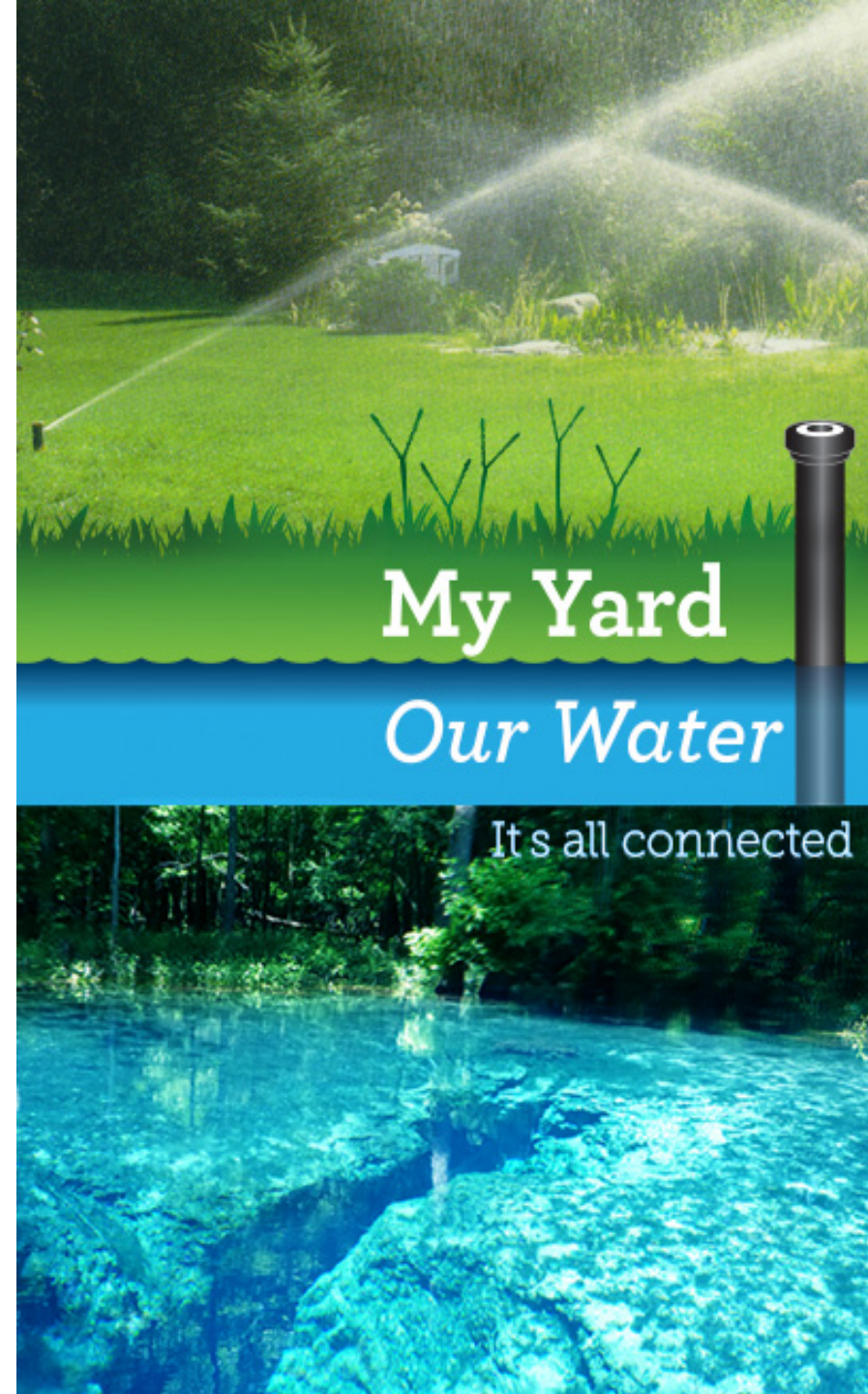




EPD Water Resources Update

9/15/2020

Stacie Greco, Water Resources Manager
Shane Williams, Stormwater Engineer
Environmental Protection Department



Alachua County Fertilizer Code

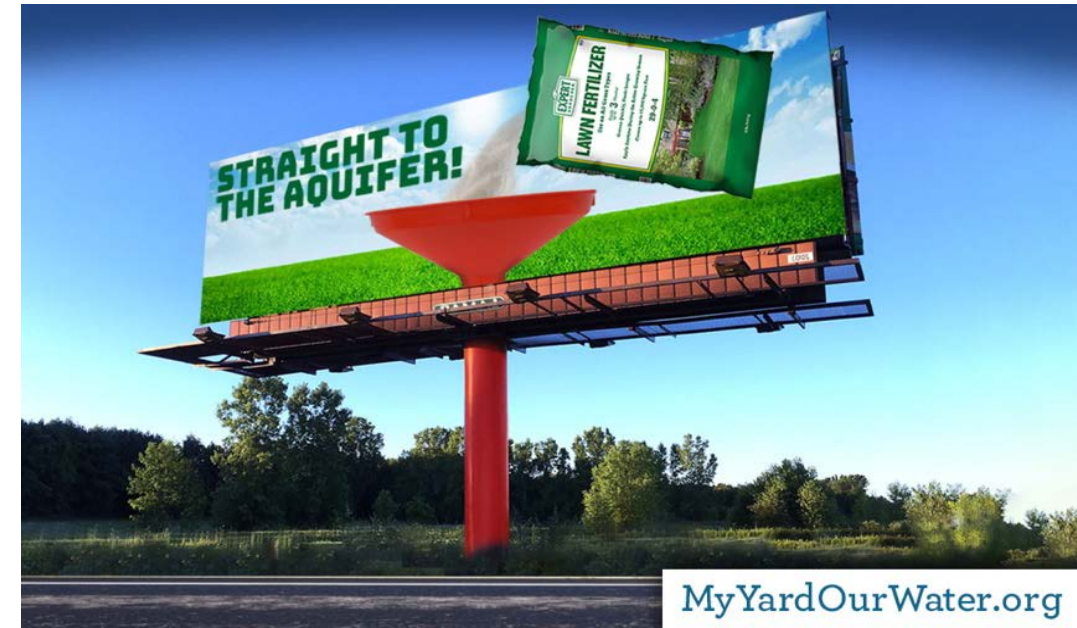
(Chapter 77 Article 4, modified April 2019)

- Fertilizer with phosphorus is only allowed if a soil or tissue test verifies a need
- Fertilizer with nitrogen is only allowed March - June and must have at least 50% slow release nitrogen



Alachua County Fertilizer Code Implementation

- Fertilizer Education
 - FDEP grant (\$135,000), Stormwater Assessment, General Fund, and Gainesville Clean Water Partnership (\$10,000 each)
 - Press releases, emails, and newsletters
 - Update signage for stores
- Enforcement
 - Complaints and inspections
 - Blitz



Social Media

**ARE
YOU
ONE
OF THE
55?**

55% of residents surveyed said they don't use fertilizer at all. Thank you!

