

Babcock Ranch Preserve Conceptual Management Plan Changes

Listed below are all of the changes that were made to the April 29, 2008 draft Babcock Ranch Preserve Conceptual Management Plan up to the current July 8, 2008 version. All page numbers refer to the July draft. Changes are shown in red font. Text additions are underlined and deletions are stricken through.

~~~~~

### Throughout the plan

Areas that refer to the business or operational plan, now read business/operational plan.

### Page xi

#### Babcock Ranch Preserve Act

BRP was established to “protect and preserve the environmental, agricultural, scientific, scenic, geologic, watershed, fish, wildlife, historic, cultural, and recreational values of the Preserve, and to provide for the multiple use and sustained yield of the renewable surface resources within the Preserve.” (FS 259.1053) and “with a goal of sustaining the ecological and economic integrity of the property being acquired while allowing the business of the ranch to operate and prosper” (FS 259.1052).

### Page xi

#### Conservation Lands

This property will be managed following a stewardship ethic for the service of public interest through the implementation of agricultural and ranch activities, protection and conservation of the land, air, water, natural resources, archeological and historic assets. This area shall provide natural resource based recreation while protecting ensuring plant and animal species viability survival and conserving any finite or renewable natural resources on the property for the benefit and satisfaction enjoyment of every state citizen presently and in the future. (Sections 253.034, 259.047, 259.1053 FS)

### Page 11

**Table 1-3. Status of Management Activities at BRP Following CMP Adoption**

| Activity                                      | Status Following CMP Adoption                                                                                                                   |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Apiary                                        | Continues                                                                                                                                       |
| Archaeological and Historical Site Protection | Increases                                                                                                                                       |
| Cattle Operations                             | Continues                                                                                                                                       |
| Ecotourism                                    | Increases                                                                                                                                       |
| Grazing                                       | Continues with <u>possible</u> adjustments                                                                                                      |
| Horticultural Debris Disposal                 | Continues                                                                                                                                       |
| Hunting                                       | Resumes with adjustments                                                                                                                        |
| Invasive Species Control                      | Continues                                                                                                                                       |
| Native Plant Nursery                          | Recommended                                                                                                                                     |
| New Income Producing Operations               | Recommended                                                                                                                                     |
| Prescribed Fire                               | Continues with adjustments                                                                                                                      |
| Public Access                                 | Increases                                                                                                                                       |
| Public Education                              | Increases                                                                                                                                       |
| Silviculture Operations                       | Continues with adjustments                                                                                                                      |
| Sod Operations                                | Continues                                                                                                                                       |
| Tenant Farming                                | <del>Shall</del> <u>Intention is to</u> be phased out over time. (See Section 3.1.3 Ranch Operations and Public Ownership <u>for details</u> ). |

*Page 13*

#### **1.4 Balancing BRP Management Requirements (3<sup>rd</sup> paragraph)**

For these reasons, a primary challenge facing management of BRP will be to generate sufficient revenue to fulfill the vision of the acquisition of BRP. The CMP outlines general strategies and opportunities to address some of these revenue shortfalls. However, the CMP is a document that guides general management of the BRP (see the Mission and Purpose section of this CMP) and cannot provide specific solutions to all financial and management challenges. The CMP will be implemented according to ~~an~~ a Business/Operational Plan developed annually and incorporated, once approved, by reference into this CMP. This Business/Operational Plan, due on or about December 15 of each year, will list specific tasks to be completed toward accomplishing the goals and objectives listed in this CMP. The Business/Operational Plan will be developed within the scope of the CMP, and the approved by the BOT and Lee County the first year, then by the managing agencies FWC, DOF, BRI, and Lee County (with respect to its portion of the property) subsequent years. The BRP partners will be notified of the Business/Operational Plan and its contents. To ensure success, BRP will require an adaptive management approach that will necessitate time, cooperation, and collaboration between parties. BRP provides a unique opportunity to develop an innovative public and private partnership to manage and sustain Florida's agricultural and conservation heritage.

*Page 53*

#### **3.1.1. Grazing and Ranch Management (5<sup>th</sup> paragraph)**

The types and proportions of grasses produced on different ranges are dependent on a complex of conditions associated with soil type, soil moisture, fire regime, and other ecological processes. Recent work by panels of experts in the Journal of Range Management and the National Research Council has proposed that "Rangeland Health" be used to supplant Condition Class assessments. Rangeland Health is defined as "the degree to which the integrity of the soil, vegetation, water, and air as well as ecological processes of the rangeland are balanced and sustained. Integrity is defined as the maintenance of the functional attributes of a locale, including normal variability." Rangeland Health takes into account dynamic ecological processes, while Condition Class is simply a measure of plants present in a climax community, and is therefore a much more comprehensive assessment. Unfortunately no comprehensive Rangeland Health assessments have been done for south Florida range to date. In lieu of a Rangeland Health assessment, the FNAI habitat assessment in conjunction with other science based resources should be used as a guide by the University of Florida Institute of Food and Agricultural Sciences (IFAS), Range Cattle Research and Education Center to establish cattle stocking rates within rangeland areas for determining determined which areas are to be below their potential ~~and may need~~ sufficiently such that a temporary reduction in grazing pressure, chopping for shrub control, or some other management input may be appropriate.

*Page 55*

#### **3.1.2. Long Term Management Needs for Ranch Operations**

There are several clear challenges to the ranching operations at BRP given public ownership. The ranch must continue to generate revenue sufficient to cover operating expenses while adhering to the guidelines of public conservation and management and applicable county, state, and federal laws, regulations, and guidance. In particular, previous revenue sources including cypress harvesting (excluding salvage harvest) and private hunting leases were ended by the

execution of the Management Agreement and it is the intent that tenant farming is to be phased out (see Section 3.1.3 Ranch Operations and Public Ownership for details on tenant farming).

As operation of BRP moves forward with the new management regime, the challenges to the ranch's revenue generating ability need to be addressed in a comprehensive way. The new management regime should consider incorporating strategies to position the ranch to meet both its immediate challenges and its need to create a business model that will allow it to be a self-sustaining working ranch.

*Page 56*

### **3.1.3. Ranch Operations and Public Ownership**

Under public ownership, the management approach at BRP will shift to a balance that will reflect the BRP Act (FS 259.1053) more closely as it relates to the habitat maintenance needs of the full suite of species that call flatwoods their home and will provide for new recreational activities that will be both appropriate and raise revenues. The following sections briefly discuss recommended changes to the following ranch operations: prescribed fire, tenant farming (agricultural licenses), turf grass, capital improvements, roads, apiary, and recreational activities.

*Page 56*

### **Prescribed Fire**

Guidelines for prescribed fire management are discussed fully in Section 3.3 Fire Management.

Fires caused by lightning at the end of the dry season and through the rainy season (growing season) represent the natural fire regime in south Florida. It is believed that native range, such as is present at BRP, has been subjected to this type of fire for many centuries. Numerous groundcover species of flatwoods and dry prairie are adapted to and dependent upon growing season fires. However, Florida ranchers have typically burned native range in winter or early spring. Prescribed fires carried out in late spring or summer will, over time, decrease coverage of saw palmetto, which in turn will increase space for forage plants to grow. Inclusion of periodic spring and summer prescribed burns in the typical burn regime, or all-season burning, will likely benefit native plant communities and thus cattle grazing and wildlife. See Section 3.7 Fish and Wildlife Management for a full discussion of the ecological effects of all-season burning.

Control of wildfires and the proper application of prescribed fire in the Wildland-Urban Interface will become important for the BRP Manager to address. Current and future encroachment by residential development in close proximity to BRP will continue to present significant smoke and fire management challenges. It is important and strongly recommended to notify adjacent landowners of prescribed fires on the BRP prior to their execution. The large size of BRP will be favorable to managers as they implement prescribed fire. For tools that will assist the BRP Manager in addressing prescribed issues in the Wildland-Urban Interface, see Section 3.8 Public Use and Education.

*Page 57*

### **Tenant Farming (Agricultural Licenses)**

~~As set forth in the Management Agreement the renewal of tenant farming leases (which are now licenses, according to BOT requirements) will end in July 2011. However, given the short term uncertainties of generating sufficient revenue for the continued operation of BRP and the~~

~~challenges associated with transitioning to alternative revenue and funding sources, it is recognized that extending the tenant farming licenses may need to be evaluated and considered.~~

As described in Section 4.3 (Ranch Operations Goals & Objectives) and Section 5 (Resource Management Challenges and Strategies) efforts will be made to identify and implement alternative revenue and funding sources for the continued responsible management of BRP, and to help offset any revenue decrease associated with a decline in tenant farming. As such, it is the intent and expectation that tenant farming on the BRP will cease prior to July 29, 2018, which is a seven year extension beyond what was agreed to in the Management Agreement. The use of tenant farming will be subject to future evaluation and the development and terms of any future management and business/operational plans.

