# 2020 - 2030
# USF Master Plan Updates

## Data Collection & Analysis

## Element 8: Conservation

UNIVERSITY OF SOUTH FLORIDA

SARASOTA - MANATEE CAMPUS

# TABLE OF CONTENTS:

## Appendix B Data Collection and Analysis (DCA)

### Element 8 Conservation

# Element 8:

# Sarasota Conservation

# Element 8 Conservation

The conservation element is intended to ensure the conservation, protection and wise use of all natural ecosystems and natural resources on the university campus and in the planning study area. Conserving natural resources is integral to ensuring the University develops in a sustainable manner.

**A. Inventory and assess existing natural and environmental resources where present both on the University campus and within the planning study area.**

**1. Wetlands, lakes, rivers, and other surface waters and bottom lands**

The USF Sarasota-Manatee campus does not contain any wetlands, lakes, rivers, other surface waters or bottom lands. The site is, however, adjacent to the Crosley Estate, which contains wetland areas and shoreline to Sarasota Bay.

**2. Floodplains**

There are no floodplains within the USF Sarasota-Manatee campus. The adjacent Crosley Estate is, however, in a designated flood zone.

**3. Known unique geological and archaeological features (Springs, Sink Holes, etc.)**

The entire campus and the Crosley Estate is a prehistoric midden, or communal waste pile, and shell midden associated with early Paleo-Indian occupations, and later cultures such as the Manasota culture. The area of and adjacent to the campus grounds do not require historic preservation.

**4. Existing mitigation sites**

There are no existing mitigation sites on the USF Sarasota-Manatee campus.

**5. Existing naturalized vegetative communities, including nesting or feeding habitat**

There is a 6.0 acre gopher tortoise conservation area in place along the eastern side of campus, between the main building (SMC) and US 41. There is also a 0.6 acre gopher tortoise conservation area established north of the main building. All conservation areas are protected by a conservation easement, and interconnected via three eco-tunnels. The conservation area is shown in Figure 8-1, Existing Natural and Environmental Resources.

**6. Native Plants**

The University has a policy to protect the native Slash Pine, unless the tree becomes a safety concern to students or USF SARASOTA-MANATEE property (buildings, awnings, walkways, outdoor coverings).

**7. Aquifers, Aquifer Recharge Areas, and Well-field Cones of Influence**

There are no aquifers, aquifer recharge areas, or well-field cones of influence within the campus.

**8. Air**

Greenhouse gas emissions (GHG) have not been calculated for USF SARASOTA-MANATEE. Establishing a baseline GHG is an important step in preparing a Climate Action Plan for the campus and determining GHG reduction targets.

**9. Energy**

Due to the costs and associated greenhouse gas emissions, reducing the University's dependence on fossil fuels is critical to this conservation element. Energy consumption-related information is included in Element 7.7, General Infrastructure, Electrical Power and Other Fuels Sub-Element.

**10. Materials**

University use of materials such as paper and other office supplies, construction materials, for operations and construction often constitutes an indirect use of natural resources. Minimization of material consumption and related waste generation should therefore be considered as an aspect of this Conservation element.

Information regarding the University management of solid waste, including recycling, is addressed in Element 7.4, *General Infrastructure, Solid Waste* Sub-Element.

## B. Assessment of Existing Natural and Environmental Resources.

Table 8-1 begins to identify environmental resources, impacts and potential actions and is intended as a framework for future campus analysis and planning as additional data is gathered and planning actions are implemented.

