# STATEMENT OF FINDINGS

Major Modification

Number: SAS-1991-01901

6 point Times New Roman !@#$%&*(^)+-<`>? ,"|\'/~$^{1234567890}_{1234567890}$ ¢{¼½¾áéúñ≤÷ó¶°
ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz234567890 $12 50
~~ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz1234567890~~ 33°31'20"
ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890

8 point Times New Roman !@#$%&*(^)+-<`>?.,"|\'/~$^{1234567890}_{1234567890}$ ¢{¼½¾áéúñ≤÷ó¶°
ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz1234567890 $12 50
~~ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz1234567890~~ 33°31'20"
ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890

10 point Times New Roman !@#$%&*(^)+-<`>?:;"|\'/~$^{1234567890}_{1234567890}$ ¢{¼½¾áéúñ≤÷ó¶°
ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz1234567890 $12.50
~~ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz1234567890~~ 33°31'20"
ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890

| | | | | |
|---|---|---|---|---|
| 25% | 40% | 50% | 80% | 100% |

1234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890

**MEMORANDUM FOR RECORD**

**SUBJECT:** Department of the Army Environmental Assessment and Statement of Finding for Permit Application SAJ-1991-01901 (SP-TSD)
Walt Disney Parks & Resorts U.S., Inc. Long Term Permit (LTP) Major Modification

This document constitutes the Environmental Assessment, 404(b)(1) Guidelines Evaluation, Public Interest Review, and Statement of Findings for the Walt Disney Parks & Resorts U.S., Inc. Long Term Permit Major Modification. This document is a supplement to the existing Environmental Assessments & Statement of Findings for the Disney Long Term Permit (LTP).

## 1.0 Application as described in public notice / coordination letter dated 26 June 2015:

1.1 Permittee: Walt Disney Parks & Resorts U.S., Inc. (Disney)
C/o Mr. Jim Yawn
PO Box 10000
Lake Buena Vista, Florida 32830-1000

1.2 Location and Affected Waterway: The 30,752 acre project site would affect waters of the United States associated with Reedy Creek and London Creek Basins which discharge into Lake Hatchineha in the Kissimmee Watershed. Portions of the project are located in canals: C-1, C-2, L-404, West Perimeter Canal of the Reedy Creek Improvement District (RCID). The project site is located in Section 33, Township 23 South, Range 27 East, Sections 1-5, 8-17, 20-29, and 33-36, Township 24 South, Range 27 East; Sections 5-8, 17-23, and 26-32, Township 24 South, Range 28 East; Sections 1-3, 11-14, 23-26, and 36, Township 25 South, Range 27 East; and Sections 5-9, 16-20, and 29-31, Township 25 South, Range 28 East in Orange and Osceola Counties, Florida.

The Mira Lago mitigation site is located in Sections 29, 30, 31, and 32, Township 27 South, and Range 29 East, and Sections 4, 5, 6, 8, 9, 16, 17 Township 28 South, Range 29 East in Osceola and Polk Counties, Florida.

1.2.1 Approximate Central Coordinates:

| | | |
|---|---|---|
| Disney Project Site: | Latitude: | 28.3632º |
| | Longitude: | -81.5639º |
| Mira Lago Mitigation Site: | Latitude: | 28.0804º |
| | Longitude: | -81.4403º |

1.3 Existing conditions: The currently authorized project site includes approximately 14,703 acres of wetlands. The majority of these wetlands (7,613 acres) occur within the Wildlife Management and Conservation Area (WMCA) which is already under a conservation easement dedicated to South Florida Water Management District. The WMCA is a significant ecological feature including Reedy Creek, floodplain and other wetlands

associated with Reedy Creek, and adjacent uplands which comprise an important natural wildlife corridor. The project site lies within the northern sub-basin of Reedy Creek which is part of the upper Kissimmee River drainage basin which ultimately flows to the Florida Everglades.

Disney has purchased five Property Additions over the past 20 years, and they are now being incorporated into the permit boundary. All of the Property Additions are adjacent to existing permitted Disney property, and are located in Orange or Osceola Counties. The total project area, including the Property Additions (758 acres), is approximately 30,752 acres. The Property Additions include agricultural land used as improved pasture with domesticated cattle grazing, commercial sites, shrub and brush land, and xeric and mixed forests, along with previously timbered forested and herbaceous wetlands. These parcels will be incorporated into Districts for development to support expansion of the project site. The five Property Additions to the project site contain 13 Florida Land Use, Cover and Forms Classification System (FLUCFCS) cover types: Commercial and Services (140), Improved Pastures (211), Shrub and Brush land (320), Xeric Oak (421), Hardwood-Coniferous Mixed (434), Roads (814), Forested Wetlands (620), Cypress (621), Wetland Forested Mixed (630), Wetland Shrub (631), Freshwater Marsh (641), Wet Prairie (643), and Borrow Pit/Stormwater Ponds (563). Specifically:

Parcel 1 (Park Plaza) is approximately 40 acres in size and consists of 17.28 acres of Hardwood-Coniferous Mixed (434), 0.93 acre of Forested Wetlands (620), and 20.67 acres of Cypress (621). This parcel is bisected by Reams Road [0.97 acre Roads and Highways (814)]. Uplands total 18.25 acres and wetlands total 21.60 acres. This property is located on the northern portion of the project site north of Bay Lake and is bisected by Reams Road.

Parcel 2 (Teal) is approximately 81 acres in size and consists of 18.61 acres of Improved Pastures (211), 61.67 acres of Wetland Forested Mixed (630), and 0.45 acre Freshwater Marsh (641) that was excavated as a cattle pond. Uplands total 18.61 acres and wetlands total 62.12 acres. This property is located on the northern portion of the project site, approximately 0.75 miles west of Reams Road, south of Buena Vista Apartments.

Parcel 3 (Northwest) is approximately 23 acres in size and includes 8.45 acres of Shrub and Brush land (320) (uplands) and 14.61 acres of Wetland Forested Mixed (630) (wetlands). This property is located on the western portion of the project site east of SR 429 and south of Seidel Road.

Parcel 4 (Bear Bay) is approximately 593.58 acres in size and includes 83.44 acres of Xeric Oak (421), 70.10 acres of Hardwood-Coniferous Mixed (434), 8.44 acres of Borrow Pit/Stormwater Ponds (563), 421.96 acres of Wetland Forested Mixed (630), and 8.54 acres of Wet Prairie (643) and 1.1 acres of Citrus Groves (221). Uplands total

154.64 acres, surface waters total 8.44 acres, and wetlands total 430.50 acres. This property is located on the western portion of the project site west of SR 429 at Flamingo Crossings and east of Avalon Road.

Parcel 5 (Smith) is approximately 20 acres in size consisting of Commercial and Services (140). This entire site consists of developed uplands. This property is located in the western central portion of the project site, north of US 192, east of Sherbeth Road and south of Osceola Parkway.

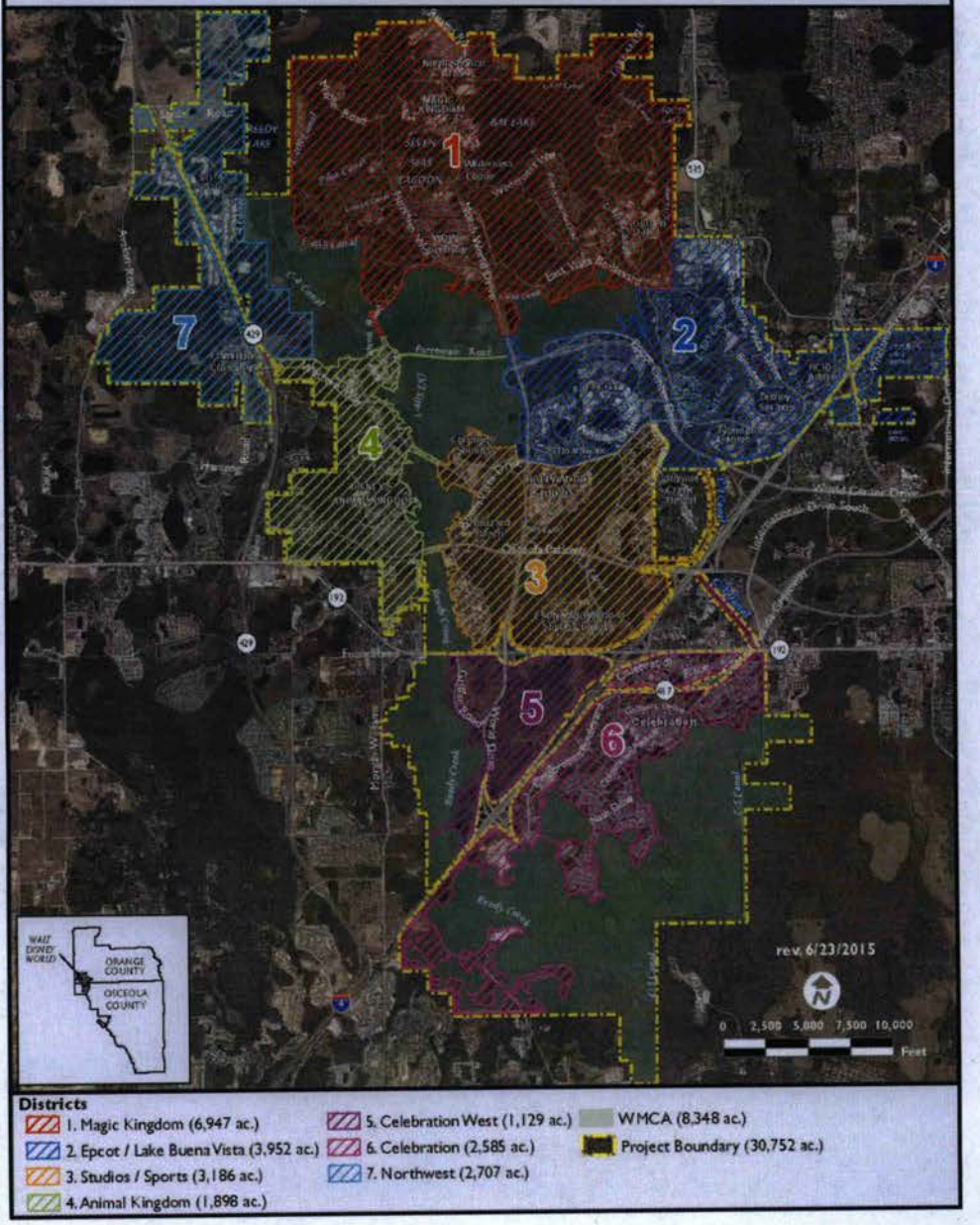
**Exhibit I Project Site Property Additions**


**Property Additions**

- Parcel 1 (Park Plaza): 40 ac.
- Parcel 2 (Teal): 81 ac.
- Parcel 3 (Northwest): 23 ac.
- Parcel 4 (Bear Bay): 594 ac.
- Parcel 5 (Smith): 20 ac.
- ACOE LTP Boundary (SAJ-1991-01901 IP-TSD): 29,994 ac.
- ACOE LTP Boundary (SAJ-1991-01901 SP-TSD): 30,752 ac.

The Disney property will be incorporated into project site Districts for development to support expansion of the project site. Disney has designated seven Districts organized around the project site's parks, resorts and other business centers (Exhibit 3). Each District has been designated based on geographic and business/operational boundaries, including major roadways and environmental features such as the WMCA. Over the term of this permit modification, redevelopment and expansion of facilities in each of these Districts will be a primary focus.

**Exhibit 3 Project Site Districts**



The project site is experiencing high guest demand, a trend that is projected to continue. In response to this high attendance, major expansions have recently been completed or have commenced for theme parks and other facilities, including Magic Kingdom and Animal Kingdom theme parks, and Disney Springs, formerly known as Downtown Disney. Significant infrastructure upgrades and enhancements have been required to support these facility expansions, including transportation and utility systems.

In response to increased theme park attendance, the growing number of guests staying on property and growing number of employees, there have been continuing expansions of roadways and other transportation systems, utility and other infrastructure upgrades, and support facility expansions. In addition, there are a number of current and planned regional infrastructure initiatives that directly affect the project site and to which the Applicant must respond. These include new roadways such as SR 429, Poinciana Parkway, I-4 expansion, and Western Way Extension, as well as energy facilities such as gas pipelines and electrical utility corridors, and expansion of public mass (bus) transit systems. Specific current plans-in-action include the development occurring alongside Disney Springs - expansion of Buena Vista Drive and a new I-4 off-ramp.

At the project site, recent and ongoing expansion and redevelopment projects include New Fantasyland at Magic Kingdom Park, Avatar-inspired land and expansion and other redevelopment projects at Animal Kingdom, Saratoga Springs Resort redevelopment, Bay Lake Tower at Disney's Contemporary Resort, and Disney Springs redevelopment. These projects reflect densification, redevelopment, and expansion of existing facilities as referenced above, and the primary type of growth anticipated in the near future.

Attendance growth and rising demand for Disney parks, resorts, and other experiences at the project site are driving projections for future development. These growth projections will require concurrent expansion of utility, transportation, and other infrastructure support. External forces are further driving the need for expansion of primary infrastructure. Examples of regional projects that directly affect the project site include I-4 Ultimate expansion, development of Horizons West, opening of SR 429 to the west via extension of Western Way, Poinciana Parkway / I-4 Interchange connection, Sabal Trail gas line, and other infrastructure corridors. Currently, the extension of Western Way is required to create regional connections to the new transportation corridors of 429 and C.R. 545, just one example of how surrounding growth impacts the project site.

1.3.1 Project History *(if applicable)*: In 1966, Disney began construction of the master surface water management system to implement the company goal to develop a resort destination complex in the state of Florida, providing for a family entertainment environment. This goal is still the central focus of Disney and quality family

entertainment is the cornerstone of Disney's business.

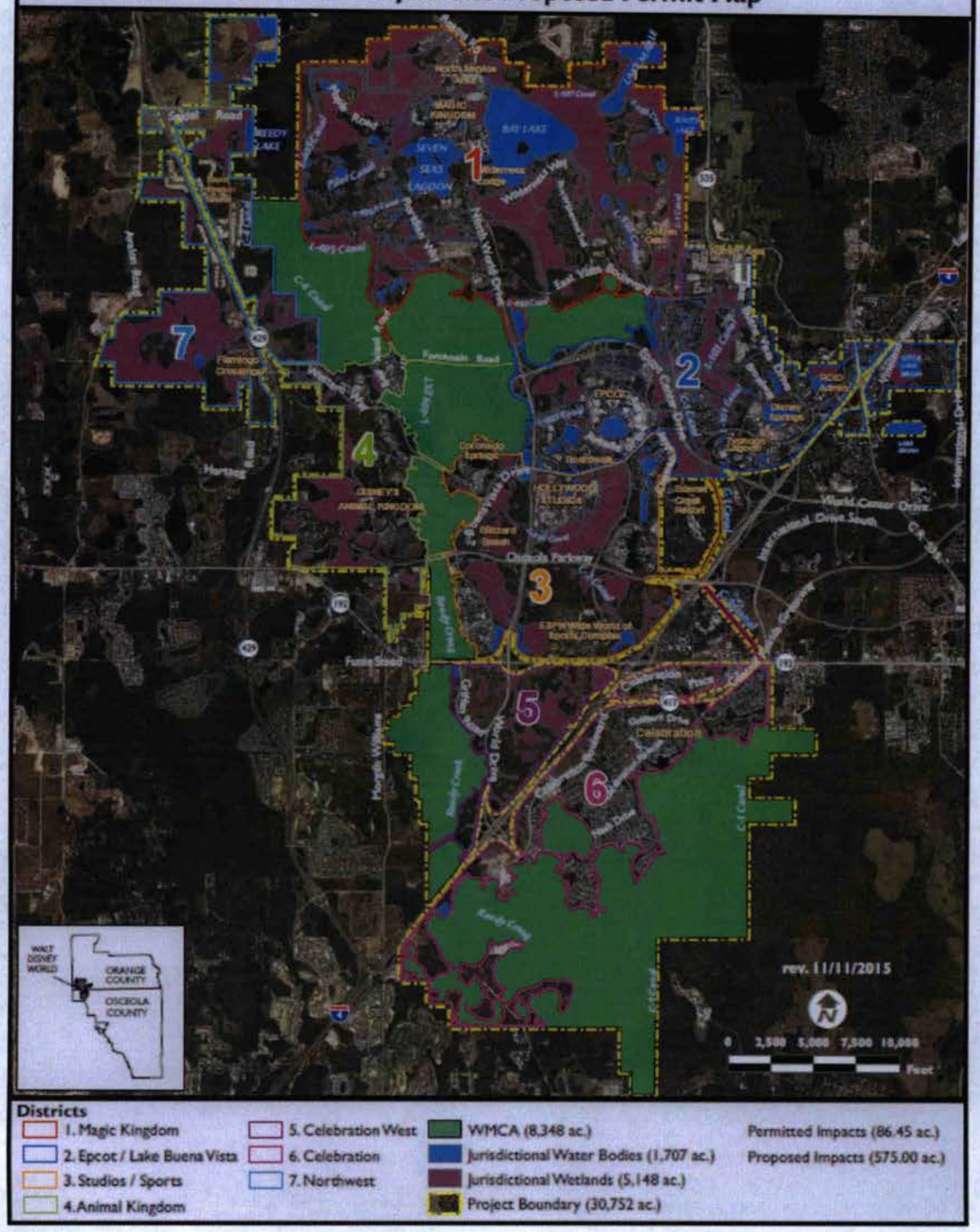
In the 1970's and 1980's, each project Disney proposed was reviewed and permitted on a site by site basis. Consistent with permit application requirements at the time, this approach did not include a comprehensive analysis of environmental features of the project site and did not address environmental issues associated with future development. In addition, wetland protection, mitigation, and other environmental issues were addressed on a case by case basis. This resulted in numerous permits and a fragmented approach to projects, impacts, and mitigation.

On December 21, 1992, Disney was granted the long-term permit (LTP) with a 20-year duration under file number: SAJ-1991-01901 (IP-GS) for the anticipated build out of the property. The history and success of the long term permit and associated on-site and off-site mitigation plans created a model planning and mitigation program. The long-term permit was extended in 2011 to December 21, 2032, in order to continue building out the project as currently permitted. No modifications to permit conditions, wetland jurisdiction, impact acreages, or the mitigation plan were proposed as part of that time extension request. The work authorized during the time extension remained the same as originally permitted: the discharge of fill material into, and mechanized land clearing of approximately 446 acres of wetlands and 71 acres of open water to build out the Disney project including construction of theme parks, hotels, roads, trolley systems, commercial and residential development in the Celebration project, expansion of the Bay Lake / Seven Seas Lagoon by constructing a new canal and two new lakes, new utility corridors for aerial and underground transmission lines, improvements to existing canals, widening of existing roads, and constructing a corridor for a future mass transit system.

1.4 Work Proposed: The applicant seeks authorization to modify the existing LTP with the following:

- Extend the LTP an additional 13 years;
- Conversion of the remaining 234 acres of specific authorized impacts in the existing LTP into their respective locations within the proposed seven Districts;
- Add five (5) parcels, Property Additions totaling 758 acres (Exhibit 1) into the Disney project site. Total modified project site will include 30,752 acres;
- Impact an additional 575 acres of Waters of the United States (WOUS) within the following seven Districts.

**Exhibit 2 Project Site Proposed Permit Map**




1.5 Avoidance and minimization statement from applicant: Given locations of the Property Additions, limited non-jurisdictional areas in proximity to existing facilities and the configuration of WOUS, impacts to WOUS necessary for growth and expansion are unavoidable.

Avoidance (site selection) was not considered a practicable alternative for this Disney project because

- Walt Disney World is a specific "tourist destination" and all attractions and supporting infrastructure must be integrated to efficiently serve guests; as such, new siting for an expansion is not possible.
- The likelihood of locating alternative tracts of land within this region of Florida with fewer wetland impacts than proposed is extremely low.

The previously permitted Disney project incorporated a comprehensive planning process to avoid, minimize, and compensate for WOUS by utilizing the Natural Areas Conservation and Management Plan (NACMP) as a foundation to protect the Reedy Creek corridor with the establishment of the WMCA. The WMCA consists of 8,348 acres and includes Reedy Creek, floodplain, and wetlands associated with Reedy Creek, and adjacent uplands which provide an important natural wildlife corridor. The WMCA is protected under conservation easement. The wetlands in the WMCA (7,613 acres) comprise 53% of the total wetlands on site. Impacts to these areas have been and will continue to be avoided except for unavoidable crossings for transportation and co-location of utilities. The integration of all program elements (attractions, hotels, transportation, support services, etc.) is essential to maintaining a safe and efficiently-operated attraction and resort complex. No impacts to these areas are requested as part of this permit modification.

Avoidance and minimization measures incorporated into this proposal include the following:

- Design projects to utilize the uplands to the maximum extent possible.
- Avoid impacts to the WMCA and associated high quality wetlands. This comprises ~ 53% of all wetlands on the project site. No impacts to these areas are requested as part of this permit modification.
- Land size requirements will be based on projected guest demand/attendance, design and operational requirements, and land acreage of existing facilities. Minimum acreage to support the project purpose will be incorporated for each project element.
- Development areas will be adjacent to and/or contiguous with existing attractions. Location for support of the attractions will be centered on the attraction and developed on available upland parcels to the extent practicable taking into consideration the land size requirements.
- Transportation and utility elements will be designed to share corridors to the extent practicable in order to minimize impacts. Crossings will be placed at the narrowest point, to the extent practicable, and bridges will be held to the minimum width necessary to comply with transportation requirements. Where necessary, design elements to facilitate wildlife movement will be incorporated.
- Best Management Practices (BMPs) will be implemented during all construction to minimize impacts to WOUS.

- Precautionary measures will be implemented for the protection of any federal threatened and endangered species.
- Land planning innovations will be applied and include incorporation of wetlands into stormwater systems and using remote parking for employees.

1.6 Compensatory mitigation proposal from applicant: Disney proposes Permittee responsible compensatory mitigation using a watershed approach. The compensatory mitigation is identified as the Mira Lago mitigation site. This site is located immediately west of the Disney Wilderness Preserve (DWP). DWP is part of the compensatory mitigation that was successfully implemented for the existing Disney LTP. The Mira Lago site consists of 3,004 acres (2,146 acres of uplands and 858 acres of wetlands and surface waters) located in the northern Kissimmee River watershed. Disney has designed a comprehensive mitigation plan (CMP) for Mira Lago. Implementation of the mitigation plan and installation of the Mira Lago site improvements is expected to result in the restoration, preservation, and enhancement of approximately 1,180 acres of wetlands (for a total of approximately 1,196 acres of wetlands and surface waters in the post-CMP condition) and preservation (with enhancement and management) of approximately 1,808 acres of uplands.

The on-site mitigation endeavors and DWP mitigation has successfully compensated for 446 acres of wetlands and 71 acres of surface water impacts (total 517 acres) authorized in the existing Disney LTP. As of date, 234 acres of impacts remain of the 517 acres, authorized under the existing LTP.

1.7 National Environmental Policy Act (NEPA) purpose and need:

1.7.1 Project purpose as described by applicant: Expansion of commercial business within the Disney property.

1.7.2 Basic project purpose: Commercial development.

1.7.3 Water-dependency determination: The proposed project is not water dependent.

1.7.4 Overall project purpose: Walt Disney Parks & Resorts U.S., Inc. (Disney) primary business is in providing entertainment and recreational activities focused on theme-park attractions. As an outgrowth, Disney has developed businesses providing ancillary support services such as hotels, restaurants, and associated infrastructure. Additional project purposes include commercial and residential development in Orange and Osceola County, Florida.

**2.0 Authority:** Section 404 of the Clean Water Act of 1972 (33 U.S.C. § 1344)

2.1 Jurisdictional Determination Information: The U.S. Army Corps of Engineers (Corps) issued a preliminary jurisdictional determination the same date that the Corps authorized the project for the five new parcels. The existing Disney LTP has an Approved Jurisdictional Determination from 1992. The Permittee requested to maintain the existing Waters of the United States (WOUS) jurisdictional areas over the existing project site and requested a preliminary Jurisdictional Determination for the five new parcels. These five new parcels are identified as the Property Additions and consist of 758 acres.

**3.0 Scope of Analysis** – *The Scope of Analysis listed in this section represents the scope of the final project description.*

3.1. National Environmental Policy Act (NEPA) – *Scope determination for NEPA review is found at 33 CFR 325, Appendix B, Paragraph 7.b. The following factors are considered in determining whether sufficient federal "control and responsibility" exists:*

3.1.1 Factors:

a. Whether or not the regulated activity comprises "merely a link" in a corridor type project – Rationale: The project is a stand-alone project and is not a link to a corridor project.

b. Whether there are aspects of the upland facility in the immediate vicinity of the regulated activity that affect the location and configuration of the regulated activity – Rationale: The applicant will utilize available uplands to the maximum extent possible. The location and configuration of the regulated activity is affected by the location of the existing theme parks, roadways, and the existing WMCA. The applicant is proposing expansion and redevelopment of existing facilities and new development within their property. Due to the mosaic pattern of wetlands and uplands, upland portions of the project site cannot fully accommodate the development areas, therefore, in order to achieve the project purpose, impacts to wetlands are necessary.

c. The extent to which the entire project will be within Corps jurisdiction – Rationale: Due to the mosaic pattern of upland and wetlands throughout the 30,752 acres the entire project will be within the Corps' control and responsibility.

d. The extent of cumulative Federal control and responsibility – Rationale: Due to the mosaic pattern of wetlands and uplands throughout the parcel the extent of Federal control and responsibility is over the entire 30,752 acres parcel within Disney ownership.

3.1.2 Determination of scope – Based on an examination of NEPA (33 CFR Part 325, Appendix B) and applicable program guidance (e.g. Council on Environmental Quality's (CEQ) *Considering Cumulative Effects Under National Environmental Policy Act and the Standard Operating Procedures for the U.S. Army Corps of Engineers Regulatory Program, July 2009*), the Corps has determined that the appropriate scope for this project is: over the entire property.

Explanation: Due to the mosaic pattern of wetlands and uplands throughout the parcel the extent of Federal control and responsibility is over the entire 30,752 acres parcel within Disney ownership.

3.2 National Historic Preservation Act (NHPA) "Permit Area" – *The NHPA scope is defined as "permit area". The permit area for an undertaking is defined in 33 CFR 325, Appendix C. The following three (3) tests must all be satisfied for an activity undertaken outside of waters of the United States to be included within the "permit area".*

3.2.1 Tests *(check all that apply)*:

☑ a. The activity outside of waters of the United States would not occur but for the authorization of the work or structures within waters of the United States.
Explanation: Due to the location, orientation, and size of aquatic resources encompassed by the overall property, the proposed activity could not proceed without work affecting those aquatic resources.

☑ b. The activity outside waters of the United States is integrally related to the proposed work or structures within waters of the United States (or, conversely, the proposed work or structures within waters of the United States must be essential to the completeness of the overall project or program).
Explanation: Work in uplands associated with this project would not proceed without work affecting onsite aquatic resources.

☑ c. The activity outside waters of the United States is directly associated (first order impact) with the proposed work or structures within waters of the United States.
Explanation: Work in the uplands is directly associated with the proposed wetland impacts.

3.2.2 Scope Determination: Activities outside waters of the United States are included because all of the above tests apply to this project.

3.2.3 NHPA Scope Summary and Description: The scope of analysis includes the entire site.

3.3 Endangered Species Act (ESA) "Action Area" – *The ESA scope is defined as "action area". The action area means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action; and, is defined in for an undertaking is defined in 50 CFR 402.02, Definitions.*

3.3.1 Determined Scope: The established ESA scope of analysis for this project encompasses the entire project site.

**4.0 Public Involvement** *(Public Notice required by 33 CFR 325.3)*:

4.1 Public Notice Information:
Application Received: 31 July 2014
Application Complete: 25 June 2015
Date Public Notice Issued: 26 June 2015
End Date for Public Notice Comment Period: 26 July 2015
Additional Information: N/A

4.2 Public Meeting(s): No
Discussion/Explanation: N/A

4.3 Public Notice Comments:

a. Comments Received From: Ajit Nana
Date Received: 6 July 2015
Comment/Issue: Wanted to know if the project would affect their hotel, Radisson Lake Buena Vista located at 12799 Apopka Vineland Road, Orlando, Florida 32836.

b. Comments Received From: Yu-Chin Liu
Date Received: 7 July 2015
Comment/Issue: Wanted to know possible impacts the project would have on his condo which is located in the Plantation Park development off of Highway 535 and Vineland Avenue.

c. Comments Received From: National Marine Fisheries Services (NMFS)
Date Received: 22 July 2015
Comment/Issue: NMFS, Habitat Conservation Division (HCD) stated that the project would not occur within the vicinity of essential fish habitat (EFH) designated by the South Atlantic Fishery Management Council or the NMFS.

d. Comments Received From: State Historic Preservation Officer (SHPO)
Date Received: 21 July 2015

Comment/Issue: SHPO determined that the proposed project is unlikely to adversely affect historic properties and recommended a special condition be included regarding unexpected discoveries.

e. Comments Received From: U.S. Environmental Protection Agency (EPA)
Date Received: 29 July 2015
Comment/Issue: The EPA did not object to the issuance of the proposed Disney modified long term permit (LTP). EPA recommended that the applicant continue to avoid and minimize wetland impacts as they develop detailed designs for park expansion. EPA recommended that the Corps coordinate periodic interagency reviews of the Disney LTP development at least every 5 years.

f. Comments Received From: U.S. Fish and Wildlife Service (FWS)
Date Received: 4 November 2015
Comment/Issue: FWS concurred with the Corps determination that the project may affect, not likely to adversely affect the following species: wood stork (Mycteria Americana), Eastern indigo snake (Drymarchon corais couperi), Florida scrub jay. The FWS provided a Biological Opinion (BO) for the sand skink (Neoseps reynoldsi).

4.4 Corps acknowledgment of comments: The Corps acknowledge the comments received from the public and provided them to the Permittee.

4.5 Issues Identified by the Corps: N/A

4.6 Comments/Issues Forwarded to Applicant: No
Date Comments Forwarded: N/A

4.7 Applicant provided response to comments: No
Summary of response: N/A

4.8 Corps Purview – The following comments are not discussed further in this document as they are outside the Corps purview: NA

4.9 Additional information *(optional)*: N/A

4.10 Public Hearing Request – *(33 CFR 327) Requests for a public hearing shall be granted unless the district engineer determines that the issues raised within the request(s) for a public hearing are insubstantial or there is otherwise no valid interest to be served by the hearing. The district engineer will make such a determination in writing, and communicate his reasons therefor to all requesting parties.*

Public Hearing: No public hearing was requested or held for this project.

Discussion/Explanation *(if necessary)*: N/A

**5.0 Alternatives Analysis** – *(40 CFR 230.10, HQ Regulatory SOP July 2009, RGL 93-2, RGL 84-09) If the project is sited in a special aquatic site (such as a wetland), and if the project does not need to be in or near the special aquatic site to fulfill its basic purpose (i.e., the project is not "water-dependent"), it is presumed that there are practicable alternatives that do not involve special aquatic sites. To overcome this presumption, the applicant must clearly demonstrate to the Corps that practicable alternatives are not available. If the presumption is not overcome, the Corps must deny the permit application. If the project is not sited in a special aquatic site and/or is water-dependent, the applicant is not required to overcome the presumption that upland alternatives are available. However, the Corps must still address whether there are any upland alternatives (or alternatives with less impact), and if any are identified, the applicant must clearly demonstrate that they are not feasible. If such a demonstration cannot be made, the Corps must deny the permit application. The Corps performed an evaluation of alternatives, as described below:*

5.1 Overall Project Purpose (as independently defined by Corps): The overall project purpose is the same as the Corps determined overall project purpose (reference Section 1.7.4).

5.2 Screening Criteria:

| Factor | Measure and/or constraint |
|---|---|
| Location | Site is a specific tourist destination; all attractions and infrastructure must be integrated to efficiently and safely serve all guests. Project site must be located adjacent to the existing theme parks and attractions to facilitate expansion/redesign of the existing facilities. |
| Availability | Site must be owned by or capable of being acquired in a timely manner by Disney to support project development. Disney owns all 30,752 acres of the property. |
| Logistics | Ability to efficiently and safely serve all guests. All attractions and supporting infrastructure must be integrated for efficiency and safety for the guests. |
| Costs | The majority of the property has been in Disney ownership for over 25 years. All property must be competitively priced. Disney owns all 30,752 acres of property subject to this project proposal. |
| Size | Site must be sufficient size to accommodate major expansion or re-development. Disney owners |

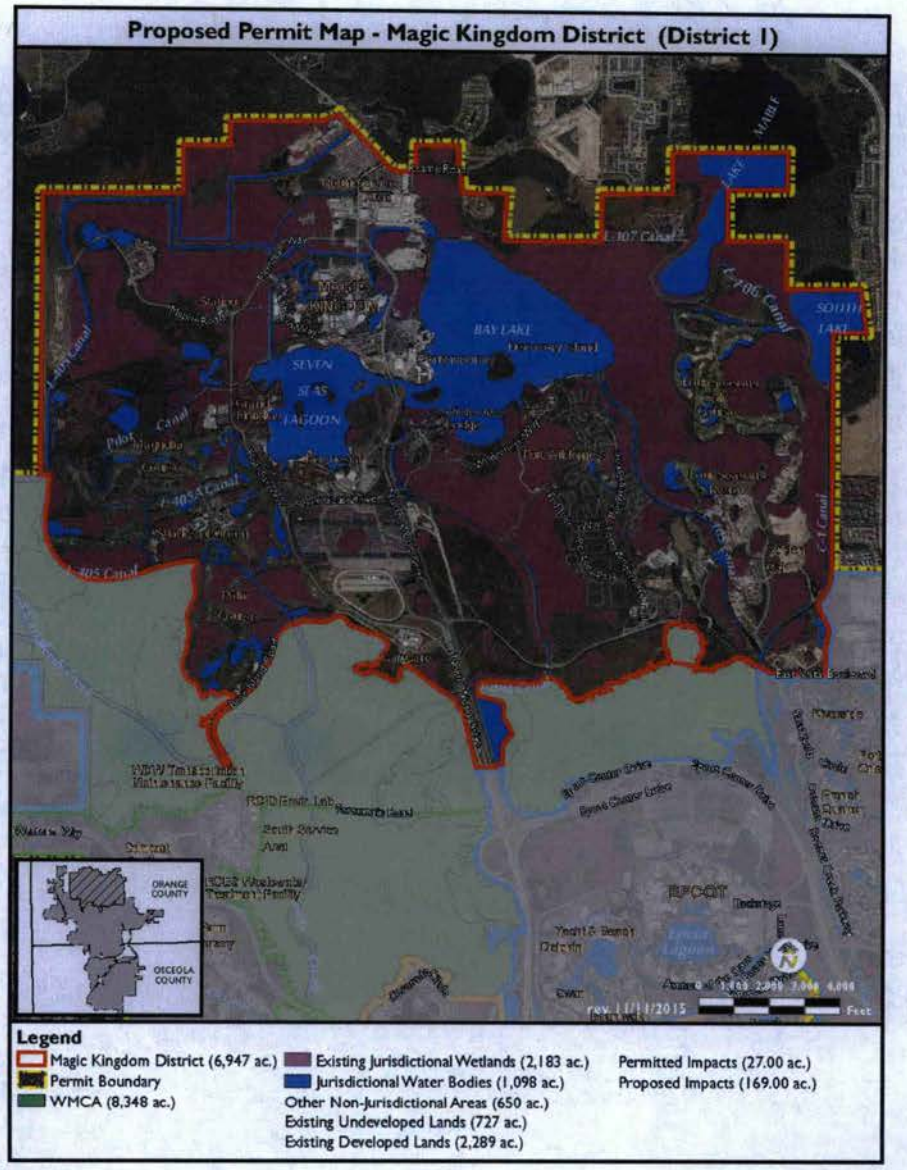
| | |
|---|---|
| | 30,752 acres with sufficient property around the existing theme parks and attractions to facilitate expansion and/or redevelopment. |
| Wetlands | Site should avoid impacts to the highest quality wetlands and minimize impacts to the maximum extent practicable. Disney has avoided impacts to the highest quality wetlands on the parcel during the initial Disney LTP review with the preservation of 53% of the on-site wetlands. The onsite conservation area is called the Wildlife Management and Conservation Area (WMCA) which consists of 8,348 acres |

5.3 No Action Alternative *(No action is defined as permit denial or alternative without impacts to waters of the United States)*: Complete avoidance of wetland impacts is not feasible since it would effectively deny the Applicant the ability to expand the primary business function and meet the overall project purpose.

5.4 Off-site locations and configurations:
a. Off-site locations and configuration were not considered since the Applicant owns 30,752 acres of land and the project purpose is to expand/redevelop the existing theme parks and facilities.

5.5 On-site configurations:
a. Due to the extended planning horizon for this project, detailed plans for projects and/or alternative on-site configurations do not exist. Final requirements are dependent upon actual demand, marketplace competition, creative input for new products, and other internal and external factors, including regional infrastructure initiatives that directly affect Disney. As specific project plans are developed, detailed plan and cross section drawings will be submitted to the Corps and will include the avoidance and minimization measures appropriate for the project. Within each of the seven Development Districts as discussed below various factors constrain growth such that development without impacts to WOUS are not practicable.

Magic Kingdom District
Magic Kingdom Park (MK) is the most visited theme park in the world and attendance is rising along with the state's growth as an international tourism destination. To accommodate projected growth in attendance and other aspects of guest demand, further expansion of the theme park is anticipated over the life of this proposed thirty-year permit modification.




The design and growth of MK drives development of surrounding transportation, support facilities and resort hotels. Seven Seas Lagoon and the guest entry plaza constrain expansion of the park to the South, making the need to expand into wetland areas to the north, east, and west unavoidable.

The Monorail, water bodies and canals, World Drive, and other roads comprise transportation systems to and from MK, and administration, remote employee parking, and other support facilities to the north, and guest parking, resorts and other facilities to the south, southwest, and southeast of the park. Most transportation corridors contain major utility corridors within their rights of way. Expansion and realignment of these facilities, as well as new facilities will be required to support park expansion. Traffic demand and safety requirements will drive the design of these facilities.

A projected increase in park attendance, increase in average length of resort stays, the need for relevance in design and amenities and other factors are driving the need for new and expanded resorts. A number of resorts in this district have been redeveloped and expanded recently, including Disney's Grand Floridian, Disney's Polynesian Resort, and Disney's Contemporary Resort. There is high potential for new and expanded resorts to the south, southwest, and southeast of MK.
There is strong potential for expanding Fort Wilderness Resort over the next thirty years due to increasing guest demand for this unique vacation experience, increasing average size of guest recreational vehicles, and rising demand for new types of camping experiences. Expansion of Fort Wilderness Resort is constrained to the north by Bay Lake, to the east by Golden Oak, to the south by Vista Boulevard, and to the west by wetlands. Growth scenarios anticipate expansion to the south and west with potential to impact wetlands in these locations.
Support facilities to the north and northwest of MK include park administration, Reedy Creek Energy Services facilities, food and other warehouses, employee costuming, transportation hub and parking, and dry dock facilities for ferries and other boats used for resort and theme park transportation. Expansion of these systems and facilities will be required to keep pace with future guest demand and park expansion.

The Epcot / Lake Buena Vista District

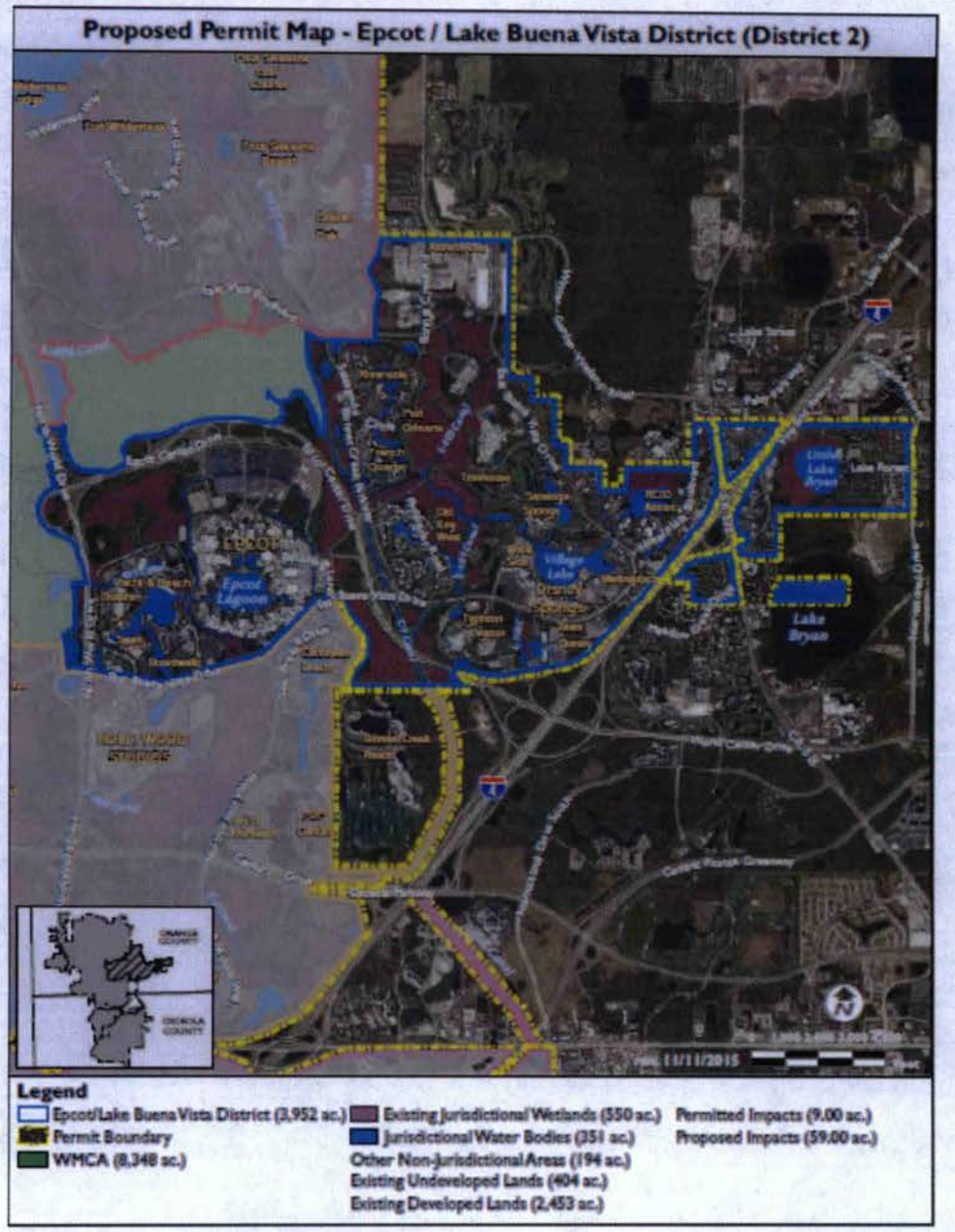
The Epcot / Lake Buena Vista District is comprised of Epcot theme park, multiple Disney resorts, and a major resort / tourist complex known as Disney Springs. The district includes the Four Seasons Resort Orlando at Walt Disney World, Golden Oak residential-resort community, administration and commercial properties to the north, and the Little Lake Bryan community on the east side of Interstate 4. Anticipated development activities in this District are primarily transportation infrastructure, with likely expansion of theme park, resort, administration and infrastructure facilities. The estimate of wetland impacts is based on projected growth of theme park attendance and number of employees, and associated resort and infrastructure expansion to support guest demand.

Epcot has not been significantly expanded over the past 20 years and trends in attendance growth will drive expansion during the term of this permit modification. Related support facilities will be required such as administration, guest and remote employee parking and transportation infrastructure.

Expansion of this park is constrained by Epcot Center Drive to the north, Buena Vista Boulevard to the south, and wetlands to the east and west. Expansion concepts anticipate potential for impacts to WOUS to the east and west.

Hotel resorts in this District have been redeveloped and expanded, reflecting a sustainable approach to resort growth at the project site. These include Treehouse

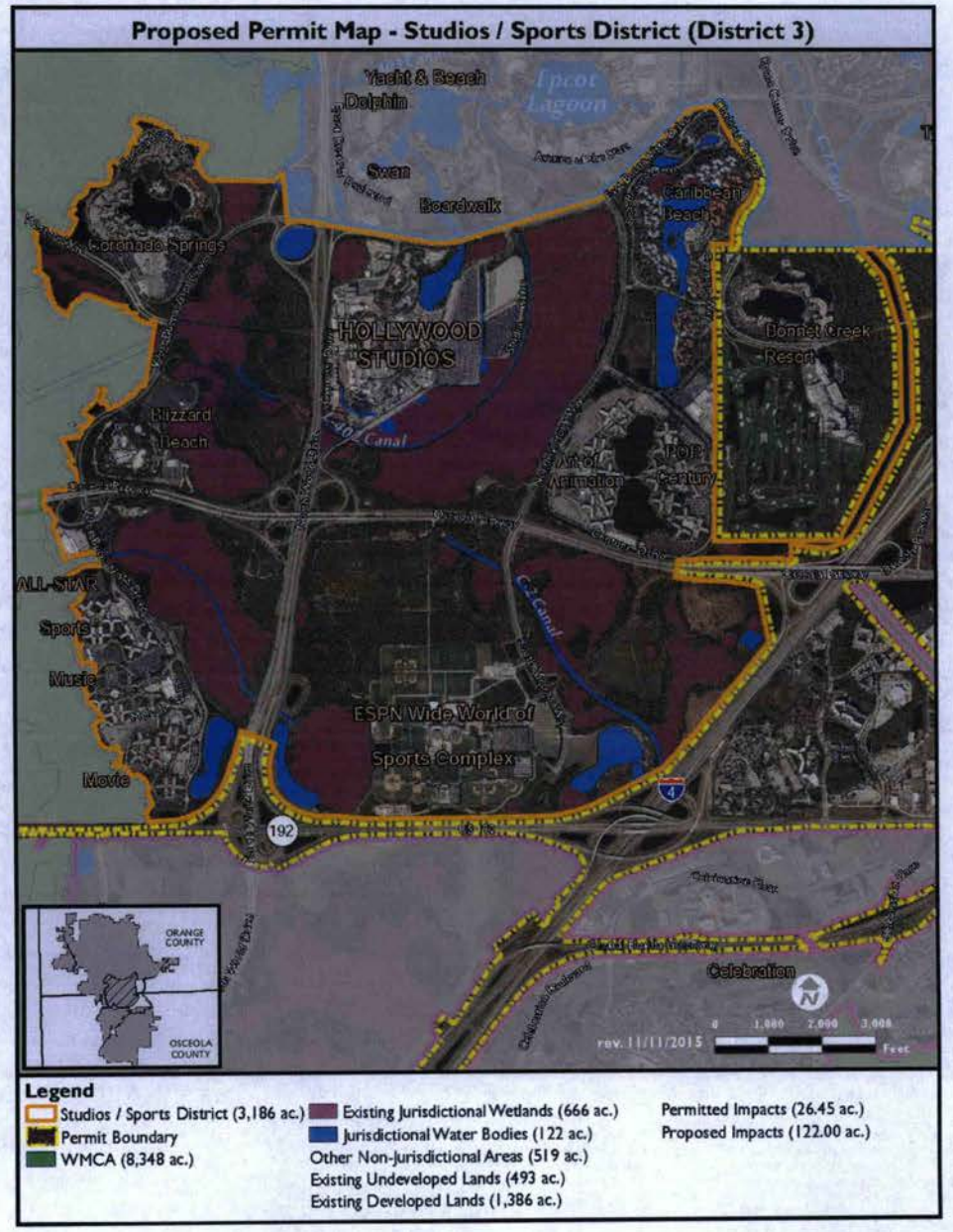
Villas at Disney's Saratoga Springs Resort & Spa, Disney's Boardwalk Inn and Villas, Disney's Yacht and Beach Club Resorts, and Disney's Saratoga Springs Resort & Spa. Continued resort expansion and redevelopment is needed to meet consumer demand as guest park attendance increases along with increases in length of stay in resorts.