Any tenant farming license agreements extending beyond the July 31, 2011 are required to be approved by the BRI. If the acreage under tenant farming licenses increases above the current level, (but below the limits set below), only existing improved farm fields or improved pastures would be utilized, and areas identified as natural areas, as defined by FNAI, shall not be converted to farm fields or other uses.

**Option to Extend Tenant Farming in the Lee County Portion of ~~on~~ BRP for 3 years (from 2011 to 2014):** Prior to expiration of the tenant farming licenses in July 2011, if BRM concludes that alternative revenue and funding sources are insufficient, BRM may submit a request to BRI to extend the current tenant farming licenses on BRP for an additional 3 years (to July 2014). The request will include a report describing the efforts and level of success of implementing the Business/Operational Plan to transition revenue and funding generation from tenant farming to alternative sources. If BRI approves the request, then the tenant farming licenses will be extended. If tenant farming is approved for extension from 2011 to 2014, farming in the Lee County tenant areas will be limited to organic-type farming after 2011. No tenant farming license extensions will be considered on the Lee County portion of BRP beyond 2014. The total acreage of lands in tenant farming in the Lee County portion of the BRP shall not exceed 1,070 acres.

~~**Option to Extend Tenant Farming in the Charlotte County Pportion of BRP: for 4 years (from 2014 to 2018):** No tenant farming license extensions will be considered on the Lee County portion of BRP beyond July 2014. However, after July 2014 if BRI concludes that alternative revenue and funding sources continue to be insufficient, the BRP Manager at that time (BRM or BRI) may submit an additional request to re-evaluate the need to further extend the current tenant farming licenses located in the Charlotte County portion of BRP for an additional 4 years (to July 2018). BRM, if it is the BRP Manager at that time, will first submit the request to BRI. Any request will include a report describing the efforts and level of success of implementing the Business Plan to transition revenue and funding generation from tenant farming to alternative sources. If BRI determines there is a need to extend the tenant farming licenses, a mid-cycle plan amendment to the CMP will be submitted to ARC and the BOT. Any tenant farming license extension must be approved by DOF, FWC, BRI, DEP, ARC, and the BOT. The total acreage of lands in tenant farms in the Charlotte County portion of the BRP shall shall not exceed 4,000 acres.~~

The total acreage of lands in tenant farms in the Charlotte County portion of the BRP shall not exceed 4,000 acres.

**Management and Alternative Use of Tenant Farm Fields Taken out of Production:** ~~As an~~ An important goal of this CMP is to identify, develop, and establish alternative revenue and funding sources, ~~no further requests to extend the tenant farming licenses beyond July 2018 will be considered.~~

Any current use or proposed alternative use of the fields currently licensed to tenant farming will be evaluated to ensure that degradation of the resources does not occur.

As Whenever active farm fields are taken out of production, specific actions must are recommended to be taken to prevent the infestation of these fields by nuisance invasive plants, especially non-native plants. Agricultural lands left fallow can easily become infested with non-native invasive plants. Cattle grazing has been demonstrated to be a cost-effective way to manage improved pasture on conservation land while that land awaits restoration to native communities. Without grazing, the land is more likely to be invaded by non-native species and oak shrubs that rapidly convert the land to a community type that is not conducive to prescribed fire. Cattle grazing on public conservation lands helps to prevent these undesirable outcomes while providing revenues to assist with land management activities.

#### *Page 58*

#### **Capital Improvements**

There are many structures on the property; these are residential, equipment related, or support recreational endeavors. All existing structures should be evaluated ~~continuously for~~ to establish their applicability to support ranch operations. If it is deemed that any particular structure does not meet a need of BRP, including architectural historic value, then consideration should be given to its demolition or removal. A decision framework ~~should~~ could be created for all proposed additions or removals of the ranch's capital improvements. Decision criteria must could be defined to guide these type decisions and who makes and approves such decisions. By the same token, if new structures are needed, then consideration should be given to construction, with the appropriate permits and based upon limits specified in the Management Agreement.

~~Per the Management Agreement (Section 19) in all cases, new buildings shall only be constructed in areas that are already disturbed by some kind of development. New structures may not be located in natural areas (per Section 18) or in wetlands. Replacement structures may be increased to a footprint size no larger than 125% of the size of the original structure (square footage may be increased with more than one story structures). In addition, manager may construct up to three new working facilities (e.g., working cattle pens, maintenance barns, etc.) as required to accommodate existing ranch operations or as required to accommodate any agricultural enterprise expansion.~~

Prior to ground disturbing activities (e.g., construction of buildings, parking lots, and new roads), FNAI, Florida Division of Historical Resources (DHR), DSL and Lee County (for projects occurring in Lee County) will be consulted and must approve any projects not listed in this management plan. ~~The DSL will be consulted on projects not listed in this management plan.~~ A Department of Juvenile Justice facility in the northern part of the BRP will may continue to operate into the foreseeable future under a lease with the State of Florida.

**Page 58**

**Roads**

Where possible, existing roads ~~shall~~ may be used for all current and future operations. Where new roads are necessary, road construction shall be in accordance with BMPs and contained therein. Typical construction and maintenance activities may include disking, plowing, grading, excavating and the application of clay, gravel, shell or other like material, or any other activity necessary to the BRP Manager's performance of its responsibilities under provisions of this CMP.

Manager ~~shall~~ may maintain existing roads and game plots. Any new roads and game plots shall not exceed 15% of length or size of existing roads and game plots. Roads needed to provide access for new construction allowed in the Management Agreement and CMP and roads required for conversion of tenant farms to wildlife habitat and forage areas are excluded from the length and size limitations (Section 24 of the Management Agreement).

**Page 59**

**Apiary**

There is an apiary operation present on BRP for honey production and harvesting and in some locations to provide pollination services for tenant farmers. Management of apiaries is a common practice on public conservation lands. The combination of flatwoods communities being restored through the potential of implementing all-season fire (causing an increase in native flowering plants) and potential new markets for honey on neighboring BRC will produce conditions for a continued, and possibly enhanced, apiary operation.

**Page 59**

**Recreational Activities (2<sup>nd</sup> paragraph)**

Some new recreational activities may have the capacity to impact ranch operations dramatically and will require careful planning. The cattle herd is separated into subherds (see Section 2.2 Ranch Operations) and any new recreational ventures must be established such that the integrity of all ranch operations, particularly cattle operations, is not compromised. See Section 3.8.1 Recreation for discussion of establishing zones on the ranch for different recreational activities that are compatible with ranch operations in each section. In particular, gates must be kept securely fastened to ensure that there is no inappropriate mixing of cattle herds. To minimize this possibility, areas of the BRP with concentrations of separately fenced improved pasture shall be avoided as venues for new recreational ventures. In all cases where fences need to be crossed by recreational trails, cattle proof openings or fence crossings ~~shall~~ may be installed. Beyond this constraint, creative thought will be needed to design and implement new recreational opportunities that are: compatible with a working ranch, nature based, potential revenue generating sources, affordable and safe for the public. Any increase in recreational activities will inevitably cause an increase in visitor-employee contacts.

**Page 60**

**3.2.1. Guidance for Management of State Lands (4<sup>th</sup> paragraph)**

The natural communities on BRP and the vegetation that constitutes them shall be managed according to these policies to further one of the stated goals of the BRP Act (FS 259.1053) "to provide sustainable and relatively natural habitat for fish, wildlife, plants, or similar ecosystems" on this working ranch. Vegetation within a natural community shall be managed to maintain the historic abundance, diversity, and distribution of native plant communities and associated fauna.

Land management tools such as inventories and mapping, prescribed fire, grazing management, timber harvests, and non-native invasive species control ~~shall~~ may be utilized. Land management tools such as hydrologic restoration, and upland restoration ~~should~~ may be utilized. Hydrology, particularly in the Telegraph Swamp system, should be managed to simulate natural hydro-periods to benefit native plant communities and wildlife while considering onsite and offsite flooding.

*Pages 61-63*

**3.2.2. Protected Plant Species**

For each of the 5 species listed, the following text was changed to “The BRP Manager, when possible, shall:”

*Page 62*

**Milkvine (*Matelea* sp.) (2<sup>nd</sup> paragraph)**

Threats to this species are habitat destruction, fire exclusion, and non-native invasive plant infestation. Soil-disturbing activities should be avoided and managers ~~should~~ may allow fires to burn into edges of hardwood forests.

