency missions and state and local emergency missions; protecting life and property; and preserving peace, order, and public safety.
3. Since the existing INRMP was signed in 2009, there have been no changes in acreage covered by the INRMP. The overall approach and priorities have not changed.



For this review for operation and effect, we are seeking input from your agency regarding any limitations of the existing INRMP with regard to natural resources management and areas that could use improvement, as well as areas that are working well. We are seeking from your agency any new or additional information, new natural resources topics or issues of concern, updates on policies or regulations, updates on rare flora and fauna listings, identification of issues of regional concern, or other new information that your agency thinks should be considered during development of this updated/revised plan. Generally, these data would be more recent than 2007, as data prior to 2007 were incorporated into the 2009 INRMP. Any data that your agency provides will be evaluated and used to help update the INRMP.


4. An agency coordination meeting (INRMP Task Force Meeting) with USFWS, NOAA-NMFS, and FWC has been scheduled to begin at 10:00 am on Friday, 28 February 2014 at CCAFS, in the Building 60600 Conference Room located on the 1st Floor. Due to the restricted access of CCAFS, please meet at 9:30 am on February 28th, at the CCAFS Pass and ID Building for escort to Building 60600. Ms Angy Chambers will meet you at the Pass and ID Building parking lot and escort you to the meeting location. Escorted attendees will leave their vehicles in the Pass and ID Building parking lot and ride to the meeting location in one vehicle.

5. For your review and information, directions to CCAFS, an agenda, and a draft Goals and Objectives document are attached to this letter. Please bring any additional staff that you feel are necessary, but advise Ms Joy Ryan in advance if additional staff members will accompany you.

6. We look forward to and welcome your participation in this INRMP Task Force Meeting and INRMP review process. The AF has hired AMEC to facilitate the review and update of this INRMP. Please send your correspondence directly to the following physical or email address:

Joy Ryan  
AMEC  
404 SW 140<sup>th</sup> Terrace  
Newberry, FL 32669  
[Joy.ryan@amec.com](mailto:Joy.ryan@amec.com)  
Mobile phone # (352) 213-6392

7. If you have any questions concerning this request, please do not hesitate to contact Ms. Ryan at (352) 333-1629. Our point of contact for this matter is Ms. Angy Chambers. She can be reached at 321-853-6822 or e-mail [angy.chambers@us.af.mil](mailto:angy.chambers@us.af.mil).

  
MICHAEL A. BLAYLOCK  
Chief, Environmental Conservation

Attachments:

1. Agenda
2. Directions/Meeting Map
3. Draft Goals and Objectives

cc:

USFWS Region 4 (Sikes Act Coordinator)  
Kerry P. Gates, USACE Mobile District

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## **Meeting Agenda**

### **Task Force Meeting to Discuss 5-Year Update of INRMP for the 45<sup>th</sup> Space Wing (45SW)**

**Date and Time:** Friday, February 28, 2014; 10am to 1pm  
**Location:** Cape Canaveral AFS - Fac 60600 - 1st Floor Conf Room  
**NOTE:** **Meet at 0930 at the CCAFS Pass and ID Building (map attached), for escort onto the AFS by Angy Chambers (45SW CEIE)**

#### **General Meeting Objectives:**

- To discuss 5-year review for operation and effect for the INRMP that includes four installations: Cape Canaveral Air Force Station (CCAFS), Patrick Air Force Base (PAFB), Malabar Transmitter Annex (MTA), and Jonathan Dickinson Missile Tracking Annex (JDMTA).
- To review changes in mission and the facilities since 2008 (as applicable, and identify anticipated changes in the next five years for the facilities)
- To review accomplishments since 2008 and identify potential future requirements and projects
- Gather input regarding updated INRMP from Florida Fish and Wildlife Conservation Commission (FWC), National Marine Fisheries Service (NMFS), and U.S. Fish and Wildlife Service (USFWS)
- To familiarize all parties with the 4 facilities and the INRMP process and requirements