The Monorail, water bodies and canals, World Drive, Epcot Center Drive, Buena Vista Drive, and other roads comprise transportation systems to and from Epcot and other theme parks and attractions, Disney Springs, and administrative and support facilities. Expansion and realignment of these facilities will be required to support projected

growth. A major enhancement of Epcot Center Drive / Buena Vista Drive interchange is needed to effectively manage increasing traffic both on and off the project site.

Studios / Sports District




The Studios / Sports District include Disney's Hollywood Studios theme park (DHS), ESPN Wide World of Sports complex (ESPNWWS), multiple Disney resorts, administration and commercial properties. Development activities that may occur in this

District include expansion of transportation and infrastructure, theme park, resort, and administration and employee support facilities. Significant growth in theme park and Sports complex attendance, with the concurrent rise in number of employees, is driving the need for resort and infrastructure expansion, as well as potential wetland impacts. DHS has continued to grow and redevelop since opening in 1989. Future plans to meet growing guest demand will require expanded attractions, administration and support facilities, guest and remote employee parking, and transportation infrastructure that provide guest and employee access to the park.

This park is constrained to the north and west by primary roadways, Buena Vista Drive and World Drive, respectively. It is constrained to the east and south by wetlands and the L-402 Canal. Expansion concepts anticipate potential for wetland impacts to two isolated wetlands just south of Buena Vista Drive and the wetlands to the east and south of the park site.

ESPNWWS opened in 1997 covering 200 acres and now encompasses 220 acres. Expansion constraints include Highway US 192 to the south, Victory Way to the east, and wetlands to the southwest. Expansion of sports fields and related facilities is essential to meet demand by youth sports groups.
New and expanded hotel resorts planned in proximity to DHS and ESPNWWS will leverage support facilities and infrastructure as part of the focus on densification. There is potential for wetland impacts due to wetland configurations to the east of Victory Way, and growth concepts for this area.

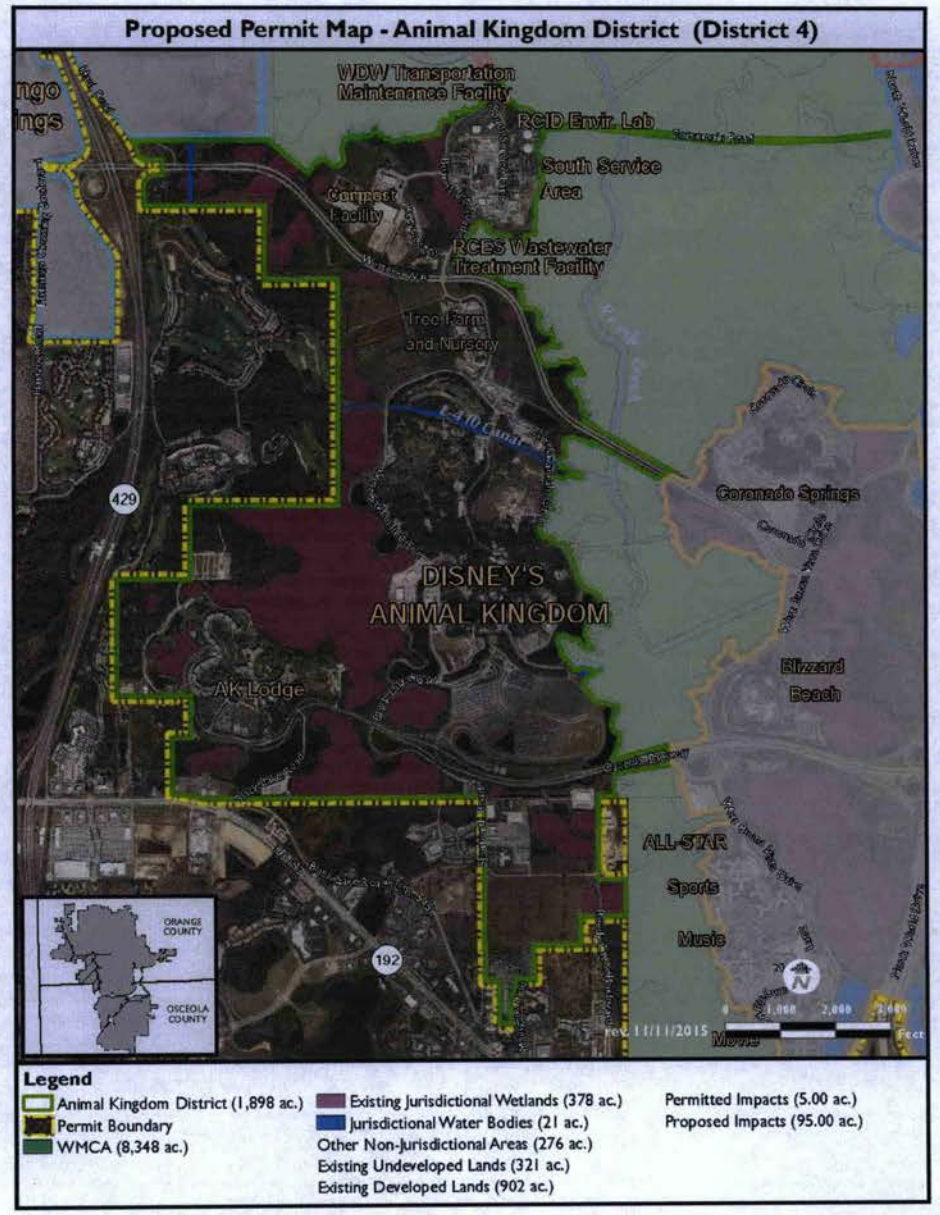
Water bodies and canals, World Drive, Osceola Parkway, Victory Way, Buena Vista Drive, and other roads comprise transportation systems to and from DHS and ESPNWWS and other theme parks, resorts, and other facilities. There is a need for more efficient and expanded transportation systems to connect these business centers. Guest and employee safety, as well as efficient transportation strategies, will drive the design of these facilities.

Animal Kingdom District

Animal Kingdom District is comprised of Disney's Animal Kingdom theme park (DAK) which opened 1998, Animal Kingdom Lodge and other resort sites. Facilities include Horticulture services, the South Service Area - RCES potable water and wastewater treatment plants, waste transfer, and waste to energy facilities, Western Way, a six-lane divided roadway and the newest gateway to the project site, and Osceola Parkway, the entry road to DAK.

DAK is currently undergoing a major expansion within the original footprint of the park that includes attractions, food and beverage, retail, administration, support facilities, guest and employee parking, and transportation infrastructure to enhance guest and

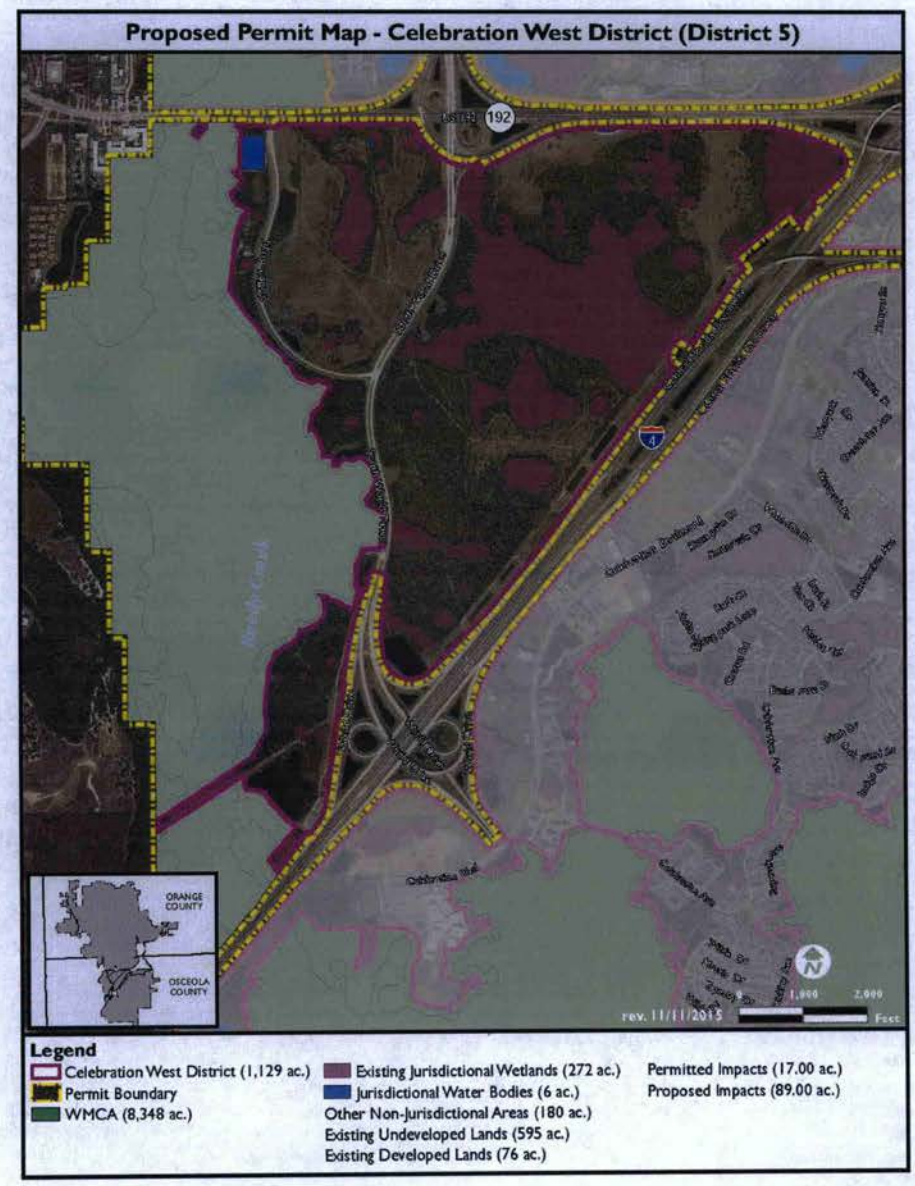
employee access to and from the park. Future park expansion is constrained to the north by support facilities and Western Way. It is constrained by the WMCA to the east, by wetlands to the west, and by Osceola Parkway to the south.




Disney's Animal Kingdom Lodge recently expanded to include the Kidani Village villas, leveraging existing amenities and transportation in this district. Guest demand for the new resort is strong and indicates a need for continuing growth in future.
Water bodies and canals, Osceola Parkway, Western Way, and other roads comprise transportation systems to and from DAK and other theme parks, resort, and facilities throughout the project site. Expansion of these systems will be required to support

projected attendance growth and increased resort guests. Guest and employee safety and efficient transportation strategies will drive the design of these facilities, along with anticipated wetland impacts.

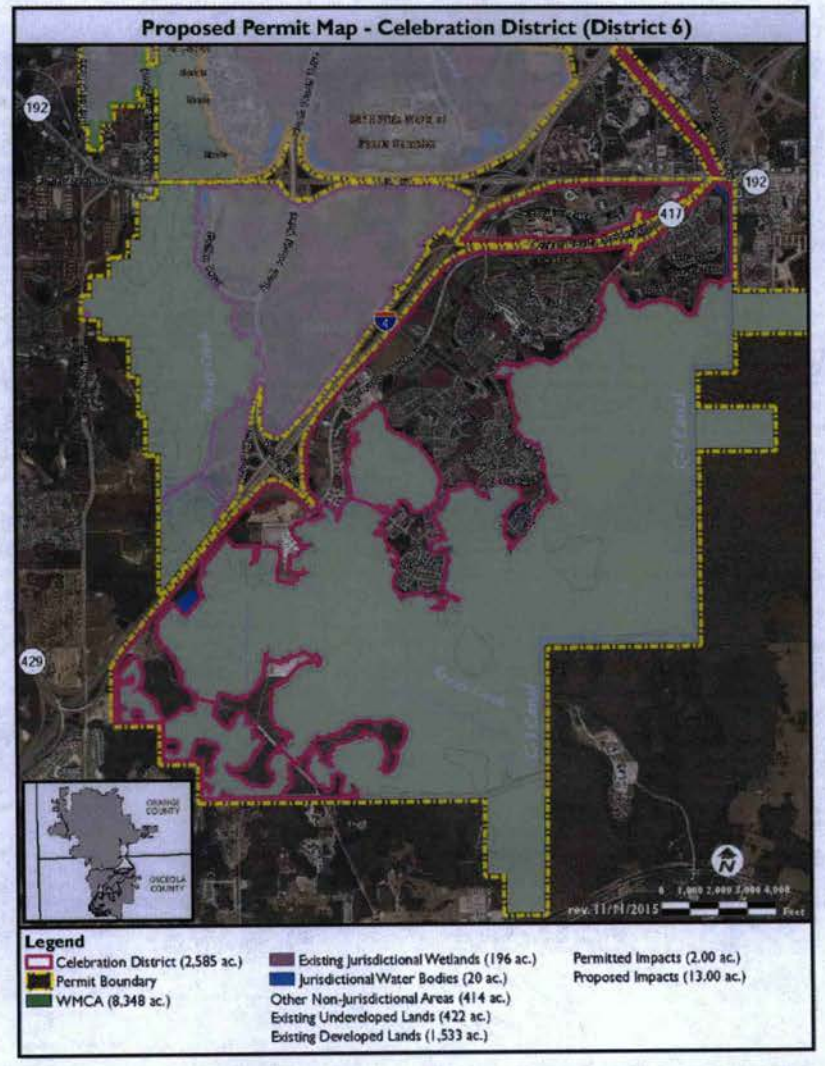
Celebration West District




The Celebration West District includes residential, workplace and commercial / retail land uses. World Drive, a four-lane divided roadway bisects this District and connects Interstate 4 with Magic Kingdom Park and other project site lands to the north. Guest demand for activities outside theme parks at the project site is growing and is

expected to continue growing during the term of this permit. Concepts for this district include expansion of transportation and infrastructure, residential, and commercial / retail facilities that support or complement theme park, resort, and other facilities to the north, as well as the Celebration community to the south and east.
Expansion of development parcels is constrained by the WMCA to the west, US 192 to the north, Interstate 4 to the south and east, and wetlands internal to the development parcels. Future expansion concepts anticipate impacts to accommodate higher density land uses that will help to support increasing number of visitors and related growth.

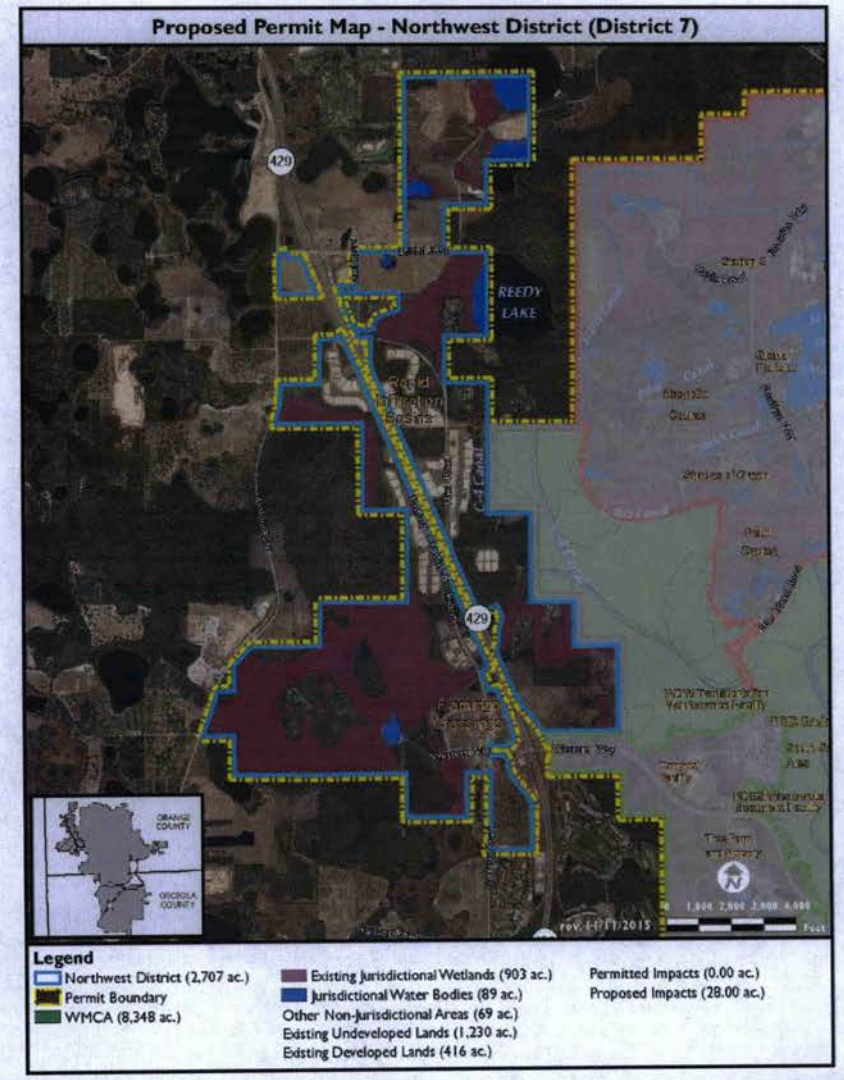
Celebration District




The Celebration District consists of residential, office, school and commercial / retail land uses. Interstate 4 and US 192 form the boundary to the north, the WMCA forms the southern boundary, and the C-1 Canal forms the eastern boundary. Much of this

district is built-out, with a number of parcels still available for development. Conceptual plans include potential for redevelopment and expansion of schools, community parks, transportation and infrastructure, residential, and commercial / retail facilities.

Northwest District




The Northwest District is positioned adjacent to Horizons West, a large-scale, off-site development to the north. Land uses in this District include resort, commercial / retail, and extensive infrastructure. The SR 429 corridor bisects this District northwest to southeast and Western Way is a regional transportation corridor that crosses the District in an east/west orientation to the south. Flamingo Crossings to the south is a planned unit development with predominately resort and commercial / retail land uses to support area residents as well as project site guests. RCID rapid infiltration basins comprise approximately 1,000 acres in the middle and northern areas of the District.

Conceptual plans for future development in this District include residential and commercial land uses, expansion of transportation and infrastructure, as well as commercial / retail facilities to support growth in projected regional demand for housing and other facilities. Guest and employee safety and efficient transportation strategies will drive the design of these facilities, with potential for impacts to WOUS.

The Table below summarizes the total acreage within the 7 Disney Districts and proposed impacts associated with the existing Disney LTP and proposed major modification to the Disney LTP.

| District | Total Acreage In District | Existing JD Wetland Acreage | Existing JD Water Acreage | Developed Acreage | Undeveloped Upland Acreage | Other Non-JD Acreage | Remaining Authorized Impact Acreage | Proposed Impact Acreage | Total Impact Acreage |
|---|---|---|---|---|---|---|---|---|---|
| Magic Kingdom | 6,947 | 2,183 | 1,098 | 2,289 | 727 | 650 | 27.0 | 169 | 196.0 |
| Epcot | 3,952 | 550 | 351 | 2,453 | 404 | 194 | 9.0 | 59 | 68.0 |
| Studios | 3,186 | 666 | 122 | 1,386 | 493 | 519 | 26.45 | 122 | 148.45 |
| Animal Kingdom | 1,898 | 378 | 21 | 902 | 321 | 276 | 5.0 | 95 | 100.0 |
| Celebration West | 1,129 | 272 | 6 | 76 | 595 | 180 | 17.0 | 89 | 106.0 |
| Celebration | 2,585 | 196 | 20 | 1,533 | 422 | 414 | 2.0 | 13 | 15.0 |
| Northwest | 2,707 | 903 | 89 | 416 | 1,230 | 69 | 0.0 | 28 | 28.0 |
| **Total** | | | | | | | **86.45** | **575** | **661.45** |

5.6 Practicable Alternatives carried forward: The only practicable alternative for expansion/redevelopment is outward from the existing infrastructure and theme parks into primarily low and moderate quality wetlands. The LEDPA is the existing project site less the WMCA.

## 6.0 Evaluation of the 404(b)(1) Guidelines:

*(40 CFR 230)* For each of the below listed evaluation criterion, this section describes the potential impact, any minimization measures that would be used to reduce the level of impact, and the resultant impact level. For the purpose of this evaluation, the fill associated with this project is for the redevelopment and expansion of facilities within the 30,752 acre Disney parcels.

6.1 Potential effects on physical and chemical characteristics of the aquatic ecosystem (Subpart C):

6.1.1 Substrate: Minor Effect (long term) – The work proposed would permanently alter the aquatic substrate of the onsite wetlands as the project would remove (excavate) the muck soils and replace that substrate with appropriate material (fill) to support the proposed work. Discharge of fill at the project site would alter the substrate elevation and contours, which could alter onsite subsurface hydrologic circulation. Discharge of fill at the project site would eliminate organisms within the wetlands at the site, either through smothering of immobile organisms or displacement of mobile organisms.

6.1.2 Suspended Particulates / Turbidity: Negligible Effect – The project would incorporate erosion prevention measures to avoid the discharge of particulate material into wetlands and downstream waters.

6.1.3 Water: Negligible Effect – Over the course of the permit duration the project would eliminate a total of 661.45 acres (86.45 acres still remaining on the existing LTP and 575 acres proposed in this major modification). These wetlands naturally filter stormwater from the adjacent parcels. However, the project design will incorporate stormwater treatment systems which will provide retention and filtration of stormwater from the sites (and any stormwater flowing onto the site from adjacent properties). A short-term impact during construction activity may occur, which could include alterations in downstream clarity and color. However, the Corps believes that the incorporation of the stormwater treatment system into the project design will negate any potential long-term adverse impacts by replacing the functions and services currently provided by the onsite wetlands. The applicant has obtained authorization for the project from South Florida Water Management District (SFWMD); the SFWMD evaluation included an in-depth evaluation of potential effects to water quality.

6.1.4 Current Patterns & Water Circulation: Not Applicable – The project should not affect the flow of currents or the circulation of water within downstream receiving waterways. The proposed stormwater treatment systems would replace existing onsite wetland functions associated with stormwater retention, discharge, flow volume and flow rate.

6.1.5

Normal Water Fluctuations: Negligible Effect – The project design incorporates a stormwater treatment system, which would provide retention and filtration of stormwater from the site (and any stormwater flowing onto the site from adjacent properties). The project engineers designed the stormwater treatment system to mimic the existing stormwater flow from the site, including stormwater retention, discharge, flow volume, and flow rate.

6.1.6 Salinity Gradients: Not Applicable – N/A

6.2 Potential effects on biological characteristics of the aquatic ecosystem (Subpart D):

6.2.1 Threatened or Endangered Species (also see section 10.1): May Affect but Not Likely to Adversely Affect – See Section 10.2 below.

6.2.2 Fish, Crustaceans, Mollusks, and Other Aquatic Organisms: Negligible Effect – The aquatic organisms in the impact area will be eliminated by the proposed activity. With the inclusion of the proposed mitigation to offset the loss, the impacts over time are expected to have a negligible effect on aquatic organisms.

6.2.3 Other Wildlife: Minor Effect (long term) – The project would eliminate habitat utilized by various reptilian, mammalian (small), and avian species. The Corps believes that the project would have a minor long-term impact on wildlife, as wildlife inhabiting the Disney project area will relocate to other habitat(s) and compete for resources. Within the overall watershed, the proposed compensatory mitigation (Mira Lago Compensatory Mitigation Plan) consists of diverse habitats that will be enhanced, restored, managed and preserve. The compensatory mitigation, Mira Lago Compensatory Mitigation Plan will compensate the loss of habitat within the Disney project areas.

6.3 Potential Effects on Special Aquatic Sites (Subpart E):

6.3.1 Sanctuaries and Refuges: Not Applicable – N/A

6.3.2 Wetlands: Minor Effect (long term) – Disney is proposing to impact up to 661.45 acres of wetlands over a period of the next 30 years with a permit duration until 2045. The proposed work will result in the loss of wetland functions and services within the project sites. However, regionally, the proposed compensatory mitigation will replace these wetland functions and services. The Permittee proposes to construct the 12 ditch blocks during the dry season and within 18 months of this authorization. Based upon the Disney Wilderness Preserve compensatory mitigation success, the proposed compensatory mitigation work at Mira Lago is anticipated to be successful within 8 years of this authorization. Therefore, the compensatory mitigation endeavors will be completed in advance of the fill impacts to WOUS which the Permittee is proposing may occur over the next 30 years.

6.3.3 Mud Flats: Not Applicable – N/A

6.3.4 Vegetated Shallows: Not Applicable – N/A

6.3.5 Coral Reefs: Not Applicable – N/A

6.3.6 Riffle and Pool Complexes: Not Applicable – N/A

6.4 Potential effects on human use characteristics (Subpart F):

6.4.1 Municipal and Private Water Supplies: Negligible Effect – The SFWMD authorized the project. In consideration of the SFWMD review of regional and local water quality and consumption/use, the Corps does not anticipate that the project would have a measurable impact on this parameter.

6.4.2 Recreational and Commercial Fisheries: Negligible Effect – The project should not adversely affect downstream salinity gradients; stormwater flow, duration, or volume; sediment transport; water quality; and/or, current patterns or water circulation. Therefore, the Corps does not believe that the project would have any measurable effect on downstream recreational and/or commercial fisheries.

6.4.3 Water-related Recreation: No Effect – The project should not adversely affect downstream salinity gradients; stormwater flow, duration, or volume; sediment transport; water quality; and/or, current patterns or water circulation. Therefore, the Corps does not believe that the project would have any measurable effect on downstream recreational and/or commercial fisheries.

6.4.4 Aesthetics: Not Applicable – N/A

6.5 Evaluation and testing (Subpart G):

6.5.1 General Evaluation of Dredged or Fill Material:
Clean uncontaminated fill material will be used from upland sources.

This evaluation indicates that the proposed discharge material meets the testing exclusion criteria for the reason cited below.

Exclusion: Based on the above information, the material is not a carrier of contaminants.

6.5.2 Chemical, Biological, and Physical Evaluation and Testing:
The Corps has determined that specific testing of the fill material is not warranted.

6.6 Actions to minimize adverse effects (Subpart H):

Actions to be undertaken in response to 40 CFR Section 203.10(d) to minimize the adverse effects of discharges of dredged or fill material are incorporated into the discussion in sections 5.1 through 5.5 above. If applicable, additional actions to minimize adverse effects are discussed below, including actions concerning the location of the discharge, actions concerning the material to be discharged, actions controlling the material after discharge, actions affecting the method of dispersion, actions related to technology, actions affecting plant and animal populations, actions affecting human use, and other actions.
Any authorization issued by the Corps would include special conditions requiring the installation of erosion control features, the use of clean fill, the stabilization of all fill areas, and the implementation of the proposed compensatory mitigation plan.

6.7 Factual Determinations – (Subpart B, section 230.11) *The determinations below are based on the determination of effects described in detail in sections 6.1 – 6.6 above*:

6.7.1 Physical substrate: Minor Effect (short term)

6.7.2 Water circulation, fluctuation and salinity: No Effect

6.7.3 Suspended particulates/turbidity: Negligible Effect

6.7.4 Contaminants: No Effect

6.7.5 Aquatic ecosystem and organisms: Minor Effect (long term)

6.7.6 Proposed disposal site: Minor Effect (long term)

6.7.7 Cumulative effects on the aquatic ecosystem: Minor Effect (long term) – Cumulative effects are discussed in section 9 of this document.

6.7.8 Secondary effects on the aquatic ecosystem: Minor Effect (long term) – Secondary effects are discussed in section 9 of this document.

6.8 Restrictions on Discharges (Subpart B, section 230.10) *(an answer marked with an asterisk indicates noncompliance with the Guidelines)*:

| | |
|---|---|
| **No** | Based on the discussion in section 5, are there available, practicable alternatives having less adverse impact on the aquatic ecosystem and without other significant adverse environmental consequences that do not |

| | |
|---|---|
| | involve discharges into "waters of the US" or at other locations within these waters? |
| **Yes** | Based on the discussion in section 5, if the project is in a special aquatic site and is not water-dependent, has the applicant clearly demonstrated that there are no practicable alternative sites that do not involve SAS? |
| | Will the discharge: |
| **No** | Violate state water quality standards? |
| **No** | Violate toxic effluent standards (under Section 307 of the Act)? |
| **No** | Jeopardize endangered or threatened species or their critical habitat? |
| **No** | Violate standards set by the Department of Commerce to protect marine sanctuaries? |
| | Will the discharge contribute to significant degradation of "waters of the US" through adverse impacts to: |
| **No** | Human health or welfare, through pollution of municipal water supplies, fish, shellfish, wildlife and special aquatic sites? |
| **No** | Life stages of aquatic life and other wildlife? |
| **No** | Diversity, productivity, and stability of the aquatic ecosystem, such as the loss of fish or wildlife habitat, or loss of the capacity of wetland to assimilate nutrients, purify water or reduce wave energy? |
| **No** | Recreational, aesthetic, and economic values? |
| **Yes** | Will all appropriate and practicable steps (40 CFR 23.70-77) be taken to minimize the potential adverse impacts of the discharge on the aquatic ecosystem? |

Remarks – *if necessary*:

6.9 Compliance with the 404(b)(1) Guidelines *(Reference section 12 of this document)*:

**7.0 General Public Interest Review** – *(33 CFR 320.4 and RGL 84-09) All public interest factors have been reviewed and summarized below. Both cumulative and secondary impacts on the public interest have been considered.*

Public Interest Factors Considered:

a. Conservation: Beneficial (major) – As a requirement of the original 1992 Disney LTP the Permittee placed 8,348 acres (7,613 wetland acres and 735 upland acres) under a conservation easement, (WMCA) and successfully completed all mitigation efforts within the Disney Wilderness Preserve. The WMCA conservation easement preserved the highest quality wetland communities within the 30,752 acre Disney property. With this major modification Disney has offered additional compensatory mitigation at the 3,004 acre Mira Lago parcel which is located on the west side of the Disney Wilderness Preserve. Disney has agreed to maintain all mitigation areas in perpetuity. The applicant has avoided impacts to the high quality wetlands within their ownership and is proposing to perform upland and wetland enhancement, restoration, management and preservation of the Mira Lago parcel. The Mira Lago parcel is located in an important network of conservation lands that will substantially benefit regional conservation. The Permittee has successfully implemented the same mitigation techniques at the Disney Wilderness Preserve and the proposed mitigation endeavors at Mira Lago are commonly used in other mitigation proposals which involve wetland enhancement and/or wetland restoration.

b. Economics: Beneficial (major) – The proposed project will accommodate theme park growth and provide economic benefits to the Central Florida region with regard to jobs, taxes, and stimulation to the regional economy. Disney employs thousands of cast members (employees), and is one of the largest single site employers in Florida and the United States.

c. Aesthetics: N/A – N/A

d. General Environmental Concerns: Neutral as a result of mitigative action – Under the original 1992 Disney LTP the Permittee preserved 8,348 acres of the highest quality wetlands within Disney's ownership. In addition, the original 1992 Disney LTP included compensatory mitigation which included upland and wetland enhancement, restoration, management and preservation of the Disney Wilderness Preserve. The proposed Disney Major Modification to the LTP includes the purchase and restoration/reestablishment of an additional 3,004 acres immediately west of Disney Wilderness Preserve.

e. Wetlands: Neutral as a result of mitigative action – The Permittee proposes additional filling of low to moderate quality wetlands and waters within the 30,752 acre Disney property. Mitigation to offset the functional loss of WOUS will consist of one full Functional Unit of Lift (Uniform Mitigation Assessment Method (UMAM) credit) for each acre of waters filled or removed from Corps jurisdiction, therefore, wetland functions within the watershed will be improved. Over half of the wetlands (53%) on the project

site are protected by a conservation easement (WMCA) and will not be affected by this project as proposed.

f. Historic Properties: No adverse effect – SHPO responded to the Public Notice by letter dated 21 July 2015. SHPO stated that the project is unlikely to adversely affect historic properties and requested a special condition be included with the authorization regarding unexpected discoveries.

g. Fish and Wildlife Values: Neutral as a result of mitigative action – The existing wetlands and waters within the subject site are low to moderate functional value in part due to past alteration of the site's natural hydroperiod as a result of flood control efforts and development of the theme parks which has fragmented many of the remaining wetland and upland areas. The Permittee has agreed to the Standard protection Measures for the Eastern Indigo Snake and to continue to adhere to the FWS Biological Opinions for this project. The existing WMCA, Disney Wilderness Preserve and the Mira Lago Mitigation areas provide large contiguous wildlife corridors that will not be fragmented by future development and will be of greater value to sustaining fish and wildlife values in perpetuity within the watershed.

h. Flood Hazards: Negligible – The Permittee proposes to fill to an elevation required by Orange and Osceola Counties to prevent flooding. In addition SFWMD has reviewed and approved the Permittee's plan to manage stormwater and prevent adverse impacts from flooding.

i. Floodplain Values: Neutral as a result of mitigative action – The Permittee proposes that to the maximum extent practicable that development will occur outside of the floodplain. If necessary development within the floodplain will include a compensatory plan to fully offset any floodplain impacts. In addition, SFWMD permit requires that Disney demonstrate that the project will not adversely impact floodplain storage.

j. Land use: Beneficial (major) – The proposed project will not change the overall land uses within Disney's 30,752 acres of land that they own.

k. Navigation: N/A – N/A

l. Shore Erosion and Accretion: N/A – N/A

m. Recreation: Beneficial (major) – This Disney major modification project will increase recreational opportunities at Disney through the expansion/redevelopment of theme parks and attractions. In addition, the compensatory mitigation areas, both Disney Wilderness Preserve and the proposed Mira Lago Mitigation area will provide public recreational access.

n. Water Supply and Conservation: Negligible – potable water will be provided by the local utilities and the developments will have to abide by the watering restrictions set forth by SFWMD.

o. Water Quality: Neutral as a result of mitigative action – SFWMD authorized the proposed development with the construction of stormwater ponds, proper erosion control measures and compensatory mitigation.

p. Energy Needs: N/A – N/A

q. Safety: Negligible – The safety of millions of guests that visit Disney every year is of upmost importance to the Permittee. The Permittee will continue to develop the projects within this Disney LTP major modification and safely and efficiently move guests among their various theme parks, attractions, and parking areas as these safety measures are critical to their primary business.

r. Food and Fiber Production: N/A – N/A

s. Mineral Needs: N/A – N/A

t. Consideration of Property Ownership: Beneficial (major) – Disney owns all 30,752 acres and will maintain the same overall project purpose within the original Disney LTP.

u. Needs and Welfare of the People: Beneficial (minor) – The proposed Disney LTP major modification project will increase tourism and recreational opportunities, provide residential opportunities for the public and provide employment opportunities.

7.1 The relative extent of the public and private need for the proposed structure or work: Due to existing and projected attendance numbers, Disney is proposing to expand and redevelop numerous attractions, improve roadway infrastructure, develop additional hotels, restaurants, retail spaces, and other areas within Disney property. The private need will be a return on investment by the owner/developer.
The public need that will be provided are new and expanded recreational opportunities at Disney.

7.2 Are there unresolved conflicts as to resource use? No
If so, are there reasonable and practicable alternative locations and/or methods to accomplish the objectives of the proposed action? NA

7.3 The extent and permanence of the beneficial and/or detrimental effects, which the proposed work is likely to have on the public and private use to which the area is suited: Detrimental impacts are expected to be minimal although they will be permanent in the construction area. The beneficial effects associated with the utilization of the property

would be permanent. The compensatory mitigation to offset the additional 575 acres of wetland fill impacts includes the 3,004 acre Mira Lago Compensatory Mitigation Plan.

**8.0 Mitigation** – *33 CFR 320.4 (r); 33 CFR 332; 40 CFR 230.70-77; 40 CFR 230.90-99 and 40 CFR 1504.12(f)*:

8.1 Avoidance – In evaluating a project area containing waters of the United States, consideration must be given to avoiding impacts on these sites. Avoidance measures for this project are: Avoidance measures indicated by the applicant in Section 1.5 of this document.

8.2 Minimization – If waters of the United States cannot be avoided, impacts must be minimized. Minimization measures for this project are: Minimization measures indicated by the applicant in Section 1.5 of this document.

8.3 Compensatory Mitigation:

8.3.1 Is Compensatory Mitigation required:

☐ No

*(If No, provide explanation here. Do not complete [delete] rest of Section 8, Mitigation. If Yes, indicate N/A here):* N/A

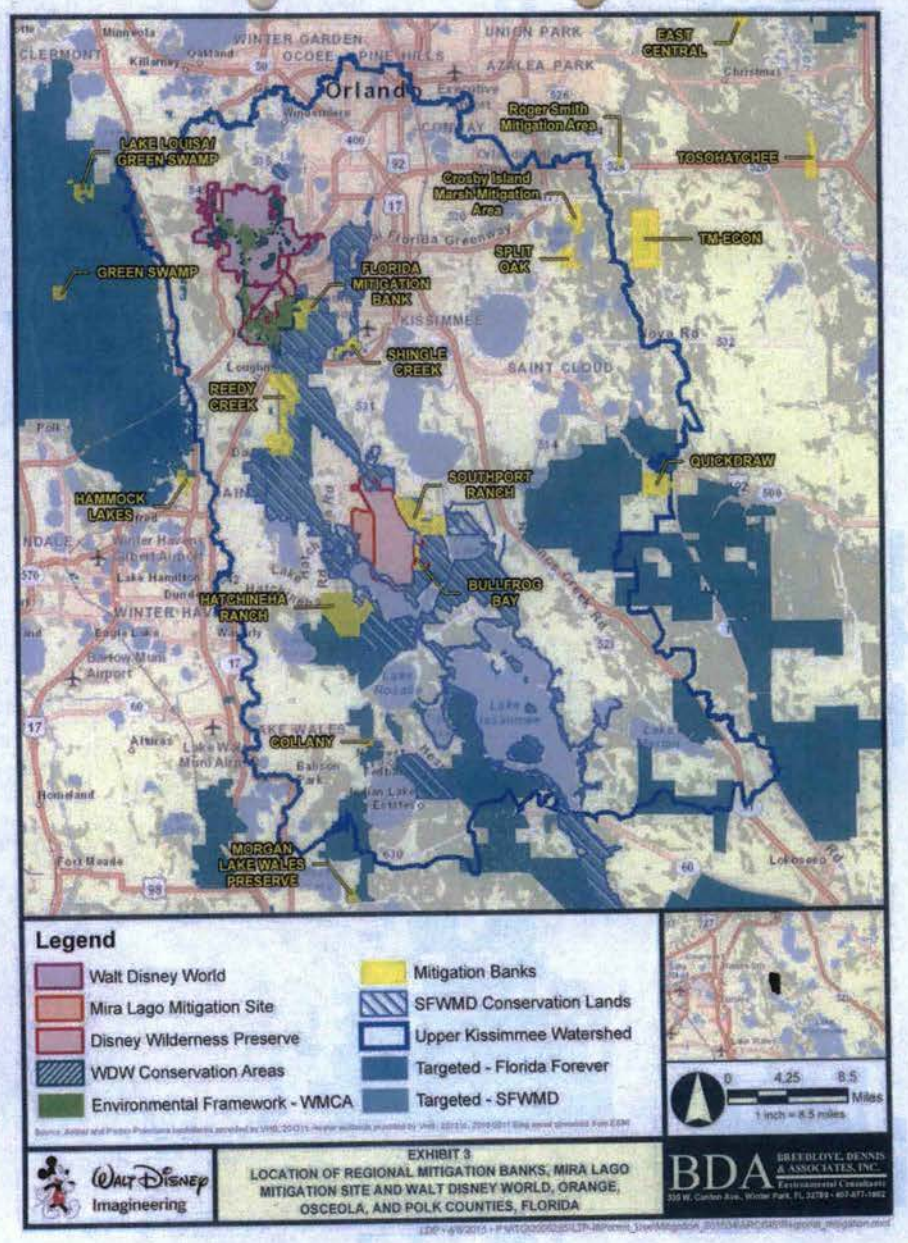
☑ Yes

*(If yes, complete the remainder of Section 8, Mitigation).*

8.3.2 Are the impacts to the jurisdictional aquatic resources in the service area of an approved mitigation bank? Yes

8.3.3 Does the mitigation bank have the appropriate number and resource type or credits available? No
Currently none of the permitted mitigation banks with service areas covering the project site have sufficient federal mitigation credits (individually or cumulatively) to offset wetland impacts. There are no in-lieu fee programs with available federal mitigation credits. As such Disney has proposed Permittee Responsible Mitigation under a watershed approach. The Permittee's mitigation is located in the same watershed as the proposed impacts (Upper Kissimmee Watershed) and proposes a type of mitigation that the Permittee has previously successfully completed on property immediately adjacent to the current mitigation property. The mitigation property is strategically located among a network of other conservation lands and has been identified for conservation by state and federal agencies, including the FWS, as well as non-governmental organizations. The mitigation is type for type and will fully offset all wetland impacts.

The exhibit below reflects the location of the proposed Mira Lago and existing mitigation banks in the service area of the project.




8.3.4 Are the impacts to the jurisdictional aquatic resources in the service area of an approved in-lieu fee program? No

8.3.5 Does the in-lieu fee program have the appropriate number and resource type or credits available? NA

8.3.6 Identify the selected compensatory mitigation options(s):

☐ mitigation bank credits

☐ in-lieu fee program credits

☑ permittee-responsible mitigation under a watershed approach

☐ permittee-responsible mitigation, on-site

☐ permittee-responsible mitigation, off-site

8.3.7 As the selected compensatory mitigation option deviates from the order of the options presented in §332.3(b)(2)-(6) and/or incorporates Permittee-responsible mitigation, explain why the selected compensatory mitigation option is environmentally preferable. Address the criteria provided in §332.3(a)(1) and §332.4(c)(2)-(14) as follows:

8.3.7.1 Description of the compensatory mitigation: Mira Lago is a 3,004-acre parcel which Disney acquired and which was entitled for full development of residential and commercial facilities. The prior authorizations are: SAJ-1193-00302 to Parker Poinciana, Inc. and SAJ-2008-02694 to Poinciana Parkway. A significant regional environmental benefit will be realized through the purchase and change in land use on Mira Lago from development to conservation. As described below Disney proposes to implement a mitigation plan at Mira Lago that will provide regional ecological value and greater long term ecological and conservation value than the wetlands and surface waters to be impacted on the Proposed Project site.
The Mira Lago Compensatory Mitigation Plan (MLCMP) includes the following endeavors:

Execute and record Conservation Easement over the Mira Lago Parcel;
Wetland enhancement of 483.59 acres;
Wetland restoration 338 acres
Upland and wetland exotic species removal;
Perpetual maintenance and management of 3,004 acres.

8.3.7.2 Selection of the mitigation type and location, §332.3(b)(2)-(6), considered the following:

a. Uncertainty and Risk [*Uncertainty – the element associated with whether the compensatory mitigation will successfully offset project impacts. Risk – the element associated with the potential for the proposed compensatory mitigation plan to fail*]:

Permittee-responsible: The Permittee has successfully implemented a wetland/upland enhancement and restoration mitigation project at the Disney Wilderness Preserve, adjacent to Mira Lago. The techniques including ditch blocks, low water crossings, nuisance/exotic species management, prescribed fire are the same

techniques proposed at Mira Lago. In addition, these techniques are commonly used on mitigation projects throughout the region with high success. Disney has also demonstrated past mitigation success through the preservation and management of the 8,348 acres of wetlands and uplands associated with the Reedy Creek system known as the Wildlife Management Conservation Area (WMCA). Credits will be released as the mitigation areas meet performance standards and trends toward success.

Mitigation Bank: Credits represent the attainment of aquatic functions at the mitigation site. Released credits of the appropriate number and type eliminate the uncertainty that the mitigation will successfully offset project impacts. Released credits eliminate or significantly reduce the risk that mitigation will fail. Released credits represent a mitigation project that has been fully implemented, has undergone a specific program of data collection documenting the physical, chemical, and biological characteristics of the mitigation site (monitoring), and has fully met established ecological performance standards or displays a continuous and appropriate positive trend toward ecological success.

b. Size and ecological value of parcel; watershed approach [*how the site is ecologically suitable for providing desired functions – consider the physical characteristics, watershed scale features, size, and location; compatibility with adjacent land uses; and, likely effects on important resources*]:

Permittee-responsible: Mira Lago is 3,004 acres and has high ecological value based on the location within a network of conservation lands and the removal of development entitlements that would have resulted in a high density residential and commercial development. Mira Lago will also provide ecological contributions and improvement of watershed functions.

Mira Lago consists of approximately 3,004 acres, originally consisting of the Avatar parcel (±1,034 acres) and the Parker Poinciana (aka, Southeast) parcel (± 1,970 acres). Mira Lago is located south of the Poinciana development, west of and adjacent to the Disney Wilderness Preserve (DWP), in Sections 29, 30, 31, 32, Township 27 South, and Range 29 East, and Sections 4, 5, 6, 8, 9, 16, 17, Township 28 South, Range 29 East in Polk and Osceola Counties, Florida. Mira Lago is in the northern Kissimmee River watershed, near the headwaters, and drains generally south to Lake Hatchineha and ultimately to the Florida Everglades. In a regional context, it is the lone, remaining large parcel, entitled for development, located among a mosaic of other conservation lands including the DWP, Lake Kissimmee State Park, Lake Wales Ridge State Forest, Catfish Creek Preserve State Park, Southport Mitigation Bank, Hatchineha Ranch Mitigation Bank, Bullfrog Bay Mitigation Bank, and several other conservation lands.

The Mira Lago property has been identified within strategic areas of several federal, state, and regional landscape and ecosystem planning initiatives. These include areas

important for ecological connectivity, habitat for protected or rare species, and managing, restoring and protecting water resources. Examples of the importance of the Mira Lago property to the regional landscape include:

- FWS, Everglades Greater Headwaters National Wildlife Refuge - Mira Lago has been identified as a Tier One, Priority One parcel for acquisition in fee as a component of the FWS's Everglades Headwaters National Wildlife Refuge. Mira Lago is located at the northern end of the refuge's designated area and would comprise part of the 50,000-acre in fee acquisition for the overall 150,000 acres planned for the refuge.
- Critical Lands and Waters Identification Project (CLIP) - CLIP is a database of statewide conservation priorities focusing on such elements as strategic habitat conservation areas, potential habitat richness, rare species habitat conservation priorities, priority natural communities, landscape integrity and greenways network, significant surface waters, natural floodplains, and wetlands. The Florida Natural Areas Inventory (FNAI) maintains an interactive CLIP map that shows Mira Lago scored as a Priority 1 and Priority 2 site, the highest possible scores.
- Florida Forever - Mira Lago is included as part of the 2014 Florida Forever Priority List developed by the Acquisition and Development Council, the administrator of the state's premier conservation and recreation lands acquisition program, Florida Forever. Mira Lago actually incorporates within its boundaries one of three proposed parcels, identified as the "southeastern parcel", in the Lake Hatchineha Watershed project, which totals approximately 6,500 acres in Osceola and Polk Counties.
- Florida Fish and Wildlife Conservation Commission (FWC), Cooperative Conservation Landscape Blueprint (Blueprint) - FWC's Blueprint was initiated to facilitate implementation of the State Wildlife Action Plan, and it uses CLIP to focus on priorities one and two as its science base. While the study area boundary is located west of Mira Lago, the 2014report identified a wildlife corridor that extends to conservation lands associated with Kissimmee Chain-of-Lakes conservation lands, and ultimately Mira Lago.

