

1 **GROWTH MANAGEMENT PLAN IMPACT:** The adoption of Land Development Code
2 regulations to specify the criteria and to determine the circumstances when creation or restoration
3 native vegetation is allowed is required as part of the EAR-based GMP amendment to CCME
4 Policy 6.1.1 (12).

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6 "Off-site native vegetation retention alternatives" are required as part of the EAR-based GMP
7 amendment to CCME Policy 6.1.1 (10).

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9 **OTHER NOTES/VERSION DATE:** Created August 24, 2009. Amended September 18, 2009,
10 November 4, 2009, March 5, 2010, March 26, 2010

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13 **Amend the LDC as follows:**

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16 **3.05.07 Preservation Standards**

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18 H. Preserve standards.

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20 1. Design standards.
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22 e. Created preserves. Although the primary intent of GMP CCME
23 Policy 6.1.1 is to retain and protect existing native vegetation,
24 there are situations where the application of the retention
25 requirements of this Policy is not possible. In these cases,
26 creation or restoration of vegetation to satisfy all or a portion of
27 the native vegetation retention requirements may be allowed. In
28 keeping with the intent of this policy, the preservation of native
29 vegetation off site is preferable over creation of preserves.
30 Created Preserves shall be allowed for parcels that cannot
31 reasonably accommodate both the required on-site preserve area
32 and the proposed activity.

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34 i. Applicability. Criteria for determining when a parcel cannot
35 reasonably accommodate both the required on-site
36 preserve area and the proposed activity allowing created
37 preserves include:

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39 (a) Where site elevations or conditions requires
40 placement or removal of fill thereby harming or
41 reducing the survivability of the native vegetation in
42 its existing locations;

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44 (b) Where the existing vegetation required by this
45 policy is located where proposed site
46 improvements are to be located and such
47 improvements cannot be relocated as to protect the
48 existing native vegetation;

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50 (c) ~~Where native preservation requirements cannot be~~

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accommodated, the landscape plan shall re-create a native plant community in all three strata (ground covers, shrubs and trees), utilizing larger plant materials so as to more quickly re-create the lost mature vegetation. These areas shall be identified as created preserves. To provide for floodplain compensation as required by the LDC.

(d) When a State or Federal permit requires creation of native habitat on site. The created preserve acreage may fulfill all or part of the native vegetation requirement when preserves are planted with all three the appropriate strata; using the criteria set forth in Created Preserves. This exception may be granted, regardless of the size of the project.

(e) When small isolated areas (of less than 1/2 acre in size) of native vegetation exist on site. In cases where retention of native vegetation results in small isolated areas of 1/2 acre or less, preserves may be planted with all three strata; using the criteria set forth in Created Preserves and shall be created **adjacent** existing native vegetation areas on site or contiguous to preserves on **adjacent** properties. This exception may be granted, regardless of the size of the project.

(f) When an access point to a project cannot be relocated. To comply with obligatory health and safety mandates such as road alignments required by the State, preserves may be impacted and created elsewhere on site.

(g) To provide for connections to on or off site preserves.

(h) In the RFMU District where upland buffers required by the LDC, lack native vegetative communities.

ii. ~~Required Planting Criteria:~~

(a) ~~Where created preserves are approved, the landscape plan shall re-create a native plant community in all three strata (ground cover, shrubs and trees), utilizing larger plant materials so as to more quickly re-create the lost mature vegetation. Such re-vegetation shall apply the standards of section 4.06.05 C. of this Code, and include the following minimum sizes: one gallon ground cover; seven (7) gallon shrubs; fourteen (14) foot high~~

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~~trees with a seven foot crown spread and a dbh (diameter at breast height) of three inches. The spacing of the plants shall be as follows: twenty to thirty foot on center for trees with a small canopy (less than 30 ft. mature spread) and forty foot on center for trees with a large canopy (greater than 30 ft. mature spread), five foot on center for shrubs and three foot on center for ground covers. Plant material shall be planted in a manner that mimics a natural plant community and shall not be maintained as landscaping. Minimum sizes for plant material may be reduced for scrub and other xeric habitats where smaller size plant material are better suited for re-establishment of the native plant community.~~

ii(b) Approved created preserves may be used to recreate

a)(1) not more than one acre of the required preserves if the property has less than twenty acres of existing native vegetation.

