45 SW INRMP Work Plan							
CCAFS			**Implementation Results**				
In-House Management Activity	**Objective(s) in Chapter 8**	**Timing**	**2016**	**2017**	**2018**	**2019**	**2020**
Meet periodically (in house biologists and contractors) to prioritize scrub LMUs to restore based on previously-prepared LMUs and mission requirements	1.1	Annually	√				
Conduct prescribed burning whenever mission requirements allow	1.1	Annually	√				
Meet annually to evaluate scrub habitat management techniques / data and determine plan for next FY	1.1	Annually	√				
Conduct Florida scrub-jay census	1.1	Annually	√				
Distribute 45 SW Instruction on Light Management prior to nesting season and educate base populace via base newspaper and email notifications	1.2	Annually	√				
Conduct daily sea turtle monitoring during season for sea turtle index nesting beach survey	1.2	Annually	√				
Prepare and submit annual sea turtle nesting summary report	1.2	Annually	√				
Conduct light inspections IAW current BO	1.2	Annually	√				
Conduct SEBM tracking tube study	1.3	Annually	√				
Incorporate SEBM data into GIS for 45 SW	1.3, 5.1	Annually	√				
Meet with USFWS to discuss current SEBM and coordinate recommendations for the SEBM	1.3	Annually	√				
Implement indigo snake protection plan during construction activities	1.4	As Required	√				
Respond to and relocate non-nuisance alligators, or contact local trapper for nuisance alligators	1.5, 1.8	As Required	√				
Conduct American alligator population surveys as needed	1.5, 1.8	As Required	NR				
Identify T&E species of concern not specifically addressed in this document	1.6	As Required	NR				
Develop recommendations for other T&E species, if applicable	1.6	As Required	NR				
Coordinate with USFWS and FWC or other appropriate agencies, as needed, on any management recommendations for other T&E species	1.6	As Required	NR				
Perform annual osprey nesting census	1.6, 2.3	Annually	√				
Conduct Florida shorebird nesting surveys/monitoring	1.6, 2.3	Annually	√				
Conduct winter shorebird survey	1.6, 2.3	Annually	√				
Survey project sites for presence of active gopher tortoises as needed	1.7	As Required	√				
Identify recipient sites, tag and record tortoises prior to relocation.	1.7	Annually	√				
Incorporate gopher tortoise relocation GIS data into 45 CES GeoBase	1.7, 5.1	2015	NC				
Trap raccoons, feral hogs and other predators on the beach and inland areas in conjunction with professional trapper services	1.8	Annually	√				

CCAFS			Implementation Results				
In-House Management Activity	**Objective(s) in Chapter 8**	**Timing**	**2016**	**2017**	**2018**	**2019**	**2020**
Complete steel trap permit report and renewal request	1.8	Biennial	NR				
Complete annual BO reporting annually and program actions if necessary	1.1-1.3, 1.6	Annually	√				
Conduct formal and informal Section 7 consultations	1.1-1.8	As Required	√				
Review projects to ensure no adverse impacts to protected species	1.1-1.8	As Required	√				
Conduct wildlife surveys in support construction projects and other activities that could impact flora and fauna	1.6, 2.1-2.3	As Required	√				
Review fishing rules to determine if revision is required	2.2	Annually	√				
Review project actions to determine impacts to fish and their habitat and conduct essential fish habitat consultation as required.	2.2	As Required	√				
Participate in the Bird Hazard Working Group and provide natural resource information as required.	2.3	Annually	√				
Perform annual rooftop surveys for least terns and black skimmers	2.3	Annually	√				
Complete federal depredation permit report and renewal request	2.3	Annually	√				
Conduct annual deer census, as required	2.4	As Required	NR				
Respond to injured wildlife	1.1-1.8, 2.1-2.4	As Required	√				
Identify and prioritize areas for invasive plant removal	3.1	As Required	√				
Meet annually to evaluate coastal habitats and identify new projects	4.1	Annually	√				
Conduct beach cleanups	4.1	Biannual	√				
Review wetlands and impoundments to identify new wetlands and/or projects and prioritize them	4.2, 5.1	Annually	√				
Incorporate any new wetland data into GIS for 45 SW	4.2, 5.1	Annually	√				
Coordinate and/or conduct a meeting with regulators to discuss / approve any wetland restoration proposals or wetland issues.	4.2	Annually	√				
Identify adversely impacted natural resource areas and prioritize / program areas to restore (i.e. abandoned lines of sight, staging areas, etc.)	4.3	Annually	√				
Add any adversely impacted natural resource areas into GIS for 45 SW	4.3, 5.1	Annually	√				
Conduct assessment of all data collection and storage activities with 45 SW GIS manager and GeoBase POC, and identify/prioritize data to be incorporated and managed	5.1	Annually	√				
Use GIS data in applicable NEPA analysis and project planning to identify, delineate and ensure protection of wildlife habitat	1.1-1.7, 2.1-2.3, 5.2	Annually	√				
Compile, and maintain, GIS data of the natural vegetative communities, as well as actual and potential habitat for federal and/or state listed species	1.1-1.7, 2.1-2.3, 5.2	Annually	√				