#### **Agenda:**

- 1) Introductions and Sign-In Sheet (Joy Ryan)
- 2) INRMP Process and Required Elements – see handout (Joy Ryan)
- 3) CCAFS/ PAFB, MTA, and JDMTA Brief History and Mission Overview (Mike Blaylock)
- 4) Review of 2008 INRMP Goals, Objectives, and Project Implementation by Installation (Angy Chambers)
  - CCAFS
  - PAFB
  - MTA
  - JDMTA
- 5) CCAFS
  - Mission and Facilities Changes (Mike Blaylock, Angy Chambers)
  - Approach and Anticipated Goals and Objectives for Next Five Years (through 2018) (Angy Chambers)
- 6) PAFB
  - Mission and Facilities Changes (Keitha Dattilo-Bain, Mike Blaylock, Angy Chambers)
  - Approach and Anticipated Goals and Objectives for Next Five Years (through 2018) (Angy Chambers)

**7) MTA**

- Mission and Facilities Changes (Keitha Dattilo-Bain, Mike Blaylock, Angy Chambers)
- Approach and Anticipated Goals and Objectives for Next Five Years (through 2018) (Angy Chambers)

**8) JDMTA**

- Mission and Facilities Changes (Keitha Dattilo-Bain, Mike Blaylock, Angy Chambers)
- Approach and Anticipated Goals and Objectives for Next Five Years (through 2018) (Angy Chambers)

**9) Discussion of Working Relationships with State and Federal Agencies – including agency process for annual review of INRMP (Angy Chambers/Joy Ryan)**

**10) Special Topics to Discuss with USFWS and NMFS (Angy Chambers)**

- Essential Fish Habitat (EFH) time requirements
- Programmatic Biological Opinion for beach mouse and required 5-year demography study
- Request BO for scrub restoration program
- Prescribed burning, in context of using invasive species control and mechanical controls as part of prescribed burning to maintain scrub jay habitat
- Consultation regarding species not found on CCAFS, PAFB, MTA, and JDMTA

