

UF Sustainability in Land and Resource Management Implementation Plan

Vision

In framing the vision for sustainability in Land and Resource Management, participants envisioned the University of Florida adopting collaborative and responsive processes for land and water management. Both technological improvements and behavior change would play significant roles in sustainable resource management. In this vision, decision makers would adhere to the Campus Master Plan and take a proactive approach to sound management principles rather than coping with problems after implementation. Adaptive management would allow for continuous improvement and the ongoing development of best practices.

To inspire behavior change in the campus community, UF would endeavor to monitor and assess our land and resource use and to educate the campus community about the effects of our collective practices. Effective feedback and reporting would allow us to hold entities accountable through incentives and/or penalties.

Desired Outcomes

Adaptive Management - Develop an adaptive management loop between the Campus Master Plan implementation, the Physical Plant Department/Grounds, and researchers to develop and carry out best practices.

Comprehensive Landscape Design and Maintenance - Develop a proactive plan that emphasizes good landscape design and outlines maintenance practices.

Integrated Pest Management - Establish a transparent IPM plan with metrics to evaluate performance. Effectively reduce the possibility of pest-transmitted disease outbreak and property damage while minimizing negative impacts on the campus community and environment.

Lake Alice and Campus Creeks - Classify Lake Alice watershed as a living laboratory, functioning as a trial watershed for best practices. No impervious surface drainage would lead directly to Lake Alice. In conjunction, the flow of campus creeks would be naturalized to help restore the watershed.

Model Sustainable Campus - Make UF grounds a model of sustainable design and management. Healthy and aesthetically pleasing environs would inspire community members to spend time outdoors. All students would leave UF with an exposure to, if not understanding of, sustainable landscaping and its effects on the ecosystem.

Resource Conservation - Educate the campus community on how to decrease consumption and reduce our environmental impact through resource conservation.

Stormwater Management - Implement rainwater harvesting for water reuse throughout campus. Design campus sites to keep all stormwater onsite, minimizing negative effects on campus watersheds. Implement low impact development techniques across campus for effective stormwater management (both water quality and quantity). Reduce the impervious surfaces on campus.

View Campus as an Ecosystem - Use the landscape as a teaching tool to study the intersection of human and natural systems as part of a healthy ecosystem. Outdoor areas would be designed to be energizing and therapeutic to the university community, as well as restorative to the environment.

Water Conservation - The campus community would treat water as a valuable resource - even if it is not priced that way. Buildings would be individually metered and departments would be held accountable to conservation standards. Incentive and rewards programs would encourage water conservation toward a target indoor per capita indoor water use metric.

Water Standards for Specific Uses - Create standards for water use, along with criteria for water quality, that include prescribed actions for use and discharge, mitigation strategies, and concomitant policies. All departments, direct support organizations and off-campus facilities would adopt and comply with water standards and policies that are set by the university.

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Action Plan

The table on the following pages lists the initial actions that can be taken over the next three years to move toward the vision for sustainability in Land and Resource Management at UF. The intention of creating this list of actions is to provide a platform for working groups as they begin to implement the vision. This list can be modified over time, and is meant to be a “living document.” Progress toward these actions will be evaluated annually and an updated action plan will be developed in the spring of 2012.

Outcome	Action	People
Adaptive Management	1. Review campus service learning projects, evaluate successes and failures, and develop best practices for selecting appropriate projects for stakeholder groups.	<ul style="list-style-type: none"> • Facilities, Planning & Construction • Physical Plant Division • Office of Sustainability • Academic Departments
Adaptive Management	2. Evaluate how institutional knowledge is maintained and utilized: <ul style="list-style-type: none"> • Evaluate, formalize, and monitor performance targets/benchmarks • Evaluate Campus Master Plan implementation at intervals less than five years • Evaluate funding mechanisms for goals outlined in the Campus Master Plan 	<ul style="list-style-type: none"> • Facilities, Planning & Construction • Office of Sustainability • Housing • IFAS Facilities Operations • Lakes, Vegetation, and Landscaping Committee • Physical Plant Division • Shands
Adaptive Management Lake Alice and Campus Creeks Water Standards for Specific Uses	3. Evaluate water quality performance standards of all campus water bodies and re-evaluate thresholds as needed	<ul style="list-style-type: none"> • Physical Plant Division • Clean Water Campaign • Environmental Health and Safety • Facilities, Planning & Construction (Master Plan) • Lakes, Vegetation, and Landscaping Committee
Comprehensive Landscape Design and Maintenance Integrated Pest Management	4. Explore how USGBC LEED can be incorporated into UF Design & Construction Standards, campus design guidelines and other processes to achieve sustainable landscape design, operational, and educational goals	<ul style="list-style-type: none"> • Facilities, Planning & Construction • Environmental Health and Safety • Housing • IFAS Facilities Operations • Physical Plant Division - Grounds • Shands