*Page 63*

**3.2.3. Non-native Invasive Plants (last paragraph)**

Data from the timber inventory and assessment (Landmark Systems 2008) (Exhibit D-10) and the FNAI inventory and assessment (2008) will be useful in identifying the problematic species, areas with infestations, and areas to prioritize for monitoring surveys. The BRP Manager ~~shall~~ may determine the efficacy of seeking outside grant funding (e.g., DEP Upland Invasive Exotics Program administered by the Bureau of Invasive Plant Management) to increase funding for these activities.

*Page 63*

**3.3. Fire Management (first paragraph)**

The BRP Manager will develop a fire management plan that will serve as a working tool and an informational document for BRP. The plan will provide guidelines in regard to wildfire suppression and prescribed fire management. It will specify burn units, burn unit prescriptions, ideal fire return intervals, and fire suppression planning. The BRP Manager will coordinate with DOF and FWC on developing the fire management plan. The plan ~~will~~ may be reviewed and amended as necessary.

*Pages 64*

**3.3.1. Prescribed Fire**

Prescribed fire is a vital and powerful tool for managing vegetation and natural communities and perpetuating extant wildlife populations that is both ecologically and economically sound. Ranch operation records and ranch staff experience should be combined with the FNAI inventory and assessment (2008) to identify areas of excessive saw palmetto or shrub cover that ~~will~~ may require mechanical treatments in conjunction with prescribed fire to restore a more natural vegetative structure.

**Annual Work Plan:** An annual work plan will be developed to guide the prescribed burning at BRP each year; this plan will be submitted to DOF and copied to FWC and Lee County. This plan will specify the target number of acres to burn in that year, the seasons, and a list of

prospective burn units that will be targeted for treatment. BRP staff experience with prescribed fire should be used to specify targeted burn units. Excluding improved pasture, burns ~~should~~ may be conducted throughout the year, rather than just winter. The priority areas for these all-season burns are those areas with protected plants, animals, or natural communities present followed by those natural communities that have the shortest fire return interval.

**Burn Unit Plans:** Each prescribed fire will be conducted in accordance with DOF regulations and state law and have a burn unit plan (or prescription). Each prescription will contain, at a minimum, the information needed to complete the DOF Prescribed Burn Plan Form FC-5400-15 (Exhibit D-7). ~~The plan must include a smoke screening procedure.~~

BRP ~~fire management staff experience~~ Prescribed Burn Plan should may be augmented with the FNAI inventory and assessment (2008) to develop prescriptions for burn units, fire return intervals, and fire suppression planning. Aerial ignition may be considered for large burn units where this tactic can be cost effective. Consideration should be given to shifting the season of burn to the growing season (April-September) for ~~each~~ some burn unit prescription. Fire return intervals for a burn unit ~~should~~ are recommended to fall within the natural, historic range for the major plant community in a burn unit.

~~In~~ Based upon available species survey data, burn units within the prescription, ~~burn units with that have~~ listed wildlife species shall explicitly state their presence and any restrictions or requirements relative to prescribed burning in proximity to these species or habitats. These may include time of year, pre-burn preparation, fire return intervals, and other burn parameters.

*Page 65*

### **3.3.3. Fire Lines and Fire Breaks**

Utilize the map products (e.g., Landmark Systems 2008) illustrating existing firelines and breaks to delineate burn blocks and minimize the need to establish new ones. Utilize these map products to assess the current need and condition for these lines and breaks. Wildfire suppression ~~or prescribed fire control~~ lines ~~should~~ are not recommended to be established in wetlands, ecotones, or other sensitive areas. If placement of such lines in wetlands, ecotones, or other sensitive areas is unavoidable, Rehabilitate rehabilitation of those lines that are affecting sheetflow shall be considered. Existing lines that are in ecotonal areas should be assessed to determine if relocation outside of the ecotone would be beneficial to the natural community. If so, then relocation should occur instead of the next maintenance event. The old line shall then be rehabilitated to restore and remove any impediment to the natural hydrology and encourage the re-establishment of the ecotonal area. New proposed prescribed fire control lines will be assessed prior to installation so as to avoid wetlands, ecotones, or other sensitive areas and to avoid possible impediments to the natural hydrology. All construction and maintenance shall be in accordance with the applicable BMPs.

*Page 65*

### **3.3.4. Sensitive Resources (2<sup>nd</sup> paragraph)**

All burn crews at BRP will ~~carry~~ have access to updated maps depicting environmentally sensitive areas such as endangered species locations, wetlands, and historical and archaeological resources. Prior to ground disturbing activities, excluding clearing of existing firelines, DHR will be consulted (Exhibit D-5). The use of heavy equipment should be avoided, when possible, at any time that significant environmental degradation might result.

Page 65

### 3.3.5. Wildfire Suppression (3<sup>rd</sup> paragraph)

~~Minimum impact suppression tactics (MIST) should be used during the suppression of all wildfires on BRP.~~ If a wildfire occurs at BRP, alternative suppression strategies are defined below.

Page 66

### 3.4 Silvicultural Guidelines and Forest Resource Management

~~The BRP Manager will abide by section 21, Silviculture, of the Management Agreement until such time as the Timber Management and RCW plans are completed and a revised Silviculture Guidelines section has been approved by Babcock Ranch Inc., Lee County, ARC and the BOT.~~

~~\*This updated silvicultural section was requested, motioned, and approved by the Acquisition and Restoration Council on April 11, 2008.~~

A Babcock Ranch Preserve Forest Management Plan (FMP) (Exhibit D-15) was developed in consideration of the Babcock Ranch Preserve Draft Red-cockaded Woodpecker Management Plan, on file with FWC, and it is the intent of DOF and FWC that the FMP serve as the controlling document for planning and implementation of forest management activities at BRP.

There are several different management techniques that are used in the management of timber resources on both private and public forest lands in the State of Florida. Some of these management scenarios fit in the strategies of promoting "... sound forest management practices which maintain the integrity of the environment and provide for our future natural resource needs" and managing "...public lands to retain their unique character and to provide multiple public benefits." Through the use of natural systems processes and silvicultural techniques, management of timber on BRP will be designed to maintain optimum production of timber, ecosystem functions, and aesthetic qualities.

The BRP annual harvest of pine timber shall not exceed the annual growth of all merchantable pine products (7,828 tons per year) as measured by Landmark Systems (2008), unless agreed to by DOF and FWC. For all natural pine stands there is an average of 37.2 merchantable trees per acre. The average pine natural regeneration across all natural pine stands averages 132.1 trees per acre. The forest inventory found, for all natural pine stands, a total of 32,869 acres with 29,013 acres of south Florida slash pine, and 3,856 acres of longleaf pine. It is recognized that forest management operations must be effectively integrated with efforts to protect and conserve state and federally listed species such as the red-cockaded woodpecker (RCW), crested caracara, and wood stork.

Page 67

### 3.4.1 Silvicultural Systems

#### Even-Aged, Two-Aged Class Management

South Florida Slash Pine and Longleaf Ecology and Silviculture South Florida slash pine (*Pinus elliottii* var. *densa*), due to its seeding characteristics, is traditionally regarded as a species best managed in natural stands using even-aged silvicultural systems and is specifically well suited to

a seed-tree harvest system (Croker and Boyer 1975). South Florida slash pine seed disperses well and does not require a large number of seed trees per area to accomplish natural regeneration. It is also well suited to artificial regeneration in plantation stands.

Heavy thinning in south Florida slash pine will yield more sawtimber sized trees, while light thinning will yield more total growth and more pulpwood sized trees. The stages of stand development and gradients of disturbance reflect the ecological basis within which the manager can operate. The early stages of stand development set the stage for even-aged silviculture. By imposing disturbances severe enough to promote regeneration across the entire stand, the manager can encourage the development of intolerant and mid-tolerant species as one or two age classes distributed uniformly across the stand.

Longleaf pine (*Pinus palustris*) seed is heavy and requires more seed trees per acre to accomplish natural regeneration. Longleaf is well suited to a whole range of products such as poles, pilings, posts, sawlogs, plywood, pulpwood, and naval stores. Longleaf naturally prunes itself well, and most stems are well formed, straight, and largely free of branches. As with other southern pines, heavy thinning in longleaf pine will yield more sawtimber sized trees, while light thinning will yield more total growth and more pulpwood sized trees. Longleaf pine in shelterwood stands produces seed crops adequate for natural regeneration, on the average of once every 4 to 5 years. Longleaf pine differs from other southern pines in that seeds germinate soon after they are dispersed.

