the Hedgelines

LMP Landscape Maintenance Professionals, Inc.℠

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In this Issue:

As we transition into the heart of spring, we encounter the most critical landscape maintenance period. This juncture presents a confluence of climatic conditions - escalating temperatures, diminished humidity, and the onset of drier conditions - which together accelerate the rate of evaporation, pushing the needs of our landscapes to the forefront.

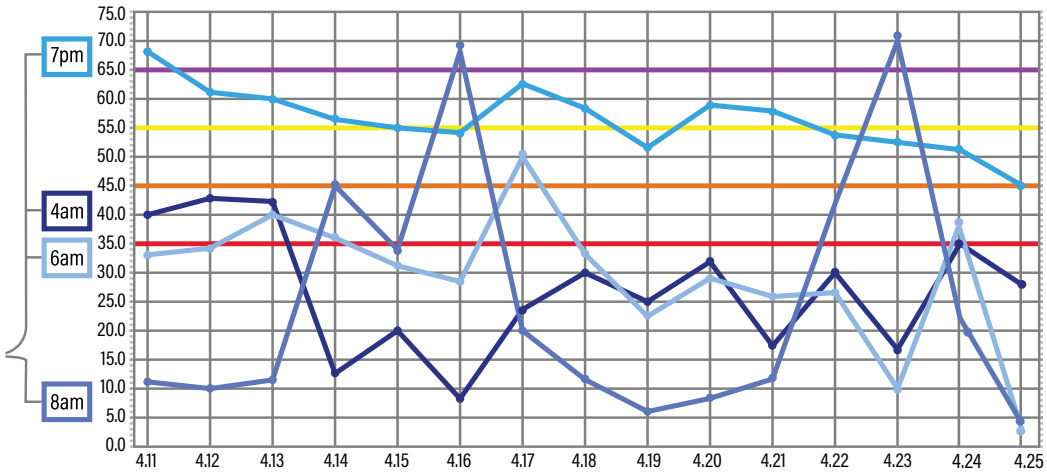
The Pressure is On Pasco: Irrigation Pressure

A comprehensive breakdown of the challenges faced by customers irrigating from Pasco County Utilities Reclaimed Water System.

The **Big Issue**

The consistent pressure and a time frame that provides enough time to run the entire system by Pasco County Utilities on the Reclaimed Water system for land of 2 acres and more. The pressure needs to be consistent to program an automatic system to irrigate an area and know it has been given the water it needs to survive. The table below shows the lack of consistency from hour to hour and day to day. The city's pressure must stay above 40 pounds per square inch to run a typical lawn sprinkler system. Sprinkler heads designed to send water 40 feet may send it only a few feet, turning landscapes into small circles of green grass surrounded by scorched earth. When pressure drops too low, sprinkler heads won't pop up from the ground at all.

We have had to use water trucks to supplement watering on many proprties. This is because we have not had the needed pressure or time required to provide the irrigation necessary to supplement the lack of rainfall, especially from the middle of April to the end of May.



The recorded pressure at the point of connection to the reclaimed water system. This is taken on the inlet side of the backflow before any pressure loss is seen through the irrigation system and reflects the supplied pressure from Pasco County Utilities at any given point in time.

PURPLE Expected Water Pressure from Utility Company and the standard for irrigation plan specifications.
YELLOW Approximate minimum pressure needed to ensure that ROTOR HEADS have 45 PSI at the head.
ORANGE Approximate pressure needed allow SPRAY HEADS to perform normally.
RED Approximate pressure needed to allow BUBBLERS and DRIP LINES to operate normally.

Water Restrictions Using Potable, Reclaimed, or Well
Adhere to Allowed Days
No Watering Between 8 a.m. and 6 p.m.
Total of 10 hours

Water Restrictions for Properties 2 Acres and More
Adhere to Allowed Days
No Watering Between 10:00 a.m. and 4:00 p.m.
Total of 18 hours

Going with **the Flow**

Different Types of Irrigation Have Different Requirements

The operating pressure of an irrigation system always affects the flow rate. A 20% pressure variation will result in a 10% flow variation. Sprinklers and emitters function best within certain pressure ranges according to application type.