Mitigation Bank: The bank site consists of a larger, consolidated mitigation parcel providing more ecological value to the watershed. The bank evaluation reflected a watershed approach that uses a landscape perspective that places primary emphasis on site selection through consideration of landscape attributes that will help provide the desired aquatic resource types and ensure they are self-sustaining. The watershed approach also considers how other landscape elements (e.g., other natural resources and developments) interact with compensatory mitigation project sites and affect the functions they are intended to provide.

c. Temporal loss [*the time between the initiation of the mitigation plan and the maturation of anticipated ecological functions at a compensatory mitigation site*]:

Permittee-responsible: A functional assessment was conducted over the proposed Mira Lago Compensatory Mitigation Plan using Uniform Mitigation Assessment Method (UMAM). The UMAM took into account time lag for the proposed mitigation endeavors to be completed, monitoring and documenting success. Disney proposes to construct the 12 site improvements within Mira Lago during the dry season (within 18 months of permit authorization) and prior to debiting any mitigation credits from the ledger. The MLCMP is anticipating complete success will be achieved within 8 years while impacts may occur until 2045. In addition, the existing Disney LTP has 94.51 credits remaining and available for use at the Disney Wilderness Preserve Mitigation Parcel.

Mitigation Bank: Availability of credits indicates that the mitigation project has already achieved an established level of maturity so there is no time loss between impact and compensatory mitigation.

d. Scientific/technical analysis, planning, and implementation [*as commensurate with the amount and type of impact, the level of scientific/technical evaluation required to appropriately and adequately assess the likelihood for ecological success and sustainability; the location of the compensation site and the significance in the watershed; and, other factors presented in a complete mitigation plan*]:

Permittee-responsible: The MLCMP has been analyzed from an ecological perspective to assess the effects of past hydrologic alteration on the site. The Permittee installed piezometers in October 2014 across the site to collect baseline hydrologic data for comparison with data following implementation of the hydrologic enhancements. Modeling of the effects of the site improvements resulted in positive ecological and hydrological benefits to the wetland on the site without adversely affecting offsite property owners. The MLCMP will be implemented following issuance of the federal, state, and local permits.

Mitigation Bank: Development of the bank involved extensive review by the Interagency Review Team (IRT), an assemblage of agency representatives with varying and specific scientific/technical expertise. The IRT adopts a consensus based approach in evaluating all aspects of the mitigation plan and the mitigation banking instrument, ensuring the plan takes into consideration the needs of the watershed and an understanding of the ecological processes that drive the functions in that watershed. The IRT ensures the site is appropriately located within the landscape, is sustainable, and has a high likelihood of ecological success. They ensure mitigation performance standards are based on objective and verifiable attributes that measure functional capacity; they ensure there is a management strategy that anticipates likely challenges and provides for the implementation of adaptive management measures to address those challenges and they evaluate any proposed modifications to the components of the mitigation plan and the banking instrument.

e. Long-term viability of mitigation/mitigation site [*how the compensatory mitigation project will be managed after performance standards have been achieved to ensure long-term sustainability of the resource*]:

Permittee-responsible: The Mira Lago site will be protected in perpetuity by a Conservation Easement and the MLCMP includes a perpetual long-term management plan. The long-term management plan includes funding for ongoing maintenance of the Mira Lago parcel.

Mitigation Bank: Long-term management plans, along with the real estate protection instrument and financial assurances, ensure the long-term viability of the mitigation site. The long-term management plan establishes a plan of action and associated timetable to implement actions to establish and maintain desired habitat conditions/functional gain within the bank. Representative management actions include but are not limited to, water level manipulation, herbicide use, and mechanical plant removal, and prescribed burning. The party responsible for the long-term management of the site was identified and evaluated to ensure capability of successfully managing the property.

f. Site Protection [*aquatic habitats, riparian areas, buffers, and uplands that comprise the overall compensatory mitigation must be provided long-term protection through real estate instruments or other available mechanisms, as appropriate*]:

Permittee-responsible: The Mira Lago site will be protected in perpetuity by a Conservation Easement with third party rights granted to the Corps.

Mitigation Bank: Site protection has been ensured through an approved real estate mechanism that is held by an appropriate third party; and, has undergone Office of Counsel review and approval. Existing restrictions, easements, rights of ways, or other encumbrances associated with the property have been extinguished or evaluated to ensure consistency/compatibility with the mitigation activities and long-term management of the property.

g. Financial Assurances [*description of financial assurances that will be provided and how they are sufficient to ensure a high level of confidence that the compensatory mitigation project will be successfully completed, as well as annual cost estimates for the long-term management needs of the site and the funding mechanism that will meet those needs*]:

Permittee-responsible: Disney has provided Letters of Credit for the initial management and construction and for monitoring, reporting, and maintenance activities that are proposed within the MLCMP.

Mitigation Bank: Financial assurances for bank implementation and long term management of the mitigation site have been established to ensure that a sufficient amount of money would be available for use to complete or replace the mitigation provider's obligations to implement the mitigation project and meet specified ecological performance standards in the event that the provider proves unable or unwilling to meet those obligations. The financial assurances considered the size and complexity of the mitigation project. The assurances are held by an approved entity; and, have undergone Office of Counsel review. Any modification, disbursement, or release of the assurances requires COE notification.

h. Other relevant factors [*additional information contributing to the appropriateness, feasibility, or practicability of the mitigation project (ESA, wildlife corridor, unique habitat, etc.)*]:

Permittee-responsible: The Mira Lago Compensatory Mitigation Plan will remove over 2,400 acres of development entitlements that exists on the parcels. The Mira Lago property is strategically located, the missing piece to the puzzle, to an overall area that has publically managed lands. The proposed endeavors at Mira Lago may also improve hydrologic areas within Disney Wilderness Preserve to the immediate east and allow for future control burns to continue on the Disney Wilderness Preserve property by removing the development rights from Mira Lago property.

Mitigation Bank: Contributions by IRT members with specific technical expertise provide input to ensure site selection and development are focused on maximizing benefits to water quality, wildlife, and specific species requirements. Watershed approach and size of mitigation site provide opportunity for wider array of ecological and direct species benefits.

8.3.7.3 Selection relied upon the following aspects of the Mitigation Plan, §332.4(c)(2)-(14): Please see the attached Mira Lago Compensatory Mitigation Plan (MLCMP) Information regarding each of the components to the MLCMP is briefly conveyed below.

a. Objectives: Mira Lago consists of approximately 3,004 acres, in the current condition with 2,146 upland acres and 858 acres of wetlands and surface waters. The MLCMP was designed from a landscape/watershed perspective and uses the most appropriate methods for developing, restoring, and managing Mira Lago's natural resources. Such an approach entails evaluating how the site fits into the local and overall regional landscape. The results of the evaluation are then compared with regional preservation/conservation efforts that have been implemented and/or are proposed by public and private entities in combination with the general development patterns and pressures on the region. This landscape approach has been utilized in the development of the MLCMP, evaluating the potential mitigation value, and constraints that may affect the plan. The MLCMP defines (1) the processes and procedures

needed to preserve, enhance, and/or restore on-site wetlands and uplands; (2) functional values resulting from the implementation; (3) implementation costs; and (4) constraints that may affect reaching the goals of the plan.

The purpose of the MLCMP is to protect and improve vegetative communities, to improve biodiversity, to provide habitat for wildlife with a focus on listed species, and to improve ecosystem function and resilience within Mira Lago and the surrounding region; achievement of this purpose will provide mitigation for the long term expansion and development on the Proposed Project sites in Disney's ownership. The goals and objectives of the environmental planning analysis consist of the following:

Short-term:
1. Create large management units or core areas that represent the native vegetation and wildlife habitats contained/restored within Mira Lago.
2. Protect sensitive areas, such as wetlands and critical areas, for listed and wetland-dependent species.
3. Enhance or restore altered habitats to their former state and function, to the extent practicable.
4. Restore more natural hydroperiods to formerly drained wetlands and expand habitat diversity.

Long-term:
1. Protect and maintain the complexity of Mira Lago's natural and historic habitats to support the continued function and connectivity of the Kissimmee Chain of Lakes, Everglades Headwaters National Wildlife Refuge (EHNWR), and the DWP.
2. Preserve and maintain corridors to connect regional habitats and ecological processes.
3. Preserve and maintain habitats for key wildlife species in the project area.

Native habitats are the primary focus of this MLCMP and include pine flatwoods and forested and herbaceous wetlands. The key wildlife species considered include white-tailed deer (Odocoileus virginianus), Florida wild turkey (Meleagris gallopavo osceola), gopher tortoise (Gopherus polyphemus), bald eagle (Haliaeetus leucocephalus), red-cockaded woodpecker (Picoides borealis), Florida scrub-jay (Aphelocoma coerulescens), eastern indigo snake (Drymarchon corais couperi), sandhill crane (Grus canadensis), and wading birds. Preservation, restoration, enhancement, and long-term management of native habitats on Mira Lago for these key wildlife species will provide, in turn, breeding, feeding, and sheltering habitats for a suite of resident and migratory species that can potentially use the mesic and hydric pine flatwoods, dry and wet prairies, and herbaceous and forested wetlands.

As proposed, implementation of the MLCMP will result in:
- Removal of development pressure from 2,428 acres;

- Restoration of 338 acres to wetlands;
- Enhancement of 483 acres of wetlands;
- Preservation and management of 858 acres of wetlands and 2,146 acres of uplands (in the current condition).

b. Site selection: Disney reviewed sites within the project site to identify significant conservation resources onsite that would provide sufficient mitigation for proposed unavoidable wetland impacts and support the Applicant's commitment to promote and lead regional conservation initiatives. The Permittee's past mitigation successes include the preservation and management of the 8,348 acres of wetlands and uplands associated with the Reedy Creek system known as the Wildlife Management Conservation Area (WMCA) and the establishment of the Disney Wilderness Preserve (DWP). The 8,500-acre DWP was established in 1992 to preserve, protect and enhance wetland and upland habitat. Today, DWP has grown to approximately 11,500-acre conservation area with the cooperation of other mitigation partners. Mira Lago is located adjacent to and west of the DWP. Establishment of Mira Lago as a mitigation site would complement and expand the regional mitigation and conservation successes within the basin that were started by Disney.

Mira Lago is in the northern Kissimmee River watershed, near the headwaters, and drains generally south to Lake Hatchineha and ultimately to the Florida Everglades. In a regional context, it is the lone remaining large parcel, entitled for development, located among a mosaic of other conservation lands including the DWP, Lake Kissimmee State Park, Lake Wales Ridge State Forest, Catfish Creek Preserve State Park, Southport Ranch Mitigation Bank, Hatchineha Ranch Mitigation Bank, and Bullfrog Bay Mitigation Bank. The Mira Lago property has been identified within strategic areas of several federal, state, and regional landscape and ecosystem planning initiatives. These include areas important for ecological connectivity; habitat for protected or rare species; and managing, restoring, and protecting water resources. As such, Mira Lago provides a unique and valuable site for conversion to conservation, completing an extensive network of conservation lands in the headwaters of the Florida Everglades.

In addition to a desired location for conservation, both historical and current activities on the site have adversely impacted onsite natural systems. Historic aerial photography (1941 through 1968) of Mira Lago depicts a series of site alterations (installation of canals, ditches, and roads) to drain on-site wetlands and improve access and site conditions for agriculture and timber operations. Alterations have included hydrological alterations, altered fire regimes, and intensive timbering activities which have resulted in reduced and altered hydroperiods within wetlands, loss of wetland habitat, and reduced quality of wetland and upland habitat for wildlife. In response, Disney has proposed the Mira Lago CMP which consists of a variety of hydrologic and vegetative enhancement and restoration activities, application of prescribed fire and exotic plant control. Mira Lago has high development potential and was entitled for development of high density

residential and commercial uses without buffers around wetlands. The goals of the Mira Lago CMP are to remove the development pressure and preserve the site, and to enhance and restore uplands and wetlands within the approximately 3,004-acre site to more natural/historic conditions.

Location within Conservation Network
The Mira Lago mitigation site has been identified within strategic areas of several federal, state, and regional landscape and ecosystem planning initiatives. These include areas important for ecological connectivity; habitat for protected or rare species; and managing, restoring, and protecting water resources Mira Lago was deemed important for conservation by U.S. Fish and Wildlife Service, Everglades Headwaters National Wildlife Refuge, Critical Lands and Waters Identification Project (CLIP), Florida Forever, Florida Fish and Wildlife Conservation Commission, Cooperative Conservation Landscape Blueprint (Blueprint), Florida Wildlife Corridor, and the Central Florida Water Initiative.

Development Potential/Entitlements
In 1983 and 1991, under pre-Development of Regional Impact (DRI) regulations, the Poinciana Planned Unit Development (PUD) consisting of several villages was approved by the Department of Community Affairs (DCA). The approvals included approximately 47,000 acres of development north and west, and included portions of the Mira Lago parcel. In the early 1990s, a total of 1,970 acres of Mira Lago, known as the Parker-Poinciana Southeast parcel was permitted for development through state and federal agencies and is currently platted as residential housing. Under the zoning designations and permits, the Parker-Poinciana (Southeast) parcel was entitled as a PUD with development of 5,232 development units with both institutional and commercial areas. These entitlements, without state and federal authorizations, also applied to the Avatar parcel and allowed for development with 3,294 single family units and 626 multi-family units for a combined total of 9,152 development units.

The approved development plans and permits included several wetland impacts and did not require upland buffers surrounding the wetlands that were planned to remain in the post-development condition. Mira Lago has high development potential and would likely have been developed if not acquired by the Applicant and designated for conservation. A land use change as currently proposed will result in a regionally important conservation contribution.

Ecological Conditions
Both historical and current activities on the site have adversely impacted onsite natural systems. Specifically, site alterations including installation of canals, ditches, and roads to drain on-site wetlands and improve access and site conditions for agriculture and timber operations have resulted in altered hydrology for the site. Additional alterations have included altered fire regimes and impacts associated with timbering activities.

Overall Mira Lago completes an extensive network of conservation lands in the headwaters of the Florida Everglades with opportunities for enhancement and restoration as well as furthering the goals of national, regional, and state conservation initiatives. The acquisition, land use change, and vacation of permits/entitlements, and MLCMP result in a substantial mitigative lift.

c. Site protection instrument: Approximately 2,146 acres of uplands and 858 acres of wetland habitat will be preserved under a conservation easement at the outset of the MLCMP. The conservation easements and management strategies provide significant regional conservation value and mitigation in excess of what is required to offset wetland impacts associated with Proposed Project activities. The securing of the site through a conservation easement is consistent with the goals and practices of the U.S. Fish and Wildlife Service and Everglades Greater Headwaters National Wildlife Refuge Northern Everglades Initiative. The site will be protected under a Passive Recreation Conservation Easement (PRCE) document with third party rights granted to the Corps to be recorded following issuance of final permits from SFWMD and the Corps. The PRCE will provide for the long term protection of Mira Lago from development, and enhance the value of continued management of adjacent existing conservation lands, and promote the continued private-public conservation initiatives pioneered by Disney and their partnership with TNC.

d. Baseline information: Mira Lago Mitigation Site
Historic aerial photography (1941 through 1968) depict a series of site alterations (installation of canals, ditches, and roads) to drain on-site wetlands and improve access and site conditions for agriculture and timber operations. Notable activities observed within the historic aerial photograph include:

- 1941 — Canal/Ditch adjacent to Wetland WPP-14 already present, installed prior to 1941
- 1944 — additional field roads were present
- 1952 — additional ditches on Avatar tract
- 1958, 1968 — agricultural activities noted; expanded land clearing, ditching, etc.

Agricultural practices throughout this period included cow-calf operation, rangeland, turpentine production, and timber. Currently cow-calf and grazing occur throughout the site. Roads traverse the site and include improved and unimproved roads. Two structures, formerly residences, occur on site.

Current Cover Types
Site reviews were conducted by BDA in November 2013 and April, May, June, August, September, and November 2014, and February 2015. The following information represents the conditions that were noted during those time periods.

**Uplands**

Improved and Unimproved Pastures (1188.46 acres): Vegetation consisted of Bahia grass (Paspalum notatum), Bermuda grass (Cynodon dactylon), tropical Mexican clover (Richardia brasiliensis), blackberry (Rubus sp.), and scattered live oak (Quercus virginiana), laurel oak (Quercus laurifolia), and slash pine (Pinus elliottii).

Palmetto Prairie / Mixed Rangeland (628.23 acres): Areas utilized by cattle but with a shrub layer are characterized as mixed communities of Palmetto Prairie (321) / Mixed Rangeland (330). Shrub vegetation is dominated by saw palmetto (Serenoa repens) and also includes sand live oak (Quercus geminata) and gallberry (Ilex glabra) with scattered longleaf pine (Pinus palustris), live oak, and laurel oak. Herbaceous vegetation includes wiregrass (Aristida stricta), lopsided indiangrass (Sorghastrum secundum), bottlebrush threeawn (Aristida spiciformis), Atlantic St. John's-wort (Hypericum reductum), tall elephantsfoot (Elephantopus elatus), Florida paintbrush (Carphephorus corymbosus), slender flattop goldenrod (Euthamia caroliniana), gayfeather (Liatris sp.), and running oak (Quercus elliottii).

Pine Flatwoods (142.22 acres): These areas (Pine Flatwoods [411]) are forested with a mixture of slash pine and longleaf pine, with lesser occurrences of cabbage palm (Sabal palmetto) and relic dahoon (Ilex cassine). Density of pine canopy varied widely across the site from moderate to dense areas in the Avatar parcel to sparse areas in the north-central portion of the Parker Poinciana parcel. The understory and shrub layer are dominated by saw palmetto, pine (Pinus sp.) and oak (Quercus sp.) taxa, and gallberry, with lesser occurrences of wax myrtle (Myrica cerifera). The herbaceous layer consists of grape (Vitis sp.) vine, gallberry, shiny blueberry (Vaccinium myrsinites), beaksedge (Rhynchospora sp.), purple bluestem (Andropogon glomeratus var. glaucopsis), and greenbrier (Smilax sp.).

Xeric Oak (50.8 acres): This area (Xeric Oak [421]) is characterized by abundant, low-growing oaks with only 5% canopy trees and less than 5% open sandy patches. Vegetation includes sand live oak, myrtle oak (Quercus myrtifolia), Chapman's oak (Quercus chapmanii), and scattered longleaf pine forming the low canopy. Shrubs and herbaceous vegetation include running oak, rusty staggerbush (Lyonia ferruginea), shiny blueberry, winged sumac (Rhus copallinum), Atlantic St. John's-wort, gopher apple (Licania michauxii), wiregrass, lopsided indiangrass, Florida paintbrush, and rabbit tobacco (Pseudognaphalium obtusifolium).

Upland Hardwood Forests (136.14 acres): These areas (Live Oak [427]) are dominated by live oak with lesser occurrences of slash pine, cabbage palm, and laurel oak. Shrubs in these areas include sapling-sized canopy taxa and saw palmetto. Herbaceous taxa includes broomsedge bluestem (Andropogon virginicus), carpetgrass (Axonopus sp.), gallberry, winged sumac (Rhus copallinum), greenbrier, bottlebrush

threeawn (Aristida spiciformis), and witchgrass (Panicum sp.).

Hardwood-Coniferous Mixed (0.66 acre): These areas (Hardwood-Coniferous Mixed [434]) consist of a co-dominant mixture of pine and oak taxa, such as laurel oak, slash pine, longleaf pine, water oak, and live oak. Shrubs include sapling-sized canopy taxa, wax myrtle, saw palmetto, myrtle oak, and gallberry. Herbaceous taxa include hardwood and coniferous taxa seedlings, as well as witchgrass, bluestem, grape, and greenbrier.

**Wetlands**

The landward extent of the wetlands within the Parker-Poinciana Southeast parcel of the mitigation site is based on the SFWMD/FDEP and the Corps formal jurisdictional approvals. The landward extent of the wetlands on the Avatar Parcel of Mira Lago was field verified by SFWMD and Corps personnel on May 23, 2014, and June 25, 2014, respectively. Wetland cover types present on the Mira Lago site include the following:

Cypress (560.92 acres): Cypress wetlands (Cypress [621]) are the majority of wetlands on the Mitigation site and consist of large connected systems and isolated systems. The majority of systems have a younger age class of cypress (Taxodium spp.) than would be expected, which may be due to hurricane damage or past logging. In addition, cattle utilized these areas heavily and may have trampled vegetative recruits. Vegetation is dominated by cypress, with slash pine encroachment noted in hydrologically impacted systems. Subcanopy and shrub taxa include laurel oak, highbush blueberry (Vaccinium corymbosum), dahoon, swamp bay (Persea palustris), wax myrtle, sweet bay (Magnolia virginiana), cabbage palm, and red maple (Acer rubrum). Herbaceous taxa include small fruit beggar ticks (Bidens mitis), narrowfruit horned beaksedge (Rhynchospora inundata), swamp fern (Blechnum serrulatum), falsefennel (Eupatorium leptophyllum), sandweed (Hypericum fasciculatum), combleaf mermaidweed (Proserpinaca pectinata), marsh mermaidweed (Proserpinaca palustris), Long's sedge (Carex longii), clustered sedge (Carex glaucescens), taperleaf waterhorehound (Lycopus rubellus), blue maidencane (Amphicarpum muhlenbergianum), blackberry, Carolina redroot (Lachnanthes caroliana), and eastern poison ivy (Toxicodendron radicans).

Wetland Forested Mixed (145.51 acres): These areas (Wetland Forested Mixed [630]) are similar to Cypress (621) but with canopy co-dominants of slash pine or laurel oak. Canopy taxa include laurel oak, swamp tupelo (Nyssa sylvatica var. biflora), cypress, slash pine, live oak, and red maple. Shrub taxa include laurel oak, fetterbush, saw palmetto, live oak, wax myrtle, slash pine, and swamp bay. Several of these areas also contain notable encroachment of saw palmetto and/or fetterbush (Lyonia lucida) into the wetland. Herbaceous taxa are similar to the Cypress (621) systems and include bluestem, cinnamon fern (Osmunda cinnamomea), Virginia chain fern (Woodwardia virginica), blackberry, Carolina redroot, swamp fern, common persimmon (Diospyros

virginiana), sphagnum (Sphagnum sp.), purple bluestem, and swamp bay.

Wetland Coniferous Forests (13.24 acres): These areas (Hydric Pine Flatwoods [625]) are co-dominated by slash pine and cypress with lesser occurrences of dahoon, cabbage palm, water oak, and laurel oak. Subcanopy and shrub taxa include wax myrtle, cabbage palm, laurel oak, and slash pine. Herbaceous taxa include witchgrass, big carpetgrass (Axonopus furcatus), Virginia chain fern, swamp fern, threeawn (Aristida sp.), beaksedge, yelloweyed grass (Xyris sp.), sphagnum, blackberry, maidencane (Panicum hemitomon), blue maidencane, and grassy arrowhead (Sagittaria graminea).

Freshwater Marsh (64.42 acres): There are a few Freshwater Marshes (641) within Mira Lago. Vegetation includes fireflag (Thalia geniculata), American cup scale (Sacciolepis striata), soft rush (Juncus effusus), spikerush (Eleocharis sp.), warty panic grass (Panicum verrucosum), sugarcane plume grass (Saccharum giganteum), clustered sedge (Carex glaucescens), pickerelweed (Pontederia cordata), blue waterhyssop (Bacopa caroliniana), narrowfruit horned beaksedge, maidencane, lizard's tail (Saururus cernuus), big floatingheart (Nymphoides aquatica), and dotted smartweed (Polygonum punctatum).

Wet Prairie (57.44 acres): These areas (Wet Prairie [643]) are located on the outer edges of Cypress systems or as isolated systems. Dominant taxa are sandweed, netted nutrush (Scleria reticularis), blue maidencane, combleaf mermaidweed, falsefennel, glade lobelia (Lobelia glandulosa), small fruit beggarticks, pineland rayless goldenrod (Bigelowia nudata), manyflower marsh pennywort (Hydrocotyle umbellata), spadeleaf (Centella asiatica), southern cutgrass (Leersia hexandra), and big carpetgrass. Wax myrtle and slash pine shrubs occur at various densities in these systems. Heavy cattle impacts were noted in the majority of the wet prairie systems on Mira Lago and included grazing, trampling, and soil compaction.

Ditches/Canals (16.23 acres): The ditches and canals (Channelized Waterways, Canals [512] / Ditches [516]) on the Avatar parcel contain a predominance of waterthyme (Hydrilla verticillata). Other vegetation within the ditches on the Avatar and Parker Poinciana parcels includes southern water grass (Luziola fluitans), pickerelweed, duckweed (Lemna sp.), torpedo grass (Panicum repens), spatterdock (Nuphar advena), wax myrtle, beaksedge, haspan flatsedge (Cyperus haspan), and soft rush.

Cattle Ponds/Other Surface Waters (0.04 acre): These reservoirs (Reservoirs [530]) contain water grass (Luziola sp.) and torpedo grass with scattered blue waterhyssop, pickerelweed, and seaside primrose willow (Ludwigia maritima). The areas are heavily utilized by cattle resulting in little vegetation, compacted soils, and poor water quality.

Hydrology
Mira Lago project is located within two drainage basins: Lake Marion Creek and Lake

Hatchineha. Soils are characterized as nearly level, poorly drained sandy soils that primarily support flatwoods and low, broad sloughs with lower depressional wetlands throughout the northern portion of the site. Soils transition to the south to nearly level, very poorly drained, loamy and mucky soils subject to flooding along Lake Hatchineha.

Historically, two wetland strands conveyed flow from wetlands to the north and contributing uplands and wetlands within the parcel through two flowways to Lake Hatchineha. The western flow way discharged into wetlands associated with London Creek along the western edge of the parcel. The eastern flow way discharged into a large wetland in the center of the parcel, and discharged to the southeast through the DWP, back into the Mira Lago Parcel, and eventually into Lake Hatchineha. The large wetland also discharged to the west into London Creek.

A series of ditches, canals, field roads, and wetland crossings constructed over the past 50 years have significantly altered the hydrology of the site. Wetland functions related to hydrology can be classified as follows: flood control, groundwater recharge and discharge, and shoreline anchoring and dissipation of erosive forces. A large ditch is visible in the 1941 aerial connecting the central wetland to Lake Hatchineha, altering the direction of flow through DWP. The ditch reversed the direction of flow from east, off-site through the DWP, to west, and draining the off-site DWP wetland system and other adjacent wetlands. Throughout the 1940s and 1950s numerous drainage ditches were installed across the site altering the hydrology. Two significant ditches are evident on the 1952 aerials channelizing wetland flow in the northwest and northeast portions of the site. Additionally, in the 1980s, concurrent with the construction of the developments to the north, canals were constructed to facilitate the flow from the adjacent Poinciana Villages to the north through Mira Lago. Two additional canals receive off-site runoff from the Poinciana site and discharge into a cypress dominated strand. A third canal also receives off-site runoff from the Poinciana parcels and DWP to the north and east via a single canal that terminates within a large wetland system in the northeast.

The decades of hydrologic alterations on the Mira Lago site have significantly reduced the wetland functions provided by the site. The reduced hydrology resulting from the ditching of the site has limited on-site and off-site flood water storage capacity, groundwater recharge, and resulted in soil oxidation and the prevalence of inappropriate transitional and upland vegetation within the historic limits of the wetlands. Additionally, the cypress strand which receives flow from canals in the northwestern portion of the site has evidence of erosion, scouring, and channelization indicative of altered hydrology. Vegetative shifts in community structure from hydrophytic vegetation to transitional and upland species with the understory of many of the wetlands located adjacent and connected to the canals were noted during BDA site reviews. Many of the herbaceous wetlands in the northeast portion of the site depicted within the 1941 and 1952 aerials are dominated by slash pine and greatly reduced in area.

Wildlife Utilization
Wildlife recorded on the Mira Lago site, using methods such as direct observation, audio/call, or sign (scat, tracks, etc.) include the following:

Amphibians: Florida cricket frog (Acris gryllus dorsalis), green treefrog (Hyla cinerea), little grass frog (Pseudacris ocularis), oak toad (Bufo quercicus), pig frog (Rana grylio), pine woods treefrog (Hyla femoralis), and southern leopard frog (Rana sphenocephala utricularia)

Reptiles: American alligator (Alligator mississippiensis), black racer (Coluber constrictor), cottonmouth (Agkistrodon piscivorus), eastern indigo snake (Drymarchon couperi), and gopher tortoise (Gopherus polyphemus)

Birds: American crow (Corvus brachyrhynchos), American kestrel (Falco sparverius), American swallow-tailed kite, anhinga (Anhinga anhinga), bald eagle, barred owl (Strix varia), belted kingfisher (Megaceryle alcyon), black-throated blue warbler (Setophaga caerulescens), black vulture (Coragyps atratus), blue-gray gnatcatcher (Polioptila caerulea), brown-headed nuthatch (Sitta pusilla), Carolina wren (Thryothorus ludovicianus), cattle egret (Bubulcus ibis), Chuck-will's-widow (Caprimulgus carolinensis), downy woodpecker (Picoides pubescens), eastern towhee (Pipilo erythrophthalmus), gray catbird (Dumetella carolinensis), great blue heron (Ardea herodias), great egret (Ardea alba), limpkin (Aramus guarauna), mourning dove (Zenaida macroura), northern bobwhite (Colinus virginianus), northern cardinal (Cardinalis cardinalis), northern mockingbird (Mimus polyglottos), northern parula (Parula americana), osprey (Pandion haliaetus), pileated woodpecker (Dryocopus pileatus), pine warbler (Dendroica pinus), red-shouldered hawk (Buteo lineatus), red-winged blackbird (Agelaius phoeniceus), sandhill crane (Grus canadensis), scissor-tailed flycatcher (Tyrannus forficatus), snowy egret (Egretta thula), tricolored heron (Egretta tricolor), tufted titmouse (Baeolophus bicolor), turkey vulture (Cathartes aura), white-eyed vireo (Vireo griseus), wild turkey (Meleagris gallopavo), and wood stork (Mycteria americana)

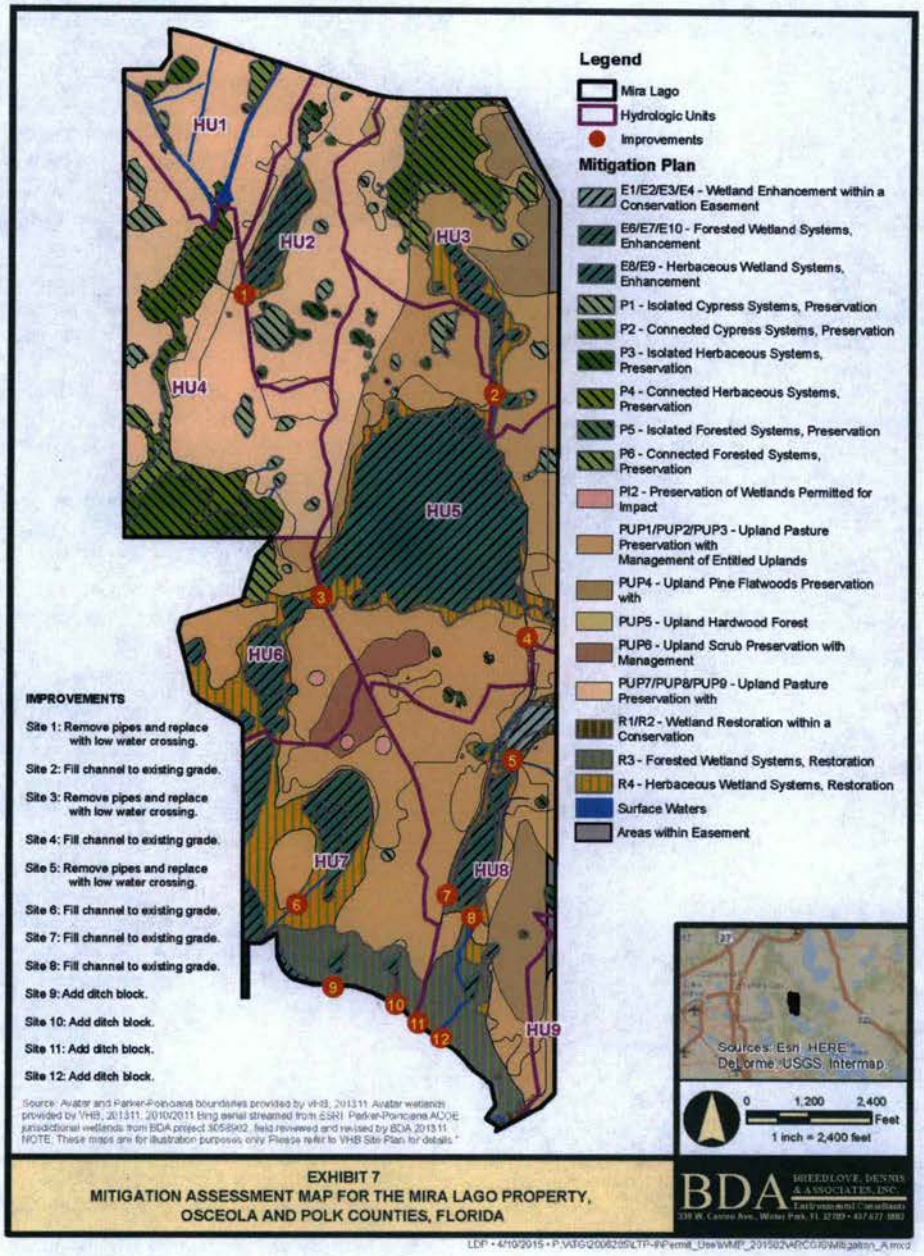
Mammals: bobcat (Lynx rufus), cottontail rabbit (Sylvilagus sp.), eastern gray squirrel (Sciurus carolinensis), nine-banded armadillo (Dasypus novemcinctus), raccoon (Procyon lotor), white-tailed deer (Odocoileus virginianus), and wild boar (Sus scrofa)

e. Determination of credits (including assessment of Indirect and Secondary Effects and Impacts in wetlands): A functional assessment using UMAM was conducted by the Corps. The Corps determined that the MLCMP could provide up to 575 mitigation credits by the attainment of functional capacity improvements. The Corps has outlined a release schedule for the 575 functional units based upon successful completion of the performance standards.

f. Mitigation work plan: General Compensatory Mitigation Plan
Mira Lago currently consists of approximately 2,146 acres of uplands and 858 acres of wetlands and surface waters. As a first step, recording a conservation easement over the Mira Lago property will set aside the site as conservation lands in perpetuity. Implementation of the hydrologic improvements and the habitat management actions will improve wetland and upland habitats for use by wildlife, further the goals of federal and state conservation programs, including the Kissimmee River Restoration Project and EHNWR, protect the continuation of conservation and restoration efforts on the DWP, and add a key corridor component to the existing public and private conservation efforts in the Kissimmee Chain of Lakes.

Information acquired from the on-site reviews, hydrologic modeling, and the proposed enhancement activities resulted in the identification of nine hydrologic units (HU), in which to implement conservation measures necessary to promote on-site and regionally significant conservation efforts on the property that will provide for compensatory mitigation of wetland fill impacts. Hydrologic Units Nos. 1 through 9 are bounded by property lines for discussions of the MLCMP, onsite hydrologic basin boundary lines, and existing man-made features, which facilitate segregating land prescription practices within the geographic confines of a particular unit. Existing roads and other infrastructure will be used for containing controlled fires, implementing timber management, or conducting other management activities.

Implementation of the mitigation plan and installation of the 12 site improvements consisting of ditch blocks and low water crossings is expected to result in the restoration/reestablishment, preservation, and enhancement of approximately 1,180 acres of wetlands (for a total of approximately 1,196 acres of wetlands and surface waters in the post-CMP condition) and preservation (with enhancement and management) of approximately 1,808 acres of uplands (Exhibit 5).




Lands within HU1 through HU3 on the northern portion of the Mira Lago project are located adjacent to the existing developments north and west of the project. Implementing components of the mitigation plan in these units has to balance the ecological benefits of restoration and management with the off-site effects to the adjacent development.

Wetland hydrologic enhancement and restoration is not possible within HU1 without risk

of potential increase in off-site flooding during specific rain events. Mitigation within HU1 will be provided through upland and wetland preservation and management.

Hydrologic Unit HU2, which is bordered by development to the north and HU1 and HU3 to the east and west, will include preservation and management of uplands and wetlands along with wetland enhancement and restoration. The wetland enhancement and restoration will be accomplished through the installation of an agricultural ditch block to restore the natural hydroperiod and duration and frequency of inundation within the wetlands.

Hydrologic Unit HU3 is located in the northeast section of the project and bound by DWP to the east, development to the north, and HU2 and HU5 to the west and south, respectively. Mitigation activities within HU3 will include wetland enhancement, wetland restoration, and wetland and upland preservation and management. The enhancements and restoration of the wetlands within this unit will be achieved through the installation of a ditch block within the north-south ditch.

Hydrologic Unit HU4 is bound by HU1 to the north, HU5 to the east, and the western property boundary. Mitigation benefits in HU4 will include upland and wetland preservation and management.

Hydrologic Unit HU6 is located south of HU4 and is bound by the western project boundary and HU7. Mitigation anticipated within this unit will include upland preservation and wetland enhancement and restoration. HU6 wetland improvements are the result of the removal of the elevated and culverted road between HU5 and HU6 and improved flow resulting from hydrologic improvements within HU5 and HU8.

Wetland enhancement and restoration within HU5 and HU8, located south of HU3 and along the eastern boundary of Mira Lago, will result from the installation of several ditch blocks within the large north-south canal that was constructed prior to 1941. The wetlands adjacent to the canal within these units will be enhanced from increased hydroperiods and extended duration of inundation and the restoration of natural flow patterns. Additional ditch blocks will be installed in the southern boundary of the project within a series of smaller ditches. The restoration of historic flow patterns within HU5 increases the depth and duration of inundation within the large central wetland (Wetland WPP-14).

Hydrologic Unit HU7 is located between HU6 and HU8 in the south central portion of the project. Wetland enhancement and restoration within HU7 will result from hydrologic enhancement of the large central wetland by removing the influence of drainage from the ditch. Additional mitigation lift will be realized within HU7 through wetland preservation and upland enhancement and preservation.

Hydrologic Unit HU9 is located between the southeaster property boundary and HU8. Mitigation benefits in HU9 will include upland preservation and management, and a small area of restoration along the southern project boundary.

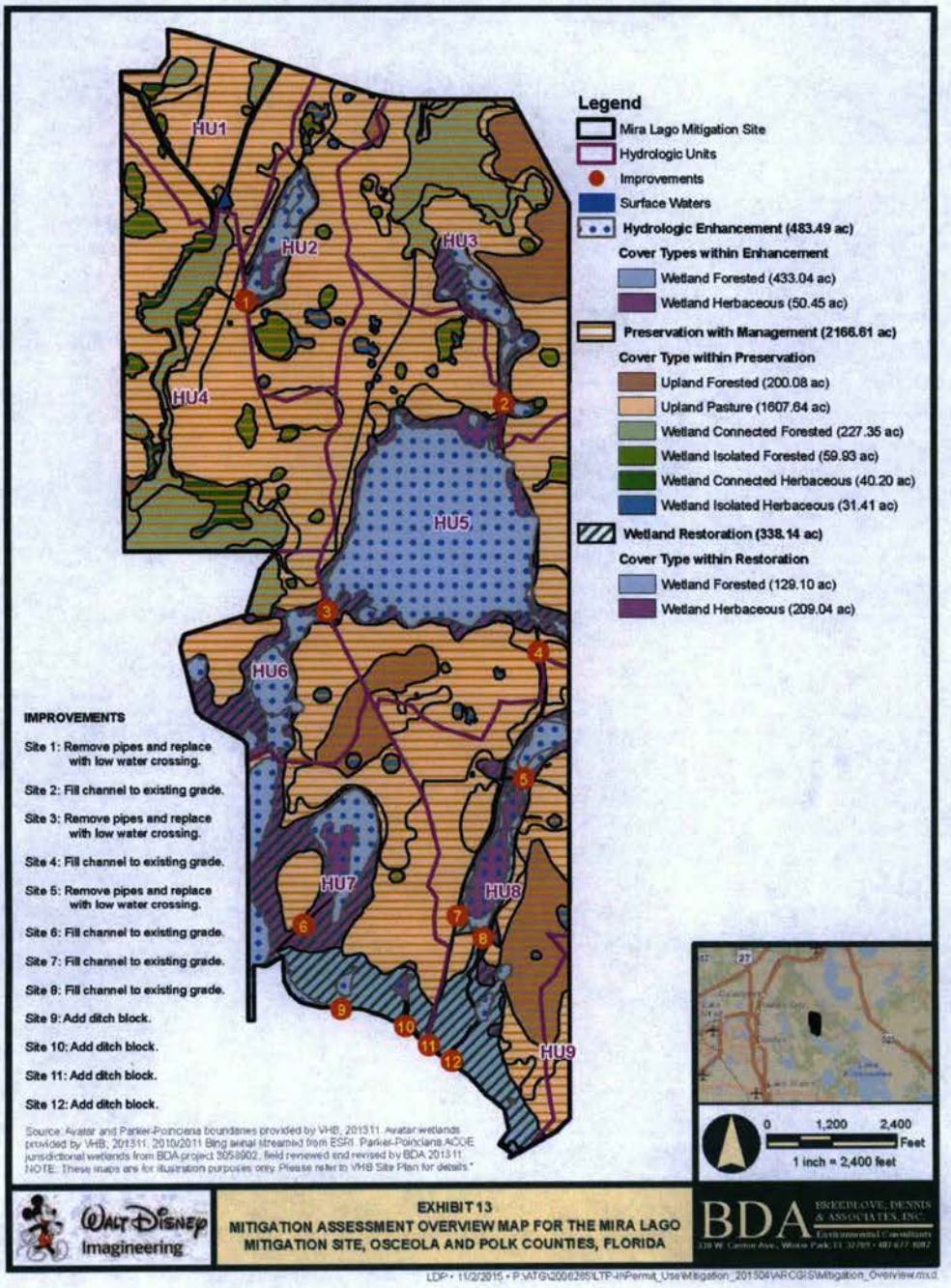
A major wetland impact that has occurred on Mira Lago has been the excavation of the large north-south canal along the eastern boundary and other ditches throughout the project. A series of hydrologic alterations drained on-site and off-site wetlands, thereby reducing the hydroperiod, depth of inundation, geographical extent of the adjacent wetlands, and surface sheet flow. These alterations resulted in a shift in the vegetative communities within the affected wetlands, allowing for inappropriate species, shrubs, pines, and saw palmetto to encroach and, in some instances, dominate the wetland understory and wetland edges that would have historically supported herbaceous wetland species. The reduced hydroperiod and water table drawdown has altered flow patterns on the site. Large areas of hydric soils, primarily in the southern portion of the site, that historically would be saturated for much of the year and support wetland vegetation are uplands and mesic transitional areas supporting facultative and upland vegetation. Restoration of surface flow regimes and water levels within wetlands is expected to hydrate adjacent uplands and restore the historic limits of the wetlands (areas that were historically wetlands) and seepage slopes. This is particularly evident when comparing acreages from current to post-CMP conditions: current uplands total approximately 2,146 acres and post-CMP upland acreages total approximately 1,808 acres. The hydrologic enhancements proposed, coupled with active on-site management, will result in wetland restoration and enhancement. Active management of the upland and wetland preservation areas will reduce the effects of the historic alterations and provide mitigation for off-site wetland impacts while restoring wildlife habitat and further regional ecological goals. VHB construction details and plans for the site improvements are provided in Attachment 2.

Wetland Restoration and Enhancement

The objectives of the CMP for Mira Lago wetlands were to restore and/or re-establish natural wetland hydroperiods and historic water flow throughout the site. The limitations and constraints due to existing residential developments will not permit hydrologic restoration and enhancement of the wetlands within management units HU1 and HU4 at this time. However, implementation of nuisance/exotic removal, fire, and other management strategies were provided for enhancement activities.

Wetland enhancement and restoration was determined possible within HU2, HU3, and HU5 through HU9. The wetland restoration/enhancement plan generally consists of three components: 1) hydrologic restoration - restoration of the historic hydrologic flow regime of the site towards Lake Hatchineha through removal of ditch influences to the greatest extent practicable; 2) incorporation of low water crossings to act like overflow weirs at strategically located sites to allow sheet water flow throughout portions of the site; and 3) hydrologic enhancement - increasing the duration of inundation in wetland

systems to restore the hydrologic regime of wetlands that are now subjected to ditch/canal drawdown influences.



The hydrologic and hydraulic modeling data were utilized to design and locate ditch blocks and overflow areas with the objective to restore the historic hydrologic flows through contiguous wetlands and overland flows and soil saturation to convert mesic uplands to the wetlands they once were while ensuring no or limited alteration to hydrology within the residential developments to the north and west. The hydrologic improvements were not designed to control off-site effects within the DWP and SFWMD London Creek conservation areas. On the contrary, the placement of certain ditch blocks and crossings were designed to improve off-site hydrology and flows to improve regional conservation. The landowners of these parcels are in favor of the hydrologic improvements. Drainage easements or other form of agreement will be necessary between the affected parties. Specific detail for each HU is planned as described in the subsequent paragraphs.

The hydrologic restoration plan within management unit HU2, an area comprising approximately 220 acres, will use the existing roadway as a ditch block at an elevation of 61 feet NGVD which, in turn, is designed to restore the natural hydrology by enhancing the existing wetland and restoring the hydrology sufficiently to restore (convert transitional and mesic uplands to wetlands) the historic limits of the wetlands. Existing vegetative communities will be maintained and/or restored within this area, and previous disturbances and alterations to these communities associated with the ditching and draining of this site will be removed. The hydrologic enhancements coupled with the fire management activities will reduce pine, palmetto, and shrub coverage adjacent to the wetlands and is expected to restore the herbaceous wetland prairie and expand the wetland marsh communities.

Approximately 24 acres comprising HU3 in the eastern portion of Mira Lago will be hydrologically enhanced and 27 acres of wetlands will be restored. Installation of a single ditch block is designed to reduce the drawdown influences from the ditch located within and along most of the wetlands within HU3. The residential development to the north created a condition that limited the design elevation of the ditch block and also the extent of the wetland restoration and enhancements to less than the 1941 condition. Removal of ditch influences will partially restore the hydrologically drained condition of these wetlands and support hydrologic regimes that restore the slough-like flows of the wetland systems.

The management unit HU5 is dominated by the large cypress wetland WPP-14. A large canal was constructed within the southeastern edge of the wetland draining HU5. Hydrologic enhancement within HU5 will result from the installation of a single ditch block within the northern extent of the canal. The ditch block is expected to increase normal pool elevations approximately 0.5-foot resulting in the enhancement of Wetland WPP-14 and restoration of 43 acres of wetlands. Additionally, removal of the ditch/canal influences will alter the flow regimes between the off-site wetlands to the east, within DWP, and west, HU6.

Restoration activities in HU6 will include the removal of the elevated and culverted roadway between HU5 and HU6. A total of approximately 40 acres of wetland enhancement and 36 acres of wetland restoration are expected from the removal of the impediment of flow from the roadway and increased flows resulting from the improvements in HU5. Additionally, benefits are expected off-site within the SFWMD London Creek parcel.

The greatest extent of wetland restoration is expected to occur within the management unit HU7. Unit HU7 is located within the southwest and south central part of Mira Lago. Restoration activities within HU7 include the installation of a ditch block at the southern end of Wetland WPP-29, establishment of a low water crossing, and minor grading along the southern field road. The installation of the ditch block at 58 feet NGVD will allow the restoration of the historic water elevations within Wetland WPP-29. The wetland will periodically reach its maximum elevation of 58 feet NGVD resulting in surface sheet flows to the west and south. Installation of a low water crossing and minor grading of the field road will allow overland flow to Lake Hatchineha restoring historic saturated soil conditions capable of supporting wetland vegetation. These restoration activities are expected to result in the enhancement of approximately 77 acres and restoration of 124 acres of wetlands.

The management unit HU8 is located in the southeast portion of Mira Lago and includes the majority of the north-south canal that originates in HU5. Restoration activities in HU8 are expected to further eliminate the influences of the canal. These activities will include the installation of a series of ditch blocks within the canal, removal of the elevated and culverted road bisecting Wetland WPP-32, and the installation of a smaller ditch block in the ditch at the southern end of Wetland WPP-32. These improvements are expected to restore the water level elevations and hydroperiods within Wetland WPP-32 and overland flows south into Lake Hatchineha. The overland flows and historic hydroperiods are expected to restore soil saturation conditions capable of supporting wetland vegetation along the southern extent of the parcel. The restoration activities are expected to result in the enhancement of approximately 52 acres and restoration of 96 acres of wetlands. Some restoration affects are expected to continue into a small area of HU9 (0.65 acre), adjacent to the southern project boundary.