MyYardOurWater.org



**BACKYARDS ARE
FOR BERRIES
AND BELLY LAUGHS
(NOT FERTILIZER).
ALACHUACOUNTYWATER.ORG**



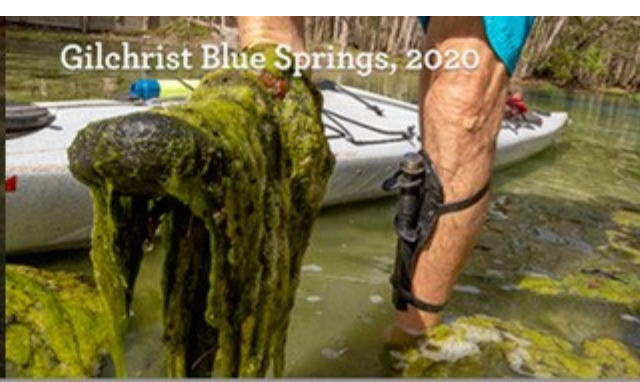
**What
starts
here,
can
end up
here.**

MyYardOurWater.org

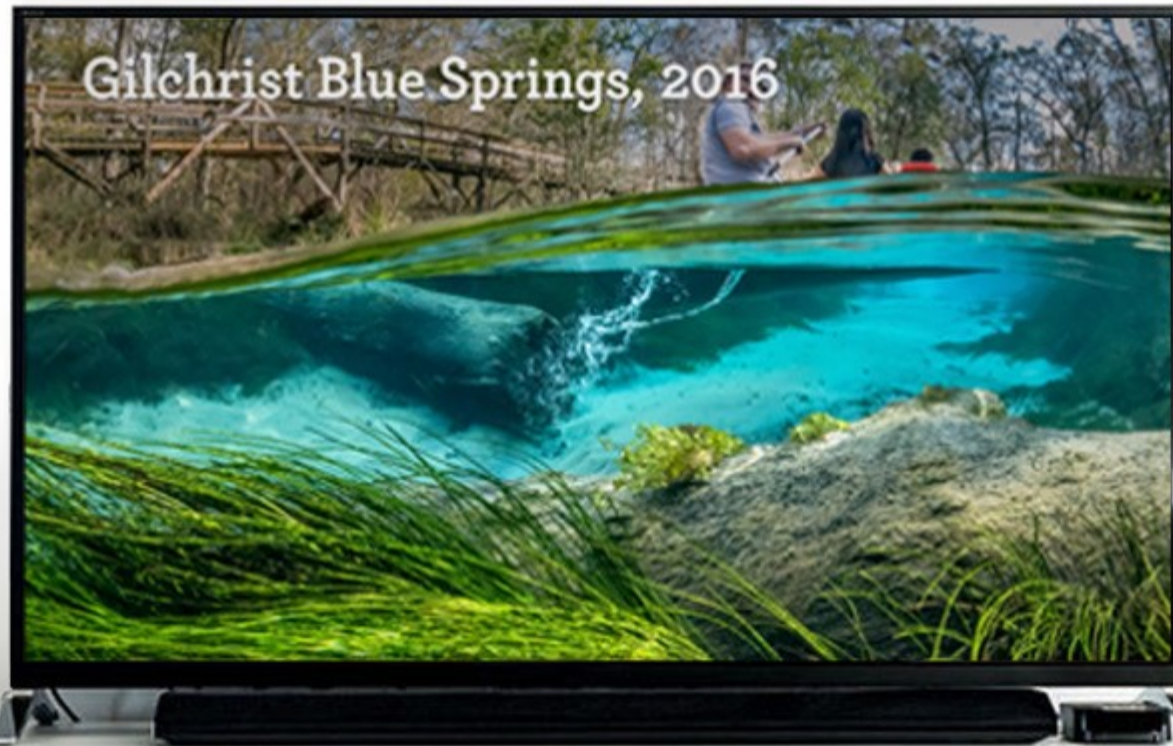


**What
starts
here,
can
end up
here.**

MyYardOurWater.org



Television



GRU Mailer- 70,000!



180693

What starts on our lawns, can end up in our springs.

MyYardOurWater.org

Over half Alachua County residents (55%) say they don't fertilize at all, and their yards still look good. Thank you! If you do use fertilizer during non-banned months, it must contain at least 50% slow release nitrogen and 0% phosphorous (the middle number on the bag must be zero). Or, try to skip the fertilizer this year entirely. Our water resources will thank you!

Alachua County, Florida

GRU
More than Energy

Billboards

(close to big box stores or high traffic areas)



NEW BAN ON FERTILIZER

July - February.

Learn more at MyYardOurWater.org.

Point of Sale Signs (Required by Code)



The sign is a rectangular poster with a black top section and a yellow middle section. The bottom section is split into two images: a lawnmower on the left and a scuba diver on the right. The text is in various colors and fonts, including yellow, white, and blue. The sign promotes a ban on fertilizers containing nitrogen from July through February, linking the use of fertilizers to water quality issues.

NEW BAN ON FERTILIZER

The Countywide Water Quality Code (Ch. 77) prohibits the use of fertilizers containing nitrogen from July through February.

What starts here, can end up here...

My Yard
Our Water
It's all connected.

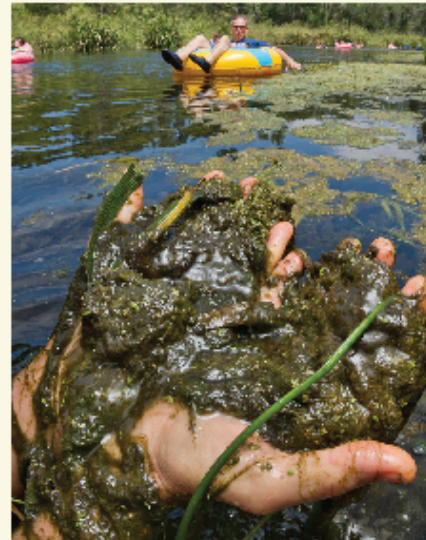
MyYardOurWater.org
(352)-264-6800

Half Page Gainesville Sun Ad

"Most Alachua County residents (55%) say they don't use fertilizer at all year-round."