Even-aged silviculture is based on a rotation, defined as the length of time between reproduction cuttings. Rotation length is affected by many factors, including land manager objectives, timber markets, economics, growth rates, and site productivity. Treatments such as site preparation, release, thinning, seed-tree harvest and the removal of seed trees are usually applied over the entire stand. The maturity of trees is determined by the collective traits of the entire stand. Thinning is done periodically to control stocking, capture anticipated mortality, and improve stand vigor and quality. The thinning interval is the length of time between thinnings.

An even-aged stand is composed, for the most part, of a single age class. A single age class is defined as a stand of trees where the age difference between the youngest and oldest tree does not exceed 20 percent of the stand rotation length.

An even-aged, two-aged class stand contains two distinctive age classes and results from even-aged reproduction cutting, such as the seed-tree and shelterwood methods, with residual trees retained well beyond the normal period needed for regeneration. The seed tree/shelterwood with reserves (two-aged stand) is desirable because the reserve overstory provides additional benefits. South Florida slash pine differs from longleaf pine in life span and tolerance to shade. In even-aged stands, stocking is maintained by thinning to enable crop trees to fully use the site's potential.

Establishment of the tree overstory is integral in promoting fire maintenance. Without the pine needle component of the understory, the fuel continuity is disrupted and periodic maintenance prescribed burns are difficult to execute. In addition, prescribed fire provides competition control of woody stem vegetation and enhances wildlife habitat.

**3.4.2 Protection and Recovery of Red-cockaded Woodpeckers**

Forest management at BRP will comply with all provisions of the U.S. Fish and Wildlife Service Red-cockaded Woodpecker Recovery Plan (USFWS 2003). This FMP focuses on compatibility of timber harvest with foraging habitat and providing for future cavity trees; the BRP Conceptual Management Plan will provide more details on species specific management. This plan allows RCW foraging habitat to be managed using two different standards. The Recovery Standard (RS) is the standard applied to most public lands and is designed to provide for growth and long-term sustainability of RCW populations. The Managed Stability Standard (MSS) establishes a minimal threshold level of habitat management, below which the loss of a red-cockaded woodpecker group (approximately 300 acres: see BRP RCW Management Plan) may be likely. Table 3-1 presents parameters and appropriate values for each standard. It must be noted that most stands included in the RS Zone do not currently meet the recovery standard, and most stands in the Managed Stability Zone do not currently meet the Managed Stability Standard. These standards should be considered desired future conditions. In order to move stands towards the desired standard, there is a need to thin dense stands of young pine even prior to reaching the desired standard.

Figure 1 of the BRP Forest Management Plan (Exhibit D-15) identifies areas of RCW habitat within BRP and the corresponding management standard. The area labeled “RS” Zone consists primarily of the longleaf-dominated stands that contain all known RCW groups on the property. This zone is established to conserve the population viability of existing RCW clusters and will be managed consistent with provisions of the Recovery Standard. The area labeled “MSS” Zone identifies a recruitment and long term dispersal zone between BRP and the larger intact populations of RCWs at Fred C. Babcock-Cecil M. Webb Wildlife Management Area. This zone will be managed consistent with the provisions of Managed Stability Standard, until occupied by RCWs, at which point the stands will be managed for the Recovery Standard.

**Table 3-1. Minimum forest management requirements for RCW habitat: Recovery Standard (RS) and South Florida Managed Stability Standard (SFLMSS).**

| <u>Parameter</u>                                                           | <u>RS</u>                       | <u>SFLMSS</u>      |
|----------------------------------------------------------------------------|---------------------------------|--------------------|
| Minimum total pine square foot BA per RCW group                            | N/A                             | 3000 square feet * |
| Minimum age of pines                                                       | 60 years                        | N/A                |
| Pine stems per acre that are ≥ 60 years old <b>AND</b> are ≥ 14 inches dbh | ≥ 18 stems                      | N/A                |
| Minimum square foot per acre BA for pine trees that are ≥ 14 inch dbh      | 20 BA ft <sup>2</sup> /acre     | N/A                |
| Square foot per acre BA for pine trees that are 10 - 14 inches dbh         | 0 – 40 BA ft <sup>2</sup> /acre | N/A                |
| Minimum square foot basal area for all pines ≥ 10 inches dbh               | 40 BA ft <sup>2</sup> /acre     | N/A                |

\* For SFLMSS the minimum total pine square foot BA for each RCW group is ≥ 3000, of which ≥ 2000 should be from pines ≥ 9 inches dbh, the remainder being comprised of pine trees of ≥ 4 inches dbh. This foraging habitat must be within 0.5 miles of the cluster and no foraging habitat should be separated by more than 200 feet of non-foraging habitat.

### **3.4.3 Silvicultural Systems for Babcock Ranch Preserve**

The following silvicultural systems shall be used on BRP:

1. Even-aged for pine stands, currently occupying 17,816 acres, not included in the RCW Recovery Standard (RS) and the Managed Stability Standard (MSS) zones.
2. Even-aged, two-aged class, with residuals, for pine stands in the RS zone, currently occupying 10,822 upland pine stand acres and in the MSS zone currently occupying 4,231 upland pine stand acres as identified in Figure 1 of the BRP Forest Management Plan (Exhibit D-15). Both zones currently total 15,053 upland pine stand acres.

#### **Even-Aged System:**

Pine stands managed under the even-aged system shall be on a 30 year natural regeneration rotation. Stands may receive maintenance thinning harvests to leave no less than an average basal area of 30 square-foot per acre, and a seed-tree harvest that will leave an average of 8-12 seed trees in south Florida slash pine and an average of 25-30 seed trees in longleaf pine per acre. All seed trees shall be selected from dominant/co-dominant trees. A portion of the seed trees may be removed once adequate natural regeneration has been established. The remaining seed trees will result in an older age structure component to the timber or BRP.

#### **Even-Aged, Two-Aged, With Residuals (RS Zone):**

Pine stands managed under the even-aged, two-aged, with residuals, system in the RS zone shall be on a 120 year natural regeneration rotation. The initial cut will provide the opening necessary to provide for natural stand replacement, while ensuring the Recovery Standards (Table 3-1) remain on site, including leaving no less than 25-30 seed trees per acre. Leave trees will consist of the oldest and largest trees in the stand, including flat tops and other potential cavity trees. Stands may receive maintenance thinning harvests to leave no less than an average basal area of 40 square feet per acre, and ensuring all other parameters of the Recovery Standard are met. Maintenance thinnings are intended to thin dense growth of young pines to create the open canopy RCWs prefer. A minimum of 20 residual seed trees per acre shall not be harvested during subsequent harvests to establish an old growth component. These residual seed trees may be utilized as future seed trees.

#### **Even-Aged, Two-Aged, With Residuals (MSS Zone):**

Pine stands managed under the even-aged, two-aged, with residuals, system in the MSS zone shall be on a 40 year natural regeneration rotation. The initial cut will provide the opening necessary to provide for natural stand replacement, while ensuring the SFLMSS standards (Table 3-1) remain on site, including leaving no less than 20 seed trees per acre. Leave trees will consist of the oldest and largest trees in the stand, including flat tops and other potential cavity trees. Stands may receive maintenance thinning harvests to leave no less than an average basal area of 30 square feet per acre, while also ensuring all parameters of the SFLMSS are met. Maintenance thinnings are intended to thin dense growth of young pines to create the open canopy RCWs prefer. A minimum of 20 residual seed trees per acre shall not be harvested during

subsequent harvests to establish an old growth component. These residual seed trees may be utilized as future seed trees.

When RCWs colonize any section of the MSS zone, the forage habitat for the cluster will then be managed at the Recovery Standard.

The annual harvest of pine timber shall not exceed the annual growth of all merchantable pine products (7,828 tons per year) as measured by Landmark Systems (2008), unless agreed to by DOF and FWC. The forest inventory found, for all natural stands, a total of 32,869 acres with 29,013 acres of south Florida slash pine, and 3,856 acres of longleaf pine.

### **Artificial Reforestation/Afforestation:**

When DOF and FWC agree that artificial reforestation/afforestation should be prescribed, prescribed fire is the preferred site preparation treatment however the site preparation prescription may include mechanical and/or chemical treatments to ensure the best opportunity for planting survival success. Initial planting stocking densities should be in the range of 605-726 seedlings per acre. Proper seedling care and close supervision of planting operations will increase planting survival success. Also, mechanical and/or chemical treatments can be used during the stand rotation to further reduce woody competition and enhance conditions for prescribed burning. The number of trees surviving after one year following artificial regeneration should target 400 trees per acre. Maintenance thinning in these plantation stands shall target reducing the basal area to 50-70 square feet per acre. When the stand reaches rotation age, a seed-tree harvest shall be performed. After the seed-tree harvest, natural pine stand harvest systems will be used.