The wetland restoration and enhancement activities were designed to restore the hydrology of the Mira Lago site to its historic conditions where possible, while minimizing potential negative off-site affects to the established residential developments to the north and west. The plan is expected to result in approximately 483 acres of enhancement to the existing wetlands and 338 acres of wetland restoration. Construction drawings of the site improvements (ditch blocks and low water crossings) were provided previously.

Upland Preservation and Management

The objectives for uplands in the CMP were to manage and improve current site conditions to provide optimal habitat for wildlife species with a particular focus on the habitat needs of listed species and support for wetlands. Approximately 1,808 acres of uplands are slated to be preserved and managed as longleaf pine and slash pine flatwoods, oak scrub, and dry prairie following implementation of the CMP; this represents a reduction in uplands due to wetland restoration and enhancement activities that will convert some current uplands back to the historic wetland condition. Longleaf pine and slash pine flatwoods cover types are located in more well-drained areas associated with the higher topographic elevations within Mira Lago. The management of the various cover types within the preserved uplands will include vegetative nuisance/exotic (N/E) species control, mechanical treatment and selective pine harvesting or thinning, and burn management. Dry prairie will consist of approximately 81 acres of areas previously used as pasture. The scrub oak, composed of approximately 51 acres, is located within the south central portion of Mira Lago. The preponderance of the land use will consist of approximately 1,648 acres of well-drained pine flatwoods.

Dry prairie will be restored on soils where improved pastures were used for grazing. Native cover will reestablish once grazing pressure is reduced and frequent burning is established. Native vegetation is expected to recruit from the surrounding flatwoods and palmetto prairies. These areas will also be maintained to manage N/E vegetation that may be present, such as tropical soda apple (Solanum viarum), cogongrass (Imperata cylindrica), and/or Chinese tallow tree (Sapium sebiferum).

Approximately 51 acres of oak scrub exists within HU6, HU7, and HU8. The area could be improved and provide potential suitable Florida scrub-jay habitat with management. Mechanical treatment (roller chopping) prior to a control burn would reduce the palmetto cover and open up sandy patches required for optimal Florida scrub-jay habitat. Timbering or girdling the large, overgrown oaks along the perimeter of the low-growing oak area followed by a controlled burn would increase the acreage of Florida scrub-jay habitat by reducing oak densities and stimulating the growth of low growing oaks preferred by Florida scrub-jays. Once the habitat reaches the optimal height and condition suitable for Florida scrub-jays, an eight to 15 year burn cycle would be necessary to maintain the habitat. Fire that occurs frequently in scrub habitat maintains the principal oak species below acorn-bearing height and encourages the spread of saw palmetto.

The well-drained pine flatwoods will consist of existing longleaf and slash pine flatwoods thinned to a basal area ranging from 30 to 50 square feet (sq. ft.), in most cases, to promote forage and improve nesting habitat for red-cockaded woodpeckers. The northeast and east central pine flatwoods within HU3, HU5, and HU8, contain suitable red-cockaded woodpecker habitat. DWP has documented red-cockaded woodpeckers

foraging on the Mira Lago project. Parts of the mesic pine flatwoods within HU7 and HU8 may be thinned to 80 sq. ft. /acre to promote cover and foraging areas for turkeys, deer, and other mammals. Any longleaf pine that may be encountered in a survey of the stands prior to logging will be marked as "leave trees" to ensure their continued existence as a component of the forest and for use as potential seed trees. Thinning pines to a basal area of 30 to 50 sq. ft. /acre will open these stands significantly to mimic native mesic flatwoods conditions.

Thinning of flatwoods is expected to occur before or concurrent with site preparation activities on Mira Lago. Thinning is a forestry tool that will be employed in the management conservation area over the long term, since the basal area of trees increases over time and stands need thinning to maintain the range of 30 to 50 sq. ft. basal area. It is envisioned that thinning harvests will generally occur every ten to 15 years, as necessary, until stands mature.

Upland habitats throughout the project will be subject to an aggressive burn management program to control and minimize shrub and palmetto coverage and improve coverage and diversity of vegetative species. The control burn schedule for pine flatwoods would likely be on a two to three year cycle, targeting the overgrown areas first, while scrub habitats would be on an eight to 15 year cycle. Field roads, existing ditches, and wetlands will be used as borders for management units, as necessary. Wildfires that occur within the Mira Lago parcels will be allowed to burn within management units as long as it is safe to do so and the extent of the wildfire and controlled burns will be mapped for determining burn sequencing and habitat needs.

Tasks

The activities, costs, and schedule to implement the CMP have been defined within the SFWMD and Corps permitting processes. The on-site activities necessary to implement the MLCMP can be divided into three categories: 1) Initial Tasks, 2) Recurring Tasks, and 3) Long Term Management. Estimates of cost and the schedule for implementation are included in the complete CMP. The activities anticipated to implement the CMP are presented as a single phase as the scope of the individual tasks. Construction activities could be completed within 6-18 months. The controlled burn management is expected to be implemented on a three year cycle.

Initial Tasks

Initial tasks include those activities that are required solely to initiate the mitigation plan. As part of the mitigation plan, a conservation easement will be recorded over the parcel. The time frame for completing this action is tied to issuance of both the SFWMD and Corps final permits and estimated to be complete within six months of permit approval. Two additional items included within the initial tasks are the activities associated with the initial land management and wetland enhancement and restoration activities. Nuisance/exotic plant control and fire regimes will be implemented as soon as possible

to prevent proliferation of N/E.

The initial land management items include roller chopping and tree thinning to enhance upland habitats for Florida scrub-jay and red-cockaded woodpecker, and the controlled burn management of one third of the upland habitat, including the Florida scrub-jay and red-cockaded woodpecker habitats. Controlled burn management of the site has been scheduled to occur over a three year cycle. A three year burn cycle provides cover and forage within two thirds of the site while the control burn is occurring. The initial land management is expected to be completed over the first year following the permit approvals since the tasks will be weather dependent and sequential.

The wetland enhancement and restoration activities include the installation of the 12 site improvements. Construction is expected to take 6-12 months. This task has been scheduled to be completed within 18 months after permit approval to allow for the bidding and contracting, dry season construction, and any potential scheduling constraints associated with listed species. Piezometers were installed in October 2014 to collect data on the pre-project condition.

Best management practices for construction - such as silt screens, turbidity curtains, and dry season construction - will be used to ensure that existing wetlands near the site improvements are protected from construction-related sedimentation and turbidity. It should be noted that the majority of wetlands occurring on-site are removed from the potential effects of construction. Further, measures described in this CMP provide for long-term benefits to wetlands both on and off-site by restoring natural hydrological processes and connections within wetland communities; thus, providing significant ecological lift and regional benefit.

Recurring Tasks

Recurring tasks are the activities that occur routinely and are necessary for the implementation of the CMP or for evaluating the effectiveness of the plan. These items include controlled burn management, maintenance and control of N/E vegetation, and monitoring and reporting. The costs for the recurring tasks are presented over a period of six years in the complete CMP.

The primary management component of the upland preservation areas on the site is the burn management program. As previously stated, the goal of the control burn management is to reduce the density of palmetto and shrub within the pine flatwoods and scrub communities to establish and improve wildlife habitat. A two to three year and eight to fifteen year fire rotations are proposed for the pine flatwoods and scrub habitats, respectively. Approximately one third of the uplands will be scheduled for management each year. Areas of dense understory will be evaluated on a case by case basis to determine if more frequent burns are necessary to meet the management goals.

Management of N/E vegetation is expected to be a permit requirement. Few areas of N/E vegetation were noted during the November site reviews. Areal coverage of N/E vegetation was estimated at less than five percent. The majority of the N/E vegetation was located in association with the most intense site alterations, improved pastures, and the large canals. Maintenance is expected to occur quarterly and include hand removal and herbicide application due to the limited coverage.

Monitoring and reporting will be required to evaluate and measure the effectiveness of the CMP at attaining the permitted success criteria. Semiannual monitoring and reporting is typically required by the agencies for mitigation projects of this size. Monitoring will include collecting vegetative and hydrologic data throughout the hydrologic units. Multiple transects, 12 automated water level recorders, and photographic stations will be permanently established throughout the site to evaluate the increased hydroperiod, duration of inundation, vegetative changes, and site conditions. The data will be compiled, analyzed to determine the extent the restoration activities are successful, and reported as required by the permits. Monitoring and reporting will also be useful in identifying opportunities for adaptive management to improve the restoration and/or areas of where additional lift may have been generated or available. Release from or reduction of the monitoring and reporting will be dependent on the success of the attainment of the restoration goals and agency approvals and may extend beyond the six years budgeted.

g. Maintenance plan: Following completion of construction, maintenance activities to be conducted will include periodic inspection of water management structures and low water crossings, periodic review of fire lanes and trails. Repairs will be completed to these areas as required. In addition, maintenance will be necessary to perimeter fencing and gates. The MLCMP includes exotic and nuisance species maintenance.

h. Performance standards: To meet the objectives of the approved compensatory mitigation plan, the Permittee shall achieve the following performance standards as outlined in MLCMP which includes 9 hydrologic units (HU):

a) Submit the executed conservation easement (with the Corps as 3rd Party Beneficiary Rights) over the 3,004 acre Mira Lago parcel;
b) HU's 1 and 4 Performance Standards include:
(1) Cover of Category I and II invasive exotic plant species, pursuant to the most current list established by the Florida Exotic Pest Plant Council at http://www.fleppc.org, shall be less than 5 percent of coverage (measured independently) in each wetland and upland area; and the nuisance species shall total less than 10 percent coverage (measured independently) in each wetland and upland area;
(2) At least 80 percent cover by appropriate wetland species (i.e., FACW or OBL) within the canopy, shrub and ground cover;

(3) Natural recruitment of desirable wetland plant species in the ground cover, shrub, and canopy within the wetland areas and upland plant species within the upland areas;
(4) At least 75 percent relative cover by appropriate upland species within the canopy, shrub and ground cover similar for the targeted communities within the upland areas;
(5) Demonstrate improved diversity and usage by native wildlife species typical of that found in the upland and wetland communities.

c) HU's 2 3, 5, 6, 7, 8, and 9 Performance Standards:
(1) Each HU Wetland enhancement area (forested and herbaceous areas) shall have at least 80 percent absolute cover by appropriate wetland species with a OBL or FACW indicator status;
(2) Wetland enhancement areas shall be inundated 6-8 months per year with normal wet season water depths of .5 – 1.5 ft.
(3) Upland enhancement areas shall have at least 75 percent relative cover by appropriate upland species within the canopy, shrub and ground cover strata for the targeted communities;
(4) Cover of Category I and II invasive exotic plant species, pursuant to the most current list established by the Florida Exotic Pest Plant Council at http://www.fleppc.org, shall be less than 5 percent of coverage (measured independently) in each wetland and upland area; and the nuisance species shall total less than 10 percent coverage (measured independently) in each wetland and upland area;
(5) Natural recruitment/regeneration of desirable canopy wetland species in the understory;
(6) Demonstrate that 338 acres of wetlands have been restored/reestablished within the HU's by documenting that the Corps wetland jurisdictional areas have expanded over the baseline conditions;
(7) Demonstrate that hydrologic conditions have improved over baseline conditions within these HU's with evidence such as water marks, adventitious roots, standing water, etc.)
(8) Demonstrate improved diversity and usage by native wildlife species typical of that found in the upland and wetland communities.

i. Monitoring requirements: The monitoring program established for Mira Lago is designed to track and document the expected progression of changes anticipated to occur within the preservation, restoration, and enhancement areas of the site. The progression of changes that will occur is based on the management program for the conservation areas which will include hydrologic enhancement/restoration, varying degrees of thinning or removal of planted slash pine, prescribed fire, maintenance of N/E species, and adaptive management strategies.

Monitoring Plan
The baseline monitoring event will provide the basis for comparisons with subsequent

monitoring events, to determine and document conditions of preserved areas over time and thus the success of mitigation in compliance with permit requirements. Nuisance plant species will be maintained below 10% total areal cover, and exotic plant species will be maintained below 5% total areal cover as part of the mitigation activities.

The general components of the monitoring plan and data consist of vegetative, hydrologic, and wildlife attributes. The combined data obtained from the measurements and observations of these components will provide the basis for interpretation of the success of the restoration, enhancement, and preservation efforts. A baseline monitoring event will be conducted prior to the implementation of the restoration, enhancement, and preservation efforts to document pre-mitigation conditions. Post-mitigation conditions will be monitored semiannually within the Mira Lago conservation areas to document the patterns of hydrologic change, recruitment, and regeneration of desirable wetland and upland canopy, shrub, and groundcover species, and continued utilization by wildlife species. The monitoring program for the conservation areas will consist of qualitative [for the Preservation areas] and quantitative [for the Enhancement and Restoration areas] vegetative monitoring and hydrologic monitoring. The details for the types of monitoring and respective subject areas are provided herein.

Qualitative Vegetative Monitoring Program
The qualitative vegetative monitoring program established for the Mira Lago conservation areas is designed to document conditions within the wetland and upland preservation areas. Approximately 358 acres of wetlands and 1,808 acres of uplands will be preserved throughout the site.

A total of 11 qualitative assessment monitoring stations will be established in areas considered representative of the conditions occurring within preserved uplands and wetlands. Each station will be monumented with a polyvinyl chloride post anchored into the ground and will be located with Global Positioning System for permanent reference. The qualitative data collected at each station will consist of the recording of common plant species present in each stratum (canopy, shrub, and groundcover), an estimate of the percent areal cover of N/E vegetation, observations of wildlife, evidence of recent fire activity, and photographic documentation. Photographic documentation will consist of four photographs taken at each station in the cardinal directions north, east, south, and west.

Quantitative Vegetative Monitoring Program
The quantitative vegetative monitoring program established for the Mira Lago conservation areas is designed to document conditions within the wetland and enhancement areas. Approximately 483 acres of wetlands will be enhanced and 338 acres of wetlands will be restored.

A total of 13 quantitative assessment monitoring transects will be established in

randomly chosen areas considered representative of the conditions occurring within restored and enhanced wetlands. Monitoring of the enhanced and restored wetland areas will consist of permanently marked transects with meter square (m2) plots. The permanently established monitoring transects will serve as the locations for the semiannual vegetation monitoring events to track the progress of the wetland enhancement/restoration efforts. The quantitative monitoring effort will include vegetation sampling in three permanent plots located along an approximately 300-foot-long transect. Each monitoring plot contains three nested sampling plots as follows: 1-m2 plot for sampling herbaceous species, 5-m2 plot for sampling woody species (primarily shrubs), and 10-m2 plot for sampling canopy species. Non-destructive estimates of the percent cover of vegetative species within each stratum, as appropriate for each restoration area, will be taken. Data to be collected within the 1-m2 and 5-m2 sampling plots will include plant species, percent areal coverage, and general vitality. Data to be collected within the 10-m2 sampling plots will include species composition, canopy closure (utilizing a densitometer), and general vitality.

The canopy stratum will consist of woody plants with a diameter at breast height (dbh) of four inches or greater, while the shrub stratum will consist of woody plants with a dbh less than four inches. The groundcover stratum will consist of non-woody plants (herbs) of any size including vines and those woody plants (seedlings) of either a shrub or a tree species that is less than three feet tall. Additional species noted along each transect that are not observed in the plot, and an estimate of the percent coverage of N/E plant species noted along each transect will also be recorded. A graphic depicting the approximate locations of monitoring transects and associated m2 plots has been included in the complete CMP. The exact location and length of each transect and the location of each m2 plot along each transect will be determined in the field at the time of the baseline monitoring event in an effort to account for variations in the overall vegetative composition and structure of the upland and wetland communities.

The baseline monitoring event will provide the basis for comparisons with subsequent monitoring events to determine and document conditions of restored and enhanced wetlands over time and thus the success of mitigation in compliance with SFWMD and Corps permit requirements. Nuisance plant species will be maintained below 10% total areal cover, and exotic plant species will be maintained below 5% total areal cover as part of the mitigation activities.

Hydrologic Monitoring

Hydrologic enhancement on Mira Lago will consist of activities designed with the objective to maintain and/or re-establish natural wetland hydroperiods and historic water flow regimes throughout the site. Hydrologic enhancement and restoration goals will be accomplished through the construction of water management features, ditch blocks, and low water crossings.

In order to document these hydrologic enhancements and restoration changes, permanently referenced hydrologic monitoring stations will be located within the wetland enhancement and restoration areas. Twelve solid-state surface water level recorders (WLRs) have been permanently installed within the hydrologic enhancement assessment area for the purpose of recording daily water levels to determine and document changes in the surface water elevations indicating that hydroperiod enhancement is occurring and substantiate the extent of success targeted by the hydrological enhancement program. Each report will include graphic representations of the accumulated data from each hydrologic recording station.

The WLRs have been installed prior to implementation of the hydrologic site improvements to document existing hydroperiod conditions. The remote recording surface WLRs will be installed and daily recorded measurements will be downloaded semiannually. The accumulated data will be analyzed for each annual monitoring report. The data will be analyzed for comparison with baseline conditions in respect to increases in water elevation, duration of surface water, and analysis of storm events and precipitation within the wetland enhancement areas on the site.

N/E Observations

Observations of N/E plant species will be recorded during each monitoring event and coordination with a licensed herbicide applicator will be completed as necessary to ensure areal coverage of N/E vegetation is maintained within the wetland and upland conservation areas of Mira Lago in accordance with the SFWMD and Corps permit conditions. Maintenance of N/E plant species will be performed in perpetuity.

Wildlife Observations

Implementation of the CMP within the restoration, enhancement, and preservation areas across Mira Lago is anticipated to provide for significantly improved foraging, nesting, and breeding habitat for wildlife species that currently utilize the site, as well as wildlife species that may potentially utilize the restored and enhanced habitats post-mitigation. The semiannual monitoring events will incorporate observations of the presence and usage of the preservation, restoration, and enhancement areas by wildlife species. During the spring and fall monitoring events, all directly observed wildlife and distinct signs of wildlife use of the site, such as nesting, tracks, marks, or audible evidence will be documented and recorded. Data accumulated will be incorporated into the annual monitoring reports, and a cumulative list of species noted during the five years of on-site monitoring will be included in the annual monitoring report to demonstrate continued and/or increased use of the site by wildlife species.

Photographic Documentation

Photographic documentation of a site is also a reliable method of interpreting changes in the conditions of a mitigation area. Permanent photographic documentation stations will be established at each vegetation-monitoring station to document the anticipated

effects of the management activities and general site conditions. Photographic documentation will be taken during each monitoring event in each of the cardinal directions (north, south, east, and west) providing a visual aspect of the trend in restoration and enhancement over time, within representative portions of all conservation area types.

Reporting

The Applicant is responsible for submitting monitoring reports in accordance with the conditions of the Corps permit for a period of not less than five (5) years following the baseline report, subsequent to permit issuance.

Baseline Monitoring and Report

A baseline monitoring event will be conducted prior to the implementation of the restoration, enhancement, and preservation efforts to establish permanent monitoring locations and document existing vegetative composition and hydrologic conditions. A baseline monitoring report to document the results of this monitoring effort will be prepared and submitted to the SFWMD and the Corps for compliance review. This report will include the following information:

- graphic representations of the approximate location of all permanent vegetation sampling stations and photographic documentation stations
- graphic representations of the approximate location of all WLRs
- tabulated data summaries of the vegetation sampling
- tabulated WLR data
- photographic documentation of current site conditions
- narrative summary interpretation of baseline sampling including general observations of current site conditions, recruitment/regeneration of desirable vegetative species, and any problems encountered and proposed solutions
- documentation of wildlife usage

The baseline monitoring report will be submitted within 60 days of completion of the baseline monitoring event.

Monitoring Frequency and Report Submittal

Semiannual monitoring events will be conducted following implementation of the restoration, enhancement, and preservation efforts to document patterns of hydrologic change, recruitment, and regeneration of desirable wetland and upland canopy, shrub, and herbaceous species, and changes to the overall vegetative composition of the restoration and enhancement monitoring areas. Spring and fall semiannual monitoring results will be documented in a monitoring report to be submitted annually to the SFWMD and Corps for compliance review. The monitoring reports will include the following information for each HU:

- tabulated data summaries of the vegetation sampling
- tabulated WLR data
- photographic documentation of the enhancement, restoration, and preservation areas
- interpretation of results and narrative discussion of site conditions regarding recruitment/regeneration of desirable vegetative species, and any problems encountered and proposed solutions
- documentation of wildlife usage

The annual monitoring reports will be submitted by January 30 of each year following completion of the previous year's fall semi-annual monitoring event.

j. Long-term management plan: Subsequent to implementation, execution and final achievement of success, long-term management activities shall be implemented to ensure continued and appropriate performance of the on-site ecological improvements and preservation. Specific activities proposed for each assessment area include:
- Semiannual monitoring for exotic and nuisance species.
- Annual assessment of the Fire Management program (see detailed Fire Management Plan).
- Semiannual monitoring/maintenance of perimeter fencing.
- Semiannual monitoring of integrity of ditch blocks and low water crossings.

During any/all monitoring events, signs of illegal access, poaching, dumping, or contravention of any of the terms of the conservation easement or Game Management Plan will be observed and reported/corrected.

Low-Water Crossings/Ditch Blocks

Site access for the some portions of Mira Lago would be through existing field/fill roads traversing through several portions of the site. Hydrologic enhancements in the form of a low-water crossings and ditch blocks will be installed in areas affected by ditches/swales and roads. The roads/low-water crossings would likely be crossed multiple times a year by personnel, and any noticeable perturbations (tree-fall, washout, blockages, etc.) would be noted/corrected at the time or reported to the managing entity for follow-up maintenance. Additionally, the roadway would be traveled specifically to inspect for any signs of decline or potential erosion areas, and low-water crossing stability or blockage; any problems would be rectified within thirty (30) days of inspection and reported in the annual status report. With the limited roadway usage and active inspection/maintenance plan, the roadway, low-water crossing, and ditch blocks are not expected to need significant improvement or replacement within 20 years.

Nuisance/Exotic Species Control

Exotic species infestations on site primarily consist of scattered occurrences of several Category I/II species (as listed by the Florida Exotic Pest Plant Council [FLEPPC]) throughout the project, including Bahia grass (Paspalum notatum), cogon grass

(Imperata cylindrica), torpedo grass (Panicum repens), Peruvian primrose willow (Ludwigia peruviana). Areal coverage varies throughout the project, but likely do not exceed 20 percent, excluding Bahia grass, in the proposed preservation and enhancement areas. In areas of improved pasture, Bahia grass concentrations exceed 80 percent or more. Bahia grass is expected to be substantially reduced during the enhancement of the target areas. Occurrences of these species, as well as other on-site exotic species, would be significantly minimized or eradicated to maintain success criteria. Any occurrence of exotic vegetation will be noted throughout the site during scheduled treatment events and all management, monitoring and inspection activities.

New exotic species occurrences would be manually or chemically treated within 30 days. Wild hog (Sus scrofa) control would also be a part of the exotic species control program, as necessary. Management staff would conduct various land management and maintenance inspections at regular intervals after success is achieved. Site perimeters, access areas, and roadway corridors would be inspected for spot treatments biannually. This inspection and treatment would be extended at least annually to include areas where low-water crossings were installed, and any other exotic plant "hot-spots" previously treated. Additionally, at least 8-16 hours of internal surveillance would be conducted as meandering transects in all areas not regularly traversed. This would minimize the extent of any new occurrences before they disrupt ecological processes and/or become established.

Prescribed Fire Management

A detailed Prescribed Fire Management Plan will be developed. With appropriate conditions, an initial prescribed fire would be conducted within all fire-dependent communities. Proposed frequency of burning will be developed following implementation of the CMP. Existing roads, trails and other infrastructure will be used for containing controlled fires where practicable. New firebreaks will be installed as necessary to protect public safety and wildlife.

Following the initial prescribed fires, assessment areas would be monitored for appropriate subsequent fires to minimize hardwood encroachment and increase herbaceous cover. An aggressive burn management plan would reduce the dense understory vegetation for red-cockaded woodpecker foraging and open up areas to promote herbaceous foraging habitat for gopher tortoises. The control burn schedule for these areas would likely be on a two to three year cycle, targeting the overgrown areas first. Some of the pine flatwoods would benefit from a thinning cut(s) in combination with a controlled burn to promote red-cockaded woodpecker dispersal onto the mitigation site.

Annual status reports would detail the condition of the communities relative to the need and potential for a burn, the conditions required for the next desirable prescribed burn, and the anticipated timeframe for the next burn. If a burn does not occur in the

anticipated desirable timeframe, the status report would also describe the reasons for the lack of implementation of the prescribed burn.

Resource Protection
The mitigation site fencing, gates, and structures would be inspected quarterly for any sign of trespass or vandalism, and problems will be rectified within 30 days. Additionally, during all inspections, any signs of illegal access, poaching, or dumping would be reported as appropriate to local authorities (County Sheriff, Florida Fish and Wildlife Conservation Commission, etc.), and noted in the annual status report.

Monitoring and Reporting
The entire site will be inspected semiannually and evaluated for specific factors including integrity of hydrologic construction features, presence and extent of nuisance and exotic plant species, the potential for prescribed fire management and overall site security. Qualitative observations including field notes, on-site photography and aerial photography will be used to evaluate the site. An annual report will be provided by January 30 of each year. Annual reports will include an evaluation of construction features and any maintenance activities performed to maintain ditch blocks and low water crossings, estimates on exotic species occurrences and maintenance of final success criteria thresholds for each HU and each Assessment Area, a summary of prescribed fire management activities and a synopsis of site security. Supporting documentation outlining all maintenance activities will also be provided within the annual report.

k. Adaptive management plan: Adaptive management includes those management tools that are applied to areas where an uncertainty exists in land management and where decisions are made on the basis of accumulated data. It is intended to achieve a variety of habitat characteristics by incorporating new data or modifying management strategies. The incorporation of adaptive management into the overall proposed mitigation plan for the Mira Lago project site will provide opportunities to modify those elements of the CMP in accordance with new information that may become available as continued on-site surveys are conducted. Vegetation monitoring data, piezometer data, and wildlife surveys for specific species may be used as indicators of successful mitigation/management efforts. Trends in animal populations and plant communities will become evident once the data is interpreted over the course of time. Modifications to management strategies, such as the frequency or extent of a specific management activity, can then be made, as necessary, in order to meet proposed goals of the CMP.

Wildlife utilization of an area, to include abundance and species diversity, can be interpreted as a reliable indicator of the productivity and success of the management strategies of the natural systems at Mira Lago. Species that will be logical candidates for survey as an indicator of successful wildlife management of the natural systems will be wild turkeys, white-tailed deer, wading birds, gopher tortoise, Florida sandhill crane,

bald eagle, and migratory songbirds. Vegetation monitoring data collected during the semiannual monitoring events will provide sufficient data to assess the success of the vegetative management efforts associated with the comprehensive enhancement, restoration, and management plan. Once the data is interpreted over the course of time, trends in animal populations and plant communities will become evident. Modifications to management strategy(s), or adaptive management, can then be made, if necessary, with proper technical assistance from qualified individuals to meet the management objectives.

Additionally, opportunities exist with the adjacent landowners and managers associated with DWP and SFWMD to supplement, collaborate, and share data and management strategies that may provide additional regional conservation benefit.

l. Financial assurances: The wetland enhancement and restoration activities include the installation of the 12 site improvements. Construction of the 12 site improvements is expected to take less than six months. This task has been scheduled to be completed within 18 months after permit approval to allow for the bidding and contracting, dry season construction, and any potential scheduling constraints associated with listed species. Additional tasks associated with project initiation include recording the Conservation Easement, land management, and assessing cattle management or removal. Recurring tasks are the activities that occur routinely and are necessary for the implementation of the CMP or for evaluating the effectiveness of the plan. These items include controlled burn management, maintenance and control of N/E vegetation, and monitoring and reporting. Long term management activities are estimated at $50,000 per year. Disney will provide Letters of Credit (construction and monitoring) as adequate demonstration of financial responsibility and assurance that the proposed mitigation will be successfully completed.

m. Other information: Currently none of the permitted mitigation banks with service areas covering the project site have sufficient federal mitigation credits (individually or cumulatively) to offset wetland impacts. There are no in-lieu fee programs with available federal mitigation credits. As such Disney has proposed Permittee Responsible Mitigation under a watershed approach. The Permittee's mitigation is located in the same watershed as the proposed impacts (Upper Kissimmee Watershed) and proposes a type of mitigation that Disney has previously successfully completed on property immediately adjacent to the current mitigation property. The mitigation property is strategically located among a network of other conservation lands and has been identified for conservation by state and federal agencies, including the FWS, as well as non-governmental organizations. The mitigation is type for type and will fully offset all wetland impacts. Disney has proposed a regionally significant mitigation plan that fully offsets lost wetland functions including secondary and cumulative impacts.

8.3.8 Other mitigative actions: NA

8.3.9 Final compensatory mitigation required by the Corps: The compensatory mitigation required by the Corps is the same as described in Section 1.6 of this document (Compensatory Mitigation proposed by the applicant).

**9.0 Cumulative and Secondary Impacts** – *(40 CFR 230.11(g) and 40 CFR 1508.7, RGL 84-9) Cumulative impacts result from the incremental environmental impact of an action when added to all other past, present, and reasonably foreseeable future actions. They can result from individually minor but collectively significant actions taking place over a period of time. A cumulative effects assessment should consider both direct and indirect, or secondary, impacts. Indirect impacts result from actions that occur later in time or are farther removed in distance from the original action, but still reasonably foreseeable.*

9.1 Geographic scope: Kissimmee River Watershed. HUC 03090101

9.2 Temporal scope: 20 years.

Explain the selected timeframe: The existing Disney LTP was issued 20 years ago and based upon development trends in this watershed.

9.3 Historical conditions of the area subject to this analysis: Historically, the Kissimmee River meandered approximately 103 miles from Lake Kissimmee to Lake Okeechobee through a 1-2 mile wide floodplain. The river and its floodplain consisted of a mosaic of wetland plant communities and supported a diverse group of waterfowl, wading birds, fish and other wildlife. Between 1962 and 1971, the river was channelized and two-thirds of the historical floodplain was drained. Excavation of the canal and placement of the spoil material destroyed one-third of the river channel. Implementation of the Kissimmee Flood Control project led to drastic declines in wintering waterfowl, wading bird and game fish populations, as well as loss of ecosystem functions. Land uses within the watershed are primarily residential and commercial with some agricultural areas which include beef production, citrus, sod production and truck crops. Minimal sand and peat mining also occurs. Urban development occurs from the City of Orlando south to Lake Tohopekaliga. The Osceola County urban service area boundary extends to just south of Lake Tohopekaliga.

9.4 Major changes to the area and description of current condition: Kissimmee River's current restoration efforts will return a significant portion of the Kissimmee River to its historic riverbed and flood plain and re-establish an environment conductive to the fauna and flora that existed their previous to the channeling efforts in the 1960's. In order to restore the ecological integrity of the damaged ecosystem, the Corps will re-establish historic hydrologic conditions, recreate the historic river/floodplain connectivity,

recreate the historic mosaic of wetland plant communities, and restore the historic biological diversity and functionality. The project area basin covers 3,000 square miles, stretching from the southern Orlando area south to Lake Okeechobee. Restoration is divided into the Upper Basin (referred to as the Kissimmee Headwaters Revitalization Project) and the Lower Basin (referred to as the Kissimmee Restoration Project). The river's upper basin includes the Upper Chain of Lakes and extends south through Lake Kissimmee to State Road 60. The lower basin includes the area from Lake Kissimmee to Lake Okeechobee.

In the upper basin, the restoration effort consists of improvements to two canals, changes in managing water levels in Lakes Kissimmee, Hatchineha and Cypress, and the acquisition of land. Restoration efforts in the river's lower basin will fill about 22 miles of the C-38 canal, excavate nearly nine miles of river channel and remove S-65B and S-65C water control structures and locks. The Corps' performs the engineering design and manages construction of the project. These actions will provide a more natural fluctuation of water levels in both the upper and lower basins that will enhance marshes around the lakes and re-establish the river's hydrology. Fish and wildlife habitat, in the river's one-to-two mile wide floodplain, will benefit.

9.5 Anticipated cumulative and secondary/indirect impacts (environmental consequences) of the proposed action: Anticipated indirect impacts include development encroachment into the adjacent wetland areas, light and noise pollution and changes in wildlife usage. Water quality impacts are not expected because the applicant proposes to construct stormwater ponds to collect, manage and treat road and yard runoff which currently is not being treated on this property. Cumulative losses of wetland function is not anticipated based upon the applicant's willingness to provide compensatory mitigation called the Mira Lago Compensatory Mitigation Plan.

9.6 Reasonably foreseeable future actions: The project would add to the cumulative impacts to wetlands and impact the local ecology associated with the overall development of Osceola and southern Orange Counties. However, the Corps asserts that cumulative impact adverse effects are not significant due to the mitigation sequencing process (avoidance and minimization of impacts and compensatory mitigation that are inherent to the proposal), large conservation land holdings and expansive natural areas in the Kissimmee River Watershed (HUC 03090101). Corps permits for the period Calendar Years 2006 to 2010 have authorized the fill of 453.7 acres of wetlands. Approximately 23 percent of the watershed area is wetland. As of October 2006, in the Kissimmee River Cataloging HUC there were approximately 365,810 acres of palustrine vegetated wetlands, 10,000 acres of palustrine unvegetated, 5,744 acres of riverine habitat, and 196,316 acres of lacustrine systems.

9.7

Effect of the proposed mitigation, including avoidance and minimization, on reducing the project's contribution to cumulative effects in the region: Disney proposes to provide compensatory mitigation with the preservation, wetland enhancement, wetland restoration of the Mira Lago 3,004 acre parcel. The Mira Lago parcel is located immediately west of the existing Disney Wilderness Preserve property that was used as compensatory mitigation for the existing Disney LTP. The Mira Lago parcel completes an extensive network of conservation lands in the headwaters of the Florida Everglades with opportunities for enhancement and restoration as well as furthering the goals of national, regional, and state conservation initiatives. The acquisition, land use change, and vacation of permits/entitlements, and MLCMP result in a mitigative lift and reduce the project's contribution to cumulative effects in the region.

9.8 Conclusions: The project as proposed is not likely to result in unacceptable cumulative or secondary impacts to jurisdictional waters of the United States.

## 10.0 Other Laws, Policies, and Effects:

10.1 Endangered Species Act (ESA):

10.1.1 Name of Species considered: Wood stork (Mycteria Americana), Eastern indigo snake (Drymarchon corais couperi), Florida scrub-jay (Aphelocoma coerulescens), Grasshopper sparrow (Ammodramus savannarum floridanus), Northern Crested Caracara (Caracara cheriway), Red Cockaded Woodpecker (Picoides borealis), bluetail mole skink (Eumeces egregius lividus), and sand skink (Neoseps reynoldsi).

10.1.2 Effects Determination:

☑ No Effect

For these species: Florida Scrub Jay, Grasshopper Sparrow, Northern Crested Caracara, Red Cockaded Woodpecker, bluetail mole skink.

☑ May affect, not likely to adversely affect

For these species: Wood stork and Eastern indigo snake.

☑ May affect, likely to adversely affect

For these species: Sand skink

☐ Jeopardize the continued existence of listed species or species proposed for such designation or adversely modify designated critical habitat

For these species: Indicate species here

10.1.3 Basis for determination: The applicant's agent, Breedlove Dennis & Associates (BDA) has conducted numerous site inspections and surveys on the Five New Property Additions and the Mira Lago parcel in 2013 and 2014. In addition, Cardno conducted numerous surveys between March 2015 and 4 June 2015. The results of the Cardno surveys and their Biological Assessment were provided to the Corps and the FWS on 9 September 2015. Based upon the information provided the Corps has provided species determinations for the five Parcel Additions and the Mira Lago Parcel as stated below.

Wood Stork:

The prior Biological Opinions (BO's) did not include the Property Additions as described in the Public Notice and reflected in the attached exhibits. The Corps has determined that the work proposed on the five Property Additions may affect, not likely to adversely affect the wood stork and federally listed plant species. Based upon review of the Effect Determination Key for the Wood Stork in Central and North Peninsular Florida dated September 2008 the project as proposed is not located within an active colony site. The project is located within the core foraging area (CFA) for wood storks. Use of the wood stork key resulted in the following sequential determination: A (Project is more than 2,500 feet from a colony site) > B (Project impacts suitable foraging habitat (SFH)) > C (Project impacts to SFH are greater than 0.50 acre) > D (Project impacts to SFH are within CFA of a colony site or wood storks have been documented foraging on the project site outside the CFA) > E (Project provide SFH compensation within the Service Area of a Service-approved wetland mitigation bank within the CFA or consists of SFH compensation within the CFA consisting of enhancement, restoration, or creation in a project phased approach that provides an amount of habitat and foraging function equivalent to that of impacted SFH) >Not Likely To Adversely Affect (NLTAA).

The wetland enhancement work proposed on the Mira Lago parcel will provide a net increase in core foraging area for wood storks. As a result the Corps has determined that the proposed Mira Lago mitigation parcel is not likely to adversely affect the wood stork.

Eastern Indigo Snake:

The Corps determined that the work proposed on four of the Property Additions (Parcels 1, 2, 3 and 5) may affect, not likely to adversely affect the Eastern indigo snake because these parcels do not contain xeric habitat and have less than 25 gopher tortoise burrows. The applicant also proposes to adhere to the Standard Protection Measures for the Eastern Indigo Snake.

One Eastern indigo snake was observed (on November 4, 2013) on the southern portion of the Mira Lago parcel. The Corps has determined that the proposed wetland enhancement work with no site development or permanent loss of habitat proposed on the Mira Lago mitigation parcel may affect, not likely to adversely affect the Eastern indigo snake and the applicant proposes to adhere to the Standard Protection Measures

for the Eastern Indigo Snake.

The Corps determined that the work proposed on Parcel 4 (Bear Bay) may affect the Eastern indigo snake as this parcel consists of xeric habitat and has greater than 25 gopher tortoise burrows. However, surveys conducted by Breedlove Dennis & Associates and recent surveys conducted by Cardno did not observe any Eastern indigo snakes on Parcel 4. Disney has agreed to adhere to the Standard Protection Measures for the Eastern Indigo Snake, to perform pre-construction surveys for this species 30 days prior to construction commencement, use Best Management Practices during construction, and if any Eastern Indigo Snakes are found to relocate them prior to, or during construction activities. As a result of these efforts the Corps has determined that the project may affect, not likely to adversely affect the Eastern indigo snake.

Florida Scrub Jay:

Suitable habitat for the Florida scrub jay was not found on the Property Additions: Parcels 1, 2, 3 and 5. Suitable habitat is present on Parcel 4 because this parcel consists of native xeric habitat. BDA and Cardno conducted surveys on Parcel 4 and no Florida scrub jays species were observed on this parcel. The Mira Lago Parcel consists of 52 acres of potential Florida scrub jay habitat. Currently, the vegetation is overgrown and does not provide optimal habitat conditions for the Florida scrub jay.

The Corps determined that the work proposed on Parcels 1, 2, 3 & 5 will have no effect on the Florida scrub jay as suitable habitat and the species were not found on these parcels. Based on the surveys provided, the Corps has determined the work proposed on Parcel 4 (Bear Bay) will have no effect on the Florida scrub-jay as this species was not observed on the parcel. The Corps has determined that the proposed mitigation work on the Mira Lago parcel will provide improved habitat conditions and future presence of the Florida scrub jay on this parcel.

Grasshopper sparrow:

There is no critical habitat for the grasshopper sparrow and their consultation area is not located within the Parcel Additions. The Mira Lago parcel is located within the consultation area for the grasshopper sparrow. The Mira Lago parcel currently does not consist of suitable habitat (frequently burned, dry prairie communities) and grasshopper sparrows have not been observed on the mitigation site. The Corps has determined that the project will have no effect on the grasshopper sparrow.

Northern Crested Caracara:

The Property Additions and the Mira Lago site are located within the consultation area for the Northern crested caracara. No crested caracara were observed on the Property Additions (Parcels: 1, 2, 3, 4, & 5) or on the Mira Lago site. Crested caracara have been observed on the Disney Wilderness Preserve (DWP) property which is

located east of Mira Lago. There is no suitable nesting or foraging habitats on the Property Additions or the Mira Lago site. The Corps has determined that the project will have no effect on the crested caracara.

Red Cockaded Woodpecker:

The Property Additions and the Mira Lago site are located within the consultation area of the red cockaded woodpecker. Of the Property Additions, only Parcel 1 has suitable habitat for the red cockaded woodpecker. Surveys conducted by Cardno within the pines on Parcel 1 did not find any evidence of red cockaded woodpecker usage. In addition, BDA did not have any evidence of red cockaded woodpecker usage on the Mira Lago site. There is a red cockaded woodpecker colony on the DWP property which is located east of Mira Lago. The proposed work on the Mira Lago site is not anticipated to affect the red cockaded woodpecker colony found within DWP. The Corps has determined that the project will have no effect on the red cockaded woodpecker.

Bluetail mole skink:

Only Parcel 5 of the Property Additions is located within the know range for the bluetail mole skink. However, a majority of Parcel 5 is developed and there is no suitable soils or habitat remaining for the bluetail mole skink. Property Additions: Parcels 1, 2, 3, & 4 are outside of the range for the bluetail mole skink. In addition, the Mira Lago parcel does not have suitable soils for the bluetail mole skink. As a result, the Corps has determined that the proposed project will have no effect on the bluetail mole skink.

Sand skink:

Sand skink are not found within Property Additions, Parcels 1, 2, & 5, and the Mira Lago parcel is not located within the range for sand skink.

A review of the soils found within the Property Additions revealed that only Parcels 3 and 4 contain suitable well-drained soils and the proper elevations for the sand skink. Surveys conducted by Cardno found sand skink tracts on approximately 18.4 acres of native xeric habitat on the western part of Parcel 4. Cardno conducted more detailed surveys for sand skink within Parcels 3 and 4 in March 2015. The surveys did not observe any sand skinks on Parcel 3 or on the eastern portion of Parcel 4. Cardno stated that the Disney project will minimize impacts to sand skinks wherever possible however, that this project may potentially result in permanent impacts of up to 86.8 acres of occupied sand skink habitat. The proposed project within Parcel 4 may affect the sand skink since it may result in permanent impacts to 86.8 acres of sand skink habitat. Disney has agreed to purchase sand skink conservation bank credits or to include funding of scientific research that would be approved by FWS as mitigation to offset the sand skink impacts. Therefore, the Corps has determined that the proposed project may affect the sand skink for the proposed work within Parcel 4.

10.1.4 Consultation: Formal

10.1.5 Consultation response(s): The Corps determined that the proposed Disney LTP major modification project may affect the sand skink and requested consultation with the FWS by letter dated 15 September 2015. The FWS provided a Biological Opinion for the sand skink on 4 November 2015.

10.1.6 Additional information *(optional)*: The Corps consulted with the FWS when processing the original Disney LTP project in 1991 and 1994 along with the Disney LTP time extension in 2009. The FWS issued BO's in 1991 and 1994 to address Florida scrub-jay (Aphelocoma coerulescens), bald eagle (Haliaeetus leucocephalus), American alligator (Alligator mississippiensis), , eastern indigo snake (Drymarchon corais couperi), sand skink (Neoseps [=Plestiodon] reynoldsi), and bluetail mole skink (Eumeces [=Plestiodon] egregius lividus) as well as listed plant species within the project site. The existing BO's did not address wood stork (Mycteria Americana). When Disney requested a time extension, the Corps re-coordinated with the FWS. By letter dated 23 November 2009, the Corps requested informal consultation on the wood stork. The Corps determined that the proposed work "may affect, but is not likely to adversely affect" listed species in the project area. This determination was based upon the successful mitigation provided at the DWP / Walker Ranch managed by The Nature Conservancy. The FWS responded to the Corps coordination letter with no objection to the 20-year time extension for the project and concurred that the project "may affect, not likely to adversely affect" the wood stork.

10.1.7 Compliance with ESA: Yes

10.2 Magnuson-Stevens Act – Essential Fish Habitat (EFH):

10.2.1 Name of Species considered: N/A

10.2.2 Effects Determination:

☑ No Effect

For these species: N/A

☐ May affect, not likely to adversely affect

For these species: Indicate species here

☐ May adversely affect

For these species: Indicate species here

10.2.3 Basis for determination: The project will not occur in any tidal waters or in the vicinity of essential fish habitat (EFH) designated by the South Atlantic Fishery Management Council or NMFS.

10.2.4 Consultation: NA

10.2.5 Consultation response: NA

10.2.6 Additional information *(optional)*: NA

10.2.7 Compliance with Magnuson-Stevens Act: NA

10.3 National Historic Preservation Act – Section 106:

10.3.1 Known sites present: No

10.3.2 Survey required/conducted: No

10.3.3 Effects determination:

☑ No potential to cause effect

For these historic properties eligible or listed in the National Register of Historic Places: All sites considered.

☐ No effect

For these historic properties eligible or listed in the National Register of Historic Places: indicate sites here

☐ No adverse effect

For these historic properties eligible or listed in the National Register of Historic Places: indicate sites here

☐ Adverse effect

For these historic properties eligible or listed in the National Register of Historic Places: indicate sites here

10.3.4 Rationale for effects determination: The proposed project will not affect sites listed, or eligible for listing, in the National Register of Historic Places or otherwise of national, state, or local significance based on correspondence from State Historic Preservation Office (and) the Jacksonville District Regulatory Division Section 106 Key, March 2013 resulted in the following sequential determination: 1 > 2 > The permit areas have been so extensively modified that little likelihood exists for the proposed project to impinge upon a historic property even if present within the affected area.

10.3.5 Memorandum of Agreement required: NA

10.3.6 Date consultation complete *(if necessary)*: NA

10.3.7 Additional information *(optional)*: SHPO responded to the Public Notice by letter dated 21 July 2015. SHPO indicated that the proposed project is unlikely to adversely affect historic properties. SHPO requested that if a permit is issued that a special condition be included regarding unexpected discoveries.

10.3.7 Compliance with National Historic Preservation Act: Yes

10.4 Corps Wetland Policy: Based on the public interest review (Section 7 of this document), the beneficial effects of the project outweigh the detrimental impacts of the project.

10.5 Water Quality Certification under Section 401 of the Clean Water Act:

10.5.1 An individual water quality certification was issued.

10.5.2 Date of Water Quality Certification decision: 19 October 2015

10.5.3 Additional information *(optional)*: South Florida Water Management District (SFWMD) authorized a conceptual permit under file no:

10.6 Coastal Zone Management Consistency under Section 307c of the Coastal Zone Management Act (CZMA):

10.6.1 A CZMA consistency determination was issued.

10.6.2 Date of CZMA decision: 19 October 2015

10.6.3 Additional information *(optional)*: South Florida Water Management District (SFWMD) authorized a conceptual permit under file no:

10.7 Effects on Federal Projects *(33 CFR 320.4(g)(4))*: This project is not located in the vicinity of an authorized federal project.

10.8 Effects on the limits of the territorial seas *(33 CFR 320.4(f))*: This proposed project does not include any structure or work affecting coastal waters.

10.9 Safety of impoundment structures *(33 CFR 320.4(k))*: This proposed project does not include any impoundment structures.

10.10 Activities in Marine Sanctuaries *(33 CFR 320.4(i))*: This proposed project is not located in a marine sanctuary as established by the Secretary of Commerce under authority of Section 302 of the Marine Protection, Research and Sanctuaries Act of 1972.