In Florida, we are surrounded by water, even under our feet in the aquifer. The water that comes out of your tap for drinking and other household uses comes from our underground aquifer (also called groundwater). Regardless of where you live in Florida, you likely live close to an "impaired" waterway. Nitrogen and/or phosphorus from yards, farms, and septic systems are the most common sources of pollution. Here in Alachua County, we contribute to the nutrient pollution on the Santa Fe River and its springs, Lake Santa Fe, the Silver River, and the Orange Creek Basin (Hogtown Creek and its tributaries, Sweetwater Branch, Turnbull Creek, Paynes Prairie, Newmans, Orange and Lochloosa lakes).



Over-manicured yards are particularly hard on our waterways. Irrigation depletes groundwater supplies, while fertilizers contribute to nutrient pollution and algal outbreaks. Irrigation and heavy rain can push nutrients from landscape fertilizers past plant roots and into the groundwater or can wash fertilizer off as stormwater into our surface waters (creeks, lakes, rivers, etc.). Rainfall is the greatest during summer, so fertilizing during these months has a high potential to pollute waterways. Additionally plants don't need as many nutrients in the cooler months. When we fertilize in the winter, polluting nutrients can move past the root zone and into our drinking water and springs.

For these reasons, fertilizer containing nitrogen is banned in Alachua County from July through February. Most Alachua County residents (55%) say they don't use fertilizer at all year-round. Thank you! Join the 55% and skip the fertilizer this year. See what happens. Even if you live in an HOA, your yard can still look great if you cut back or eliminate the fertilizer.

Remember, having a nice yard is, well, nice. But having clean water to drink, swim in, and for the future is pretty important. We can have it all! We may have to shift our expectations a bit and let go of the bright green monoculture carpet look year-round. It is normal for grass to turn a little yellow or brown in the winter and during droughts. Having a few weeds or multiple species in your yard does not make you a bad neighbor, it actually makes you a good neighbor to our springs and pollinators! Our beloved animals, our kids and our springs will benefit if you don't use fertilizer. Join the 55% today and skip the fertilizer!

Learn more from the Alachua County Environmental Protection Department at MyYardOurWater.org.





FERTILIZER FREE YARD PLEDGE

Did you know fertilizer washes off our yards and seeps into our waterways and the aquifer – our drinking water source! The Countywide Water Quality Code (Ch. 77) bans the use of fertilizers containing nitrogen for eight months out of the year from July through February. Just because you CAN use fertilizer March through June, doesn't mean you NEED to use fertilizer – and many people don't. We surveyed over 1,000 Alachua County residents in 2018/2019 and 55% said they don't use fertilizer at all! You can skip the fertilizer, and your yard can still look great. Join the 55% today! Our aquifer, springs and future generations will thank you!

I pledge to: (CHECK ALL THAT APPLY)

- | | |
|--|--|
| <ul style="list-style-type: none"> ☐ Skip the fertilizer this year. Your yard can still look great! ☐ Skip the fertilizer at least in the back yard. ☐ Ask my landscape professional about a top dressing with compost instead of fertilizer. ☐ Never fertilize when soil is saturated or before a rain. | <ul style="list-style-type: none"> ☐ Always clean up fertilizer spills by sweeping into yard or collecting! Don't blow or wash spills into a storm drain or road. ☐ Store fertilizer in areas protected from rainfall and stormwater runoff. ☐ Bring unwanted fertilizer to the Alachua County Household Hazardous Waste Collection Center at 5125 NE 63rd Ave. for proper disposal. |
|--|--|

X *Signature*

I'M ONE OF THE 55%

SPRINGS CONVERSATION PLEDGE

Name: _____

Email: _____

Phone: _____

To encourage your commitment and track the success of your pledge, you may be contacted by program partners.

- ☐ Do not contact me.



Pledge, T-shirts, & Bumper Stickers



Results?

- A survey will be completed in the fall of 2020
- Results will be used in combination with modeling efforts to estimate load reduction and load reduction potential



Irrigation Design Code

(Chapter 77 Article 6, modified April 2019)

- Expanded into municipalities
 - Communication with municipal staff to notify applicants
 - Brochures dropped off at Building Departments
 - Press release
 - Emails to irrigation contractors and building community
 - Site visits
 - Minimal compliance issues



Irrigation and
stormwater
vehicle wraps
~\$10,000

**THE
AQUIFER
IS OUR
WATER
SOURCE**



ES1902

MyYardOurWater.org



FERTILIZER BANNED
July - February

Ichetucknee
Springs, 2019

ENVIRONMENTAL PROTECTION

MyYardOurWater.org

#JOIN THE 55
Skip the Fertilizer



ES1902



What
starts
here,
can
end up
here.

Fertilizer Free
TO PROTECT OUR SPRINGS



Over-
watering
here, →
leaves
less
here. ←

ENVIRONMENTAL PROTECTION

**Irrigation
restrictions
enforced all year.**

MyYardOurWater.org



ES1902

Irrigation Social Media Outreach- \$8,400



Aquifer Awareness

- Based on local survey data, less than 50% of residents know that their drinking water is groundwater from the aquifer.
 - Disconnect- “Use less water to save our springs”
- 2019- \$12,000 (General Fund and Gainesville Clean Water Partnership)
 - One billboard near Archer Rd and SW 34th Street for July 2019
 - 4 million views
 - Social media yielded 92,000 impressions and 7,000 views of an educational video
- 2020- \$12,000 total (\$10,000 Springs Tag Grant)
- 2021- applied for \$10,000 Springs Tag Grant

Aquifer Awareness 2020



OUTDOOR ADVERTISING: Billboard

4/6/2020 – 5/3/2020

Budget: \$3,335

376,832 Impressions



Social Media

11/1/19 - 1/31/20

Budget: \$400

- Impressions: 43,899
- Reach: 9,228
- Link Clicks: 248



My Yard Our Water

Sponsored · 🌐



The aquifer is our main water source. It feeds us and our beautiful springs. It's all connected and every drop counts, so please use it wisely.



