

**APPENDIX A**  
**WILDLIFE MANAGEMENT PLAN**

THE RESERVE AT SWEETWATER ESTUARY  
WILDLIFE MANAGEMENT PLAN

I. Purpose

The purpose of this wildlife management plan is to ensure that adverse impacts to rare or endangered species, or their habitat, will not occur within the proposed amendment area. This plan is consistent with Conservation Element Policies V.4.1, V.4.2, and V.4.5 of the Taylor County Comprehensive Plan. Best Management Practices (BMPs) will be utilized and are intended to be compatible with maintaining and/or improving the environmental quality of habitat for rare and endangered species within the proposed amendment area, and to allow unhindered movement across the site. This plan will outline BMPs which will occur before, during, and after construction. These BMPs will be utilized to avoid and minimize effects to rare and endangered species habitat from the proposed project. The delisted bald eagle is also addressed in this plan.

II. Introduction

Birkitt Environmental Services, Inc. (Birkitt) conducted state and federally listed species surveys of the proposed amendment site on multiple occasions from 2003 to 2009. In accordance with BMPs, Birkitt reviewed the Florida Fish and Wildlife Conservation Commission (FWC) Strategic Habitat Conservation Areas maps, Florida Natural Areas Inventory (FNAI), and North Central Florida Strategic Regional Policy Plan Regionally Significant Natural Resources map series prior to completion of field work in order to identify habitats where rare or threatened and endangered listed species may occur.

During the listed species surveys, Birkitt biologists utilized pedestrian, vehicular, and boat surveys concurrently with terrestrial and aquatic habitat surveys to determine the presence of rare and endangered species and their associated habitats within and adjacent to the proposed amendment area. The rare and endangered species observed in the vicinity of the project during these surveys included various wading birds foraging in the salt marshes on site. In addition, American alligator, gopher tortoise, and Florida mouse habitat was identified.

After completion of the field surveys and conceptual plan development, it was determined that the proposed Sweetwater Resort Community will include approximately 25.74 acres of wetland impacts. No saltmarsh impacts are proposed. Wetland mitigation will be developed in accordance with Chapter 62-345 F.A.C. to offset the proposed impacts. It is also important to note that approximately 1017 acres of the 1,291 acre proposed amendment area have been avoided and will be designated as conservation area.

### III. Wildlife Habitat Protection

During the multiple listed species surveys of the proposed amendment area, wading birds were observed. The presence of potential habitat for the American alligator, gopher tortoise (*Gopherus polyphemus*), and the Florida mouse indicate that the species could also be present within the proposed amendment area. As a result, the Florida mouse, American alligator, wading birds, and gopher tortoise are discussed below.

#### a. American Alligator

The American alligator (*Alligator mississippiensis*) is Federally listed as “threatened due to similarity of appearance” (to the American crocodile), and State listed as a Species of Special Concern (SSC) by the FWC. American alligators are found throughout the Southeastern United States, and their preferred habitat includes freshwater wetlands, lakes and rivers. The occurrence of American alligators on the proposed amendment site has not been documented by FNAI and no individuals were observed during the protected species surveys conducted by Birkitt biologists. However, it is still possible that the species could potentially occur within the proposed amendment area, as potential habitat is present.

There is ample appropriate habitat located outside the proposed amendment area for alligators to utilize. Alligators can be highly mobile, and therefore, these habitats are available for alligators to move to should they be disturbed by any proposed construction activities.

Thus, it is expected that by following the practices outlined in this wildlife management plan, the proposed activities will have minimal, if any, effects on American alligators.

#### b. Wading Birds

Wading birds are typically listed in the state of Florida as Species of Special Concern (SSC). They are not federally listed. Wading birds are most commonly associated with wetlands, streams, and other aquatic habitats. Most wading birds possess long legs and toes, and long and sometimes curved bills – adaptations enabling them to live and feed in shallow water habitats. Wading birds rely heavily on wetland habitat including, but not limited to, inland and coastal emergent marshes as well as wooded swamps. These preferred habitats do occur on site and as a result wading birds are expected to be on site.

During field surveys of the proposed amendment site, several wading birds were observed foraging. No nests or wading bird colonies were observed, however, potential nesting habitat was present. Table 1 below lists the wading bird species observed onsite.

