

## 7.0 Conservation

### Goal 1: To Preserve, Enhance, Manage and Appropriately Use Wetlands, Water Bodies, Wildlife Habitat, and Other Natural Resources.

#### **Objective 1.1: To preserve and enhance native vegetation communities and wildlife habitat on or adjacent to the main campus or satellite properties.**

Policies	Status	Benchmarks	Recommendations
<p><b>Policy 1.1.1:</b> Where feasible the University shall remove non-native invasive plants (whether grasses, shrubs or trees) which are identified on any of the following lists: The IFAS Assessment of Non-Native Plants in Florida's Natural Areas, the Department of Agriculture and Consumer Services' "Noxious Weed List" (Rule 5B-57.007, F.A.C), the Department of Environmental Protection's "Prohibited Aquatic Plant List" (Rule 62C-52.011, F.A.C.) and the Florida Exotic Pest Plant Council's "Florida's Most Invasive Species List" from the campus grounds. As these species are located on campus, the University shall coordinate with the Florida Department of Environmental Protection and other appropriate governmental entities to ensure the proper removal and disposal of these exotic species. Exceptions to this policy (e.g., use of invasive non-native plants in academic research) must be approved and conditioned by the Lakes, Vegetation and Landscaping Committee.</p>	Ongoing	<p>The university successfully applied for and received grants from the Florida Department of Environmental Protection in 2004/05, 2005/06, 2007/08 and 2009/10 for invasive exotic plant removal. In 2005/06, Capital Improvement Trust Funds were allocated for environmental stewardship projects including invasive exotic plant removal. UF has also participated in the City of Gainesville's Air Potato Round Up every year since 2005. In 2012, a research plot of invasive exotic plants, <i>Leucaena leucocephala</i> – <i>Lead Tree</i>, was removed from a field near Lake Alice under supervision of the Florida Department of Environmental Protection. In spite of these efforts, invasive exotic plants still thrive in many UF conservation areas due to limited resources for retreatment and up-stream seed sources.</p>	Retain

Policies	Status	Benchmarks	Recommendations
<b>Policy 1.1.2:</b> University faculty and student groups with the necessary expertise shall be encouraged to assist in prioritizing exotic invasive plant removal and developing revegetation plans to reduce the possibility of reinvasion by exotic non-native species.	Ongoing	Faculty and students were involved in development of the Conservation Area Land Management Plan for campus conservation areas. Subsequently, several student groups including the Wetlands Club, Environmental Engineering Society, Student Planners Association, and some fraternities and sororities have been involved in invasive exotic plant removal either as stand-alone initiatives or as participation in the City of Gainesville's Air Potato Roundup. However, there is no single UF unit charged with organizing, prioritizing or long-term commitment to these efforts.	Retain
<b>Policy 1.1.3:</b> It is the intent of the University to remove non-native, nuisance animals where feasible.	Ongoing	The Division of Environmental Health and Safety is responsible for removing non-native, nuisance animals.	Retain
<b>Policy 1.1.4:</b> Any proposed development adjacent to a designated Conservation Area shall be carefully sited and integrated into the existing landscape to have a minimal visual impact on the area. Landscape treatments shall preserve significant existing native vegetation, e.g. listed species and heritage trees, to allow a graduated transition from developed areas to Conservation Areas. The existing native vegetation shall serve to essentially buffer proposed development in order to maintain the natural and undeveloped character of the area.	Ongoing	The Nanoscale Research Facility, Garage 13/TAPS Office, and PKY Elementary Building are examples of projects constructed adjacent to conservation areas. In each case, the projects' design included erosion controls and native replanting to buffer and enhance the adjacent area.	Retain

**Objective 1.2: To protect and conserve the natural functions of creeks, lakes, ponds, sinkholes, floodplains and wetlands on or adjacent to the main campus or satellite properties.**

