

Spanish Wells Community Lakes & Ponds Newsletter

**Safeguarding our aquatic ecosystems—not just for today,
but for generations to come.**



Spanish Wells Stormwater Ponds – A Critical Community Resource

Welcome to this special edition newsletter dedicated to the lakes and ponds of Spanish Wells. Our entire system of lakes are actually man-made stormwater retention ponds engineered and built in phases before all of the residences in each sub-HOA were constructed.

The Lakes Committee is an all-volunteer group committed to preserving, protecting, and enhancing the aquatic treasures that define our community's natural beauty and ecological health. Lakes and ponds are more than scenic backdrops; they are living systems that support biodiversity, minimize flooding risks, regulate local climate, recharge groundwater, and provide recreational and educational opportunities for residents of all ages. These water bodies serve as vital habitats for fish, birds, amphibians, and countless other species, while also playing a crucial role in stormwater management and nutrient cycling. As stewards of these resources, the committee works to ensure that our lakes and ponds remain clean, safe, and vibrant. Through monitoring, education, and collaboration, we aim to foster a deeper understanding of their importance and inspire responsible care from every member of our community. Together, we can safeguard these aquatic ecosystems—not just for today, but for generations to come.

The board and this committee have received a number of comments concerning the algae growth this summer on numerous lakes, we hope that this newsletter will answer those questions."

We hope you find the news here as informative as we find the work inspiring! To learn more contact swcawater@gmail.com or visit the Lakes Committee pages of the SWCA website [here](#).

[Lakes And Ponds Information](#)



By Sandy Rittenhouse Black

This past summer, the Lakes Committee devoted significant time drafting a Request For Proposals (RFP,) and interviewing lake management firms. The goal was to provide the community with the highest level of service at the best price. The previous contract focused almost exclusively on chemical applications. Having learned that the installation of aeration, reduced chemical applications, and the planting of littorals promotes healthier ponds, it was important that this be defined in the new contract.

Proposals were independently ranked by members of a Review Committee then compared for each of the four submitted proposals. Review Committee members all ranked SOLitude Lake Management highest.

SOLitude offers:

- A strong littoral maintenance program
- Selective chemical application and hand removal of invasive plants
- A dedicated portal to report maintenance requirements and request service
- Off-the-shelf stored parts of aeration equipment to facilitate fast repairs
- An in-house laboratory for water testing

Solitude staff will be on site every Thursday to assess and treat the Spanish Wells ponds as needed.

It was SOLitude that worked on the Lake 50 bank restoration on Alhambra Lane and the community is very pleased with their work in that area. Moving forward similar bank restoration, repairs, and dredging may be required.

Visit SOLitude's website [here](#).

Sandy Rittenhouse-Black graduated from VA Tech with a Bachelor of Science in Horticulture and Business. She retired as Manager at Green Springs Gardens, in Alexandria VA in 2017. She served on the Cordova Board of Directors from 2019-2025 and is currently the Cordova Landscape Chair and works with the Lake and Ponds Committee.

High Level Independent Evaluation Underway



By Gerry Benson

In early August, the SWCA Board engaged Bowman Engineering to conduct a high-level evaluation of all 42 stormwater ponds in Spanish Wells. The purpose of this assessment is to provide the Board with an independent overview of current pond conditions and to deliver updated cost estimates for potential repairs, without vendor influence.

Rick Brylanski, Senior Vice President, PE, is heading the project. Rick brings years of experience working in Spanish Wells, including engineering, mapping, and permitting for the community's stormwater pond system and control structures. Bowman (fka Hole Montes, Inc.) has been serving as the Engineer of Record for SWCA since 2004. During that time, they have accrued a vast knowledge of the master storm water system operations for the community. They have been engaged with prioritizing replacement of the aging storm sewer system comprised of metal culverts which required mapping of the entire storm sewer system, replacement of the storm water pumping station, and other general community infrastructure enhancements.



So far, shorelines have been measured and mapped to document the linear footage of riprap, vegetated banks, and evaluate the observed bank slope conditions. The banks have been ranked according to their current state or risk of erosion, especially near structural features such as homes and the golf course. Site pictures are also being added to an interactive map so these conditions can be seen by anyone. The next step will involve measuring muck depth in many of the older, narrow channels, which are currently exhibiting surface filamentous algae growth, and evaluating some options for stabilizing the lake banks to not only abate erosion but provide environmental benefits for nutrient reduction to make the lakes healthier.

