

Florida Department of Environmental Protection (DEP)
Suwannee River Basin Management Action Plan (BMAP)
Question and Answer (Q&A) Summary
Public Meeting on May 24, 2024
10:00 am – 11:24 am
Via GoToWebinar

Attendees

Richmond Abellera, DEP
Eesa Ali, Applied Sciences
Mitchell Allen, State Representative Allison
Tant's Office
Stephanie Armstrong, SRWMD
Kelly Aue, University of Florida
Nicki Bailey, Levy County
Lisa Bally, ATM
Emily Beach, University of Florida
Evelyn Becerra, DEP
Connie Becker, DEP
JP Bell, Florida Realtors
Marcelo Blanco, DEP
Eric Blount, Palm Bay
Del Bottcher, SWET
Amy Brown, SRWMD
Lynette Brown, BDA
Tiffany Busby, Wildwood Consulting
Andrew Carswell, Levy County
Leidyane Carter, SRWMD
Laura Catlow, Citizen
Stacy Cecil, SJRWMD
Unknown, The Florida Channel
Sandra Chupinsky, DEP
Daniel Corbett, DEP
Chris Dawson, Gray Robinson
Mary Diaz, SRWMD
Paul Donsky, University of Florida
Chloe Dougherty, Florida Springs Council
Kim Duffek, DEP
Michael Dukes, University of Florida
Douglas Dycus, FDOT
Kristine Eskelin, SRWMD
Amanda Exposito-Ferree, Atkins Realis
Chris Fagerstrom, Pond Co.
Chris Farrell, Audubon Florida
Jessica Fetgatter, DEP
Casey Fitzgerald, Citizen
Sher Gache, Citizen

Meriah Gannon, CDM Smith
Diane Garte, Citizen
Tina Gordon, Wildwood Consulting
Trisha Green, DEP
Jade Greene, DEP
Roxanne Groover, FOWA
Sam Hankinson, DEP
Kira Hansen, Kimley-Horn
Madeline Hart, FDACS
Kenny Hayman, DEP
Janet Hearn, ATM
Stacey Hectus, Levy County
Ray Hodge, United Dairy Farmers
Robin Holland, FDACS
Moiria Homann, DEP
Jason Icerman, City of Tallahassee
Merrilee Jipson, Citizen
Andrew Johnston, Citizen
Dustin Jones, FDOH
Chandler Keenan, DEP
Chuck Key, Citizen
Sean King, SRWMD
Scott Knight, Wetland Solutions
Jacob Landfield, SFWMD
Greg Lang, Mittauer & Associates
Celeste Lyon, RES
Leroy Marshall, SRWMD
Max McAmis, Pasco County
Kelsey McDaid, University of Florida
Morgan Morrow, FDACS
Jim Myles, DB Environmental
Ryne Nimmo, DEP
Trevor Noyes, NFPS
Brittney O'Neal, FDACS
Alan Obaigbena, Citizen
Kevin O'Donnell, DEP
Michael Osborn, Lake County
Robert Palmer, Citizen
Lindsey Pavao, Alachua County

John Petrohovich, Mittauer & Associates
Henry Phillips, Citizen
Elizabeth Pickett Gray, Citizen
Nicolas Pisarello, ATM
Paul Plourde, Citizen
Marty Proctor, Citizen
John S. Quarterman, Citizen
Lorna Radcliff, SRWMD
Joanna Reilly-Brown, Alachua Conservation
Trust
Alden Rosner, Suwannee Parks
Kristin Rubin, Citizen
Kimberly Shugar, DEP
Ryan Smart, Florida Springs Council
Patricia Spellman, University of South Florida
John Spencer, Geosyntec

Jennifer Thera, FDACS
John Thomas, Citizen
Debby Tipton, DEP
Joanne Tremblay, Citizen
Jonathan Turner, FDOT
Shreya Vuttaluru, Tampa Bay Times
Brandon Wanner, Stantec
Ken Weaver, DEP
Stefani Weeks, Holloway
Tanya Welborn, DEP
Brenda Wells, Florida Springs Council
Benita Whalen, Dispersed Water
Kim Wheeler, Citizen
Barton Wilder, FDACS
Kevin Wright, Oak River Farms
Sarah Younger, Citizen

Suwannee River BMAP Overview

Q: Are written public comments and questions that were posted going to be addressed today?

A: We will be specifically addressing questions that are directly related to the material presented today.

Q: Is this the only public meeting scheduled for this basin before the new BMAP is determined?

A: No, DEP will have additional public meetings for this and the various other springs BMAPs.

Q: Can you repeat what “DEAR” represents?

A: DEAR is the Division of Environmental Assessment and Restoration within DEP.

Q: On the charts shown, why does the nitrate concentration data stop in late 2020 or early 2021? Where is the most recent data?

A: The charts shown in the presentation represent two decades of data in the Impaired Waters Rule (IWR) database, which is used for assessments. More recent data is available in the Watershed Information Network (WIN) database.

