

Indian River Lagoon (IRL) Basin Management Action Plan (BMAP)
Webinar Summary

Wednesday, December 12, 2019

2:00 pm – 3:31 pm

Participants (~68)

Holly Abeels	Claudia Listopad
Irene Arpayoglou	Art Lorenz
Leila Atallah Benson	Mark Mathes
Anthony Betts	Bach McClure
Rob Bolton	Michael McCabe
Tiffany Busby	Victoria Messina
Vincent Burke	Alexis Miller
Andrea Castro	Matthew Mitts
Stacy Cecil	Richard Mutterback
Jeff Cooke	Edward Northey
Graham Cox	Judy Orcutt
Brett Cunningham	Henry Pate
Sara Davis	Mary Paulic
Patrick Dayan	Jon Perry
Doug Durham	Nicolas Pisarello
Amy Eason	Ken Poole
Rebecca Elliott	Thomas Price
Yesenia Escribano	Jeff Ratliff
Chris Farrell	Joanie Regan
Kyle Fegley	Sandra Reller
Lisa Gemma	Ted Saltos
Patricia Gertenbach	Matt Scriptor
Karla Guerrero	Jimmy Sellers
Hannah Hart	David Sherrer
Kenny Hayman	Charles Shinn
Tiffany Herrin	Gerald Smith
Krystle Hoenstine	Robbyn Spratt
Danielle Huffner	J. Danielle Straub
Jodie Hutchins	Juliane Struve
VJ Karycki	Rachel Vitek
Sarah Ketron	Laurel Web
David King	Terry Williamson
Robert Kline	Thomas Willson
Margie Lasi	Kelly Young
Roy Laughlin	Dallas Young

The full webinar recording and supporting materials are posted to the Florida Department of Environmental Protection (DEP) file transfer protocol (FTP) site at

http://publicfiles.dep.state.fl.us/DEAR/BMAP/IndianRiverLagoon/Meetings/Lagoon-wide/2019_12_Annual/.

Questions and Answers

Question: What is the approximate cost to date for sampling efforts?

Answer: We have not yet started sampling at the living shoreline, so we don't have cost numbers yet.

Question: Is it possible to use one or more protocols?

Answer: The protocols are written to be used independently, so yes. So if you do not have all three components of our project, you can still use the ones that apply to your project.

Question: How long will this quarterly sampling occur?

Answer: We plan to sample for one year, submit the data, and then determine what happens next.

Question: What are we talking about when we say TMDL or BMAP "credits"?

Answer: In BMAP report, for any stakeholder who has a certain number of required reductions, they get credit towards those required reductions. We calculate the credits based on the type of project and the method for that project type. For example, if you have a baffle box, we have a certain way to calculate the potential benefit to the IRL from that one baffle box and that gets listed with the baffle box project.

Question: What have been the average costs to remove a pound of total nitrogen (TN) and total phosphorus (TP) for muck removal?

Answer: I don't know that we know that. We don't have those numbers specifically. I don't know if any of our local governments have actually gone through the process, or Joel Steward (a private consultant), or the water management district have those kinds of numbers.

Question: Do these credits apply to the Banana River Lagoon (BRL) the same as Central IRL (CIRL)?

Answer: So we have three IRL BMAPs: the BRL BMAP, the North IRL (NIRL) BMAP, and the CIRL. The muck guidance applies to any of the three BMAPs—it's the same across all three BMAPs.

Question: If your project was completed before the revised muck guidance, can it still be submitted beyond the 180-day limit?

Answer: Our first reaction is that we will look at the 180-day and the guidance for the limits. If you do have a project like that, please give us more details. We are probably going to stick with the 180-day limit but it doesn't hurt to look at it a little more closely.

Question: Are these credits being approved now, or is this a discussion of a credit plan to be implemented?