**11) Meeting Close (Joy Ryan)**

- A. Review Action Items
- B. Discuss any Outstanding Issues

**Outcome:**

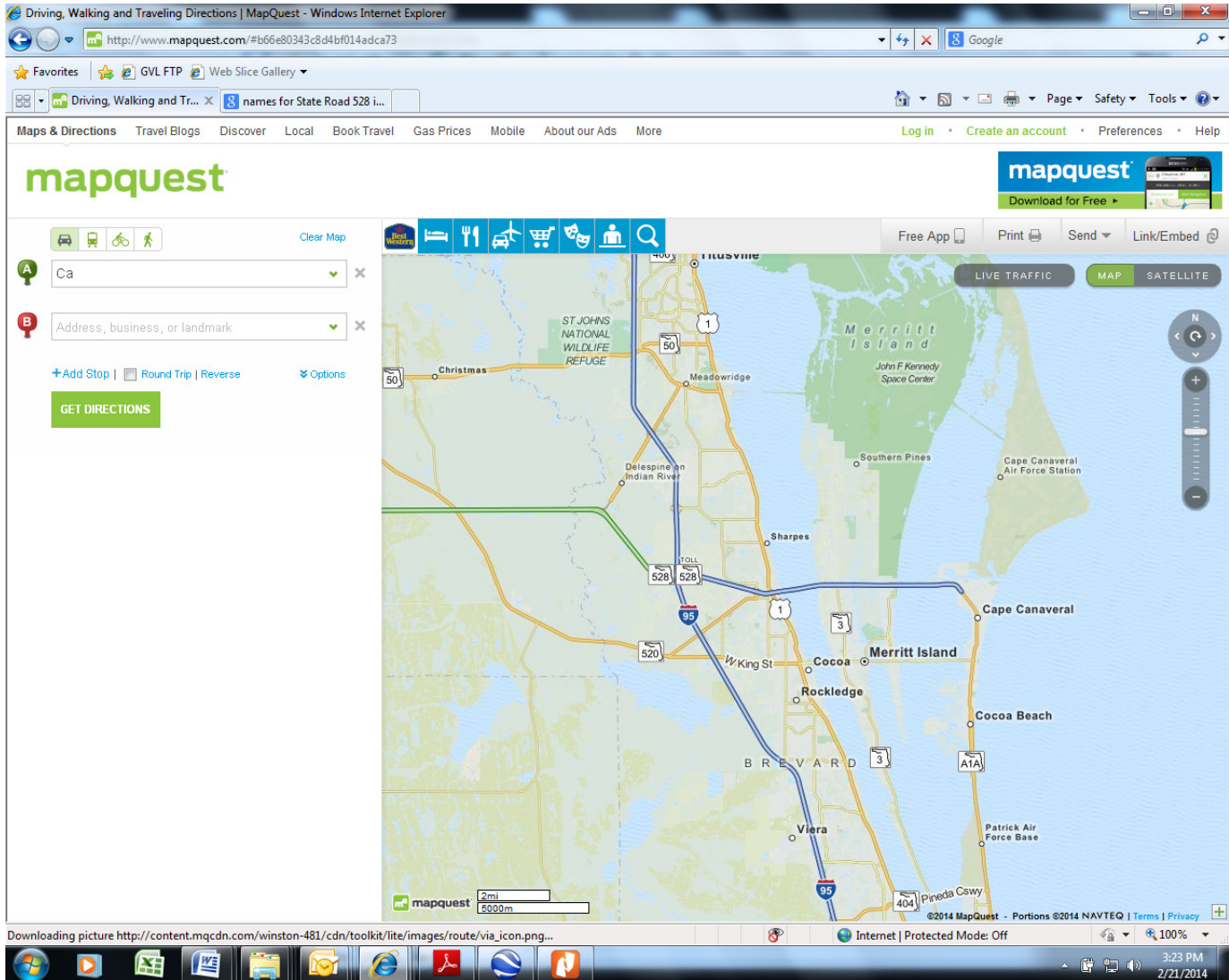
- An understanding of the primary sustainability challenges for each installation
- An understanding of what projects have been implemented over the past 5 years and what areas of the INRMP require updates
- An understanding of funding limitations for future projects; and approach for future projects
- Input from FWC, NMFS, and USFWS regarding items for inclusion in updated INRMP, and ongoing working relationship with 45 CES/CEIE



## Directions to CCAFS Pass and ID Building

Meet at 0930 at CCAFS Pass and ID Building for 2/28/2014 Meeting at CCAFS. If you have questions or issues, contact Joy Ryan, mobile # (352) 213-6392.

Since attendees will be coming from different areas of the state, these travel directions begin east of Orlando at the intersection of I-95 and State Road (SR) 528, the Beachline Expressway.