All timber related activities on BRP will comply with the most recent version of the Florida Department of Agriculture and Consumer Services, Division of Forestry Silviculture Best Management Practices (BMP) (FDACS cite) and the requirements of appropriate listed species recovery plans.

### **Prescribed Burning:**

The southern portion of the state has an extended growing season for pine trees and other vegetation. There is also an extended wet season that could limit the frequency of prescribed burns. Therefore, the objective is to prescribe burn from December through March on a target of a three (3) year return interval, with the BRP Forest Management Plan being the controlling document for prescribed burning in the CMP. This will meet several resource objectives including management of cattle forage on BRP. Weather conditions permitting, it is recommended that seed-tree natural regeneration areas be prescribe burned in the early fall to prepare the ground for seed fall.

### **Other Forest Resource Management Activities**

#### **Salvage Harvest:**

In the case of wildfire, insect, disease, or other catastrophic events, selective harvesting is permitted to salvage dead or dying timber. These areas shall be specifically identified and

delineated by DOF, in consultation with FWC, prior to the initiation of the timber harvest. Clear cutting shall only be used as a timber harvesting method for restoration purposes and for salvage harvest operations as appropriate. Salvage harvesting should be properly documented and shall comply with Silviculture BMPs and shall apply to all areas of BRP including cypress. Following such disaster, all site preparation and reforestation activities shall be conducted according to BMPs and federal and state protocols. When conducting salvage cuts a minimum of 6 snags per acre will be retained. When possible, the remnant snags shall be greater than 8 inches dbh.

### **Snags:**

Snags that are at least 10 inches dbh and at least 6 feet tall provide wildlife habitat. Soft snags, that do not present a risk to human life or property or are not a fire containment hazard, should be protected to benefit wildlife. During normal maintenance or seed tree harvests hard snags may be harvested.

### **Stump Removal:**

Lightered stump harvesting was a historic use on BRP prior to State and County ownership. Lightered stump harvesting may continue to occur on the Charlotte County portion of BRP. Lightered stump harvesting shall not continue on the Lee County portion of BRP.

Lightered stump harvest operations shall be conducted as outlined below:

- All applicable BMPs shall be followed.
- Approximately 5 stumps per sale or harvest area shall remain after the sale is concluded to provide wildlife habitat.
- Stump holes shall be smoothed over.
- Stump removal sites shall be monitored for compliance.
- The site shall be monitored for invasive species until the native ground cover is re-established.

### **Alternative Forest Products:**

The production of alternative forest products may be pursued in the following areas: pine stands, sod farm, row crop, and pasture. Alternative forest products that should be considered by BRP management include:

- Planting additional pine to generate additional volume of forest products.
- Harvesting younger pine (10 to 25 years old) for mulch, and/or for cellulosic biomass for energy and/or fuel production. Mulch plants are currently located in Okeechobee, Ft. Myers, Moore Haven, and Hardee County.
- Harvesting pine straw in planted pine stands for use as landscape mulch. Pine straw shall be raked no more than 5 times during a 25-year rotation to minimize nutrient depletion (Duryea and Edwards 1998).

- Establishing a native tree/plant nursery. In addition to revenue generation, the nursery can be a source of public education and information regarding the use and establishment of native trees as well as an “in-house” source of native plant material. Also, nursery stock may be sold to the public. In accordance with the Management Agreement planting non-native invasive species is prohibited.
- Cabbage palms have been periodically harvested for the landscape market. Most of the cabbage palms are found as individuals or small clusters within the natural pine stands or along the edges of Telegraph Creek Swamp. The harvesting of cabbage palm is permitted and will be guided by the federal Crested Caracara Recovery Plan, Recommended Management Practices and Survey Protocols for Audubon's Crested Caracara (Morrison 2001), and recommended management objectives for crested caracara in this CMP (see Section 3.7.3). Federal law prohibits disturbance or removal of cabbage palms when used as a nest site for the federally threatened crested caracara. To minimize disturbance to a caracara nest site, limited harvesting of pines within 1000 feet of a documented caracara nest tree may occur after consultation with FWC.

*Page 71*

### **3.5. Soil Management**

Soil disturbing activities shall be confined to areas disturbed prior to acquisition and that have the least likelihood of experiencing erosion problems, or as specified in this CMP and the Management Agreement. Soil disturbing activities will follow landform contours to the extent practicable. On areas that have been disturbed prior to state acquisition, such as the row crop tenant farms, an assessment will be made requested from NRCS to determine if soil erosion is occurring, and if so, appropriate measures will be implemented to stop or control the effects of this erosion.

*Page 72*

### **3.6. Hydrology and Water Resources Management**

*(1<sup>st</sup> paragraph)*

The BRP was established to protect and preserve the environmental assets of the site including the watershed. Protection of the water resources of the site includes protection of offsite headwaters of the Telegraph Swamp/Creek system, protection of a variety of onsite water resources enumerated in Section 2.6. Water Resources, and which will may contribute to the protection of downstream creeks, the Caloosahatchee River and the estuary. Water resource protection activities will be coordinated with the SFWMD and accomplished mostly by avoidance of impacts to onsite wetlands and surface waters and use of BMPs for activities on BRP.

*(6<sup>th</sup> paragraph)*

Numerous surfacewater permit modifications exist for the former Crescent B Ranch lands. It is essential to identify and comply with existing water resource-related permits for BRP. The State will need to review permits for conditions or operational restrictions that may affect existing or future operations and activities on BRP. This review will is intended to ensure that appropriate operational procedures are in place, especially as procedures relate to water control structures or other surfacewater management activities. Manager shall maintain existing culverts, ditches,

drains, swales, and other control structures on the property as necessary, when not part of restoration efforts.

*(9<sup>th</sup> paragraph)*

Local hydrology and groundwater quality can be affected by faulty or poorly cased groundwater wells, therefore the State ~~shall~~ may evaluate the integrity and construction specifications of the approximately 350 wells on BRP to determine which wells should be properly abandoned, capped or rehabilitated. The manager may, subject to applicable permitting (including applicable BMPs), install wells for the activities allowed in this CMP (coordinating with Lee County, where appropriate).

*Page 74*

**3.7. Fish and Wildlife Management**

Fish and wildlife management on BRP shall comply with state and federal guidelines, regulations, and laws. Principally wildlife management will be accomplished by managing plant communities or ecosystems. Species-specific management strategies for state and federally listed species shall be employed when natural community management practices are insufficient to ensure species perpetuation. Within the BRP, the BRP Manager ~~shall~~ and or FWC may inventory, survey, and monitor population trends and parameters of physiological condition in selected species, particularly those that are threatened, endangered, special concern, or hunted.

*Page 78*

**3.7.2. Game Species**

The focal game species on BRP will be white-tailed deer, Florida wild turkey, and northern bobwhite. Each of these species has specific habitat requirements. The BRP Manager should coordinate with FWC and DOF regarding the management of these species and their habitat. Per the Management Agreement, FWC shall manage the hunting and wildlife management activities on the Preserve and the manager ~~should work~~ will provide technical assistance limited to ranch operations to with FWC ~~on~~ during the development and implementation of these programs.

In the future, if deemed appropriate and agreed to in writing by all partners, the BRP manager may manage all or some of the hunting programs developed for the preserve.

**White-tailed Deer**

The relationship between deer density and physical condition has been well established. The management of the deer herd on BRP ~~shall~~ may include population monitoring through population estimates or indices that reflect population trends. Such indices may include track counts, spotlight counts, camera counts, or aerial surveys. Harvests ~~shall~~ may also be monitored by tracking the total carcasses per year as well as by age and sex. Provide monitoring results to the CMP Partners. Impose antler restrictions on the harvest to protect the yearling segment of the buck population. This will improve the age structure of the buck population, increasing the number of older individuals with larger antlers available to harvest.

*Pages 79*

**3.7.3. Endangered, Threatened, and Special Concern Wildlife Species**

*(2<sup>nd</sup> paragraph)*

~~Specific Tasks~~ Recommended management objectives:

## **Gopher Tortoise**

### **Specific Tasks Recommended management objectives:**

1. Abide by federal and state law.
3. Identify occupied and potential habitats. The FNAI inventory and assessment (2008) should provide a baseline. Occurrence information from periodic systematic surveys and incidental observations shall be reported and recorded.