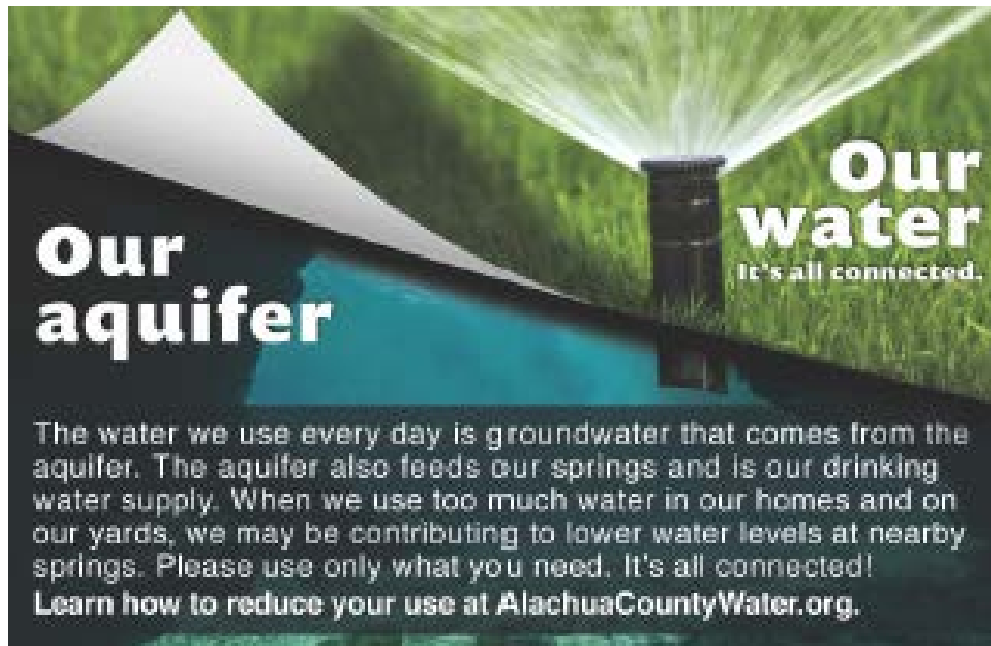
It's all connected.

ALACHUACOUNTY.US

Use Water Wisely, Alachua!

LEARN MORE

The water we use every day is groundwater that comes from the aquifer. The aquifer also feeds our springs and is our drinking water supply. When we use too much water in our homes and on our yards, we may be contributing to lower water levels at nearby springs. Please use only what you need. It's all connected!
Learn how to reduce your use at AlachuaCountyWater.org.



PRINT ADVERTISING: Gainesville Sun
3 Sundays = \$1,000
Sunday Disbursement = 60,000

The water we use every day is groundwater that comes from the aquifer. The aquifer also feeds our springs and is our drinking water supply. When we use too much water in our homes and on our yards, we may be contributing to lower water levels at nearby springs. Please use only what you need. It's all connected!
Learn how to reduce your use at AlachuaCountyWater.org.



REGIONAL TRANSIT: 3 RTS Buses

Budget: \$1,765

4/1/2020 – 6/1/2020



Florida Friendly Landscaping Code for HOAs

(Chapter 77 Article 7, Adopted April 2019)

- Three workshops for HOAs and management companies
- Included in outreach presentations
- 3 cases to date- all have been resolved with meetings and site visits.
 - County Extension staff has been instrumental



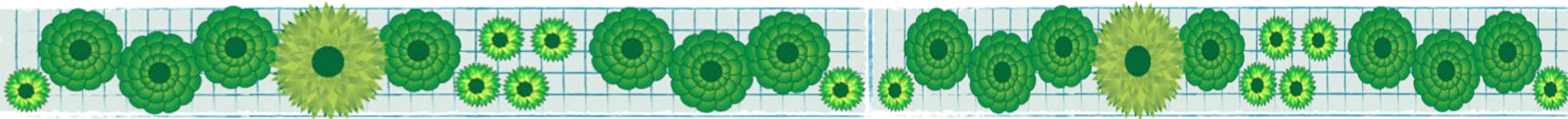
Turf SWAP Landscaping Retrofit Rebate Program

- Goals: Reduce the area of irrigated turf
 - Reduce nutrient (fertilizer) pollution
 - Reduce outdoor water use
 - Promote Florida Friendly Landscaping™
- Program promotion and staffing paid for by the Gainesville Clean Water Partnership



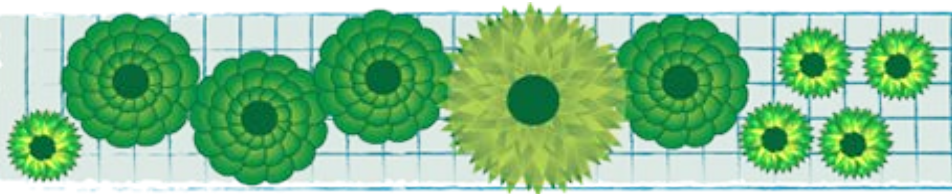
2017-2019 Grant- \$240,000 from SJRWMD

- 50% rebate up to \$2,000
- 135 participants
- 1,901 irrigation heads removed
- More than 400,000 ft² high volume irrigation removed
- ~16 million gallons per year potential savings (estimated based on flow rates/avg run times)



Turf SWAP 2020/2021

- \$100,000 Grant from SRWMD
- 50% rebate up to \$1,500
- Currently open and going well!



Stormwater Education- 2019 #nofilter Campaign

- Surveys indicate that many people think stormdrains lead to treatment facilities
- ~\$25,000 from General Fund, Stormwater Assessment, and Gainesville Clean Water Partnership.
- Social media and buses
 - 1,681,803 impressions
- Rerunning elements in 2020



Stormwater Assessment Projects

- Little Hatchet Creek reactive weirs
- Sweetwater trailhead LID
- Lochloosa Lake Initiative, Phase 1
- Newnans Lake Initiative, Phase 3



Little Hatchet Creek Weirs

- This project involves the installation of two weirs on Little Hatchet Creek to divert baseflow into bioreactors.
- The goal is to remove phosphorus. The source of the phosphorus is from exposed portions of the Hawthorne Group.
- The Hawthorne Group is phosphate rich and has been exposed due to channelization and erosion.