Q: Is the WIN database available if someone wanted to do a comparison over time? How difficult is WIN to use if you are not a professional?

A: Yes, the WIN database is user friendly. If you have issues, you can reach out to DEP staff for assistance. Also, feedback on how to improve WIN is always welcome.

Q: What is the time period between samples provided in WIN and what is the frequency?

A: For questions about WIN, please contact Justin Nelson at Justin.M.Nelson@FloridaDEP.gov. He is the WIN Coordinator for the northeast region of the state.

Nitrogen Source Inventory Loading Tool (NSILT) Results

Q: A portion of the Floridan Aquifer recharge area lies in Georgia. Is any attention being given to nitrate sources beyond the Florida-Georgia state line?

A: Being in Florida, we have only evaluated the Florida component of the basins. DEP has not looked at incorporating any loading estimates coming from Georgia. We need to address the source loading from Florida.

Q: Where does the percentage of load impacting the spring come from for each recharge area (high, medium, low)?

A: The recharge rates are consistent with what was used in the previous NSILTs and are based on literature review that considers aquifer confinement, vulnerability, and connectivity to the spring head.

Q: How are the surface water map perimeters determined and why are some connected watersheds, including the Ocklawaha River, not included in the BMAP perimeter boundary?

A: The Upper Ocklawaha River Basin has its own BMAP that provides for the protection and restoration of those surface waters.

Q: Have the attenuation assumptions changed from the 2018 analyses?

A: The attenuation rates have remained the same in this BMAP, with the exception of the onsite sewage treatment and disposal systems (OSTDS) (or “septic systems”) attenuation factor being updated based on Florida-specific studies and feedback from the DEP OSTDS group.

Q: Are the loading rate units in total nitrogen?

A: The loading here is based on nitrate being the primary form of nitrogen.

Q: Is geographic information systems (GIS) information available for the NSILT analysis?

A: Please send an email to BMAPPprogram@FloridaDEP.gov letting us know which files you are interested in, and we can provide them to you.

Q: Why would livestock waste (90%) attenuate more than farm fertilizer (80%)?

A: Discussion with Florida Department of Agriculture and Consumer Services (FDACS) indicated that livestock waste is an organic source with less movement through the soil column.

Q: How are contributions of nutrient loads considered as the Santa Fe River flows into the Lower Suwannee?

A: For the NSILT loading, we are assessing the groundwater loading at the spring vents, so the surface flows are outside the scope of the NSILT process. There is a Santa Fe River BMAP and if there is an interconnection between the rivers, reductions done for the Santa Fe BMAP will also benefit the Suwannee River watershed.

Q: Regarding DEP-permitted dairies and wastewater facilities, is dairy loading calculated as dairy or wastewater?

A: Loads from DEP-permitted dairies are considered dairy contributions. The NSILT considers confined animal feeding operations (CAFO)-permitted dairies as well as non-CAFO dairies. Different evaluations are used for non-CAFO dairies that do not have nutrient management plans (NMPs).

Q: How has the NSILT predicted the nitrogen loads to groundwater compared to the measured loads at the spring vent to see how they compare?

A: The NSILT does not model groundwater transport and spring vent loading, it is a GIS based tool to estimate loading from various anthropogenic sources. We have done a spring vent analysis review, but it is difficult to compare the two directly due to unknown transport dynamics, lag time, legacy loading, and other complex dynamics of the groundwater systems. The NSILT and spring vent analysis together allow us to estimate loading to groundwater and needed reductions at the spring vent.

Q: Can you go into more detail on how NMPs are used to evaluate nitrogen from dairies?

A: The NMPs provide details on the loading expected from animals on site and waste handling practices. The plans determine the expected loading left and applied at the end of the waste handling practices. These factors were used to directly estimate the loading from CAFO dairies.

Q: Have the atmospheric depositions calculations in and around poultry farms shown higher nutrient loading in surface waters and the spring vent discharges? Has clear cutting had a calculation in atmospheric deposition?

A: The atmospheric deposition data that was used for this analysis will capture atmospheric deposition from the different sources, such as poultry, throughout the basin.

Spring Vent Load Analysis Results

Q: Since agriculture is the source of the greatest loading, why are the reductions not greater? The 10% to 15% reduction for an industry that is a primary contributor seems low.

A: While agriculture is a large contributor in this area, all sources need to be addressed. Producers are required by statute to enroll in best management practices (BMPs) or perform monitoring; the 10% to 15% reduction estimate is related to BMP enrollment. There are several other initiatives that DEP will be using to reduce agricultural loading, such as regional projects and cost-shares. Those other mechanisms will help further address fertilizer loading beyond those estimated from BMP enrollment.

Q: DEP mentioned meeting with the different entities. Will DEP work with individual producers?

A: DEP will be coordinating that with FDACS who have working relationships with producers, as well as the water management districts and University of Florida Institute of Food and Agricultural Science (UF-IFAS) to determine the best strategies to meet those allocations.

Next Steps - BMAP Updates

The meeting adjourned at 11:24 am.