## **Eastern Indigo Snake**

### **Specific Tasks Recommended management objectives:**

3. Identify potential habitats. (FNAI and FWC)
4. Report and record incidental observations, when possible.
7. Maintain stumps in Lee County to provide natural subterranean refugia.

## **Crested Caracara**

The FNAI inventory and assessment (2008) is expected to improve upon the current understanding of Audubon's crested caracara density, distribution, and habitat utilization on BRP and the meta-population. These data will be used to develop a site-wide approach to caracara management that incorporates the federal Crested Caracara Recovery Plan, Recommended Management Practices and Survey Protocols for Audubon's Crested Caracara (Morrison 2001), agency policy and regulations, state and federal guidelines, and the best available science regarding caracara management as amended or revised by FWC or USWFS. The intent of this approach is to provide for the retention of current caracara occurrences as well as the opportunity to expand the caracara presence on BRP through active land management. Prescribed fire and cattle grazing are recommended practices for maintaining shall be utilized such that the preferred open foraging habitat is maintained. It is important to retain clumps of cabbage palms shall be retained for nesting and roosting and to replace nesting/roosting substrates as they are lost. Manage cabbage palm restoration to facilitate the availability of nesting/roosting substrate replacements.

Caracara nest sites, territories, and home ranges, and potential future habitat identified by the 2008 FNAI inventory and assessment shall to the greatest extent feasible, be managed to maintain and enhance the caracara population on BRP. Cabbage palm harvesting will be guided by the needs of the caracara population. the federal Crested Caracara Recovery Plan and Recommended Management Practices and Survey Protocols for Audubon's Crested Caracara (Morrison 2001).

Management for crested caracara will carry the following prohibitions, prescriptions, restrictions, recommendations and allowances consistent with, or in addition to, the federal Crested Caracara Recovery Plan and Recommended Management Practices and Survey Protocols for Audubon's Crested Caracara (Morrison 2001).

### **Recommended management objectives:**

BRP-wide:

3. If FWC determines that the FNAI inventory and assessment (2008) is insufficient to identify all caracara resource areas, then the necessary additional surveying will occur prior to any cabbage palm harvesting.

Protection of existing nest sites and nest territories:

- ~~5. Between January and March all activities within 300 m of a nest will be prohibited (including burning where there is an active nest (e.g., nest with eggs or young present), except cattle grazing.~~
- ~~6. No snag removal will be permitted within 300 m of a nest.~~
- ~~7. No chemical usage is permitted within 300 m of a nest. The exception is the minimum approved herbicide usage needed to control FLEPPC Category I and II species.~~

Protection of existing foraging areas:

- ~~8. Identify preferred foraging habitat within a 3 km buffer of nest trees (e.g., prairie, pasture, and wetlands).~~
- ~~9.5. Maintain **these** preferred habitats within **this** foraging buffers identified by the FNAI inventory and assessment or subsequent inventories. Vegetation management may include cattle grazing and prescribed fire.~~
- ~~10.6. Maintain the natural and manmade wetlands and water bodies within **this** foraging buffers. Land management activities may include cleaning of drainage ditches.~~

Creating new nesting habitat:

- ~~12.8. Where suitable foraging habitat is identified, but no nesting activity is occurring and cabbage palms are lacking, **create** new nesting habitat may be created by planting cabbage palms that are at least 5 m tall and with a full crown.~~

Permitted activities (allowances):

- ~~16.11. Harvesting of cabbage palms outside of current occupied ~~or identified future~~ habitat of caracaras. In identified future caracara habitat, clumps of cabbage palms should be retained to provide nesting/roosting substrates.~~

### **White Ibis**

~~Specific Tasks Recommended management objectives:~~

3. Use the wading bird habitat usage information provided by the FNAI inventory and assessment (2008) to identify current suitable habitat. (FWC)
7. Setback any disturbances (e.g., trails, roads, buildings) at least 100 m (330 ft) from colonies to prevent disturbance of waders by BRP visitors and staff. Where existing disturbances occur within this 330 ft such uses can continue, but increased use levels ~~shall~~ should be avoided. Increased use levels would include an increased number of people or equipment use at a site.

### **Wood Stork**

~~Specific Tasks Recommended management objectives:~~

4. Utilize the wood stork aerial survey conducted by the USFWS to maintain current records of wood stork rookery occurrences. (FWC)
5. Utilize the wood stork occurrence and habitat availability information provided by the FNAI inventory and assessment (2008) to identify currently used habitats. (FWC)
9. Closely monitor water quality in wetlands (FWC) (potential foraging and nesting habitat). Provide monitoring results to the CMP Partners.

### **Burrowing Owl**

#### **Specific Tasks Recommended management objectives:**

3. Report and record incidental observations, when possible.

### **Red-cockaded Woodpecker**

#### **Specific Tasks Recommended management objectives:**

3. Report and record incidental observations of RCWs, when possible.
4. Periodically re-survey for RCWs and monitor RCW populations on BRP through periodic surveys (USFWS 2003). Provide monitoring results to the CMP Partners. (FWC)
9. Assess the proximity of the populations of RCWs on Lykes Brothers Conservation Easement and on BWWMA to determine and plan for connectivity, if achievable, between these populations. If so, coordinate species management with the managers of these lands. (FWC)

### **Sherman's Fox Squirrel**

#### **Specific Tasks Recommended management objectives:**

3. Use the FNAI inventory and assessment (2008) to identify the occupied and potential habitats on BRP. (FWC)
4. Use nest counts to estimate population numbers (or create an index). (FWC)
7. Utilize uneven-aged timber harvests when and where appropriate.
10. Monitor the population and population trends. Provide monitoring results to the CMP Partners. (FWC)
11. Assess whether the Sherman's fox squirrel populations on BWWMA or other public conservation lands are within the dispersal distances of the Sherman's fox squirrel. If so, coordinate with the managers of these other lands to enhance connectivity options through habitat management. If such interchange is not currently possible, coordinate with the other land managers to determine how such connectivity could be achieved through land management practices. (FWC)

### **Florida Panther**

#### **Specific Tasks Recommended management objectives:**

2. Utilize data from the ongoing telemetry study from USFWS and FWC (supplemented by data from the 2008 FNAI inventory and assessment) to identify known and potential habitats used by panthers on BRP. (FWC)
5. Potential for human-panther interactions shall may be addressed through education programs and proactive measures. (FWC)

### **Florida Black Bear**

#### **Specific Tasks Recommended management objectives:**

3. Utilize FNAI inventory and assessment (2008) information and/or other regional information on bear populations. (FWC)
5. Monitor the population. Provide monitoring results to the CMP Partners. (FWC)
6. Maintain and enhance connectivity of BRP with BWWMA and or public conservation lands within the dispersal distances of the bear. (FWC)

*Page 86*

### **3.7.4. Non-native Invasive Species (2<sup>nd</sup> and 3<sup>rd</sup> paragraphs)**

A variety of management techniques may be necessary to maintain the feral hog population on BRP at reduced densities that minimize impacts to natural resources. The BRP Manager ~~will~~ is recommended to continue to monitor and manage feral hogs to reduce their ecological impacts.

Although currently not known to exist on BRP lands, this Preserve, like other Lee County Conservation 20/20 preserves, does not contain nor will it support feral cat colonies. FWC's Feral and Free Ranging Cats policy is "To protect native wildlife from predation, disease, and other impacts presented by feral and free-ranging cats" (FWC 2003). Any feral cats ~~will~~ may be trapped and taken to the appropriate county animal services.

*Page 87*

### **3.8. Public Use & Education (3<sup>rd</sup> and 4<sup>th</sup> paragraphs)**

The BRP Manager should actively work with adjacent land owners to keep them informed of any land management activities that might impact nearby residences. It is especially important, and reasonable efforts will be made, to notify adjacent landowners of prescribed fires on the BRP prior to their execution. It is recommended that, where feasible and appropriate, managers include educational information when conducting burn notifications. This will help adjacent landowners become aware of burns and it will help them better understand these critical land management actions.

The BRC will connect directly to the Preserve. This adjacent residential community will contain approximately 19,000 homes upon completion and will have many amenities and structures that support the community. The BRC is planned to house most of the infrastructure needed to support the residents of the area. Many of the services and facilities provided will, directly and indirectly, support the needs of the Preserve. Some of the planned services and facilities may include: An ecolodge, hotels, a full service camping area with RV hookups, multiple environmental education facilities throughout the property, a large research and classroom area for Florida Gulf Coast University (FGCU), an observatory, a rodeo arena, stables, and stores. It is recommended that all potential development on BRP ~~shall~~ first take into account current and planned services and facilities on BRC in order to avoid duplication of efforts. Careful consideration of the services and facilities provided on BRC as well as any other future neighboring developments, including Lee County facilities, will prevent costly duplications and will encourage partnerships.