Policies	Status	Benchmark Data	Recommendations
<p><b>Policy 1.2.1:</b> Encroachments into jurisdictional wetlands shall be required to receive prior permit approval from federal and state regulatory agencies. Wetlands, as defined in subsection 373.019(17) of the Florida Statutes and Chapter 62-340.200(19) of the Florida Administrative Code (FAC) include those areas that are inundated or saturated by surface water or ground water at a frequency or duration sufficient to support vegetation typically adapted for life in hydric or alluvial soils. The wetland limits shall be delineated utilizing the methodology described in Chapter 62-340.300, FAC. Impacts include any activity which may negatively affect the vegetative composition, water quality, water quantity, hydrologic regime, soil composition or substrate of defined wetlands. All mitigation shall be in conformance with an approved permit from the appropriate Federal and State agencies (including agencies of the State).</p>	<p>Ongoing</p>	<p>Construction projects comply with this policy.</p>	<p>Retain</p>
<p><b>Policy 1.2.2:</b> An average of 50 feet and minimum of 35 feet upland buffer shall be identified and protected around all wetlands/water bodies that are not within a Conservation Area prior to construction of any buildings. Where a buffer cannot be provided, mitigation of the buffer deficiencies shall be required and reviewed by the Lakes, Vegetation and Landscaping Committee.</p>	<p>Ongoing</p>	<p>Construction projects comply with this policy. These standards are slightly higher than what would be required by the Water Management Districts but equivalent to that required by the City of Gainesville.</p>	<p>Retain – modify to provide flexibility for projects where existing encroachments exist (e.g. demo/rebuild projects such as at PKY site)</p>

Policies	Status	Benchmark Data	Recommendations
<b>Policy 1.2.3:</b> No development shall be permitted within the required upland buffer, unless appropriate minimization of impact and mitigation is approved by the Lakes, Vegetation and Landscaping Committee.	Ongoing	Construction projects comply with this policy.	Retain
<b>Policy 1.2.4:</b> All ornamental landscaping improvements within required upland buffers shall use only native plants in a naturalistic way and shall be approved by Lakes, Vegetation and Landscaping Committee.	Ongoing	Construction projects comply with this policy. Garage 13 construction provides an example of this landscaping along the creek.	Retain
<b>Policy 1.2.5:</b> All proposed development projects within 50 feet of a wetland shall be submitted to the appropriate Water Management District for review in the design phase of the project.	Ongoing	Construction projects comply with this policy, which is consistent with the University's master stormwater permit. Garage 13 is an example of a project that required this WMD review.	Retain
<b>Policy 1.2.6:</b> New Development within the 100-year floodplain, as mapped for the University's current Master Stormwater Permit is discouraged and shall be prohibited unless it can be demonstrated that such development has elevated base floor elevations at least 1 foot above the 100-year floodplain, preferably two feet, and has provided for compensating storage elsewhere on the proposed building area site. If compensating storage is not necessary to protect other structures, the development may mitigate by funding stormwater enhancements that help address problems within the floodplain. Examples include, in-stream erosion control measures and low impact development techniques as addressed in the Stormwater Element of this Master Plan. For 100-year floodplains not mapped in the University's current Master Stormwater permit, the Federal Emergency Management Agency's (FEMA) 100-year floodplain mapping shall be used as best available data.	Ongoing	Construction projects comply with this policy. While the Harrell Education Building did not impact the 100-year floodplain, its building site was immediately adjacent. As a result, the project included passive swales along the creek bank as an erosion control measure. No project has been required to provide compensating storage.	Retain

**Objective 1.3: To restrict University activities known to threaten the habitat and survival of endangered and threatened species on or adjacent to the main campus or satellite properties.**

