

CONSERVATION ELEMENT

Goal 1

To ensure the conservation, protection, and wise use of all natural ecosystems and natural resources on the University campus and in the context area.

Objective 1A

Protect air quality.

Policy 1A-1

FAU shall evaluate a strategic plan for reducing the use of single occupant internal combustion vehicles for commuting. The strategy shall include incentives for encouraging the use of alternative modes of transportation such as Tri Rail, SFEC Shuttle, car pools, electric vehicles, bicycles, and other human-powered modes of transportation (i.e., close-in HOV parking plan).

Policy 1A-2

In conjunction with Policy 1A-1 above and Transportation Element policies, FAU shall develop a concurrent strategic plan for replacing parking lots with parking garages. The combination of fewer commuter vehicles and parking garages will enable space presently used for parking to be used for more environmentally favorable applications.

Policy 1A-3

The University shall over the next decade increase the number of trees on campus to enhance the existing development. New trees will be added in conjunction with new development as it occurs.

Policy 1A-4

Encourage increased use of public transportation by faculty, staff, and students.

Policy 1A-5

Design and maintain utility plant, laboratory, and other facilities that use exhaust ducts for air discharge, to minimize the discharge of pollutants. FAU shall install appropriate filtering devices on fume hoods and minimize the storage and use of volatile and hazardous materials in campus buildings.

Policy 1A-6

FAU shall evaluate a program for the monitoring of both indoor and outdoor air quality. Indoor sampling shall occur at chemistry laboratories, kitchens, and other sites where fumes are produced. Outdoor sampling sites shall include parking lots and congested intersections. Failure to meet air quality standards adopted by the Florida Department of Environmental Protection (FDEP) shall result in an assessment of the probable cause and the preparation and implementation of a plan to improve and maintain air quality.

Objective 1B

Conserve, appropriately use, and protect the quantity and quality of current and projected water sources.

Policy 1B-1

Consider the feasibility of maintaining water levels in lakes and ponds through the use of reclaimed wastewater (gray water).

Policy 1B-2

Consider expanding the use of the existing reclaimed wastewater (gray water) for irrigation for campus landscape and lawn watering to reduce the use of well groundwater.

Policy 1B-3

Conserve water resources and reduce chemical use through the use of xeriscape design principles including:

- Use of drought tolerant non-invasive and native plant material;
- Use of low volume delivery fixtures;
- Zoned irrigation systems;
- Moisture sensors and rain switches;
- Use of drought tolerant ground cover;
- Use of canopy trees where appropriate; and
- Use of soil amendments and mulch to enable soils to retain moisture.

Policy 1B-4

FAU shall continue to mitigate the impacts of University-generated stormwater and minimize stormwater-borne pollutants through the continued implementation of a system of the University Best Management Practices.

Policy 1B-5

Establish procedures to guard against accidental dumping or spillage of oils, solvents, paints, or other by-products of Physical Plant.

Policy 1B-6

Properly dispose of contaminants; do not deposit them into septic fields or other groundwater recharge areas (i.e., retention basins).

Policy 1B-7

The University shall not undertake activities on campus that would contaminate groundwater sources or designated recharge areas unless provisions have been made to prevent such contamination or otherwise provide mitigation for such activities so as to maintain established water quality and quantity.

Policy 1B-8

Design catch basins for stormwater to include weirs to trap floating debris.

Policy 1B-9

Coordinate with BCC on the stormwater management of the East Campus.

Policy 1B-10

The University shall continue to implement a comprehensive water conservation program, to include:

- compliance with SFWMD conservation program requirements;
- limiting the hours of outdoor irrigation;
- the use of treated wastewater effluent for an expanded campus irrigation system;
- the use of automated timers and other irrigation flow monitoring equipment;
- xeriscape landscaping procedures for new building construction and common areas; and
- the use of ultra-low volume fixtures in new building construction.

Objective 1C

Conserve and appropriately use energy.

Policy 1C-1

Continue to improve energy conservation on the campus through improved facility maintenance.

Policy 1C-2

Implement and continue to monitor on a follow-up basis the Campus-Wide Energy Surveys funded by Florida Energy Office, which will identify and prioritize energy savings measures and projects and seek Florida Energy Office grants to assist in the upgrading of equipment and studying of procedures to save energy.

Policy 1C-3

Institute review procedures for mechanical and electrical equipment replacement that shall guarantee improved energy efficiency with the incorporation of new equipment.

Policy 1C-4

Encourage walking and biking on campus through Transportation Element policies designed to reduce dependence on the single-occupant automobile as the primary transportation mode.

