7.0 Conservation

Goal	Status	Recommendations
Goal 1: To Preserve, Enhance, Manage and Appropriately Use Wetlands, Water Bodies, Wildlife Habitat, and Other Natural Resources.	The 2018 Landscape Master Plan (LMP) elevates the importance of the campus natural resources and provides additional policies, guidelines, and standards for campus landscape management.	Modify the goal to reflect LMP goals. **Goal 1: Celebrate the Ecological Setting of the Campus by Preserving, Enhancing, Managing, and Appropriately Using its Natural Resources as Native Habitats for Flora and Fauna.**

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
Policy 1.1.1: 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) and 'Prohibited Aquatic Plant List' (Chapter SB-64.011, F.A.C.), the and the Florida Exotic Pest Plant Council's " List of Invasive Plant Species " 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. Current known locations of invasive plants in campus Conservation Areas is depicted in Figure 7-5.	Ongoing	The University continues to prohibit non-native invasive plants and selectively removes existing ones is the Natural Area Teaching Lab and other areas on campus. The Landscape Master Plan recommends the University conduct a program of regular monitoring.	Modify – **Policy 1.1.1:** <u>The University shall implement a program of regular monitoring in Conservation Areas, particularly on riparian zones, for the control of non-native plants and edge maintenance. Non-native invasive plants (whether grasses shrubs or trees)</u> are identified on any…."

Policies	Status	Benchmarks	Recommendations
Policy 1.1.2: 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 Greater Raider Invader. However, there is no single UF unit charged with organizing, prioritizing or long-term commitment to these efforts outside of the Natural Areas Teaching Lab.	No Change
Policy 1.1.3: 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.	No Change
Policy 1.1.4: 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 Vet Med ESCO plant is an example of a recent project constructed adjacent to conservation areas. In this case, the project's design included erosion controls and native replanting to buffer and enhance the adjacent area.	No Change

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
Policy 1.2.1: 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).	Ongoing	Construction projects comply with this policy.	Modify to reflect Statutory references. **"….**as defined in subsection 373.019(27) of the Florida Statutes…."

Policies	Status	Benchmark Data	Recommendations
Policy 1.2.2: 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 new buildings. Where a buffer cannot be provided, mitigation of the buffer deficiencies shall be required and reviewed by the Lakes, Vegetation and Landscaping Committee. Exception to this policy will be made for replacements of existing buildings in the same location.	Ongoing	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.	Add new policies 1.2.7 and 1.2.8 for Satellite properties to match wetland protection polices for unincorporated Alachua County.
Policy 1.2.3: 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.	No Change
Policy 1.2.4: 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.	No Change
Policy 1.2.5: 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.	No Change

Policies	Status	Benchmark Data	Recommendations
Policy 1.2.6: 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.	No Change

Policies	Status	Benchmark Data	Recommendations
		Add new policies for Satellite properties to match wetland protection polices for unincorporated Alachua County.	New **Policy 1.2.7:** An average of 75 feet and minimum of 50 feet upland buffer shall be identified and protected around all wetlands/water bodies prior to construction of any new buildings for all Satellite properties in unincorporated Alachua County. Where a buffer cannot be provided, mitigation of the buffer deficiencies shall be required and reviewed by the Lakes, Vegetation and Landscaping Committee. Exception to this policy will be made for replacements of existing buildings in the same location.
		Add new policies for Satellite properties to match wetland protection polices for unincorporated Alachua County.	New **Policy 1.2.8**: An average of 100 feet and minimum of 75 feet upland buffer shall be identified and protected around all wetlands/water bodies prior to construction of any new buildings for all Satellite properties in unincorporated Alachua County that have a documented federally and/or state regulated vertebrate wetland/aquatic dependent animal species within 300 feet of the surface water or wetland . Where a buffer cannot be provided, mitigation of the buffer deficiencies shall be required and reviewed by the Lakes, Vegetation and Landscaping Committee. Exception to this policy will be made for replacements of existing buildings in the same location.
		The Landscape Master Plan recommends maintaining planted edges on water bodies.	New **Policy 1.2.9:** Provide native planted riparian and upland zones, preferably as a minimum 50’ buffer zone, to alleviate erosion, filter contaminant run-off, and reduce algae-supportive light in littoral zones. Within these planted zones and while maintaining the natural systems, cautiously and selectively create targeted view sheds with review and approval of the Lakes, Vegetation and Landscaping Committee.

Policies	Status	Benchmark Data	Recommendations
		The Landscape Master Plan recommends reintroducing planted edges along specific water bodies.	New **Policy 1.2.10:** Return the manicured edges of water bodies, particularly Dairy Pond, Jennings Creek, Yulee Preserve, and Lake Alice Creek, to their natural condition with expanded native planting zones.
		The Landscape Master Plan recommends daylighting piped streams.	New **Policy 1.2.11:** Daylight piped streams to the greatest extent possible to further the development of the campus natural flow ways and to promote infiltration of surface water runoff while also managing erosion to reduce stream incising and downstream sedimentation build-up.

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
Policy 1.3.1: 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 379, F.S., and Chapter 68A, F.A.C. and Chapter 581, F.S., and Chapter 5B-40, 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.	Modify to reflect Statutory references. **"….**Chapter 379.2291, F.S., Chapter 68A-27, F.A.C., and federal…"

Policies	Status	Benchmark Data	Recommendations
Policy 1.3.2: 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.	No Change
Policy 1.3.3: University personnel shall follow procedures and seek consultation with the appropriate agencies as identified in the Florida Fish and Wildlife Conservation Commission's Wildlife Conservation Guide 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. The policy currently does not address alterations in water bodies.	Modify - **"**…. when any alterations to land or water bodies are proposed for a site where a listed species is likely or known to occur."