*Page 87*

#### **3.8.1 Recreation**

**Biking: Biking:** There are currently no biking opportunities on BRP. It is recommended that bike trails be placed on BRP. Some portion of these trails can be shared with hikers and horseback riders, but where trails are narrow and/ or winding or exist within thick vegetation, care shall be taken to keep hikers, bikers, and horseback riders separate in order to avoid conflicts. Some bike trails ~~shall~~ may follow existing roads as long as road conditions are not too sandy, creating difficult biking conditions. Where possible, bike trails ~~shall~~ may link with the BRC. Bike trail connectivity between BWWMA and BRP shall be considered.

**Horseback Riding:** There are currently no public horseback riding opportunities at BRP. Horses are commonly used by Preserve staff in a working capacity, so they are present on the property at this time. It is recommended that horse trails be developed. Some portion of these trails ~~shall~~ may be shared with hikers and bikers; however care should be taken to keep hikers, bikers, and horseback riders separate when possible so as to avoid conflicts. Horses can be spooked by bikes and their hooves can churn up soil and make trail conditions sandy or muddy in some areas, making it challenging for bikers or hikers that are sharing the trail. Connecting trails from BWWMA and BRC shall be considered. In order to keep livestock on BRP safe, all horses coming onto BRP shall be required to hold a current negative Coggins certificate that indicates the animal has tested negative for Equine Infectious Anemia. Recreational users shall only use ~~Any hay brought from offsite shall be~~ certified clean hay (hay is purchased certified) in order to prevent the introduction of non-native invasive species. These are common requirements for horses on public conservation lands.

**Camping:** There are no developed or primitive camping opportunities on BRP at this time. It is recommended that camping be considered as one of the activities hosted on the Preserve. The feasibility of providing primitive camping shall be explored in the Recreation Master Plan. The BRC may include a full service campground. Potential camping facilities at the BRC, as well as any adjacent camping opportunities, ~~shall~~ may be considered prior to campsite development in order to minimize capital expenses on the Preserve and limit intensive uses to areas with existing infrastructure.

**Wildlife Watching:** Wildlife watching currently occurs on the Preserve in the form of the Babcock Wilderness Adventures ecotour. Wildlife watching will be a component of almost all recreation activities that occur on the Preserve. Consideration ~~shall~~ may be given to providing specific locations for certain types of wildlife watching. For example, birding is an extremely popular activity and the numbers of birders worldwide are growing annually. The BRP Manager may consider providing birding opportunities such as bird blinds, overlooks, or guided tours. Additionally, the BRP Manager ~~shall~~ may consider nominating BRP to be part of the Great Florida Birding Trail (<http://floridabirdingtrail.com>) in order to attract more birders.

**Hunting:** Hunting has been an integral part of the property for decades. Prior to public ownership, hunting leases provided access and opportunities for hunting. With the sale of Crescent B Ranch to the State of Florida and Lee County, hunting opportunities ~~must now be provided~~ are recommended to be offered on a larger scale to the public. There is a public desire for a variety of hunting opportunities, including low cost day hunts, multi-day hunts, hunts for youth, and hunts for people with mobility impairment. It is possible to provide several types of hunting on the Preserve. The Recreation Master Plan ~~shall~~ may contain recommendations for a tiered hunting structure that provides the public with a variety of hunting opportunities. Hunting ~~shall~~ may be included in the Recreation Master Plan's zoning protocol with certain areas of the Preserve designated for particular hunts. The types of hunts that occur will depend upon game type, game management needs, ranch operations needs, habitat management goals and objectives, appropriate habitat, and access to the area. In addition to hunting program structure, the Recreation Master Plan shall consider other hunting opportunities such as field trials. Hunting ~~shall~~ may be limited or nonexistent in improved pasture areas due to the high potential for conflicts with cattle. There shall be no release of non-native invasive animals, including feral hogs, on the Preserve (68a-4.005 FAC).

**Safety and Emergency Access:** There are safety issues on the Preserve due to its size, abundance of native wildlife (including alligators and venomous snakes), and the variety of activities that occur on the land. The size of the Preserve makes it necessary to have an emergency access plan for any to respond to potential injuries or health issues visitors may sustain while on the property. The wide open nature of the land makes the likelihood of heat exhaustion or dehydration high when the public accesses the Preserve on their own (e.g., while on a self guided hike). In addition, the diverse activities that occur and potentially will occur shall be carefully planned to avoid conflict, such as hunting, cattle grazing, and interactions of visitors with each of these activities.

**Access:** (2<sup>nd</sup> *pagaraph*)

Excluding ranch operations, all dogs allowed on property must be kept under physical restraint at all times, unless specifically authorized otherwise by the BRP manager.

**Facility Availability:** There is limited availability of facilities on the Preserve to use for recreation, education, and other activities. The Cypress Lodge is currently used for meetings, but is not at this time suitable for overnight guests. Ten hunt camps (remnants of former hunt leases) exist on BRP, although their condition varies. Facilities such as bathrooms, parking, and shelters shall be considered when planning recreation activities. The availability of facilities on neighboring BRC as well as any other future developments shall may be considered. The use of existing or offsite facilities and infrastructure will limit capital expenses and avoid duplication.

*Page 91*

### **Recreation Master Plan**

The Recreation Master Plan shall provide an analysis on the types of recreation that are compatible with BRP management objectives. A Recreation Master Plan shall be created in order to guide recreation on the Preserve. The Recreation Master Plan should be comprehensive and include discussion on the types of recreation that should occur, where recreation should occur, and how recreation should occur. The plan shall may include types of suitable recreation at BRP, zoning of public use opportunities, where appropriate and feasible, and monitoring for impacts.

**Types of Suitable Recreation:** The plan should include descriptions of the types of recreation that shall may occur on the Preserve. This includes general public access, special or limited opportunity access or events, and ecotourism.

*Page 92*

### **Partnership with the Babcock Ranch Community**

The BRP Manager and/or contractors shall may meet with the BRC as part of the market analysis and needs assessment and during the creation of the Recreation Master Plan. The purpose of the meetings will be to discuss how the community and the Preserve will be connected. A partnership between the BRP and the community will be critical in order to allow appropriate access to the Preserve while also managing a working ecologically diverse landscape. BRC will may have many structures such as non formal (environmental education) facilities, formal education facilities (FGCU research building and K-12 schools), and potentially an ecolodge, hotel and conference center, full service camping, stables, and stores as well as the 19,000 homes that will bring in residents that have an interest in accessing the Preserve. Additionally, as part of the Purchase Agreement (Exhibit D-8), the BRC Property Owners Association will be providing the Preserve with monthly funds from each residence land owner to support Preserve

management and operations. This funding source has the potential to provide the Preserve with substantial annual income. With this many people in close proximity to the Preserve, a partnership is needed to plan for links and types of access that will provide recreation opportunities that match management objectives, provide income to the BRP, and foster awareness and appreciation for the Preserve and the unique experiences it offers. If future developments occur on adjacent land, similar partnerships ~~shall~~ may be pursued.

**Page 93**

**Interim Use**

Until the Recreation Master Plan is developed and recreation trails, facilities, and infrastructure are created, there should be additional public access to BRP, beyond the Babcock Wilderness Adventures tours, provided sufficient funding is available. Managers shall attempt to create interim recreation opportunities that accommodate at least limited usage for: hunting, hiking, biking, horseback riding, and wildlife watching. Interim hunting opportunities are expected to begin in September 2008. Initial hunting opportunities ~~will~~ may be limited until managers are able to determine a tiered approach to hunting that will work for the Preserve. Currently there are no opportunities for biking or horseback riding on the BRP. These activities traditionally require longer trails and require coordination and planning in order to provide a safe experience that does not conflict with other users. Hiking trails are being developed in the northwest and west section of the Preserve. Hiking access can be allowed upon completion of the trails and the creation of safety guidelines. Wildlife watching opportunities do not necessarily require the development of additional trails or infrastructure so this activity should be easily accommodated on an interim basis using hiking trails and current ecotour operations. Access to the Lee County portion of BRP from BRC is governed by the Purchase Agreement (Exhibit D-8) and Lee County is working with the appropriate parties to open public access to the BRP.

**Page 96**

**3.9. Plans to Locate Fragile Non-renewable Natural and Cultural Resources**

~~Prior to ground disturbing activities (e.g., construction of buildings, parking lots, and new roads), FNAI, Florida Division of Historical Resources (DHR), DSL and Lee County (for projects occurring in Lee County) will be consulted and must approve any projects not listed in this management plan. A Department of Juvenile Justice facility in the northern part of the BRP may continue to operate into the foreseeable future under a lease with the State of Florida. Representatives of the SFWMD, DHR, and FNAI will be consulted prior to the initiation of any proposed significant ground disturbing activity. Every effort will be made to protect known archaeological and historical resources.~~

**Page 96**

**3.9.1. Archaeological and Historic Resources**

It is recommended that the BRP Manager work with the DHR to periodically determine the need for a complete historical cultural resource assessment and to determine how it would be completed. An historic architectural evaluation is recommended prior to the demolition of any structures, including barns and cowpens. In addition, managers ~~shall~~ are recommended to work with the local historical society as well as onsite and local ranch experts and historians to develop and publish a history of the Preserve.