Additional tasks include delineating littoral shelves to identify areas where shoreline vegetation can be supplemented for stabilization—some ponds previously supported substantial plant life which is no longer present. The evaluation will also map upland areas suitable for planting buffers to improve nutrient uptake that serve both bank stabilization and decrease algal blooms.

This comprehensive evaluation is intended to arm the Board in identifying and determining funding options for these lake and environmental improvements.

Gerry Benson is a registered Professional Engineer in several states. His experience includes 45 years working on municipal capital improvement programs (CIPs), infrastructure rehabilitation, disaster recovery programs, and wet-weather planning. In addition to his program management experience, he has extensive project experience in wastewater, water, solid waste, and hazardous waste remediation

Surface Algae Raises Concerns



By Konrad Schultz

This summer has been challenging for a number of our stormwater ponds - particularly the older, narrower ones that date back to the creation of the original 18-hole golf course. These narrow ponds were built first to prevent flooding of roads and residences and second to prevent pollutants from reaching the gulf.



Now forty plus years later, the accumulation of nutrients in the sediment combined with hot summer weather and low water flow creates ideal growing conditions for algae.

The temporary solution is now underway. Solitude Lakes Management - The largest lakes management company in the USA - began its service contract on September 1 and is in Spanish Wells every Thursday. Multiple algae treatments have already occurred. As the algae turns yellow and dies, it will sink at the next rainfall and become the next layer of nutrients in the sediment. (Commonly called muck.)

Image submitted by Dave Hoffman

Unfortunately, though, once enough muck has built up, chemical treatments (which are limited by law) become less effective, algae blooms become more frequent and then more costly but longer lasting solutions are required.

The Lakes Committee is working with Solitude and Bowman to develop a comprehensive plan for the SWCA Board to review. None of the solutions will be easy or cheap. When the time comes, please voice your support.

Learn more about what is needed for aging stormwater retention ponds by watching this short video.



Click on image to view video

Konrad Schultz is an active member of the Spanish Wells Lakes Committee. He formerly served as a founder and Director of one of Cape Cod's largest freshwater pond groups and has worked on projects including stormwater runoff, swale/stormwater retention basin construction and planting, pond plant harvesting and aeration.

Demonstration Lakes Maturing Nicely



By Madeleine Panciroli

Seven lakes in Spanish Wells are now being actively managed as demonstration lakes. The goal is for residents to see how by using contemporary management practices we can improve water quality and stabilize eroding shorelines. Look for this sign.



Many are showing great early success. Aeration has been installed to activate bacteria that aid in the digestion of nutrient rich muck. Littoral plants have also been installed along the shoreline of all seven and are maturing nicely. Littoral plants slow wave motion - the #1 cause of bank erosion. They also uptake nutrients in stormwater runoff.



Cattails yellowing in foreground after “wicking” treatment and spatterdock “lily pads” in the water.

We’ve learned from our successes as well as our failures. Lake 10 on Alhambra Lane enjoyed terrific growth of littoral plants but then spatterdock and cattails grew to nuisance levels and needed treatment. Reducing chemical treatments is a goal, but we’ve learned that things grow very fast in nutrient rich muck and staying on top of it is a tricky balance.



We hope that you are enjoying the vistas and the returning wildlife including birds, butterflies, and otters.

Madeleine Pancirolli has been a member of the Lakes Committee and sampling lakes since 2024. She loves looking out from her lanai at lake 41 in Marbella.

Bank Restoration at Stormwater Pond #50



By Bruce Henry

The \$250,000 restoration of the last stormwater pond in Spanish Wells (# 50) to the south of Alhambra Lane is now complete. Years of erosion had taken its toll on this important control structure. Wave action and chemical treatments had killed plants that stabilize the shoreline and the low-maintenance zone vegetation. Invasive *Plecostomus* fish had burrowed holes deep into the eastern bank. Now, low growing flowering plants such as dune sunflower and perennial pea carpet the low maintenance zone, and littoral plants line the shoreline. It's a striking difference and could represent a model for other stormwater ponds in Spanish Wells.