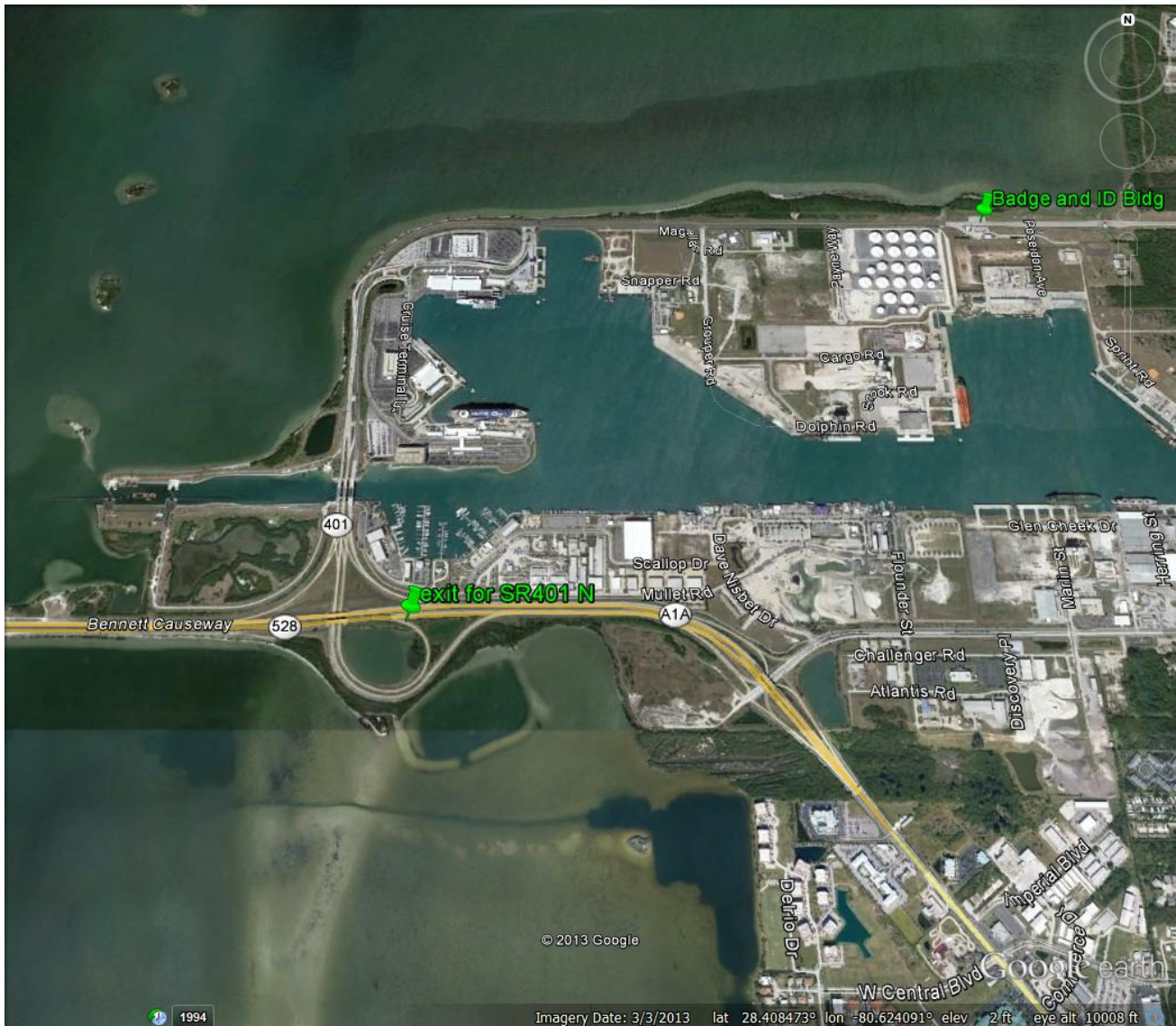


From the intersection of I-95 and SR528, go East on SR528 approximately 12.5 miles toward Cape Canaveral

Merge onto SR401 North toward “Cape Canaveral Air Force Station/Port Canaveral/A Cruise Terminals/North Cargo Piers” (exit right from SR 528 to loop north onto SR 401N)

Travel North on SR 401N for approximately 2.5 miles

On SR 401N, you will pass a large storage tank yard on the right, and then see a small one-story building on the right (the “Pass and ID” building). Pull into parking lot of the Pass and ID Building and wait for Angy Chambers to escort you to the meeting location. Escorted attendees will leave their vehicles in the Pass and ID Building parking lot and ride to the meeting location in one vehicle.



Only if you have a personal access badge to CCAFS and escort is not required, here are directions to the meeting location on CCAFS from the CCAFS gate:

After the Pass and ID Building, continue east on SR 401N (becomes Samuel Phillips Parkway) to the CCAFS gate to show your access badge.

From the CCAFS gate, continue north on Samuel Phillips Parkway for approximately five miles.