Micro-Spray, Bubblers and Drip: Require about **25 psi** to operate correctly.
Spray heads: Most are designed to work their best at about **30 psi**.
Rotator heads: Require **40 psi** to operate correctly.
Rotor heads: Require the highest pressure to operate properly at **45 psi**.

Flow: The Volume

Flow is the volume of water that moves through your system over a specific period. Think of it as the lifeblood of your irrigation system. It's usually measured in gallons per minute (GPM) or gallons per hour (GPH).

Pressure: The Driving Force

Pressure, on the other hand, is the force that propels this water. Measured in pounds per square inch (PSI), it's the driving force that ensures water reaches every nook and cranny of your landscape.

Factors Affecting Flow

1) the pressure (PSI) available at the source 2) the pressure losses from the source 3) the size and number of outlets

Maximizing Irrigation Water Efficiency

As we transition into the heart of spring, we encounter the most critical landscape maintenance period. This juncture presents a confluence of climatic conditions - escalating temperatures, diminished humidity, and the onset of drier conditions - which together accelerate the rate of evaporation, pushing the needs of our landscapes to the forefront.

Below is an example of a timer and how long it takes to run the Spray and Rotor zones for May. Typically, the most demanding time of year is the middle of April to the end of May. This time is when conditions are the driest, and the temperatures are higher. Lower humidity also helps to create greater evaporation rates.

Controller: Sample Controller				**Location: Pasco County**	
Zone	Irrigation Type	Precipitation Rate	Weekly ET	Weekly Runtime Minutes	Minimum Pressure
1	Spray	1.5	1.33	56	45
2 - 10	Rotor	0.45	1.33	146	55
11	Drip				35
12	Rotor	0.45	1.33	146	55

Right, SWFWMD recommends watering at 70% of the optimal irrigation. This assumes the landscape is well hydrated before optimal irrigation is reduced. The times shown for this controller are based on mathematical calculations for Evapotranspiration using the average daily ET for May in this area. This will show how much time would be required to hydrate the turf to optimal conditions.

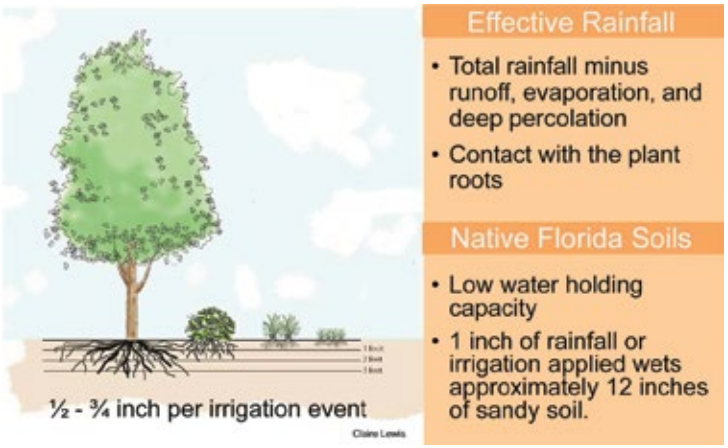
However, it's important to note that while this method aids in water conservation, it might pose challenges in achieving the lush aesthetic many communities desire. This is where the balance between environmental responsibility and community standards becomes a focal point of discussion.