Answer: I think the answer is, this is a discussion of how you can get credits for doing this type of project. So if you are planning to do this kind of project, you probably want to get in touch with us so we can talk about the details with you and we can make sure you are following this protocol, if you would.

Question: General question about TMDL credits: How are the credits used? Who applies for these credits?

Answer: Basically, any stakeholder who has a requirement reduction under these BMAPs they can tell us they are doing a project like this, and apply for credits for doing this project. This is typically a local government (city, county), a special district, or the state (Florida Turnpike Authority or the Florida Department of Transportation [FDOT]).

Question: How much of the seagrass loss is attributed to turbidity (light attenuation) versus other factors?

Answer: Most of the major losses occurred when we had phytoplankton blooms. So that exacerbated the turbidity issue, but most of the grass was lost probably due to light reduction from phytoplankton.

Question: At what depth is oxygen being measured?

Answer: That is measured at 0.5 meters—it's a surface water measurement.

Question: Does the species of phosphorus and nitrogen get measured (organic, etc.) and does it matter? I know you showed the organic and inorganic concentrations.

Answer: We tried to get different species of TN and TP; you can use what was measured to parse it out. One the things about the organic forms, some of the phytoplankton that have been problematic in the recent past seem to be better at using the organic forms than the types of phytoplankton that bloomed in the past; so that is one of the reasons that we are tracking that closely.

Question: What kind of projects led to these TN and TP reductions?

Answer: There is a pretty big variety of projects that have been reported. A lot are structural projects and other types of projects like education, street sweeping, and policy-related projects. In terms of an actual number of the structural projects—I'm not sure. That information is available in the annual report, which we will talk about later. You can download the project list, not just for these BMAPs, but for any BMAPs statewide. There is a large variety of projects in these and other BMAPs.

Question: How will the future target reductions be met? What kind of projects?

Answer: Essentially, what Stacy is about to talk about is what we are doing to update these BMAPs. Everything that Ted just presented is based on what is adopted and the allocations that are set already. Everything is kind of being updated and re-done. So, we will probably have different numbers for what future reductions are needed, once we get through this whole update process. But the same kinds of projects that have been submitted in the past can continue to be submitted by stakeholders to meet any future reductions as well as there is an option to do more large-scale regional projects in areas where that makes sense and where the state can put resources towards that. Also, if there are other types of projects that we aren't considering currently for credit, please let us know that you have an idea because we are always looking for new and innovative ways really to help reduce nutrients and to restore seagrass.

Question: What kinds of measurements or monitoring gives the estimates of reductions? Do you have analysis or engineering estimates of efficacy to determine the amount of reduction?

Answer: We actually have a document on the DEP webpage that you can look at the different types of methods we use to calculate these reductions. They are based on various literature calculations or methodologies. In some cases, that may be a large study or report that the DEP put together. In some cases, it's a number—it's a compilation of literature sources all on the same topic. We've come up with an accepted method/calculation for that method. It is largely dependent on the project type. Sometimes

it's a little easier to measure that project type. Some types--Ted mentioned public education—you can't really measure that, so we have an accepted way that we give credit.

Question: Is the City of Cocoa Beach active in muck removal and TN/TP reduction credits?

Answer: I'm sure that we can look up the projects, but I don't know if any of us immediately know the answer to that question. We will write that down and try to get back in touch with you after the webinar about that.

Question: Can you give more detail on the status of allocations for the Central IRL? Where is it at in the process?

Answer: We are about to do that, so hold on to that thought. If you still have another question after Stacy talks, we will answer it at that time.

Question: It looks like the C-25 basin is being removed from the Central IRL BMAP. Is this correct? Is there another BMAP this area is within? Can you explain a little more why C-25 basin is being removed from the IRL BMAP?

