

**Group 5 - Policies that protect water quality and quantity and the maintaining of the natural water regime and protect listed animal and plant species and their habitats on land that is not voluntarily included in the Rural Lands Stewardship Area program.**

**Policy 5.1**

To protect water quality and quantity and maintenance of the natural water regime in areas mapped as FSAs on the Overlay Map prior to the time that they are designated as SSAs under the Stewardship Credit Program. Residential Uses, General Conditional Uses, Earth Mining and Processing Uses, and Recreational Uses (layers 1-4) as listed in the Matrix shall be eliminated in FSAs. Conditional use essential services and governmental essential services, except those necessary to serve permitted uses or for public safety, shall only be allowed in FSAs with a Natural Resource Stewardship Index value of 1.2 or less. Where practicable, directional -drilling techniques and/or previously cleared or disturbed areas shall be utilized for oil or gas extraction in FSAs in order to minimize impacts to native habitats. Asphaltic and concrete batch making plants shall be prohibited in areas mapped as HSAs. The opportunity to voluntarily participate in the Stewardship Credit Program, as well as the right to sell conservation easements or a free or lesser interest in the land, shall constitute compensation for the loss of these rights.

**Policy 5.2**

To protect water quality and quantity and maintenance of the natural water regime and to protect listed animal and plant species and their habitats in areas mapped as FSAs, HSAs, and WRAs on the Overlay Map that are within the ACSC, all ACSC regulatory standards shall apply, including those that strictly limit non-agricultural clearing.

**Policy 5.3**

To protect water quality and quantity and maintenance of the natural water regime and to protect listed animal and plant species and their habitats in areas mapped as FSAs, HSAs, and WRAs on the Overlay Map that are not within the ACSC, if a property owner proposes to utilize such land for a non-agricultural purpose under the Baseline Standards referenced in Policy 1.5 and does not elect to use the Overlay, the following regulations are applicable, shall be incorporated into the LDC, and shall supercede any comparable existing County regulations that would otherwise apply. These regulations shall only apply to non-agricultural use of land prior to its inclusion in the Overlay system:

1. Site clearing and alteration shall be limited to 20% of the property and nonpermeable surfaces shall not exceed 50% of any such area.
2. Except for roads and lakes, any nonpermeable surface greater than one acre shall provide for release of surface water run off, collected or uncollected, in a manner approximating the natural surface water flow regime of the surrounding area.
3. Revegetation and landscaping of cleared areas shall be accomplished with redominantly native species and planting of undesirable exotic species shall be prohibited.

4. An Environmental Impact Statement shall be prepared by the applicant and reviewed by Collier County in accordance with County regulations.
5. Roads shall be designed to allow the passage of surface water flows through the use of equalizer pipes, interceptor spreader systems or performance equivalent structures.

**Policy 5.4**

Collier County will coordinate with appropriate State and Federal agencies concerning the provision of wildlife crossings at locations determined to be appropriate.

**Policy 5.5**

For those lands that are not voluntarily included in the Rural Lands Stewardship program, non-agricultural development, excluding individual single family residences, shall be directed away from the listed species and their habitats by complying with the following guidelines and standards:

1. A wildlife survey shall be required for all parcels when listed species are known to inhabit biological communities similar to those existing on site or where listed species are directly observed on the site. The survey shall be conducted in accordance with the requirements of the Florida Fish and Wildlife Conservation Commission (FFWCC) and U.S. Fish and Wildlife Service (USFWS) guidelines. The County shall notify the FFWCC and USFWS of the existence of any listed species that may be discovered.

2. Wildlife habitat management plans for listed species shall be submitted for County approval. A plan shall be required for all projects where the wildlife survey indicated listed species are utilizing the site, or the site is capable of supporting wildlife and can be anticipated to be occupied by listed species. These plans shall describe how the project directs incompatible land uses away from listed species and their habitats.

