St. Lucie River and Estuary Basin Management Action Plan

Technical Meeting Summary
Wednesday, August 13, 2014
9:30 AM – 12:00 PM
Martin County Building Department - Building Department Conference Room
900 Southeast Ruhnke Street, Stuart, Florida 34994

Attendees

Sam Amerson, Port St. Lucie	Dianne Hughes, Martin County
Jason Bessey, St. Lucie County	George Jones, ORCA
Darrell Brand, Palm Cove Yacht Club	Bill Kerr, BKI Consultants
Tiffany Busby, Wildwood Consulting	Kathy LaMartina, SFWMD
Joe Capra, Captec Engineering	Milton Leggett, Stuart
Kevin Carter, SFWMD	Chris Lestrange, St. Lucie County
Deb Drum, Martin County	Dale Majewski, Port St. Lucie
John Duchock, Jupiter Island	Anne McCarthy, CSA Ocean Sciences
Ron Edwards, Evans Properties	Mark Nelson, FDEP
Holly Edmond, FDACS	Greg Nolte, Martin County
Rebecca Elliott, FDACS	Mary Oakley, UF
Rachel Espinosa, E Sciences	Nyla Pipes, One Florida Foundation
Jesse Etelson, ECOART South Florida	Marcy Policastro, Wildwood Consulting
Stan Ganthier, FDEP	Kenneth Rau, Higgins Engineering
Glen Gareau, SFWMD	H.M. Ridgely, Evans Properties
Luis Girado, Citizen	Gayle Ryan, Save the Indian River
Amy Griffin, St. Lucie County	Jon Shainman, Channel 5 News West Palm Beach
Bill Griffin, Stuart	Rob Taylor, Hazen and Sawyer
Katie Hallas, FDEP	Candace Walls, Congressman Murphy's Office
Janet Hearn, ATM	Arjuna Welagoda, Indian River County
Patrick Helms, AECOM for NSLRWCD	Don West, St. Lucie County
Kevin Henderson, Evergreen Engineering	Julie Williams, River Warrior

Welcome and Opening Remarks

Tiffany Busby welcomed everyone to the first annual meeting for the St. Lucie River and Estuary Basin Management Action Plan (BMAP). The participants introduced themselves and the entity they represent.

Overview of the BMAP Annual Progress Report

Katie Hallas stated that she sent the BMAP annual progress report to the distribution list on Friday, and she also posted the report to the BMAP file transfer protocol (FTP) site and sent the link to the distribution list. This is the first annual update on the BMAP activities for the period of June 11, 2013 through June 30, 2014. The report discusses the accomplishments from the last year and the upcoming year's activities. The total maximum daily load (TMDL) was adopted in March 2009 for the nine impaired waterbody identification (WBID) numbers in the St. Lucie River and Estuary Basin. The TMDL was for total phosphorus (TP), total nitrogen (TN), and biochemical oxygen demand (BOD). Once a TMDL is adopted by the Florida Department of Environmental Protection, the Department uses the TMDL targets in the BMAP process to determine the allocations and reductions necessary to make improvements in water quality. For the St. Lucie River and Estuary Basin, the TMDL compliance point

is at the Roosevelt Bridge monitoring site. The BMAP focused on TP and TN reductions, and those reductions should result in an improvement in BOD. The Department typically develops BMAPs for nutrients because the Department and U.S. Environmental Protection Agency (EPA) identified nutrients as the main source of water quality problems in the state. In the St. Lucie River and Estuary BMAP, detailed allocations were assigned to the stakeholders to achieve 30% of the required reductions during the first five-year BMAP phase. The BMAP was signed by the Secretary, which makes the BMAP actions enforceable.