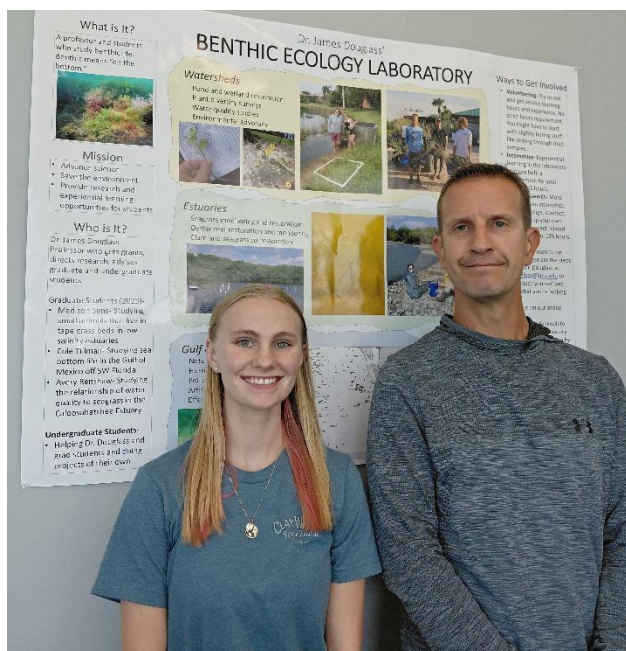
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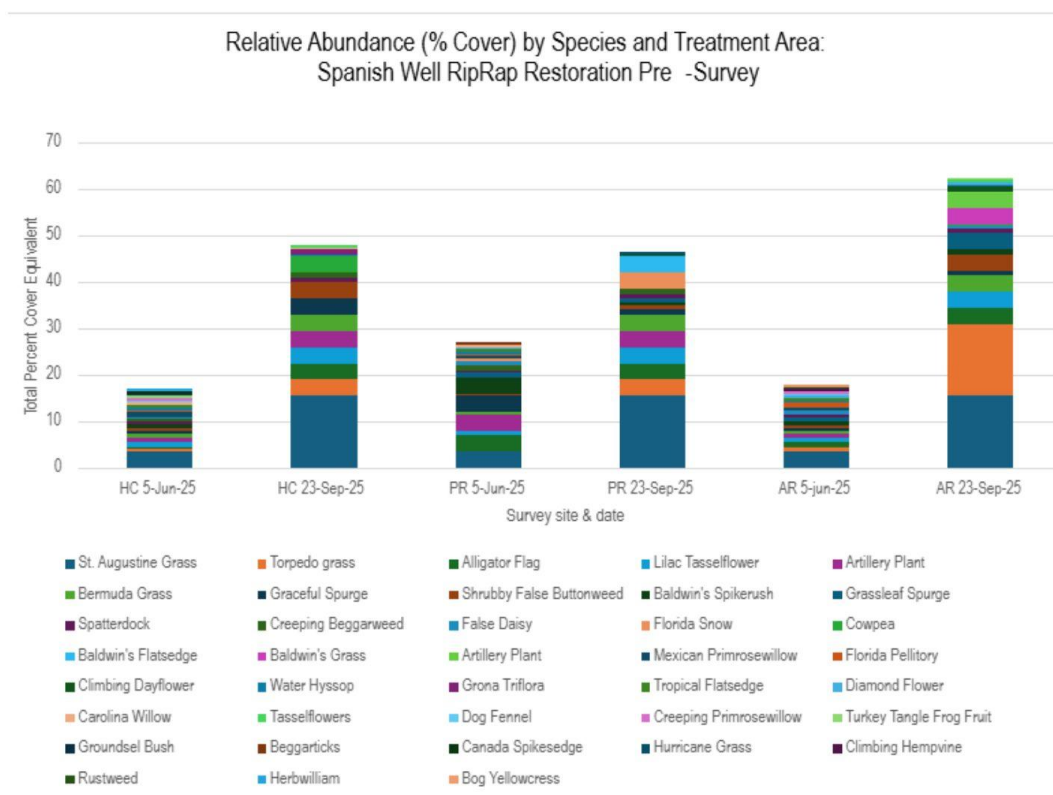
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Bruce Henry and his wife Maggie are full-time Spanish Wells residents. They came to Spanish Wells in 2022 and enjoy the community as full-time golf club members. Bruce retired in 2017 from Pacific Gas & Electric in California after 36 years in Electric Operations. He is currently engaged with the Spanish Wells community on the Hurricane Readiness, Safety, and Lakes and Ponds Committees.