CCAFS			Implementation Results				
In-House Management Activity	**Objective(s) in Chapter 8**	**Timing**	**2016**	**2017**	**2018**	**2019**	**2020**
Conduct Annual NEPA and Natural Resource Training for design engineers and determine other training needs for base personnel and update training materials.	5.2, 6.1	Annually	NC				
Determine facilities which are non-compliant and notify facility managers	6.1	Annually	√				
Maintain training for 45 CES/CEIE-C personnel as needed (i.e. annual burn training, sea turtle workshop, etc.)	6.1	Annually	√				
Conduct sea turtle walks for 45 SW leadership and other interested parties	6.2	Annually	√				
Participate in events to educate public on natural resource protection and 45 SW activities (i.e. Bird Festival, Boy Scouts, conferences, etc.)	6.2	Annually	√				
Investigate how the 45 SW will re-establish and maintain a CLEP (full time 45 SW CES/CEIE-C position lost).	All	2015	√				
CCAFS			**Implementation Results**				
Project Activity	**Objective(s) in Chapter 8**	**Timing**	**2016**	**2017**	**2018**	**2019**	**2020**
MGT, SPECIES, FL SCRUB-JAY This project will provide funds to conduct monitoring of FL scrub-jays on Cape Canaveral AFS, including: conduct annual census, band birds, survey and mark nests prior to clearing activities, conduct monitoring of birds to determine dispersal after clearing activities, monitor demographic performance of birds, and monitor response of birds from restoration activities. Deliverables will include a monthly report detailing monitoring results including maps showing general territories of birds being monitored; annual census map and GIS data showing locations of jay groups, number of adult and juveniles, identification of bands observed and other general behavior observations; completion of annual permit report for submittal to USFWS; and completion of annual report for the Skid Strip BO.	1.1	Annually	√				
MGT, HABITAT, REPI LANDS This project will provide funding for the purpose of restoring, enhancing, and maintaining 189 acres scrub habitat on 45 SW conservation easements purchased with funds provided under the DoD REPI program. The easements were obtained for the purpose of preserving habitat for the Florida scrub-jay; they support 1 of 4 recovery criteria "establishment of several scrub preserves with sufficient acreage to sustain viable scrub-jay populations" as stated in the Florida Scrub Jay Recover Plan, dated 9 May 1990. Work would include scrub restoration (large oak removal), invasive plant eradication, creation of bare ground sandy openings, prescribed burning, etc. The County has provided equal matching funds to purchase these properties and are providing additional maintenance funds that exceed the USAF contribution.	1.1, 3.1	Annually	NP*				

