



Statewide Springs Basin Management Action Plan (BMAP) Updates

Division of Environmental Assessment and
Restoration

Florida Department of Environmental Protection

October 27, 2020



Webinar Housekeeping

Outstanding Florida Springs Basin Management Action Plans (BMAPs) Public Webinar

Attendee Participation

Open your control panel.

Join audio:

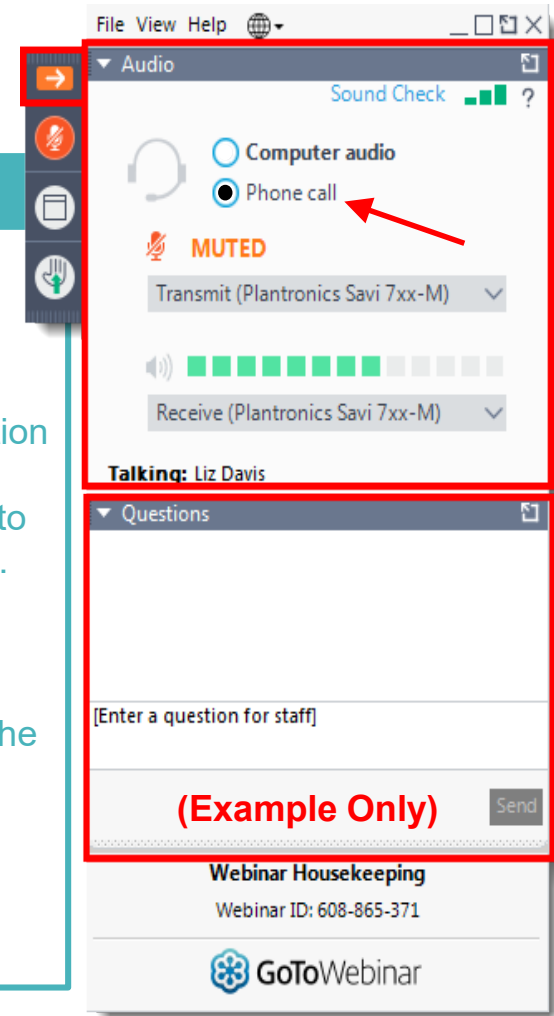
- Choose Computer Audio or
- Choose Phone Call and dial using the information provided with your registration

We expect a large attendance today; attendee audio will automatically be muted to prevent background noise from interfering with your ability to hear the presenters.

Submit questions and comments via the **Questions** panel.

If you are viewing this webinar as a group, please provide a list of attendees via the **Questions** panel. Time is limited today, so unanswered questions will be listed in the meeting summary, along with a response.

Note: Today's presentation is being recorded and will be provided on the ftp site after the webinar.





