To follow please find my report regarding issues and recommendations specific to Bermuda Bay Beach Condominium Associations’ current landscaping practices and water conservation initiatives.

1.) Planting
Many of the shrubs are planted very close to structures and too close together. Lack of aeration around plants might be a stress factor and may lead to a pest infestation. Also planting large shrubs too close to buildings or walkways requires more frequent pruning to keep them 3’- 4’ high. Therefore when designing a new landscape it is recommended choosing plants that don’t grow taller and wider than desired to minimize pruning and maintenance. Pruning is discussed further below.

2.) Turf
The association has St. Augustinegrass in the landscape. Using proper landscaping maintenance practices, such as moderating nitrogen fertility, proper mowing height and only irrigating when the grass needs water, are ways to reduce environmental stress and thatch build-up. Please refer to the booklet “Best Management Practices” http://turf.ufl.edu/pdf/BMPmanual.pdf and the fact sheets on Fertilization: http://edis.ifas.ufl.edu/pdffiles/LH/LH01000.pdf Weed Management in Home Lawns: http://edis.ifas.ufl.edu/EP141 and the Florida Lawn Handbookhttp://edis.ifas.ufl.edu/features/handbooks/floridalawn.html

Small and narrow strips of grass are difficult to maintain in regards of mowing, fertilizing and watering and could be replaced by a drought tolerant groundcover, low growing shrubs or mulch. If the turf/weeds have the purpose of edging a bed, it might be necessary to either use an edging material to hold the soil and mulch in place or use edging plants such as Society Garlic, Liriope or Mondo grass (for shade and partial shade) just to name a few. Please refer to the Fact Sheets on Groundcovers for full sun: Sunshine Mimosa http://edis.ifas.ufl.edu/pdffiles/EP/EP34300.pdf and Perennial Peanut http://edis.ifas.ufl.edu/pdffiles/AG/AG32900.pdf

The roots of oak trees in the parking lot medians are filling most of the planting area. Space allowing, groundcover plugs (4”) could be carefully planted between the roots. If the roots are too dense for planting it is recommended to only spread a thin layer of mulch on top of the roots.

3.) Irrigation
The association is irrigating with reclaimed water in most areas. As a general guideline for irrigation: Each zone should have an output of approximately ¼” per watering cycle. The calibration of the sprinkler zones might be essential for correct watering and to
determine the duration of watering per zone. Please refer to the fact sheet on Calibration. http://edis.ifas.ufl.edu/lh026

The irrigation schedule should also be adjusted accordingly, like being reduced in the cooler winter months (skip a week of watering) while plants are dormant (late October through early/mid March) and being shut off during the summer rainy season and only turned on when needed. Please see information on “skip a week”. http://www.swfwmd.state.fl.us/conservation/skipaweek/

A regular inspection of the sprinkler heads and nozzles is recommended. Ideally the system should be inspected weekly for broken or misdirected sprinkler heads, system malfunctions and leaks. Necessary repairs should be performed immediately for water conservation reasons and landscape health. If possible the turf areas and the beds should be watered with different zones because of the difference in water requirement for turf and shrubs.

It is required to have an automatic rain-shut-off device or soil moisture sensors installed on every automatic irrigation system. Regular maintenance to assure proper functioning of the rain-shut-off device should be included in the irrigation maintenance program. Soil moisture sensors are a more reliable and accurate irrigation control technology with less maintenance involved. Please refer to the fact sheet Residential Irrigation System Rainfall Shutoff Devices http://edis.ifas.ufl.edu/AE221 and Smart Irrigation Controllers: How do Soil Moisture Sensor Irrigation Controllers Work http://edis.ifas.ufl.edu/ae437

4.) Pruning
Most shrubs have been pruned frequently and on a “regular” basis or pruned severely. Pruning shrubs too frequently will result in plants having a woody/leggy appearance at the bottom and forming a green “canopy” on the top and will decline eventually. Bloom production is greatly reduced on flowering plants that are frequently pruned. Therefore when designing a new landscape it is recommended using plants that don’t grow taller and wider than desired to minimize pruning and maintenance.

The so called “Hurricane” pruning on palms is not recommended. Only brown palm fronds should be pruned. Green, yellow and partially brown fronds should NOT be taken off. Hurricane cuts will restrict the palms ability of photosynthesis (food production of the plant). Over time this will stress and weaken the palms which can lead to deformation of the trunk (pencil-pointing), make them more prone for breaking in heavy winds and can eventually kill the tree. Seed pods can be removed anytime without harming palms. Please refer to attached documents on palm care.