CCAFS			Implementation Results				
Project Activity	**Objective(s) in Chapter 8**	**Timing**	**2016**	**2017**	**2018**	**2019**	**2020**
MGT, WILDLAND FIRE Goods and services required to support implementation of the WFMP. This project will fund an average of four prescribed burns per year averaging 300 acres as required by BO. This work also includes all pre-burn preparation for the planned LMUs to be burned.	1.1	Annually	√				
MGT, SPECIES, GREEN SEA TURTLE The purpose of this project will provide funds to perform biannual monitoring of a resident population of juvenile green sea turtles in the Trident Submarine Basin. The monitoring will document the population structure, assess the degree of residency within the basin of individual turtles, estimate the size of the population, assess significant increases or decreases, assess any threats to the population, and provide a final report of all activities and results.	1.2	Annually	√				
MGT, SPECIES, SEA TURTLES This project will provide funds to conduct annual monitoring of sea turtles. Scope of work will include the following: perform daily nesting surveys and mark a sample of nests for the three species of sea turtles that nest on CCAFS, monitor nest fates, conduct hatchling productivity of marked nests, screen nests from predators, conduct predator trapping, shield nests from exterior lighting, perform light surveys, perform disorientation surveys, conduct sea turtle stranding and salvage activities, and perform sea turtle educational walks. Deliverables include a spreadsheet detailing daily numbers and locations of all crawls of all species; productivity spreadsheet detailing all fates and all actions taken on all marked nests; monthly report detailing the number of nest and non-nesting emergences, nests lost to predation, nests hatched and nests disoriented; annual sea turtle nesting report to be submitted to FWC; reports for all disorientations observed; reports for all stranded turtles observed; spreadsheet detailing results of all light surveys; annual sea turtle permit renewal package; and an annual disorientation report to be submitted to USFWS per the BO.	1.2	Annually	√				
MGT, SPECIES, NUISANCE WILDLIFE Requirements to control the presence and spread of nuisance wildlife species as required by a Biological Opinion. Primary nuisance wildlife are hogs, raccoons, and coyotes. This project will control the proliferation of nuisance wildlife that cause adverse impacts Federally listed Florida Scrub-jay, Southeastern Beach mouse, Eastern indigo snake, and the candidate species the gopher tortoise and their habitat.	1.2, 1.8	Annually	√				

CCAFS			Implementation Results				
Project Activity	**Objective(s) in Chapter 8**	**Timing**	**2016**	**2017**	**2018**	**2019**	**2020**
MGT, HABITAT, T&E The project provides funding to maintain, restore, and enhance 250 acres of scrub habitat on CCAFS. Work includes creating openings, roller chopping, large tree removal, mechanically cutting, and properly disposing of vegetative debris. Scrub habitat restoration also has the benefit of supporting other federally listed and at risk species such as beach mice, indigo snake, and gopher tortoise on CCAFS.	1.1, 1.3-1.4, 1.6-1.7	Annually	√				
MGT, HABITAT, COASTAL DUNE This project will provide funding to restore/enhance the coastal dune/strand areas on CCAFS, as needed, which may include but not be limited to repair/replacement of dune crossovers and fencing, removal of debris from the beach, construction of new dunes, removal/control of invasive species (both floral and faunal), and/or planting of native dune vegetation. Project will maintain, restore, or enhance approximately 200 acres of coastal habitat.	1.1-1.3, 2.3, 3.1, 4.1	Annually	√				
MGT, SPECIES, SEBM This project will provide funding to conduct an annual tracking tube study in partnership with NASA, NPS, & USFWS to determine the seasonal and annual habitat occupancy of southeastern beach mice within coastal dune/strand habitat on Federal properties, on which the majority of the population is now located. The project will fund a contractor to assist the USAF with setting up 280 tracking tubes on CCAFS, collecting habitat data around each tube, checking tracking tubes over a two week period, analyzing and summarizing the data, and providing a final report of activities and results. Conducting yearly occupancy surveys ensures the USAF has current data during ESA consultations, helps direct project activities to ensure destruction to habitat is avoided, and helps identify declines or increases in population and habitat occupancy from one year to the next.	1.3	Annually	√				
MGT, SPECIES, GOPHER TORTOISE This project will provide the services of a backhoe and operator to assist biologists with the excavation of 50 gopher tortoise burrows to prevent death and/or destruction to gopher tortoises, their burrows and any other state or federally listed species found to inhabit a burrow, in support of various construction projects. In addition, this project includes gopher surveys, bucket trapping, assistance with excavations via backhoe, marking and relocation of tortoises, GIS data collection and management, and completion of the annual Gopher Tortoise CCA report.	1.7	Annually	√				