b)(2) not more than two acres of the required preserves if the property has equal to or greater than twenty acres and less than eighty acres of existing native vegetation.

c)(3) not more than 10% of the required preserves if the property has equal to or greater than eighty acres of existing native vegetation.

iii(e) The minimum dimensions shall apply as set forth in 3.05.07H.1.b.

iv(d) All perimeter landscaping areas that are requested to be approved to fulfill the native vegetation preserve requirements shall be labeled as preserves and shall comply with all preserve setbacks.

~~f. Allowable supplemental plantings. Supplemental native plantings in all three strata may be added to preserve areas where the removal of non-native and/or nuisance vegetation creates open areas with little or no native vegetation coverage. Plant material in these restoration areas shall meet the following minimum size criteria: one gallon ground covers, three gallon shrubs and six foot high trees. Plant material shall be planted in a manner that mimics a natural plant community and shall not be maintained as landscaping. Minimum sizes for plant material may be reduced for scrub and other xeric habitats where smaller size plants material are better suited for re-establishment of the native plant~~

community.

v. Preparation of required planting plans for preserves.

Preserve planting plans shall be designed by an individual with academic credentials and experience in the area of environmental sciences or natural resource management. Academic credentials and experience shall be a bachelor's or higher degree in one of the biological sciences with at least two years of ecological or biological professional experience in the State of Florida.

vi. Planting requirements for created preserves.

Soils compatible with the habitat to be created shall be used to create the preserve. Where compatible soils are not present, a minimum of 6 to 8 inches of compatible soil shall be used.

Where created preserves are approved, the planting plan shall re-create a native plant community in all three strata (ground cover, shrubs and trees), utilizing larger plant materials to more quickly re-create the lost mature vegetation. Environments which do not normally contain all three strata shall only be required to plant the strata found in the habitat to be created. Plant material shall be planted in a manner that mimics a natural plant community and shall not be maintained as landscaping. Such re-vegetation shall include the following minimum sizes: one gallon ground cover; 7 gallon shrubs; canopy trees in the following sizes: 25 percent at 10 feet, 50 percent at 8 feet and 25 percent at 6 feet. Spacing requirements for calculating the number of plants shall be as follows: 20 to 30 foot on center for trees with a small canopy (less than 30 feet mature spread) and 40 to 50 foot on center for trees with a large canopy (greater than 30 feet mature spread), 10 foot on center for shrubs, 3 foot on center for ground covers which spread by rhizomes or creeping stems or which have a mature height of 2 feet or more, excluding the bloom, and 2 foot on center for ground covers with a mature height of less than 2 feet, excluding the bloom, and which reproduce primarily by seed.

Minimum sizes for plant material may be reduced for scrub and other xeric habitats in order to promote diversity or where smaller size plant material is better suited for re-establishment of the native plant community. Coverage of pine and hardwoods in scrub habitats shall occupy no more than 70% of the area of a scrub preserve, in order to create natural open areas for wildlife and native ground covers. In south Florida slash pine dominated

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environments, where fire is a concern, the amount of mid-story vegetation planted may be reduced to promote the growth of native ground covers, reduce the threat of wildfire and to promote use of the preserve by listed species.

Three gallon container saw palmetto (*Serenoa repens*) may be used in lieu of seven gallon containers. South Florida slash pine (*Pinus elliottii* var. *densa*) trees may be planted in the following sizes: 25 percent at 6 feet and 75 percent at 4 feet, with a spacing requirement of 40 feet on center for calculating the number of slash pines to be planted.

Mangrove trees may be planted as three gallon size containers but must be planted a minimum of five to seven foot on center for calculating the number of mangroves to be planted, if planted at this size. Ground covers in estuarine and other aquatic environments may be planted as liners or bare root plants.

Upland or seasonally wet preserves with extended dry periods shall detail a method of providing water until the plants are established.

vii. Supplemental planting requirements within preserves.