There were several projects completed during the reporting period. The City of Port Pierce adopted a fertilizer ordinance; the City of Stuart completed the Amerigo Avenue drainage improvements; the Florida Department of Transportation (FDOT) and Martin County completed the Indian Street Bridge projects; Martin County completed the Rio stormwater improvements; and the Town of Sewall's Point completed the pedway/greenway, High Point exfiltration, and Indialucie projects. In addition, to date, FDACS has 170 notices of intent (NOIs) to implement agricultural best management practices (BMPs) in the BMAP area. These NOIs cover 131,594.6 acres. The BMAP target was to enroll 90% of the agricultural acres in BMPs by the end of the five-year phase (June 2018), and FDACS is currently 84.4% of the way toward meeting their 90% enrollment goal. To date, 39,252.2 acres remain to be enrolled in NOIs. The Department and FDACS will work together to identify other projects to achieve additional reductions beyond BMPs. FDACS is also enrolling agriculture within the water control districts and will continue to coordinate with them on these efforts.

Katie stated that the City of Fort Pierce adopted a fertilizer ordinance during the reporting period. They also began construction of the Indian Hills Recreation Area stormwater improvements project, which was formerly called the Heathcote Botanical Gardens project. This project includes installation of a walking trail, bioswale, alum injection, and floating island. The City of Port St. Lucie phased out 265 septic tanks during the reporting period. Katie noted that the TN reductions for this phase out have not been calculated yet, but the reductions will be included in the next annual report. During the last meeting in February 2014, Dr. Ming Ye (Florida State University) presented on the ArcGIS-based Nitrate Load Estimation Toolkit (ArcNLET) model, which is the Department's approved method for calculating reductions from septic tank phase out for the BMAPs. The city previously phased out about 5,600 septic tanks, which had a reduction of 34,206.5 pounds per year (lbs/yr) of TN. Port St. Lucie also passed a revised fertilizer ordinance and kicked off a baffle box project that will be completed in fall 2014. The St. Lucie West Services District (within the city's boundaries) started a project to improve the wetland detention areas to increase residence time, and this project is expected to have nutrient-reduction benefits as a result of the increased residence time.

The City of Stuart phased out about 150 tanks since 2000, which had an associated reduction of 1,340.7 lbs/yr of TN. The city completed the Amerigo Avenue drainage improvements project and began phase 1 of the Heart of Haney project, which deals with exotics eradication. The city also provided information on existing baffle boxes, continuous deflective separation (CDS) units, and closed basins that do not contribute to the St. Lucie River and Estuary, and the reductions for these projects were calculated for the annual report. Martin County phased out 1,084 septic tanks since 2000, which resulted in a reduction of 15,369.2 lbs/yr of TN. The county also installed a Beemat, floating island project, at the Old Palm City stormwater treatment area, and the county will be gathering information about the reductions. In addition, the county completed the Rio stormwater treatment project. St. Lucie County initiated construction of White City-Citrus Seagar stormwater project, which includes a four-

acre detention pond and floc logs. The Town of Sewall's Point completed three projects, two of which prevent uncontrolled discharges into the St. Lucie Estuary and Indian River Lagoon (IRL).

Katie stated that during the reporting period, a total of 52,152 lbs/yr of TN reductions and 280 lbs/yr TP reductions occurred. Many of the TN reductions were associated with completing the calculations for septic tank phase outs. The reductions in the annual report are in addition to the projects that were shown as completed in the adopted BMAP. The total reductions to date are 369,430 lbs/yr of TN and 105,710 lbs/yr of TP. Katie presented the graphs from the report, which show the starting load from the TMDL, current load after the project reductions, and allocations to achieve the TMDL. The graphs also include a line showing the target for the first five-year BMAP phase. To date, the projects completed have achieved a 35.1% reduction in TN, which is greater than the 30% target for this phase, and the stakeholders still have projects underway. A total of 26.2% of the TP reductions have been achieved, and the additional projects planned will meet the 30% target.

Katie stated that a detailed water quality evaluation will occur at the end of year four of BMAP implementation. Since there was only one year of data post-BMAP implementation, the annual report includes a quick evaluation of water quality. Katie stated that she used data collected by the South Florida Water Management District (SFWMD) at the Roosevelt Bridge (station SE03), which is the TMDL compliance point. The TN TMDL target concentration is 0.72 milligrams per liter (mg/L), and this is target is not being met except in 2014, which may be because the data are only through June 2014. The TP concentrations are exceeding the target of 0.081 mg/L from years 2000–2014; however, a downward trend is present for years 2011–2014. Katie stated that she would update the graphs to note the concentration units, and to state that the years are calendar, not water years. A more detailed analysis of water quality will be conducted in the future.