### **3.9.2. Soil and Water Resources**

Most of the natural communities on BRP, including wetlands, have been managed to support ranch operations. Restoration projects that may occur on BRP will be designed to enhance ecological integrity. These projects will occur in conjunction with ranch operations and public access opportunities, requiring considerations of compatibility among activities. Water resource protection activities will be coordinated with the SFWMD and accomplished mostly by avoidance of impacts to on-site wetlands and surfacewaters (where possible) and use of best management practices. Any new activities planned for BRP will be evaluated for impacts to wetlands, surfacewater features, and groundwater. If adverse impacts ~~will~~ occur, existing permits shall be modified or new permits acquired to cover the proposed activity. Permit conditions shall be complied with to minimize adverse impacts to water resources.

Land managers shall protect groundwater and surfacewater quality by identifying potential sources of surfacewater, groundwater, or soil contamination from existing ranch operations and other future uses on BRP. Management activities shall be conducted in a manner to minimize soil erosion and wetland degradation. All pertinent activities shall be conducted in accordance with BMPs and other appropriate measures as deemed necessary by a hydrologist/watershed Specialist, and will meet or exceed standards of BMPs for public conservation lands. The Natural Resource Conservation Service can be consulted to correct soil erosion or degradation issues, particularly regarding sod lifting that removes topsoil, and row crop operations that expose soil to potential erosion. In addition, if future soil and water resource problems arise, they shall immediately be assessed and the appropriate action will be proposed and implemented under the direction of a hydrologist. BRP ~~staff manager~~ shall ~~cooperate work~~ with the SFWMD to monitor quantity and quality of groundwater and surfacewater resources.

### **3.9.4. Assessment of Impact of Planned Uses**

~~Under the guidance of DOF, silviculture management shall be implemented to ensure a continuing renewable timber resource and while preserving diverse ecological resources for an indefinite time period.~~

Public access uses will be monitored to evaluate impacts on the natural systems. If significant impacts are identified, public access will be modified appropriately.

~~Historical/Archaeological Resources: In the event of any significant ground disturbing activity, DHR will be contacted for review and comment. The DOF will then follow the management procedures outlined in Exhibit D-5 and will comply with all appropriate provisions of FS 267.061(2).~~

~~Water resources will be protected through the use of BMPs for all applicable activities, review of existing groundwater and surfacewater monitoring data collected in the vicinity of BRP, establishment of additional monitoring sites as needs are identified, evaluation of existing groundwater wells and surfacewater management practices, identification of procedures related to handling and storage of chemicals on BRP, ensuring any new development minimizes adverse impacts to water resources and acquisition of the lands within the optimal boundary that contain the headwaters of Telegraph Swamp. In order to protect and better understand the water resources on BRP a review of ground and surface water stations and data will be conducted.~~

Additional monitoring sites will be installed where needed to provide for data gaps. Periodic reviews of the handling and storage of chemicals will be conducted to ensure that the surface and ground water is protected. The manager is encouraged to provide comments on adjacent properties as they undergo development which could impact the water resources on the BRP. Land acquisition within the optimal boundary and the headwaters of the Telegraph Swamp will be encouraged.

Under the guidance of FWC, wildlife resources, both game and nongame species, will be intended to be protected through ecosystem management techniques outlined in this document in accordance with relevant laws, regulations, and guidelines and under the guidance of FWC.

*Page 97*

### **3.9.5. Alternative Uses Considered and Explanation of Why Not Adopted (3<sup>rd</sup> paragraph)**

Other alternative uses will be considered by BRM, BRI, Lee County, FWC, and DOF, and ~~will~~ may be accommodated as appropriate if they are determined to be compatible with other uses and with the management goals and objectives of the Preserve.

*Page 99*

## **4. RESOURCE MANAGEMENT GOALS AND OBJECTIVES**

The management goals described in this section are broad statements designed to guide the general direction of management actions to be conducted in order to achieve an overall desired future outcome for BRP. The objectives listed within each management goal offer more specific management guidance, and are considered the necessary steps to be completed in order to accomplish the management goals. Many of the objectives listed have specific end-of-the-calendar-year target dates for completion, and all of them are classified as having either short-term (less than two years) or long-term (up to ten years) timelines for completion. The short-term or long-term status of each objective is listed parenthetically at the end of each objective. In some cases certain management activities have already been implemented and are anticipated to continue; these types of management activities are parenthetically referred to as “Ongoing, Long-term.”

Unless otherwise specifically mentioned, the entity responsible for the following objectives is Babcock Ranch Management, LLC. In addition, management activity and operational budget reports will be produced annually in the form of a Business/Operational Plan by BRM, and will initially be submitted to and approved by the BOT and Lee County in 2008, and then by FWC, DOF, BRI, and Lee County (with respect to its portion of the property) in subsequent years.

*Pages 99*

## **4. RESOURCE MANAGEMENT GOALS AND OBJECTIVES**

“Short-term” (completed in less than two years from the CMP’s approval) or “long-term” (completed within three to ten years) classifications were added to all of the objectives.

*Pages 99, 100, 103, 104, 111*

**4.1. Natural Resource Goals & Objectives**

Goal 1, Objective 1

Goal 2, Objective 2

**4.3. Ranch Operations Goals & Objectives**

Goal 1, Objectives 8 and 9

**6.2. Management Needs, Cost Estimates, and Funding Sources**

**Table 6-1. BRP Needs and Cost Estimates**

In the areas listed above that mention the Timber Management Plan, now read [Forest Management Plan](#).

*Page 103*

**4.3. Ranch Operations Goals & Objectives**

**Goal 1. Continue to manage BRP as a working ranch and silviculture operation that sustains long term economic and conservation values.**

**Objectives**

4. Where possible, convert current tenant farming areas to other agricultural revenue generating operations such as native plant nurseries, improved pasture, and cattle grazing by the July 31, ~~2011~~ [2018 \(Long-term\)](#).
5. By 2010, evaluate the need to extend tenant farming ~~on BRP in Lee County~~ up to an additional 3 years (to July 2014) if the alternative revenue and funding sources are insufficient ([Short-term](#)).
- ~~6. By 2013, if tenant farming licenses have been extended an additional 3 years (to July 2014), the BRP Manager may re-evaluate the need to further extend the current tenant farming license located in the Charlotte County portion of BRP an additional 4 years (to July 2018; Long-term).~~

*Page 110*

**6.2. Management Needs, Cost Estimates, and Funding Sources**

BRM is required to produce a business/[operational](#) plan (~~Exhibit D-13~~) for ranch operations [annually due on or about December 1](#). For the purposes of this CMP, BRM has produced a [Business/Operational Plan \(Exhibit D-13\)](#). ~~pro-forma income statement for the current annual budget for ranch operations based on the fiscal year 2007 (Exhibit D-4). BRM projects the total revenue for ranch operations to be \$2,475,887 and the total expenses to be \$2,543,647. In addition, revenue from the tour operation is \$579,976 and expenses are \$586,575. The projected net income/loss for 2007 is a net loss of \$74,359. The actual income and expenses may be different from this projection.~~

*Page 110*

**Table 6-1. BRP Needs and Cost Estimates**

| Management Activity                                         | Cost Estimates | Funding Source(s) | Implemented By | Estimated Completion Date                |
|-------------------------------------------------------------|----------------|-------------------|----------------|------------------------------------------|
| <b>Support, Land Management Planning, Resource Planning</b> |                |                   |                |                                          |
| Write a Timber Management Plan.                             | \$50,000       | DOF               | Contractor     | <del>2010</del> <u>Completed in 2008</u> |
| Write a Red-cockaded Woodpecker (RCW) Management Plan.      | \$50,000       | FWC               | Contractor     | <del>2010</del> <u>Completed in 2008</u> |
| <b>Visitor Services/Recreation, Operations</b>              |                |                   |                |                                          |
| Write an Annual <u>Business/Operational</u> Plan.           | TBD            | TBD               | TBD            | <del>TBD Dec. 1,</del> <u>annually</u>   |

*Page 121*

**8.2 Document Exhibits**

Exhibit D-13 Business/Operational Plan (~~Available 2008 from BRM~~)

Exhibit D-15 Babcock Ranch Preserve Forest Management Plan