Supplemental plantings in the strata required to restore the habitat to its natural condition shall be added to preserves where prior clearing or disturbance, or the removal of non-native and/or nuisance vegetation has created open areas with little or no native vegetation. Plant material shall be planted in a manner that mimics a natural plant community and shall not be maintained as landscaping. Supplemental plantings must be of the species typical of the native habitats being restored and take into consideration the requirements of any listed species using the preserve.

Areas defined as "native vegetation" pursuant to this section and required to be retained as preserves, shall only be required to plant material in the sizes specified in this subsection and not in the sizes required for created preserves. Supplemental plantings within preserves shall be in accordance with requirements specified in approved state and federal permits for a project. Where not specified in the State and Federal permits for a project, supplemental plantings within County required preserves shall adhere to the following minimum standards: one gallon or liner ground covers, three gallon shrubs and four foot high trees. Ground covers in aquatic environments may be planted as bare root plants.

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Natural recruitment of native groundcovers may be used in areas where native groundcovers would be expected to regenerate on their own. If within a two-year period the coverage of ground covers is less than that typically found in environments containing these species, then supplemental planting with native ground covers or distribution of native seed shall be required. A planting plan with schedule for planting or distributing native seed shall be included as part of the preserve management plan, in case sufficient natural recruitment of groundcovers has not occurred.

Natural recruitment of south Florida slash pine (*Pinus elliotii* var. *densa*) may be used where south Florida slash pine would be expected to regenerate on their own. If within a two-year period the number of pine seedlings is less than that needed to regenerate the habitat type, then supplemental planting with south Florida slash pine or distribution of south Florida slash pine seed shall be required. A backup planting plan with schedule for planting or distributing seed shall be included as part of the preserve management plan, in case sufficient natural recruitment has not occurred. South Florida slash pine trees may be planted as seedlings in lieu of planting four foot high trees, for individual preserves 100 or more acres in size.

Restoration of mangroves shall be with one to three gallon container mangroves, unless otherwise permitted by State and Federal permitting agencies.

Minimum sizes for plant material may be reduced for scrub and other xeric habitats in order to promote diversity or where smaller size plant material is better suited for re-establishment of the native plant community. Coverage of pine and hardwoods in scrub habitats shall occupy no more than the 70% of the area of a scrub preserve, in order to create natural open areas for wildlife and indigenous ground covers.

viii. Success criteria.

Success shall be demonstrated for created preserves and supplemental planting within preserves, 5 years after installation of plant material and shall be included with the monitoring report. Before and after photos taken from specific or permanent field markers to identify the locations within the preserve shall be included in the above mentioned monitoring report. Demonstration of success shall include the following.

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- a) Eighty percent vegetative coverage has been attained within the preserve.
- b) Native vegetation is within the range of species diversity, density and distribution documented within either reference sites or from literature references for the specific habitat types.
- c) Native vegetation characteristic of the habitat are reproducing in the vegetative or seeding manner typical of the species.
- d) When permitted through the Water Management District using UMAM, overall UMAM scores must indicate that the preserves have attained or are clearly trending toward the "with-mitigation" scores used to determine success.

f. Off-site vegetation retention.

- i. Applicability. A property owner may request that all or a portion of the Collier County on-site **native vegetation** preservation retention requirement be satisfied offsite for only the following situations and subject to restrictions listed below.
 - a) Properties zoned commercial or industrial where the on-site preserve requirement is less than 2 acres in size.
 - b) Park sites where the on-site preserve requirement is less than one acre in size.
 - c) **Essential service** facilities other than parks, for any size preserves.
 - d) Preserves less than one acre in size.
 - e) Affordable housing projects. The maximum percent of **native vegetation** retention allowed offsite shall be equal to the percent of affordable housing units, without limitation as to size of the preserve.
 - f) Existing or proposed preserves with 75 percent or more coverage with exotic vegetation. Existing preserves not previously overrun with this type vegetation and which arrive at this state due to lack of management of the preserve shall mitigate off site at a ratio of 2 to 1.