Agenda

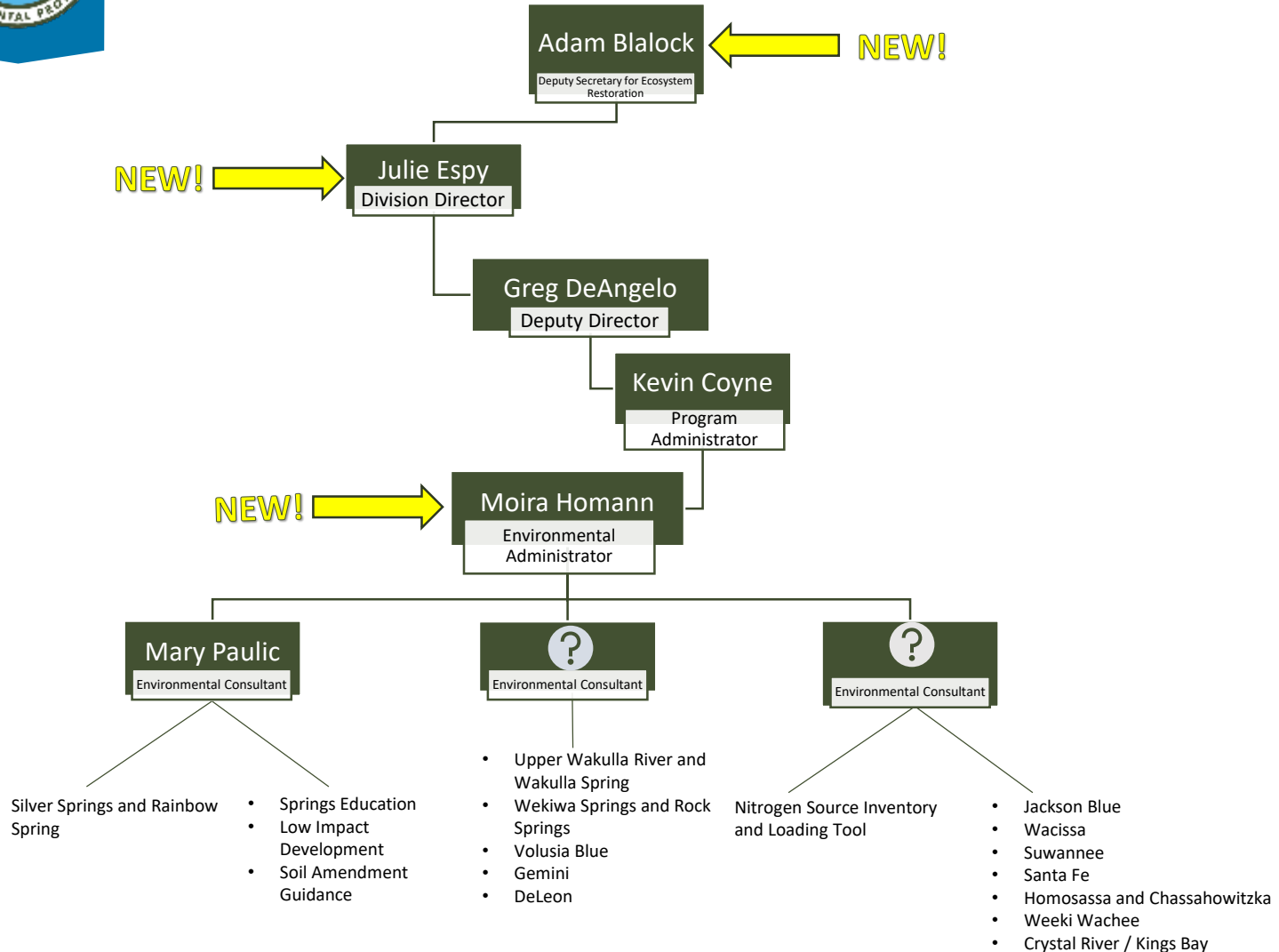
- DEP Staff Contacts/Organizational Chart
- BMAP Status Update
- Counties' Feasibility Analyses Update
- Funding Updates
 - Program funding updates
 - Project funding updates
- Project Requests/Annual Updates
- Reporting Requirements/Clean Waterways Act
- DEP Updates
 - Education efforts
 - Low impact development (LID) work
 - Soil amendment guidance