Second-Phase Planning Update

Katie stated that although the stakeholders are still working on meeting the first 30% of the reductions, the Department and stakeholders have started to think about the next phase of reductions (June 2018 through June 2023). Katie noted that in February she had asked for project ideas so that she could discuss with the stakeholders whether the projects would be eligible for BMAP credit and/or Department funding. She will likely ask the stakeholders to meet with her each spring to discuss new projects. Katie stated that she is starting this process early because she recognizes that the stakeholders need to obtain project approval from their boards, and that it takes time to design and construct new projects.

Katie stated that managed aquatic plant systems (MAPS), or floating islands, were included in the BMAP as provisional BMPs. Provisional BMPs are relatively new BMPs that the Department is in the process of determining what efficiencies should be assigned to them. MAPS were included as an option in the BMAP; however, none of the stakeholders provided a MAPS project for inclusion in the final adopted BMAP. Since the BMAP was adopted, the Department talked with experts about this project type, and the data show that the efficiency of this project is highly variable. Therefore, the Department is no longer giving the 20% provisional credit for new MAPS projects. If a stakeholder would like to implement a MAPS project, they should contact Katie about designing a short-term monitoring plan to evaluate the inflow and outflow nutrient concentrations to determine the efficiency of that specific project.

Janet Hearn asked what the range efficiencies is for the MAPS projects. Katie responded that they have a very large range and there are also projects that do not work. These projects are still eligible for BMAP credit; however, monitoring data will be needed to determine the efficiency. There are MAPS projects in the IRL BMAPs, which were implemented before this change in credit policy, so the credits for those project will not be affected. The new process will apply to future MAPS projects. Deb Drum asked if multiple entities are interested in using a new technology that looks promising to reduce nutrients, would the Department be willing to pay for the project monitoring. Katie responded that the Department could possibly help with funding. The interested entities could get together to apply for Section 319 or TMDL grant funding. The Department is trying to use this funding to investigate more innovative projects.

Kevin Henderson asked if the Department would take back credits from phasing out septic tanks if future data show this project has no benefit. Katie responded that the Department would not take back the credit, but would look at what other projects need to be done to achieve the TMDL. The Department recognizes that some of the older BMPs might not achieve the estimated reductions, even though they are functioning properly, so new types of BMPs needed to be identified. The Department does have data to show that phasing out septic tanks has a benefit because the ArcNLET model uses data collected in the basin. Tiffany added that if, over time, the Department obtains information that a BMP does not work as originally thought, the Department would not recalculate reductions for the projects that were already given credit. In the future, this BMP would either be dropped as an option, or the Department would determine another method to calculate load reductions. If the TMDL is not being met overall, additional projects would have to be identified. Kevin stated that it is important that the Department is willing to change the process as the information changes. Katie responded that this is why the Department uses an iterative BMAP process that allows for the use of adaptive management to meet the TMDL.

Katie noted that some of the IRL stakeholders provided information on new BMPs they were interested in, and they wanted to know what level of reductions these projects would achieve. Katie stated that as the Department gathers information on these BMPs, she will provide it to the St. Lucie River and Estuary Basin stakeholders. If the stakeholders have other BMPs or innovative technologies they are interested in using, they should let Katie know, so that the Department can research the associated reductions. Dianne Hughes asked if Katie could share the list of BMPs that the IRL stakeholders provided. Katie responded that she will send this information to the distribution list. The projects include bio-sorption activated media (BAM), denitrification walls, green BMPs, and septic tank phase outs. The Department determined draft reduction efficiencies for some of the BMPs based on literature reviews, and the stakeholders are providing additional information to help revise the efficiencies.