10.11 Other Authorizations:
N/A

10.12 Significant issues of Overriding National Importance *(33 CFR 320.4(j)(2))*:
N/A

10.13 Discussion *(if necessary)*: During the review of this Disney LTP Major Modification, Disney requested to modify five previous authorizations and one consent order which included compensatory mitigation onsite, but outside of the WMCA and transfer the compensatory mitigation to the Disney Wilderness Preserve.
Disney requested this modification in an effort to incorporate these wetland areas into the future growth plans associated with the Disney LTP Major Modification without these areas being designated as mitigation. SFWMD removed the conservation easement off of these wetland mitigation areas on 12 November 2015.

The Table below summaries the Mitigation Site location, the prior Corps' Permit number, Corps' authorized date and the actual impact acreage.

| MITIGATION SITE | PERMIT NO. | ISSUE DATE | IMPACT ACRES | COMMENTS |
|---|---|---|---|---|
| Hollywood Studios | 86IPM-20696 | 5/18/87 | 55.04 | |
| | 89IPM-91047 | 6/15/90 | 22.4 | |
| | 89IPM-91047 | 1/16/91 | 34.72 | |
| Whittenhorse Creek North | 87IPM-20495 | 9/24/92 | 12.56 | |
| | 90IPM-04768 | 4/16/91 | 2.7 | 1.98 wetlands; 0.72 waters |
| | 90IPM-04768 | 8/14/91 | 12.69 | 9.45 wetlands; 3.24 waters |
| | 199100829(IPMB) | 5/6/91 | 4.99 | 0.43 wetlands; 4.56 waters |
| Bonnet Creek Golf Course | 94-464-CIV-ORL-18 | 4/28/94 | 1.25 | |
| **Total Acres Impact** | | | **146.35** | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| *Total North of U.S. 192:* | | | | *337.45* | *183.52* | *9.84* | *136.52* | *107.51* | *182.95* | *38.6%* |
| *Total South of U.S. 192:* | | | | *166.38* | *86.99* | *24.71* | *17.41* | *12.40* | *59.69* | *32.5%* |
| *Grand Total Permit V:* | | | | *503.84* | *270.51* | *34.55* | *153.93* | *119.91* | *232.80* | *35.4%* |
| 88IPM-20696 | N/A | N/A | N/A | 55.04 | 55.04 | 55.04 | | | 0.00 | 0.0% |
| 89IPM-91047 | N/A | N/A | N/A | 22.4 | 22.4 | 22.4 | | | 0.00 | 0.0% |
| 89IPM-91047 | N/A | N/A | N/A | 34.72 | 34.72 | 34.72 | | | 0.00 | 0.0% |
| 87IPM-20495 | N/A | N/A | N/A | 12.56 | 12.56 | 12.56 | | | 0.00 | 0.0% |
| 90IPM-04768 | N/A | N/A | N/A | 1.98 | 1.98 | 1.98 | | | 0.00 | 0.0% |
| 90IPM-04768 | N/A | N/A | N/A | | | 0.72 | 0.72 | 0.72 | 0.00 | 0.0% |
| 90IPM-04768 | N/A | N/A | N/A | 9.45 | 9.45 | 9.45 | | | 0.00 | 0.0% |
| 90IPM-04768 | N/A | N/A | N/A | | | 3.24 | 3.24 | 3.24 | 0.00 | 0.0% |
| 199100829(IPMB) | N/A | N/A | N/A | 0.43 | 0.43 | 0.43 | | | 0.00 | 0.0% |
| 199100829(IPMB) | N/A | N/A | N/A | | | 4.56 | 4.56 | 4.56 | 0.00 | 0.0% |
| 94-464-CIV-ORL-18 | N/A | N/A | N/A | 1.25 | 1.25 | 1.25 | | | 0.00 | 0.0% |
| *Total Substitute Mitigation (MOD 88):* | | | | *137.83* | *137.83* | *146.35* | *8.52* | *8.52* | *0.00* | *0.0%* |
| | | | | | | *232.80 - 146.35 = 86.45* | *Remaining LTP Mitigation:* | | | *86.45* |

Prior to Modification 88, the remaining number of WOUS acres authorized to be impacted in the existing 1992 LTP was 232.80 acres. As a result of Modification 88, the existing 1992 Disney LTP was reduced by 146.35 acres with the remaining balance to WOUS as 86.45 acres. The final project description in Section 11.1 below reflects this remaining balance.

## 11.0 Final Project Description and Special Conditions:

11.1 Final Project Description: To modify the existing Disney Long Term Permit (LTP) with the following:

- Extend the Disney LTP an additional 13 years to December 21, 2045;

- Add five (5) parcels, Property Additions totaling 758 acres (Attachment 1, Sheet 1) into the Disney project site. Total modified project site will include 30,752 acres;

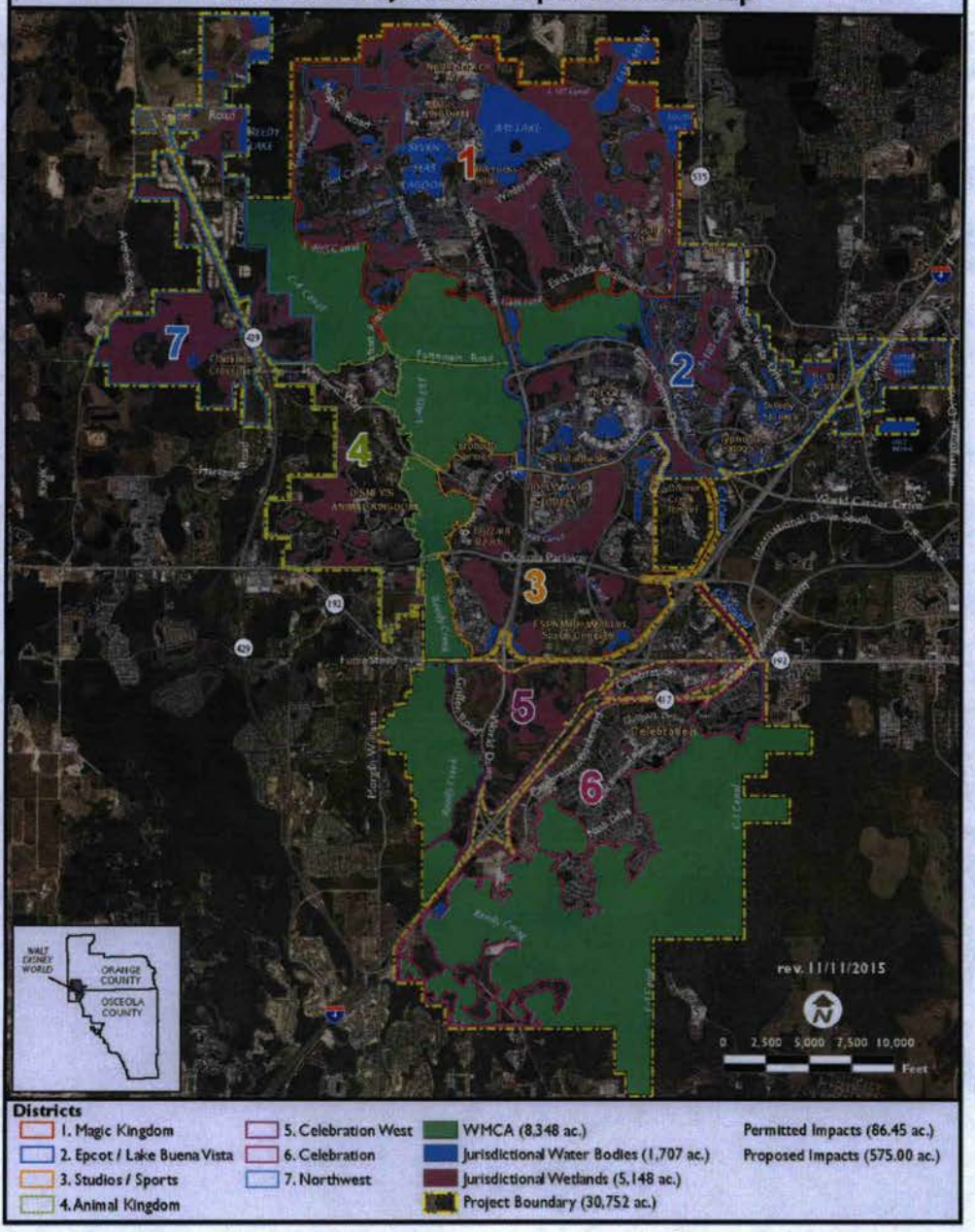
- To fill a total of 661.45 acres of waters of the United States (WOUS) in seven designated Districts within the Disney property, (excluding the Wildlife Management Conservation Areas (WMCA)). Of the 661.45 acres of fill, 86.45 acres are the remaining acres of fill previously authorized in the 1992 Disney LTP. The following table shows the acreages

of fill authorized by this major modification within each Disney District (excluding (WMCA areas):

| District Name | Remaining Authorized acres of fill in WOUS 1992 Disney LTP | Additional acres of authorized fill in WOUS 2015 Disney LTP Major Modification | Total Authorized Acres of fill in WOUS |
|---|---|---|---|
| District 1: Magic Kingdom District | 27 | 169 | 196.00 |
| District 2: Epcot/Lake Buena Vista District | 9 | 59 | 68.00 |
| District 3: Studios/Sports District | 26.45 | 122 | 148.45 |
| District 4: Animal Kingdom District | 5 | 95 | 100.00 |
| District 5: Celebration West District | 17 | 89 | 106.00 |
| District 6: Celebration District | 2 | 13 | 15.00 |
| District 7: Northwest District | 0 | 28 | 28.00 |
| Total acres | 86.45 | 575.00 | 661.45 |

Authorize the discharge of fill at the Mira Lago compensatory mitigation site associated with the required compensatory mitigation (Attachment 5).

**Exhibit 2 Project Site Proposed Permit Map**




11.2 Special Conditions: Special conditions regarding project notifications, reporting, As-Builts, cultural resources, turbidity control, eastern indigo snake conditions, compensatory mitigation, wetland avoidance and minimization, perpetual conservation, utilization of clean fill, and regulatory agency changes have been included with this authorization.

Special Conditions for SAJ-1991-01901 Disney LTP Major Modification::
1. The Conditions in the LTP Major Modification supersede the conditions included in the 1992 Disney LTP.
2. Reporting Address: Requires the Permittee to send all documents to the Corps Enforcement Section in Jacksonville, Florida.
3. Project Notifications: Requires the Permittee to notify the Corps at least 30 days prior to construction regarding wetland fill impacts.
4. Commencement Notification: Requires the Permittee to provide written notification of project commencement.
5. As-Builts: Requires the Permittee to provide As-Built exhibits upon project completion.
6. Cultural Resources/Historic Properties: Requires the Permittee to adhere to standard precautionary and reporting measures if archaeological or cultural resources are encountered.
7. Turbidity /Erosion Control: Requires the Permittee to utilize turbidity control devices to prevent erosion and/or turbidity.
8. Fill Material: Requires the Permittee to utilize only clean fill for the project.
9. Wetland Avoidance/Minimization Areas: Requires the Permittee to avoid the impacts to the 8,348 acre Wildlife Management and Conservation Area.
10. Compensatory Mitigation: Requires the Permittee to initiate the Mira Lago Compensatory Mitigation Plan within 18 months of permit issuance.
11. Conservation Easement: Requires the Permittee to execute and record the Mira Lago Conservation Easement with the Corps as 3rd Party Beneficiary Rights
12. Compensatory Mitigation Performance Standards: Establishes the performance standards for the Mira Lago Compensatory Mitigation Plan.
13. Monitoring and Reporting Timeframes: Establishes time frames for conducting monitoring of the MLCMP area and the submittal of monitoring reports.
14. Reporting Format: Provides details regarding the information that should be supplied in the monitoring report.
15. Mira Lago Mitigation Release of Credits: Establishes how the functional lift associated with the Mira Lago Compensatory Mitigation Plan will be released over time based upon successful achievement of the performance criteria.
16. Remediation: Requires the Permittee to submit an alternative compensatory mitigation proposal if the authorized compensatory mitigation area is not successful within eight years.
17. Mitigation Release: Requires the Permittee to be complete the compensatory mitigation area and to perpetually be responsible to keep the mitigation area successful.
18. Eastern Indigo Snake: Requires the Permittee to adhere to the Eastern indigo snake conditions.
19. Biological Opinion: Requires the Permittee to adhere to the FWS Biological Opinion for the sand skink.
20. Posting of Permit: Requires the Permittee to post the authorization at the project

site.
21. Ledgers: Notifies the Permittee that the Corps will maintain the Impact Ledger and the Mitigation Ledger based upon the Permittee's Project Notification requests.
22. Annual Reviews: Requires the Permittee to conduct annual reviews with the Corps and FWS and interagency reviews with the Corps, FWS and EPA every 5 years.
23. Regulatory Agency Changes: Requires the Permittee to request a modification if they propose or any other regulatory agency requires changes to the authorized project.
24. The Permittee recognizes that this Disney LTP Major Modification is not valid unless the Permittee has water quality certification from the State of Florida.

## 12.0 Findings and Determinations:

12.1 Section 176(c) of the Clean Air Act General Conformity Rule Review: The proposed permit action has been analyzed for conformity applicability pursuant to regulations implementing Section 176(c) of the Clean Air Act. It has been determined that the activities proposed under this permit would not exceed de minimis levels of direct or indirect emissions of a criteria pollutant or its precursors and are exempted by 40 CFR Part 93.153. Any later indirect emissions are generally not within the Corps' continuing program responsibility and generally cannot be practicably controlled by the Corps. For these reasons, a conformity determination is not required for this permit action.

12.2 Relevant Presidential Executive Orders:

12.2.1 EO 13175, Consultation with Indian Tribes, Alaska Natives, and Native Hawaiians: This action has no substantial effect on one or more Indian tribes, Alaska or Hawaiian natives.

12.2.2 EO 11988, Floodplain Management: Alternatives to location within the floodplain, minimization and compensatory mitigation of the effects were considered above.

12.2.3 EO 12898, Environmental Justice: The Corps has determined that this proposed project would not use methods or practices that discriminate on the basis of race, color or national origin nor would it have a disproportionate effect on minority or low-income communities.

12.2.4 EO 13112, Invasive Species: The evaluation provided above included invasive species concerns in the analysis of impacts at the project site and associated compensatory mitigation projects.

12.2.5 EO 13212 and EO 13302, Energy Supply and Availability: The project was not one that will increase the production, transmission, or conservation of energy, or strengthen pipeline safety.

12.2.6 EO 13547, Stewardship of the Ocean, Our Coasts, and the Great Lakes: The project would not adversely affect the protection, maintenance, and/or restoration of the health of ocean, coastal, and/or Great Lakes ecosystems and resources; the sustainability of ocean and coastal economies; the preservation of our maritime heritage.

12.3 Finding regarding the need for an Environmental Impact Statement: Having reviewed the information provided by the applicant and all interested parties and an assessment of the environmental impacts, we find that this permit action will not have a significant impact on the quality of the human environment. Therefore, an Environmental Impact Statement will not be required.

12.4 Compliance with the Section 404(b)(1) Guidelines: Having completed the evaluation in Section 6, the undersigned have determined that the proposed discharge complies with the Guidelines, with the inclusion of the appropriate and practicable conditions listed in Appendix A to minimize pollution or adverse effects to the affected ecosystem.

Reason for noncompliance: N/A

12.4.1 The proposed action is the Least Environmentally Damaging Practicable Alternative (LEDPA).

12.5 Public Interest Determination: We find that issuance of a Department of the Army Permit is not contrary to the public interest.

**Prepared By:**

Date: 17 November 2015

Tamy Dabu, Project Manager

**Reviewed By:**

Date: 17 November 2015

Irene Sadowski, Chief Cocoa Permits Section

**Approved By:**

Date: 17 November 2015

for Jason A. Kirk, P.E.
Colonel, U.S. Army
District Commander

FORM 80157
Rev. 07/09

# SOUTH FLORIDA WATER MANAGEMENT DISTRICT
## ENVIRONMENTAL RESOURCE
## PERMIT MODIFICATION NO. 48-00714-P
## DATE ISSUED: OCTOBER 19, 2015

**PERMITTEE:** REEDY CREEK IMPROVEMENT DISTRICT
(R C I D/WALT DISNEY WORLD PARKS AND RESORTS AND MASTER PLAN)
1900 HOTEL PLAZA BLVD.P O BOX 10170
LAKE BUENA VISTA, FL 32830-0170

**ORIGINAL PERMIT ISSUED:** MAY 2, 2011

**ORIGINAL PROJECT DESCRIPTION:** CONVERSION OF A SURFACE WATER MANAGEMENT PERMIT TO AN ENVIRONMENTAL RESOURCE PERMIT FOR A 28,909.27-ACRE PROJECT KNOWN AS REEDY CREEK IMPROVEMENT DISTRICT / WALT DISNEY WORLD MASTER PLAN.

**APPROVED MODIFICATION:** THIS ENVIRONMENTAL RESOURCE PERMIT MODIFICATION MODIFIES PREVIOUSLY APPROVED CONCEPTUAL PERMIT NO. 48-00714-P (APPLICATION NO. 100212-12) FOR THE REEDY CREEK IMPROVEMENT DISTRICT / WALT DISNEY WORLD (RCID/WDW) MASTER PLAN ON AN APPROXIMATELY 29,745 ACRE EXPANDED SITE, AND AUTHORIZES NEW CONSTRUCTION WITHIN THE APPROXIMATELY 3,004 ACRE MIRA LAGO MITIGATION PLAN (MP) SITE.

**PROJECT LOCATION:**

| | |
|---|---|
| ORANGE COUNTY , | TWP 24S RGE 27E |
| | TWP 24S RGE 28E |
| OSCEOLA COUNTY , | TWP 25S RGE 27E |
| | TWP 25S RGE 28E |
| POLK COUNTY , | SECTION 29,30,31,32 TWP 27S RGE 29E |
| | SECTION 4,5,6,8,9,16,17 TWP 28S RGE 29E |

**PERMIT DURATION:** See Special Condition No:1.

This is to notify you of the District's agency action concerning Permit Application No. 140801-15, dated August 1, 2014. This action is taken pursuant to the provisions of Chapter 373, Part IV, Florida Statutes (F.S.).

Based on the information provided, District rules have been adhered to and an Environmental Resource Permit Modification is in effect for this project subject to:

1. Not receiving a filed request for an administrative hearing pursuant to Section 120.57 and Section 120.569, or request a judicial review pursuant Section 120.68, Florida Statutes.
2. The attached 18 General Conditions.
3. The attached 24 Special Conditions.
4. The attached 3 Exhibits.

Should you object to these conditions, please refer to the attached "Notice of Rights" which addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. Should you wish to object to the proposed agency action or file a petition, please provide written objections, petitions and/or waivers to:

Office of the District Clerk
South Florida Water Management District
Post Office Box 24680
West Palm Beach, FL 33416-4680
e-mail: clerk@sfwmd.gov

Please contact this office if you have any questions concerning this matter. If we do not hear from you in accordance with the "Notice of Rights", we will assume that you concur with the District's action.

CERTIFICATION OF SERVICE

I HEREBY CERTIFY THAT this written notice has been mailed or electronically submitted to the Permittee (and the persons listed on the attached distribution list) this 19th day of October, 2015, in accordance with Section 120.60(3), F.S. Notice was also electronically posted on this date through a link on the home page of the District's website (my.sfwmd.gov/ePermitting).

By Lisandra Jones
DEPUTY CLERK
SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Attachments

## NOTICE OF RIGHTS

As required by Sections 120.569 and 120.60(3), Fla. Stat., the following is notice of the opportunities which may be available for administrative hearing or judicial review when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Not all of the legal proceedings detailed below may be an applicable or appropriate remedy. You may wish to consult an attorney regarding your legal rights.

### RIGHT TO REQUEST ADMINISTRATIVE HEARING

A person whose substantial interests are or may be affected by the South Florida Water Management District's (SFWMD or District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Fla. Stat. Persons seeking a hearing on a SFWMD decision which affects or may affect their substantial interests shall file a petition for hearing with the Office of the District Clerk of the SFWMD, in accordance with the filing instructions set forth herein, within 21 days of receipt of written notice of the decision, unless one of the following shorter time periods apply: (1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Fla. Stat.; or (2) within 14 days of service of an Administrative Order pursuant to Section 373.119(1), Fla. Stat. "Receipt of written notice of agency decision" means receipt of written notice through mail, electronic mail, or posting that the SFWMD has or intends to take final agency action, or publication of notice that the SFWMD has or intends to take final agency action. Any person who receives written notice of a SFWMD decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

If the District takes final agency action which materially differs from the noticed intended agency decision, persons who may be substantially affected shall, unless otherwise provided by law, have an additional Rule 28-106.111, Fla. Admin. Code, point of entry.

Any person to whom an emergency order is directed pursuant to Section 373.119(2), Fla. Stat., shall comply therewith immediately, but on petition to the board shall be afforded a hearing as soon as possible.

A person may file a request for an extension of time for filing a petition. The SFWMD may, for good cause, grant the request. Requests for extension of time must be filed with the SFWMD prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and that the SFWMD and any other parties agree to or oppose the extension. A timely request for an extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

### FILING INSTRUCTIONS

A petition for administrative hearing must be filed with the Office of the District Clerk of the SFWMD. Filings with the Office of the District Clerk may be made by mail, hand-delivery, or e-mail. Filings by facsimile will not be accepted. A petition for administrative hearing or other document is deemed filed upon receipt during normal business hours by the Office of the District Clerk at SFWMD headquarters in West Palm Beach, Florida. The District's normal business hours are 8:00 a.m. – 5:00 p.m., excluding weekends and District holidays. Any document received by the Office of the District Clerk after 5:00 p.m. shall be deemed filed as of 8:00 a.m. on the next regular business day. Additional filing instructions are as follows:

- Filings by mail must be addressed to the Office of the District Clerk, P.O. Box 24680, West Palm Beach, Florida 33416.

- Filings by hand-delivery must be delivered to the Office of the District Clerk. Delivery of a petition to the SFWMD's security desk does not constitute filing. It will be necessary to request that the SFWMD's security officer contact the Office of the District Clerk. An employee of the SFWMD's Clerk's office will receive and file the petition.
- Filings by e-mail must be transmitted to the Office of the District Clerk at clerk@sfwmd.gov. The filing date for a document transmitted by electronic mail shall be the date the Office of the District Clerk receives the complete document. A party who files a document by e-mail shall (1) represent that the original physically signed document will be retained by that party for the duration of the proceeding and of any subsequent appeal or subsequent proceeding in that cause and that the party shall produce it upon the request of other parties; and (2) be responsible for any delay, disruption, or interruption of the electronic signals and accepts the full risk that the document may not be properly filed.

**INITIATION OF AN ADMINISTRATIVE HEARING**

Pursuant to Sections 120.54(5)(b)4. and 120.569(2)(c), Fla. Stat., and Rules 28-106.201 and 28-106.301, Fla. Admin. Code, initiation of an administrative hearing shall be made by written petition to the SFWMD in legible form and on 8 1/2 by 11 inch white paper. All petitions shall contain:

1. Identification of the action being contested, including the permit number, application number, SFWMD file number or any other SFWMD identification number, if known.
2. The name, address, any email address, any facsimile number, and telephone number of the petitioner and petitioner's representative, if any.
3. An explanation of how the petitioner's substantial interests will be affected by the agency determination.
4. A statement of when and how the petitioner received notice of the SFWMD's decision.
5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the SFWMD's proposed action.
7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the SFWMD's proposed action.
8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the SFWMD to take with respect to the SFWMD's proposed action.

**MEDIATION**

The procedures for pursuing mediation are set forth in Section 120.573, Fla. Stat., and Rules 28-106.111 and 28-106.401–.405, Fla. Admin. Code. The SFWMD is not proposing mediation for this agency action under Section 120.573, Fla. Stat., at this time.

**RIGHT TO SEEK JUDICIAL REVIEW**

Pursuant to Section 120.68, Fla. Stat., and in accordance with Florida Rule of Appellate Procedure 9.110, a party who is adversely affected by final SFWMD action may seek judicial review of the SFWMD's final decision by filing a notice of appeal with the Office of the District Clerk of the SFWMD in accordance with the filing instructions set forth herein within 30 days of rendition of the order to be reviewed, and by filing a copy of the notice with the clerk of the appropriate district court of appeal.

**FINAL APPROVED BY EXECUTIVE DIRECTOR OCTOBER 19, 2015**

**Last Date For Agency Action:** November 27, 2015

## INDIVIDUAL ENVIRONMENTAL RESOURCE PERMIT STAFF REPORT

**Project Name:** R C I D/Walt Disney World Parks And Resorts Master Plan

**Permit No.:** 48-00714-P

**Application No.:** 140801-15

**Application Type:** Environmental Resource (Conceptual Approval Modification And Construction/Operation Modification)

**Location:** Orange County, T24S/R27E
T24S/R28E

**Location:** Osceola County, T25S/R27E
T25S/R28E

**Location:** Polk County, S29,30,31,32/T27S/R29E
S4,5,6,8,9,16,17/T28S/R29E

**Permittee :** Reedy Creek Improvement District

**Operating Entity :** Reedy Creek Improvement District
Walt Disney World Parks & Resorts U.S ,Inc

**Project Area:** 3,825.00 acres

**Permit Area:** 32,735.00 acres

**Project Land Use:** Other
Commercial

**Drainage Basin:** LAKE HATCHINEHA

**Drainage Basin:** REEDY CREEK

**Receiving Body:** REEDY CREEK, LAKE HATCHINEHA **Class:** CLASS III

**Special Drainage District:** Reedy Creek Improvement District

**Total Acres Wetland Onsite:** 575.00
**Total Acres Impacted Onsite :** 575.00
**Total Acres Presv/Mit Compensation Offsite:** 2970 57
**Conservation Easement To District :** Yes
**Sovereign Submerged Lands:** No

**PROJECT SUMMARY:**

This Environmental Resource Permit is a modification of the previously approved Permit No. 48-00714-P (Application No. 100212-12) for the Reedy Creek Improvement District / Walt Disney World (RCID/WDW) Master Plan for conceptual approval. The modification is for the addition of 821 acres to the previously approved RCID/WDW site (28,910 acres) for a total of 29,731 acres and construction approval for the addition of the approximately 3,004 acre Mira Lago Mitigation Plan (MP) site (Exhibit 1) for a total permit area of 32,735 acres. These Conceptual wetlands impacts will require a permit modification.

This modification does not authorize any additional construction on the RCID/WDW site, the previously authorized wetland impacts, or the mitigation previously approved.

The 3,004 acre Mira Lago project site will consist of the installation of hydraulic improvements including ditch blocks and low water crossings in order to restore historic water flow through the site and to re-establish natural wetland hydroperiods for mitigative preservation, restoration and enhancement activities. The design of the system included calculations to show that there will not be adverse impacts to the existing Poinciana Residential Development. Construction for all aspects of mitigation is proposed. A conservation easement will be recorded over 2,970.57 acres after the conceptual permit is issued and before any wetland impacts can occur. Approximately 33.43 acres of the Mira Lago site will not be included in the conservation easement to accommodate an existing power easement and future administration and maintenance facilities.

Issuance of this permit constitutes certification of compliance with state water quality standards in accordance with Rule 62-330.062 Florida Administrative Code (F.A.C.).

## PROJECT EVALUATION:

### PROJECT SITE DESCRIPTION:

RCID/WDW

The 821 acres of property additions are located adjacent to the 28,910 acres of RCID/WDW master plan property in Orange and Osceola Counties.

Mira Lago

The 3,004 acre Mira Lago site is located north of Lake Hatchineha, west of the Disney Wilderness Preserve (DWP) in Polk and Osceola Counties. Refer to Exhibit 1 for a location map. In a regional context, it is the lone remaining large parcel, entitled for development, located among a mosaic of other conservation lands including the Disney Wilderness Preserve, Everglades Headwaters Conservation Partnership, Lake Kissimmee State Park, Lake Wales Ridge State Forest, Catfish Creek Preserve State Park, Southport Mitigation Bank, Hatchineha Ranch Mitigation Bank, and Bullfrog Bay Mitigation Bank. The project site consists of environmentally sensitive lands whose preservation will be provided through a conservation easement. Implementation of hydraulic improvements consisting of ditch blocks and low water crossings will occur to restore historic water flow across the site and to re-establish natural wetland hydroperiods, resulting in wetland restoration and upland habitat enhancement.

It is anticipated that surface water flow across a portion of Nature Conservancy Property may occur from time to time from Mira Lago. Therefore, a Perpetual Flowage and Inundation Easement was executed. Please refer to ePermitting.

For information on the wetlands and surface waters within the project, please refer to the Wetlands and Surface Waters section of this staff report.

### LAND USE:

RCID/WDW

No construction is authorized for the RCID/WDW property under this application.

Mira Lago

Negligible impervious surfaces, including ditch blocks and low water crossings, will be constructed to restore historic water flow through the site and to re-establish natural wetland hydroperiods. No other impervious surfaces are proposed.

### WATER QUANTITY :

**Discharge Rate :**

RCID/WDW

As shown in the table below and in Exhibit 2.2, the project discharge is measured from the final outfall from the RCID property (S-40 structure). It is below the discharge rate derived from the 2013 (RCID/WDW) Drainage Master Plan. The project discharge is for the final fully developed condition and assumed that the hydrology of the previously permitted parcels remained unchanged, while the new

property additions were assumed at 80% impervious.

Mira Lago

The proposed project will restore the native/historic hydrologic regimes throughout a majority of the project site returning post development flow to a natural sheet flow pattern. Therefore, the surface water management system for this project has not been designed to limit discharge for the design event to a specified rate.

Discharge Storm Frequency : 10 YEAR-3 DAY Design Rainfall : 10.19 inches

| Basin | Allow Disch (cfs) | Method Of Determination | Peak Disch (cfs) | Peak Stage ( ft, NAVD 88) |
|---|---|---|---|---|
| RCID/WDW | 3282 | Previously Permitted | 2976 | 72.21 |

**Offsite Flows:**

It is anticipated that surface water flowage across a portion of The Nature Conservancy property (located to the east) may occur from time to time from Mira Lago. Therefore, a Perpetual Flowage and Inundation Easement was executed and will be recorded following permit issuance and in accordance with the attached work schedule. Please refer to ePermitting.

**Receiving Body :**

| Basin | Str.# | Receiving Body |
|---|---|---|
| Rcid/Wdw | S-40 | REEDY CREEK |

**WATER QUALITY :**

RCID/WDW

No adverse water quality impacts are anticipated as a result of the proposed project since no works in the RCID/WDW are proposed with this application. Water quality treatment for all future development will be provided for the greater of one-inch or 2.5 inches times the percent of imperviousness over the project site, or criteria in effect at the time of construction permitting. A half-inch of dry pretreatment will be required for sites where the storage or handling of hazardous materials will occur (see special conditions).

Mira Lago

No adverse water quality impacts are anticipated as a result of the proposed project since the works are expected to increase residence time via increased hydroperiods in targeted wetlands to mimic historic hydrologic regimes. Construction consists of ditch blocks and low water crossings.

**WETLANDS:**

**Wetlands And Other Surface Waters:**

The project area contains wetlands and surface waters. The wetlands can be generally described as herbaceous and forested freshwater wetlands. Additional wetland descriptions are located in the

ePermitting file.

The project will result in impacts to 575 acres of wetlands (represents approximately 4.6% of total owned RCID/WDW wetlands) as described in the table below. The applicants are proposing to provide a full UMAM credit of mitigation for each acre of direct impact proposed. Given that the highest possible UMAM score is 1.0 (perfect functionality) and the applicant concedes to using the highest possible score, in reality the approach provides more mitigation than would result if each wetland is individually reviewed. This approach will address the direct as well as indirect wetland impacts. Furthermore, in all likelihood the 575 acres of wetlands provide average to low functional value.

To mitigate for the proposed wetland impacts, the applicant will purchase and implement restorative mitigative activities on approximately 3,004 acres (2,970.57 acres will be placed under easement) of land adjacent to the Disney Wilderness Preserve on a property know as Mira Lago. It is located within strategic areas of several federal, state and regional landscape and ecosystem planning initiatives. These include areas important for ecological connectivity, habitat for protected or rare species, and managing, restoring and protecting water resources. Their proposed mitigation plan results in a functional gain of 1,269.41 UMAM units. Please see ePermitting for details of the proposed mitigation plan. A comprehensive restorative mitigation plan was developed for both wetlands and uplands which includes perpetual land preservation via a conservation easement. Implementation of enhancement and restoration techniques for wetland and upland habitat is a fundamental component of the plan which includes industry accepted land management involving prescribed fire and exotic / nuisance species control. The amount of mitigation was determined by using (the Unified Mitigation Assessment Method in Chapter 62-345, F.A.C. the Wetland Rapid Assessment Procedure/ Other). The final scores can be found in the permit file.

**Mitigation Plan:**

The Mira Lago property is located south of the Poinciana development, west of and adjacent to the Disney Wilderness Preserve in Polk and Osceola Counties. It consists of two smaller parcels (Avatar 1,034 acres) and Parker Poinciana (1,970 acres). In a regional context, it is the lone remaining large parcel, entitled for development, located among a mosaic of other conservation lands including the Disney Wilderness Preserve, Everglades Headwaters Conservation Partnership, Lake Kissimmee State Park, Lake Wales Ridge State Forest, Catfish Creek Preserve State Park, Southport Mitigation Bank, Hatchineha Ranch Mitigation Bank, and Bullfrog Bay Mitigation Bank.

Historic aerial photography (1941-1968) depict a series of site alterations to drain wetlands and improve access for agriculture and timber operations. In 1983 and 1991 the Department of Community Affairs (DCA) approved development of the Mira Lago mitigation property. A PUD with 5,232 development units is entitled for development under the following: SFWMD permit # 49-00094-S, ACOE permit # 199300302, Polk and Osceola Counties BLIVR -783 and BLIM 691-004.

The purpose of the mitigation plan is to promote biodiversity and maintenance of habitat and ecosystem function and resilience within Mira Lago and the surrounding region. The goals and objectives of the environmental planning analysis consist of the following:

Short-Term:
1. Create large management units or core areas that represent the native vegetation and wildlife habitats contained/restored within Mira Lago.
2. Protect sensitive areas, such as wetlands and critical areas, for listed and wetland dependent species from future development impact.
3. Enhance or restore altered habitats to their former state and function, to the extent practicable.
4. Restore more natural hydroperiods to formerly drained wetlands and expand habitat diversity.

Long-Term:
1. Protect and maintain the complexity of Mira Lago's natural and historic habitats to support the continued function and connectivity.
2. Preserve and maintain corridors to connect regional habitats and ecological processes.
3. Preserve and maintain habitats for key species in the project area.

The functional gain realized by successful completion of the proposed mitigation plan exceeds the proposed functional loss calculated for the wetland impacts. UMAM polygon ID's are provided in the wetland inventory as well as exhibits to the permit. For additional information concerning specific activities and anticipated results for each polygon please review ePermitting.

**Cumulative Impact Assessment:**

Since the mitigation is not located within the same basin as the wetland impacts, a cumulative impact analysis was conducted of the Reedy Creek Basin pursuant to Rule 10.2.8 of Volume I. The complete analysis can be found in the permit file.

Wetlands and surface waters within the RCID/WDW jurisdiction are situated in the headwaters of the Upper Kissimmee River and accordingly are connected to the Kissimmee River through the Reedy Creek drainage including London Creek and Lake Marion Creek drainage. Wetlands and surface waters on Mira Lago (mitigation site) are also hydrologically connected to the Kissimmee River through Lake Marion Creek and London Creek as well as through Lake Hatchineha and Lake Kissimmee. Thus, the area where the proposed impacts are to occur and where mitigation for those unavoidable impacts will occur, are part of the same Upper Kissimmee River watershed though they may lie in different smaller drainage basins.

The habitat range of wildlife species potentially affected by development includes the entire Upper Kissimmee River watershed. Therefore, mitigation provided through enhancement and restoration of habitat on Mira Lago will fully offset potential habitat loss resulting from proposed wetland impacts.

An analysis of the study area for cumulative impacts in the Reedy Creek drainage basin, where wetland impacts will occur, was completed. The Reedy Creek drainage basin, which is part of the Upper Kissimmee River watershed, includes approximately 114,009 acres. Currently, approximately 52,490 acres (46%) of the Reedy Creek basin are wetlands (44,741 acres) or surface waters (7,748 acres). Of the 44,741 acres of wetlands in Reedy Creek approximately 27,815 acres (62.2%) are protected in conservation, public lands, or part of an existing or pending District permit, including 8,348 acres (30%) within RCID. Similarly for surface waters, 782 acres (10.1%) of the 7,748 acres of surface waters in the basin are protected, resulting in a total of 57.9% of wetlands and surface waters currently protected in the Reedy Creek basin. The proposed impacts total 575 acres of wetlands, representing 3.4% of the remaining wetlands that are not protected in the drainage basin.

There are 575 acres of low to average quality wetlands proposed for impact. The wetlands proposed for impact have already been degraded due to alterations in the hydrology related to adjacent and regional development. Historically, the area was agriculture, and RCID began water control planning in the late 1960's, both of which led to altered hydrology. The wetlands on the project site consist primarily of cypress strands, cypress domes, freshwater marsh, and wet prairie. None of these systems are unique or rare within the watershed, and no impacts will occur within the Wildlife Management and Conservation Area (WMCA). Mitigation necessary to fully offset the loss of wetland function has been determined in accordance with the Uniform Mitigation Assessment Method (UMAM), and will be provided offsite on the regionally significant property known as Mira Lago, purchased by Walt Disney Parks and Resorts, U.S. Inc. for enhancement and restoration within the Upper Kissimmee watershed. The mitigation is part of a

large scale regionally important conservation area and is within the same watershed (Upper Kissimmee River) as the project impacts. Given that the compensatory mitigation provided will fully offset wetland functional loss and is being provided in the same watershed as the project impacts, there will be no unacceptable cumulative impacts incurred.

**Monitoring/Maintenance:**

The general components of the Mira Lago monitoring plan and data collection consist of vegetative, hydrologic, and wildlife attributes. The combined data obtained from the measurements and observations of these components will provide the basis for interpretation of the success of the restoration, enhancement, and preservation efforts. A baseline monitoring event will be conducted prior to implementation of the restoration, enhancement, and preservation efforts to document pre-mitigation conditions. Post-mitigation conditions will be monitored semiannually within the Mira Lago conservation areas over a period of five years (or until achievement of success criteria) to document the patterns of hydrologic change, recruitment, and regeneration of desirable wetland and upland canopy, shrub, and groundcover species, and continued use by wildlife species. The monitoring program for the conservation areas will consist of qualitative (for preservation areas) and quantitative (for enhancement and restoration areas) vegetative monitoring and hydrologic monitoring. A detailed monitoring and maintenance plan as well as work schedule is provided as ePermitting.

**Wetland Inventory:**

The functional gain realized through successful completion of mitigative activities at the offsite Mira Lago mitigation area will be used to offset the functional loss incurred in the conceptual 575 acres of impact.

**Wetland Inventory :**

CONSTRUCTION MOD -OFFSITE MITIGATION

| Site Id | Site Type | Pre-Development | | | | Post-Development | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Pre Fluccs | AA Type | Acreage (Acres) | Current Wo Pres | With Project | Time Lag (Yrs) | Risk Factor | Pres. Adj. Factor | Post Fluccs | Adj Delta | Functional Gain / Loss |
| E1-3 | OFF | 600 | Enhancement | 14.78 | .60 | .73 | 1 | 1.00 | | 600 | .130 | 1.921 |
| E6710 | OFF | 630 | Enhancement | 418.26 | .37 | .70 | 1 | 1.00 | | 630 | .330 | 138.026 |
| E8-9 | OFF | 640 | Enhancement | 50.40 | .40 | .70 | 1 | 1.00 | | 640 | .300 | 15.120 |
| P1 | OFF | 621 | Preservation | 54.50 | .60 | .73 | 1 | 1.00 | .90 | 621 | .117 | 6.377 |
| P2 | OFF | 621 | Preservation | 161.10 | .57 | .70 | 1 | 1.00 | .90 | 621 | .117 | 18.849 |
| P3 | OFF | 640 | Preservation | 24.75 | .57 | .73 | 1 | 1.00 | .90 | 640 | .144 | 3.564 |
| P4 | OFF | 640 | Preservation | 40.20 | .53 | .70 | 1 | 1.00 | .90 | 640 | .153 | 6.151 |
| P5 | OFF | 630 | Preservation | 3.50 | .53 | .83 | 1 | 1.00 | .90 | 630 | .270 | .945 |
| P6 | OFF | 630 | Preservation | 64.70 | .53 | .70 | 1 | 1.00 | .90 | 630 | .153 | 9.899 |
| PUP1 | OFF | 200 | Preservation | 867.10 | .00 | .75 | 1 | 1.00 | .90 | 200 | .675 | 585.293 |
| PUP12 | OFF | 200 | Preservation | 5.20 | .00 | .70 | 1 | 1.00 | .90 | 200 | .630 | 3.276 |
| PUP4 | OFF | 411 | Preservation | 119.00 | .00 | .75 | 1 | 1.00 | .90 | 411 | .675 | 80.325 |
| PUP5 | OFF | 420 | Preservation | 1.28 | .00 | .75 | 1 | 1.00 | .90 | 420 | .675 | .864 |
| PUP6 | OFF | 421 | Preservation | 50.80 | .00 | .85 | 1 | 1.00 | .90 | 421 | .765 | 38.862 |
| PUP7 | OFF | 200 | Preservation | 747.60 | .55 | .75 | 1 | 1.00 | .90 | 200 | .180 | 134.568 |
| R1-2 | OFF | 200 | Restoration/Creation | 3.30 | .43 | .73 | 1 | 1.00 | | 640 | .300 | .990 |
| R3 | OFF | 400 | Restoration/Creation | 125.80 | .00 | .67 | 1 | 1.00 | | 630 | .670 | 84.286 |
| R4 | OFF | 200 | Restoration/Creation | 209.10 | .00 | .67 | 1 | 1.00 | | 640 | .670 | 140.097 |
| SW | OFF | 500 | Preservation | 9.20 | | | | | | | | |
| | | | **Total:** | 2970.57 | | | | | | | | 1269.41 |

**Wetland Inventory :**

CONSTRUCTION MOD -ONSITE WETLAND IMPACT

| Site Id | Site Type | Pre-Development | | | | Post-Development | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Pre Fluccs | AA Type | Acreage (Acres) | Current Wo Pres | With Project | Time Lag (Yrs) | Risk Factor | Pres. Adj. Factor | Post Fluccs | Adj Delta | Functional Gain / Loss |
| W1 | ON | 600 | Direct | 575.00 | 1.00 | .00 | | | | 140 | -1.000 | -575.000 |
| | | | **Total:** | 575.00 | | | | | | | | -575.00 |

| Fluccs Code | Description |
|---|---|
| 140 | Commercial And Services |
| 200 | Agriculture |
| 400 | Upland Forests |
| 411 | Pine Flatwoods |
| 411 | Pine Flatwoods - Hydric |
| 411 | Pine Flatwoods - Upland |
| 420 | Upland Hardwood Forest |
| 421 | Xeric Oak |
| 500 | Water |
| 600 | Wetlands |
| 621 | Cypress |
| 630 | Wetland Forested Mixed |
| 640 | Vegetated Non-Forested Wetlands |

**Fish And Wildlife Issues:**

The wetlands or surface waters conceptually approved for impact provide habitat for wetland-dependent species. At such time construction applications are submitted, recent listed species surveys or a copy of all required authorizations and permits from the applicable agency must be provided. This permit does not relieve the applicant from complying with all applicable rules and any other agencies' requirements if, in the future, endangered/threatened species or species of special concern are discovered on the site.

**LEGAL ISSUES:**

Conservation easements within the RCID/WDW totaling 241.22 acres are scheduled for the November 12, 2015 Governing Board for consideration for release to allow for potential future impact. Legal descriptions and sketches for these parcels are provided as ePermitting.

In addition, District permit # 53-00216-P (App. No. 060117-17) required a conservation easement over 115 acres on Mira Lago. This conservation easement release is also scheduled for the November 12, 2015 Governing Board. This release of conservation easement is provided in ePermitting.

A conservation easement encompassing 2,970.57 acres of the Mira Lago mitigation parcel will be recorded after permit issuance and prior to the November 12, 2015 Board meeting. The approved conservation easement may be found in ePermitting.

Two Letters of Credit are provided as ePermitting. One Letter of Credit is for construction activities on the mitigation site and the second Letter of Credit is for monitoring and maintenance activities. Walt Disney Parks and Resorts, U.S., Inc. will provide funding and implement long term management for Mira Lago once all success criteria are met.

A flowage easement between the Mira Lago project site and the adjacent Disney Wilderness Preserve is provided as ePermitting. This easement will facilitate the hydrologic enhancement described in the mitigation plan.

**CERTIFICATION, OPERATION, AND MAINTENANCE:**

Pursuant to Chapter 62-330.310 Florida Administrative Code (F.A.C.), Individual Permits will not be

converted from the construction phase to the operation phase until construction completion certification of the project is submitted to and accepted by the District. This includes compliance with all permit conditions, except for any long term maintenance and monitoring requirements. It is suggested that the permittee retain the services of an appropriate professional registered in the State of Florida for periodic observation of construction of the project.

For projects permitted with an operating entity that is different from the permittee, it should be noted that until the construction completion certification is accepted by the District and the permit is transferred to an acceptable operating entity pursuant to Sections 12.1-12.3 of the Applicant's Handbook Volume I and Section 62-330.310, F.A.C., the permittee is liable for operation and maintenance in compliance with the terms and conditions of this permit.

In accordance with Section 373.416(2), F.S., unless revoked or abandoned, all stormwater management systems and works permitted under Part IV of Chapter 373, F.S., must be operated and maintained in perpetuity.

The efficiency of stormwater management systems, dams, impoundments, and most other project components will decrease over time without periodic maintenance. The operation and maintenance entity must perform periodic inspections to identify if there are any deficiencies in structural integrity, degradation due to insufficient maintenance, or improper operation of projects that may endanger public health, safety, or welfare, or the water resources. If deficiencies are found, the operation and maintenance entity will be responsible for correcting the deficiencies in a timely manner to prevent compromises to flood protection and water quality. See Section 12.4 of Applicant's Handbook Volume I for Minimum Operation and Maintenance Standards.

## RELATED CONCERNS:

**Water Use Permit Status:**

The applicant has indicated that Reedy Creek Improvement District will supply irrigation water for the project, including reclaimed water, as previously permitted

This permit does not release the permittee from obtaining all necessary Water Use authorization(s) prior to the commencement of activities which will require such authorization, including construction dewatering and irrigation.

**CERP:**

The proposed project is not located within or adjacent to a Comprehensive Everglades Restoration Project component.

**Right-Of-Way Permit Status:**

A District Right-of-Way Permit is not required for this project.

**Historical/Archeological Resources:**

The Permittees have coordinated with Florida Department of State, Division of Historical Resources (DHR) regarding cultural resources within the approved Development and Jurisdictional areas. DHR approved a methodology for property-wide cultural resource surveys including all Development Areas in 1992, in conjunction with issuance of Permit 48-000714-S Those surveys were subsequently completed by the Permittees, and the associated reports were approved by DHR. The final report was approved by DHR on October 25, 2010, in support of Permit Application #100212-12. Application No. 140801-15 incorporated additional Development Areas and the mitigation site Mira Lago, the Permittees have coordinated with DHR for cultural resources review within the additional areas.

**DEO/CZM Consistency Review:**

The issuance of this permit constitutes a finding of consistency with the Florida Coastal Management Program.

**Third Party Interest:**

No third party has contacted the District with concerns about this application.

**Enforcement:**

There has been no enforcement activity associated with this application.

**STAFF RECOMMENDATION TO EXECUTIVE DIRECTOR:**

The Staff recommends that the following be issued :

This Environmental Resource Permit is a modification of the previously approved Permit No. 48-00714-P (Application No. 100212-12) for the Reedy Creek Improvement District / Walt Disney World (RCID/WDW) Master Plan for conceptual approval of the addition of 821 acres to the previously approved RCID/WDW site (28,910 acres) for a total of 29,731 acres and construction approval for the addition of the approximately 3,004 acre Mira Lago Mitigation Plan (MP) site (Exhibit 1) for a total permit area of 32,735 acres.