Policies	Status	Benchmark Data	Recommendations
<b>Policy 1.3.1:</b> The University shall continue to protect and conserve endangered and threatened species of plants and wildlife, and species of special concern, as required by the Endangered Species Act of 1973, as amended, Chapter 372, F.S., Chapter 39, F.A.C., and federal and state management policies relating to the protection of threatened and endangered species and species of special concern.	Ongoing	Federal and state laws and management policies have been followed. As one example, the Emerging Pathogens Building adjusted the construction schedule to comply with protections of nearby eagles during the nesting period.	Retain
<b>Policy 1.3.2:</b> During the initial planning phase of any physical changes to the campus, the University shall perform an analysis of wildlife and plants in the area to be affected. All plants (Chapter 5B-40, F.A.C.) and animals (Rule Chapter 68A-27 F.A.C.) identified as threatened and endangered species and species of special concern by Federal and State agencies shall be noted. Protection plans for these listed species, if documented on site, shall be formulated that are consistent with those of the appropriate local, state and federal agencies.	Ongoing	Since most construction projects are located in already impacted urban areas, the presence of threatened and endangered species is low. All projects with new footprints conduct a tree inventory during the early planning phase so that any unique species would be identified.	Retain
<b>Policy 1.3.3:</b> University personnel shall follow procedures and seek consultation with the appropriate agencies as identified in the Florida Fish and Wildlife Conservation Commission's <u>Wildlife Methodology Guidelines</u> (January 15, 1988) when any land alterations are proposed for a site where a listed species is likely or known to occur.	Ongoing	University personnel follow these procedures and seek consultation as required.	Retain

**Objective 4: To preserve, enhance, manage and appropriately use wetlands and uplands, wildlife habitat, and water resources, while also enabling outdoor teaching and research opportunities on all of the University’s designated Conservation Areas (the following policies under this Objective are only applicable within Conservation Areas, as identified on the Future Land Use Map, unless otherwise stated within the policy).**

Policies	Status	Benchmark Data	Recommendations
<b>Policy 1.4.1:</b> Conservation Area Land Management (CALM) Plan, including specific plans for each designated Conservation Area(s), shall be reviewed, updated and approved on an annual basis by the Lakes, Vegetation and Landscaping Committee.	Ongoing	The CALM Plan and specific plans for each designated Conservation Area are maintained, however; annual reporting to the LVLC has not been provided consistently. Responsibility for CALM Plan implementations is not assigned to any single UF unit.	Retain
<b>Policy 1.4.2:</b> CALM plans will be developed within one year of adoption of this Master Plan for each Campus Master Plan Alachua County Satellite property that contains Conservation land use designations. Such management plans shall address measures to reduce the potential for or impacts of wildfires as applicable.	Complete	CALM Plans were developed for CMP Alachua County Satellite Properties with conservation areas: Beef Research Unit, Dairy Research Unit and Lake Wauburg. Ongoing implementation and monitoring needs to be coordinated with the property management unit. Updates of these CALM plans should enhance recommendations for wildfire mitigation.	Modify – reflect that these plans are complete and implementation is ongoing with reviews and updates
<b>Policy 1.4.3:</b> Preserve and restore natural habitat functions on all campus Conservation Areas as identified in each area’s management plan.	Ongoing	The Conservation Land Management Plan identifies restoration activities for each conservation area. Invasive exotic plant removal and native plant revegetation has taken place in several of these areas. Erosion control measures with native plantings were implemented in creeks at Lake Alice Creek and Reitz Ravine.	Retain

Policies	Status	Benchmark Data	Recommendations
<p><b>Policy 1.4.4:</b> The University shall seek funding to implement the recommendations contained in the Conservation Area Land Management Plan.</p>	Ongoing	<p>Grants from the Florida Department of Environmental Protection in 2004/05, 2005/06, 2007/08 and 2009/10 together with Capital Improvement Trust Funds in 2005/06 for environmental stewardship projects were used to implement recommendations of the CALM Plan. In 2013, a grant to Tree Campus USA spearheaded by the UF Office of Sustainability lead to the planting of numerous native trees in the University Arboretum conservation area.</p>	Retain
<p><b>Policy 1.4.5:</b> Maintain hydrologic function and improve water quality, utilizing innovative best management practices (BMPs) in line with the University's teaching mission.</p>	Ongoing	<p>Low impact development (LID) techniques have been employed in several construction projects including Hough Hall, SW Recreation Center and the Small Animal Hospital. Several stand-alone LID projects and large-scale erosion control projects have also been implemented. The Harrell Medical Education Building will include swales to protect the adjacent creek. Water quality monitoring is conducted through the UF Clean Water Campaign and National Pollutant Discharge Elimination System (NPDES) program.</p>	Retain
<p><b>Policy 1.4.6:</b> Support the University's teaching and research mission by coordinating with departments involved in ecological research.</p>	Ongoing	<p>University operations collaborate with the academic departments in a variety of ecological areas, particularly for the UF Clean Water Campaign and National Pollutant Discharge Elimination System (NPDES) program. Campus conservation areas, including Lake Alice and the Natural Area Teaching Lab (NATL) have been used for a variety of research and teaching including topics such as water quality, turtles, geomatics, and fire management.</p>	Retain

