

TAB 1



City of Palmetto Agenda Item

Meeting Date

3/15/10

Presenter: Allen R. Tusing, Director

Department: Public Works

Title:

**Total Maximum Daily Load (TMDL)
Tampa Bay Nitrogen Management Consortium Reasonable Assurance Overview**

Background:

From the uppermost reaches of Old Tampa Bay and Hillsborough Bay to the mouth of the bay at Egmont Key, the Tampa Bay estuary is made up of a variety of habitats where fish and other wildlife find shelter and food. Submerged seagrass is among the most important habitats because it serves as shelter, nursery, and food source for a diverse variety of species and stabilizes the bay bottom. Restoration of seagrass habitat is a priority environmental goal of local government and agency partners of the Tampa Bay Estuary Program. The key to restoring seagrass is improving and then maintaining adequate water clarity that allows light to penetrate into the shallow waters of the bay where seagrasses grow. And the key to maintaining water clarity is preventing excessive nitrogen – a nutrient necessary for plant growth – from entering the bay and stimulating the growth of microscopic algae that cloud the water and prevent light from reaching the seagrasses.

In August 1996, the NEP's governmental partners joined with key industries in the Tampa Bay region to create a unique ad-hoc public/private partnership known as the Tampa Bay Nitrogen Management Consortium for the express purpose of developing a Consortium Action Plan. In November 2002, the Florida Department of Environmental Protection (FDEP) concluded that the Tampa Bay Nitrogen Management Consortium's nitrogen management strategy provided reasonable assurance that the state water quality criteria for nutrients would be met.

In 1998, USEPA approved a Total Maximum Daily Load (TMDL) for nitrogen for Tampa Bay as is required by Section 303(d) of the federal Clean Water Act. In 2007, USEPA and FDEP advised the Nitrogen Management Consortium that existing and future surface water discharge permit limits for entities discharging to Tampa Bay must not cumulatively exceed the federally-recognized TMDL for nitrogen loading, and that no new or renewed permits would be approved until facility-specific allocations consistent with the TMDL were developed.

To help ensure continued recovery of vital seagrass habitat and the successful nitrogen management strategy that makes it possible, local governments, agencies, and industry participants of the Nitrogen Management Consortium worked together over 18 months to provide FDEP with an updated reasonable assurance document, ensuring that state water quality criteria for nutrients will continue to be met in the bay.

Budgeted Amount: \$0.00 **Budget Page No(s):** **Available Amount:** \$0.00 **Expenditure Amount:** \$0.00

Additional Budgetary Information:

Funding Source(s): **Sufficient Funds Available:** Yes No **Budget Amendment Required:** Yes No **Source:**

City Attorney Reviewed: Yes No N/A **Advisory Board Recommendation:** For Against N/A **Consistent With:** Yes No N/A

Potential Motion/Direction Requested:

Staff Contact: Allen R. Tusing, Director

Attachments: TBNMC Overview

Tampa Bay Nitrogen Management Consortium TMDL and Reasonable Assurance Overview



City of Palmetto

March 2010



Why is this needed?

- 1972 Clean Water Act requires that pollution limits be set for waterbodies in the Country
- Total Maximum Daily Loads are the regulatory “yardstick” permitted discharge limits are required to meet
- Applies to both permitted dischargers (wastewater plants, stormwater systems) & unpermitted sources (agriculture, atmospheric inputs, groundwater/springs, etc.)

Regulatory Setting

- In 1998, EPA set Nitrogen TMDLs in Tampa Bay based on loading estimates from 1992-1994
- The Tampa Bay TMDL goal is to protect water quality by limiting nitrogen discharges to the “yardstick”

Tampa Bay Reasonable Assurance

- State FDEP uses the NMC Reasonable Assurance as the measurement for achieving water quality targets
- The Tampa Bay Nitrogen Management Consortium's 50+ public & private entities cooperatively developed an equitable approach to maintain adequate bay water quality

NMC Activities Since 2008

- Fairly assign nitrogen discharge amounts (allocations) to all entities and sources to ensure TMDL “yardstick” is met
- Multiple day-long meetings (20+) have been held since January 2008
- Extensive scientific analyses have been conducted to identify fair allocations of nitrogen discharge

The Good News

- Tampa Bay water quality is being maintained at target levels
- Unlike for most other areas in Florida, nitrogen allocations for Tampa Bay are not “cutbacks.” They require no expensive investments to achieve.

The Challenge Ahead

- Proposed allocations are equal to the regulatory “yardstick” (no breathing room for new or expanded sources)
- Future growth will require projects and/or transfers to offset any nitrogen increases
- Revision of regulatory “yardstick” (TMDL) is possible but will require future effort/expense

Next Steps

In September, Consortium participants will conduct a roll call vote to approve:

1. Submittal of the Final 2009 Tampa Bay Reasonable Assurance Addendum to FDEP; and
2. Agreement to forward the 2009 Declaration to their entity's appropriate authority, for their consideration prior to January 1, 2010.

2009 Declaration

The undersigned Consortium participant hereby accepts the 2009 Tampa Bay Reasonable Assurance Addendum and agrees with the undersigned Consortium participant's nitrogen load allocations established by the Consortium for the 2008-2012 Reasonable Assurance period (as described in Exhibit "A").

Implications

- Accepted allocation limits will result in wastewater plants & stormwater permits that are based on loading levels for 2003-2007
- New or expanded nitrogen sources will have to show offsets to be permitted
- Consortium collectively defined allocations, rather than regulatory agencies

SUMMARY POINTS

1. ALLOCATIONS ARE REQUIRED
2. SOUND TECHNICAL BASIS
3. STANDARDIZED EQUITABLE ALLOCATIONS
4. PROCESS AND ALLOCATIONS DEVELOPED BY CONSORTIUM PARTICIPANTS
5. COLLECTIVE COST-EFFECTIVE PROCESS
6. PROVEN RESULTS. Annual water quality targets met 86.5% of the time. Seagrass coverage expanded by almost 10% (2,730 acres).