Florida Gulf Coast University (FGCU) Riprap Study – Pond 9

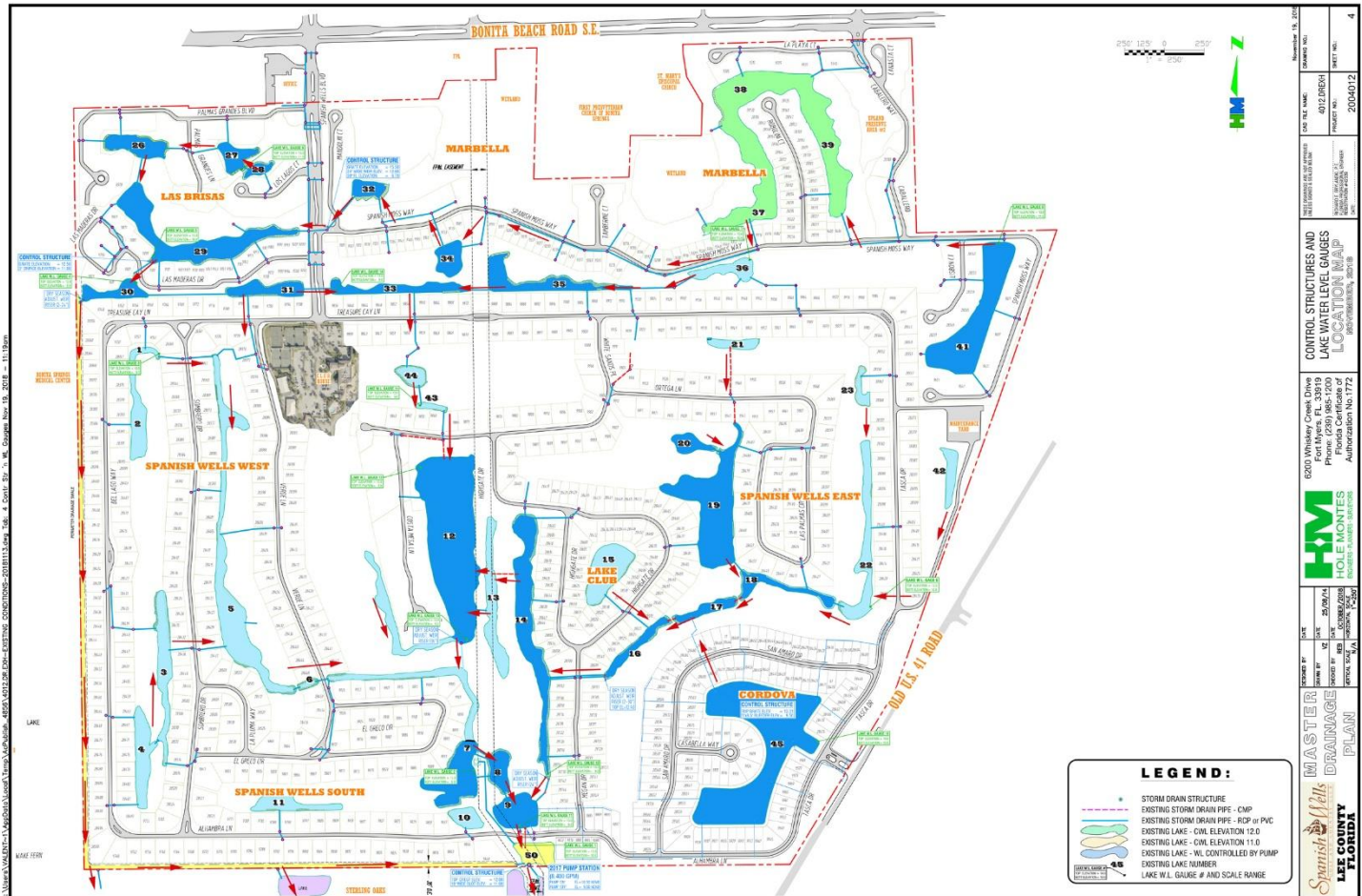


Dr. James Douglass, a professor at the FGCU Water School, and his undergraduate research assistant, Cadynce Campbell, have launched an innovative study at Lake 9 in Spanish Wells. The project compares three different treatment methods for the lake's riprap shoreline: 1. Herbicide control where current maintenance practices will still take place including mowing and herbicide spraying. 2. Passive restoration where current maintenance practices will stop. 3. Active restoration where current maintenance practices will stop and researchers will organize and plant a variety of plants along the shoreline. The goal of this research is to assess the effectiveness of planting within riprap zones and the efficiency of the pond -including shoreline stabilization and nutrient run off, ultimately leading to a healthier, cleaner, and more beautiful pond.



Aeration Update

The installation of aeration in many of our ponds has been a priority. Aeration extends the lifespan of stormwater ponds by helping “good bacteria” to digest organic matter that creates nutrient rich “muck.” This muck is the fuel that feeds algae. Aeration is a contemporary technique that is used on every stormwater pond constructed throughout Florida today and has proven successful.