CCAFS			Implementation Results				
Project Activity	**Objective(s) in Chapter 8**	**Timing**	**2016**	**2017**	**2018**	**2019**	**2020**
MGT, SPECIES, BRAZILIAN PEPPER Project includes the control of invasive species through restoration of 200 acres of scrub habitat utilized by the federally listed Florida scrub-jay, SEBM, eastern indigo snake, and gopher tortoise. Primary invasive species being treated are Brazilian pepper, cogon grass, and Australian pine. Others species include mimosa, castor bean, acacia, giant cane, rosary pea, melaleuca, torpedo grass, natal grass, air potato, lantana, and Russian thistle.	1.1, 1.3, 1.4, 1.6, 1.7, 2.3, 3.1	Annually	√				
MGT, INVASIVE SPECIES This project will provide funding to control the presence and spread of invasive species as required by a Biological Opinion. Primary invasives being treated are Brazilian pepper, cogon grass, and Australian pine. Others treated if they are located in the same area are mimosa, Castor bean, Acacia, Giant Cane, Rosary pea, Melaleuca, Torpedo grass, Natal grass, Air potato, Lantana, Russian thistle. This project will control the spread of invasive species through restoration of 718 acres of scrub habitat utilized by the federally listed Florida Scrub-jay, Southeastern Beach mouse, Eastern indigo snake, and candidate species the gopher tortoise. Impact if not funded: USFWS may issue a Notice of Violation due to non-compliance of a Biological Opinion and refuse to sign INRMP.	1.1-1.7, 2.1-2.3, 3.1, 4.1-4.3	Annually	√				
MGT, WETLANDS/FLOODPLAIN This project will support the maintenance, restoration, and enhancement of approximately 375 acres of the 2800 acres of wetlands on CCAFS. Specific work for this project includes invasives monitoring & control, vegetation control to allow water movement, opening up impounded areas. The USFWS National Wetlands Inventory identified 297 acres of semi-enclosed estuarine wetlands, 1308 acres of lacustrine marshes, 91 acres of tidal wetlands and 1141 acres of shallow Palestrina wetlands, all of which are in need of management to return them to natural, or near-natural condition. The funds are needed for invasive plant treatments, restoration of hydrology and planting of native wetland plant species where invasive plants are removed.	3.1, 4.1-4.3	Annually	√				
MONITOR, WETLANDS Monitor restored wetlands IAW regulatory permit requirements and provide annual reports. Monitoring of 76 acres of restored wetlands will include invasive exotic plants, not to exceed 5% cover; appropriate wetlands species, at least 80% of cover; and water quality to be equal to or greater than the baseline analysis. Permit requires 5 years of monitoring after completion of project and acceptance by regulatory agencies.	4.1-4.3	Annually	√				

CCAFS			Implementation Results				
Project Activity	**Objective(s) in Chapter 8**	**Timing**	**2016**	**2017**	**2018**	**2019**	**2020**
CCAFS LANDCOVER ANALYSIS Develop an updated, geospatial land cover dataset including vegetative height profiling through image/aerial photography interpretation, geoprocessing techniques/tools and groundtruthing for CCAFS. New high resolution imagery will be utilized for this project. Target accuracy of at least 85% is required. The dataset and map generated will be incorporated by the Air Force into the natural resource geographic information system geodatabase and the 45 SW Integrated Natural Resources Management Plan, and will be used by the Air Force to assess habitat change trends, habitat restoration effects, assist in study of a multitude of land management strategies, and aid in performance of comparative analyses after 10 years of development of CCAFS (last analysis using 2010 imagery and 2007 LIDAR).	1.1, 1.3-1.8, 2.1-2.4, 3.1, 4.1-4.3, 5.1-5.2	2016	NC				
MGT, HABITAT, FUEL LOAD STUDY Provide analysis of CCAFS fuel loads to include sampling of stem density, etc., in order to define risk of wildfire. Study should include risk assessment based on structures, facility operations, etc., for appropriate qualification of wildfire risk in addition to fuel loads surrounding facilities/infrastructure.	1.1	2018	NP				
MGT, SPECIES, BATS Species-specifIc management activity to achieve the goals of the INRMP. Demolish all old bat-houses located throughout CCAFS and PAFB (approximately 165) installed over 20 years ago that are creating adverse impacts to natural resources (invasion by Africanized bees, perching by predatory birds, etc.). Strategically plan limited rebuild and installation of new bat-houses (approximately 2). Incorporate new bat-house sites into 45 SW ENV GIS.	4.3	2018	NP				