Answer: This goes back to the last webinar and we had Dr. Claudia Listopad talk a lot about the Surface Water Iterative Loading (SWIL) model development. There was quite a bit of effort that went into looking at the hydrology for that model development. Based on that and previous meetings and discussions, we agreed to move forward with this boundary based on model development. We can talk more offline about this. If there are specific questions about hydrologic connections, then we should probably get Dr. Listopad involved. That is, generally, where we are going with the changes to the boundary.

Question: Who will be responsible to recalculate reductions for existing projects?

Answer: That is something that we will do here after we get through the allocation process and everyone's allocations get set. Then we use the same Load Estimation Tool that Stacy described, to recalculate those existing projects and their potential benefit so it's apples-to-apples between what is being required and what is being credited.

Question: You may have mentioned this already, but is this webinar being recorded so we can go back through to better understand a lot of this - audio included because it's very useful. Thanks!

Answer: I'll mention that we are recording the presentation so if you want to go back later and look through some of the things we talked about—it is a lot of information. It will be available for download. We will also make the PDF of the presentation available if you don't want to watch and just want to look through it yourself. I'll talk more about that at the end.

Question: Can you go back to the Eau Gallie Basin reduction slide? Did you mean the area of where the WBID is located or the reduction from the TMDL?

Answer: If there is a question about that, let us know while we are on this slide. There were no questions.

Question: Can you please expand upon the percent total maximum daily load (TMDL) reduction?

Answer: The TMDLs they specify for each segment the necessary percent reduction for TN or TP to help restore the seagrass. So we have gone back--Stacy pulled out all the segment numbers and the percent reductions for each of those segments. The groupings that she was talking about are based on the

similarity in the required percent reductions from the TMDL. When she has grouped three segments together in a segment group, the TN and TP percent reductions from the TMDL are the same for all three of those segments. If that doesn't answer your question, please follow up.

Question: Are the cell calculations based on the dominant land use event mean concentration (EMC)?

Answer: I think so. We had a pretty detailed model presentation. Fortunately, Dr. Listopad gave us that presentation in a previous webinar. I think that recording is out there. I can't answer that question specifically; I don't want to misspeak. My advice is to go back to the FTP site (which we will give you the link for at the end), look at the presentation and I think that should answer your question. If not, let us know because we can set up something in future to get more specific answers on the modeling. We didn't actually do the modeling at DEP.

Question: If a city is within IRL North B, IRL Eau Gallie, and IRL Central A, the city would get two allocation numbers--one North and one South? Or will the Eau Gallie Basin be a separate allocation?

Answer: Essentially, within your NIRL BMAP you'll get one allocation number; for CIRL, you'll get a separate number. If you are in BRL, you'll get a number for that. We would consider the Eau Gallie Basin not as its own basin but as a segment group within the NIRL, so it goes towards your contribution calculation for the NIRL.

Question: What is the best way to submit comments on or before 1/10/2020?

Answer: There are a couple ways. Stacy is going to give you a way to do that if you have comments now. Also, we will give you our contact information at the end so you can send us comments. There is a survey that will pop-up at the end of the webinar with some specific questions. If you don't have all the information you need right now, you don't have to answer right away. They will also go out in a follow up email to the webinar, so you'll have another opportunity to answer them. You can always email Ted, Sara, or myself and we will definitely get back to you.

Question: Is the TMDL reduction percentage still based on the Xueqing Gao TMDL report from 2009?

Answer: The adopted TMDL rules have not changed, so we have to rely on the percentages in the adopted TMDLs. So the answer is yes.

Question: The recent Blue Green Algae Task Force recommended more water quality monitoring; and secondarily, more enforcement of best management practice (BMP) plan enrollment and reporting. Will this recommendation inform and guide BMAP planning?

Answer: I can't speak to the content to the updated BMAPs just yet only because we are in the beginning stages of the updates. We are looking at the task force recommendations because they will continue to have meetings. So we follow that very closely and we work directly with Dr. Tom Frazer, the Chief Science Officer, who is kind of leading that task force. So stay tuned—we will try to provide updates on that in future public meetings.