Policies	Status	Benchmark Data	Recommendations
<b>Policy 1.4.7:</b> Improve appearance, security and controlled access in all campus Conservation Areas.	Ongoing	The Capital Improvement Trust Funds in 2005/06 for environmental stewardship projects included fencing, signage, information kiosks, and planting of native flowering trees throughout the conservation areas.	Retain
<b>Policy 1.4.8:</b> New exterior lighting installations within Conservation Areas shall be discouraged. Exceptions must be evaluated and approved by the University's Lakes, Vegetation, and Landscaping Committee.	Ongoing	No new lighting has been installed in Conservation Areas. Limited lighting will be installed in sections of a new bicycle/pedestrian path along the edge of several conservation areas, and has been approved by LVLC.	Retain
<b>Policy 1.4.9:</b> All new utilities in Conservation Areas shall evaluate alternatives, demonstrate necessity, minimize impacts and be placed underground, unless it is deemed that underground placement will create undue hardship or disturb habitat for listed species. A utility installation plan must be submitted to and approved by the University's Lakes, Vegetation and Landscaping Committee for any utility installation in a Conservation Area.	Ongoing	LVLC has reviewed and approved the limited number of utility projects impacting conservation areas including one south of the Nanoscale Research Facility.	Retain
<b>Policy 1.4.10:</b> All Stormwater improvement projects within Conservation Areas shall conform to the intent of being in a conservation area. This means that these improvements will emphasize wildlife habitat, use native vegetation and be designed to blend in with the natural environment. All new or expanded stormwater improvements that do not relate to on-going maintenance shall be reviewed by the Lakes, Vegetation and Landscaping Committee for approval.	Ongoing	Several stormwater projects including erosion control and pond dredging have enhanced habitat areas and been reviewed by the LVLC as required.	Retain

Policies	Status	Benchmark Data	Recommendations
<p><b>Policy 1.4.11:</b> Development activity that necessitates a land use change reducing the size of a designated Conservation Area and that is inconsistent with that area’s management plan is strongly discouraged. Such development activity must meet the requirements of State and Federal agencies, and provide the evaluation of alternatives and impact minimization strategies as specified in the Future Land Use Element. However, if such development is deemed necessary following these evaluations, then mitigation for Conservation Areas shall be required. The mitigation shall be approved by the Lakes Vegetation and Landscaping Committee, and may be in the form of either: 1) designation of land in the Conservation land use classification with similar function and value; 2) acquisition and preservation of property in Alachua County with similar function and value at a 10:1 (acquired land: impacted land) ratio with preference for acquisition of conservation land adjacent to other Preservation Areas (as identified in the Alachua County Comprehensive Plan); and/or 3) fund the enhancement and restoration of designated Conservation Areas equal to the monetary value of land acquisition described in the previous option.</p>	<p>Ongoing</p>	<p>The university has maintained zero net loss of Conservation lands. The Reclaimed Water Storage tank required a land use amendment in an area that had been an upland Conservation Area on the east side of Lake Alice. Comparable upland acreage was amended into the Conservation Future Land Use on the west side of Lake Alice to provide for no net loss. No construction project has contemplated Conservation land mitigation per this policy. The campus master plan update for 2015-2025 proposes some modifications to Conservation Future Land Use designations, but upholds this no net loss policy.</p>	<p>Retain</p>