CCAFS	Implementation Results

Project Activity	Objective(s) in Chapter 8	Timing	2016	2017	2018	2019	2020
MGT, SPECIES, HERPTILES This project will provide funding to conduct a herpetological survey on Cape Canaveral Air Force Station, Patrick Air Force Base, Malabar Missile Tracking Annex, and Jonathon Dickenson Missile Tracking Annex. The project will fund a contractor to survey for all potential state and/or federally listed herpetological species such as the eastern indigo and Atlantic saltmarsh snakes, as well as supplement the existing herpetological lists for all four bases. Eastern indigo snakes have not been observed for several years and it is not known if they are still present and, or, if any other listed species are present. Impact if not funded: Not knowing the status of potentially listed species prevents natural resources managers from knowing how and where to manage for the species, and lack of enough information when conducting Section 7 consultations.	1.4, 2.1	2017	NP				
ENVIRONMENTAL SERVICES, CN (Conservation Law Enforcement Officer) This position provides 1/2 manpower conservation law enforcement support to CCAFS, PAFB, MTA and JDMTA. Scope would include periodic visits to check for violations of fishing rules, monitor activities of beach goers during sea turtle nesting season, monitor for looting at archaeological sites. It would also include responding to and investigating violation of conservation and cultural resource laws. For many years there was a full-time CLEO. This project would provide at least a minimal capability. Impact if not funded: Failure to have law enforcement results in limited deterrence of illegal activities regarding natural and cultural resources.	6.1	Annually	NF				

45 SW INRMP Work Plan							
PAFB			Implementation Results				
In-House Management Activity	Objective(s) in Chapter 8	Timing	2016	2017	2018	2019	2020
Review annual sea turtle nesting summary report and contract	1.2	Annually	√				
Distribute 45 SW Instruction on Light Management prior to nesting season and educate base populace via base newspaper and email notifications	1.2	Annually	√				
Conduct light inspections IAW current BO	1.2	Annually	√				
Respond to and relocate non-nuisance alligators, or contact local trapper for nuisance alligators	1.5, 1.8	As Required	√				
Conduct American alligator population surveys as needed	1.5, 1.8	As Required	NR				
Identify T&E species of concern not specifically addressed in this document	1.6	As Required	NR				
Develop recommendations for other T&E species, if applicable	1.6	As Required	NR				
Coordinate with USFWS and FWC or other appropriate agencies, as needed, on any management recommendations for other T&E species	1.6	As Required	√				
Perform annual osprey nesting census	1.6, 2.3	Annually	√				
Conduct Florida shorebird nesting surveys/monitoring	1.6, 2.3	Annually	√				
Conduct winter shorebird survey	1.6, 2.3	Annually	√				
Complete annual BO reporting annually and program actions if necessary	1.2, 1.6	Annually	√				
Conduct formal and informal Section 7 consultations	1.1-1.8	As Required	√				
Review projects to ensure no adverse impacts to protected species	1.1-1.8	As Required	√				
Trap raccoons and other predators on the beach and inland areas in conjunction with 45 SW CE Pest Shop	1.8	Annually	√				
Identify all reptile/amphibian habitats and incorporate into GIS for 45 SW	2.1	Annually	NP				
Identify all aquatic habitats and incorporate into GIS for 45 SW	2.2	Annually	NR				
Review fishing rules to determine if revision is required	2.2	Annually	NR				
Review project actions to determine impacts to fish and their habitat and conduct essential fish habitat consultation as required.	2.2	As Required	√				
Participate in the Bird Hazard Working Group and provide natural resource information as required.	2.3	Annually	√				
Perform annual rooftop surveys for least terns and black skimmers	2.3	Annually	√				
Complete Federal depredation permit report and renewal request	2.3	Annually	√				
Respond to injured wildlife	1.1-1.8, 2.1-2.4	As Required	√				
Identify and prioritize areas for invasive plant removal	3.1	As Required	√				
Meet annually to evaluate coastal habitats and identify new projects	4.1	Annually	√				