Controller: Q					
Location: Pasco County					
Zone	Irrigation Type	Preciptation Rate	Weekly ET	Weekly Runtime in Minutes	Minimum Pressure
1 - 6	SPRAY	1.5	1.33	56	45
7	BUBBLER				35
8 - 9	SPRAY	1.5	1.33	56	45
10	DRIP				35
11 - 14	SPRAY	1.5	1.33	56	45
15	BUBBLER				35
16 - 19	SPRAY	1.5	1.33	56	45
20	BUBBLER				35
21 - 26	SPRAY	1.5	1.33	56	45
27	BUBBLER				35
28	DRIP				35
29 - 37	SPRAY	1.5	1.33	56	45
38	BUBBLER				35
39 - 42	SPRAY	1.5	1.33	56	45
43	DRIP				35
44 - 50	SPRAY	1.5	1.33	56	45
51	DRIP				35
52 - 56	SPRAY	1.5	1.33	56	45
57	BUBBLER				35
58 - 60	SPRAY	1.5	1.33	56	45
61	BUBBLER				35
62 - 64	SPRAY	1.5	1.33	56	45
65 - 69	ROTOR	0.45	1.33	146	55
70	SPRAY	1.5	1.33	56	45
Run time @ 55 PSI = 730 minutes (12.2 hours)					
Run time @ 45 PSI = 3,026 minutes (50.4 hours)					

Irrigation **Challenges** & **Actions**

Irrigation scheduling is based on the water needs of particular plants in the landscape, as influenced by the environment and other site-specific factors such as soil, root zone depth and local weather conditions.

Plant irrigation requirements will differ based on a plant's ability to extract soil moisture in relation to root zone depth and its physiological ability to deal with reduced availability of moisture. Plants require more water during seed, flower, and fruit production.



Weeks of hot, dry weather are putting pressure on local reclaimed water supplies. With above-normal temperatures and drier-than-normal conditions, things aren't forecast to get better anytime soon. The area's rainy season typically sets in during late May. When it doesn't, things can dry out quickly as temperatures climb.

Given the pressure and the time frame provided by Pasco County, many properties with large controllers on a single water source will have difficulty providing adequate irrigation. The following recommendations can help to prevent loss of landscape.

1. Supplement watering with a water tanker.
2. Apply COMAND or Hydretain to affected areas.
3. Place your heads closer together to get the coverage you need.
4. Reach out to the Pasco Utility Department and inquire on improvements that may help with the pressure.

A Proactive **Solution**

COMAND® LIFE SOILS

Advanced Natural Topdressing & Soil Builder

Improved Turf Performance Holds Nutrients Supplies Microbes Saves Water

Comand® is an excellent solution to deal with watering restrictions and sandy soil. Typically, compost and soil would not be considered a cost reduction variable, but when you can only water once a week, it could save you from replacing plants and turf.

Comand® is a bioengineered yet completely natural product designed as a one-of-kind specialty top dressing. Comand® is produced using a proprietary blend of enzyme-producing microbes. Utilizing unique composting methodology and innovative techniques, microorganisms are maximized for soil and turf health.

What Makes **COMAND** So Unique?

