

Orange Creek Basin Management Action Plan (BMAP) Annual Meeting
Florida Department of Environmental Protection (DEP)
June 20, 2022, via GoToWebinar
1:30 pm – 3:08 pm

Attendees

Richmond Abellera, DEP	Moira Rojas Homann, DEP
Suzanne Archer, SJRWMD	Lee Hollimon, Tidal Vision USA
Lisa Bally, RES	Tom Kallemeyn, DEP
Steve Beck, FWC	Chandler Keenan, DEP
Connie Becker, DEP	Jen Lomberg, Matanzas Riverkeeper
Tonya Bennett, Citizen	Lori McCloud, SJRWMD
Kayla Brunson, DEP	Nicole Morgan, DEP
Tiffany Busby, Wildwood Consulting	David Moritz, Citizen
Lauren Campbell, DEP	Gail Mowry, Gainesville
Mike Collazo, Florida Senate	Jim Myles, DB Environmental
Kamri Colvin-Reece, DEP	Alan Obaigbena, FDOT
Dean Dobberfuhl, SJRWMD	Gregory Owen, Alachua County
Pamela Dugan, Eutrophix	John Petrohovich, Mittauer and Assoc.
Douglas Dycus, FDOT	Derek Reiners, FGCU
Julie Espy, SAS	Charles Shinn, Florida Farm Bureau
Chris Fagerstrom, Pond & Company	Stacey Simmons, FDACS
Jessica Fetgatter, DEP	Jennifer Thera, FDACS
David Frady, DEP	Tiffany Trent, SJRWMD
Samuel Hankinson, DEP	Diana Turner, DEP
Kenneth Hayman, DEP	Jonathan Turner, FDOT
Janet Hearn, ATM-Geosyntec	Shane Williams, Alachua County
Cori Hermle, FDACS	Eden Yarborough, SJRWMD
Robin Holland, FDACS-Dept. of Forestry	

Welcome

Tiffany Busby welcomed everyone and went over the GoToWebinar features. Tiffany Busby briefly introduced Jessica Fetgatter, the DEP Coordinator for the Orange Creek BMAP. Tiffany Busby also mentioned that the manager at DEP is Moira Homann. Jessica can be reached at 850-245-8107 or via email at Jessica.Fetgatter@floridadep.gov. Tiffany noted that the presentation today and the meeting summary will be posted. A follow up email to this meeting will be sent with a link to the site where the meeting materials are available.

Orange Creek BMAP Background & Update

Jessica reminded everyone that the initial BMAP adopted was in 2008 and the most recent amendment was adopted in 2019. She showed a map of the basin and the waters with nutrient total maximum daily loads (TMDLs) being implemented in the Orange Creek BMAP. There are also some bacteria impairments. Jessica reviewed the summary of progress based on the reporting period through December 2021. Jessica showed a table with the total estimated reductions based on the completed BMAP projects through 2021. The

numbers in the table showed the reductions for Lake Wauberg, Lochloosa Lake, Newnans Lake, Orange Lake, and Alachua Sink. She also showed a table with the number of projects that have been completed, ongoing, planned, and underway within the Orange Creek BMAP database.

Jessica showed the DEP Story Map for Orange Creek. She added that the current Story Map posted on the DEP website is based on the project information in the Statewide Annual Report (STAR) 2020. The updated Orange Creek story map will be posted by July 1st with the new information through 2021. The site is here:

<https://fdep.maps.arcgis.com/apps/MapSeries/index.html?appid=5843ed77913441019e2f560352c9cbaa>. Jessica noted that in the update, monitoring information has been added that shows the surface water quality stations and the flow stations within the basin.

STAR Updates/2021 and 2022

Jessica explained that there is an additional story map for the STAR that is updated each year. The report is posted here: <https://floridadep.gov/STAR>. Like the Orange Creek story map, the current STAR story map is through 2020. By July 1, the new STAR story map will be posted that includes the project information through December 2021.

For STAR 2021, the data through 2021 were collected from local entities. In November 2021, a request to review the project data was sent out and the due date for responses was January 14, 2022. The report was compiled and by July 1, 2022, the report will be submitted to the Governor and Florida Legislature and web posted.

The STAR process began in 2015 when all the BMAP updates were compiled into one report. In 2021, an online portal was created to collect and update project information. A pilot version of the portal was tested starting in November 2021. For STAR 2022, all entities will use the portal to review and submit project updates. To access the project data, an FDEP Business Portal account and login is needed. Jessica urged everyone who will be editing or updating BMAP project information to sign up for an FDEP Business Portal login now and no later than July 31, 2022. This login will provide access to the BMAP project data when the portal reopens.

Jessica added that portal training will be held in October and the portal will re-open in mid-November for updates. The STAR 2022 updates are due no later than January 13, 2023, and all updates will be made in the DEAR – Restoration Project Data Portal. If you do not already have an FDEP Business Portal login, you can create one here:

<https://www.fldepportal.com/DepPortal/go/home>. Jessica noted that she needs to know if you have staff that need access to the portal so that they are part of the list of people that are granted permission to the project data.