TABLE 1  
OBSERVED WADING BIRD SPECIES

Scientific Name	Common Name	Designated Status (FWC)	Observed On-site
<i>Egretta caerulea</i>	Little blue heron	SSC	X
<i>Egretta rufescens</i>	Reddish egret	SSC	X
<i>Egretta thula</i>	Snowy egret	SSC	X
<i>Egretta tricolor</i>	Tricolored heron	SSC	X
<i>Platalea ajaja</i>	Roseate spoonbill	SSC	X
<i>Eudocimus albus</i>	White ibis	SSC	X

The proposed project is anticipated to have little to no impacts on wading bird individuals, as there are numerous high quality and suitable habitats located in close proximity to the proposed amendment area and outside the influence of construction and operation activities. Additionally, construction and operational activities, occurring on the proposed amendment area, are expected to have a minimal affect on wading bird foraging habitat because BMPs will be utilized during the construction and operation of the proposed development, and a substantial portion of the proposed amendment area will be designated as conservation. In addition, a Natural Resource Management Plan (NRMP) will be developed for the proposed Audubon International Signature Sanctuary Program Golf Course, which will include practices which conserve and protect wading birds and their habitat.

Thus, it is expected that by following the practices outlined in this wildlife management plan and by implementation of the mitigation plan, the proposed project activities will have minimal, if any, adverse affects on wading birds.

d. Gopher Tortoise

The gopher tortoise is currently listed as Threatened in the State of Florida. The gopher tortoise's protection status was recently increased from the previous category of Species of Special Concern in 2007. The species is not currently federally protected.

The gopher tortoise typically inhabits relatively well-drained, sandy soils and is generally associated with longleaf pine and xeric oak sandhills. It also occurs in scrub, xeric hammock, pine flatwoods, dry prairie, coastal grasslands and dunes, mixed hardwood-pine communities, and a variety of disturbed habitats such as pastures, fields, and the shoulders of roadways (Diemer, 1986; Breininger *et al.*, 1994).

Suitable gopher tortoise habitats, as described above, exist in the northeast portion of the proposed project site. A species specific survey for gopher tortoises will be conducted prior to development in this area. If gopher tortoises are present, they will be relocated in accordance with FWC permit requirements by an Authorized Gopher Tortoise Agent; therefore, no direct impacts to gopher tortoises will occur.

e. The Florida Mouse

The Florida mouse is listed by the FWC as a Species of Special Concern. The habitat requirements of the Florida mouse consist of xeric upland communities with sandy soils. No direct or indirect observation of this species has been made, however the Florida Mouse is a commensal species of the gopher tortoise and potential habitat for both species does exist within the northeast portion of the proposed amendment site. Field assessments will be conducted as part of the gopher tortoise surveys and any occurrences will be relocated to an appropriate recipient site in accordance with FWC requirements

c. Bald Eagle – Not Listed

The bald eagle (*Haliaeetus leucocephalus*) was delisted from its previous “threatened” status by the U.S. Fish and Wildlife Service (USFWS) on August 8, 2007 and by the Florida Fish and Wildlife Conservation Commission (FWC) in April 2008. However, this species has been placed in an “other” classification category and is still protected under the Federal Bald Eagle and Golden Eagle Protection Act and the State Bald Eagle Management Plan.

This species utilizes areas close to coastal areas, bays, rivers, lakes, or other bodies of water that provide sufficient concentrations of food sources, such as fish (FNAI, 2007). The proposed amendment area may be considered bald eagle habitat as it is a coastal area adjacent to the Gulf of Mexico.

According to the FWC eagle nest locator database (FWC, 2005), two (2) bald eagle nests (one active [TA002] and one inactive [TA003]) are located near the proposed amendment area. The active nest, TA002, is an element occurrence documented by the FNAI and is located greater than 2,000 feet from the proposed amendment area. Ground truthing of these nests was conducted on January 20, 2005 by Birkitt biologists to confirm the presence and activity of these nests. Birkitt biologists confirmed the presence of TA002, and observed a bald eagle flying in the vicinity of the nest. Nest TA003 was not observed, and the last observation was recorded in the FWC eagle nest locator database in 1983, and FWC last checked the nest in 2003. Therefore, it is our conclusion that nest TA003 is abandoned. An additional eagle nest was observed during a 2009 site investigation; this nest was found within the southern portion of the proposed amendment area and has been determined to be active.

Rule 68A – 16.002 F.A.C., states that proposed activities should be consistent with the FWC Eagle Management Guidelines (2008). The Bald Eagle Management Guidelines and the National Bald Eagle Management Guidelines

(USFWS, 2007) suggest that activities conducted within 660 feet of active or alternate bald eagle nests be minimized. No activities will occur within 660 feet of the nest during nesting season. A permit will be required for activities within 330 feet of an active nest and appropriate mitigation provided pursuant to the FWC Eagle Management Guidelines. Some portions of the site development will occur within the 330 foot buffer zone; however, and a bald eagle permit will be required for activities in proximity to this nest. Mitigation will be provided per the FWC Eagle Management Guidelines. Onsite mitigation is available within the proposed amendment area to meet the mitigation requirements and to protect this species.