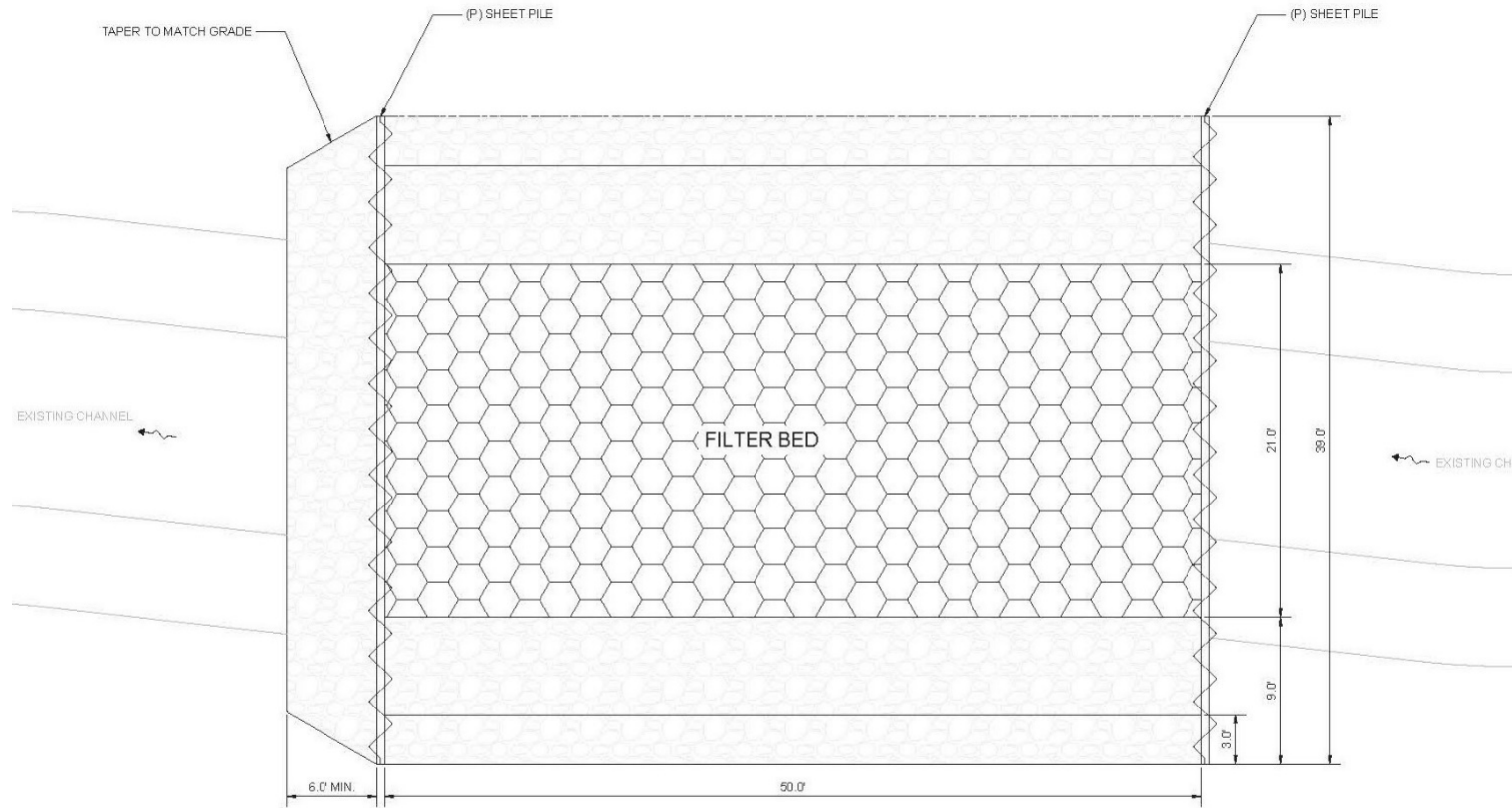
Little Hatchet Creek Erosion

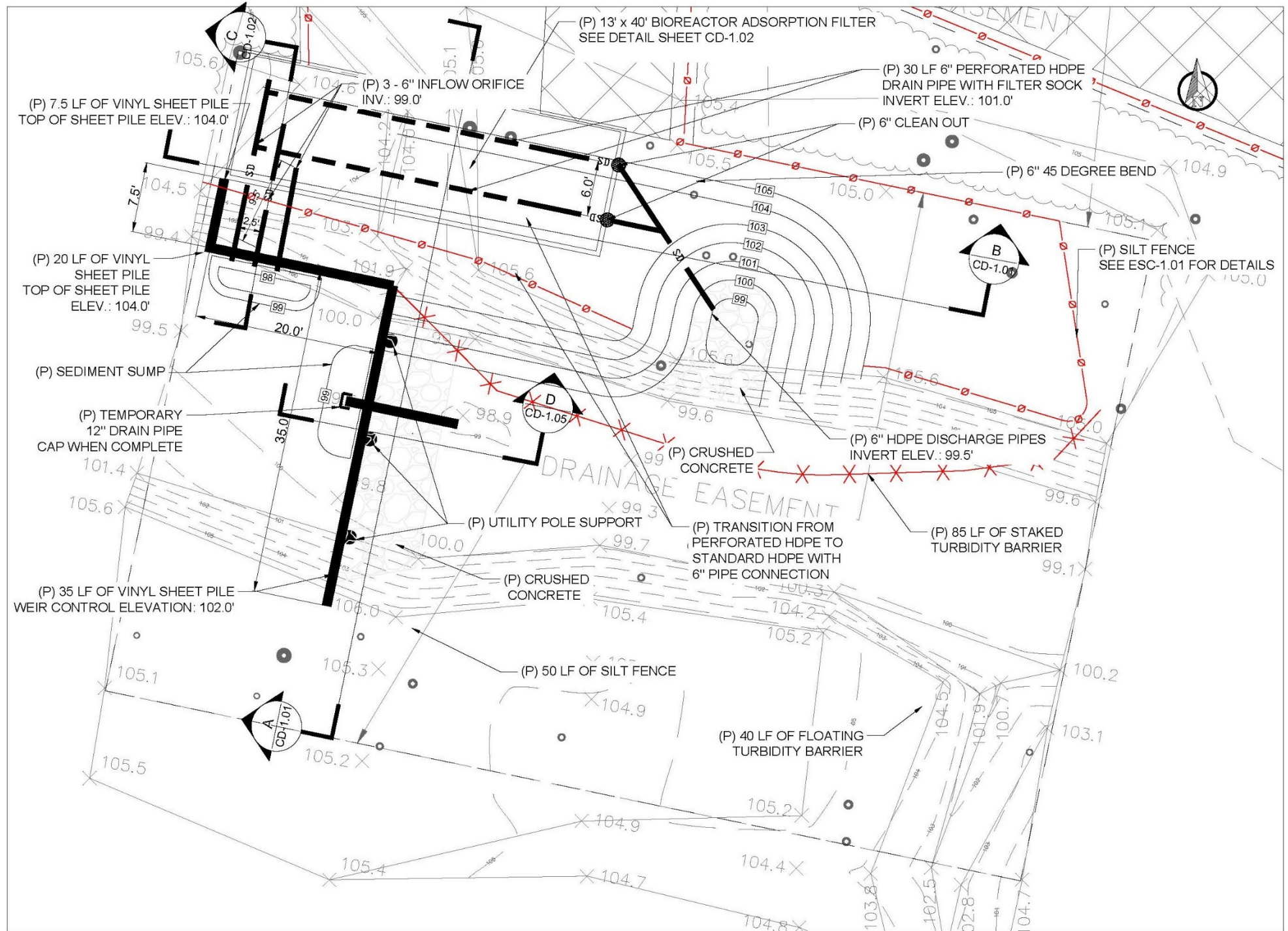


Little Hatchet Creek Weirs

- Over the past year the project has been permitted by SJRWMD and Army Corps of Engineers (ACoE).
- The ERP process required the County and City to form an inter-local agreement to be co-applicants.
- The ACoE process was briefly delayed when the Corps requested an archeological survey. Fortunately the State had already determined it wasn't needed.

The design of the weirs has significantly changed!





Sweetwater Preserve Parking Area

- The west trailhead for Sweetwater Preserve is located at the end of vacated section of SE 16th Ave.
- Runoff from the vacated road and intersection discharges into Sweetwater Branch.
- There are erosion problems at the outfall.