- a. Management plans shall incorporate proper techniques to protect listed species and their habitats from the negative impacts of proposed development. Open space and vegetation preservation requirements shall be used to establish buffer areas between wildlife habitat areas and areas dominated by human activities. Provisions such as fencing, walls, or other obstructions shall be provided to minimize development impacts to the wildlife and to facilitate and encourage wildlife to use wildlife corridors. Appropriate roadway crossings, underpasses and signage shall be used where roads must cross wildlife corridors.

- i. The following references shall be used, as appropriate, to prepare the required management plans:

1. South Florida Multi-Species Recovery Plan, USFWS, 1999.
2. Habitat Management Guidelines for the Bald Eagle in the Southeast Region, USFWS, 1987.
3. Ecology and Habitat Protection Needs of Gopher Tortoise (*Gopherus polyphemus*) Populations found on Lands Slated for Large Scale Development in Florida, Technical Report No. 4, Florida Game and Fresh Water Fish Commission, 1987.

4. Ecology and Development-Related Habitat Requirements of the Florida Scrub Jay (*Apelocoma coerulescens*), Technical Report No. 8, Florida Game and Fresh Water Fish Commission, 1991.
5. Ecology and Habitat Protection Needs of the Southeastern American Kestrel (*Falco Sparverius Paulus*) on Large-scale Development Sites in Florida, Nongame Technical Report No. 13, Florida Game and Fresh Water Fish Commission, 1993.
  - ii. The County shall consider any other techniques recommended by the USFWS and FFWCC, subject to the provision of paragraph 3 of this policy.
  - iii. When listed species are directly observed on site or indicated by evidence, such as denning, foraging, or other indications, a minimum of 40% of native vegetation on site shall be retained, with the exception of clearing for agricultural purposes. The County shall also consider the recommendation of other agencies, subject to the provisions of paragraph 3 of this policy.
- b. For parcels containing gopher tortoises (*Gopherus polyphemus*), priority shall be given to protecting the largest most contiguous gopher tortoise habitat with the greatest number of active burrows, and for providing a connection to off site adjacent gopher tortoise preserves.
- c. Habitat preservation for the Florida scrub jay (*Aphelocoma coerulescens*) shall conform to the guidelines contained in Technical Report No. 8, Florida Game and Fresh Water Fish Commission, 1991. The required management plan shall also provide for a maintenance program and specify an appropriate fire or mechanical protocols to maintain the natural scrub community. The plan shall also outline a public awareness program to educate residents about the on-site preserve and the need to maintain the scrub vegetation. These requirements shall be consistent with the UFWS South Florida Multi-Species Recovery Plan, May 1999, subject to the provisions of paragraph (3) of this policy.
- d. For the bald eagle (*Haliaeetus leucocephalus*), the required habitat management plans shall establish protective zones around the eagle nest restricting certain activities. The plans shall also address restricting certain types of activities during the nest season. These requirements shall be consistent with the UFWS South Florida Multi-Species Recover Plan, May 1999, subject to the provisions of paragraph (3) of this policy.
- e. For the red-cockaded woodpecker (*Ipicoides borealis*), the required habitat protection plan shall outline measures to avoid adverse impacts to active clusters and to minimize impacts to foraging habitat. Where adverse effects can not be avoided, measures shall be taken to minimize on-site disturbance and compensate or mitigate for impacts that remain. These requirements shall be consistent with the UFWS South Florida Multi-Species Recovery Plan, May 1999, subject to the provision