Turn left onto W. Skid Strip Road, travel for one block

Building 60600 is at the intersection of W. Skid Strip Road and Hangar Road; parking lot accessed from Hangar Road; the conference room is on the 2<sup>nd</sup> Floor

Goal #	Goal	Objective #	Objective	Conservation and Management Activities	Base	Need Date	Justification	Projects
1	Protect federally listed threatened and endangered species and their habitat while ensuring mission sustainability	1.1	Conduct Management of Florida Scrub-Jay and Habitat	1.1.1: Conduct population census	CCAFS/JDMTA	Annual, June/July	Biological Opinion	Mgt, Species, FL Scrub-Jay
				1.1.2: Conduct banding of individuals	CCAFS	Yearround	Biological Opinion	Mgt, Species, FL Scrub-Jay
				1.1.3: Monitor scrub-jay response to restoration activities	CCAFS	Yearround	Endangered Species Act	Mgt, Species, FL Scrub-Jay
				1.1.5: Restore/enhance/maintain scrub-jay habitat	CCAFS	Yearround	Endangered Species Act	Mgt, Habitat, T&E
				1.1.4: Conduct prescribed burning of an average 300 acres/yr over a 10-year period	CCAFS	Yearround	Biological Opinion	Mgt, Wildland Fire
				1.1.6: Complete annual Biological Opinion reporting, as required	CCAFS/JDMTA	Annual	Biological Opinion	
		1.2	Conduct Management of Sea Turtles and Habitat	1.2.1: Monitor nesting/hatchling success through participation in State and Index Nesting Beach Surveys	CCAFS/PAFB	May-Oct	Biological Opinion	Mgt, Species, Sea Turtles
				1.2.2: Complete annual report of all sea turtle monitoring activities	CCAFS/PAFB	Annual		Mgt, Species, Sea Turtles
				1.2.3: Conduct predator removal to decrease predation rates	CCAFS/PAFB	Yearround	Endangered Species Act	Mgt, Habitat, Coastal Dune
				1.2.4: Issue annual reminders to base personnel regarding sea turtle nesting season and lighting requirements	CCAFS/PAFB	Annual	Biological Opinion	Mgt, Species, Sea Turtles
				1.2.5: Conduct light inspections to ensure compliance with Space Wing Instruction 32-7001 and Light Management Plans	CCAFS/PAFB	Minimum 5/nesting season	Biological Opinion	Mgt, Species, Sea Turtles
				1.2.6: Conduct annual review of SWI 32-7001 to determine if revision is necessary	CCAFS/PAFB	Annual	Biological Opinion	
				1.2.7: Complete Biological Opinion reporting, as required	CCAFS/PAFB	Annual	Biological Opinion	
				1.2.8: Restore/enhance sea turtle nesting habitat, as needed	CCAFS/PAFB	As needed	Endangered Species Act	Mgt, Habitat, Coastal Dune
				1.2.9: Monitor population of juvenile green sea turtles in Trident Basin	CCAFS	Biannual	Endangered Species Act	Mgt, Species, Green Sea Turtle
		1.3	Conduct Management of Southeastern Beach Mouse and Habitat	1.3.1: Conduct occupancy study in partnership with NASA and NPS	CCAFS	Annual, Feb/Mar	Endangered Species Act	Mgt, Species, SE Beach Mouse
				1.3.2: Conduct Five Year Demography Study	CCAFS	2017	Biological Opinion	Mgt, Species, SE Beach Mouse
				1.3.3: Conduct monitoring in select LMUs for SEBM occupation	CCAFS	Yearround		