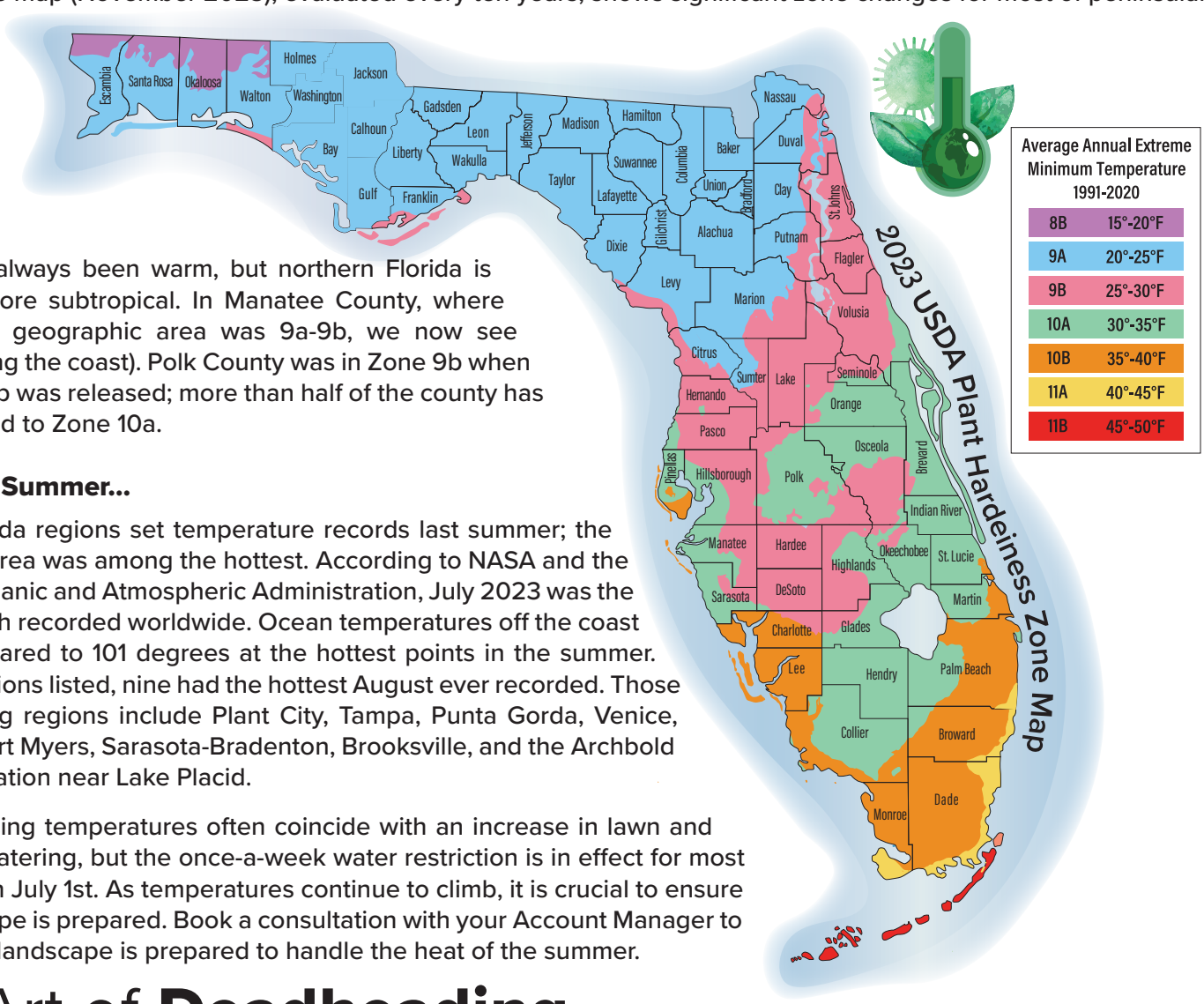
Through many years of research, Harvest Quest developed an inoculum, which accelerates and uniquely enhances the natural biological process of composting.

The use of the inoculum reverses the physics of composting, with initial temperatures being generated on the outside of the piles and the heat front moving inwards. This unique phenomenon allows microbes to increase optimally and results in the creation of very mature and biologically diverse compost. Furthermore, a focus on the natural disease suppression capabilities has been enhanced through carefully controlled curing procedures and re-inoculation with mesophilic (ambient temperature) microbiology known to suppress nematodes and root and crown root diseases.

COMAND is screened to a very fine consistency, which removes woody particles, making it suitable for applying to even the most closely mown turf.

Did Your Zone Hardiness **Change?**

For the first time since 2012, the U.S. Department of Agriculture released a new Plant Hardiness Zone Map. Last summer saw record-breaking temperatures in Florida, with July 2023 being the hottest month ever globally. The most recent update to the map (November 2023), evaluated every ten years, shows significant zone changes for most of peninsular Florida.



Florida has always been warm, but northern Florida is becoming more subtropical. In Manatee County, where most of the geographic area was 9a-9b, we now see 10a-10b (along the coast). Polk County was in Zone 9b when the 2012 map was released; more than half of the county has been bumped to Zone 10a.

