Estero Bay Agency on Bay Management

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The FGCU Master Plan has 18 Elements. The focus of our review has been on the highlighted sections:

1. Academic Mission
2. Academic Program
3. Urban Design
4. Landuse
5. Academic Facilities
6. Support Facilities
7. Housing
8. Recreation and Open Space
9. General Infrastructure
10. Utilities
11. Transportation
12. Intergovernmental Coordination
13. Conservation
14. Capital Improvement
15. Architectural Design
16. Landscape Design
17. Facilities Maintenance
18. Coastal Management

Throughout this text, strike through sections are proposed deletions from the last Master Plan, underline text are revisions; changes in red are our edits. These suggestions came from ABM members, and from students in the Conservation Strategies for a Sustainable Future course, Spring 2011

In addition, some sections have been identified as already adhering to The Principles of the ABM, including:

II. Uplands, Headwaters and Isolated Wetlands B. Vegetation (3) Limited application of herbicides that rapidly degrade may be used, according to the product label, on a case by case basis for the control of nuisance and invasive non-native vegetation and to maintain native plant communities.

II. Uplands, Headwaters and Isolated Wetlands A. Land Management and Acquisition (5) Conservation easements will be used as an option to protect critical habitats.

II. Uplands, Headwaters and Isolated Wetlands B. Vegetation (4) Promote, whenever possible, the active and aggressive removal of invasive non-native plants from all common areas, conservation easements, preserves and natural areas within the Estero Bay watershed.

II. Uplands, Headwaters and Isolated D. New Construction (1) Construction within flood plains shall be avoided wherever possible.

II. Uplands, Headwaters and Isolated D. New Construction (2) For construction that must occur within flood plains, utilize techniques that do not adversely impact the capacity of the floodplain (e.g. use of pilings to raise living floor elevations versus use of fill).

II. Uplands, Headwaters and Isolated Wetlands G. Urban (2) Permitting must address cumulative impacts to the water storage capacity of the watershed.
II. Uplands, Headwaters and Isolated Wetlands H. Roadways (1) All future roadways to be located in the floodplain within the Estero Bay watershed will be designed and constructed to not impede flows from a 25-year, 3 day, storm event.

II. Uplands, Headwaters and Isolated Wetlands H. Roadways (2) Transportation planning shall be undertaken with goals of increasing public transportation and enhancing new and existing roads with walkable, bikeable passageways that are connected and landscaped.

We see opportunities for further improvement of the Campus Master Plan based on the following Principles:

I. General J. Activities in the watershed by any regulatory agency shall provide the opportunity for public participation.

II. Uplands, Headwaters and Isolated Wetlands B. Vegetation (1) Natural, native vegetation within natural systems will be retained to the greatest extent possible.

II. Uplands, Headwaters and Isolated G. Urban (4) Proposals that reduce impacts to Estero Bay and its watershed, that might include: rural village concepts, urban infill, redevelopment sites, greenways; should be encouraged.
1.0 ACADEMIC MISSION OF THE UNIVERSITY ELEMENT

1.1 Introduction
The mission statement is the cornerstone of the University’s philosophy, guiding its approach to programs, operations, and development. Since its adoption in 1992, FGCU’s mission statement has undergone some significant changes to reflect the evolution of the institution with regard to its scope and direction.

GOAL 105
Demonstrate responsible leadership and innovation by infusing environmental sustainability throughout critical dimensions of University life and community interactions. The university should act as a model for sustainable practices

Objective 105.1 --- Energy conservation
Promote energy conservation and efficiency.

 Policy 105.1.1
Study recommendations of the Environmental Sustainability Committee (ESC) and identify those to be implemented.

 Policy 105.1.2
All new buildings will be built to at least LEED standards.

 Policy 105.1.3
Automate buildings and retrofit to reduce energy consumption by 5% per square foot.

Objective 105.2—Event Management
Encourage sustainable manage event practices on school campus through implemented environmental practices in site use and event planning.