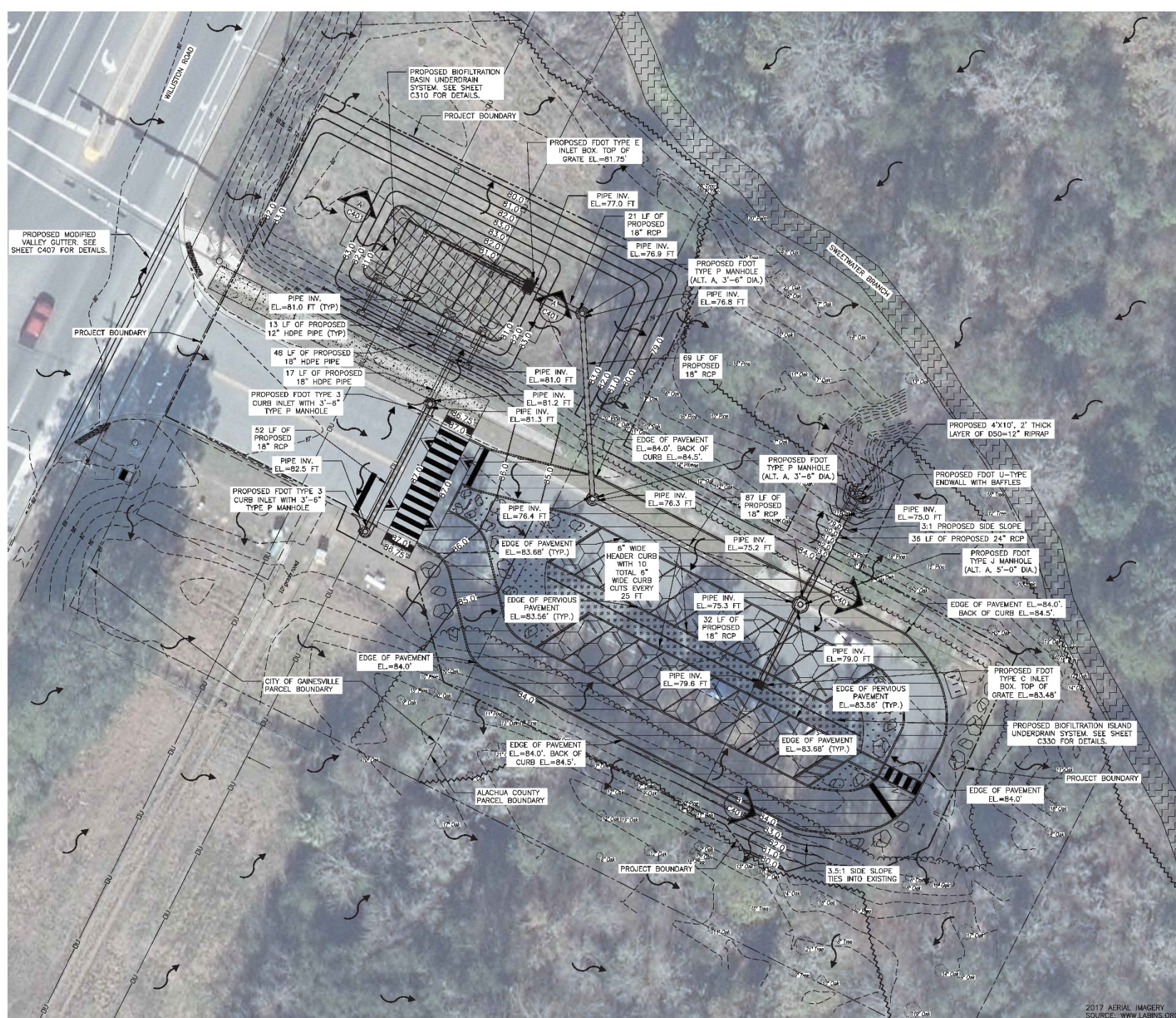


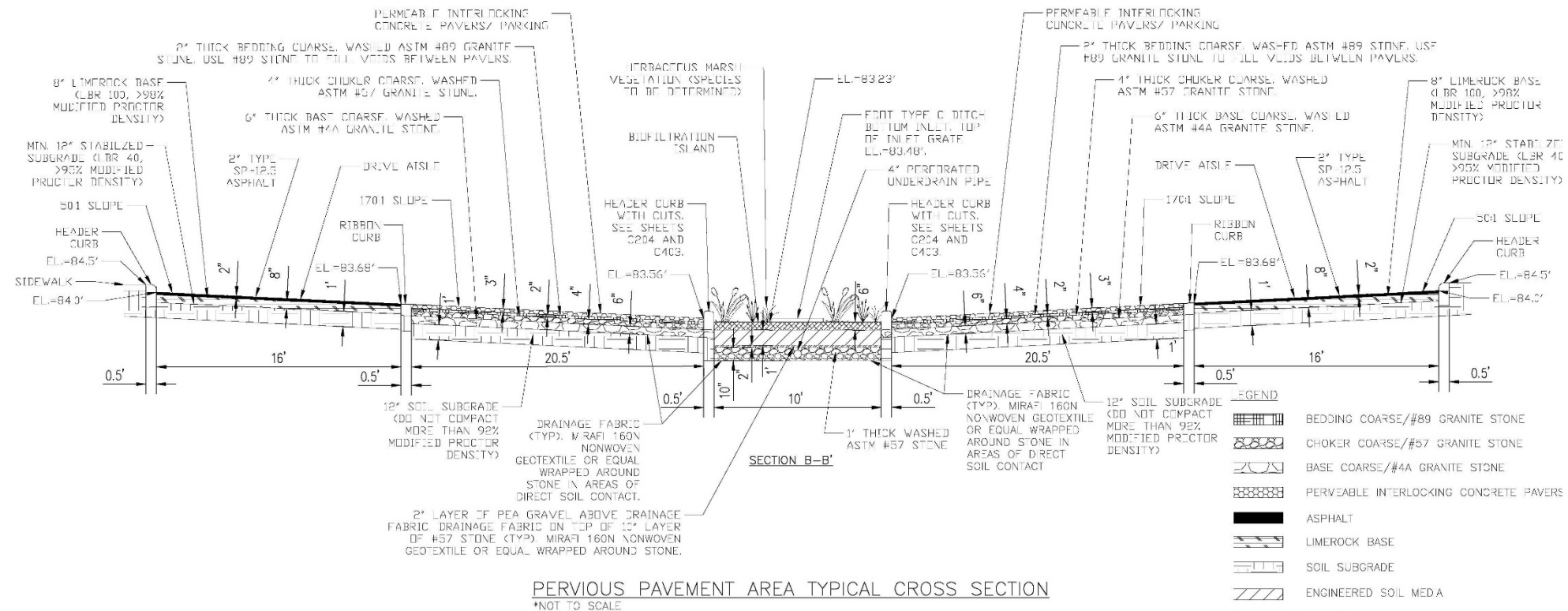