Based on the information provided, District rules have been adhered to.

Staff recommendation is for approval subject to the attached
General and Special Conditions.

**STAFF REVIEW:**

**NATURAL RESOURCE MANAGEMENT APPROVAL**

**ENVIRONMENTAL EVALUATION**

Jennifer Thomson

Marc S. Ady

**SUPERVISOR**

Jennifer Thomson

Jennifer Thomson

**SURFACE WATER MANAGEMENT APPROVAL**

**ENGINEERING EVALUATION**

Robert D. Hyman

R Douglas Hyman

**SUPERVISOR**

Mark S. Daron, P.E.

**ENVIRONMENTAL RESOURCE COMPLIANCE BUREAU CHIEF :**

Ricardo A. Valera, P.E.

**DATE:** 10/15/15

**REGULATION DIVISION ASSISTANT DIRECTOR :**

Anthony M. Waterhouse, P.E.

**DATE:** 10/15/15

## GENERAL CONDITIONS

1. All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62-330.315, F.A.C. Any deviations that are not so authorized shall subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S. (2012).

2. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with Rule 62-330.090(7), F.A.C Such notice is not an encumbrance upon the property.

3. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the "State of Florida Erosion and Sediment Control Designer and Reviewer Manual" (Florida Department of Environmental Protection and Florida Department of Transportation June 2007), and the "Florida Stormwater Erosion and Sedimentation Control Inspector's Manual" (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.

4 At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the Agency a fully executed Form 62-330.350(1), "Construction Commencement Notice" indicating the expected start and completion dates. If available, an Agency website that fulfills this notification requirement may be used in lieu of the form.

5. Unless the permit is transferred under Rule 62-330.340, F.A.C., or transferred to an operating entity under Rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms and conditions of the permit for the life of the project or activity.

6. Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable.
   a For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex- "Construction Completion and Inspection Certification for Activities Associated With a Private Single-Family Dwelling Unit"[Form 62-330.310(3)], or
   b. For all other activities- "As-Built Certification and Request for Conversion to Operational Phase" [Form 62-330 310(1)].
   c. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.

7. If the final operation and maintenance entity is a third party:
   a. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as- built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12 3 thru 12 3.3 of Applicant's Handbook Volume I) as filed with the Department of State, Division of Corporations and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.
   b. Within 30 days of submittal of the as- built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity" [Form 62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.

## GENERAL CONDITIONS

8. The permittee shall notify the Agency in writing of changes required by any other regulatory agency that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.

9. This permit does not:
   a. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;
   b. Convey to the permittee or create in the permittee any interest in real property;
   c. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or
   d. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.

10. Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.

11. The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.

12. The permittee shall notify the Agency in writing:
    a. Immediately if any previously submitted information is discovered to be inaccurate; and
    b. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with Rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.

13. Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.

14. If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification shall be provided in accordance with Section 872.05, F.S.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule 62-330.201, F.A.C., provides otherwise.

## GENERAL CONDITIONS

16. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.

17 This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the Agency will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts

18 A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the Agency staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.

## SPECIAL CONDITIONS

10. The permittee has established a wetland accounting system concurrent with the submittal of the first construction application under Permit # 48-00714-S. This accounting system, entitiled Table 11 tracks all wetland impacts permitted pursuant to the initial conceptual permit. Table 11 has been modified by this conceptual permit to incorporate mitigation provided at Mira Lago Mitigation Property. Permittee shall maintain this wetland accounting system. Each construction application submitted tothe District shall include: Information identifying the specific wetland (by wetland number) to be impacted by the project. The wetland acreage to be impacted (including both total impact acreage and acreage impact broken down by wetland type: cypress, mixed forested, transitional and marsh); and a property wide total of impact authorized to date pursuant to this conceptual permit.

11. This permit authorizes mitigation activities and construction of ditch blocks and low water crossings on the Mira Lago Mitigation Property as set forth in the Mira Lago Mitigation Plan (MP) in application No 140801-15 and supporting application information incorporated by reference into this permit. Thirty days prior to construction, the Permittees shall deliver to the District the approved Construction Letter of Credit ($192,195.00) and begin baseline monitoring. Within 30 days of completion of construction of the initial mitigation activities as described in the MP, the Permittees will provide the District with a wetland completion report including as built drawings of the ditch blocks and low water crossings signed and sealed by a Florida registered professional engineer. Upon acceptance of that report by the District, the monitoring as described in the MP shall begin and the Permittees may request release of the Construction Letter of Credit upon delivery of the mitigation monitoring Letter of Credit to the District. Within thirty days of completion receipt of the mitigation monitoring Letter of Credit, the District may take action necessary to secure the release of the Construction Letter of Credit.
    At the time the Mitigation Monitoring Letter of Credit ($570,240.00) goes into effect, a monitoring program shall be implemented for Mira Lago Mitigation Property encompassing the wetland restoration, enhancement, and preservation areas in accordance with the MP and shall include annual reports submitted to the District for a period of five years. These annual reports shall detail ongoing mitigation/management activities at the Mira Lago Mitigation Property. The permittees may request release from monitoring and reporting when permit success criteria are met. Upon the District's approval and release from further monitoring and reporting, the Permittees may request release of the Mitigation Monitoring Letter of Credit. Within 30 days the District may take action necessary to secure the release of the Mitigation Monitoring Letter of Credit. Management and maintenance of the Mira Lago Mitigation Property in perpetuity will be the responsibility of Walt Disney Parks and Resorts, U.S., Inc. or subsequent owners of the Mira Lago Mitigation Property.

    Letters of Credit may be found in ePermitting.

12. This permit does not supersede or delete any requirements for other applications covered in Permit No. 48-00714-P unless otherwise specified herein.

13. This permit conceptually authorizes the impact and development of an additional 575 acres of wetlands within the RCID/WDW exclusive of the WMCA as shown in ePermitting. At the time of construction permit application, descriptions of the proposed construction area shall be provided to the District. Table 11 will be adjusted for the above impacts and shall be considered to have been mitigated by the onsite and offsite mitigation provided pursuant to Permits 48-00714-S, 48-00714-S-22 and application number 140801-15.

    Onsite mitigation is provided by the preservation in perpetuity of the WMCA via conservation easement recorded in Official Record Book 4558 at Page 2657 of the Public Records of Orange County, Florida and at Official Record Book 1125 at Page 1165 of the Public Records of Osceola County Florida. This permit does not authorize impact to, or the ability to adversely affect any portion of, the WMCA located within the project boundary.

## SPECIAL CONDITIONS

1. The conceptual phase of this permit shall expire on 10/19/2035.
   The construction phase of this permit shall expire on 10/19/2020.

2. Operation and maintenance of the RCID master stormwater management system shall be the responsibility of REEDY CREEK IMPROVEMENT DISTRICT. Operation and maintenance of the mitigation site known as Mira Lago shall be the responsibility of Walt Disney Parks and Resorts,U S., Inc.

3. Activities associated with the implementation of the mitigation, monitoring and maintenance plan(s) shall be completed in accordance with the work schedule attached as Exhibit No. 3. Any deviation from these time frames must be coordinated with the District's Environmental Resource Compliance staff, and may require a minor modification to this permit. Such requests must be made in writing and shall include (1) reason for the change, (2) proposed start/finish and/or completion dates; and (3) progress report on the status of the project development or mitigation effort.

4. Prior to November 12, 2015, the permittee shall submit a copy of the recorded conservation easement for the Mira Lago mitigation property.

5. The delineation of the extent of wetlands and/or other surface waters located within the limits of the proposed development has been determined pursuant to Rule 62-340, F A C and shall be considered binding.

6. A monitoring program shall be implemented at the Mira Lago site in accordance with the plan in ePermitting. The monitoring program shall extend for a period of 5 years with annual reports submitted to District staff. Mitigation will be deemed successful when the post development UMAM score shall indicate that each community type or assessment area has attained or is clearly trending toward the "with project" scores that were used to determine the potential credits.

7. Endangered species, threatened species and/or species of special concern have been observed onsite and/or the project contains suitable habitat for these species. It shall be the permittee's responsibility to coordinate with the Florida Fish and Wildlife Conservation Commission and/or the U.S Fish and Wildlife Service for appropriate guidance, recommendations and/or necessary permits to avoid impacts to listed species.

8. If monitoring reports or other information show the wetlands at the Mira Lago Mitigation Site have been negatively affected by the permitted site improvements in a manner that is irreversible (such as impounding the wetland and drowning the existing vegetation or a reduction in the hydroperiod resulting in the transition of wetlands into upland/transitional habitat), the permittee shall be required to submit a remediation plan within 30 days of notification by the District's Environmental Resource Compliance staff of such conditions. The remediation plan may include onsite or offsite mitigation as necessary to address any deficiences.

9. The Permittees have identified 22 87 acres on the Mira Lago Mitigation Property for potential construction of improvements in uplands to serve as administration and management facilities for the Mira Lago Mitigation Property (ePermitting). This proposed 22.87 acre footprint for these improvements has been excluded from the proposed conservation easement over the Mira Lago Mitigation Property. If and when the permittees decide to construct, or expand any improvements on the Mira Lago Mitigation Property, they shall make application for a construction permit to the District for review and approval. At that time, the Permittees may seek approval from the Governing Board to modify the location of these improvements and the Mira Lago Conservation Easement and UMAM values and ledger shall be modified to reflect those changes. These improvements may be used by the Permittees or their assignee, a public agency, or non-profit organization for site management, environmental education, outreach, residential and accessory land uses and/or for public recreational purposes.

## SPECIAL CONDITIONS

Offsite mitigation is provided at Mira Lago Mitigation Property under the terms of this conceptual permit. UMAM credits provided by the plan shall be available to offset wetland impacts within the project boundary on a 1 UMAM to 1 acre of wetland impact basis.

14. All sovereign submerged lands issues have been addressed under applications #920205-9 and #070530-22. As a result, General Condition 10 is hereby waived.

15. The permittee acknowledges that, pursuant to Rule 40E-4.101(2), F.A.C., a notice of Environmental Resource or Surface Water Management Permit may be recorded in the county public records. Pursuant to the specific language of the rule, this notice shall not be considered an encumbrance upon the property.

16. If prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, the permitted project should cease all activities involving subsurface disturbance in the immediate vicinity of such discoveries. The permittee, or other designee, should contact the Florida Department of State, Division of Historical Resources, Review and Compliance Section at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Project activities should not resume without verbal and/or written authorization from the Division of Historical Resources. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

17. At a mimimum the following best management practices shall be employeed by the permittee during construction:
a) Contractors shall be strictly prohibited from adversely affecting the water table within protected wetlands;
b) Contractors shall be strictly prohibited from disturbing protected wetlands and associated upland buffers;
c) Construction site access shall be provided via upland areas exclusively using existing roads and right-of-ways where possible;
d) The discharge of contaminants, construction and land clearing debris, and/or trash into protected wetlands shall be strictly prohibited;
e) Prior to construction, protected wetlandsand upland buffers shall be field delineated with "enviro-fence" (or equivalent) and sediment barriers shall be installed;
f) Erosion control within construction sites shall be accomplished by quickly stabilizing disturbed areas through the use of grass cover, turbidity fences, etc.;
g) Silt barriers shall be used in waterway areas to prevent the release of sediment and/or turbid water into surrounding waters.

    Silt screens or other appropriate sediment control measures shall be utilized during construction. The selected sediment control measure shall be installed landward of any upland buffer zones around all protected wetlands or landward of protected wetlands where no upland buffer zones exist. All areas shall be stabilized and vegetated immediately after constuction to prevent erosion into the wetlands and upland buffer.

18. The RCID shall analyze, update and revise the Master Drainage Plan at least bi-annually to include all revisions and permit modifications to the Master Water Control System and submit a report to the District when requested.

19. If proceeding with a General Permit by rule for construction dewatering, the Permittee acknowledges that the dewatering operation is subject to the Permit Conditions in Section 5.0 of the Applicant's Handbook for Water Use Permit Applications, including responsibility for mitigating any harm that may occur as a result of the dewatering to existing legal uses, off-site land uses, or natural resources.

## SPECIAL CONDITIONS

20. Although dewatering is not proposed at Mira Lago, should dewatering be required no dewatering effluent shall be directed into preserved wetlands or upland buffers

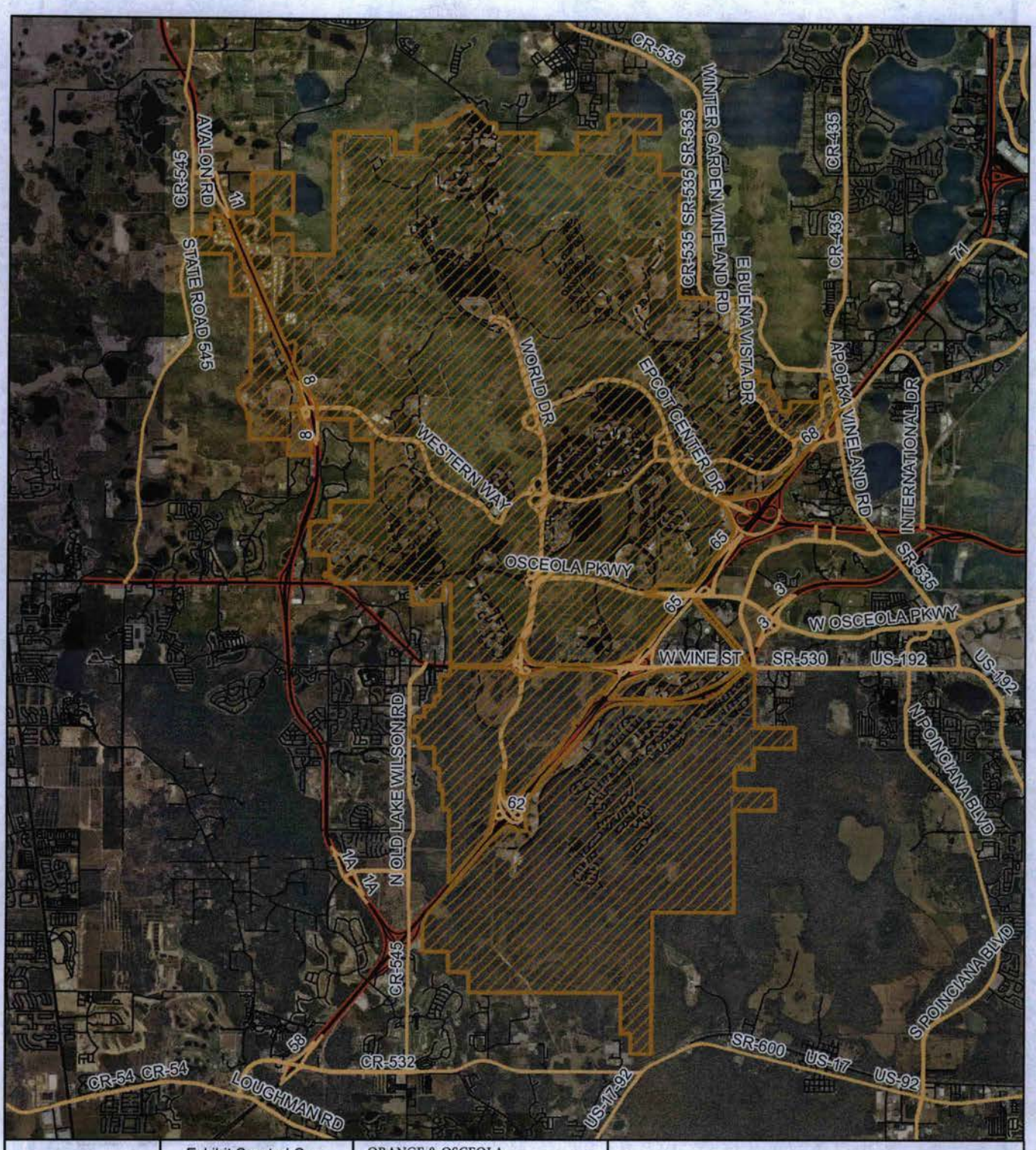
21. All commercial/industrial parcels shall provide a minimum dry pre-treatment volume of 1/2 inch of runoff prior to discharge into the master stormwater management system.

22 The RCID shall monitor quarterly at Site RC-14/S-40 for the water quality parameters described below. The RCID shall also monitor quarterly at the fifteen additional locations as shown on the Conceptual Permit Surface Water Monitoring Site map (see ePermitting). Results obtained at these additional monitoring locations shall be used to define and isolate problem areas should monitoring at Site RC-14/S-40 exceed state water quality requirements. In that event, RCID shall submit proposals to correct any detrimental effects resulting from such exceedance(s).
QUARTERLY SAMPLING PARAMETERS.
Chloride
Color (annual sample only)
Conductivity
Copper (dissolved)
Dissolved Oxygen
Fecal Coliform
Hardness
Nitrogen: ammonia, TKN, NOx
pH
Phosphorus. Total P
Temperature
Total Alkalinity

Quarterly sampling will take place in March, June, August and December.

23. Prior to permitting for any future development seeking to obtain a construction permit under this Conceptual Permit, a surface water management plan shall be reviewed and approved in writing by the Reedy Creek Improvement District for conformance with the overall surface water management concept, including compliance with water quality treatment, best management practices and flood plain protection as described in this permit This written approval by RCID shall be submitted to the District along with the construction permit application. This condition shall apply to all future projects seeking to obtain a construction permit under this Conceptual Permit, including construction permitting within the Golden Oak, Flamingo Crossings, and Celebration project areas or other area(s) that has been or shall be de-annexed from within the political boundary of RCID but seeking to remain under this Conceptual Permit.

24. The following are exhibits to this permit Exhibits noted as incorporated by reference are available on the District's ePermitting website (http.//my.sfwmd.gov/ePermitting) under this application number.
Exhibit No. 1 Location Maps
Exhibit No 2 Drainage Plans, Pages 1 - 26
Exhibit No. 2.1 Drainage Basin Properties and Peak Flows, Page 1 of 1
Exhibit No. 2.2 S-40 Peak Flows, Page 1 of 1
Exhibit No. 3 Environmental Table of Contents, Pages 1-3




| Exhibit No: 1 | Exhibit Created On: 2015-03-23 | ORANGE & OSCEOLA COUNTIES, FL |
|---|---|---|

Application

Permit No: 48-00714-P

Application Number: 140801-15

## REGULATION DIVISION

Project Name: R C I D/WALT DISNEY WORLD PARKS AND RESORTS MASTER PLAN

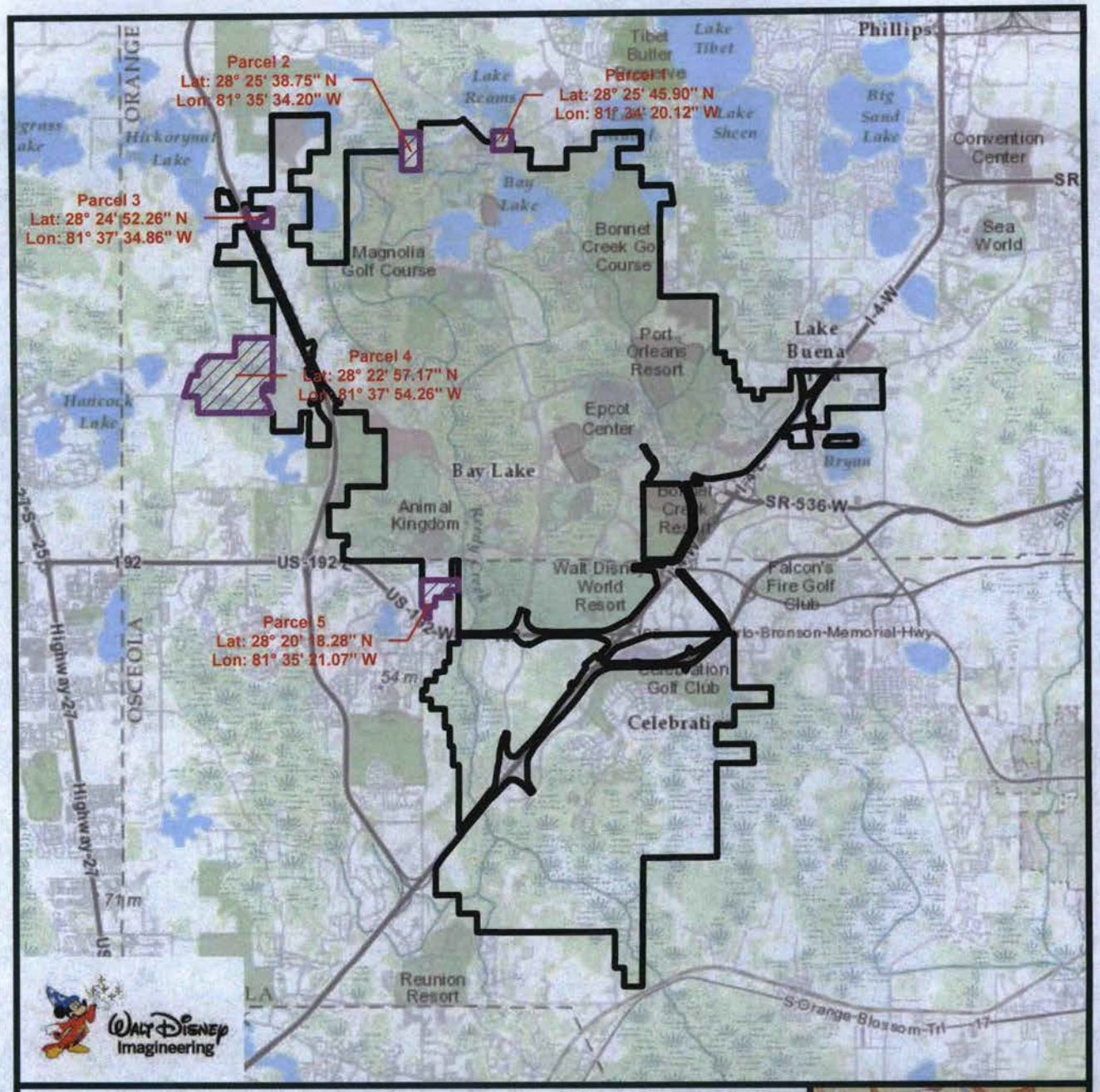
N

0 1.25 2.5 Miles

sfwmd.gov

Created by Regulation GIS Section

South Florida Water Management District




## Legend

- RCID/Walt Disney World Parks and Resorts Master Plan
- RCID/Walt Disney World Parks and Resorts Master Plan Parcel Additions


0 1 2 Miles

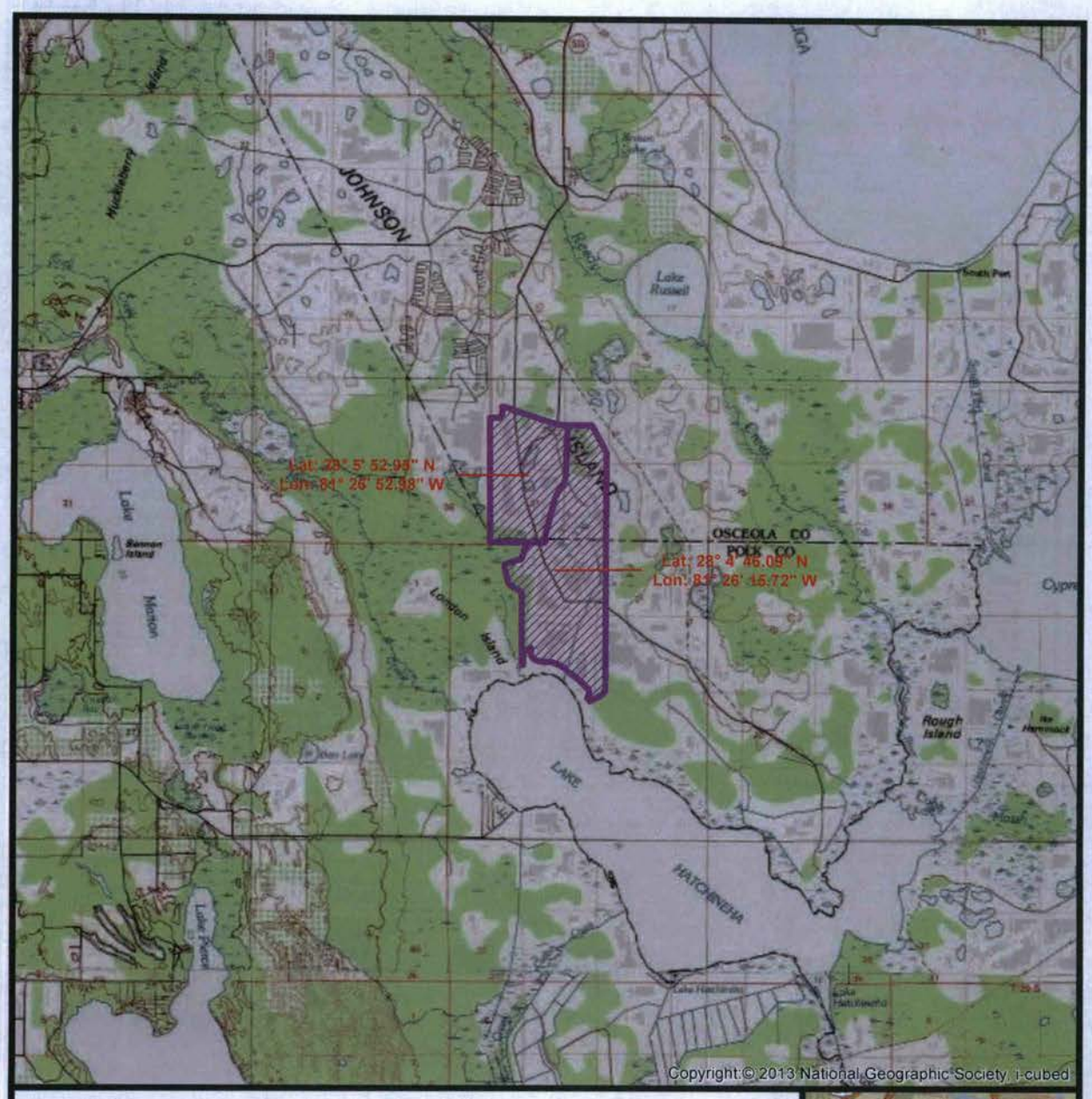
1 inch = 2 miles

Source: Data provided by frank.salmon@atkinsglobal.com 2011/08/24 through 2013/11/21. The Modified RCID/WDW Master Plan boundary is under review and subject to modification.

**FIGURE 1.0-1**
**LOCATION OF THE RCID/WALT DISNEY WORLD PARKS AND RESORTS MASTER PLAN PARCEL ADDITIONS, ORANGE AND OSCEOLA COUNTIES, FLORIDA**

BDA BREEDLOVE, DENNIS & ASSOCIATES, INC.
Environmental Consultants
330 W. Canton Ave., Winter Park, FL 32789 • 407-677-1882

LDP • 4/16/2015 • P:\ATG\2006285\LTP-II\Permit_Use\ERP_201405_201503\ARCGIS\LTP2\Location.mxd




**Legend**

Mira Lago

Source: Avatar and Parker-Poinciana boundaries provided by VHB; 201311. Topo streamed from ESRI.


0 1 2 Miles

1 inch = 2.0 miles

**EXHIBIT A**
**LOCATION OF THE MIRA LAGO PROJECT SITE (SECTIONS 29,30,31,32, TOWNSHIP 27 S, AND RANGE 29 E, AND SECTIONS 4,5,6,8,9,16,17 TOWNSHIP 28 S, RANGE 29 E), OSCEOLA AND POLK COUNTIES, FLORIDA**

BDA BREEDLOVE, DENNIS & ASSOCIATES, INC. Environmental Consultants
330 W. Canton Ave., Winter Park, FL 32789 • 407-677-1882

LDP • 9/30/2014 • P:\ATG\2006285\LTP-II\Permit_Use\ERP_RAI_201409\ARCGIS\Location.mxd

# Site Plans

Issued for: Osceola/Polk County

Date Issued: July 2014

Latest Issue: April 2015

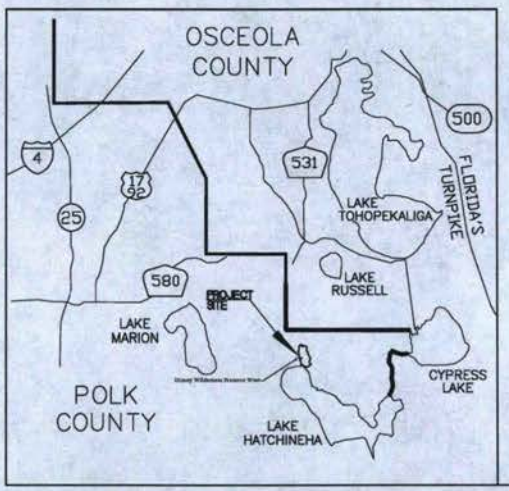
**Index**

| No. | Drawing Title | Latest Issue |
|---|---|---|
| C00 | Cover Sheet | 04/2015 |
| C1.0 | Legend & General Notes | 04/2015 |
| C2.0 | Overall Site Plan | 04/2015 |
| C3.0-C3.21 | Site 1 - Site 12 | 04/2015 |
| C4.0 | Erosion & Sediment Control Details | 04/2015 |
| C5.0 | Details | 04/2015 |

# Long Term Permit II-

## Mitigation Plan

Poinciana, Florida




Site Location Map ↑ 1" = 3 miles

Project Team:

Civil Engineering:
**Vanasse Hangen Brustlin, Inc.**
225 E. Robinson Street
Suite 300
Orlando, FL 32801
(407) 839-4006

Environmental Scientists:
**Breedlove, Dennis & Associates Inc.**
330 West Canton Ave
Winter Park, FL 32789
(407) 677-1882

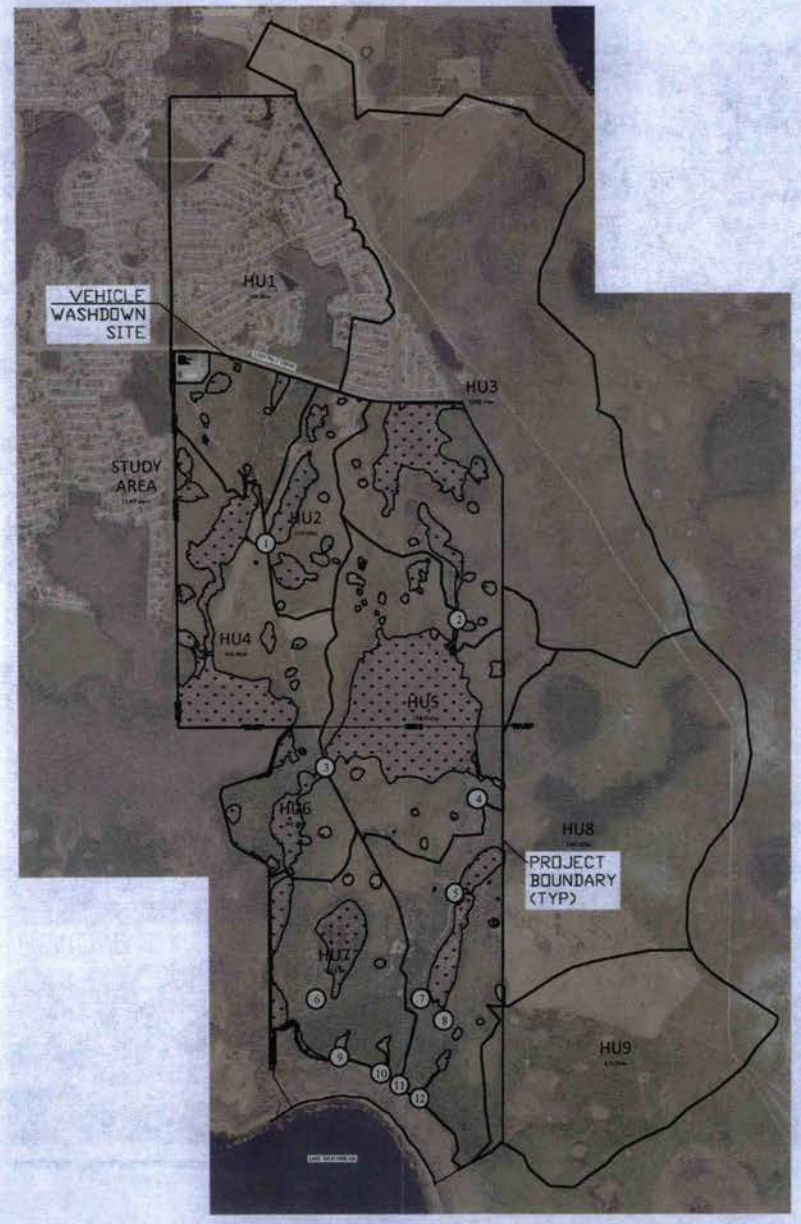
Surveyor:
**Southeastern Surveying and Mapping Corporation**
6500 All American Boulevard
Orlando, Fl. 32810
(407) 292-8580

VHB Project No. 61880.01
225 E. Robinson Street, Orlando, FL 32801
Issued for: Permit

Drawing Number
C00
SHEET OF
PROJECT NO.
61880.01

Paul W. Yeargain
PE No. 50682


***Vanasse Hangen Brustlin, Inc.***
Transportation — 225 E. Robinson Street, Suite 300
Land Development — Orlando, Florida 32801
Environmental Services — 407 839 4006 FAX 407 839 4008
Certificate of Authorization No. 3932




## IMPROVEMENTS:

SITE 1: REMOVE PIPES AND REPLACE WITH LOW WATER CROSSING

SITE 2: FILL CHANNEL TO EXISTING GRADE

SITE 3: REMOVE PIPES AND REPLACE WITH LOW WATER CROSSING

SITE 4: FILL CHANNEL TO EXISTING GRADE

SITE 5: REMOVE PIPES AND REPLACE WITH LOW WATER CROSSING

SITE 6: FILL CHANNEL TO EXISTING GRADE

SITE 7: FILL CHANNEL TO EXISTING GRADE

SITE 8: FILL CHANNEL TO EXISTING GRADE

SITE 9: ADD DITCH BLOCK

SITE 10: ADD DITCH BLOCK

SITE 11: ADD DITCH BLOCK

SITE 12: ADD DITCH BLOCK

## KEY:

# PROPOSED IMPROVEMENT SITE LOCATION AND NUMBER

WETLAND

VHB
Vanasse Hangen Brustlin, Inc.
Transportation
Land Development
Environmental Services
Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300
Orlando, Florida 32801
407.839.4006 • FAX 407.839.4008
Certificate of Authorization Number FL 43932

N

0 4000 8000

SCALE IN FEET

Long Term Permit II
Mitigation Plan

Osceola/Polk County, Florida

Permit

DATUM NGVD 29

Overall
Site Plan

C2.0

61880.01


JURISDICTIONAL WETLAND IMPACT=.03 ACRES

N

0 50 100

SCALE IN FEET

VHB

Vanasse Hangen Brustlin, Inc.

Transportation
Land Development
Environmental Services

Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300
Orlando, Florida 32801
407.839.4006 • FAX 407.839.4008
Certificate of Authorization Number FL #3932


KEY MAP

Long Term Permit II
Mitigation Plan

Osceola/Polk County, Florida

Permit

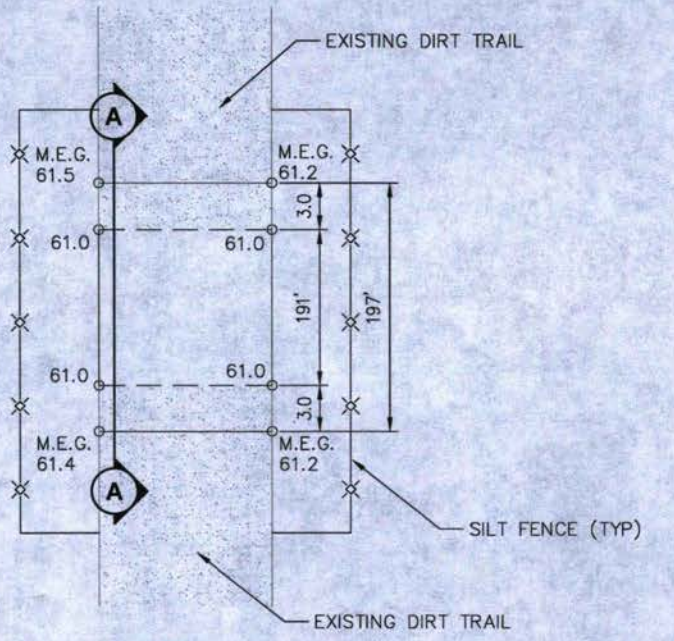
DATUM NGVD 29

Site 1 (HU2/HU4)

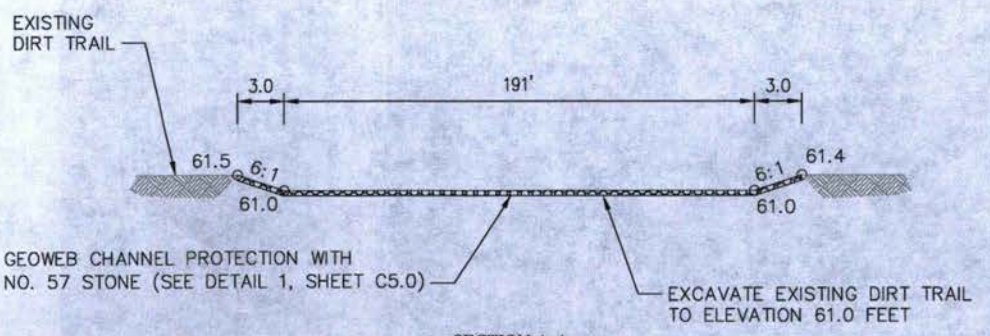
C3.0

61880.01

Paul W. Yeargin
PE 50882




DETAIL 1




SECTION A-A

VHB

Vanasse Hangen Brustlin, Inc.

Transportation
Land Development
Environmental Services

Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 300
Orlando, Florida 32801
407.839.4006 • FAX: 407.839.4008
Certificate of Authorization Number FL 43932


KEY MAP

Long Term Permit II
Mitigation Plan

Osceola/Polk County, Florida

Permit

DATUM NGVD 29

Site 1 (HU2/HU4)

C3.1

61880.01

JURISDICTIONAL
WETLAND
IMPACT=.00 acres

JURISDICTIONAL
SURFACE WATER
IMPACT=.31 acres


N

0 80 160

SCALE IN FEET

VHB

Vanasse Hangen Brustlin, Inc.

Transportation
Land Development
Environmental Services

Vanasse Hangen Brustlin, Inc.
225 E. Robinson Street, Suite 500
Orlando, Florida 32801
407.839.4006 • FAX 407.839.4008
Certificate of Authorization Number FL #3932


KEY MAP

Long Term Permit II
Mitigation Plan

Osceola/Polk County, Florida

Permit

DATUM NGVD 29

Site 2 (HU3)

C3.2

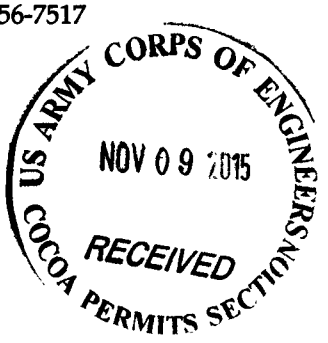
61880.01

# United States Department of the Interior

## U. S. FISH AND WILDLIFE SERVICE

7915 BAYMEADOWS WAY, SUITE 200
JACKSONVILLE, FLORIDA 32256-7517

IN REPLY REFER TO:
**FWS Log No. 04EF1000-2016-F-0025**




November 4, 2015

Ms. Irene Sadowski, Chief
Cocoa Permits Section
Department of the Army
Jacksonville District Corps of Engineers
400 High Point Drive, Suite 600
Cocoa, FL 32926
(Attn: Tamy Dabu)

The U.S. Fish and Wildlife Service (Service) has received the U.S. Army Corps of Engineers (Corps) request for consultation dated September 15, 2015, for the Walt Disney Parks and Resorts U.S., Inc. (WDPR) modification of the Long Term Permit (LTP) SAJ-1991-01901 (IP-GS). Modification of the LTP is being processed under permit application number SAJ-1991-01901 (SP-TSD) (proposed action).

The enclosed Biological Opinion is based on our review of the modification request, which is located in Osceola and Orange Counties, Florida, and its effects on the federally threatened sand skink (*Neoseps* [=*Plestiodon*] *reynoldsi*). The Corps has determined the proposed action may affect, likely to adversely affect, the sand skink. Our Biological Opinion on the sand skink and the Service's concurrence on the species listed in the paragraphs below are submitted in accordance with section 7 of the Endangered Species Act of 1973, as amended in 1998 (Act) (87 Stat. 884; 16 U.S.C. 1531 et seq.).

The Corps provided a "no effect" determination for the following federally threatened species: northern crested caracara (*Polyborus plancus audubonii* [=*Caracara cheriway*]), Florida scrub-jay (*Aphelocoma coerulescens)*, red-cockaded woodpecker (*Picoides borealis*), and blue-tailed mole skink (*Plestidon egregious lividus)*. In addition, the Corps provided a "no effect" determination on one federally endangered species, the Florida Grasshopper Sparrow (*Ammodramus savannarum floridanus).* The Service concurs with the Corps determination of "no effect" for these species because they do not occur in any of the areas that will be impacted by the proposed action.

The Corps provided a "may affect, but not likely to adversely affect" determination for the following species: wood stork (*Mycteria americana*) and eastern indigo snake (*Drymarchon corais couperi* [=*D. couperi*]). The Service concurs with the Corps determination and the following subsections detail if suitable habitat is located in the modified permit area, if surveys were conducted, and any proposed conservation measures that minimize the probability of

incidental take to an insignificant and discountable level. Because we concur with the Corps "may affect, but not likely to adversely affect" determinations, the following species will not be discussed or included in the enclosed Biological Opinion.

**Northern Crested Caracara**
The property additions identified in the proposed action include: Parcels 1, 2, 3, 4, 5, the LTP Supplemental Area, and the Mira Lago Restoration Area (Mira Lago). All are located within the consultation area for the Northern crested caracara. Crested caracaras have been observed on the The Nature Conservancy's Disney Wilderness Preserve (DWP) which is located east of Mira Lago. There is currently no suitable nesting habitat and limited foraging habitat on any of the property additions and no crested caracaras were observed on any of the property.

**Florida Scrub-jay**
Suitable habitat for the Florida scrub-jay is not found within Parcels 1, 2, 3 and 5. Suitable habitat is present on Parcel 4 (Bear Bay) and the LTP Supplemental Areas (MW-6, MW-7, MW-11, MW-22, MW-23 and Tract 17) because these areas consist of native xeric habitat. Consulting firms, Breedlove, Dennis & Associates, Inc. (BDA) and Cardno conducted surveys on Parcel 4 and have conducted nearly 20 years of habitat monitoring on the LTP Supplemental Areas and Florida scrub-jays have not been observed on these properties. Mira Lago contains 52 acres of potential Florida scrub-jay habitat. Currently, the vegetation is overgrown and does not provide suitable habitat conditions for the Florida scrub-jay.

**Red-Cockaded Woodpecker**
The property additions, LTP Supplemental Areas, and Mira Lago are located within the consultation area of the red-cockaded woodpecker. Of the property additions, only Parcel 1 has potentially suitable habitat (mature pine trees) for the red-cockaded woodpecker. Surveys conducted within the pines on Parcel 1 did not find any evidence of red-cockaded woodpecker usage. In addition, there is no evidence of red-cockaded woodpecker usage on Mira Lago. There is a red-cockaded woodpecker colony on the DWP property which is located east of Mira Lago; however, the proposed work on Mira Lago is not anticipated to affect the red-cockaded woodpecker colony found within DWP.

**Blue-tailed Mole Skink**
Only Parcel 5 of the property additions is located in Osceola County within the known range for the blue-tailed mole skink. However, a majority of Parcel 5 is developed and there are no suitable soils or habitat remaining for the blue-tailed mole skink. The property additions and the LTP Supplemental Areas are located within Orange County outside of the range of the blue-tailed mole skink. In addition, Mira Lago does not have suitable soils for the blue-tailed mole skink.

**Florida Grasshopper Sparrow**
There is no critical habitat for the grasshopper sparrow and the consultation area for this species is not located within the parcel additions or the LTP Supplemental Areas. Mira Lago is located within the consultation area for the grasshopper sparrow but does not have suitable habitat (frequently burned, dry prairie communities) and the species has not been observed on Mira Lago.

**Wood Stork**

The proposed action occurs in the geographic range of threatened wood stork and includes no more than 575 acres of wetlands, which provide potential foraging habitat for the wood stork. The Corps used the Service's *Effect Determination Key for the Wood Stork in Central and North Peninsular Florida* (September 2008) to assess the proposed action's potential impacts to wood storks. The proposed action is not located within an active colony site, but is located within the core foraging area (CFA) for wood storks. The wetland enhancement work proposed on Mira Lago will provide a net increase in suitable foraging habitat for wood storks. In addition, a conservation easement will be placed over the Mira Lago property as a part of the Compensatory Mitigation and Monitoring Plan. A receipt of the recorded easement shall be provided to the Service prior to commencement of construction on the project site.

**Eastern Indigo Snake**

To minimize impacts to the species resulting from the proposed action and the site improvements associated with the proposed mitigation plan for the Mira Lago property, WDPR will implement the *Standard Protection Measures for the Eastern Indigo Snake* (USFWS 2013) throughout the duration of the project construction activities. In addition, WDPR will continue to employ best management practices during project development and operation to avoid harassing or killing of wildlife unless physical harm to a human is imminent during project construction activities.

For these species listed above, this letter fulfills the requirements of section 7 of the Act and no further action is required. If modifications are made to the project, if additional information involving potential effects to the wood stork, Florida grasshopper sparrow, Florida scrub-jay, red-cockaded woodpecker, northern crested caracara, eastern indigo snake or blue-tailed mole skink becomes available, additional consultation may be necessary.

The Service appreciates the coordination and cooperation of the Corps and WDPR in developing a suite of conservation measures that will avoid, minimize, and compensate for unavoidable impacts to listed species. If you have any questions about the attached Biological Opinion, please feel free to contact Annie Dziergowski, of my staff at (904)731-3089.

Sincerely,

for Jay B. Herrington
Field Supervisor

cc:
FWS, SFESFO (Jeff Howe)
FWC, Lakeland, Florida (Nancy Douglas)

## BIOLOGICAL OPINION

This Biological Opinion is a document that includes the Service's analysis of whether the proposed action, is likely to jeopardize the continued existence of sand skinks (*Plestiodon reynoldsi)*. "To jeopardize the continued existence of a listed species" means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of the species (50 CFR §402.02). Because critical habitat has not been designated for the sand skink, this Biological Opinion will not discuss critical habitat or analyze the potential for adverse modification.

## CONSULTATION HISTORY

The following information is provided in accordance with 50 CFR §402.14(c). The Biological Assessment sent to the Service has a complete consultation history for the project (Cardno 2015). The summary presented below highlights our early coordination. The Service provided technical guidance on specific survey methods and species conservation measures. To meet deadlines for the proposed wetland compensation (options to purchase the property) and expedite permitting for the Corps permit, the Service agreed to initiate Formal Consultation on September 09, 2015. The Service reviewed and edited the first draft biological opinion provided by Cardno on October 29, 2015, and provided a draft Biological Opinion to the Corps on November 4, 2015. The following list is presented in chronological order, starting with early coordination and discussions about the Proposed Project.

**2014 May 19,** A pre-application/coordination meeting was conducted with the Service in Jacksonville to introduce the Proposed Project, Mira Lago, and discuss anticipated species coordination effort.

**2014 June 30,** A pre-application/coordination meeting was conducted with the Service in Jacksonville to discuss permitting history, the Proposed Project, and Mira Lago, and discuss anticipated coordination effort.