 Policy 105.2.1
Recycling made readily available for public use

 Policy 105.2.2
Offering reusable alternatives at events

Objective 105.3—Textbook Use
Model ways to reduce paper use in textbook buying through the school

 Policy 105.3.1
Promote the use of E-books for textbooks from the bookstore

 Policy 105.3.2
Have the University Colloquium: A Sustainable Future (IDS 3920) reader put into PDF format

Objective 105.4—Food and Dining Sustainability
Promote the use of environmentally conscious and organic foods.

 Policy 105.4.1
Mandate that at least 10% of food and beverages available on campus are USDA certified organic.

 Policy 105.4.2
Ensure that at least 10% of dairy and meat products are certified humane treated and handled.

 Policy 105.4.3
Promote the use of local foods

Objective 105.5—Environmental Awareness
Promote environmental awareness for students, faculty and staff, including information on environmental initiatives at the university.

 Policy 105.5.1
Develop Sense of Place training for new faculty and staff, including the controversy surrounding the siting of the University
Policy 105.5.2
Design nature walks for incoming freshman and new faculty and staff.

Policy 105.5.3
Continue development of a trial system through conservation areas on the campus and host community hikes to introduce faculty, staff, students and community members to University ecosystems.

Objective 105.6 - Sustainability of outside contractors

Policy 105.6.1
Encourage campus vendors to use biodegradable, reusable, or sustainable packaging and utensils.

Policy 105.6.2
Give preferential selection to companies/services meeting green or sustainability certification in their area.

Objective 105.7 - Water Quality Conservation
Promote water conservation and efficiency.

Policy 105.7.1
All bathrooms are to be retrofitted with low flow toilets and urinals.

Policy 105.7.2
Landscaping will emphasize native plants

Policy 105.7.3
All landscape management activities are to adhere to Best Management Practices to reduce nutrient loading to campus water bodies and to minimize downstream impacts.

Objective 105.8 - Campus Development
Utilize new urbanism approaches to campus design and development that minimize needs for off-campus or out of community trips to meet resource needs
3.0 URBAN DESIGN ELEMENT

3.1 Introduction
The 1995 Campus Master Plan focused on the definition of a spatial organization for the new, undeveloped campus. Through implementation of the policies of that Master Plan, the foundation of this spatial definition, as well as a unique campus character, have been begun to be established. The 2005 master plan update established urban design principles to guide development of the southeast and northwest districts of the campus. The following goals, objectives, and policies are intended to further refine the spatial organization reflected in the current concept developed in the 1995 Campus Master Plan through the application of principles for building placement, open space definition, and the establishment of strong pedestrian and visual linkages among the various buildings and functional areas of the campus. It is the intent of the urban design policies to create a clear and strong development framework, while allowing the campus to expand in concert with existing buildings and open spaces. This 2005 master plan update also establishes urban design principles to guide development of the as-yet-unbuilt southeast and northwest districts of the campus.

GOAL 301
Develop the campus of Florida Gulf Coast University in a manner that creates a memorable composition of buildings and open spaces, and incorporates the preserved natural areas, (See Figures 3-1 and 3-2 1- Urban Design Framework Element Campus Character).

Objective 301.7 – Energy Efficiency
Develop, where feasible and cost-effective, buildings on campus that incorporate passive energy efficiency design practices.

Policy 301.7.1
Encourage architects to utilize the following specific passive energy efficiency design principle for campus buildings:
(a) Overhangs and recesses to shade southern-facing glass areas.
(b) Maximize shaded/protected outdoor corridors for circulation.
(c) Maximize shading of buildings through plant placement and selection, emphasizing the use of native vegetation.
(d) Design outdoor courtyards, arcades, etc., to maximize natural ventilation and air movement.
(e) Generally select roof materials and building colors to minimize heat gain.
(f) Exceed, where practicable, minimum insulation requirements for ceilings and walls.
4.0 FUTURE LAND USE ELEMENT

GOAL 401
Designate Sufficient Suitable Lands To Accommodate The Future Growth And Development Of The Campus. Develop future land uses on the University campus in a manner that: is space- and function-efficient and considers the University’s future academic needs; conserves natural, historic and archaeological resources; and is coordinated with future land uses in the host community.