H.M. Ridgely stated that the compliance point at the Roosevelt Bridge is upstream of almost every project named in the presentation, so these projects will not affect the measured concentrations at this location. Katie responded that the update to the model will help to determine what flows affect which TMDLs. This location is the main compliance point for the TMDL, and the reductions for the upstream WBIDs were determined by back-calculating the reductions needed to meet the TMDL. These projects will benefit the downstream waters, which the BMAP also aims to restore, but projects included in the BMAP will help improve the water quality at the compliance point.

The Department and SFWMD are looking to update the Watershed (WaSh) loading model to replace the spreadsheet model used for the first BMAP phase. The WaSh model is the most appropriate tool for the next BMAP phase, and the stakeholders provided feedback that they agree with using this model. The Department has an agreement with SFWMD to update the model, and they will start updating the water quality portion in August 2015. Katie noted that a separate meeting may be held next year after the annual meeting to discuss the modeling. The plan is to complete the modeling in spring 2016 to help refine the allocations and projects needed. August 2018 would be the five-year BMAP update meeting.

Katie requested that any comments on the annual progress report be submitted by Friday, August 22nd so that she could finalize and post the report to the BMAP website and FTP site. There are a few stakeholders that need to provide information on new projects they submitted so that the reductions can be quantified, and Katie will follow up with them. Dianne asked what is occurring this year on the WaSh model. Katie responded that SFWMD is currently working to update the Graphical User Interface (GUI) to use a more recent version of ArcGIS and to update the boundaries and water quantity component. These items will be completed in time to start the water quality component in August 2015. Dianne asked if the boundary revisions include adding the South Coastal Sub-basin. Katie responded that this sub-basin will be included. The Department is working closely with SFWMD to ensure the model update will meet the timeline for the BMAP.

Accomplishments in Project Implementation

Martin County

Greg Nolte stated that the Rio St. Lucie stormwater project started in 2009/2010. The economic bubble had burst by this time, so Martin County did not have much money for projects. The county wanted to focus on projects close to the St. Lucie River where they did not have to buy land, so they could get the "best bang for the buck" in terms of nutrient reductions. The county evaluated all of their stormwater inlets to the St. Lucie River, and identified a 53-acre basin that is adjacent to the north shore of the river. The topography on this site ranges from an elevation of 28 feet to 5 feet over an area of about 1,700 feet, so there is a lot of elevation change. This area was first platted in 1925, which was before Martin County was a county. This area was part of St. Lucie County at the time. The typical lot size is 25 feet by 100 feet, and this area has no stormwater treatment and historical flooding problems.

The objective of this project was to provide one inch of treatment over the project area to provide flood control and stormwater treatment prior to discharging to the river. The project includes exfiltration trenches, second generation baffle boxes in three locations, re-establishing swales, and initiating a public education program. The preliminary design was done in June 2012, the survey was completed in February 2013, the final design was completed in September 2013, and the project was completed in May 2014. The project included 1,976 linear feet of exfiltration trench in eight neighborhood road right-of-ways and three baffle boxes. The project provides 4.5 acre-feet of treatment, which is a little over one inch of treatment. The second generation baffle boxes collect debris, which can be cleaned out using vacuum trucks. The county received a TMDL grant for $240,000, and a Northern Everglades and Estuaries Protection Program (NEEPP)/SFWMD 5/5/5 grant for $310,000. The county contributed $240,000 for a total budget of $790,000. The actual project cost was $696,764, so it came in under budget. The county completed about 25 projects that treat about 10,000 acres and equates to about a third of an inch of treatment over that acreage. The cost of these projects is about $5,000 per acre treated, and $177,636 per acre-foot of treatment provided. The Rio project cost was $13,146 per acre and $153,811 per acre-foot, which is in line with the other projects costs.