Clean Waterways Act Requirements

Jessica explained that the Clean Waterways Act requires that DEP incorporate local wastewater treatment plans and onsite sewage treatment and disposal system (OSTDS) remediation plans into all nutrient BMAPs by July 1, 2025. Jessica added that DEP held a

statewide webinar a few months ago to review these requirements and request that local entities use existing information, collect new information, and/or provide these plans to DEP prior to the deadline. Jessica noted that the webinar materials are available online here, including the presentation materials and the recording of the webinar:

http://publicfiles.dep.state.fl.us/DEAR/BMAP/2025%20BMAP%20Updates/Meetings/2022/Clean%20Waterways%20Act_WWTF%20and%20OSTDS%20Requirements_March%2031/.

St. Johns River Water Management District (SJRMWD) Updates

Tiffany Trent provided a water quality monitoring update on the Orange Creek Basin. Tiffany Trent noted that the monitoring focuses on total nitrogen (TN), total phosphorus (TP), and chlorophyll-a. The update highlights water quality in three lakes: Newnans Lake, Lochloosa Lake, and Orange Lake. Arithmetic means were used as each lake had samples collected in every quarter. The harmful algal bloom (HAB) data were collected via the DEP HAB website.

Tiffany Trent reviewed the TMDLs and whether the lakes met the goals. Lochloosa Lake met the TMDL TP and chlorophyll-a target in 21021. Newnans Lake and Orange Lake were close to meeting the TP and chlorophyll-a targets in 2021 but did not meet them. While Orange Lake does not have a TN target, Newnans Lake and Lochloosa Lake have TN TMDLs. Neither Newnans Lake nor Lochloosa Lake were close to meeting their TMDL targets, respectively.

Tiffany Trent reviewed the TP concentrations for each lake. She also reviewed the annual average chlorophyll-a concentrations.

Q: Chandler Keenan asked is there a driver for the trend of large increases in 2006-2011.

A: Tiffany Trent responded that she was not sure, but we could investigate that question.

Tiffany Trent noted that DEP has a nice website on HABs. The most recent data are available at this website:

<https://fdep.maps.arcgis.com/apps/webappviewer/index.html?id=a91827d2b4fc4b739b999cf3c99307f1>. The older HAB data are available here: <https://floridadep.gov/dear/algal-bloom/content/algal-bloom-sampling-results>. Tiffany Trent noted that if any knows of prior data to the data on the DEP site, please let her know. She noted that two samples taken in Orange Lake in March 2022 had microcystin toxin levels exceeding the EPA recreational limits of 15 parts per billion (ppb). No algal samples collected in 2021 had detectable levels of microcystin, cylindrospermopsin, anatoxin, or nodularin.

She provided a water quality summary that noted from 2020 to 2021 the TP, TN, and chlorophyll-a levels have improved in Newnans Lake, Lochloosa Lake, and Orange Lake. The TMDLs were met for TP and chlorophyll-a in Lochloosa Lake. Newnans Lake and Orange Lake were close to meeting the TP and chlorophyll-a TMDLs. As Orange Lake had elevated levels of microcystin in the spring of 2022, elevated chlorophyll-a values are suggested over the 2021 concentrations.

Tiffany Trent reviewed the issues with the Orange Lake Weir at U.S. 301. For some time, it was unclear to whom the weir belonged – SJRMWD, Alachua County, Florida Department of

Transportation (FDOT), DEP, or the Florida Fish and Wildlife Commission (FWC). It was determined that DEP owns the weir. The weir does need to be repaired or replaced.

The SJRWMD has also reviewed areas of interest around Orange Lake to assess whether we should add another foot height to the weir. Since the weir isn't operable right now, it's hard to tell how it would behave when working properly. If the weir was raised another foot, there are a few residential, low-lying locations that could be affected by raising the weir. The sink hole on the southwestern side of the lake has been thought to replenish the Silver River and so there is work to determine whether the sink hold is connected. These are items the SJRWMD is investigating.

Tiffany Trent showed the stage levels and the mean daily stages on the various lakes. The date of Hurricane Irma (2017) was marked which explains the increase in water levels across all the lakes after the storm. The orange dotted line is the Orange Lake Weir and the solid orange line represents the Orange Lake levels. An inset graphic showed where the Orange Lake water level could rise if the weir height would be increased by one foot. Since the lake level is less than recent water levels, it does not appear that there would be negative effects from raising the weir. Some photos were shown of properties at similar lake levels.

In the Orange Lake Restoration Area, in 2021 large floating vegetation islands were harvested along with an assessment of the cost effectiveness of material and thereby nutrient removal. The cost estimates are \$1,313/metric ton (MT) of TN and \$94,574/MT of TP.

Florida Department of Agriculture and Consumer Services (FDACS) Updates

Cori Hermle provided the updates for agriculture implementation in the BMAP.