Objective 401.1 – Protection of Natural Resources
Ensure that future campus development is consistent with local, state and federal environmental regulations and permits that establish limitations on development of the University campus.

Policy 401.1.1
As appropriate to match the pace of future construction, develop, adopt, and implement a "Land Management and Development Review Process" to ensure the compliance of future site development plans and proposals with:
(a) Current environmental permits for site development;
(b) Current Campus Master Plan Goals, Objectives, and Policies, as applicable; and
(c) Current Facilities Master Plan or Specialized Academic Facilities Master Plan(s), as applicable.

The Land Management and Development Review Process shall encourage careful use of the University’s land resources and minimize deviations from the Campus Master Plan and shall be implemented through an advisory committee or other process deemed appropriate by the University, which shall include, at a minimum, participation from FGCU’s Facilities Planning staff and faculty representatives from each of the academic units, student representatives, and members of the surrounding community. The functions of the review committee may include, but shall not be limited to:
(a) Reviewing on- and off-campus facility usage assessments;
(b) Providing input into the planning of specific facilities;
(c) Providing input into the review of the Facilities Master Plan; and
(d) Providing input into the development of the University’s Capital Improvement Plan.
8.0 RECREATION AND OPEN SPACE ELEMENT

8.1 Introduction
The Master Plan for Florida Gulf Coast University has been prepared with the intent of preserving as much of the existing high quality natural environment of the site as possible. The areas to be retained and restored as natural open space are identified specifically in the Conservation Element of this Master Plan. The Plan also accommodates lands for development of on-campus recreation and athletic facilities that are required by the State University System. The development of the on-campus recreation and athletic facilities should be coordinated with the growth of the University’s enrollment.

GOAL 801
Provide recreation and athletic facilities adequate to meet the projected needs of students, faculty and staff of the University, while maintaining the ecological functions of the campus ecosystem.

Objective 801.2 – Provision of Facilities
Ensure that athletic and recreational facilities and open space amenities are adequately and efficiently provided to serve projected student enrollment (See Figure 8-1 Future Recreation and Open Space).

Policy 801.2.12
The University shall continue to survey campus parks, passive recreational facilities, and open spaces to identify deficiencies, including impacts on the preservation of campus wildlife. The adopted Campus Master Plan shall be amended as needed to incorporate the results and recommendations contained in this survey.

Policy 801.2.13
After accomplishing the survey above, if any deficiencies are found, the University will set a timetable to remedy the deficiencies. The adopted Campus Master Plan will be amended as needed to incorporate the timetable and results of the survey.
10.0 UTILITIES ELEMENT

10.1 Introduction
Florida Gulf Coast University will upgrade existing on-campus systems for chilled water, electrical power and telecommunications to reflect the updated Campus Master Plan. The plan for the University does not include provision of steam. Consequently the steam utility is not included in the following goals, policies, and objectives. In addition, the plan provides that the campus needs for chilled water will be met on-campus. Therefore, the plan does not require coordination with off-campus service providers for this utility.

ELECTRICAL POWER AND OTHER FUELS SUB-ELEMENT

GOAL 1002
Provide electrical power source to meet the demand for lighting, heating, and air conditioning, and equipment power to adequately service the buildings and structures (See Figure 10-2 Future Electrical Power Distribution), utilizing solar power or other sustainable sources were feasible.
11.0 TRANSPORTATION ELEMENT

11.1 Introduction
The traffic circulation and parking plan for the University is designed to provide maximum flexibility for future development of all portions of the campus, while minimizing the impacts of construction of these facilities on the natural environment. The proposed traffic circulation plan includes three access points to the University campus off Ben Hill Griffin Parkway, which connect to the main interior circulation road which circles the academic core. The circular configuration provides maximum flexibility for distribution of traffic between the northern and main entrances.

Coordination between the University, Lee County, and adjacent developments will be important to ensure that safe, convenient access to the University is provided. The policies defined in the Intergovernmental Element of this Master Plan define how this coordination will be achieved.