Kathy LaMartina asked how the county knows when to maintain the baffle boxes, especially with all the recent rain. Greg responded that the county's field operations crew checks the baffle boxes to determine their maintenance schedule. There is a learning curve to determine the appropriate schedule. Some baffle boxes are maintained quarterly, and others are maintained annually. The county is in the process of determining how often the new baffle boxes need to be cleaned. Based on the conditions in this area, the maintenance will likely be quarterly. Kathy asked how many second generation baffle boxes are in the county. Greg responded that they have about 20 second generation baffle boxes, and a lot of first generation baffle boxes. H.M. asked how the county disposes of the material collected from the baffle boxes. Greg responded that for the Warner Creek baffle box, the county was taking the sediments to have them weighed and tested for nutrient content. The vacuum truck is emptied at the field operations office, and then the material is disposed. Kathy asked if the county has an estimate of the amount of sediment removed by the baffle boxes. Dianne responded that they do, and the county receives BMAP credit for the sediment removal. Ron Edwards asked what the estimated nutrient reductions are from this project. Greg responded that the calculations for the reductions have not been done yet. Kevin asked since the exfiltration pipe has cuts on the bottom and could fill with sediments, how the county would address this issue. Greg responded that the slots are on the sides of the pipe, so if the bottom fills with sediment, some exfiltration should occur through the tops of the slots. The county will clean out the pipes if they fill up.

Glenn Gareau noted that this project was a stormwater retrofit for an area without treatment. In addition, it collects leaf litter in the baffle boxes, which is another opportunity for credit. Since this area is on septic tanks, the project also removes stormwater that would have interacted with the septic systems, so that is another mechanism for credit. Tiffany responded that the county will receive credit for cleaning out the material in the baffle boxes, in addition to the project credit. Jesse Etelson asked if there is any signage to help the community understand the project. Greg responded that the county went door-to-door to pass out pamphlets about preventing personal pollution, they added placards on the stormwater inlets that say "No Dumping," and they sent a letter about the purpose of the project and how individuals could help to reduce pollution.

City of Stuart

Sam Amerson stated that Amerigo Avenue is located on the north end of the peninsula in Stuart. The project area is a 9.9-acre site that is made up of single family homes, a hospital, and offices. The hospital had additional land to build on, and they had an agreement to leave a park area for 20 years, which expired a few years ago. This area had problems with flooding, and the road is the hospital emergency route. The hospital wanted the road and the adjacent land for on-street parking, and the city wanted the hospital's land for the project. The city and hospital swapped the land without money exchanging hands. For the cost-share on the project, they decided that the city would pay 75% and the hospital would pay 25%. The project estimate was $770,000, which included a public meeting during design to obtain feedback from the residents on what they wanted in their area.

Sam stated that before the project, there was a low point in the road where the water went. There was a pump station in this area that pumped the stormwater to the river without any treatment. On December 10, 2011, there was a significant rainfall of 6.48 inches, which caused major flooding on Amerigo Avenue. Once the water receded, there was about two feet of debris at the pump station. Also, as part of this project, a building in the area that was owned by the hospital was removed. The project included

a dry retention area, and there are sandy soils, which are good for this project. A control structure was added at the north end of the pond. The project also included an exfiltration system and improvements to the roadway based on the residents' feedback (round about, new pavement, and pavers). A wall was constructed at the end of the street to provide a buffer between the hospital and residents. The project area is now a city park with public access. The final cost was $791,681, of which the city paid $300,000, the hospital paid $434,931, and SFWMD paid $56,750. The hospital agreed to pay for the portions of the project that were recommended by the public.

Kathy asked if the pump station is still in this area. Sam responded that they removed the pump station, and this discharge to the river has now been eliminated. Dianne asked if there are issues with people not picking up after their dogs in this park. Sam responded that the residents in this area are good about cleaning up after their pets. This road is marked as a dead end, which has limited the number of outside people who use the park. Gayle Ryan asked if the water is filtered before it is discharged to the river. Sam responded that it is cleaned by the retention pond and exfiltration trenches. Gail asked if the city is fertilizing the grass in the park. Sam responded that the city typically does not fertilize in their parks. Fertilizer application is limited to only when needed. Glen asked if the pond works wells in the sandy soils. Sam responded that the pond percolates down from full stage in about 24 hours.