Agricultural Best Management Practices (BMPs)

Cori explained that agricultural BMPs are management strategies on the landscape. These are based on the best available science and technology. The FDACS BMPs are developed in consultation with DEP staff. These BMPs must balance production and water resource protection. The benefits that may result from BMPs include increased efficiencies and conservation and protection of water quality, among other benefits.

FDACS Role in BMP Implementation

Then, Cori noted that FDACS develops BMPs and adopts them as rules. FDACS also assists producers with BMP enrollment. The agency also identifies and supports targeted cost-share of select BMPs and they fund research. There are multiple adopted BMP manuals for different commodities. The producer options are to enroll in the BMP program under the correct manual or follow a prescribed monitoring program at the producer's expense.

Enrollments within the Orange Creek BMAP

Within the Orange Creek BMAP area Cori stated that 39 % of all agricultural acres are enrolled. The total agricultural lands are 68,512 acres and the enrolled acres are 26,695 acres. Around 72 % of all irrigated agricultural acres are enrolled. Cori showed a graph that demonstrates how land uses that were identified as agricultural acres may no longer be actual agriculture because they were developed into residential or commercial uses. After separating these unenrollable acres, FDACS reports the enrolled acres versus the unenrolled acres. These are summarized in

an annual report due to the legislature by July 1 each year. The Florida Statewide Agricultural Irrigation Demand (FSAID) VIII Geodatabase was used to identify the agricultural acres. Cori noted that state-owned properties are set aside. Some agricultural land uses are not considered to be enrollable. Unlikely enrollable acres may be timberland, aquaculture, small slivers, etc.

FDACS reviewed the potentially enrollable acres that are not yet enrolled. There are some staffing shortages within FDACS, so it is important to review how the unrolled acres are structured; many of the parcels have small acreages. There is more value in enrolling the parcels with larger acres to achieve more acres enrolled.

BMP Implementation Verification (IV)

Cori stated this IV process is the method by which FDACS staff visit the sites and verify that the growers are implementing the BMPs for which they enrolled. The Clean Waterways Act (also known as Senate Bill 712) provided further requirements. This legislation requires IV site visits every two years. As of June 1, 2022, 91 % of the site visits have been completed. The law also requires the collection, review and retention of nitrogen and phosphorus fertilizer records. There is a nutrient application record form (NARF) that is used for reporting.

Outreach is also an important provision to implement the Clean Waterways Act. FDACS has produced a frequently asked questions (FAQ) document, videos, and continued collaboration with UF-IFAS Extension to raise awareness.

Research Program

Cori added that FDACS also maintains a research program. You can visit the FDACS website for further information about those projects here: <https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Best-Management-Practices/BMP-Research>. Many of the projects deal with nutrient management.

2021 FDACS Legislative Report

Next, Cori noted there is an annual FDACS legislative report; the 2021 report will be posted on the FDACS website by July 1, 2022. She reviewed the general contents of the report and noted there is an interactive story map also. For the report, see <https://www.fdacs.gov/Divisions-Offices/Agricultural-Water-Policy>.

Cori can be reached by phone 850-688-6156 or via email at Corinne.Hermle@fdacs.gov.

Unenrolled Agricultural Producer Enforcement

David Frady explained that DEP is in charge of enforcement action on those parcels that are not enrolled in agricultural BMPs where they are required by the BMAP. David reviewed the general process for working with an enrolled parcel and getting them into compliance. FDACS provides to DEP a list of parcels and case files of those parcels that FDACS believes are not enrolled. One of the difficulties is that the local property appraisers' sites are out of date. There are many sales of agricultural lands. The big first step is verifying the status of the parcels. Then the approach is to use education first and then enforcement.

The approach is to first send a compliance assistance letter that explains that compliance is needed. Most of these parcels are small properties. The biggest challenge is getting the owner or

manager on the phone and talk to them, so they understand this is a legal obligation and a benefit to them and to the environment.

For those that are still out of compliance after the education phase, then DEP moves into compliance mode. DEP focuses on large parcels, so the effort is more worthwhile. DEP has recently engaged a contractor to knock on doors and speak to these property owners.

Of the 69 % of the unenrolled parcels identified by FDACS and referred to DEP have been brought into compliance. This is more than 83 % of the total acres. There are no parcels greater than 100 acres out of compliance and the majority are smaller than 10 acres. DEP is engaged in an ongoing campaign to educate landowners of their requirements and bring them quickly into compliance.

Adjournment

Jessica thanked everyone for attending. The meeting ended at 3:08 pm.

Action Items

All--Everyone who will be editing or updating BMAP project information should sign up for an FDEP Business Portal login now and no later than July 31, 2022. Also, once you have a login, please notify Jessica Fetgatter that you and any of your colleagues and consultants that will be updating project information will need access to your entity's project data.

All – Continue to follow information on the Clean Waterways Act requirements and the need for local OSTDS and wastewater remediation plans to be included in the BMAP by July 2025.