DEAR Org Chart/Contacts

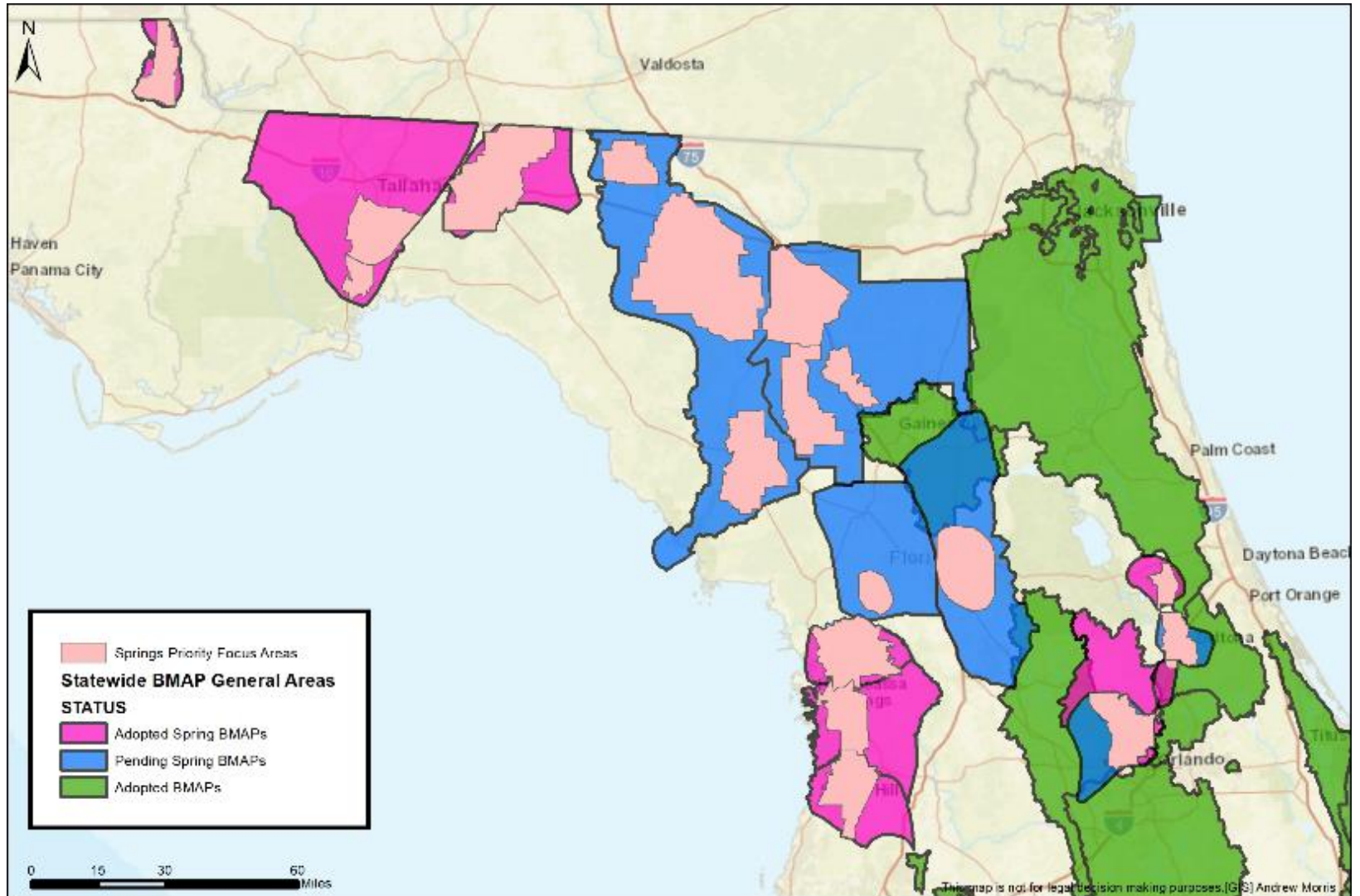
Springs BMAPs





Springs BMAPs

Adopted and Pending





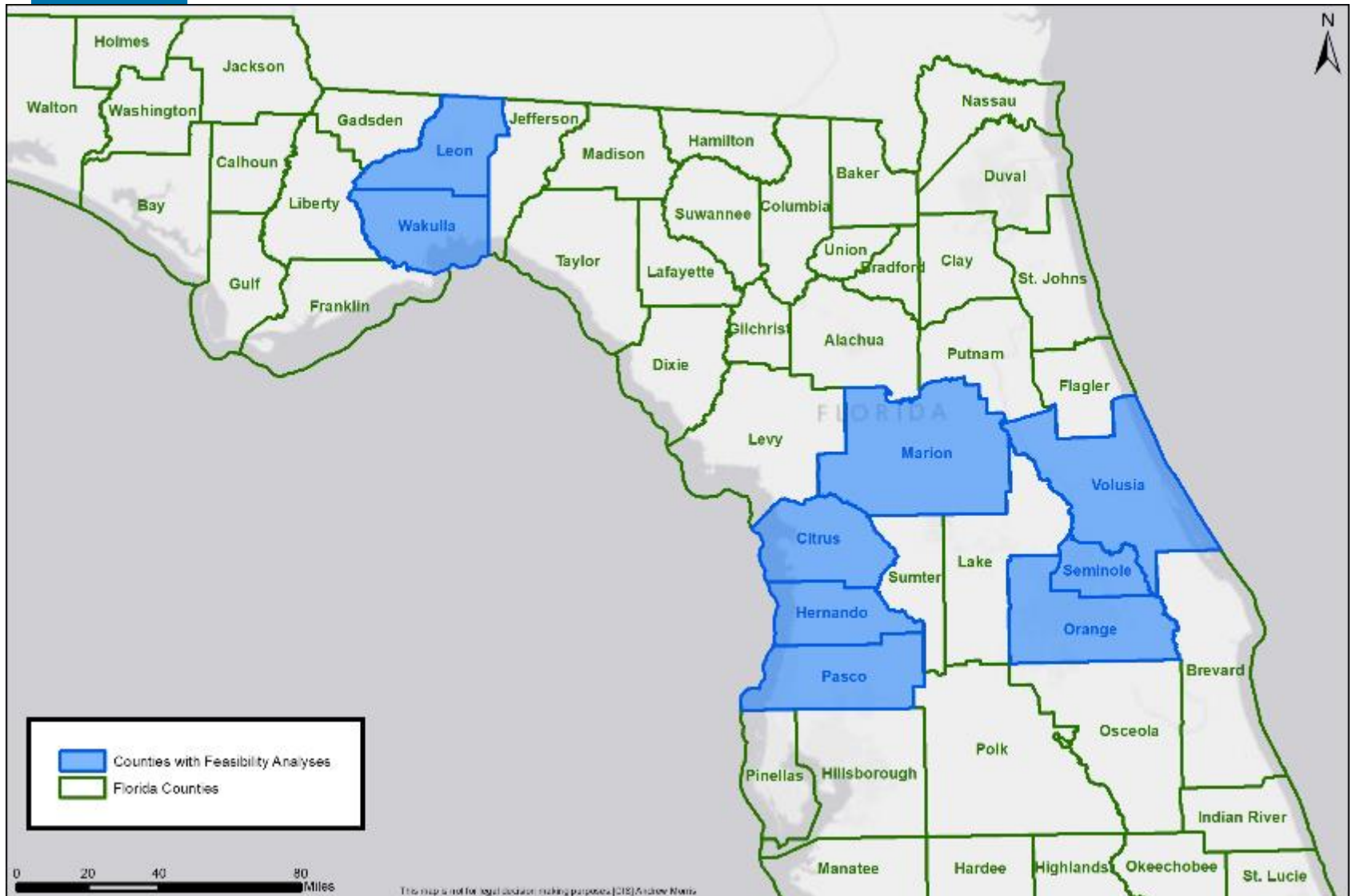
Florida Springs and Aquifer Protection Act

Sub-Sections 373.801– 373.813, F.S.

- Requirements for BMAPs for Outstanding Florida Springs (OFS)
 - Delineation of a Priority Focus Area (PFA)
 - Prohibited activities within PFAs
 - Fertilizer ordinance
 - Identification and estimated pollutant load of each point source or category of non-point sources
 - Onsite Sewage Treatment and Disposal Systems (OSTDS) Remediation Plan



Feasibility Analyses





Funding Updates

Program Funding Updates
Project Funding Updates





Program Funding

Septic Upgrade Incentive Program

- DEP allocated approximately \$10,437,352 to fund residential system upgrades for homeowners with conventional septic systems within a Springs BMAP Priority Focus Area (PFA)
 - 1,053 conventional systems were converted to systems with advanced nitrogen removal features
- No current specific Legislative appropriation for homeowner system upgrades
- DEP is exploring transitioning the septic upgrade program to the county governments.
 - Providing funding directly to interested counties



Program Funding

Water and Springs Restoration

- Grants for springs restoration and legislative water projects
- Springs projects are selected through a public process with the water management districts
- Legislative water projects are chosen by the Florida Legislature from community budget requests
- Eligible projects include:
 - Water quality improvement, sewer, land acquisition, onsite sewage treatment and disposal systems (OSTDS), agricultural best management practices (BMPs), and reuse water
- Springs Projects for 2020-2021 Funding





Project Funding

State Revolving Fund

- Florida's largest financial assistance program for water infrastructure,
 - Capitalized by federal grants through the U.S. Environmental Protection Agency (EPA)
- Provides low-interest loans to local governments to plan, design, and build or upgrade water, wastewater and stormwater facilities such as:
 - Wastewater collection and treatment
 - Water supply treatment, storage, and distribution
 - Reuse, stormwater, nonpoint sources, and green energy
- Clean Water and Drinking Water State Revolving Funds
 - Estimated \$270 million per year
 - Loan interest rates below market rates and vary based on economic standing of community
 - Loans can be made for planning, design, and/or construction
 - Small community wastewater construction grants