Objective 1. 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
Policy 1.4.1: 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. The Office of Sustainability may assume this responsibility.	Modify policy regarding frequency of LVL reviews **Policy 1.4.1:** Conservation Area Land Management (CALM) Plan, including specific plans for each designated Conservation Area(s), shall be reviewed and approved by the Lakes, Vegetation and Landscaping Committee <u>as changes are necessitated</u>.
Policy 1.4.2: CALM plans developed for each Campus Master Plan Alachua County Satellite Property that contains Conservation land use designations shall be implemented and monitored. 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 need to be coordinated with the property management units.	No Change
Policy 1.4.3: 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.	No Change

Policies	Status	Benchmark Data	Recommendations
Policy 1.4.4: The University shall seek funding to implement the recommendations contained in the Conservation Area Land Management Plan.	Ongoing	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. No specific funding for CALM Plan implementation has been identified since that time. The Landscape Master Plan and Lake Alice Trail Plan include additional recommendations for funding improvements in Conservation Areas.	Modify – "…Conservation Area Land Management Plan, Landscape Master Plan, and Lake Alice Trails Plan."
Policy 1.4.5: Maintain hydrologic function and improve water quality, utilizing innovative best management practices (BMPs) in line with the University's teaching mission.	Ongoing	Low impact development (LID) techniques have been employed in several construction projects including Farrior Hall Addition and Harrell Medical Education Building included new LID features. Water quality monitoring is conducted through the UF Clean Water Campaign and National Pollutant Discharge Elimination System (NPDES) program.	No Change

Policies	Status	Benchmark Data	Recommendations
Policy 1.4.6: Support the University's teaching and research mission by coordinating with departments involved in ecological research.	Ongoing	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.	No Change
Policy 1.4.7: Improve appearance, security and controlled access in all campus Conservation Areas.	Ongoing	Minimal management projects have been implemented in Conservation Areas since the Capital Improvement Trust Funds in 2005/06 for environmental stewardship projects provided fencing, signage, information kiosks, and planting of native flowering trees throughout the conservation areas. In 2019/20, Facilities Services rebuilt the damaged boardwalk overlook on Lake Alice accessed from University Gardens. Clarify consistency required with existing plan documents for these modifications.	Modify – "….in all campus Conservation Areas, <u>consistent with the Landscape Master Plan, Lake Alice Trails Plan, Conservation Land Management Plan, and Campus Master Plan</u>."
Policy 1.4.8: 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	Limited lighting was installed on a boardwalk and bridge in the form of small pack-lights on the structure railing at the Cross Campus Greenway near Lake Alice creek. The concept was approved by LVLC.	No Change

Policies	Status	Benchmark Data	Recommendations
Policy 1.4.9: 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. A distinction is needed to clarify utility distribution systems and stormwater treatment facilities are allowed in Conservation Areas but not other utility infrastructure that would otherwise be identified in the Utility Future Land Use. A corresponding clarification will be made in the FLU definitions Policy 1.1.2.	Modify – "All new <u>utility distribution systems or stormwater treatment facilities</u> in Conservation Areas…"
Policy 1.4.10: 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.	No Change
		The Landscape Master Plan and Lake Alice Trails Plan provide guidance on public access for passive recreation in Conservation Areas.	New **Policy 1.4.11:** Provide passive recreation opportunities for the public to experience natural features of the campus through corridors and spaces including those in the Lake Alice Trail Plan on Figure 1-8.

Policies	Status	Benchmark Data	Recommendations
		The Landscape Master Plan includes recommendations for interpretive signage in Conservation Areas.	New **Policy 1.4.12:** Provide interpretive signage where appropriate, beyond the NATL, to educate the community about the natural systems of the campus and, where applicable, about habitat restoration efforts.
		The Lakes, Vegetation and Landscape Committee recommends a policy to clarify appropriate manmade interventions in Conservation Area.	**New Policy 1.4.13:** Human intervention in Conservation Areas not addressed by other Campus Master Plan policies (e.g. lighting, utilities, trails, stormwater treatment and signage) shall be limited to activities that demonstrate the ability to enhance the ecological function of the Area or the ability of people to experience the natural environment through resource-based passive recreation, teaching and research.

Policies	Status	Benchmark Data	Recommendations
Policy 1.4.11: 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.	Ongoing	The university has maintained zero net loss of Conservation lands. No construction project has contemplated Conservation land mitigation per this policy. The 2015-2025 campus master plan update made some modifications to Conservation Future Land Use designations but upheld the no net loss policy.	No Change – Renumber **Policy 1.4.14**

(NEW) Objective 1.5: Protect and improve air quality through the proper control and reduction of airborne pollutants.

Clean Air Policies are required by FBOG and are recommended for inclusion in the Conservation Element. This Objective and its policies had been in the Facilities Maintenance Element under Objective 1.6. They are being moved to the Conservation Element.

Policies	Status	Benchmark Data	Recommendations
Policy 1.5.1: The University shall monitor indoor and outdoor air quality, and minimize emissions of air pollutants from and within buildings by adhering to the Fume Hood Policy and Indoor Environmental Quality Policy developed and implemented by the Environmental Health and Safety Office.	Ongoing	The Environmental Health and Safety Office continues to provide this service.	Move from Facilities Maintenance Element
Policy 1.5.2: The University shall continue to comply with the regulations set forth in the Clean Air Act, Title 40 Code of Federal Regulations (CFR) as applicable.	Ongoing	The University continues to comply with these regulations as applicable.	Move from Facilities Maintenance Element