Grove Land Reservoir and Stormwater Treatment Area (STA) Project

Rob Taylor stated that he is part of a team working with Grove Land Utilities on this project, which is also funded by SFWMD and St. Johns River Water Management District (SJRWMD). This project is at the end of phase 2 to determine if it is economically and financially feasible. In this area, there is an issue with uncontrolled discharges to the St. Lucie Estuary and IRL, and these discharges have pollutants that are causing damaging effects in these waterbodies. In addition to the environment benefit of restoring these waterbodies, there is an economic benefit. Grace Johns (Hazen and Sawyer) conducted an economic evaluation for all the counties along the IRL to determine the benefits to those counties from the health of the IRL. The economic benefits are about $1,077,308,000 per year for Martin County and St. Lucie County. These benefits include recreational expenditures (boat rentals and slip rentals), recreational use value (amount spent to recreate on the lagoon), non-use value of lagoon (what non-users are willing to pay to maintain the lagoon), real estate value, and income from daily recreational expenditures. This value is in 2013 dollars and was an update from the original 2007 study.

The Grove Land project is located within northern Okeechobee County and southern Indian River County. This area has the ability to move water through the canals into the proposed reservoir and STA. This site is well located for environmental and ecosystem restoration as well as for providing water supply. The Central Florida Water Initiative (CFWI) is predicting up to a 70 million gallons per day (MGD) shortfall in water by 2040, and this project could help meet this need. The project can provide up to 136 MGD of water treated through the reservoir and STA. This water could then be discharged into the St. Johns River to help with water supply and improve the minimum flows and levels (MFLs), sent to utilities or other large users, used in aquifer storage and recovery (ASR) to store excess water for later use, or returned to the estuary in the dry season. The proposed project includes an approximately 5,000-acre reservoir and 2,000-acre STA. Rob noted that these sizes would be adjusted as the project is further developed. The project site is located in both the SFWMD and SJRWMD, which allows flexibility to move water where it is needed in either district.

The benefits of this project include the ability to divert stormwater away from the coastal estuaries, the ability to connect the water management districts, ecosystem protection and water supply, assist in meeting the needs of the St. Johns River Basin, and the ability to put the project into operation faster than a similar project in the Comprehensive Everglades Restoration Plan (CERP). The project would reduce a total of 155,100 acre-feet of water or 37% of the annual discharges. The acre-feet removed from the different canals may change depending on the results of the feasibility study. As part of the study, they evaluated how much water the project could treat while staying below SJRWMD's criteria for discharges to the St. Johns River of 80 parts per billion (ppb) of TP. They determined the project could treat about 136 MGD of water with a 275 ppb influent TP concentration and a 76 ppb effluent TP concentration. The estimated nutrient reductions range from 38 metric tons (MT) of TP and 67 MT of TN with 100% of the flow returned to the estuaries in the dry season to 55 MT of TP and 303 MT of TN with no return flow to the estuaries. Rob noted that the actual reductions will likely be in the middle of these ranges.

In order to determine if the project was financially feasible, they evaluated the project benefits and who would receive the benefits. This involved determining the conceptual project infrastructure, estimating the dollar value of the benefits, estimating the cost of the project, looking at the net present value for financial forecasting scenarios, and identifying potential cost-share. For the project to move forward, the present value of the benefits to the customer had to exceed the present value of the costs to the customer. In addition, the revenue had to be greater than the cost. The feasibility study was conducted in two phases. The first phase was a high level evaluation to ensure there were no fatal flaws in the project. From this phase, in October 2013, they determined that project was financially and economically feasible. The draft report for the second phase is currently in review, and it includes a more detailed conceptual analysis. This project still appears to be feasible. The project has been presented to CFWI and is being considered to address some of the water supply issues. The team will evaluate the regulatory and permitting issues associated with the project future studies.