PAFB			Implementation Results				
In-House Management Activity	**Objective(s) in Chapter 8**	**Timing**	**2016**	**2017**	**2018**	**2019**	**2020**
Conduct beach cleanups (now managed by Keep Brevard Beautiful)	4.1	Biannual	√				
Review wetlands and impoundments to identify new wetlands and/or projects and prioritize them	4.2, 5.1	Annually	√				
Incorporate any new wetland data into GIS for 45 SW	4.2, 5.1	Annually	√				
Coordinate and/or conduct a meeting with regulators to discuss / approve any wetland restoration proposals or wetland issues.	4.2	As Required	√				
Identify adversely impacted natural resource areas and prioritize / program areas to restore (i.e. abandoned lines of sight, staging areas, etc.)	4.3	Annually	√				
Add any adversely impacted natural resource areas into GIS for 45 SW	4.3, 5.1	Annually	NR				
Conduct assessment of all data collection and storage activities with 45 SW GIS manager and GeoBase POC, and identify/prioritize data to be incorporated and managed	5.1	Annually	√				
Use GIS data in applicable NEPA analysis and project planning to identify, delineate and ensure protection of wildlife habitat	1.1-1.7, 2.1-2.3, 5.2	Annually	√				
Compile, and maintain, GIS data of the natural vegetative communities, as well as actual and potential habitat for federal and/or state listed species	1.1-1.7, 2.1-2.3, 5.2	Annually	NC				
Conduct Annual NEPA and Natural Resource Training for design engineers and determine other training needs for base personnel and update training materials.	5.2, 6.1	Annually	NC				
Determine facilities which are non-compliant and notify facility managers	6.1	Annually	√				
Maintain training for 45 CES/CEIE-C personnel as needed (i.e. annual burn training, sea turtle workshop, etc.)	6.1	Annually	√				
Conduct sea turtle walks for 45 SW leadership and other interested parties	6.2	Annually	√				
Participate in events to educate public on natural resource protection and 45 SW activities (i.e. Bird Festival, Boy Scouts, conferences, etc.)	6.2	Annually	√				
Investigate how the 45 SW will re-establish and maintain a CLEP (full time 45 SW CES/CEIE-C position lost).	All	2015	NF				

PAFB	Implementation Results

Project Activity	Objective(s) in Chapter 8	Timing	2016	2017	2018	2019	2020
CONSTRUCT BACK DUNE This project will create a 'back dune' (behind the primary dune) in two areas totaling approximately 1 mile in length utilizing sand from an approved upland source. Dune will be designed to follow FEMA templates, and dune vegetation will be planted along new dune to aid in naturally blocking artificial light to prevent disorientations of federally protected sea turtles.	1.2, 1.3, 1.6, 2.2, 2.3, 3.1, 4.1	2020	NP				
MGT, SPECIES, SEA TURTLES This project will conduct an annual survey of the PAFB population of sea turtles. This project will survey and track nesting and hatching success along PAFB beach (4.3 miles) in compliance with BOs issued by USFWS to assess potential impacts from 45 SW lighting and dune/beach restoration efforts (dune restoration FY13/14).The three species of sea turtles this project covers are the loggerhead, green and leatherback. Surveys are performed daily from 1 May to 30 September; they include a count of crawls per species per day and monitoring for predation, hatch success and disorientation. Data is used to assist the USFWS is determining population trends and recovery effort success. Monitoring for disorientation is required by a USFWS BO, which establishes an incidental take of 3% or less due to disorientation caused by 45SW lighting. Daily monitoring for disorientation is essential to identify problem light sources immediately to prevent take exceedance.	1.2	Annually	√				
MGT, HABITAT, COASTAL DUNE Project will include approximately 5 acres of dune restoration efforts. Approximately 500 sea grapes will be planted, the invasive Chaste tree will be mechanically removed, and herbicide will be applied by hand on re-sprouting chaste tree within previously planted sea grape areas. This project is needed to implement BO light management initiatives for T&E sea turtles.	1.2, 1.6, 2.2, 2.3, 3.1, 4.1	Annually	√				
MGT, HABITAT, COASTAL UPLAND This multi-phase project is to continue to restore and monitor 25 acres of the closed Landfill site #5 (ERP site) which was dominated by Brazilian pepper. Restoration is to include 1,000 cubic yards (cy) of top soil, over 140 plants/trees from 1-gallon (gal) to 15-gal, 900 cy of mulch, and herbicide treatment of re-sprouts of Brazilian pepper, Australian pine, chaste tree (Vitex), cogon grass, natal grass, and Wedelia. Under this restoration plan, T&E habitat protection and biodiversity education will be implemented. Phasing is required due to cost, landfill constraints, re-treatment of invasive species, and habitat restoration using native plants and educational ecosystem trail/signs. This project protects/enhances T&E habitat, specifically for the wood stork and FL manatee shoreline habitat and the gopher tortoise. The project will end in FY 2017.	1.6, 1.7, 2.2, 2.3, 3.1, 4.1	2016, 2017	√				