**2014 September 5,** The applicant conducted a field review of Mira Lago with the Service to inspect the proposed conservation area.

**2014 October 28,** A pre-application/coordination meeting was conducted with the Service in Jacksonville to discuss listed species on the Proposed Project.

**2015 March 4,** A pre-application/coordination meeting was conducted with the Service in Jacksonville. The Service provided technical assistance in developing a site-specific methodology for conducting listed species surveys.

**2015 May 15,** The applicant provided preliminary survey results to the Service via email.

**2015 May 21,** The Service coordinated via a conference call with the applicant and their consultant to discuss the ongoing wildlife surveys.

**2015 May 27,** A pre-application/coordination meeting was conducted with the Service in Jacksonville. The Service and the applicant's consultants discussed proposed Conservation Measures for avoidance, minimization, and conservation of the sand skink, eastern indigo snake, and wood stork.

**2015 July 7,** A pre-application/coordination meeting was conducted with the Service in Jacksonville to discuss the final results of the listed species survey and the preparation of the Biological Assessment.

**2015 September 8,** The applicant provided via email to the Service an electronic copy of the Biological Assessment.

**2015 September 9,** The applicant provided to the Service a hard copy of the Biological Assessment.

**2015 September 21,** The applicant provided via email to the Service additional revised and supplemental figures to support the Biological Assessment.

**2015 October 6,** The Service coordinated via a conference call with the applicant and their consultant to discuss conservation measures for the sand skink.

**Description of Proposed Action**

Walt Disney Parks and Resorts U.S., Inc. (WDPR), is seeking authorization to modify the existing US Army Corps of Engineers' (ACOE) Permit No. 199101901 (IP-GS), referred to as the Long Term Permit (LTP), to allow for the continued growth of the Walt Disney World Resort (WDW) located in Orange and Oseola Counties. The specific modification request includes the addition of five properties acquired over the past 20 years into the overall Corps project boundary, an additional 575 acres of wetland impacts, listed species impacts on six sites not currently authorized in the existing LTP project area, and an extension to the permit expiration date. The five property additions total 758 acres and are adjacent to and contiguous with the existing LTP project limits (Exhibit 1, Figure 1, and Table 1). The cumulative total Corps project area for the entire WDW property, including the proposed property additions, is approximately 30,752 acres.

The focus of this Biological Opinion are five additional parcels located outside of the LTP boundary, as well as an additional six sites not previously authorized for development that are located within the existing LTP permit boundary (see Table 1). The Corps consulted with the Service in 1991, 1994 and in 2009 regarding WDPR's Long Term Permit (LTP) [Corps Permit No. SAJ-1991-01901 (IP-GS)]. The Service issued Biological Opinion's in 1991 and revised in 1994 to address the Florida scrub-jay (*Aphelocoma coerulescens)*, bald eagle (*Haliaeetus leucocephalus*), eastern indigo snake (*Drymarchon corais couperi* [=*D. couperi*]), blue-tailed mole skink (*Plestidon egregious lividus)*,and sand skink. The LTP will be extended for an additional 13 years via the new Corps permit, however; all the incidental take, reasonable and prudent measures and terms and conditions are valid and the Biological Opinions are attached for reference in the Appendix.

**Table 1. Section – Township – Range of the Project Locations for this Biological Opinion**

| Parcel ID | Acres | Section | Township | Range | County |
|---|---|---|---|---|---|
| Parcel 1 | 39.8 | 1 & 2 | 24S | 27E | Orange |
| Parcel 2 | 80.9 | 3 | 24S | 27E | Orange |
| Parcel 3 | 23.1 | 8 | 24S | 27E | Orange |
| Parcel 4* | 593.6 | 19, 20, 29, &30 | 24S | 27E | Orange |
| Parcel 5 | 20.0 | 2 & 3 | 25S | 27E | Osceola |
| MW-6* | 12.3 | 21 | 24S | 27E | Orange |
| MW-7* | 11.0 | 22 | 24S | 27E | Orange |
| MW-11* | 4.4 | 16 | 24S | 27E | Orange |
| MW-22* | 15.6 | 21 | 24S | 27E | Orange |
| MW-23* | 9.6 | 22 | 24S | 27E | Orange |
| Tract 17* | 15.5 | 009 | 24S | 27E | Orange |

As a part of the Proposed Action, WDPR is proposing compensatory mitigation for unavoidable wetland impacts at Mira Lago using a watershed approach. The proposed mitigation plan for the Mira Lago property, as detailed in WDPR's Compensatory Mitigation and Monitoring Plan, is designed to protect and improve vegetative communities, improve biodiversity, provide habitat for wildlife with a focus on listed species, and improve ecosystem functions on Mira Lago and the surrounding watershed and ecosystem. The mitigation plan includes the removal of the existing development entitlements and the enhancement, restoration, and preservation of wetland habitats through the installation of ditch blocks in the man-made drainage features and low water crossings to enhance and restore certain onsite wetland hydrology and flow patterns. The proposed mitigation plan also includes the preservation (with enhancement and management) of upland habitat on the property, a portion of which will be used as a relocation site for gopher tortoises (*Gopherus polyphemus*). Upon completion of the proposed mitigation plan, the Mira Lago property will contain approximately 1,196 acres of wetlands and surface waters, and 1,808 acres of uplands.

The proposed action will impact sand skinks in the future via development of future facilities to support the expansion WDPR, see Exhibit 1. As such and for the analysis of the proposed action, WDPR anticipates that all the sand skink occupied habitat will likely have entertainment facilities, roads, or support structures associated with the expansion. Sand skinks were determined by the applicant to be present on approximately 18.4 acres of native xeric habitat within Parcel 4 (Bear Bay) and on 68.4 acres within the LTP Supplemental Areas, for a total of 86.8 acres of occupied sand skink habitat.

**Action Area**

The action area is defined as all areas to be directly or indirectly affected by the Federal action and not merely the immediate area involved in the action. The action area includes the scope of the additional parcels listed in Table 1. However, only a portion are occupied by sand skinks (Parcel 4 [Bear Bay] and the LTP Supplemental Areas) and these areas are entirely surrounded by unsuitable soils or habitat.

**Conservation Measure**

Conservation measures (CM) are actions to benefit or promote the recovery of a listed species that are included by the Federal agency as an integral part of the proposed action. These actions are taken by the Federal agency or applicant and serve to avoid, minimize, or compensate for project effects on the listed species.

CM 1. Compensation for Sand Skink Habitat Loss

Development activities will potentially result in permanent impacts of up to 86.8 acres of occupied sand skink habitat (18.4 acres of occupied habitat on Parcel 4 and 68.4 acres of occupied habitat on the LTP Supplemental Areas). To address this impact, WDPR is proposing the purchase of sand skink conservation bank credits for the impacted acreage at the standard 2:1 ratio prior to initiation of development activities within an occupied habitat or will provide an alternative equivalent option to be approved by the Service.

Alternative equivalent compensation could include the following options:

1. Funding to protect or restore lands that directly benefit the recovery of sand skinks.
2. Funding of scientific research to be approved by the Service.

Any proposed funding for either land protection or restoration or scientific research would be designed to help in meeting the goals of the South Florida Multi-Species Recovery Plan for the sand skink. Sand skink conservation bank credits, funding for land protection, or approved research funding will be provided no later than 60 days prior to ground disturbance of occupied habitat.

**STATUS OF SPECIES**

**Sand Skink**

The most recent status review of the sand skink is in the 5-year review for this species (Service 2007a). The Multi-Species Recovery Plan (Service 1999) is incorporated by reference and can be used to obtain more detailed information about this species.

Sand Skinks were listed as threatened under the Act in 1987 (52 FR 42658). A primary consideration for the listing of the species was the modification and destruction of xeric upland communities in central Florida. By some estimates, as much as 90 percent of the scrub ecosystem

has already been lost to residential development and the conversion to agriculture, primarily citrus groves (Kautz 1993; Turner et al. 2006b). No critical habitat is designated for the species, so none will be affected.

**Species Description**

The sand skink is a small, fossorial lizard that reaches a maximum length of about 5 inches. The tail makes up about half the total body length. The body is shiny and usually gray to grayish-white in color, although the body color may occasionally be light tan. Hatchlings have a wide black band located along each side from the tip of the tail to the snout. This band is reduced in adults and may only occur from the eye to snout on some individuals (Telford 1959). Sand skinks contain a variety of morphological adaptations for a fossorial lifestyle. The legs are vestigial and practically nonfunctional; the eyes are greatly reduced, the external ear openings are reduced or absent (Greer 2002), the snout is wedge-shaped, and the lower jaw is countersunk.

The taxonomic classification of the sand skink has been reevaluated since it was listed as *Neoseps reynoldsi* in 1987 (52 FR 42658), and the commonly accepted scientific name for the sand skink is now *Plestiodon reynoldsi* (Brandley et al. 2005; Smith 2005). A detailed description of the recent taxonomic review can be found in Service (2007a). The Service continues to use the scientific name as published in the final listing rule (52 FR 42658).

**Genetics and Evolutionary History**

The sand skink evolved and radiated on the central Lake Wales Ridge (Branch et al. 2003). Analysis of mitochondrial DNA indicates populations of the sand skink are highly structured with most of the genetic variation partitioned among four lineages: three subpopulations on the Lake Wales Ridge characterized by high haplotype diversity and a single, unique haplotype detected only on the Mount Dora Ridge (Branch et al. 2003). Under the conventional molecular clock, the 4.5 percent divergence in sand skinks from these two ridges would represent about a 2-million year separation. The absence of haplotype diversity on the Mount Dora Ridge would suggest this population was founded by only a few individuals or severely reduced by genetic drift of a small population (Branch et al. 2003).

**Distribution, Habitat, and Abundance**

The sand skink occurs on the sandy ridges of interior central Florida from Marion County south to Highlands County. The extant range of the sand skink includes Highlands, Lake, Marion, Orange, Osceola, Polk, and Putnam Counties (Christman 1988; Telford 1998). Principal populations occur on the Lake Wales Ridge and Winter Haven Ridges in Highlands, Lake, and Polk Counties (Christman 1992a; Mushinsky and McCoy 1991). One of largest of these ridges, the Lake Wales Ridge, located in southern Florida, encompasses approximately 517,303 acres (Weekley et al. 2008). The sand skink was once thought to be uncommon on the Mount Dora Ridge, with sites documented within the Ocala National Forest (Christman 1970; 1992a). However, recent surveys associated with proposed projects are documenting sand skinks in various locations on the Mount Dora Ridge (Service 2015).

The sand skink is widespread in native xeric uplands with excessively well-drained soils (Service 2012), principally on the ridges listed above at elevations greater than 82 feet above mean sea level. Commonly occupied native habitats include Florida scrub, including sand pine scrub, xeric oak scrub, rosemary scrub and scrubby flatwoods, as well as high pine communities that include sandhill, longleaf pine/turkey oak, turkey oak barrens and xeric hammock (see habitat descriptions in Myers 1990 and Service 1999). Coverboard transects extended from scrub or high pine (sandhill) through scrubby flatwoods to pine flatwoods revealed that sand skinks left more tracks in scrub than the other three habitats and did not penetrate further than 130 feet into scrubby flatwoods or 65 feet into pine flatwoods (Sutton et al. 1999).

Various authors have attempted to characterize optimal sand skink habitat (Telford 1959; 1962; Christman 1978; 1992a; Campbell and Christman 1982). Literature descriptions of scrub characteristics have not proven very useful to predict sand skink abundance, but expert opinion was more successful (McCoy et al. 1999). McCoy et al. (1999) used trap-out enclosures to measure sand skink densities at seven scrub sites and attempted to rank each area individually based on eight visual characteristics to identify good habitat: (1) root-free, (2) grass-free, (3) patchy bare areas, (4) bare areas with lichens, (5) bare areas with litter, (6) scattered scrubs, (7) open canopy, and (8) sunny exposure. None of the individual literature descriptions of optimal habitat (or any combination thereof) accurately predicted the rank order of actual sand skink abundance at these sites, which ranged in density from 52 to 270 individuals per acre (Sutton 1996). However, knowledgeable researchers, especially as a group, appear to be able to visually sort out the environmental variables important to sand skinks, but had difficulty translating their perceptions into a set of rules that others could use to identify optimal sand skink habitat (McCoy et al. 1999).

Multiple studies (Collazos 1998; Hill 1999; Mushinsky and McCoy 1999; Gianopulos 2001; Mushinsky et al. 2001) have determined the relationship between sand skink density and a suite of environmental variables. These studies have found that sand skink relative density was positively correlated with low canopy cover, percent bare ground, amount of loose sand and large sand particle size, but negatively correlated with understory vegetation height, litter cover, small sand particle size, soil moisture, soil temperature, and soil composition. In an unburned sandhill site at Archbold Biological Station, Meshaka and Lane (2002) captured significantly more sand skinks in pitfall traps set in openings without shrubs than at sites with moderate to heavy shrub density. Telford (1959) suggested scattered debris and litter provided moisture that was important to support an abundant food supply and nesting sites for sand skinks. Cooper (1953) noted the species was most commonly collected under rotting logs, and Christman (1992a) suggested they nest in these locations. Christman (2005) found that skinks continue to occupy scrub with a closed canopy and thick humus layer, although at lower densities. Recent surveys have also shown sand skinks may occupy both actively managed lands, such as citrus groves and pine plantations, and old-field communities (Pike et al. 2007), if these sites are adjacent to patches of native habitat that can serve as a source population for recolonization.

Experimental studies have been conducted to investigate the effects of management techniques, such as mechanical treatment and prescribed burning, on sand skink abundance. Several studies found a decrease in relative abundance of skinks immediately following both mechanical and burning treatments (Mushinsky and McCoy 1999; Gianopulos 2001; Gianopulos et al. 2001; Mushinsky et al. 2001; Sutton et al. 1999). Gianopulos (2001) and Gianopulos et al. (2001)

reported a significant increase in skink captures in mechanical treatment plots over the 5-year period following the treatment. However, a clear increase in skink numbers following a burn was not observed (Navratil 1999; Gianopulos et al. 2001; Mushinsky et al. 2001).

For prescribed fire, Christman (2005) conducted trap surveys at sites with a known burn history on the Lake Wales Ridge in Polk and Highlands Counties and did not observe a strong correlation between skink density and number of years since the site was burned. Mushinsky et al. (2001) noted that significantly larger skinks were captured in burned plots, indicating that more insect prey may have been available from decaying logs or that older skinks inhabited these sites. In the long-term, management techniques can influence species genetics. Recent genetic studies found that fire frequency may influence genetic diversity. The study reported that infrequent fire may be beneficial to the species, but a more frequent fire regime fire could reduce genetic diversity (Schrey et al. 2011).

Habitat size may be a factor in maintaining viable skink populations. Pike et al. (2006) monitored sand skinks and quantified vegetation change in six areas from 5 to 69 acres that were restored to a more natural state using fire and canopy thinning, and set aside for conservation in residential areas. This study documented a severe decline in occupancy and relative density of sand skinks and hypothesized that indirect impacts from surrounding development, such as changes in soil hydrology, may have caused the decline. Hydrologic changes in the soil may have occurred as a result of the construction of retention ponds or run-off from neighborhoods that caused a rise in the groundwater level (Pike et al. 2006). The population decline of skinks noted may have been caused by prescribed burning used to restore these sites (Mushinsky in Service 2007a).

**Life History**

The sand skink is usually found below the soil surface burrowing through loose sand in search of food, shelter, and mates. Sand skinks feed on a variety of hard and soft-bodied arthropods that occur below the ground surface. The diet consists largely of beetle larvae and termites (*Prorhinotermes* spp.). Spiders, larval ant lions, lepidopteran larvae, roaches, and adult beetles are also eaten (Myers and Telford 1965; Smith 1982).

Sand skinks are most active during the morning and evening in spring and at mid-day in winter, the times when body temperatures can easily be maintained at a preferred level between 82 and 88 degrees Fahrenheit in open sand (Andrews 1994). During the hottest parts of the day, sand skinks move under shrubs to maintain their preferred body temperatures in order to remain active near the surface. With respect to season, Telford (1959) reported skinks most active from early March through early May, whereas Sutton (1996) found skinks most active from mid-February to late April. Based on monthly sampling of pitfall traps, Ashton and Telford (2006) found that captures peaked in March at Archbold Biological Station, but in May at Ocala National Forest. All of these authors suggested the spring activity peak was associated with mating. At Archbold Biological Station, Ashton and Telford (2006) noted a secondary peak in August that corresponded with the emergence of hatchling sand skinks.

Telford (1959) assumed that sand skinks become sexually mature during the first year following hatching, at a size of 1.78 inches snout-vent length. He suspected that most of the breeders in his

study were in their second year and measured between 1.78 and 2.24 inches snout-vent length. However, Ashton (2005) determined that sand skinks become sexually mature between 19 and 23 months of age and have a single mating period each year from February through May. Sand skinks first reproduce at two years of age, and females produce a single clutch in a season, although some individuals reproduce biennially or less frequently (Ashton 2005). Sand skinks lay 2 to 4 eggs under logs or debris in May or early June (Ashton 2005; Mushinsky in Service 2007a), approximately 55 days after mating (Telford 1959). The eggs hatch from June through July. Sand skinks can live at least to 10 years of age (Meneken et al. 2005). Gianopulos (2001) found that the sex ratio of sand skinks did not differ significantly from 1:1, which is consistent with the findings of Sutton (1996).

During a translocation study, Mushinsky et al. (2001) found that sand skinks moved a median distance of 84 ft. between captures, with a few moving over 460 feet in 2 weeks. Similarly, other studies found that skinks sampled within 82 ft. of each other shared greater genetic similarity compared to those further away suggesting their limited dispersal ability and/or home range may explain the relatively high degree of genetic structure within and among sand skink populations (Branch et al. 2003; Reid et al. 2004).

Analysis of blood and fecal samples obtained from 20 sand skinks in Ocala National Forest demonstrated that no blood parasites were present, and only normal protistan and helminth symbiotes were observed, with no evidence of effect on survival of individuals or the population (Telford 1998). Similarly, a species of nematode (*Parapharyngodon ocalaensis*) was collected from the intestinal tracts of 22 sand skinks (Bursey and Telford 2003). It is not known to be a threat to the species. In a subsequent paper, Telford and Bursey (2003) found three species of endoparasites in 45 sand skinks from Ocala National Forest.

**Population Dynamics**

The population dynamics of sand skinks within their extant ranges are not well known because the skinks' small size and secretive habits make their study difficult. Sand skinks are known to exhibit life-history traits that are also found in a number of other fossorial lizard species, such as: delayed maturity, a small clutch size of relatively large eggs, low frequency of reproduction, and a long lifespan (Ashton 2005). Such character traits may have resulted from intraspecific competition or predation.

The current status of the sand skink throughout its geographic range is unclear because recent comprehensive, range-wide surveys have not been conducted. At the time of Federal listing in 1987, Florida Natural Area Inventory (FNAI) had recorded 31 known sites for the sand skink. By 2015, the Service had approximately 285 occurrence records with an increase in occurrence reports from Marion, Lake, and Orange Counties. The incidental observation data was compiled from a variety of sources by the Service (Service 2015). This increase is largely the result of more intensive sampling of scrub habitats in recent years and does not imply this species is more widespread than initially supposed. Nonetheless, except for a few locations where intensive research has been conducted, limited information about the presence or abundance of sand skinks exists throughout the range.

In the northern portion of the range, at least three persistent populations are under federal jurisdiction in the Ocala National Forest on the Mount Dora Ridge (Telford 1998, Service 2007a). Sand skinks have been collected for genetic analysis in both ridges (Branch et al. 2003) and population studies have been conducted at Archbold and in Ocala National Forest (Ashton and Telford 2006). Additional studies have provided presence/absence information that has been used to determine the extant range of the species (Mushinsky and McCoy 1991; Stout and Corey 1995). However, few long-term monitoring efforts have been undertaken to evaluate the population size, or population trends, of sand skinks at these sites, on remaining scrub habitat on private lands, or range-wide.

Approximately 85 percent of xeric upland communities historically used by sand skinks on the Lake Wales Ridge are estimated to have been lost due to development (Turner et al. 2006b, Service 2007a). It is likely that continued residential and agricultural development of xeric upland habitat in central Florida has destroyed or degraded habitat containing sand skinks. Protection of the sand skink from further habitat loss and degradation provides the most important means of ensuring its continued existence. Of the 73 locations examined by Turner et al. (2006a) on which sand skinks were reported, 39 are protected and, as of 2004, 27 were managed. Current efforts to expand the system of protected xeric upland communities on the Lake Wales Ridge, coupled with implementation of effective land management practices in both ridges, represent a likely opportunity for assuring the sand skink's survival.

It is possible that existing private and public conservation lands on the Lake Wales Ridge may provide significant suitable habitat for sand skinks. Over the last 20 years, the State of Florida has acquired xeric upland habitat through the Florida Forever program and its predecessors (Florida Department of Environmental Protection 2008). Combined, these land acquisition programs have protected almost 25,000 acres of xeric uplands (Turner et al. 2006a). The Service has also acquired portions of several tracts totaling 1,800 acres as a component of the Lake Wales Ridge National Wildlife Refuge (Service 1993).

Table 2 is a GIS desktop analysis with the acres of the FNAI protected lands within two of the ridge systems, Mount Dora and Lake Wales, that have suitable soils and elevation. Our analysis queried the Natural Resources Conservation Service soil database for well-drained, sandy soils (Apopka, Archbold, Astatula, Candler, Daytona, Duette, Kendrick, Lake, Orsino, Paola, Pomello, Satellite, St. Lucie and Tavares soils [Service 2011]), and clipped out soils that occurred in elevations at 82 ft. or higher. This desktop analysis is a rough estimate of potential habitat on two major ridges but has not been ground-truthed or surveyed and should be used a guideline for potential suitable habitat. Other factors such as habitat restoration, transportation and residential development was not considered or omitted from the analysis and calculation of acres.

**Table. 2. Potential Sand Skink Habitat in two Ridge Systems**

| NAME | Total Acres | Potential Sand Skink Habitat Acres: Elevation 82 feet and Skink Soils | Total Acres of Protected Lands within Ridge | Potential Sand Skink habitat under Protection within Ridge |
|---|---|---|---|---|
| Mount Dora Ridge | 267,718 | 183,614 | 123,628 | 101,854 |
| Lake Wales Ridge | 514,522 | 271,253 | 61,148 | 20,718 |

Source: Geographic Information System (GIS) desktop analysis Service 2015.
GIS Sources: Ridges: FDEP, FNAI: Protection Lands, Soils: U.S. Department of Agriculture, Natural Resources Conservation Service, Elevation: U.S. Geological Services

Recent studies estimated the current geographic distribution and total population size of sand skinks on public and privately owned conservation lands on the Lake Wales Ridge. The study found approximately 29,513 acres of suitable habitat on conservation lands on the Lake Wales Ridge. Total population size was estimated using mean density from 61 trap-out enclosures and applying the mean density across the public and privately owned conservation lands. During the spring time prior to reproduction, total skink population was estimated at 2.16 million individuals (95% confidence interval = 1.72 – 2.60 million) (Mushinsky et. al 2011). Although this estimated population assumes average density across all protected, suitable habitats in the Lake Wales Ridge, it demonstrates the amount of protected and occupied sand skink habitat that will assist recovery and reduce the risk of extirpation.

Because sand skinks have low dispersal abilities, introductions into restored or created unoccupied habitat in the Mount Dora or other ridges may be necessary. Sand skinks relocated to two former citrus groves in Orange County have persisted for at least 5 years (Hill 1999; Mushinsky et al. 2001). Comparisons of persistence, recruitment, and survival were used to determine translocation success of sand skinks on two restored scrub sites for 6 years following relocation (Mushinsky et al. 2001; Penney 2001; Penney et al. 2001). One site established a self-sustaining population, while the other did not. It was determined that site location, habitat suitability, and initial propagule size were the factors affecting success. Researchers concluded that the chances of long-term survival may improve when habitat is restored, and skinks are introduced to sites close to intact scrub, rather than to isolated sites (Mushinsky et al. 2001; Penney 2001).

## ENVIRONMENTAL BASELINE

The environmental baseline is an analysis of the effects of past and ongoing human and natural factors leading to the current status of the species, its habitat (including designated critical habitat), and ecosystems within the action area. The environmental baseline does not include the effects of the action under review in this Biological Opinion.

As mentioned in the project description, the Service consulted on sand skinks in May 1994, on the amended permit for the WDW permit. We considered the previous take authorized for sand skinks as a part of the environmental baseline for our analysis of the current proposed action.

**Status of the species within the action area**

Because sand skinks leave a distinctive sinusoidal S-shaped trail on the soil's surface when they move through the soil, various survey methods can be used to detect the tracks and determine presence of the sand skink. The survey methods employed can be used to estimate the extent of the site used by skinks. However, the actual number of skinks that may occur on the site is not known.

The Applicant coordinated with the Service to assess the potential habitat for sand skinks in specific areas of the proposed action and to focus on the locations where coverboard surveys would be warranted in potentially suitable habitats. Based on Service recommendations, the applicant's consultants conducted pedestrian surveys and coverboard surveys for sand skinks in late March, April and through early May 2015 in Parcel 3 and in four areas of potentially suitable habitats in Parcel 4.

The applicant's consultants conducted visual pedestrian surveys according to the USFWS Sand Skink and Blue-tailed Mole Skink Survey Protocol (2012). A review of the soils found within the Property Additions revealed that only Parcels 3 and 4 contain suitable well-drained soils and the proper elevations for the sand skink. Surveys conducted by Cardno found sand skink tracts on approximately 18.4 acres of native xeric habitat on the western part of Parcel 4. Cardno conducted more detailed surveys for sand skinks within Parcels 3 and 4 in March, April, and May of 2015. The surveys did not observe any sand skinks on Parcel 3 or on the eastern portion of Parcel 4.

Within the six supplemental LTP sites, the Florida sand skink is naturally occurring (MW-6, MW-7, and MW-11) or introduced as an experimental population (MW-22, MW-23, and Tract 17) associated with sand skink research sponsored by WDPR and completed by the University of South Florida. WDPR determined the occupancy of the suitable habitats on the LTP Supplemental Areas (68.4 acres). The applicant will minimize impacts to sand skinks on the proposed action wherever possible; however, this development may result in unavoidable, permanent impacts of up to 86.8 acres of occupied sand skink habitat.

**Factors affecting species' environment within the action area**

The skinks and the habitats they occupy surrounding the action area are threatened by degradation resulting from fire exclusion, historic agricultural practices, lack of management, and residential development. As mentioned in the previous section, some suitable habitat is interspersed within Parcel 4 and the LTP Supplemental Areas. Xeric habitats favored by skinks require periodic fire to maintain optimal habitat values such as patches of bare sand and low shrub architecture. The need to protect agricultural, residential, and commercial development has resulted in the suppression of wildfires.

Xeric habitats lacking periodic fire or management become overgrown and less suitable to skinks. Over time, skinks will diminish in abundance and eventually may be extirpated. WDPR will have

no mechanism to perpetuate land management practices beyond the action area, so the maintenance of habitat for skink suitability surrounding the action area will be the responsibility of individual property owners.

**Climate Change**

The Intergovernmental Panel on Climate Change (IPCC) concluded that warming of the climate system is unequivocal (IPCC 2007a). Numerous long-term changes have been observed including changes in arctic temperatures and ice, and widespread changes in precipitation amounts, ocean salinity, wind patterns, and aspects of extreme weather including droughts, heavy precipitation, heat waves, and the intensity of tropical cyclones (IPCC 2007b). While continued change is certain, the magnitude and rate of change is unknown in many cases.

Climatic changes in Florida could amplify current land management challenges involving habitat fragmentation, urbanization, invasive species, disease, parasites, and water management (Pearlstine 2008). Based on current predictions, global warming will be a particular challenge for endangered, threatened, and other "at risk" species. However, it is difficult to estimate, with any degree of precision, how the sand skink will be affected by climate change. Although the skinks occur on high sandy ridges, they may be sensitive to changes in rainfall patterns or changes in seasonal temperatures. The Service will use Strategic Habitat Conservation Planning, an adaptive science-driven process that begins with explicit population objectives, as the framework for adjusting our management strategies in response to climate change (Service 2006b).

## EFFECTS OF THE ACTION

This section analyzes the direct, indirect, and beneficial effects of the proposed action and interrelated and independent actions on federally listed skinks and their habitat.

**Factors to be considered**

The proposed action contains occupied skink habitat and is located within the geographic range of the sand skink. The timing of construction, relative to sensitive periods of the skink's life cycle, is unknown. The proposed action will be conducted in in multiple stages and will alter native vegetation within the action area. The time required to complete construction is not known but the time limit for completing the work authorized by the Corps permit ends on December 21, 2044. The disturbance associated with future development activities will be permanent and will result in a direct loss of habitat currently occupied by skinks.

**Direct effects**

Direct effects are those effects that are reasonably certain to occur as a result of the proposed action at the time of construction. . Direct effects include: the death and/or injury to individual sand skinks and eggs as a result of construction and land clearing activities in areas occupied by sand skinks.

The proposed action will result in the permanent loss of 86.8 acres of occupied sand skink habitat through future facility or road development activities within the WDPR. Incidental mortality of skinks due to land clearing and construction activities is reasonably certain to occur. Mechanical preparation of the project site can injure or result in mortality of individual skinks and skink eggs.

Sand skinks may respond to the commencement of construction activities by attempting to flee construction areas to avoid the disturbance. However, because skinks are not highly agile, they may not be able to successfully flee before they are affected by construction activities. As such, there may sand skink mortality during earthmoving activities associated with the implementation of the proposed action, as analyzed in this Biological Opinion.

**Interrelated and interdependent actions**

An interrelated activity is an activity that is part of the proposed action and depends on the proposed action for its justification. An interdependent activity is an activity that has no independent utility apart from the action under consultation. There are no known interrelated or independent actions for this proposed action.

**Indirect effects**

Indirect effects are those effects that result from the proposed action and related development, are later in time, and are reasonably certain to occur. Skinks that are not killed or injured at the time of construction are reasonably certain to be harmed after construction because habitat impacts will be to a degree that the remaining skinks' ability to feed, breed, and shelter will be impaired to the point that it will result in the death or injury of remaining individuals within the action area. Additional indirect effects of a development are increased incidences of vehicle wildlife collisions resulting in road kill and habitat fragmentation within the Lake Wales Ridge region which can decrease connectivity and genetic exchange across the skink's range.

**Beneficial effects**

Beneficial effects are those effects of the proposed action that are completely positive, without any adverse effects to the listed species or its critical habitat. WDPR is proposing the purchase of sand skink conservation bank credits for the impacted acreage at a 2:1 ratio prior to initiation of development activities within an occupied habitat or will provide an alternative equivalent option as approved by the Service. The alternative equivalent compensation could include funding to protect or restore lands that directly benefit the recovery of sand skinks or funding of scientific research to be approved by the Service. Any proposed funding for either land protection or restoration or scientific research would be designed to help in meeting the goals of the South Florida Multi-Species Recovery Plan for the sand skink. Sand skink conservation bank credits, funding for land protection, or approved research funding will be provided no later than 60 days prior to ground disturbance of occupied habitat.

**Analyses for effects of the action**

To minimize the population effects for the loss of skinks and skink habitat, the applicant has proposed the purchase of sand skink conservation bank credits for the impacted acreage at a 2:1 ratio prior to initiation of development activities within an occupied habitat or will provide an alternative equivalent option to be approved by the Service as a part of the proposed action. We recognize that a higher ratio of conservation actions as compared to the Proposed Project impacts has long-term beneficial actions for the species, however; there will be a time lag associated with the impacts and concluding the actions associated with CM1. Therefore, our jeopardy analysis considered the direct loss of 86.6 acres of occupied habitat and loss of individuals at the time of construction due to grading or development activities.

Although we know that portions of the project site are occupied, it is difficult to quantify abundance due to the cryptic nature of the species and survey methodology and the actual number of skinks that currently occupy the site is unknown. The Service has determined that the acres of occupied acres of scrub habitat are a quantifiable proxy for the jeopardy analysis and allows the Service to quantify and monitor take of the species. Skinks occur within 86.8 acres of the action area. Based on estimated acres of protected lands that are managed for sand skinks and scrub species, the proposed loss of occupied habitat is an insignificant amount, less than 0.3% (assuming 29,511 acres, Mushinsky et al. 2011). The Service acknowledges that this may be a conservative estimate of occupied habitat because of the limited range-wide data regarding sand skink population size at all protected sites in the remaining scrub habitat. Based on the best available information, the Service has determined that the loss of individual skinks within the 86.8 acres of occupied skink habitat would not jeopardize the recovery or continued existence of the species.

## CUMULATIVE EFFECTS

The Service defines "cumulative effects" considered in this Biological Opinion as the effects of future State, Tribal, local, or private actions (*i.e.,* non-Federal actions) reasonably certain to occur in the action area. The Service's definition of cumulative effects does not include future Federal actions unrelated to the proposed action because these actions require separate consultation pursuant to section 7 of the Act. At this time, there are no known future State, Tribal, local, or private actions that will occur within the action area.

## CONCLUSION

After reviewing the current status of the sand skink, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is the Service's biological opinion that the proposed action is not likely to jeopardize the continued existence of the sand skink. We base this decision on the following factors:

1. The proposed action would not result in the loss of priority sand skink protection areas as designated by the Service or other agencies to achieve recovery of the sand skink.While the proposed action shall result in a reduction of available skink habitat in the action area, there is sufficient suitable occupied habitat under conservation in the Lake Wales Ridge

and Mount Dora Ridge (Ocala National Forest) that the loss of 86.8 acres of occupied habitat is not likely to jeopardize recovery or the continued existence of the species.

2. The proposed action includes conservation measures that will result in future compensation that will benefit sand skink recovery. The future compensation shall be accomplished by one of the following: 1) the purchase of sand skink conservation bank credits for the impacted acreage at the standard 2:1 ratio prior to initiation of development activities within an occupied habitat; 2) providing an equivalent amount of conservation services via funding to protect or restore lands that directly benefit the recovery of sand skinks; or 3) providing funding for scientific research to be approved by the Service.

## INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. "Take" is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct." "Harass" is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns that include, but are not limited to, breeding, feeding, or sheltering. "Harm" is defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking, that is incidental to and not intended as part of the agency action, is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

The measures described below are non-discretionary, and must be undertaken by the Corps so that they become binding conditions of any grant or permit issued to WDPR, as appropriate, for the exemption in section 7(o)(2) to apply. The Corps has a continuing duty to regulate the activity covered by this incidental take statement. If the Corps (1) fails to assume and implement the terms and conditions or (2) fails to require WDPR to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the Corps or WDPR must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement [50 CFR § 402.14(i)(3)].

Sections 7(b)(4) and 7 (o)(2) of the Act generally do not apply to listed plant species. However, limited protection of listed plants from take is provided to the extent that the Act prohibits the removal and reduction to possession of federally listed endangered plants or the malicious damage of such plants on areas under Federal jurisdiction, or the destruction of endangered plants on non-Federal areas in violation of State law or regulation or in the course of any violation of a State criminal trespass law.

## AMOUNT OR EXTENT OF TAKE

The Service anticipates incidental take of sand skinks in the form of harm (i.e., injury, mortality and habitat loss). Construction activities associated with the proposed action may wound or kill skinks, and result in the loss of 86.8 acres of occupied skink habitat. The Service finds the number of sand skinks incidentally taken by the action will be difficult to quantify for the following reasons: (1) individuals have a small body size and spend the majority of their time underground, making the detection of a dead or impaired specimens unlikely; and (2) a suitable survey method has not been developed to accurately estimate skink density, thus the number of skinks currently occurring in the proposed action area is not well known.

The Service finds all sand skinks occurring within the 86.6 acres of skink habitat on the Proposed Project may be taken incidental to the action. The Service has determined the anticipated take is not likely to result in jeopardy to federally listed skinks. If, during the course of this action, this level of take is exceeded, such take would represent new information requiring reinitiation of consultation and review of the reasonable and prudent measures provided. The Federal agency must immediately provide an explanation of the causes of the taking and review with the Service the need for modification of the reasonable and prudent measures.

### Effect of the Take

In the accompanying Biological Opinion, the Service determined this level of anticipated take is not likely to result in jeopardy to the sand skink. Critical habitat has not been designated for the sand skink and will not be affected.

## REASONABLE AND PRUDENT MEASURES

When providing an incidental take statement, the Service is required to give reasonable and prudent measures it considers necessary or appropriate to minimize the take along with terms and conditions that must be complied with, to implement the reasonable and prudent measures. The Service has determined that the following reasonable and prudent measures are necessary and appropriate to minimize the take of sand skinks.

1. WDPR will minimize the adverse effects of harm and harassment to the sand skink by implementing a skink habitat compensation and management plan consistent with the requirements of this BO.
2. The Corps and WDPR shall ensure the level of incidental take anticipated in this Biological Opinion is commensurate with what is included in the proposed action.

The conservation measures described as a part of the project description are considered binding measures and shall be implemented for the exemption in section 7(o)(2) to apply. In the event that a sick, injured, or dead species is found, the Service has provided the following procedures to handle or dispose of any individuals taken.

## TERMS AND CONDITIONS

In order to be exempt from the prohibitions of section 9 of the Act, the Corps and WDPR must comply with the following terms and conditions that implement the reasonable and prudent measures described above and outline reporting and monitoring requirements. These terms and conditions are non-discretionary.

1.1 Prepare a skink habitat compensation and management plan for Service's and Corps review prior to skink impacts. Because impacts will be authorized via the Corps permit through 2044, the plan shall employ an adaptive management framework and adhere to the conservation priorities listed in the Service's 5-year review or recovery plan. WDPR will meet with the Corps and the Service annually to review the actions specific to listed species impacts.

1.2 Construction within occupied habitat on the Proposed Project will not commence until: a) WDPR provides the Service with a receipt (in the form of a letter or email) that the required sand skink credits have been acquired by WDPR or Service approved equivalent alternative compensation has been properly funded; and b) WDPR and the Corps have received an email or letter from the Service indicating that we have received the receipt from the approved research institute(s) or conservation bank(s). Proposed compensation will meet the objectives outlined in the sand skink habitat and management plan.

2.1 WDPR and the Corps will submit a table and a map delineating the location of the impacts as a report to the Service 60 days prior to construction. The table shall include the total acres of occupied skink habitat impacted due to the construction. A final report table template is attached to the Biological Opinion.

### Disposition of Sick, Injured, or Dead Specimens

Upon locating a dead, injured, or sick threatened or endangered species, initial notification must be made to the nearest Service Law Enforcement Office: U.S. Fish and Wildlife Service; 9549 Koger Boulevard, Suite 111; St. Petersburg, Florida 33702; 727-570-5398. Secondary notification should be made to the Florida Fish and Wildlife Conservation Commission: South Region; 3900 Drane Field Road; Lakeland, Florida; 33811-1299; 1-800-282-8002; and

Care should be taken in handling sick or injured specimens to ensure effective treatment and care or in the handling of dead specimens to preserve biological material in the best possible state for later analysis as to the cause of death. In conjunction with the care of sick or injured skinks, or preservation of biological materials from a dead animal, the finder has the responsibility to carry out instructions provided by Law Enforcement to ensure that evidence intrinsic to the specimen is not unnecessarily disturbed.

## CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

1. The conservation and protection of the Mira Lago property has been identified as one of the focal areas of the Everglades Headwaters Conservation Partnership within the proposed acquisition boundary of Everglades Headwaters National Wildlife Refuge. As planning efforts evolve, we recommend continued coordination with the Service in regard to how federal acquisition of the property fits into the vision of the proposed Everglades Headwaters National Wildlife Refuge.

## REINITIATION NOTICE

This concludes formal consultation on the Proposed Project. As provided in 50 CFR § 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action area has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded if more than 86.8 acres of skink habitat is impacted (as described in Proposed Project description) ; (2) the project proponent fails to provide compensation for the proposed impacts as described in the project description within the agreed upon timeframe (2) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; (4) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; or (5) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

Thank you for your cooperation in the effort to protect fish and wildlife resources. If you have any questions regarding this project, please contact Annie Diezerkowski at (904) 731-3089.

Sincerely,

for Jay B. Herrington
Field Supervisor

## LITERATURE CITED

Andrews R.M. 1994. Activity and thermal biology of the sand-swimming skink *Neoseps reynoldsi*: Diel and seasonal patterns. Copeia 1994(1):91-99.

Ashton, K.G. 2005. Life history of a fossorial lizard, *Neoseps reynoldsi*. Journal of Herpetology 39(3):389-395.

Ashton, K.G. and S.R. Telford, Jr. 2006. Monthly and daily activity of a fossorial lizard, *Neoseps reynoldsi*. Southeastern Naturalist 5(1):175-183.

Babis, W.A. 1949. Notes on the food of the indigo snake. Copeia 1949 (2):147.

Branch, L.C., A.M. Clark, P.E. Moler, and B.W. Bowen. 2003. Fragmented landscapes, habitat specificity, and conservation genetics of three lizards in Florida scrub. Conservation Genetics 4:199-212.

Brandley, M.C., A. Schmitz, and T.W. Reeder. 2005. Partitioned Bayesian analyses, partition choice, and the phylogenetic relationships of Scincid lizards. Systematic Biology 54(3):373-390.

Breininger, D.R., M.L. Legare, and R.B. Smith. 2004. Edge effects and population viability of eastern indigo snakes in Florida. Pgs. 299-311 in: H.R. Akcakaya, M. Burgman, 0. Kindvall, P. Sjorgren-Gulve, J. Hatfield, and M. McCarthy, editors. Species Conservation and Management: Case Studies. Oxford University Press, New York, New York.

Bursey, C.R., and S.R. Telford, Jr. 2002. *Parapharyngodon ocalaensis* n. sp. (Nematoda: Pharyngodonidae) from the sand skink, *Neoseps reynoldsi* (Scincidae), of Florida. The Journal of Parasitology 88(5):929-931.

Campbell, H.W. and S.P. Christman. 1982. The herpetological components of Florida sandhill and sand pine scrub associations. Pages 163-171 *in* N.J. Scott, editor. Herpetological communities. U.S. Fish and Wildlife Service, Wildlife Research Report No. 13, Washington, D.C.

Carson, H.L. 1945. Delayed fertilization in a captive indigo snake with note of feeding and shedding. Copeia 1945(4): 222-224.

Cardno. 2015. *Biological Assessment for the Walt Disney Parks and Resorts U.S., Inc. Long Term Permit II*, prepared for Walt Disney Parks and Resorts U.S., Inc.

Christian, K. A., and S. Waldschmidt. 1984. The relationship between lizard home range and body size: a reanalysis of the data. Herpetologica 40:68–75.

Christman, S.P. 1970. The possible evolutionary history of two Florida skinks. Quarterly Journal of the Florida Academy of Science 33(4): 291-293.

Christman, S.P. 1978. Threatened: bluetailed mole skink, *Eumeces egregius lividus* (Mount). Pages 38-41 *in* R.W. McDiarmid, editor. Rare and endangered biota of Florida. Volume 3: amphibians and reptiles. University Press of Florida; Gainesville, Florida.

Christman, S.P. 1988. Endemism and Florida's interior sand pine scrub. Final project report no.GFC-84-010, Florida Game and Fresh Water Fish Commission; Tallahassee, Florida.

Christman, S.P. 1992a. Threatened: sand skink, *Neoseps reynoldsi* (Stejneger). Pages 135-140 *in* P.E. Moler, editor. Rare and endangered biota of Florida. University Press of Florida, Gainesville, Florida.

Christman, S.P. 1992b. Threatened: bluetailed mole skink, *Eumeces egregius lividus* (Mount). Pages 117-122 *in* P.E. Moler, editor. Rare and endangered biota of Florida. University Press of Florida; Gainesville, Florida.

Christman, S.P. 2005. Densities of *Neoseps reynoldsi* on the Lake Wales Ridge. Final report submitted to U.S. Fish and Wildlife Service, Vero Beach, Florida.

Christman, S.R. and W.S. Judd. 1990. Notes on plants endemic to Florida scrub. Florida Scientist 53(1):52-73.

Collazos, A. 1998. Microhabitat selection in *Neoseps reynoldsi*: The Florida sand swimming skink. M.S. Thesis. University of South Florida; Tampa, Florida.

Conant, R. and J.T. Collins. 1998. A Field Guide to Reptiles and Amphibians Eastern and Central North America. Third Edition, Expanded. Houghton Mifflin Company; New York, New York.

Cooper, B.W. 1953. Notes on the life history of the lizard, *Neoseps reynoldsi* Stejneger. Quarterly Journal of the Florida Academy of Sciences. 16(4):235-238.

Cox, J.A. and R.S. Kautz. 2000. Habitat conservation needs of rare and imperiled wildlife in Florida. Office of Environmental Services, Florida Fish and Wildlife Conservation Commission, Tallahassee, Florida. 156 pp.

Diemer, J.E., and D.W. Speake. 1983. The distribution of the eastern indigo snake, Drymarchon corais couperi, in Georgia. Journal of Herpetology 17(3):256-264.

Florida Department of Environmental Protection. 2008. Acquisition and Restoration Council February 2008 Florida Forever Priority List [Internet] [cited August 18, 2014] Available from: http://www.dep.state.fl.us/lands/FLForever/FF_Acquisition/Feb_2008_FF_list.doc.

Florida Statues, Chapter 369, Part III. 2004. Wekiva Parkway Protection Act 2004. [Internet] [Cited August 18, 2015] Available from: http://laws.flrules.org/files/Ch_2004-384.pdf

Gianopulos, K.D. 2001. Response of the threatened sand skink (*Neoseps reynoldsi*) and other herpetofaunal species to burning and clearcutting in the Florida sand pine scrub habitat. M.S. Thesis, University of South Florida; Tampa, Florida.

Gianopulos, K.D., H.R. Mushinsky, and E.D. McCoy. 2001. Response of the threatened sand skink (*Neoseps reynoldsi*) to controlled burning and clear-cutting in Florida sand pine scrub habitat. Proceedings from the Florida Scrub Symposium; Orlando, Florida.

Greenberg, C.H., D.G. Neary, and L.D. Harris. 1994. Effect of high-intensity wildfire and silvicultural treatments on reptile communities in sand-pine scrub. Conservation Biology 8:1047-1057.

Greer, A.E. 2002. The loss of the external ear opening in scincid lizards. Journal of Herpetology 36(4):544-555.

Hill, K. 1999. Responses of released populations of the sand skink, *Neoseps reynoldsi*, to scrub habitat translocation in Central Florida. M.S. Thesis. University of South Florida; Tampa, Florida.

Intergovernmental Panel on Climate Change Fourth Assessment Report. 2007. Climate Change 2007: Synthesis Report. Summary for Policy Makers. Draft.

Kartesz, J.T. 1994. A synonymized checklist of the vascular flora of the United States, Canada, and Greenland. 2nd edition. 2 vols. Timber Press, Portland, OR

Keegan, H.L. 1944. Indigo snakes feeding upon poisonous snakes. Copeia 1944 (1):59.

Kochman, H.J. 1978. Eastern indigo snake, Drymarchon corais couperi. Pages 68-69 in R.W. McDiarmid, ed. Rare and endangered biota of Florida. University Presses of Florida; Gainesville, Florida.

Kautz, R.S. 1993. Trends in Florida wildlife habitat 1936-1987. Florida Scientist 56(1):7-24.

Kuhnz, L.S. 2000. Microhabitats and home range of the California legless lizard using biotelemetry. Master's Theses. Paper 2095.

Lawler, H.E. 1977. The status of Drymarchon corais couperi (Holbrook), the eastern indigo snake, in the southeastern U.S.A. Herpetological Review 8(3):76-79.

Layne, J.N., and T.M. Steiner. 1996. Eastern indigo snake (Drymarchon corais couperi): summary of research conducted on Archbold Biological Station. Report prepared under Order 43910-6-0134 to the U.S. Fish and Wildlife Service; Jackson, Mississippi.

Lazell, J.D., Jr. 1989. Wildlife of the Florida Keys: a natural history. Island Press; Washington D.C.