Policy 1C-5

Expand, enhance, and promote existing administrative and operational procedures to conserve energy and minimize future demand, under the leadership of Physical Plant.

Policy 1C-6

Energy conservation fixtures, air conditioning and lighting systems, and other building specific energy use and management techniques shall continue to be a required element of all new buildings on campus.

Policy 1C-7

Determine and implement appropriate measures to assist compliance by all University community members with the Florida Solid Waste Management Act of 1988. This will include efforts to expand, enhance, and promote existing programs to recycle suitable materials collected on campus, as well as the recycling of materials other than those currently collected on campus.

Policy 1C-8

Strategically locate shade trees to mitigate passive solar radiation and to funnel breezes.

Objective 1D

Conserve, appropriately use, and protect native vegetative communities and wildlife habitat.

Policy 1D-1

Valuable Conservation and Open Spaces have been indicated on **Figure 13.2**. These areas shall be set aside as open space preserves for native plant communities, burrowing owls, and other plant and animal species that are listed as endangered, threatened, rare or species of special concern by Federal, State, regional or local agencies. Where possible, these areas shall remain protected from development and all other activities that may diminish their natural values and functions.

The Davie Campus does not contain any valuable conservation space. Valuable open space has been identified on **Figure 13.2**. Included in this category is the Palm Grove that should remain and be maintained for a minimum of eight years per the University's agreement with the University of Florida's IFAS Department. Portions of the Palm Grove may also be preserved for future FAU use.

Policy 1D-2

Plan for the protection of native plant communities and endangered, threatened, and rare plant species. The preparation of this plan shall be coordinated with the Florida Game and Fresh Water Fish Commission, FAU Conservation Committee, and other appropriate governmental entities to ensure the proper management of plants identified on the "Official Lists of Endangered and Potentially Endangered Fauna and Flora in Florida", which is updated periodically by the Florida Game and Fresh Water Fish Commission.

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The adopted campus master plan shall be amended, as necessary, to include the results of the Native Plant Community management plan.

Policy 1D-3

Areas shall be set aside to serve also as areas for aquifer recharge and shall be protected from development or other activities which would affect this function.

Policy 1D-4

It is the intent of FAU to remove all non-native invasive plants (whether trees, grasses or shrubs) which are identified on the Exotic Pest Plant Council's "Florida's Most Invasive Species List" from the campus grounds. The University is preparing a plan to remove invasive, destructive plant species from all areas of the campus. The results of this plan shall be incorporated in and/or coordinated with the Native Plant Community and Wildlife Management Plan(s). The preparation of this plan shall be coordinated with the FDEP and other appropriate governmental entities to ensure the proper removal and disposal of these non-native invasive plants. The adopted campus master plan will be amended, as necessary, to include the results of the Invasive and Destructive Plant Species Plan.

Policy 1D-5

The University shall perform a census of wildlife and plants in the area to be affected by any physical change to the Campus in order to protect wildlife and vegetative communities until a management plan is in place. Plants or animals identified on "Official Lists of Endangered and Potentially Endangered Fauna and Flora in Florida" will be noted and the appropriate agencies will be notified, as identified in the Florida Game and Fresh Water Fish Commission's "Wildlife Methodology Guidelines" (January 15, 1988).

Policy 1D-6

The University in any designation of its property as environmentally sensitive land will continue to base its decisions on Federal and State guidelines plus the expertise of the Biology Department and the University's Conservation Committee.

Policy 1D-7

Adopt a plan to remove destructive invasive animal species from campus. The campus master plan will be amended as necessary to include the results of the plan.

Objective 1E**Protect and conserve the natural functions of soils, rivers, floodplains, and wetlands.****Policy 1E-1**

Protect water quality in lakes. All new and existing lakes shall be provided with vegetated littoral zones composed of native vegetation. All lakes shall be managed to provide wildlife habitat and support viable populations of native plant and animal species.

Objective 1F**To maximize on-campus reclamation of hazardous materials and consumer products.****Policy 1F-1**

All University buildings shall be designed with facilities to accommodate collection, storage and disposal of recycled materials.

Policy 1F-2

The University shall coordinate on-campus recycling programs with those of local government in regard to materials collected, and disposal/collection procedures.

Policy 1F-3

The University shall provide on-campus facilities for the collection and storage of hazardous materials used in University operations as required by Federal, State and Local regulations.

Policy 1F-4

The University shall encourage academic programs that promote awareness of environmental impacts of resource recycling.

Policy 1F-5

The University shall utilize its hazardous materials handling and storage procedures to include as a minimum the proper containerization, classification and labeling of all hazardous waste.

Policy 1F-6

The University shall utilize only licensed hazardous waste transportation and disposal companies.