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g) Created preserves which do not meet the success criteria in 3.05.07 H.1.e.viii or where preserves have not been planted in a manner which mimics a natural plant community.

h) Preserves which do not meet the minimum dimensional requirements of this section.

i) Portions of preserves located within platted single-family lots.

j) Right of Way acquisitions to be conveyed or in the process of being conveyed to the County by non-governmental entities for all purposes necessary for roadway construction, including ancillary drainage facilities, and including utilities within the right of way acquisition area.

k) All criteria listed for created preserves.

ii. Restrictions, when one or more of the following situations occur.

a) Xeric scrub and hardwood hammocks which are one acre or more in size, mangrove (excluding mangrove fringes less than 40 feet in width on artificially created shorelines), coastal dune and strand environments, and listed species habitat or corridors per the requirements or recommendations of the FFWCC or USFWS, shall not be allowed to have the on-site **native vegetation** preservation retention requirement provided offsite.

b) Preserves shall remain onsite if located contiguous to natural **flowways** required to be retained per the requirements of the SFWMD, natural water bodies, estuaries, government required preserves (not meeting the offsite preservation criteria herein), NRPAs, or contiguous to property designated for purchase by Conservation Collier or purchased by Conservation Collier, or contiguous to properties containing listed species nests, buffers, corridors and foraging habitat per the requirements or recommendations of the FFWCC or USFWS. For the purpose of this section, natural **flowways** shall also include those identified during wetland permitting with applicable state and federal agencies, regional drainage studies, or surface water management permits.

c) Remaining portions of on-site preserves must be a

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minimum of one acre in size and shall not meet the
offsite criteria of sub-section 3.05.07 H.1.f.i.f) and
g) above, unless preserved with higher quality
habitat not qualifying for the off-site **native
vegetation** retention alternative.

iii. Off-site Alternatives. Off-site **native vegetation** retention
requirements may be met by monetary payment or by land
donation.

a) Applicants shall make monetary payment to Collier
County. Such funds will be used by the County for
the purchase and management of off-site
conservation lands within the county. The
monetary payment shall be based on the location
of the land to be impacted and be equal to 125
percent of the average cost of land in the Urban
Designation or 125 percent of the average cost for
all other Designations, as applicable, as defined by
the FLUE, purchased by Collier County, through
the Conservation Collier program. This monetary
payment shall be made prior to the preconstruction
meeting for the SDP or final plat construction
plans.

b) In lieu of monetary payment, applicants may
choose to donate land for conservation purposes to
Collier County or to another government agency. In
the event of donation to Collier County, the
applicant may acquire and subsequently donate
land within the project boundaries of Winchester
Head, North Golden Gate Estates Unit 53, another
multi-parcel project or any other land designated by
Conservation Collier donation acceptance
procedures.

Applicants who choose to donate land shall be
required to demonstrate that the land to be
donated contains **native vegetation** communities
equal to or of higher priority (as described in
subsection 3.05.07 A.) than the land required to be
preserved onsite. In no case shall the acreage of
land donated be less than the acreage of land
required to be preserved onsite. Land donated to
satisfy the off-site vegetation retention requirement
must be located entirely within Collier County.
Donations of land for preservation shall be made to
a federal, state or local government agency
established or authorized to accept lands for the
conservation and management of land in
perpetuity, subject to the policies and procedures

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of the receiving entity. Lands donated to Collier County must include a cash payment for management of the land. The amount of this payment shall be equal to 25 percent of the average cost of land in the Urban Designation or 25 percent of the average cost in all other Designations, as applicable, as defined by the FLUE, purchased by Collier County, through the Conservation Collier program.

Applicant shall provide evidence that donations of land for preservation and endowments for management have been accepted by and donated to the entity stated above, at the time of the preconstruction meeting for the SDP or final plat construction plans. Exotics shall be removed in accordance with the time frames provided in 3.05.07 H.2. State and Federal agency requirements for mitigation, remediation and monitoring for the donated land shall be the responsibility of the applicant.

iv. PUD zoning. Where the off-site **native vegetation** retention alternative is used for portions of preserves not identified on a PUD master plan, a PUD amendment is not required. Preserves or portions of preserves identified on a PUD master plan shall require an amendment to the PUD master plan to use the **native vegetation** retention alternative, subject to 10.02.13 E, unless the option to use the off-site native vegetation retention alternative is included in the PUD.

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