About Last Summer...

Several Florida regions set temperature records last summer; the Tampa Bay area was among the hottest. According to NASA and the National Oceanic and Atmospheric Administration, July 2023 was the hottest month recorded worldwide. Ocean temperatures off the coast of Florida soared to 101 degrees at the hottest points in the summer. Out of 14 regions listed, nine had the hottest August ever recorded. Those record-setting regions include Plant City, Tampa, Punta Gorda, Venice, Lakeland, Fort Myers, Sarasota-Bradenton, Brooksville, and the Archbold Biological Station near Lake Placid.

Summer's rising temperatures often coincide with an increase in lawn and landscape watering, but the once-a-week water restriction is in effect for most of us through July 1st. As temperatures continue to climb, it is crucial to ensure your landscape is prepared. Book a consultation with your Account Manager to ensure your landscape is prepared to handle the heat of the summer.

The Art of **Deadheading**

Deadheading, the act of removing fading or dead flowers from plants, is a simple yet essential practice to maintain the beauty of your garden. By tidying up your plants and encouraging more blooms, you can enjoy vibrant displays in beds, borders, containers, and hanging baskets.

Key Points:

Deadheading improves plant appearance and promotes re-flowering

Most garden plants benefit from deadheading; exceptions include those with decorative seeds and fruits or plants you want to collect seeds from

Regular deadheading throughout the seasons keeps your plants healthy and blooming

Benefits of Deadheading:

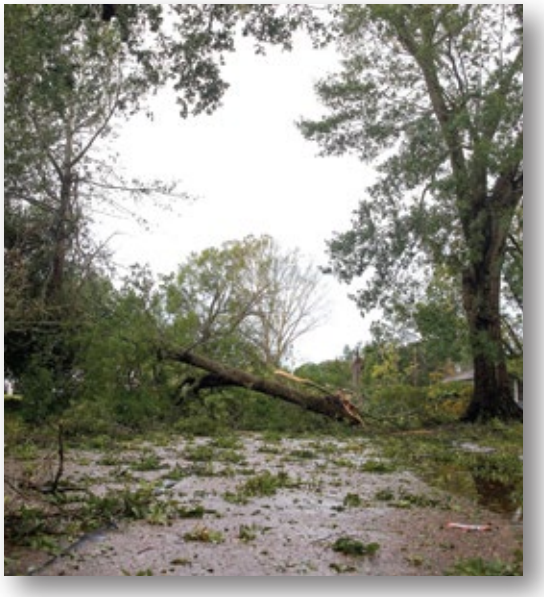
Channels plant energy into growth and flower production instead of seed pods

Prevents petals from scattering and stops self-seeding in certain plants


The geranium cluster of flowers is spent, it's an old bloom crying out for you to deadhead the old bloom.

HURRICANE SEASON COUNTDOWN

The first outlook for the 2024 hurricane season shows what could be a very active season. Around 23 named storms are expected to form in the Atlantic basin, and nearly half will become hurricanes.



For the 41st year running, the Department of Atmospheric Science at Colorado State University has provided the upcoming season's Atlantic basin hurricane activity. Led by Dr. Phil Klotzbach, a senior research scientist at CSU, the team has expressed more confidence in this year's outlook than in previous years, given the favorable large-scale conditions for hurricanes.

Current El Niño conditions will likely transition to La Niña conditions this summer and fall, leading to hurricane-favorable wind shear conditions. Sea surface temperatures in the eastern and central Atlantic are currently at record warm levels and are anticipated to remain well above average for the upcoming hurricane season. A warmer-than-normal tropical Atlantic provides a more conducive dynamic and thermodynamic environment for hurricane formation and intensification.

As with all hurricane seasons, residents are reminded that it only takes one hurricane to make landfall to make it an active season. Thorough preparations should be made every season, regardless of predicted activity. This not only saves money on damages but also ensures the safety of residents and visitors all summer.