Goal #	Goal	Objective #	Objective	Conservation and Management Activities	Base	Need Date	Justification	Projects
1	Protect federally listed threatened and endangered species and their habitat while ensuring mission sustainability	1.3	Conduct Management of Southeastern Beach Mouse and Habitat	1.3.4: Ensure pest control operations are in accordance with Biological Opinion	CCAFS	Yearround	Biological Opinion	
				1.3.5: Complete Biological Opinion reporting, as required	CCAFS	Annual or as required	Biological Opinion	
		1.4	Conduct Management of Eastern Indigo and Habitat	1.4.1: Conduct eastern indigo survey	CCAFS	2017	Endangered Species Act	Need project
				1.4.2: Implement indigo snake protection plan during construction activities	CCAFS/MTA/JDMTA	As needed	Endangered Species Act	
		1.5	Conduct Management of American Alligator	1.5.1: Respond to alligator calls; relocate nonnuisance alligators; call alligator trapper to remove nuisance alligators	CCAFS/PAFB	As needed		
				1.5.2: Conduct population surveys as needed	CCAFS/PAFB	As needed		
		1.6	Conduct Management of Federally Listed Species and Habitat	1.6.1: Document the presence of other federally list threatened and endangered species	CCAFS	2017	Endangered Species Act	Need project
				1.6.2: Conduct annual shorebird survey to document the presence of ESA listed bird species	CCAFS/PAFB	Annual	Endangered Species Act	
				1.6.3: Review all Biological Opinions to determine if revisions are required	CCAFS/PAFB	Annual		
				1.6.4: Review NEPA documentation, designs, site plans, work orders to ensure no adverse impacts to listed species	CCAFS/PAFB/MTA/JDMTA	Yearround	Endangered Species Act	
				1.6.5: Conduct Section 7 consultations when actions have the potential to adversely impact a listed species	CCAFS/PAFB/MTA/JDMTA	Yearround	Endangered Species Act	
		1.7	Conduct Management of Gopher Tortoise and Habitat	1.7.1: Complete report for Candidate Conservation Agreement	CCAFS/PAFB/MTA/JDMTA	Annual	Candidate Conservation Agreement	Mgt, Species, Gopher Tortoise
				1.7.2: Conduct population survey/estimate	CCAFS	2017	Candidate Conservation Agreement	Need project
				1.7.3: Conduct gopher tortoise surveys and relocation to support various projects	CCAFS/PAFB/MTA/JDMTA	Yearround	Candidate Conservation Agreement	Mgt, Species, Gopher Tortoise
				1.7.4: Conduct monitoring in select LMUs for gopher tortoise presence	CCAFS	Yearround		Mgt, Species, Gopher Tortoise
				1.7.5: Incorporate gopher tortoise relocation data into GeoBase	CCAFS	2015		
		1.8	Implement Nuisance Wildlife Program	1.8.1: Remove coyotes and feral hogs	CCAFS/MTA	Yearround	Endangered Species Act	Mgt, Habitat, Coastal Dune