Rob reviewed the potential benefits of the project to the BMAP stakeholders. The lifecycle annualized cost is about $677,067,000 in 2013 dollars, with $5,767,000 for annual operations and maintenance. These costs include the STA and reservoir, improvements, financing, and contingency. The range is $71-$242 per cost of TN or TP removed. The costs of 28 other projects were evaluated and these projects had a median cost of $240 per pound of nutrient removed. Rob noted that deciding to buy into the STA and reservoir is a business decision about whether buying credit from a regional facility makes more sense than making reductions through local projects. The costs going forward should also be considered because the "low hanging fruit" for local projects have already addressed. Cost sharing in this project can make the cost of the reductions less than $240 per pound, and using the treated water for water supply takes the water from wastewater to a resource. The St. Lucie Estuary reductions from this project would be 46,000 – 68,000 lbs/yr of TP and 73,000 – 333,000 lbs/yr of TN. These ranges would change depending on how much water was moved from each of the canals in the basin. Rob noted that water quality credit trading is allowed in Florida Statutes, and the Department can authorize trading in an area. Participation in trading is voluntary, and the buyer must provide a signed affidavit to the Department. The Department will not participate in setting credit prices, and the trade shifts the responsibility for reductions from the credit buyer to seller.

Darrell Brand asked what the reduction in flow out of the C-23 would occur from this project. Robert responded that the current estimate is about 24,000 acre-feet of water annually from the C-23, or 18% of

the current flows. Deb stated that the presentation seemed to minimize water quantity, and that it seems that utilities would have more interest in this project for water quantity, whereas water quality is secondary. Rob responded that he focused on the water quality benefits of the project for this meeting, and the presentation to the CFWI had a focus on water quantity. Central Florida is facing a huge water demand that will not be met with traditional sources in the future, and their financial input to this project is significant. He believes the cost for nutrient reductions will be lower because of the revenue stream to this project from the water supply side. This is why the project is unique. Sam stated that while water supply utilities need this water as a source, the water quality credits are still a commodity and need to a component because the utilities might not move forward on this project alone. Robert responded that the estuaries need the water quality help now, and the water supply need will be a factor in the future. Arjuna Welagoda asked if the study will look at the cost to treat surface water to create a supply. Robert responded that the project is providing the ability to allocate water. The treatment at each facility to create potable water is not something the project study will evaluate. Tiffany asked if the project design will definitely proceed. Rob responded that there are a lot of decisions that need to be made on the project, and he is not sure how it will proceed.

Don West asked if the Department has created a process for water quality credit trading. Rob responded that this is still being worked out, but there is a statute that addresses trading. Tiffany added that the legislature passed legislation to allow trading statewide, and the Department is conducting the rulemaking. There is a meeting August 27th in Palm Bay to discuss this process. Darrell asked if the presentation would be made available. Katie responded that she will post all the presentations and send an email to the distribution list with the link.

Public Comments and Wrap Up

Nyla Pipes stated that there is a lawsuit on the federal level against FDOT and the Federal Highway Administration in regards to the bridge in Port St. Lucie. The project will impact preserve land that has major flora and fauna, and this area is the last remaining natural wetland on the north fork of the river. They are looking for support in this lawsuit, and the Conservation Alliance of St. Lucie County website has more information.

Katie stated that the next BMAP meeting is not scheduled at this time. A meeting may be held in November if the stakeholders would like to discuss new BMPs and/or the WaSh model schedule. Katie will send an email in early October asking the stakeholders if there are any agenda items.

Kathy stated that the St. Lucie River Issues Team grant is out, and she thinks that the applications are due Friday, August 22nd. The legislature provided about $2 million for projects, and this funding will be administered by the Department. The stakeholders can contact Kathy with questions about the grant.

Adjourn

The meeting was adjourned at 11:45 AM.

Action Items

- Katie Hallas will include updated calculations on the Port St. Lucie phase out project in the next annual progress report, when the calculations are completed.
- Katie will update the water quality evaluation graphs to note the units for the concentrations and that the years are calendar years.

- Stakeholders interested in implementing MAPS projects should contact Katie to design a monitoring plan.
- The stakeholders should let Katie know if there are new types of BMPs or innovative technologies they are interested in pursuing.
- Katie will send the list of new BMPs provided by the IRL stakeholders to the distribution list. COMPLETE
- Stakeholders should provide any edits to the annual progress report by Friday, August 22nd.
- Katie will follow up with the stakeholders that need to provide information to quantify their new projects in the annual progress report.
- Katie will post the meeting presentations to the FTP site, and send a notice to the distribution list. COMPLETE
- Katie will send an email in early October asking the stakeholder if there are any agenda items they would like to discuss at a potential November meeting.