

## **INDIAN RIVER COUNTY LANDSCAPE BEST MANAGEMENT PRACTICES (BMPs)**

A great way to help our local environment is to follow these simple best management practices (BMPs) for residential landscape management. BMPs are tested procedures that will help the environment by minimizing stormwater runoff from your yard. Following these suggestions are a great way to start creating a Florida Friendly Yard whose goal is to reduce nutrient, chemical, and biological pollutants to our local waterways. Only when the majority of IRC citizens utilize these BMPs will the Indian River Lagoon return to a healthier state.



### **BMP #1) Right Plant, Right Place**

A plant that is planted in the correct location will thrive with minimal amounts of water, fertilizer, and pesticides. Though Florida natives are always a good choice for Florida yards, even these plants need to be in their proper place to be low-maintenance. Many other non-natives can also thrive in a Florida yard if planted appropriately. The key to this BMP is research; the secret to successful landscape design is thorough planning. Ask your landscaper or local garden center about which plants will thrive in full sunlight, full shade, or partial sunlight. Do you have a low lying area that collects rain water? There are many great plants that would prefer to sit in those extra hydrated areas and then require less irrigation.

Things to consider: what type of light does the plant prefer, how much water does it require, how large will it grow, and will it require more pesticide? Once you can answer these questions and select the best part of your yard for each plant you are on your way to a healthier well-balanced landscape.

Another part of Right Plant, Right Place is that it can aide in reducing turf grass from your yard. Most grasses we see in Florida are high maintenance; the less turf grass, the lower maintenance your yard can be. There are several other options for ground cover that require less irrigation, less mowing, less fertilizing, and fewer chemicals that harm the environment. By planting more plants, shrubs, and bushes, you are eliminating the need for turf grass. See BMP #4 below for additional suggestions.

For more information on choosing the right plants or turf cover, use the plant list available through the Florida Yards and Neighborhoods program by UF/IFAS at <http://ffl.ifas.ufl.edu> or contact our local Extension office at 772-226-4317.



Florida Friendly lawns utilizing plants to reduce turf.



Sunshine Mimosa replacing turf.

### BMP #2) Fertilize Appropriately

Most fertilizers are made up of three main ingredients: Nitrogen, Phosphorous, and Potassium. These numbers can be seen on any bag of fertilizer represented in an N-P-K format. For example, if a bag of fertilizer says 10-0-16, it means this bag contains 10% Nitrogen, 0% Phosphorous, and 16% Potassium. These nutrients are all needed by plants to survive, but just like how a body only absorbs the amount of nutrients it needs, your landscape will not retain excess nutrients and they will be washed away. It can be hard to think of “nutrients” as pollutants, but in our waterways, too many nutrients cause rapid algal growth, which in turn removes oxygen from the water killing fish and can block aquatic plants, like seagrasses, from photosynthesizing.

To reduce nutrients, fertilize just twice a year; once in the fall and once in the spring. Prevent algal growth by using a fertilizer with 0% Phosphorous (our Florida soil is naturally rich in Phosphorous so anything we add is already excess). Avoid fertilizing within 10 feet of any water body. Mulching grass clippings back into your yard should provide the needed nutrients to eliminate one fertilizer application. Never leave grass clippings in the street where they can wash to nearby water bodies and promote algal growth.



Fertilize once in the fall and once in the spring.



Don't leave clippings in the street.



Reduce nutrients and prevent algal growth.

### Questions for your landscaper:

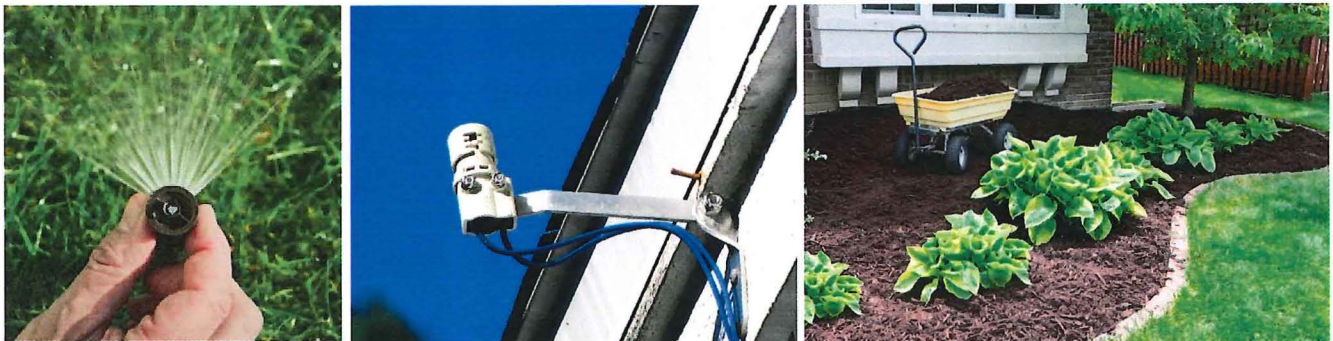
- ❑ What is the percentage of N-P-K nutrients in the fertilizer they use?
- ❑ How often are they applying fertilizer to your yard? If more than twice, talk about cutting back to fall and spring.
- ❑ What do they do with grass clippings?
- ❑ Are they certified by Green Industries in the Landscaper Best Management Practices course?

