

North Indian River Lagoon (IRL) Basin Management Action Plan (BMAP)
Briefing to the Titusville City Council
October 9, 2012

Summary of Questions from the City Council

- Mayor James Tulley noted that the BMAP is not an optional program because it is mandated by the state.
- Mary Paulic responded that since the city has a municipal separate storm sewer system (MS4) permit, implementing the actions in the BMAP is not optional. However, the city has submitted enough projects to achieve their first BMAP iteration required reductions with some credit for the next BMAP iteration.
- Mayor Tulley stated that the city still plans on implementing those projects but he just wanted to clarify that participation in the BMAP is not optional.
- Vice Mayor Walt Johnson stated that the current brown algae bloom creates a cloud on the lagoon that is affecting seagrass. He asked if the effects of this bloom are being taken into account in the BMAP process because nutrients are not the only factor impacting seagrass. This brown algae bloom is not something the city caused; the bloom is coming into the North IRL from Mosquito Lagoon.
- Mary responded that the Florida Department of Environmental Protection (FDEP) is aware of the event; however, the brown algae bloom is new for the IRL so this event is not part of the longer history and science that the total maximum daily loads (TMDLs) are based on. The seagrass evaluation is currently through 2009, which does not include the recent algal blooms. The St. Johns River Water Management District (SJRWMD) is working with multiple agencies in the area to try to better understand the causes of the brown algae bloom.
- Vice Mayor Johnson stated that he is concerned that the city will be asked to continue to reduce nutrients when they do not seem to be causing the brown algae bloom. Based on a report about this type of bloom in other areas, it seems to be caused by static water and high salinity concentrations. This has to be taken into account in the BMAP process because the city could be cleaning up something that is not the cause of the problem in the lagoon.
- Mary responded that the BMAP is for the next five-year period, and FDEP will not ask for additional reductions until the end of that period. By that point in time, there should be more information about the causes of the bloom.
- Vice Mayor Johnson noted that in other areas, the brown algae bloom has lasted 7-8 years so it could still be in the lagoon in five years.
- Council Member Kathleen Burson noted that her understanding is that nutrients cause algal blooms.
- Mary responded that this is true and is the premise that the TMDL is based on. Excessive nutrients can lead to algal blooms that cloud the water and prevent light from reaching the seagrass. Some types of algae can also grow on the seagrass, further impacting them.
- Council Member Burson asked if it could be that the city's nutrient loads did contribute to the brown algae bloom.
- Mary responded that the agencies are investigating this relationship in an effort to identify the cause of the bloom.

- Council Member Burson asked if FDEP is monitoring nutrient loads in all of the IRL to identify sources that might not be known.
- Mary responded that SJRWMD has an extensive ambient monitoring program in the IRL, which is included in the BMAP monitoring plan. There are few pipes that discharge directly to the lagoon so most of the sources are stormwater runoff from agricultural and urban lands. Agriculture will be required to implement best management practices (BMPs) as part of the BMAP.
- Council Member Burson asked if there are any programs the cities should implement to help the lagoon, other than to address stormwater loads.
- Mary responded that FDEP has been developing credit guidance for muck removal, aquatic vegetation harvesting, and plant or algal mats to take up nutrients. FDEP also holds free erosion and sediment control workshops that provide information to the cities about how to control the loading at the source.
- Vice Mayor Johnson stated that he understands the nutrients' link to algal blooms but the brown algae blooms seems to be unique.
- Council Member Rita Pritchett asked if the city has applied for Section 319 funding and TMDL grants.
- Lorraine Guise responded that the city has applied for these funding sources and she is in the process of applying for funding for the Draa Field BMAP project.
- The council members unanimously voted to approve Resolution No. 26-2012, "A resolution of the City of Titusville, Florida, to support continued refinement, development and implementation of the North Indian River Lagoon Basin Management Action Plan to achieve total maximum daily loads for nutrients that support a healthy, sustainable and productive estuarine ecosystem; and providing for an effective date."