PAFB	Implementation Results

Project Activity	Objective(s) in Chapter 8	Timing	2016	2017	2018	2019	2020
MGT, INVASIVE SPECIES This project will include mechanical and manual removal of previously untreated invasive species, monitoring prior invasive removal within approximately 30 acres to determine the effectiveness of treatment, and re-treatment of new saplings/sprouting of invasive, exotic vegetation (e.g., Brazilian pepper, Chaste tree, Wedelia, cogon grass, Australian pine, etc.) that adversely competes with desirable native species at PAFB. The primary method of control will be hand removal with follow-up herbicide application using portable herbicide spraying equipment. The project will also protect wood stork habitat (shoreline/wetland restoration) and gopher tortoise (and their habitat) IAW the ESA and the Candidate Conservation Agreement, respectively.	1.3, 1.6, 1.7, 2.1-2.3, 3.1, 4.1-4.3	Annually	√				

45 SW INRMP Work Plan							
MTA			Implementation Results				
In-House Management Activity	Objective(s) in Chapter 8	Timing	2016	2017	2018	2019	2020
Implement indigo snake protection plan during construction activities	1.4	As Required	NR				
Conduct formal and informal Section 7 consultations	1.1-1.8	As Required	NR				
Review projects to ensure no adverse impacts to protected species	1.1-1.8	As Required	√				
Conduct wildlife surveys in support construction projects and other activities that could impact flora and fauna	1.6, 2.1-2.3	As Required	NR				
Identify and prioritize areas for invasive plant removal	3.1	As Required	√				
Review wetlands and impoundments to identify new wetlands and/or projects and prioritize them	4.2, 5.1	Annually	NR				
Incorporate any new wetland data into GIS for 45 SW	4.2, 5.1	Annually	NR				
Identify adversely impacted natural resource areas and prioritize / program areas to restore (i.e. abandoned lines of sight, staging areas, etc.)	4.3	Annually	NR				
Add any adversely impacted natural resource areas into GIS for 45 SW	4.3, 5.1	Annually	NR				
Conduct assessment of all data collection and storage activities with 45 SW GIS manager and GeoBase POC, and identify/prioritize data to be incorporated and managed	5.1	Annually	NC				
Use GIS data in applicable NEPA analysis and project planning to identify, delineate and ensure protection of wildlife habitat	1.1-1.7, 2.1-2.3, 5.2	Annually	NR				
Compile, and maintain, GIS data of the natural vegetative communities, as well as actual and potential habitat for federal and/or state listed species	1.1-1.7, 2.1-2.3, 5.2	Annually	NC				
Conduct Annual NEPA and Natural Resource Training for design engineers and determine other training needs for base personnel and update training materials.	5.2, 6.1	Annually	NC				
Maintain training for 45 CES/CEIE-C personnel as needed (i.e. annual burn training, sea turtle workshop, etc.)	6.1	Annually	NR				
Participate in events to educate public on natural resource protection and 45 SW activities (i.e. Bird Festival, Boy Scouts, conferences, etc.)	6.2	Annually	√				
Investigate how the 45 SW will re-establish and maintain a CLEP (full time 45 SW CES/CEIE-C position lost).	All	2015	NF				

MTA			Implementation Results				
Project Activity	**Objective(s) in Chapter 8**	**Timing**	**2016**	**2017**	**2018**	**2019**	**2020**
MGT, HABITAT, FLATWOODS Project involves the restoration of approximately 25 acres of flatwoods habitat in the west sector of MTA that is used for 45 SW training and asset storage. Flatwoods habitat is utilized by the gopher tortoise. The federally threatened indigo snake may also be present in this location. The FFS and Palm Bay Fire Department assessed MTA as having high fuel load at present. Restoration activities will include clearing/thinning overgrown habitat to reduce fuel loads and wildfire risk and the treatment of invasive species.	1.4,.6, 1.7, 2.1, 3.1	Annually	√				
MGT, INVASIVE SPECIES This project will include mechanical and manual removal of previously untreated invasive species, monitoring prior invasive removal within approximately 130 acres to determine the effectiveness of treatment, and re-treatment of new saplings/sprouting of invasive, exotic vegetation (e.g., Brazilian pepper, cogon grass, climbing fern, natal grass, rosary pea, lantana, Australian pine, java plum, guava, rattlebox, Melaleuca, etc.) that adversely competes with desirable native species at MTA. The primary method of control will be mechanical removal with follow-up herbicide application using portable herbicide spraying equipment. The project will also protect the gopher tortoise (and their habitat) IAW the Candidate Conservation Agreement.	3.1	Annually	√				