Project Funding

Nonpoint Source Funding

- Federal Clean Water Act Section 319(h) grants
 - Minimum 40% non-federal match
 - Not Eligible: Planning or design (may be eligible match)
- State Water-quality Assistance grants
 - “Shovel ready”, but no required match
 - No required monitoring
- Submit proposal anytime during the year. Primary review for funding periods are September/October and March/April
- Local and state governments (including water management districts) and public universities are examples of local groups eligible for funding





Project Funding

Eligible Nonpoint Source Projects

- Demonstration and evaluation of BMPs
- Nonpoint pollution reduction in priority watersheds (e.g., areas with water quality restoration plans, etc.)
Example includes treatment of impaired waters
- Green infrastructure/low impact development for stormwater
- Groundwater protection from nonpoint sources
- Public education programs on nonpoint source management ("319 Grant" only)
- Septic to sewer projects ("319 Grant" only)





Funding Contacts

Where to Find Information

- **State Revolving Fund:** floridadep.gov/wra/srf or contact
 - Clean Water Loans: Tim Banks, 850-245-2969, timothy.banks@dep.state.fl.us
 - Drinking Water Loans: Shanin Speas-Frost, 850-245-2991, Shanin.Speasfrost@dep.state.fl.us
- **Nonpoint Source Management Grants:** floridadep.gov/wra/319-tmdl-fund or contact
 - Amanda Peck, 850-245-2952, Amanda.Peck@dep.state.fl.us
- **Water and Springs Restoration:**
 - Sandra Waters, 850-245-2898, WSRP@dep.state.fl.us



Statewide Annual Report Updates

*Project Requests
Annual Updates*



Project Information

Collection and Credit Verification

- 2019 Statewide Annual Report is available:
 - <https://www.floridadep.gov/star>
 - Thank you to everyone who contributed their 2019 project information!
- 2020 Statewide Annual Report collection:
 - 2020 Project/program updates will be requested in November
 - Additional details may be required to meet Senate Bill 712 requirements
 - 2020 data priorities include~
 - Latitude/longitudes for project sites/treatment areas
 - Starting and completion year for the project
 - Filling in any applicable missing information
 - Funding plans for the next 5 years for wastewater and septic system projects
 - Information due back to DEP in January 2021



Senate Bill 712

The Clean Waterways Act



Senate Bill (SB) 712

Clean Waterways Act

- Legislation passed/signed in 2020
- Addresses multiple areas covered in BMAPs (e.g., agriculture, wastewater, funding)
- Focus on surface water BMAPs
- Similar language to requirements outlined in the Florida Springs and Aquifer Protection Act





SB 712

Clean Waterways Act

- Florida Springs and Aquifer Protection Act compared to the Clean Waterways Act (SB 712)
- *Similarities:*
 - Wastewater treatment plans
 - OSTDS remediation plans
 - Biosolids
- *Differences:*
 - Immediate OSTDS prohibitions
 - Reporting requirements





SB 712

Clean Waterways Act

- Clean Waterways Act (SB 712), items of interest:
 - OSTDS fast track approval process
 - Reporting requirement/wastewater projects – including costs
 - OSTDS program transfer
 - OSTDS location rules
 - Utility maintenance plans/rulemaking requirements





SB 712

Clean Waterways Act

- Clean Waterways Act (SB 712), other areas/sectors:
 - Agriculture
 - Increased reporting
 - Requirement for implementation
 - Development of regional projects
 - Water quality monitoring (DEP)
 - Stormwater rule updates (DEP)





BMAP Updates

Education efforts

Soil amendment guidance

*Managing Stormwater Runoff for
Sensitive Groundwater Areas (Low
impact development [LID]) Guidance*



Education Outreach

Springs Education Discussion

- BMAPs contain an education project
- DEP provided funding to local governments for springs education outreach efforts
 - 319 grants provided by Division of Water Restoration Assistance
- Informal discussion group started
 - Allows DEAR to learn about local government programs, as well as other DEP Programs, and improve coordination
 - Focus on stormwater management and septic systems