- of paragraph (3) of this policy.
- f. In areas where the Florida black bear (*Ursus americanus floridanus*) may be present, the management plans shall require that garbage be placed in bear-proof containers, at one or more central locations. The management plan shall also identify methods to inform local residents of the concerns related to interaction between black bears and humans. Mitigation for impacting habitat suitable for black bear shall be considered in the management plan.
  - g. For projects located in Priority I or Priority II Panther Habitat areas, the management plan shall discourage the destruction of undisturbed, native habitats that are preferred by the Florida panther (*Felis concolor coryi*) by directing intensive land uses to currently disturbed areas. Preferred habitats include pine flatwoods and hardwood hammocks. In turn, these areas shall be buffered from the most intense land uses of the project by using low intensity land uses (e.g., parks, passive recreational areas, golf courses). Golf courses within the Rural Lands Area shall be designed and managed using standards found within this Overlay. The management plans shall identify appropriate lighting controls for these permitted uses and shall also address the opportunity to utilize prescribed burning to maintain fire-adapted preserved vegetation communities and provide browse for white-tailed deer. These requirements shall be consistent with the UFWs South Florida Multi-Species Recover Plan, May 1999, subject to the provisions of paragraph (3) of this policy.
  - h. The Management Plans shall contain a monitoring program for developments greater than 10 acres.
3. The County shall, consistent with applicable policies of this Overlay, consider and utilize recommendations and letters of technical assistance from the Florida Fish and Wildlife Conservation Commission and recommendations from the US Fish and Wildlife Service in issuing development orders on property containing listed species. It is recognized that these agency recommendations, on a case by case basis, may change the requirements contained within these wildlife protection policies and any such change shall be deemed consistent with the Growth Management Plan.

### **Policy 5.6**

For those lands that are not voluntarily included in the Rural Lands Stewardship program, Collier County shall direct non-agricultural land uses away from high functioning wetlands by limiting direct impacts within wetlands. A direct impact is hereby defined as the dredging or filling of a wetland or adversely changing the hydroperiod of a wetland. This policy shall be implemented as follows:

1. There are two (2) major wetlands systems within the RLSA, Camp Keais, Strand and the Okaloacoochee Slough. These two systems have been mapped and are designated as FSA's. Policy 5.1 prohibits certain uses within the FSA's, thus preserving and protecting the wetlands functions within those wetland systems.

2. The other significant wetlands within the RLSA are WRA's as described in Policy 3.3. These areas are protected by existing SFWMD wetlands permits for each area.
3. FSAs, HSAs and WRAs, as provided in Policy 5.3, and the ACSC have stringent site clearing and alteration limitations, nonpermeable surface limitations, and requirements addressing surface water flows which protect wetland functions within the wetlands in those areas. Other wetlands within the RLSA are isolated or seasonal wetlands. These wetlands will be protected based upon the wetland functionality assessment described below, and the final permitting requirements of the South Florida Water Management District.
  - a. The County shall apply the vegetation retention, open space and site preservation requirements specified within this Overlay to preserve an appropriate amount of native vegetation on site. Wetlands shall be preserved as part of this vegetation requirement according to the following criteria:
    - i. The acreage requirements specified within this Overlay shall be met by preserving wetlands with the highest wetland functionality scores. Wetland functionality assessment scores shall be those described in paragraph b of this policy. The vegetative preservation requirements imposed by Policies 5.3 and 5.5 shall first be met through preservation of wetlands having a functionality assessment score of 0.65 or a Uniform Wetland Mitigation Assessment Method score of 0.7, or greater. Within one year from the effective date of this Amendment, the County shall develop specific criteria in the LDC to be used to determine those instances in which wetlands with a WRAP functionality assessment score of 0.65 or a Uniform Wetland Mitigation Assessment Method score of 0.7, or greater must be preserved in excess of the preservation required by Policy 5.3.
    - ii. Wetlands utilized by listed species or serving as corridors for the movement of listed species shall be preserved on site. Wetland flowway functions through the project shall be maintained.
    - iii. Proposed development shall demonstrate that ground water Table drawdowns or diversions will not adversely change the hydoperiod of preserved wetlands on or offsite. Detention and control elevations shall be set to protect surrounding wetlands and be consistent with surrounding land and project control elevations and water tables. In order to meet these requirement projects shall be designed in accordance with Sections 4.2.2.4.6.11 and 6.12 of SFWMD's Basis of Review, January 2001. Upland vegetative communities may be utilized to meet the vegetative, open space and site preservation requirements of this Overlay when the wetland functional assessment score is less than 0.65.
  - b. In order to assess the values and functions of wetlands at the time of Project review, applicants shall rate functionality of wetlands using the South Florida Water Management District's Wetland Rapid Assessment Procedure (WRAP), as described in Technical Publication Reg-001, dated September 1997, and updated August