### BMP #3) Irrigation Management

Many people with irrigation systems over water their yard, wasting a precious resource. The best time to water is in the morning between 6 AM and 10 AM; this reduces loss of water due to evaporation when the sun is scorching down on the yard. Your plants and grass also only need to be watered when they are starting to wilt. Overwatering makes them drought intolerant. Set your irrigation system to water just twice a week, and you can install a rain shut-off device or soil moisture sensor to override your irrigation system and prevent overwatering when it has been raining. Keeping moisture in the soil is important in areas especially around trees and landscape plants. Use mulch to retain moisture in garden beds and around trees, around two to three inches will do the trick!

If you have an irrigation system, the most important step is to perform regular system maintenance. This includes checking for leaks, unclogging and replacing broken heads, pointing heads at the plants (not driveways and sidewalks), and pruning plants that interfere with irrigation systems. And finally don't forget to calibrate the system. Even an efficient irrigation system can waste water if it's left on too long. The ideal amount of water to apply to a lawn is  $\frac{1}{2}$  to  $\frac{3}{4}$  inch.

When we over irrigate, we not only waste water and possibly damage the vegetation, but we are also creating more stormwater runoff which carries any pollution from your yard to the Indian River Lagoon or stormwater retention pond nearby.



Calibration is key to conserve.

A rain gauge to turn off system appropriately. Use mulch to retain moisture for your plants and trees.

#### BMP #4) Taking Your Yard to the Next (FL Friendly) Level

An alluring way to reduce our personal storm runoff from leaving our yard is by installing a rain garden. Rain gardens are an attractive addition to slow water from leaving your yard and allow the rain to replenish the ground water. Created in the lowest point of your property, utilizing rocks, mulch, and water-tolerant plants, this little oasis will help prevent pollution.

Another beautiful addition to your Florida-Friendly yard, is a butterfly garden. These gardens attract delicate wildlife, encourage native plant diversity, and provide food for birds, lizards, and mammals.

Both of these eco-friendly gardens have multiple benefits in your landscape. They both reduce the amount of turf grass, which in turn reduces the amount of pollutant carrying runoff, and they both can include Florida native plant life stabilizing our fragile ecosystem. Both of these gardens will attract different types of wildlife and enhance your landscape to new levels of beauty!

For more issues on caring for your lawn and installing rain or butterfly gardens, see:

<http://gardeningsolutions.ifas.ufl.edu>.



A lively butterfly garden full of FL natives.



Butterflies enjoying a native fire bush.



A Florida native rain garden.

#### BMP #5) Pesticide and Herbicide Usage

Pesticides are any chemicals that harm or kill insects. Herbicides are any chemicals that harm or kill plants. When you notice pests and weeds in your yard, decide on the best course of action before automatically choosing chemical applications.

Many pests and weeds can be removed by hand which will reduce chemical pollution from infiltrating the runoff. If removal by hand is not an option, spot treat only the affected area, limiting the amount of chemicals used. Avoid using broad-spectrum insecticides or herbicides. These chemicals will harm not only the pests and weeds but beneficial plants and bugs. Only use products that are designed to only target your identified pest or weed.

Herbicides are safe and effective if the product label instructions are followed. Label instructions include proper application timing, rates, and application methods. Herbicide application timing during the plant's growth cycle is important. For example, weeds not controlled prior to seedhead formation are harder to control and are able to deposit new seeds in future. Get rid of weeds before they have the ability to reproduce!

For more information on weed control visit the detailed IFAS site at <http://edis.ifas.ufl.edu/ep141>.

**Questions for your landscaper/applicator:**

- When possible are they removing weeds and pests by hand?
- Are the products used in your yard eco-friendly or organic?
- Have they taken the time to identify the location of pests/weeds to spot treat only? Spraying the entire yard further stresses turf grass and plants.
- Check their pesticide license to ensure they are up-to-date on new environmental concerns and appropriate treatments.

Below is the 2016 Award of Excellence Residential Yard, awarded by the Florida Native Plant Society. Utilizing BMPs and creating a Florida Friendly yard is not only beneficial to our local environment, but can also create a gorgeous unique landscape. (Pictures from other residential award winning homes can be found at <https://www.fnps.org/>)



**Resources:**

Florida-Friendly Plant Database: <http://floridayards.org/fyplants/index.php>

The Florida Yards and Neighborhoods Handbook by UF IFAS Extension. The handbook can be found at <http://ffl.ifas.ufl.edu>

Indian River County Stormwater: [www.ircstormwater.com](http://www.ircstormwater.com)

FDEP Nonpoint Source Management: <http://www.dep.state.fl.us/water/nonpoint/pubs.htm>

Rain Gardens: <http://gardeningsolutions.ifas.ufl.edu/design/types-of-gardens/rain-gardens.html>

Butterfly Gardens: <http://gardeningsolutions.ifas.ufl.edu/design/types-of-gardens/butterfly-gardens.html>

Florida Native Plant Society Awards: [https://www.fnps.org/what-we-do/landscape awards 2016#show4](https://www.fnps.org/what-we-do/landscape_awards_2016#show4)