Education Outreach

Logistics

- Meet at least twice per year
- Expanded to include water management districts, state parks, IFAS Extension, and other local governments within springsheds
- Purpose is to provide updates, share materials and inform each other of our activities
 - Avoid contradictory messages
- Benefit is enhanced communication both inside and outside of DEP



Soil Amendment Guidance

- How to guidance on using organic amendments to enhance urban soils
 - Urban soils can be compacted with little organic matter – not good for growing plants
 - Can lead to excess irrigation and fertilization to grow plants
- Important in sensitive groundwater areas with sandier soils and faster infiltration rates
- Worked with University of Florida Program for Resource Efficient Communities
- Recommendations based on research at On Top of the World and other Central Florida communities



Guidance Details

- Primary audience is landscape industry and other related professionals
- Identify where amendments are useful
- Three major sections
 - Part I: Soils in the Urban Environment
 - Part II: Organic Soil Amendments
 - Part III: Implementation
- Long-term Considerations Section
 - Information gaps and limitations
 - Future research needs



Soil Amendment Guidance

How to get a copy

- The Guidance Document is available [here](#)
- The Field Sheet is available [here](#)

GUIDANCE FOR AMENDING URBAN SOILS WITH ORGANIC AMENDMENTS



October 12, 2020

PRACTICAL INSTRUCTIONS FOR AMENDING URBAN SOILS

Avoid scheduling compost amending on days when significant rainfall is possible, as this can cause washout or erosion where concentrated runoff occurs.

PREPARING THE AREA TO BE AMENDED

1. Amending soils should not occur until all on-site construction traffic has ended. All building construction, including outdoor pavement, and installation of major utilities should be completed. Installation of irrigation lines and components should occur after amending is complete to avoid risk of damaging irrigation lines during tilling.
2. The soil surface should be graded smooth and free of any foreign debris, trash, or rocks larger than 2 inches.
3. It is recommended that irrigation components, irrigation installation equipment, and sod be staged on-site in preparation to install irrigation system and lay sod as soon as possible after amending the soil.

TURF AREAS

Apply Soil Amendment to Areas to be Sodded:

1. Using a small front-end loader or spreader, compost should be at a rate of 4 yd³ / 1,000 ft², which is a depth of 1.3 inches.
2. Even out any shallow or deep compost areas to ensure even
3. Spot check the material depth with a ruler to check that the soil should be visible.
4. Visually assess that compost has an even color and texture
5. When using mature compost, it is not necessary to add fertilizer after initial incorporation.

Incorporate Soil Amendment



spread evenly over the surface (Figure 10)

incorporation (Figure 11).

material is 1 to 2 inches. No areas of bare

across the amending area.

as nutrients in compost are most available

Figure 1. Spread compost with front-end loader.
Credit: UF/PREC.



Managing Stormwater Runoff

Sensitive Groundwater Areas Guidance

- Develop guidance document for sensitive groundwater areas
- Working with UF Program for Resource Efficient Communities
 - Just signed agreement within the past month
 - Estimate complete draft end of 2021
 - Part of larger project to develop LID concepts across Florida
- UF created a similar guidance document for Southeast Florida coral reef areas
- Low Impact Development (LID) basis



What is LID?

- Also called Green Infrastructure or Green Stormwater Infrastructure
 - Use of plants, soils, and pervious material to control stormwater
 - Overall reduce use of irrigation water and fertilizer





LID Benefits

- Stormwater Treatment (nutrient reduction)
- Flood Control
- Neighborhood Improvement
 - Beautification
 - Recreation
 - Increased Property Value
 - Increased Safety (real and perceived)
 - Reduced Street Heat
 - The “Halo” Effect
- Improved Community Health (mental/physical)





Challenges

- Major premise of managing stormwater is reduce runoff
 - Infiltration important, water out of sight
 - But want water to be clean before discharge to aquifers
 - Identify best options for stormwater management where groundwater contamination is a concern



Purpose of Guidance

- Idea came about through discussion with several local governments and water management district to identify their needs and expectations
- Local governments have the role of reviewers and shapers of guidance
 - This is a tool or set of references for local implementation
- Expected product
 - Literature review section
 - Full vetting of at least 5 selected techniques



Thank you!

Questions?



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