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Outcome	Action	People
Comprehensive Landscape Design and Maintenance	5. Improve and nurture involvement of faculty and students with relevant specializations in Lakes, Vegetation, and Landscaping Committee and its subcommittees	<ul style="list-style-type: none"> • Lakes, Vegetation, and Landscaping Committee • Academic Departments • Faculty Senate • Student Government
Comprehensive Landscape Design and Maintenance View Campus as an Ecosystem	6. Continue programs to remove invasive exotic plants and replant with natives in Conservation Areas. <ul style="list-style-type: none"> • Evaluate areas on campus beyond the Conservation Areas for potential to replace existing non-native landscapes with a cohesive native ecosystem (e.g., longleaf pine) 	<ul style="list-style-type: none"> • Physical Plant Division - Grounds • Facilities, Planning & Construction • IFAS Facilities Operations • Lakes, Vegetation, and Landscaping Committee • Housing • Shands
Comprehensive Landscape Design and Maintenance View Campus as an Ecosystem	7. Incorporate plant selection and management into campus design guidelines that supplement the existing UF Design and Construction Standards and implement policies of the Campus Master Plan <ul style="list-style-type: none"> • Address appropriate use of functional edible landscapes (available for people to pick) using common Florida species/fruits • Define what constitutes “good landscape design” for campus 	<ul style="list-style-type: none"> • Facilities, Planning & Construction (Master Plan) • Academic Departments • Lakes, Vegetation, and Landscaping Committee • Physical Plant Division - Grounds
Integrated Pest Management	8. Develop a proactive integrated pest management plan to direct pest/disease efforts toward causes, rather than symptoms and to augment existing protocols to extend beyond common pests (e.g., ants and termites) to more complex emerging problems (e.g., loss of bay trees and Sabal palms to invasive insects)	<ul style="list-style-type: none"> • Physical Plant Division • Biological Sciences • Environmental Health and Safety • Housing • IFAS • Lakes, Vegetation, and Landscaping Committee • Shands • University Athletic Association

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Outcome	Action	People
Lake Alice and Campus Creeks Stormwater Management	9. Continue and expand implementation of low-impact development (LID) projects including increased use of permeable pavements in new and retrofitted construction.	<ul style="list-style-type: none"> • Physical Plant Division • Environmental Engineering Sciences • Facilities, Planning & Construction • Housing • IFAS Facilities Operations • Shands • Soil and Water Science Department
Lake Alice and Campus Creeks Stormwater Management	10. Consider the potential to utilize financing from new building construction projects to fund critical LID retrofits within the projects' respective stormwater basins	<ul style="list-style-type: none"> • Business Affairs • Facilities, Planning & Construction • Physical Plant Division • Shands • Housing • IFAS Facilities Operations
Lake Alice and Campus Creeks Model Sustainable Campus View Campus as an Ecosystem	11. Develop educational opportunities including curriculum, using campus as a living laboratory. <ul style="list-style-type: none"> • Create educational opportunities for landscapes installed through campus construction projects • Encourage interdisciplinary student charrettes and studio projects for campus design and construction projects • Target education and research programs in Conservation Areas on campus with the potential to serve as living laboratories. 	<ul style="list-style-type: none"> • Sustainability Committee • Academic Departments • Facilities, Planning & Construction • Housing • IFAS Facilities Operations • Lakes, Vegetation, and Landscaping Committee • Natural Area Teaching Laboratory Advisory Committee • Office of Sustainability • Physical Plant Division - Grounds • Shands • Office of Sustainability
Model Sustainable Campus	12. Explore opportunities and funding for increased or improved outdoor campus seating and classroom space	<ul style="list-style-type: none"> • Facilities, Planning & Construction • Housing • IFAS Facilities Operations • Lakes, Vegetation, and Landscaping Committee • Physical Plant Division - Grounds • Shands • Student Government

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Outcome	Action	People
Model Sustainable Campus	13. Survey students to determine how they relate to campus as a component of sustainability literacy, and incorporate into: <ul style="list-style-type: none"> • SERU (Student Experience at a Research University) • Sustainability Literacy Survey 	<ul style="list-style-type: none"> • Student Affairs • Department of Landscape Architecture • Office of Sustainability • Office of Institutional Research and Planning
Model Sustainable Campus	14. Install Community-Based Social Marketing (CBSM*) signage or prompts in appropriate campus locations to promote open spaces and natural areas <ul style="list-style-type: none"> • Continue to engage people with visual examples via the online campus map • Use highly conspicuous mediums to increase advertising scope, leading individuals to CBSM* outreach 	<ul style="list-style-type: none"> • Office of Sustainability • Facilities, Planning & Construction • Housing • IFAS Facilities Operations • College of Design, Construction, and Planning • Lakes, Vegetation, and Landscaping Committee • Physical Plant Division • Shands
Resource Conservation	15. Educate departments and units about their resource use and explore programs to encourage conservation and accountability	<ul style="list-style-type: none"> • Office of Sustainability • Facilities, Planning & Construction • Physical Plant Division • Deans, Directors, and Department Chairs
Resource Conservation Water Standards for Specific Uses	16. Improve financing, marketing, and diffusion of water fountain filtration system upgrades via the Green Team Network	<ul style="list-style-type: none"> • Office of Sustainability • Physical Plant Division
View Campus as an Ecosystem	17. Develop campus outdoor photography and mixed media contest to portray the beauty of native landscapes	<ul style="list-style-type: none"> • College of Fine Arts • IFAS Photography • Office of Sustainability
Water Conservation	18. Require water metering on all new buildings and use data to compile new standards for water conservation according to building classifications	<ul style="list-style-type: none"> • Facilities, Planning & Construction • Housing • IFAS Facilities Operations • Physical Plant Division • Shands
Water Conservation	19. Evaluate the cost to install water meters on existing buildings (may be performed on building classification basis)	<ul style="list-style-type: none"> • Physical Plant Division • Facilities, Planning & Construction • Housing

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Outcome	Action	People
		<ul style="list-style-type: none">• IFAS Facilities Operations• Shands

**CBSM = Community-Based Social Marketing. Pragmatic tools designed to foster change, emphasizing direct contact with individuals in impactful ways, rather than mass advertising or awareness campaigns.*