- 1999, or the Uniform Wetland Mitigation Assessment Method, identified as F.A.C. Chapter 62-345. The applicant shall submit to County staff agency-accepted WRAP scores, or Uniform Wetlands Mitigation Assessment scores. County staff shall review this functionality assessment as part of the County's EIS provisions and shall use the results to direct incompatible land uses away from the highest functioning wetlands according to the requirements found in paragraph 3 above.
- c. All direct impacts shall be mitigated for pursuant to the requirements of paragraph (f) of this policy.
  - d. Single family residences shall follow the requirements contained within Policy 6.2.7 of the Conservation and Coastal Management Element.
  - d. The County shall separate preserved wetlands from other land uses with appropriate buffering requirements. The County shall require a minimum 50-foot vegetated upland buffer adjacent to a natural water body, and for other wetlands a minimum 25-foot vegetated upland buffer adjacent to the wetland. A structural buffer may be used in conjunction with a vegetative buffer that would reduce the vegetative buffer width by 50%. A structural buffer shall be required adjacent to wetlands where direct impacts are allowed. Wetland buffers shall conform to the following standards:
    - i. The buffer shall be measured landward from the approved jurisdictional line.
    - ii. The buffer zone shall consist of preserved native vegetation. Where native vegetation does not exist, native vegetation compatible with the existing soils and expected hydrologic conditions shall be planted.
    - iii. The buffer shall be maintained free of Category I invasive exotic plants, as defined by the Florida Exotic Pest Plant Council.
    - iv. The following land uses are considered to be compatible with wetland functions and are allowed within the buffer:
      - (1) Passive recreational areas, boardwalks and recreational shelters;
      - (2) Pervious nature trails;
      - (3) Water management structures;
      - (4) Mitigation areas;
      - (5) Any other conservation and related open space activity or use which is comparable in nature with the foregoing uses.
    - v. A structural buffer may consist of a stem-wall, berm, or vegetative hedge with suitable fencing.
  - f. Mitigation shall be required for direct impacts to wetland in order to result in no net loss of wetland functions.

Mitigation Requirements:

    - i. "No net loss of wetland functions" shall mean that the wetland functional score of the proposed mitigation equals or exceeds the wetland functional score of the impacted wetlands. Priority shall be given to mitigation within FSA's and HSA's.
    - ii. Loss of storage or conveyance volume resulting from direct impacts to wetlands shall be compensated for by providing an equal amount of storage or conveyance capacity on site and within

- or adjacent to the impacted wetland.
- iii. Protection shall be provided for preserved or created wetland or upland vegetative communities offered as mitigation by placing a conservation easement over the land in perpetuity, providing for initial exotic plant removal (Class I invasive exotic plants defined by the Florida Exotic Plant Council) and continuing exotic plant maintenance, or by appropriate ownership transfer to a state or federal agency along with sufficient funding for perpetual management activities.
  - iv. Prior to issuance of any final development order that authorizes site alteration, the applicant shall demonstrate compliance with paragraphs (f) i, ii, and iii of this policy. If agency permits have not provided mitigation consistent with this policy, Collier County will require mitigation exceeding that of the jurisdictional agencies.
  - g . Wetland preservation, buffer areas, and mitigation areas shall be identified or platted as separate tracts. In the case of a Planned Unit Development (PUD), these areas shall also be depicted on the PUD Master Plan. These areas shall be maintained free from trash and debris and from Category I invasive exotic plants, as defined by the Florida Exotic Pest Plant Council. Land uses allowed in these areas shall be limited to those listed above (3.e.iv.) and shall not include any other activities that are detrimental to drainage, flood, control, water conservation, erosion control or fish and wildlife habitat conservation and preservation.