McCoy, E.D., P.E. Sutton, and H.R. Mushinsky. 1999. The role of guesswork in conserving the threatened sand skink. Conservation Biology 13(1):190-194.

Meneken, B.M., A.C.S. Knipps, J.N. Layne, and K.G. Ashton. 2005. *Neoseps reynoldsi* longevity. Herpetological Review 36:180-181.

Meshaka Jr., W.E., and J.N. Layne. 2002. Herpetofauna of a long unburned sandhill in south central Florida. Florida Scientist 65(1):35-50.

Moler, P.E. 1985a. Distribution of the eastern indigo snake, Drymarchon corais couperi, in Florida. Herpetological Review 16(2):37-38.

Moler, P.E. 1985b. Home range and seasonal activity of the eastern indigo snake, Drymarchon corais couperi, in northern Florida. Final performance report, Study E-1-06, III-A-5. Florida Game and Fresh Water Fish Commission; Tallahassee, Florida.

Moler, P.E. 1992. Eastern indigo snake. Pages 181-186 in P.E. Moler, ed. Rare and endangered biota of Florida, volume III, Amphibians and Reptiles. University Press of Florida; Gainesville, Florida.

Mushinsky, H.R. and E.D. McCoy. 1991. Vertebrate species compositions of selected scrub islands on the Lake Wales Ridge of Central Florida. Florida Game and Fresh Water Fish Commission, Nongame Wildlife Program, Project Report GFC-87-149; Tallahassee, Florida.

Mushinsky, H.R., and E.D. McCoy. 1999. Studies of the sand skink (*Neoseps reynoldsi*) in Central Florida. Final report to Walt Disney Imagineering. University of South Florida, Tampa, Florida.

Mushinsky, H.R., E.D. McCoy, K. Gianopulos, K. Penney and C. Meyer. 2001. Biology of the threatened sand skink of restored scrub habitat and their responses to land management practices. Final report to the Disney Wildlife Conservation Fund. University of South Florida, Tampa, Florida.

Mushinsky, H.R., E.D. McCoy, A. Catenazzi, E. Britt, A. Schrey, and J.S. Godley. 2011. Research to Benefit the Conservation of the Florida Sand Skink. Final Report. Department of Integrative Biology, University of South Florida, Tampa, Florida and Cardno ENTRIX, Riverview, Florida. September 2011.

Myers, C.W., and S.R. Telford, Jr. 1965. Food of *Neoseps*, the Florida sand skink. Quarterly Journal of the Florida Academy of Science. 28:190-194.

Myers, R.L. 1990. Scrub and high pine. Pages 150-193 *in* R.L. Myers and J.J. Ewel, editors. Ecosystems of Florida. University Presses of Florida; Gainesville, Florida.

Navratil, G. 1999. A study of selected land management practices on the sand pine scrub habitat of Florida: A measure of the effects of land management on the sand skink, *Neoseps reynoldsi.* M.S. Thesis, University of South Florida, Tampa, Florida.

Pearlstine, L.G. 2008. Ecological consequences of climate change for the Florida Everglades: An initial summary. Technical memorandum, South Florida Natural Resources Center, Everglades National Park. Homestead, Florida.

Penney, K.M. 2001. Factors affecting translocation success and estimates of dispersal and movement patterns of the sand skink *Neoseps reynoldsi* on restored scrub. M.S. Thesis. University of South Florida, Tampa, Florida.

Penney, K.M., H.R. Mushinsky, and E.D. McCoy. 2001. Translocation success of the threatened sand skink [Internet]. Pages 26-28 *in* D. Zattau, editor. Proceedings of the Florida Scrub Symposium 2001; Orlando Florida [cited August 18, 2014]. Available from: http://www.fws.gov/northflorida/Scrub-Jays/Docs/Proceedings-07-2001.pdf

Pike, D.A., R.S. Mejeur, W.D. Lites, and J.H. Exum. 2006. Do neighborhood conservation areas work? A drastic reduction in lizard occupancy coinciding with improved habitat quality and surrounding development. Abstract in Joint Meeting of the 22nd Annual Meeting of the American Elasmobranch Society, 86th Annual Meeting of the American Society of Ichthyologists and Herpetologists, 64th Annual Meeting of the Herpetologists' League, and the 49th Annual Meeting of the Society for the Study of Amphibians and Reptiles; 12–17 July 2006; New Orleans, Louisiana.

Pike, D.A., K.S. Peterman, and J.H. Exum. 2007. Use of altered habitats by the endemic *Plestiodon reynoldsi* Stejneger (sand skink). Southeastern Naturalist 6:715–726.

Prager, R. 2015. Compensation for Wekiva Parkway 204(2B)-205(2A)-206(2C) sand skink. Email communication July 10, 2015.

Reid, D.T., K.G. Ashton and K.R. Zamudio. 2004. Characterization of microsatellite markers in the threatened sand skink (*Neoseps reynoldsi*). Molecular Ecology Notes 4:691-693.

Schrey, Aaron W.; Fox, A M.; Mushinsky, H R.; and McCoy, Earl D., 2011. Fire increases variance in genetic characteristics of Florida Sand Skink (Plestiodon reynoldsi) local populations" *Integrative Biology Faculty and Staff Publications.* Paper 113.

Shaw, C.E. 1959. Longevity of snakes in the U.S. as of January 1, 1959. Copcio.

Smith, C.R. 1982. Food resource partitioning of fossorial Florida reptiles. Pages 163-171 *in* N.J. Scott, editor. Herpetological communities. U.S. Fish and Wildlife Service, Wildlife Research Report No. 13; Washington, D.C.

Smith, C.R. 1987. Ecology of juvenile and gravid eastern indigo snakes in north Florida. M.S. thesis, Auburn University; Auburn, Alabama.

Smith, R. 2003. Personal communication. Biologist. Presentation to the U.S. Fish and Wildlife Service on February 24, 2003. Dynarnac Corporation; Kennedy Space Center, Florida.

Smith, H.M. 2005. *Plestiodon*: A replacement name for most members of the genus *Eumeces* in North America. Journal of Kansas Herpetology 14:15-16.

Speake, D.W., D. McGlincy, and C. Smith. 1987. Captive breeding and experimental reintroduction of the eastern indigo snake. Pages 84-90 in R.R. in Proceedings of the 3rd Southeastern Nongame and Endangered Wildlife Symposium; Athens, Georgia.

Steiner, T.M., O.L. Bass, Jr., and J.A. Kushlan. 1983. Status of the eastern indigo snake in southern Florida National Parks and vicinity. South Florida Research Center Report SFRC-83/01, Everglades National Park; Homestead, Florida.

Stout, I.J. and D.T. Corey. 1995. Effects of patch-corridor configurations on nongame birds, mammals, and herptiles in longleaf pine-turkey oak sandhill communities. Nongame Project Report No. RFP-86-003, Florida Game and Fresh Water Fish Commission; Tallahassee, Florida.

Sutton, P.E. 1996. A mark and recapture study of the Florida Sand skink *Neoseps reynoldsi* and a comparison of sand skink sampling methods. M.S. Thesis, University of South Florida; Tampa, Florida.

Sutton, P.E., H.R. Mushinsky and E.D. McCoy. 1999. Comparing the use of pitfall drift fences and cover boards for sampling the threatened sand skink (*Neoseps reynoldsi*). Herpetological Review 30(3):149-151.

Telford, S.R., Jr. 1959. A study of the sand skink, *Neoseps reynoldsi*. Copeia 1959 (2):100-119.

Telford, S.R., Jr. 1962. New locality records for the sand skink, *Neoseps reynoldsi* Stejneger. Copeia 1959:110-119.

Telford, S.R., Jr. 1998. Monitoring of the sand skink (*Neoseps reynoldsi*) in Ocala National Forest. Final report submitted to U.S. Forest Service, Ocala National Forest, Silver Springs, Florida.

Telford, S.R., Jr., and C.R. Bursey. 2003. Comparative parasitology of squamate reptiles endemic to scrub and sandhills communities of north-central Florida, U.S.A. Comparative Parasitology 70:172–181.

Turner, F.B., R.I. Jennrich, and J.D. Weintraub. 1969. Home Ranges and Body Size of Lizards. Ecology 50(6):1076-1081.

Turner W.R., D.S. Wilcove, and H.M. Swain. 2006a. State of the Scrub: Conservation progress, management responsibilities, and land acquisition priorities for imperiled species of Florida's Lake Wales Ridge [Internet]. Archbold Biological Station; Lake Placid, Florida [cited August 18, 2014]. Available from: www.archbold-station.org/ABS/publicationsPDF/Turner_etal-2006-StateotScrub.pdf

Turner, W. R., D. S. Wilcove, and H. M. Swain. 2006b. Assessing the effectiveness of reserve acquisition programs in protecting rare and threatened species. Conservation Biology 20(6):1657-1669.

U.S. Fish and Wildlife Service (Service). 1987. Endangered and Threatened Wildlife and Plants; determination of Threatened Status for *Bonamia grandiflora* (Florida Bonamia) [Internet]; Endangered Species Field Station; Jacksonville, Florida [cited October 26, 2015].

U.S. Fish and Wildlife Service (Service). 1993. Proposed Establishment of Lake Wales Ridge National Wildlife Refuge. U.S. Fish and Wildlife Service, Atlanta, Georgia.

U.S. Fish and Wildlife Service (Service). 1999. South Florida multi-species recovery plan [Internet]; Atlanta, Georgia [cited August 18, 2015]. Available from: http://www.fws.gov/verobeach/index.cfm?Method=programs&NavProgramCategoryID=3&programID=107&ProgramCategoryID=3

U.S. Fish and Wildlife Service (Service). 2007a. Bluetail mole skink (*Eumeces egregius lividus*) and sand skink (*Neoseps reynoldsi*) [Internet]. 5-year review: summary and evaluation. South Florida Ecological Services Office, Vero Beach, Florida [cited August 13, 2015]. Available from: http://ecos.fws.gov/docs/five_year_review/doc1071.pdf

U.S. Fish and Wildlife Service (Service). 2007b. Draft communications plan on the U.S. Fish and Wildlife Service's Role in Climate Change.

U.S. Fish and Wildlife Service (Service). 2012. Draft Species Conservation Guidelines, South Florida – Sand Skink and Bluetail Mole Skink [Internet]. U.S. Fish and Wildlife, South Florida Ecological Services Office; Vero Beach, Florida [cited August 13, 2015] Available from: http://www.fws.gov/verobeach/ReptilesPDFs/20120206Skink%Final.pdf

U.S. Fish and Wildlife Service (Service). 2015. Sand Skink Geographic Information Systems Records.

U.S. Fish and Wildlife Service (Service). 2011. Sand Skink and Bluetail Mole Skink Consultation Area Map [Internet] U.S. Fish and Wildlife, South Florida Ecological Services Office; Vero Beach, Florida [cited August 13, 2015] Available from: http://www.fws.gov/verobeach/ReptilesPDFs/20120206_Skink%20consultation%20area%20map.pdf

Weekley, C.W., E.S. Menges, R.L. Pickert. 2008. An ecological map of Florida's Lake Wales Ridge: a new boundary delineation and an assessment of post-Columbian habitat loss. Florida Scientist 71(1):45-64.

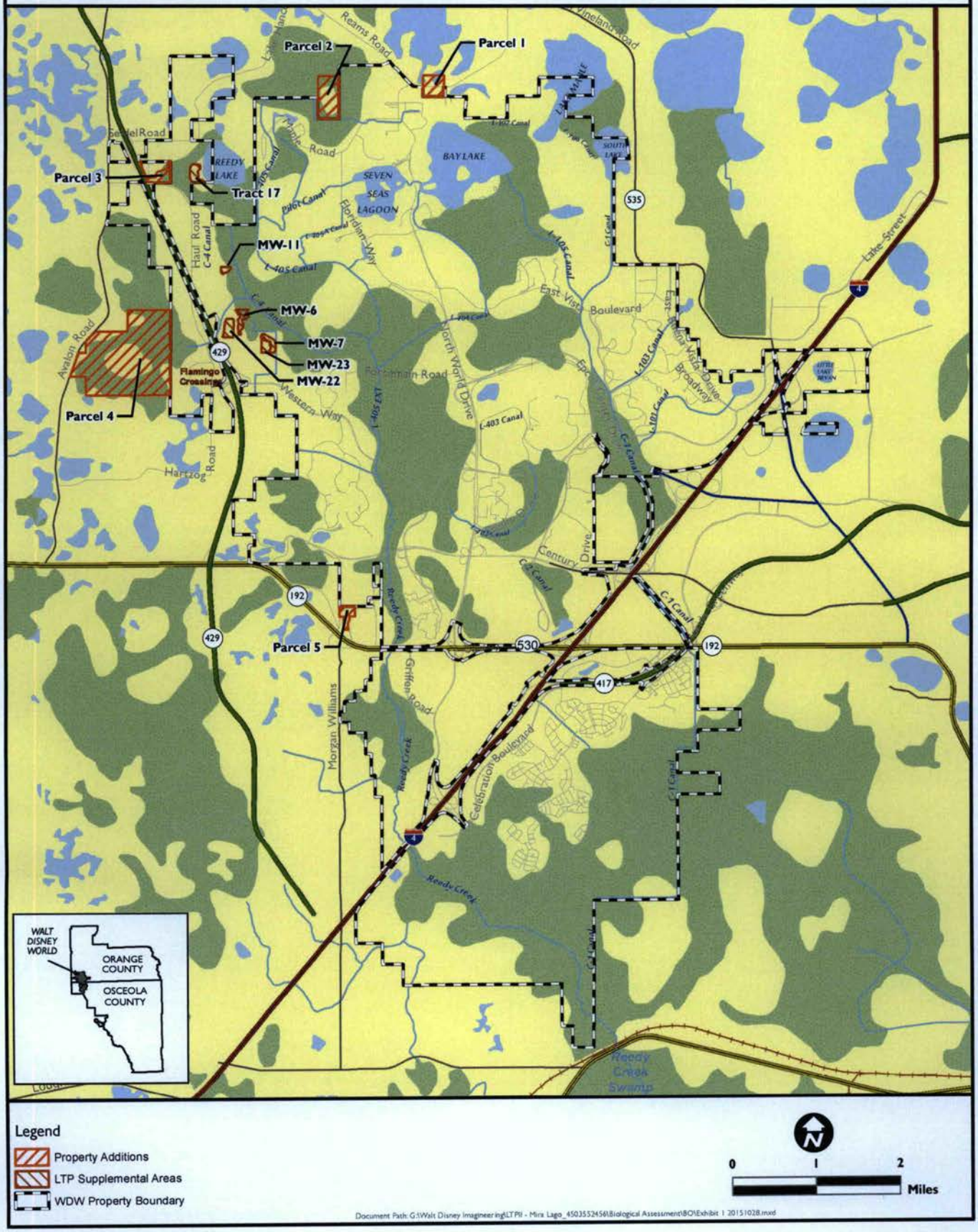
Zeigler, M. 2006. Personal communication. Citrus grove operations manager. Meeting with the U.S. Fish and Wildlife Service on August 1, 2006. Agricultural Resource Management; Vero Beach, Florida.

**FINAL REPORT TEMPLATE**

| **Parcel ID** | **Acres Presumed Occupied** | **Final Acres of Habitat Impacted** | **Final Compensation or Equivalent Alternative Compensation** |
|---|---|---|---|
| Parcel 4* - Bear Bay | 18.4 | | |
| MW-6* | 12.3 | | |
| MW-7* | 11.0 | | |
| MW-11* | 4.4 | | |
| MW-22* | 15.6 | | |
| MW-23* | 9.6 | | |
| Tract 17 | 15.5 | | |
| Total | 86.6 Acres | | |

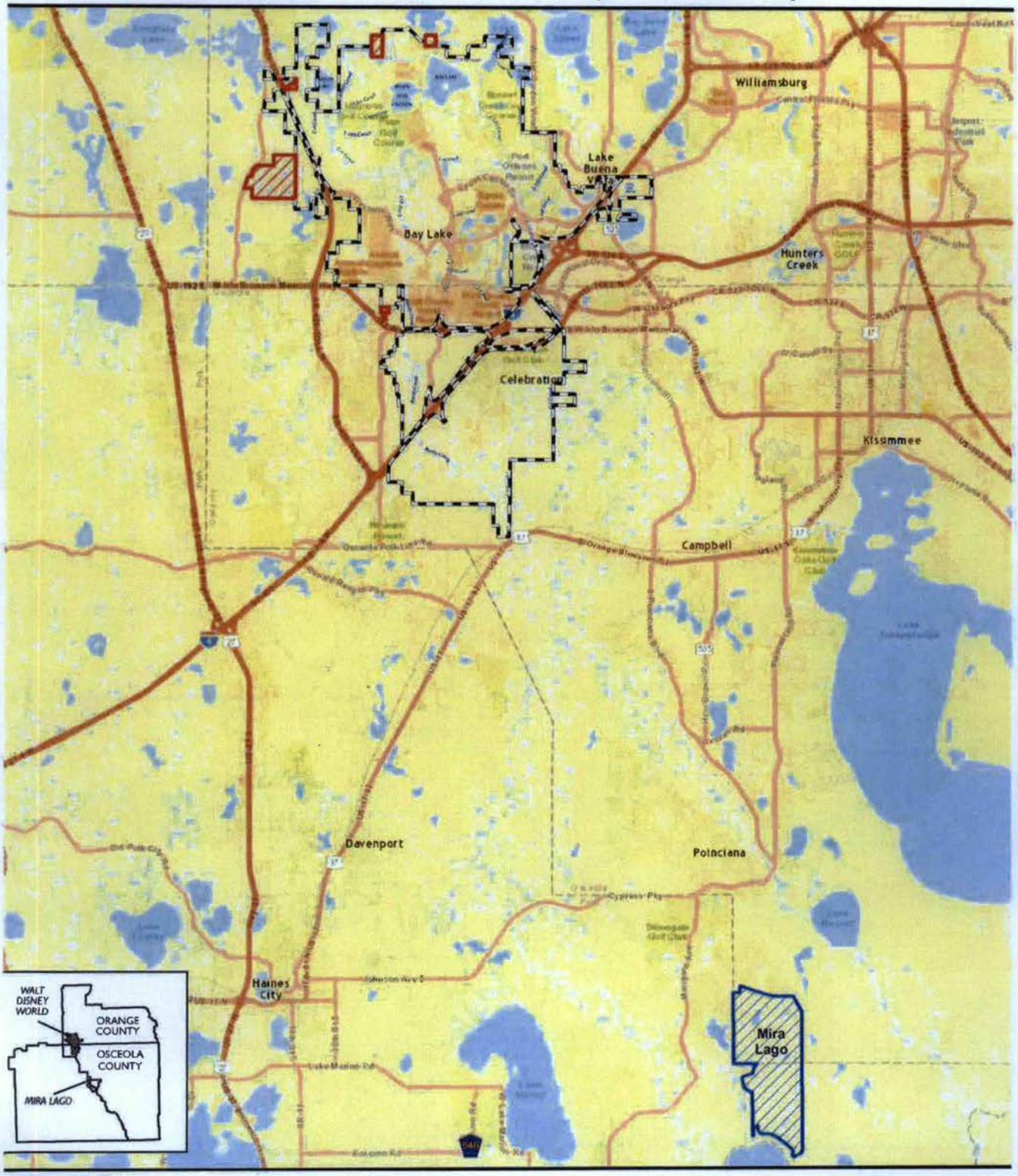
**APPENDIX**

## Exhibit1 - Parcel Location Map



**APPENDIX**

## Figure 1.- LTP II and Mira Lago Location Map



**APPENDIX**
**Biological Opinion, May 1994**

# United States Department of the Interior

FISH AND WILDLIFE SERVICE
6620 Southpoint Drive, South
Suite 310
Jacksonville, Florida 32216-0912

MAY 1 0 1994

Colonel Terrence C. Salt
District Engineer
U.S. Army Corps of Engineers
P.O. Box 4970
Jacksonville, Florida 32232-0019

**FWS Log No:** 4-1-92-065C
**Application No:** 199101901 (IP-GS)
**Applicant:** Walt Disney World Company
**County:** Orange

Attn: Regulatory Division

Dear Colonel Salt:

This represents the revised Biological Opinion of the U.S. Fish and Wildlife Service (Service) in accordance with Section 7 of the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 *et seq.*). This revised Biological Opinion satisfies the consultation requirements of Section 7(a)(2) of the Act. It does not address the requirements of other environmental statutes, such as the National Environmental Policy Act. A complete administrative record of this consultation is on file in this office.

## PROJECT DESCRIPTION

A complete description of the project, as permitted on December 21, 1992, is summarized in the Service's December 4, 1991, Biological Opinion to the Corps.

## CONSULTATION HISTORY

The Corps issued the public notice on November 7, 1991. On December 4, 1991, the Service provided a Biological Opinion to the Corps with reference to the bald eagle and Florida scrub jay. Subsequent to issuance of the opinion and Corps' permit, the applicant determined that there are additional federally listed threatened and endangered species that were not considered during the Section 7 consultation on the project site. The confirmed species are: sand skink *(Neoseps reynoldsi)*, eastern indigo snake (*Drymarchon corais couperi)*, Florida bonamia (*Bonamia grandiflora)*, scrub buckwheat (*Erigonum longifolium*

var. *gnaphalifolium*), scrub lupine (*Lupinus aridorum)*, scrub beargrass (*Nolina brittoniana)*, paper-like nailwort (*Paronychia chartacea)*, and woody wireweed (*Polygonella myriophylla)*. Species not confirmed are blue-tailed mole skink (*Eumeces egregius lividis)*, pygmy fringetree (*Chionanthus pygmaea)*, scrub blazing star, (*Liatris ohlingerae)* and scrub plum (*Prunus geniculata)*. As a result of this new information, on March 28, 1994, the Corps reinitiated Section 7 consultation on this project. The applicant has provided a report (March 18, 1994) summarizing the results of the surveys and proposing compensation to reduce and minimize the impact to several listed species.

## BIOLOGICAL OPINION

### EASTERN INDIGO SNAKE

During the initial review, this species was inadvertently omitted from the December 4, 1991, Biological Opinion. There have been 13 recorded sightings of this species on the Walt Disney World (WDW) site.

The development of this property may result in the incidental take of eastern indigo snakes. To compensate for wetland loss and wildlife impacts including the incidental take of Florida scrub jays, the applicant purchased Walker Ranch, 8,500 acres, in Osceola County. The eastern indigo snake has been reported on the ranch.

The applicant will instruct construction personnel on the WDW property about this species and its protected status. If an eastern indigo snake is found, the snake will be relocated to one of several conservation areas on the WDW property.

After review of the best available scientific and commercial information, it is our Biological Opinion that the project is not likely to jeopardize the continued existence of the eastern indigo snake. The snake is found throughout Florida in a variety of habitats. The acquisition of Walker Ranch (Disney Wilderness Preserve) will assist in the recovery of this species.

## INCIDENTAL TAKE

Section 9 of the Endangered Species Act, as amended (Act), makes it illegal to "take" an endangered species of fish or wildlife. "Take" (as defined in the Act) means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or to attempt to engage in any such conduct. "Harm" and "harass" are further defined in Service regulations (50 CFR 17.3). "Harass" is defined as an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns, which include, but are not limited to, breeding, feeding or sheltering. "Harm" is defined as an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

Under the terms of Section 7(b)(4) and 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered a prohibited taking provided that such taking is in compliance with the terms and conditions of this incidental take statement. The measures described below are nondiscretionary, and must by implemented by the agency so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, in order for the exemption in Section 7(o)(2) to apply.

The Federal agency has a continuing responsibility to regulate the activity that is covered by this incidental take statement. If the agency fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of Section 7(o)(2) may lapse.

The Service has reviewed the biological information for this species, information presented by the applicant's representative, and other available information relevant to this action, and based on our review, incidental take in the form of harass or harm is anticipated and authorized for all eastern indigo snakes on the project site.

When providing an incidental take statement, the Service is required to give reasonable and prudent measures it considers necessary or appropriate to minimize the take along with terms and conditions that must be complied with to implement the reasonable and prudent measures. The Service must also specify procedures to be used to handle or dispose of any individuals taken. The Service believes the following reasonable and prudent measure is necessary and appropriate to reduce the take:

> The applicant shall post information exhibits at construction sites to inform construction personnel about the eastern indigo snake.

To implement the above reasonable and prudent measure, the Service has outlined the following terms and conditions for incidental take. In accordance with the Interagency Cooperation Regulation (50 CFR 402), these terms and conditions must be complied with to implement the reasonable and prudent measures for incidental take.

1. The information exhibit shall, at a minimum, provide a picture of the eastern indigo snake and a physical description. The exhibit shall inform construction personnel that this species is protected by both federal and state laws, and if observed, should not be injured or killed.

2. If an eastern indigo snake is observed, the animal should be relocated to one of the conservation areas on WDW.

3. If a dead eastern indigo snake is found, the specimen should be frozen and the Jacksonville Field Office contacted (904-232-2580).

**APPENDIX**
**Biological Opinion, May 1994**

SAND SKINK

During the initial surveys, the sand skink had not been observed on the property. There had been no documented occurrence of this species on WDW. However, subsequent surveys revealed the presence of this species on the western edge of the project site, within habitats associated with the Lake Wales Ridge. All documented sightings in Florida have occurred in habitats that are at least 100 feet above sea level. A detailed description of trapping methodology is provided in the report submitted for reinitiation of consultation.

Sand skinks were documented at nine stations on the project site, north of US Highway 192 and west of Reedy Creek. All of the sites occupied by sand skinks were above the 100-foot contour and contiguous with the Lake Wales Ridge. The proposed project will result in the incidental take of sand skinks. However, only a small area of the project site is located on the Lake Wales Ridge, the population center for this species. Based on our review of this project, it is the Service's Biological Opinion that the small reduction of sand skink habitat on the eastern edge of its range is not likely to jeopardize the continued existence of this species.

To compensate for the incidental take of sand skinks, the applicant has proposed funding to initiate research on general biological and management issues affecting this species. The applicant has developed proposals for six specific projects. The research will be conducted by scientists knowledgeable about sand skinks. A draft contract has been prepared, and reviewed by the Service. Objectives and time tables are included in the contract. The six research proposals are:

1.0 Develop an annotated bibliography for the sand skink.

2.0 Comparative sampling efficiency of four methods (pitfall-drift fences, plywood shelters, surface raking and track counting) at detecting skinks.

3.0 Macrodistribution of sand skinks at Walt Disney World.

4.0 Microhabitat selection.

5.0 Age structure.

6.0 Response of sand skinks to land management practices.

A detailed description of each research proposal and objectives is outlined in the report (March 18, 1994) submitted for reinitiation of Section 7 consultation. On April 13, 1994, the Service received a letter from the applicant's consultant with a copy of a letter from the scientists who will conduct the research, elaborating on the proposed work. In addition to the work outlined in the March 18 report, several changes have been made. Regarding project 2.0, the sampling period has been extended for one year, and a control will be

established to measure efficacy of the different trapping techniques. Project 6.0 will include roller chopping as a land management practice.

The April 13 letter enclosed a copy of the research proposals, including dates in which interim and final reports will be completed. Quarterly reports will be submitted for proposals 2.0, 3.0, 4.0, and 5.0 with a final report by December 1995. Biannual reports will be submitted for proposal 6.0 with a final report completed by December 1997.

## INCIDENTAL TAKE

**See introductory explanation of incidental take under "Eastern indigo snake".**

**The Service has reviewed the biological information for this species, information presented by the applicant's representative, and other available information relevant to this action. Based on our review, incidental take in the form of harass or harm is anticipated for sand skinks on the project site. The Service is unable to specify the amount of take to occur. The Service, therefore, anticipates take for all sand skinks found within the project site.**

When providing an incidental take statement, the Service is required to give reasonable and prudent measures it considers necessary or appropriate to minimize the take along with terms and conditions that must be complied with, to implement the reasonable and prudent measures. Furthermore, the Service must also specify procedures to be used to handle or dispose of any individuals taken. The Service believes the following reasonable and prudent measure is necessary and appropriate to reduce the take.

> The Corps should include as a special condition in the permit a requirement that the applicant complete the six research proposals outlined in the March 18, 1994, report, and modified April 13, 1994. The applicant should provide the Corps and Service a copy of the signed contract for the six research proposals.

To implement the above reasonable and prudent measure, the Service has outlined the following terms and conditions for incidental take. In accordance with the Interagency Cooperation Regulation (50 CFR 402), these terms and conditions must be complied with to implement the reasonable and prudent measure for incidental take.

1. If it is necessary to modify a study proposal, the applicant shall request prior concurrence from the Corps and Service.

2. The Corps and Service shall receive all quarterly and biannual reports, as well as the final reports.

3. If a dead sand skink is found, it should be frozen and the Jacksonville Field Office notified for further guidance (904-232-2580).

**APPENDIX**
**Biological Opinion, May 1994**

BLUE-TAILED MOLE SKINK

The project site is outside of this species' known range. Throughout the ongoing sand skink trapping effort, three mole skinks have been trapped, but were not identified as the blue-tailed mole skink. Currently, the presence of the blue-tailed mole skink has not been confirmed on WDW; therefore, the Service believes the project will not affect this species.

PLANTS

Based on plant surveys conducted for the WDW property, the following plants were observed on site: Florida bonamia, scrub buckwheat, scrub lupine, scrub beargrass, paper-like nailwort, and woody wireweed. Except for the scrub lupine, which is seriously in danger of extinction, these species are still locally abundant in at least portions of their ranges (usually the Lake Wales Ridge in Highlands and Polk Counties; for Florida bonamia, the Ocala National Forest). All of these species thrive in bare, sunny areas of scrub vegetation that are not shaded by shrubs or sand pines. As a result, scrub vegetation that is actively managed to reduce (or periodically eliminate) shrubs and sand pine cover can support these species permanently on relatively small sites. Because these plants maintain dormant seed in the soil, they are likely to appear when shrubs are removed.

The Service has previously coordinated with the applicant regarding the scrub lupine with reference to the Little Lake Bryan Development of Regional Impact (DRI). The Development Order issued for this DRI called for either designating a scrub lupine conservation area (35 acres) on WDW or an off-site area if appropriate.

The remaining plant species are restricted to the western edge of the property. The applicant has placed 35.3 acres of scrub habitat under conservation easements, which will be managed for scrub plants. The preserves are established at six sites, west of Reedy Creek. Most of the sites are currently not suitable for these plants, but through active management, to which the applicant has agreed, these sites should become suitable. It is assumed there is an adequate seed source of these plants to repopulate the preserve areas.

Based on our review, it is the Service's Biological Opinion this project is not likely to jeopardize the continued existence of the above referenced plants.

## CONSERVATION RECOMMENDATION

Conservation recommendations are suggestions of the Service regarding discretionary measures to reduce or avoid adverse effects of a proposed action on listed species. Conservation recommendations may also include suggestions on ways for the Federal agency to meet its responsibility to conserve listed species under Section 7(a)(1) of the Act.

We recommend that if there is no evidence that the above listed plants are growing in the preservation areas on WDW after two years post-management, the applicant should attempt to introduce these plants into the sites.

This concludes consultation under Section 7 of the Act. If modifications are made in the project, or if additional information becomes available relating to threatened or endangered species, such as the occurrence of the blue-tailed mole skink on WDW, reinitiation of consultation may be necessary.

Sincerely yours,

Michael M. Bentzien

Michael M. Bentzien
Assistant Field Supervisor

cc
Charles Bazemore

Steve Godley
Biological Research Associates, Inc.
3910 US Highway 301 North, Suite 180
Tampa, Florida 33619

Bob Boos

**APPENDIX**

**Biological Opinion, December 1991**

United States Department of the Interior

TAKE PRIDE IN AMERICA

FISH AND WILDLIFE SERVICE
3100 University Blvd. South
Suite 120
Jacksonville, Florida 32216

December 4, 1991

RECEIVED
DEC 09 1991
REGULATORY

BHR wmd, mwc, PF, PN
Bob Boos, Brenda Eckmier 91419100

Colonel Terrence C. Salt
District Engineer
U.S. Army Corps of Engineers
P.O. Box 4970
Jacksonville, Florida 32232-0019

FWS Log No:4-1-92-065C
Application No: 199101901 (IP-GS)
Applicant: Walt Disney World Company
County: Orange
Date: November 7, 1991

Dear Colonel Salt:

This represents the Biological Opinion of the Fish and Wildlife Service, pursuant to Section 7 of the Endangered Species Act of 1973, as amended, and provides our comments with reference to the Fish and Wildlife Coordination Act. A complete administrative record of this consultation is on file in this office.

## Project Description

The applicant, Walt Disney World Company, has requested a 20-year permit for dredge and fill activities associated with the company's complete buildout of their property. The purpose of the project is to provide expanded entertainment, recreation, accommodations, education, shopping, office space, residential, and transportation facilities in one cohesive proposal to meet the demand for these activities at Walt Disney World (WDW) over the next 20 years. The projects call for filling 24.8 acres of open water and 533.6 acres of wetlands. The proposed dredge and fill work north of State Road (SR) 192 will be to enlarge the entertainment complexes and create two new theme parks. The work south of SR 192 will be associated with Celebration, a mixed use residential and commercial development. Due to the long-term nature of the proposal, only conceptual plans exist for many of the components of the project; however, the applicant has provided specific locations for roadways and the infrastructure necessary to serve areas proposed for future development.

RECEIVED
DEC 10 1991
ROBERT BOOS

wetlands, but acknowledges that once final plans are developed, less acreage may be impacted.

In the application, the applicant provided a detailed description of wetlands in each OU, and classified each wetland from functional to highly degraded. During the November 19, on-site inspection, the applicant showed the Service representative wetlands and explained the rating rationale. We agreed with their rationale, however, classifying a wetland is subjective. While we may disagree with some calls, overall, we do not have further comments on this particular issue.

A majority of the wetlands north of SR 192 have been severely impacted because of past efforts to drain the wetlands. The canals excavated during the 1960's have been very successful in dewatering the wetlands, which has resulted in soil subsidence and oxidation. The wetland functions have been destroyed as a result of this drainage effort.

South of SR 192, the applicant will develop Celebration, a mixed residential/commercial community. Of the 14 OU's within this development, the one that will have the most impact is OU 45. This unit is proposed for a regional mall. Within OU 45, there are isolated wetlands and some that are contiguous to Reedy Creek. These contiguous wetlands and the majority of the isolated wetlands will be filled for the mall. Other than this unit, the applicant has minimized the fill. Majority of the fill in the remaining wetlands south of SR 192 is for widening Interstate 4, constructing interchanges, and the road network system for Celebration. To develop the roadway network, it will be necessary to cross Reedy Creek at several points. The applicant will bridge these crossings. No fill will be required for the residential portion of this development.

To mitigate for wetland impacts, the applicant will restore approximately 250 acres of stressed wetlands north of EPCOT, purchase Walker Ranch in Osceola County and restore approximately 600 acres of stressed wetlands on the property. The applicant proposes to establish a conservation easement on Walker Ranch and convene a "Walker Ranch Advisory Board". The board will be responsible for developing a management plan for the property.

The Service is satisfied that the applicant has avoided and minimized wetland fill for most of the project. As discussed during the field inspection, we remain concerned about the extent of fill within OU 45. We suggested the applicant continue to evaluate alternative designs for the mall to avoid impacting the two wetland strands contiguous to Reedy Creek.

The Service supports the mitigation proposed for this project. The applicant has not completed the plans for the on-site restoration, but anticipates the final plans will be completed shortly after the end of the comment period. As discussed during the on-site inspection, we requested that rather then establishing the conservation easement using a ratio system, the applicant place the easement over the entire property immediately after the permit is issued. We want to continue to encourage the applicant to place the entire Walker Ranch under conservation easement immediately.

**APPENDIX**

**Biological Opinion, December 1991**

To mitigate for the wetland loss, the applicant proposes to enhance approximately 250 acres of stressed forested wetlands adjacent to EPCOT through rehydration, and purchase a 8,500-acre tract, known as Walker Ranch, in Osceola County. The applicant proposes to place Walker Ranch under a conservation easement over the next 20 years and will restore 692 acres of wetlands on the property through rehydration. The applicant proposes that Walker Ranch be conserved and managed pursuant to a plan under the review and guidance of a "Walker Ranch Advisory Board" (WRAB) made up of representatives from the permitting and review agencies, scientists, environmental groups and the Disney Development Company.

## Consultation History

The Corps issued the public notice on November 7, 1991. The Fish and Wildlife Service has been aware of this project, and has had several preapplication meetings with the applicant. There are two federally listed threatened and endangered species found within the influence of this project, the bald eagle (*Haliaeetus leucocephalus*) and the Florida scrub jay (*Aphelocoma coerulescens coerulescens*). We believe the project will have an impact on both species, therefore, this report represents the Biological Opinion of the Service.

## Biological Opinion

### Florida Scrub Jay

The Florida scrub jay is found throughout portions of its historic range in Florida. This species has been extirpated in extreme northeast and southwest Florida as well as much of its east and west coast range. The major population centers for scrub jays are the Ocala National Forest, the Kennedy Space Center/Canaveral Air Force Station, and the Lake Wales Ridge. Scrub jays are found in Orange County; however, their detailed distribution and status remains unknown. Since most of the land is under private ownership, its occurrence is unknown unless the landowner proposes to develop the property, at which time, threatened and endangered species surveys are required. Orange County is not within one of the population centers of the scrub jay.

On WDW property, there are several small patches of scrub habitat found north of SR 192. These small areas have been surveyed using recorded scrub jay calls, and the only group of scrub jays found is in Operational Unit (OU) 16. The scrub habitat is confined to a small ridge along both sides of a secondary road. Based on the surveys, two adult birds have been observed using this area, and one inactive scrub jay nest was found in a small live oak on the edge of the improved pasture. Areas north of the road are vegetated in longleaf pine/wire grass, intermixed with small herbaceous wetlands surrounded by titi. The scrub habitat is sparse under the longleaf pine. The development plan for OU 16 calls for a theme park. This development will eliminate this patch of scrub and result in the loss of one family of scrub jays. It is the Service's Biological Opinion, however, that the loss of one family of scrub jays on WDW is not likely to jeopardize the continued existence of this species.

**APPENDIX**

**Biological Opinion, December 1991**

Bald Eagle

In Orange County, there are approximately 14 active bald eagle nesting territories. On WDW property, one active territory is found south of SR 192, deep within the Reedy Creek drainage area. The Florida Game and Fresh Water Fish Commission has worked with the applicant to reduce the impact of Celebration on this territory. The applicant has agreed to maintain a primary zone of 1500 feet, with a secondary zone of an additional 750 feet. The Service believes these zones are adequate to protect the integrity of this territory; therefore, it is the Service's Biological Opinion this action is not likely to jeopardize the continued existence of the bald eagle.

**Incidental Take**

Florida Scrub Jay

Section 9 of the Act prohibits the taking of listed species without a special exemption. Taking is defined to mean harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct. Taking can only be authorized through special provisions. Under the terms of Sections 7(b)(4) and 7(O)(2), taking that is incidental to and not intended as part of the agency action is not considered taking within the incidental take statement.

The Service has reviewed the biological information and other available information relevant to this action, and based on our review, we anticipate that no more than one family of scrub jays will be taken as a result of the construction of this facility. The actual number of individuals may vary, depending on the time of year land clearing occurs. Walt Disney World Company is authorized, therefore, to take up to a maximum one family of Florida scrub jays in OU 16 on WDW for the purpose of constructing a theme park.

When providing an incidental take statement, the Service is required to give reasonable and prudent measures it considers necessary or appropriate to reduce the take, along with terms and conditions that must be complied with to implement the reasonable and prudent measures. Furthermore, the Service must also specify procedures to be used to handle or dispose of individual species taken.

The applicant has proposed to purchase 8,500 acres of undeveloped property in Osceola County to compensate/mitigate for wetlands on WDW that will be dredged and filled. On Walker Ranch there are 26 families of scrub jays. The applicant, with guidance from the WRAB, will manage and enhance this property for scrub jays, as well as other endangered species, such as bald eagles and red-cockaded woodpeckers.

**Reasonable and Prudent measure**

The applicant will purchase Walker Ranch and establish the WRAB as soon as possible.

**APPENDIX**

**Biological Opinion, December 1991**

## Terms and Conditions

In order to be exempt from the prohibitions of Section 9 of the Endangered Species Act, the following terms and conditions, which implement the reasonable and prudent measure described above must be met.

1. As a part of the negotiated agreement between the agencies and applicant, Walker Ranch will be placed under a conservation easement at the time of purchase or use the ratio described in the application.

2. The WRAB shall convene within 60 days after the property is purchased to begin the process of developing management objectives for Walker Ranch.

3. Thirty days prior to construction in OU 16, the applicant will survey the scrub habitat to determine the status of scrub jays. If more than one family of scrub jays are observed, the applicant shall notify the Jacksonville Field Office (904-791-2580). If only one family continues to use the area, the applicant is free to initiate land clearing.

4. If in the course of the operational phase of the project a dead scrub jay is found, the remains should be frozen immediately, and our office contacted within 24 hours for disposition.

Bald Eagle

In meeting the provisions for incidental take in Section 7 (b)(4) of the Endangered Species Act, we have reviewed the Biological Opinion and all available information relevant to this permit action. Based on our review, incidental take is not authorized for the bald eagle during implementation of this project. If an incident involving a bald eagle occurs, all work should cease and our office notified immediately (904-791-2580).

This concludes consultation pursuant to Section 7 of the Endangered Species Act. If modifications are made in the project, such as the Walker Ranch not being purchased, or if additional information on threatened or endangered species becomes available, reinitiation of consultation may be necessary.

## Fish and Wildlife Coordination Act Comments

The Service has reviewed the complete application describing in detail the conceptual plan of development, need for the project, wetland conditions, and the mitigation plan. Reviewing and permitting agencies have requested in the past that the applicant provide a complete plan of development for the WDW property. As a result, the applicant has submitted a total plan of development for the next 20 years, and has requested a 20-year permit to carry out the work. While the applicant has not provided a detailed project description for each OU, the applicant has identified those wetlands that will be dredged or filled. The applicant has requested authorization to fill approximately 533 acres of

Based on our review of this project, the proposed mitigation, and the effort the applicant has expended to minimize the fill in wetlands, the Service does not object to issuance of this long-term permit.

This represents the views of Department of Interior.

Sincerely yours,

David J. Wesley
Field Supervisor

cc

Breedlove, Dennis & Associates, Inc.
Mark Christopher

## Dabu, Tamy S SAJ

**From:** Dziergowski, Annie <annie_dziergowski@fws.gov>
**Sent:** Tuesday, May 10, 2016 1:42 PM
**To:** Dabu, Tamy S SAJ
**Subject:** [EXTERNAL] Amending Disney Long Term Permit BO

Tamy,

I just wanted to let you know that we will be submitting a amendment to the BO that we issued to Disney for their Long Term Permit. After some discussions it was determined that the initial amount of "take" for 86 acres included areas that had already been permitted by the Service in 2006. This reduced the amount of "take" to 46.1 acres. This letter will also include their proposed compensation for this take. I hope to have something too you in the next few weeks. Please let me know if you have any questions.

Thanks,
Annie

Annie Dziergowski, Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Email: annie_dziergowski@fws.gov <mailto:annie_dziergowski@fws.gov>
7915 Baymeadows Way, Suite 200
Jacksonville, FL 32256-7517
904.731.3089 (direct)
904.731.3336 (main)
904.731.3045 or 3048 (fax)
Blockedhttp://www.fws.gov/northflorida

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
400 HIGH POINT DRIVE, SUITE 600
COCOA, FLORIDA 32926

REPLY TO
ATTENTION OF

**November 18, 2015**

Regulatory Division
North Permits Branch
Cocoa Permits Section
SAJ-1991-01901 (SP-TSD)
Disney Long Term Permit Major Modification

Walt Disney Parks & Resorts U.S., Inc.
C/o Mr. Lee Schmudde
PO Box 10000
Lake Buena Vista, Florida 32830-1000
E-mail address: lee.schmudde@disney.com

Dear Mr. Schmudde:

The U.S. Army Corps of Engineers (Corps) has completed the review and evaluation of your Department of the Army permit application major modification, number SAJ-1991-01901 (SP-TSD). Our regulations require that you have an opportunity to review the terms and conditions prior to final signature by the Department of the Army. Enclosed is an unsigned Department of the Army permit instrument (permit).

Please read carefully the Special Conditions beginning on page 2 of the permit. These were developed to apply specifically to your project. Water Quality Certification is also required prior to issuance of a permit. The Corps has received a copy of the State of Florida certification for your project. In accordance with General Condition 5 of the permit, any special conditions of the Water Quality Certification have been attached to the Department of the Army permit.

**Instructions for Objecting to Permit Terms and Conditions:** This letter contains an initial proffered permit for your proposed project. If you object to certain terms and conditions contained within the permit, you may request that the permit be modified. Enclosed you will find a Notification of Administrative Appeal Options and Process fact sheet and Request for Appeal (RFA) form. If you choose to object to certain terms and conditions of the permit, you must follow the directions provided in Section 1, Part A and submit the completed RFA form to the letterhead address.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria under 33 CFR Part 331.5, and that it has been received by the District office within 60 days of the date of the RFA. Should you decide

to submit an RFA form, it must be received at the letterhead address by January 17, 2016.

**Instructions for Accepting Terms and Conditions and Finalizing Your Permit:** It is not necessary to submit an RFA form to the District office, if you do not object to the decision in this letter. In this case, the permit must be signed by the applicant in the space provided on the signature page of the permit. In the case of corporations, acceptance must be by an officer of that corporation authorized to sign on behalf of the corporation. The party responsible for assuring the work is done in accordance with the permit terms and conditions must sign the permit. Please type or print the name and title of the person signing below the signature and the date signed.

SIGN AND RETURN THE PERMIT, IN ITS ENTIRETY, TO THE LETTERHEAD ADDRESS, ALONG WITH A CHECK OR MONEY ORDER FOR $100.00 MADE PAYABLE TO THE *FINANCE AND ACCOUNTING OFFICER, JACKSONVILLE DISTRICT.*

The permit will be signed by the District Engineer and returned to you. It is important to note that the permit is not valid until the District Engineer signs it.

The Corps Jacksonville District Regulatory Division is committed to improving service to our customers. We strive to perform our duty in a friendly and timely manner while working to preserve our environment. We invite you to take a few minutes to visit the following link and complete our automated Customer Service Survey:

http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey

Your input is appreciated – favorable or otherwise.

If you have any questions concerning this application, you may contact Tamy Dabu in writing at the letterhead address, by electronic mail at tamy.s.dabu@usace.army.mil, or by telephone at 321-504-3771 extension 11.

Sincerely,

for Donald W. Kinard
Chief, Regulatory Division

Enclosures

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL**

| Applicant: Walt Disney Parks & Resorts U.S., Inc./ LTP Major Mod | File Number: **SAJ-1991-01901** | Date:11/18/2015 |
|---|---|---|
| Attached is: | | See Section below |
| **X** | INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission) | A |
| | PROFFERED PERMIT (Standard Permit or Letter of permission) | B |
| | PERMIT DENIAL | C |
| | APPROVED JURISDICTIONAL DETERMINATION | D |
| X | PRELIMINARY JURISDICTIONAL DETERMINATION | E |

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/functions/cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- *ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.*

- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- *ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.*

- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- *ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.*

- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

| SECTION II - REQUEST FOR APPEAL OBJECTIONS TO AN INITIAL PROFFERED PERMIT |
|---|
| REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.) |

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

| POINT OF CONTACT FOR QUESTIONS OR INFORMATION: | |
|---|---|
| If you have questions regarding this decision and/or the appeal process you may contact:<br><br>**Tamy Dabu, Project Manager**<br>**321-504-3771 extension 11** | If you only have questions regarding the appeal process you may also contact:<br>**for process:**<br>**Tori White**<br>**904-232-1658** |

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

| | Date: | Telephone number: |
|---|---|---|
| _____<br>Signature of appellant or agent. | | |