45 SW INRMP Work Plan							
JDMTA			**Implementation Results**				
In-House Management Activity	**Objective(s) in Chapter 8**	**Timing**	**2016**	**2017**	**2018**	**2019**	**2020**
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	1.1	As Required	NR				
At least annually, survey JDMTA for presence of Scrub Jays and obtain JDSP survey data for surrounding habitat	1.1	Annually	NC				
Implement indigo snake protection plan during construction activities	1.4	As Required	NR				
Assess lichen, *Cladonia perforata* , areas and relocation plots and make management recommendations if applicable	1.6	Annually	NC				
Complete annual BO reporting annually and program actions if necessary	1.1, 1.6	Annually	NR				
Conduct formal and informal Section 7 consultations	1.1-1.8	As Required	NR				
Review projects to ensure no adverse impacts to protected species	1.1-1.8	As Required	√				
Conduct wildlife surveys in support construction projects and other activities that could impact flora and fauna	1.6, 2.1-2.3	As Required	√				
Identify and prioritize areas for invasive plant removal	3.1	As Required	√				
Identify adversely impacted natural resource areas and prioritize / program areas to restore (i.e. abandoned lines of sight, staging areas, etc.)	4.3	Annually	NR				
Add any adversely impacted natural resource areas into GIS for 45 SW	4.3, 5.1	Annually	NR				
Conduct assessment of all data collection and storage activities with JDSP , 45 SW and GeoBase POC, and identify/prioritize data to be incorporated and managed	5.1	Annually	NC				
Correspond regularly via phone/email and through meetings with neighboring JDSP personnel to maintain a successful relationship and data sharing environment	5.1, 5.2	Annually	√				
Use GIS data in applicable NEPA analysis and project planning to identify, delineate and ensure protection of wildlife habitat	1.1-1.7, 2.1-2.3, 5.2	Annually	√				
Conduct Annual NEPA and Natural Resource Training for design engineers and determine other training needs for base personnel and update training materials.	5.2, 6.1	Annually	NC				
Compile, and maintain, GIS data of the natural vegetative communities, as well as actual and potential habitat for federal and/or state listed species	1.1-1.7, 2.1-2.3, 5.2	Annually	NC				
Determine facilities which are non-compliant and notify facility managers	6.1	Annually	NR				
Maintain training for 45 CES/CEIE-C personnel as needed (i.e. annual burn training, sea turtle workshop, etc.)	6.1	Annually	√				
Conduct sea turtle walks for 45 SW leadership and other interested parties	6.2	Annually	√				

JDMTA			**Implementation Results**				
In-House Management Activity	**Objective(s) in Chapter 8**	**Timing**	**2016**	**2017**	**2018**	**2019**	**2020**
Participate in events to educate public on natural resource protection and 45 SW activities (i.e. Bird Festival, Boy Scouts, conferences, etc.)	6.2	Annually	√				
Investigate how the 45 SW will re-establish and maintain a CLEP (full time 45 SW CES/CEIE-C position lost).	All	2015	NF				
JDMTA			**Implementation Results**				
Project Activity	**Objective(s) in Chapter 8**	**Timing**	**2016**	**2017**	**2018**	**2019**	**2020**
MGT, INVASIVE SPECIES This project will include monitoring prior invasive species removal within the JDMTA property (approximately 15 acres including clear zone) to determine the effectiveness of treatment, and re-treatment of new saplings/sprouting of invasive, exotic vegetation (e.g., earleaf acacia, rosary pea, natal grass, and schefflera) that adversely competes with desirable native species. The primary method of control will be mechanical removal with follow-up herbicide application using portable herbicide spraying equipment. The project will also protect the gopher tortoise (and their habitat) IAW the CCA.	3.1	Annually	√				