Goal #	Goal	Objective #	Objective	Conservation and Management Activities	Base	Need Date	Justification	Projects
1	Protect federally listed threatened and endangered species and their habitat while ensuring mission sustainability	1.8	Implement Nuisance Wildlife Program	1.8.2: Remove raccoons depredating sea turtle nests	CCAFS/PAFB	Yearround	Endangered Species Act	Mgt, Habitat, Coastal Dune
				1.8.3: Complete steel trap reporting requirements and renew permit	CCAFS	Biennial		
2	Manage non-threatened and endangered native species by promoting biodiversity and utilizing methods to enhance these species and their habitats	2.1	Conduct Management of Herpetological Species and Habitat	2.1.1: Complete survey of herpetological species and determine management actions	CCAFS	2017		Need project
				2.1.2: Incorporate results of survey into INRMP	CCAFS	2017		
		2.2	Conduct Management of Aquatic Species and Habitat	2.2.1: Review fishing rules to determine if revision is required	CCAFS	Annual		
				2.2.3: Review project actions to determine impacts to fish species and their habitat, and conduct essential fish habitat consultation as required	CCAFS/PAFB	Yearround	National Environmental Policy Act, Magnuson-Stevens Fishery Conservation and Management Act	
		2.3	Conduct Management of Migratory Birds and Habitat	2.3.1: Participate in Bird Hazard Working Group and coordinate wildlife/habitat management near the airfiled IAW the BASH plan	CCAFS/PAFB	Yearround	Migratory Bird Treaty Act, Exective Order	
				2.3.2: Complete annual depredation permit reporting requirements and renewal of permit	CCAFS/PAFB	Annual	Migratory Bird Treaty Act, Exective Order	
				2.3.3: Conduct surveys for migratory bird nests prior to mechanical and/or prescribed fire treatment and mark areas to avoid destruction of nests	CCAFS	Yearround	Migratory Bird Treaty Act, Exective Order	
				2.3.4: Conduct migratory bird survey	CCAFS/PAFB/MTA/JDMTA	2018	Migratory Bird Treaty Act, Exective Order	Need project
				2.3.5: Conduct osprey census to assist natural resource managers in determining impacts to species from project activities	CCAFS	Annual	Migratory Bird Treaty Act, Exective Order	
				2.3.6: Perform annual rooftop surveys for least terns and black skimmer	CCAFS/PAFB	Annual	Migratory Bird Treat Act, Exective Order	
				2.3.7: Perform annual shorebird surveys and submit data into Florida Shorebird Alliance database	CCAFS/PAFB	Annual	Migratory Bird Treat Act, Endangered Species Act, Exective Order	
				2.3.8: Continue participation in Partners in Flight program	CCAFS/PAFB/MTA/JDMTA	Yearround		

Goal #	Goal	Objective #	Objective	Conservation and Management Activities	Base	Need Date	Justification	Projects
				2.3.9: Incorporate protection measures for migratory bird species during NEPA review of projects	CCAFS/PAFB/MTA/JDMTA	Yearround	Executive Order	
2	Manage non-threatened and endangered native species by promoting biodiversity and utilizing methods to enhance these species and their habitats	2.4	Conduct Management of White-tailed Deer	2.4.1: Perform deer census as needed to determine if management actions are required	CCAFS	As needed		
3	Manage invasive plant species to minimize impacts to native ecosystems and to support mission sustainability	3.1	Control invasive plants species and monitor effectiveness of treatment	3.1.1: Identify and prioritize areas for invasive plant removal	CCAFS/PAFB/MTA/JDMTA	Yearround		
				3.1.2: Utilize mechanical methods and herbicide to remove and control invasive plant species	CCAFS/PAFB/MTA/JDMTA	Yearround	Executive Order	Mgt, Habitat, T&E; Mgt, Habitat, Coastal Dune; Mgt, Invasive Species, Brazilian Pepper
				3.1.3: Monitor all areas previously treated and re-treat as needed	CCAFS/PAFB/MTA/JDMTA	As needed	Executive Order	Mgt, Habitat, T&E; Mgt, Habitat, Coastal Dune; Mgt, Invasive Species, Brazilian Pepper
4	Employ ecosystem principles to manage natural resources and promote biodiversity	4.1	Maintain coastal habitat through restoration and/or enhancement of coastal dunes, strands, and swales	4.1.1: Determine the condition of the coastal habitat and prioritize areas for restoration and/or enhancement based on impacts from erosion, storm damage and the presence and health of dune vegetation	CCAFS/PAFB	Annual		
				4.1.2: Renourish and replant coastal areas identified for restoration and/or enhancement	CCAFS/PAFB	As needed	Endangered Species Act, Migratory Bird Treat Act, Executive Order	Mgt, Habitat, Coastal Dune
				4.1.3: Conduct biannual beach cleanups	CCAFS/PAFB	Biannual	Endangered Species Act, Migratory Bird Treaty Act, Executive Order	
		4.2	Maintain wetland habitat through restoration and/or enhancement	4.2.1: Identify and analize all impounded wetlands and manmade barriers inhibiting connections between estuarine wetlands and the Banana River	CCAFS	Annual		