GOAL 1103

Reduce the need for future roadway capacity and parking at the University through the provisions designed to reduce dependence on the single-occupant vehicle and promote of public transit service to serve the needs of the University and surrounding areas.

**Objective 1103.1 – Provision of Transit Service**
Provide public transit service to the campus from major activity centers and system transfer points.

**Objective 1103.2 – Future Right-of-Way**
Incorporate right-of-ways into long-term planning to accommodate future mass transit options

**Objective 1103.3 - Mass Transit Coordination**
Work with other landowners with the University Community to coordinate efforts toward increasing access to mass transit
13.0 CONSERVATION ELEMENT

13.1 Introduction
Prior to submittal of the initial conceptual permit, the site of Florida Gulf Coast University underwent a detailed analysis of the existing environmental conditions. This analysis included vegetation mapping using newly flown aerial photography, on-site flagging of jurisdictional wetland boundaries (ACOE, DEP, SFWMD), securing of binding jurisdictional determinations, surveying of jurisdictional lines, and wildlife surveys. All of this information was utilized in the preparation of the 1995 Campus Master Plan, and incorporated in the USACOE dredge and fill permit application and the SFWMD conceptual permit application. These permit applications were filed in February 1994, and permits have since been granted. As a result of this process, the University’s program for environmental conservation is well underway. The USACOE and SFWMD permits define the way in which the campus must be developed and the natural environment maintained. No additional development outside of the initial conceptual permit is proposed or contemplated at this time. Consequently most of the policies in the following section reference the provisions defined in the environmental permits.

Objective 1301.3 – Conservation and Protection of Native Vegetative Communities and Wildlife
Develop the University campus in harmony with the land's natural characteristics by conserving, protecting, restoring and enhancing native vegetative communities and wildlife habitat to the extent practicable and appropriate.

Policy 1301.3.3
Conserv[e and protect the native upland vegetation adjacent to wetland restoration areas on the campus, and in accordance with environmental permits for site development. This will include the use of mechanical reduction of fuel loads and controlled burns to sustain upland vegetation.

Policy 1301.3.5
Design roads and other horizontal site improvements crossing wetlands and upland buffer areas in a manner which will facilitate wildlife movement in among those areas and to minimize mortality associated with road crossings.
16.0 LANDSCAPE DESIGN GUIDELINES ELEMENT

16.1 Introduction
The 2000 update of the campus master plan served to extend the landscape development strategies established in the original 1995 master plan and focus on the creation of signature open spaces. In 2005, those strategies remain highly relevant to the development of the academic core of campus. The following goals, objectives and policies seek continuity with the previous guidelines, while also advancing concepts for the development of the southeastern housing/student life district of campus, reflecting the goals that have been accomplished in the previous five years, and incorporating lessons learned from recent seasons of extreme weather events.

GOAL 1601
Create a distinctive landscape environment that juxtaposes “institutional” landscapes with environmentally sensitive, native plant landscapes. The resulting visually rich environment is meant to exemplify the diversity of Southwest Florida's native and designed landscape environments.

Objective 1601.1 – Landscape Concepts
Implement landscape concepts for the Florida Gulf Coast University campus in accordance with the principles outlined in Figure 16-1.

Policy 1601.1.7
Maintain the central campus "great space" as a predominantly open, turf lawn with formal plantings of signature palm trees to reinforce and emphasize the ceremonial character of this symbolic space. Palm trees chosen for this area shall be native, single-trunk, pinnately-compound leaf species that is majestic in character and scale, such as medjool date or royal palm. Periphery areas beyond the formal lawn but part of the “great space” shall be developed with native canopy and flowering trees to provide visual diversity and shaded outdoor retreat areas. Where practicable and appropriate, pedestrian walkways should be developed which both reinforce the formal lawn and accurately reflect intuitive pedestrian routes. Develop the “great space” with a landscape to hardscape ratio of 85% to 15%.

Policy 1601.1.14
As parking structures are planned and developed on the FGCU campus, create landscape strategies that assist in mitigating the visual impact of these structures on the campus. This might include planting on the sides or top of the structures.