The inspection and pruning of trees should be performed by a Certified Arborist. The website of the International Society of Arboriculture www.isa-arbor.com lists local certified arborists http://www.isa-arbor.com/faca/findArborist.aspx and offers valuable information about why to hire a certified arborist as well as information about any tree related topic.
Removal of the dead wood within a plant and tree can and should be done any time using pruning shears, loppers, or a handsaw for trees. This landscaping practice not only gives the plant a neat appearance it also will make room for new growth and removes entryways for diseases. Please refer to the UF/IFAS fact sheet Pruning Landscape Trees and Shrubs http://edis.ifas.ufl.edu/MG087

5.) Mulching
Mulch should be maintained 2”-3” deep. Mulch helps retain moisture in the soil and moderates soil temperature, it also helps to reduce erosion and weeds. There are many Florida-Friendly mulches available, like Eucalyptus, Melaleuca and Pine Bark mulch. Cypress mulch is not recommended because harvesting cypress trees from the wild negatively impacts wetlands.

Refrain from so called volcano mulching: Always keep the mulch a couple of inches away from the base of shrubs and at least 1’ from tree trunks and about 1’ away from the foundation of buildings. Please see fact sheet on Mulch http://edis.ifas.ufl.edu/FR079

6.) Fertilization/Pest Control
Fertilization:
Each variety of plant and tree has unique nutrient needs. One fertilizer will not necessarily meet the needs of all. Established shrubs and trees should only be fertilized as needed and only during the growing season. Using a slow release fertilizer once or twice a year, as needed, is recommended. Ideally plants should be monitored for nutritional needs and only fertilized when there are indications of malnutrition.

PLEASE NOTE: To reduce polluted stormwater runoff during the rainy season Pinellas County has adopted a fertilizer ordinance that prohibits the use of fertilizers containing nitrogen and/or phosphorus between June 1 and September 30.

Turf can be fertilized two times a year. A turf fertilizer with at least 50% of slow release nitrogen is required. Reducing the amount of fertilizer and pesticides used on your lawn will minimize the amount of chemicals running off into stormwater systems. Please refer to attached document for reclaimed water users and recommended reduction of fertilizers. The grass goes dormant in the winter months therefore the latest fertilizer application should occur before mid October.

Pest Control:
Applications of pesticides should not be done preventively, but only when needed. Recommended is spot treatment (not a broadcast application) using the least toxic remedy first.

7.) Invasive Plants
Schefflera, carrotwood trees and seedlings, Brazilian pepper, Oyster plants, syngonium, asparagus and Mexican petunia were found in the landscape. These are non native invasive plants and their removal is encouraged. The landscape should be monitored on a
regular basis for the appearance of invasive species as they may quickly outgrow and
displace your landscape plants. Refer to the Fact Sheet for the Exotic Pest Plants for
more information. http://plants.ifas.ufl.edu/

SUGGESTIONS

1.) Recommendations for the existing landscape/improvement of landscaping
The suggestions you find in this report are based on the principles of Florida-Friendly
Landscaping™ developed by the University of Florida, Institute of Food and Agricultural
Sciences (UF/IFAS), and the Florida-Friendly Landscaping™ Program.

To improve the landscape, a change of landscaping practices is of the essence. If the
Association agrees upon a different and in the long run healthier landscape, we can
provide you with information how to achieve this goal.

Services such as leaf raking, hand weeding, hand pruning and removal of non native
invasive plants and seedlings that the association would like to have included in the
regular landscaping maintenance could be specified in the landscaping maintenance
contract. Also refer to the booklet “Environmental Landscape Management

2.) Recommendations for a new landscape
- For redesigning the landscape or part of it, it is recommended to have a design in place.
- Test soil for pH.
- Choose the right plant for the right location (i.e. sun, shade, pH, space available, salt
tolerance) and group plants according to their needs. Please refer to the website
  www.floridayards.org – Plant Database.
- Consider mature size of plants that don’t grow taller than desired, to reduce pruning.
- Use plants that are adapted to our local soils and climate to reduce maintenance.
- Don’t over-plant and give the plants room to grow into.
- Don’t plant too deep.
- Provide adequate water for plant establishment and consider micro-irrigation for non-
turf planting areas.
- and Mulch, Mulch, Mulch with organic materials.

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