**Table 8-1 Assessment of Natural and Environmental Resources On-Campus and within the Study Area**

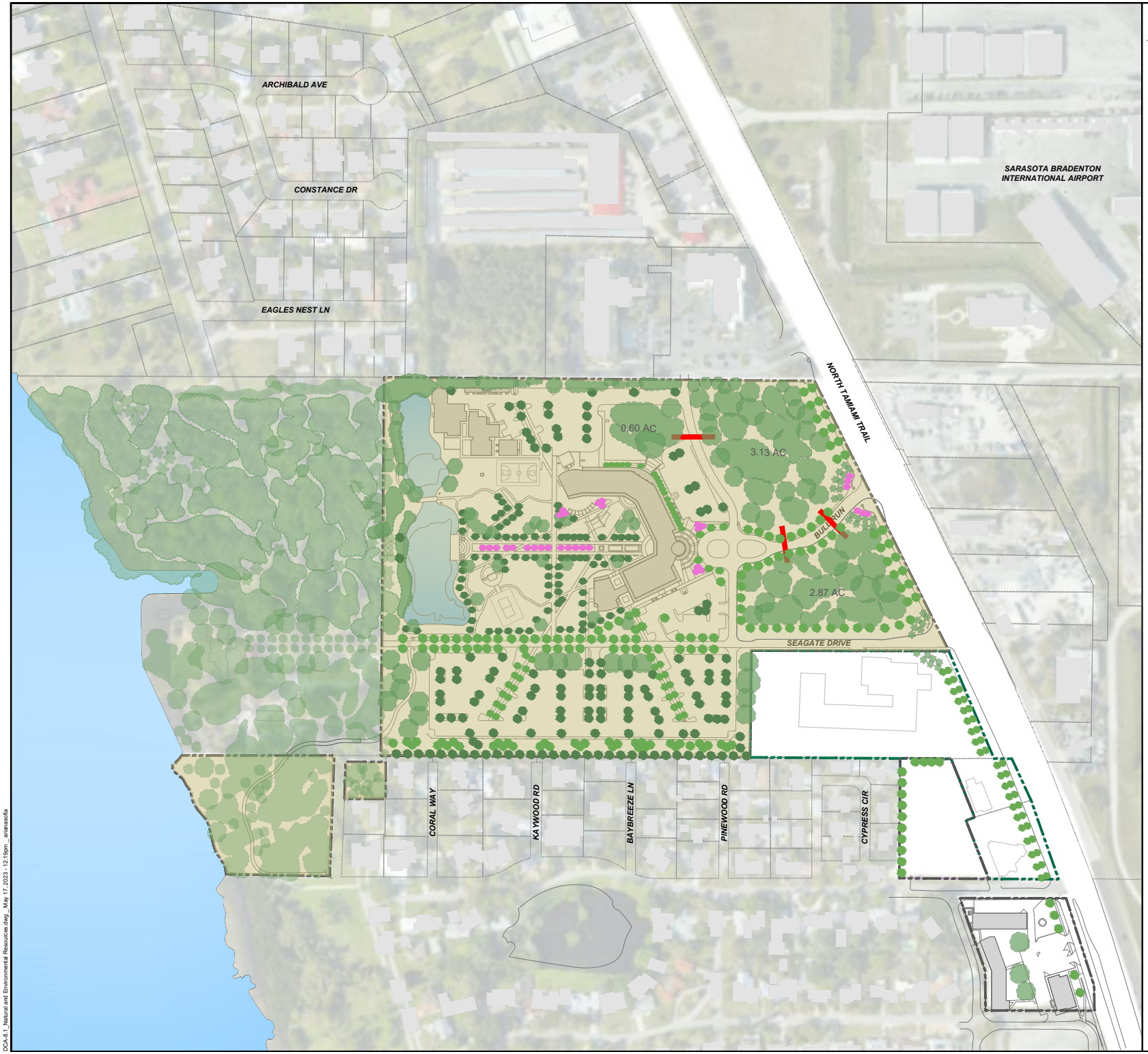
| | Assessment Information | | | | |
|---|---|---|---|---|---|
| **Environmental Resources** | **Existing or potential commercial/ recreational/ conservation uses** | **Protection/ restoration opportunities & methods** | **Known University-generated pollution sources (rates, where available) or impacts** | **Pollution minimization strategies/ techniques** | **Ecological functions & values** |
| Surface Water (wetlands, lakes, ponds) | Refer to: Element 4, Element 8A, Element 9 | LID | Fertilizer<br>Parking lot runoff contaminants | LID<br>Reduce the # of cars on campus | Local biodiversity<br>Water filtration |
| Floodplains | Refer to: Element 9 | Protect Sarasota Bay water quality | NA | Stormwater runoff nutrient removal prior to entering Bay | Local biodiversity |
| Existing Mitigation Sites | NA | NA | NA | NA | NA |
| Naturalized Vegetative Communities | Refer to: Element 4, Element 8A | Establish through campus planting plan and implementation, protect existing habitat | | | Carbon sequestration<br>Water filtration<br>Local biodiversity |
| Native Plants | Refer to: Element 8A | Remove invasive and exotic species | NA | NA | Water conservation<br>Reduced fertilizer use<br>Local biodiversity |
| Geological Features | Refer to: Element 8A | NA | NA | NA | NA |
| Aquifers, Aquifer Recharge Areas, and Well-field Cones of Influence | NA | NA | NA | NA | NA |
| Air | NA | | Vehicle exhaust | Reduce the # of cars on campus | Ecosystem health |
| Energy | Refer to: Element 7.7 | | | | |
| Materials | Refer to: Element 7.5 | | | | |

NA Not Applicable

**Sources:**

The following is a list of sources reviewed for information to support the Conservation Element data collection and analysis.

- USF SARASOTA-MANATEE Facilities Planning and Management, Response to Data Needs Request, Feb. 2011
- USF SARASOTA-MANATEE Development Settlement Agreement, August 2004
- FFWCC Applications and Exhibits, September 2004
- USF SARASOTA-MANATEE Division of Historical Resources letter, October 2004.




UNIVERSITY of SOUTH FLORIDA

**2020 - 2030**
**Sarasota-Manatee Campus**
**Master Plan Update**

- Campus Limits
- Study Areas
- #AC Gopher Tortoise Conservation Area
- Naturalized Area
- Existing Tree Canopy
- Eco Tunnel
- Existing USFM Facilities

**Element 8**
Conservation

**DCA Figure 8.1**
Natural and Environmental Resources

**Date**
ADOPTED 06/13/2023

0 500 1000 ft.

DCA-8.1_Natural and Environmental Resources.dwg _ May 17, 2023 - 12:19pm _ arianaofa