

APPENDIX C

WILDLIFE MANAGEMENT PLAN

THE RESERVE AT SWEETWATER ESTUARY

WILDLIFE MANAGEMENT PLAN

December 5, 2008

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.

II. Introduction

Birkitt Environmental Services, Inc. (Birkitt) conducted protected species surveys of the proposed amendment site during November 2003, June 2004, November 2004, January 2005, May 2005, July 2005, and August 2005. 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 listed species may occur.

During the protected 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, bald eagle and American alligator habitat was identified. No nests or nesting activities were observed within the proposed amendment area.

After completion of the field survey and design phase of the project, it was determined that the proposed Sweetwater Resort Community will include approximately 39 acres of direct impacts and 5.5 acres of secondary impacts to freshwater wetlands on site, and approximately 0.5 acres of impact to salt marsh habitat. As mitigation for these impacts, a total of approximately 256 acres of wetlands will be placed under a conservation easement in perpetuity. This includes approximately 144 acres of freshwater herbaceous wetlands, approximately 22 acres of salt marsh, and an additional 90 acres of freshwater forested wetlands. In addition, three (3) freshwater, forested, wetland credits will be purchased from the San Pedro Mitigation Bank. The impacts and mitigation plan was reviewed and approved by the Suwannee River Water Management District in June 2008, in

accordance with Environmental Resource rules. It is also important to note that approximately 652 acres of the 1,170 acre proposed amendment area have been avoided and will be designated as open space.

III. Wildlife Habitat Protection

During the multiple protected species surveys of the proposed amendment area, wading birds were the only listed species observed. However, the presence of potential habitat for the bald eagle and American alligator indicate that the two species could also be present within the proposed amendment area. As a result, the bald eagle, American alligator, and wading birds are discussed below.

a. Bald Eagle

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 Plan 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 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 and may be lost.

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. Activities inconsistent with the FWC Bald Eagle Management Guidelines require a permit. As stated above, nest TA002 is greater than 2,000 feet from the northernmost edge of the proposed amendment area. As a result, the proposed project is not expected to affect the active nest and a Bald Eagle Permit is not required for this nest.

b. 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.

c. 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

Scientific Name	Common Name	Designated Status (FWC)	Observed On-site
<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 placed under a conservation easement or remain in its current natural state as open space. 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. Furthermore, as part of the mitigation plan, over 20 acres of saltmarsh habitat are to be enhanced, improving the value for foraging wading birds.

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.

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 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.
- 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 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 help prevent 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 256 acres of wetland habitat will be protected, enhanced, and/or created according to the mitigation plan, which is anticipated to improve foraging habitat for rare or endangered species.
- Landscaping for the proposed development will include the use of native plants and vegetation.
- Over 54,500 linear feet of upland buffer adjacent to wetlands will be established to protect these habitats.
- As part of the Audubon International Signature Sanctuary Program 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 pursuant to special limiting condition #34 of the Environmental Resource Permit (ERP) issued by the Suwannee River Water Management District (SRWMD) in June 2008.
- The majority of the development will be clustered into three development areas, leaving a substantial portion of the project area as open space and conservation area (78%). The preserved and open space areas should provide suitable foraging, roosting, and nesting habitat for rare or endangered species.
- Small marsh islands, potentially suitable as nesting habitat, will be preserved within the proposed area designated as open space (approximately 652 acres).

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

Several wildlife surveys of the 1,170 acre proposed amendment area were conducted for the presence of rare or endangered species and their habitat. Habitat for the bald eagle, the American alligator and several wading bird species were recorded as being present in the proposed amendment area.

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. An active bald eagle nest TA002 was observed during a January 2005 survey by Birkitt biologists. However, this nest is greater than 2,000 feet from the proposed amendment area and therefore is not expected to be affected by the proposed development activities.

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 912 acres of wetlands will be placed in a conservation easement and/or open space which will be available on site 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.

The proposed amendment area will protect approximately 256 acres on site in perpetuity under a conservation easement and designate an additional 652 acres on site as undeveloped open space. Additionally, approximately 166 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 95 acres of the 1,170 acre proposed amendment area (8%). Therefore, through the implementation of BMPs, the Mitigation Plan, and adherence to this Wildlife Management Plan, adverse impacts to rare or endangered species and their habitat will be avoided, minimized, and mitigated.