Goal #	Goal	Objective #	Objective	Conservation and Management Activities	Base	Need Date	Justification	Projects
				4.2.2: Restore and/or enhance wetlands identified in 4.2.1 by removal of barriers, installing culverts, etc. to restore natural connections between estuarine wetlands and the Banana River	CCAFS	As needed	Executive Order	Mgt, Habitat, Wetlands
				4.2.3: Prioritize an restore/enhance other wetland areas	CCAFS/PAFB/MTA	As needed	Executive Order	Mgt, Habitat, Wetlands
4	Employ ecosystem principles to manage natural resources and promote biodiversity	4.3	Restore and/or enhance other disturbed or adversely impacted habitat	4.3.1: Identify and prioritize adversely impacts areas for restoration, such as abandoned lines of sight, spoil areas, staging areas and abandoned facilities/roads/pavement	CCAFS/PAFB	As needed		
				4.3.2: Restore adversely impacted natural resource areas	CCAFS/PAFB	As needed		
5	Develop and maintain a thorough data collection and processing system for management of natural resources	5.1	Update, organize, and prioritize natural resources data sets and information	5.1.1: Conduct annual assessments of all data collection and stoarge activities with the Installation Management GIS manager and the 45th Civil Engineering Geo Integration Office (GeoBase) point of contact	CCAFS/PAFB/MTA/JDMTA	Annual		
				5.1.2: Annually review natural resources hardware/software to ensure compatibility with Air Force and AFSPC GeoBase standards	CCAFS/PAFB/MTA/JDMTA	Annual		
				5.1.3: Review GIS natural resources layers annually with base planners to ensure compatibility between base planning and natural resources conservation	CCAFS/PAFB/MTA/JDMTA	Annual		
				5.1.4: Develop a list of data that is managed within GIS, data that is not managed but needs to be, and prioritize what data needs to be managed within GIS	CCAFS/PAFB/MTA/JDMTA	2015		
		5.2	Utilize natural resources data to support 45 SW decision-making	5.2.1: Use GIS in applicable NEPA analysis and project planning to identify, delineate and ensure protection to habitat required for long-term survival of wildlife	CCAFS/PAFB/MTA/JDMTA	Yearround		
				5.2.2: Brief natural resources (using GIS data) management annually to Wing leadership	CCAFS/PAFB/MTA/JDMTA	Annual		

Goal #	Goal	Objective #	Objective	Conservation and Management Activities	Base	Need Date	Justification	Projects
6	Protect natural resources through training, education, and outreach	6.1	Provide natural resources awareness to base personnel	6.1.1: Develop and conduct training for natural resources awareness at newcomers briefings, to base security personnel, EOD personnel, engineers, etc.	CCAFS/PAFB/MTA/JDMTA	As needed		
				6.1.2: Provide natural resources educational material such as brochures, posters, etc.	CCAFS/PAFB/MTA/JDMTA	As needed		Outreach
6	Protect natural resources through training, education, and outreach	6.1	Provide natural resources awareness to base personnel	6.1.3: Educate base personnel through periodic articles in the base newspaper, website, EDASH, and global email notifications	CCAFS/PAFB/MTA/JDMTA	As needed		
				6.1.4: Annual brief Wing leadership on natural resources including current active Biological Opinions and the requirements associated with each	CCAFS/PAFB/MTA/JDMTA	Annual		
		6.2	Conduct educational outreach that promotes the 45 SW natural resources program	6.2.1: Participate in base and community events (turtle walks, bird and wildlife festival, briefings to schools, etc.)	CCAFS/PAFB/MTA/JDMTA	As needed		
7	Protect natural resources through implementation of a conservation	7.1	Implement the Conservation Law Enforcement Plan (Tab I) and the goals and objectives contained therein	7.1.1: Investigate how the 45 SW will re-establish and maintain a conservation law enforcement program (position lost)	CCAFS/PAFB/MTA/JDMTA	2015		