Aeration was first installed in 2023 on ponds in Spanish Wells that had readily available electricity nearby. Next it was added to the larger water bodies with the thought that if those ponds began to suffer, they would be extremely expensive to remediate. Delaying the inevitable (some form of dredging) seemed wise. Now, approximately $\frac{2}{3}$ of the water volume in Spanish Wells is aerated.

Not all aeration has worked. The older, narrow channels and ponds that were built in the 1980's continue to see algal blooms. More expensive solutions will be needed. However, in those cases, where aeration has not worked, it has not been wasted. The diffusers (commonly called bubblers) can simply be pulled and reinstalled after remediation.

Lakes and Libations Community Education Series



By Shari Rodriguez

Lakes and Libations hosted three programs during spring 2025. Each program provided greater insight into how Storm Water Retentions Ponds work in Florida and Spanish Wells. Lake Water Margaritas were a favorite among the attendees.



The 2025 series started off with a comprehensive look at how Spanish Wells' complex lake and storm water retention ponds work. Have you ever wondered why our lakes flood sometimes? Or where does the water go? Committee Chair Bruce Henry and Konrad Schultz waded deep into these, and other related topics. While our lakes and ponds provide a lovely aesthetic to our community, the intricate system helps to manage water flow during the rainy season and provide irrigation to the golf course and other areas

during the dry season. Managing this system is complex and under the watchful eye of Bruce, Konrad and the committee

We all have a keen interest in keeping our yards beautiful and our ponds healthy. However, it is frustrating when plants don't survive the summer heat or drown in the rainy season. Kamilia Perez, Residential Horticulture Agent from University of Florida IFAS Extension Collier County, shared nine principles of the Florida Friendly Landscaping Program™. Adopting these principles helps to reduce irrigation costs and plant losses, while creating beautiful, lasting landscapes.





Residents curious about our Demonstration Lakes met with Lake Committee docents for the final spring program. Guests learned about the plans for the Demo Lakes, lessons learned to date and unique findings that will help sustain our lakes well into the future.

Mark your calendars: The first 2026 Lakes and Libations program will be held January 27 at 5:00pm. Dr. Ernesto Lasso de la Vega, Lee County Hyacinth Control District, will provide a report on the results from the SW Pond Watch sampling program.

Videos of these and other presentations may be found in their entirety [here](#).



Shari Rodriguez organizes the Community Education programs for the Lakes Committee and dedicates her time to providing meaningful learning opportunities for all members of the community

Pond Watch



By Chris Ketterer



Pond Watch is a Lee County program that involves community volunteers who sample retention pond water quality and help to identify those needing attention. Here at Spanish Wells, we have taken samples monthly from 5 ponds, including our 4 demonstration ponds, for nearly 2 years.

Water samples are taken to Lee County Water Hyacinth Control District for analysis of Phosphorus, Nitrogen and other chemical elements. Spanish Wells samples are compared to a “reasonable range” as determined by Lee County.



Dr Ernesto Lasso de la Vega analyzes water sample

This data will help determine the effectiveness of the steps we have been taking to improve water quality, such as aeration, littoral plants, reduced chemical usage and other means.

Chris Ketterer has a lifetime appreciation of nature and the environment. As a proud member of the water quality team, he monitors our progress by taking monthly water samples of Spanish Wells stormwater ponds for analysis to the laboratory in Lee County.

Reducing Nutrient Inputs Is Key

When we began introducing contemporary lake management techniques to Spanish Wells several years ago, the committee cautioned that to be effective we will need to reduce nutrient inputs to our stormwater ponds. There are two ways to do this:

1. Apply less fertilizer, pesticides & herbicides and consider replacing portions of lawn with native plants that require less water, fertilizer, pesticides, herbicides
2. Create a vegetative low maintenance zone around our ponds.

The key words used today are “slow the flow.” If we can slow the flow of both water volume and nutrient inputs into our ponds, we will extend their lifespan and **significantly lower future remediation costs.** Does it make any sense to spend money on costly remediations now only to have to do the same thing again in another 0-15 years?

One effective way to do this is to plant “low maintenance” or “buffer” zones above the pond bank and littoral plants in the water. Upland vegetation reduces grass clippings, storm debris and nutrient run off. Littoral plants uptake nutrients that have made their way to the shoreline. These zones can be an attractive feature that property owners and golfers will enjoy.



Perennial pea on the shore of lake 50



To learn more about low maintenance zones **click on the image to the left.**

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