#### IV. Best Management Practices

Established BMPs will be implemented before, during, and after construction. The following BMPs will be implemented to ensure no adverse affects to rare or endangered species or their habitat occur:

##### Pre-Construction

- Prior to construction, surveys will be conducted on potential rare or endangered species habitats to identify the presence of any individuals, burrows, and/or nests.
- Protective strategies include no human activities or disturbances during critical times such as nesting.
- If nesting rare or endangered species or nests are identified, no disturbances shall occur within the vicinity of the nest until such time as nesting is completed and juveniles have left the area.
- If the presence of the gopher tortoise or Florida mouse is observed, FWC permits will be obtained and the species relocated to an acceptable recipient site by an Authorized Gopher Tortoise Agent.
- The Applicant shall obtain all necessary permits from the FWC and the USFWS prior to construction of the proposed development.
- Activities which may occur within 330 or 660 feet of an active bald eagle nest shall be consistent with FWC Bald Eagle Management Guidelines.

##### During Construction

- Silt fences will be installed along the perimeter of the construction areas where impacts to foraging habitat may occur and around areas being directly impacted by construction. The silt fencing is expected to minimize any adverse impacts to adjacent foraging habitat or any rare or endangered species that may be present.
- Construction staging areas shall be established in upland areas, located away from potential wading bird or American alligator habitat.
- During construction, monitoring for rare or endangered species will be conducted. If rare or endangered species are found in construction areas, construction activities will cease until the individuals have left the area.
- Efforts will be made to minimize noise during construction.
- The use of bright lights will be minimized during construction.

#### Post-Construction

- Approximately 1017 acres of habitat will be designated as Conservation Area.
- Landscaping for the proposed development will include the use of native plants and vegetation.
- As part of the Audubon International Signature Sanctuary Program Silver certification, a NRMP will be developed for the golf course. The NRMP will include BMPs specifically for the protection of rare or endangered species and their habitat.
- Water access will be limited to non-motorized vessels.
- The majority of the development will be clustered into development areas, leaving a substantial portion of the project area as conservation area (79%) which will provide suitable foraging, roosting, and nesting habitat for rare or endangered species.
- Upon locating a dead, injured, or sick rare or endangered species, initial notification must be made to the nearest USFWS Law Enforcement Office. Secondary notification should be submitted to the FWC.

#### V. Conclusion

Multiple wildlife surveys of the 1,291 acre proposed amendment area were conducted between 2003 and 2009 for the presence of rare or threatened and endangered species and their habitat. Habitat for the Florida mouse, the American alligator, the gopher tortoise, and several wading bird species was recorded as being present in the proposed amendment area.

No American alligators were observed during the wildlife surveys; however, alligators are known to occur in almost every wetland in Florida. Alligator habitat does exist on site but impacts to this species and its habitat are expected to be minimal, if any. Suitable habitat, in close proximity to the project area, is available for any alligators that might be present within the proposed amendment area to move to while construction activities are underway.

Wading birds have been observed foraging within the proposed amendment area, however, no nests or colonies were observed during the wildlife surveys. Wading birds can utilize a variety of wetland habitats, and suitable areas will be available for foraging and nesting outside of the influences of the construction/operational activities. In addition, approximately 1017 acres of wetlands will be designated as conservation, which will be available for wading birds and any other potential rare or endangered species. The NRMP developed for the golf course will include specific practices to protect rare or endangered species and their habitat.

Suitable gopher tortoise and Florida mouse habitat exists in the northeast corner of the project site. Although no gopher tortoises or their burrows or Florida mice have been observed, a survey will be conducted to determine presence of these species. If gopher tortoises or Florida mice are present, relocation will occur to move all

individuals within construction areas to a recipient site in accordance with FWC permit requirements.

The bald eagle, which has been delisted by both the USFWS and the FWC, is proposed for classification in an "other" category and is protected under the Federal Bald and Golden Eagle Protection Plan and the State Bald Eagle Management Plan. A bald eagle nest was observed within the proposed amendment area in 2009 and development is proposed to occur within the 330' buffer. No construction will occur during nesting season and no direct impacts to the nest will occur. However, a bald eagle permit will be obtained and mitigation measures will be implemented per the Bald Eagle Management Guidelines to protect this species.

The proposed amendment area will contain approximately 1017 acres of undeveloped conservation land. Additionally, approximately 147 acres is proposed to be an eighteen (18) hole golf course certified through the Audubon International Signature Sanctuary Program. Certification in the Audubon International Signature Sanctuary Program includes development of an NRMP which will include practices to protect rare or endangered species and their habitat. Such practices include planting native vegetation and low maintenance landscaping, reduction in the amount of chemicals and fertilizers used to manage turf, water conservation measures, and providing wildlife habitat. Proposed development activities will occur in approximately 127 acres of the 1,291 acre proposed amendment area (10%). Therefore, through the implementation of BMPs and adherence to this Wildlife Management Plan, adverse impacts to rare or endangered species and their habitat will be avoided, minimized, and mitigated.