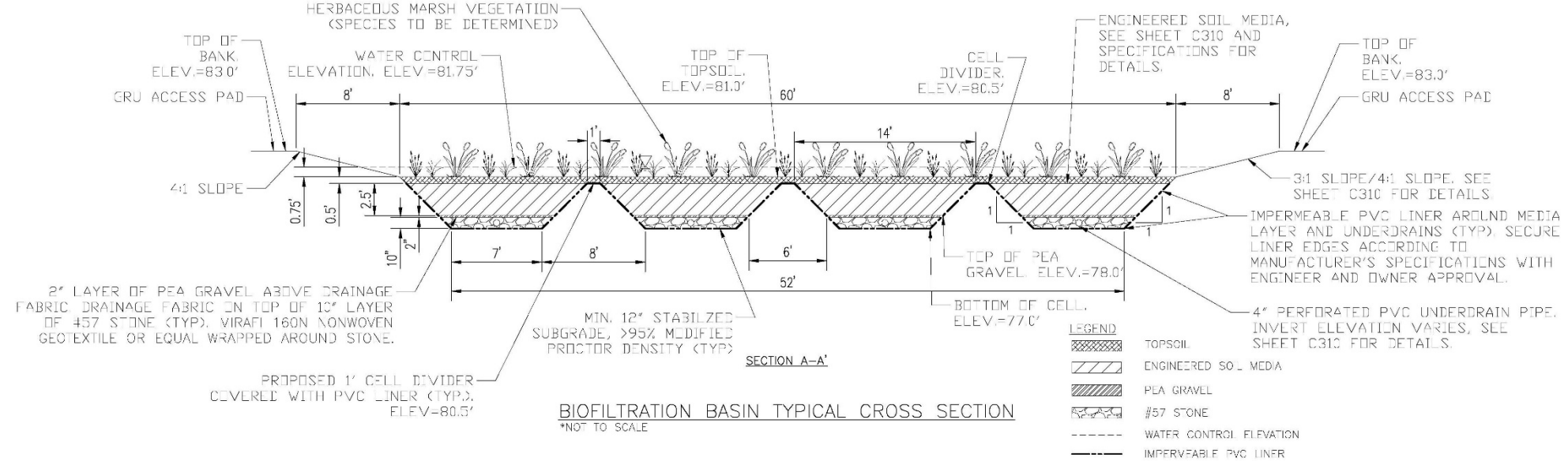
Sweetwater Preserve Parking Area