One of the most critical steps property managers and boards should take in preparation for hurricane season is centered around landscaping to prevent unnecessary damage and ensure the safety of residents and visitors. While there's no way to completely avoid the damage Mother Nature can cause during these wild storms, preparing now will go far in minimizing it.

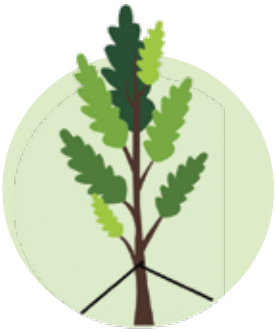
Being prepared for the eventuality of a hurricane will ensure that your grounds are ready to withstand many of its harmful impacts. If you would like to schedule a landscape assessment to identify and troubleshoot vulnerabilities or potential hazards, contact your Account Manager or call our office to schedule it!

Inspecting Property for **Landscaping Elements of Concern**

Preparing Landscape for High Winds and Rain

Use Compost
Compost improves soil drainage and plant root structure, which gives plants more defense against wind and rain.

Evaluating Drainage
Make sure that your drainage system and gutters are correctly positioned and free of clogs.



Prune Branches
Proper pruning improves tree structure, reduces the risk of branch failure, and allows wind to pass more freely through the canopy, decreasing the chances of uprooting.

Staking
Securing young trees and shrubs with stakes is crucial. This proactive measure can significantly protect your plants from potential damage.

The Defoliator: Eastern Lubber Grasshopper

This Florida native is one of a few species of grasshoppers that occurs in large enough numbers to cause severe damage to landscape ornamentals. During the breeding season, lubbers lay 25 to 50 eggs. Right now, lubbers are at their developmental peak and are huge, about four inches long. These eggs are underground during the winter and hatch between March and June. After they hatch, the young grasshoppers molt their exoskeletons five times every two weeks before becoming adults.

Lubbers eat broadleaf plants, causing significant damage. They readily climb plants, eat irregular holes in vegetation, and can completely strip foliage from plants. Combating these pests is best while they are in the nymph stage. Fast-forward a few months, though, and the lubber becomes an almost invincible warrior in shining bright and toxic armor. The lubber's yellow to orange exoskeleton serves as a warning to predators. They hiss and produce a foul-smelling froth (Lubbers store toxins in their bodies from the poisonous plants they eat.) secreted from their thorax and can spray a toxin for a distance of about 6 inches.

When the show up...

1. Catch them while they are young: spray with pesticide as soon as you see black swarms of baby lubbers or shake them off into a bucket of soapy water.
2. If you find adult lubbers in your yard, pick them off by hand and drown them. You can also nip them with garden shears. Adult lubbers don't congregate like the young, so you'll need to look in every single plant.
3. Even after eliminating adults, chances are an entirely new generation of eggs is buried in your garden. Don't despair. Watch out for nymphs next spring and get rid of them. If you are vigilant for a few years, you'll eliminate lubbers for good.

The Art of **Deadheading**, *continued*

To Deadhead or Not?
Deadheading is a straightforward process that involves removing old growth to stimulate new blooms. By pinching off faded flowers at the base, you encourage continual flowering. Remember to check for hidden buds before pruning.

Timing is crucial when deadheading as it extends the lifespan of flowers. Regular maintenance ensures healthier plants and a more beautiful garden overall.

Embrace the Process:
Engage in regular evaluations of your garden to identify deadheading needs. This maintenance task benefits your plants and provides a peaceful and meditative moment in the garden.

Let Nature Thrive:
While some perennials benefit from second blooms through deadheading, consider leaving seed pods for wildlife enjoyment during winter. Plants like coneflowers and Rudbeckia attract birds with their seeds, enriching your garden's ecosystem.

By practicing proper deadheading techniques, you'll witness your garden flourish with renewed beauty season after season. Enjoy nature's gift of continuous blooms and thriving plant life with this simple yet rewarding practice.

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