Project Goals

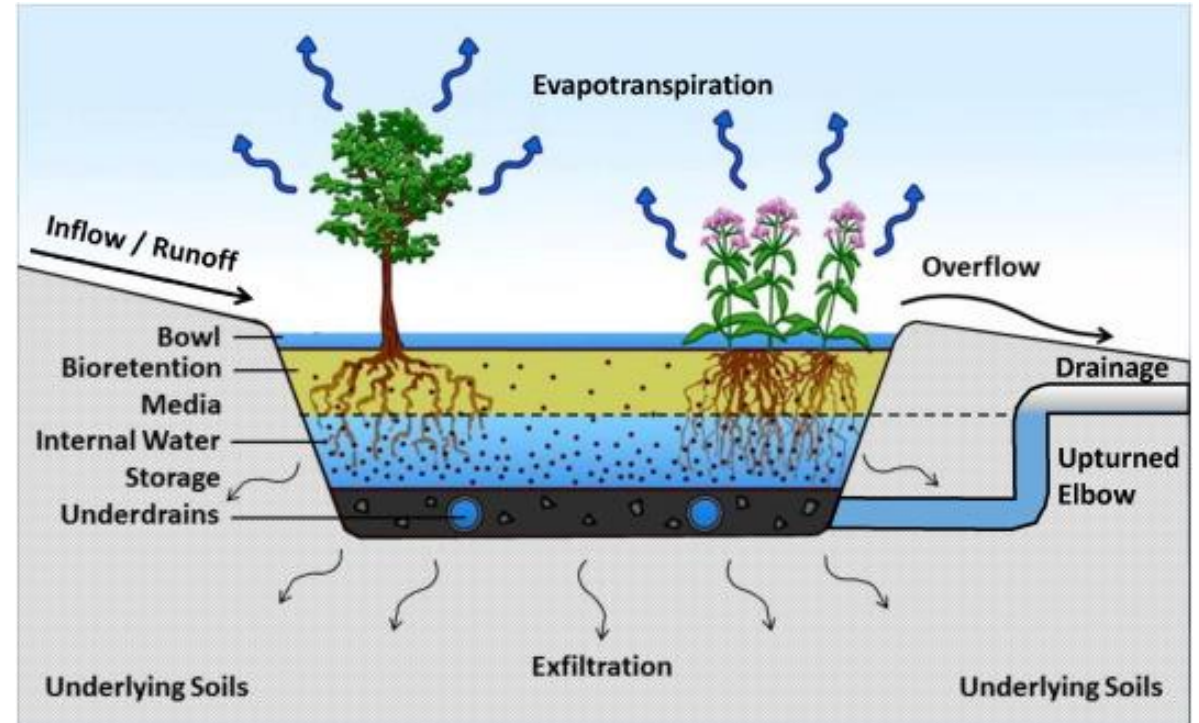
- Demonstration and research site for LID.
- Address the untreated runoff and erosion.
- Create a formal parking area.
- Integrate a future City multi-use trail between Depot and Sweetwater Wetland Parks.
- Allow GRU access to a section of power lines they currently cannot access.





University of Florida Research

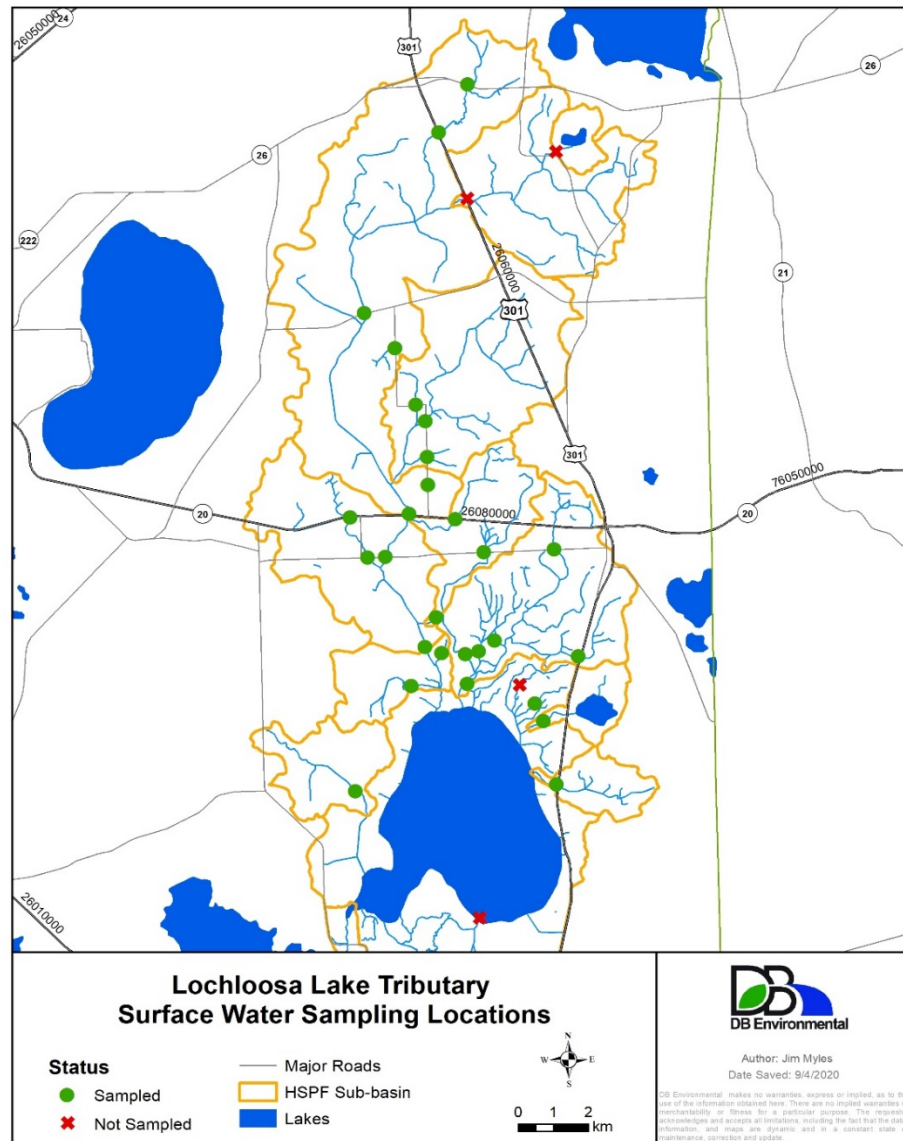
- A team lead by Dr. Eban Bean will be evaluating the pollutant removal efficiency of the biofiltration area.
- The biofiltration area is designed with four distinct internal cells. Two are “free draining” with native soil or a engineered soil. The other two use the same soil but are configured to have an internal water storage layer.



LochLoosa Lake Initiative, Phase 1

- Compared to Newnans Lake, we know little about potential nutrient sources for Lochloosa Lake.
- The County has hired DB Environmental to perform a nutrient source study focusing on surface sources.
- A literature review, wet season tributary sampling, rainfall sampling and soil sample collection has been completed.
- Dry weather tributary sampling, soil sampling on properties around the lake and lake sampling still to be done.

LochLoosa Lake Initiative, Phase 1



Newnans Lake Initiative, Phase 3

- Internal recycling on nutrients is a significant source in Newnans Lake.
- Without addressing the internal recycling it is not certain TMDL could be met.
- The County hired Wetland Solutions to conduct a feasibility study on a treatment wetland and other potential solutions.
- County will be meeting with FDEP, FWC, SJRWMD and City of Gainesville to review the study and determine next steps.

Thank You!

Stacie Greco

Shane Williams

Alachua County Environmental Protection

Sgreco@AlachuaCounty.us

eswilliams@AlachuaCounty.us

www.MyYardOurWater.org

www.AlachuaCountyWater.org

