

PELICAN BAY SERVICES DIVISION
Municipal Services Taxing & Benefit Unit

NOTICE OF PUBLIC MEETING

MONDAY, JANUARY 26, 2015

THE WATER MANAGEMENT COMMITTEE OF PELICAN BAY SERVICES DIVISION WILL MEET AT 1 PM ON MONDAY, JANUARY 26 AT THE COMMUNITY CENTER AT PELICAN BAY, LOCATED AT 8960 HAMMOCK OAK DRIVE, NAPLES, FLORIDA.

AGENDA

1. Pledge of Allegiance
2. Roll call
3. Agenda approval
4. Audience comments
5. Treating algae in lakes presentation by Michael Shaner, SePRO
6. Reestablish community educational outreach
7. Experimental copper removal presentation by Geoff Noble
8. Preparing an RFP for water management consultant
9. Adjournment

ANY PERSON WISHING TO SPEAK ON AN AGENDA ITEM WILL RECEIVE UP TO THREE (3) MINUTES PER ITEM TO ADDRESS THE BOARD. THE BOARD WILL SOLICIT PUBLIC COMMENTS ON SUBJECTS NOT ON THIS AGENDA AND ANY PERSON WISHING TO SPEAK WILL RECEIVE UP TO THREE (3) MINUTES. THE BOARD ENCOURAGES YOU TO SUBMIT YOUR COMMENTS IN WRITING IN ADVANCE OF THE MEETING. ANY PERSON WHO DECIDES TO APPEAL A DECISION OF THIS BOARD WILL NEED A RECORD OF THE PROCEEDING PERTAINING THERETO, AND THEREFORE MAY NEED TO ENSURE THAT A VERBATIM RECORD IS MADE, WHICH INCLUDES THE TESTIMONY AND EVIDENCE UPON WHICH THE APPEAL IS TO BE BASED. IF YOU ARE A PERSON WITH A DISABILITY WHO NEEDS AN ACCOMMODATION IN ORDER TO PARTICIPATE IN THIS MEETING YOU ARE ENTITLED TO THE PROVISION OF CERTAIN ASSISTANCE. PLEASE CONTACT THE PELICAN BAY SERVICES DIVISION AT (239) 597-1749 OR VISIT PELICANBAYSERVICESDIVISION.NET.

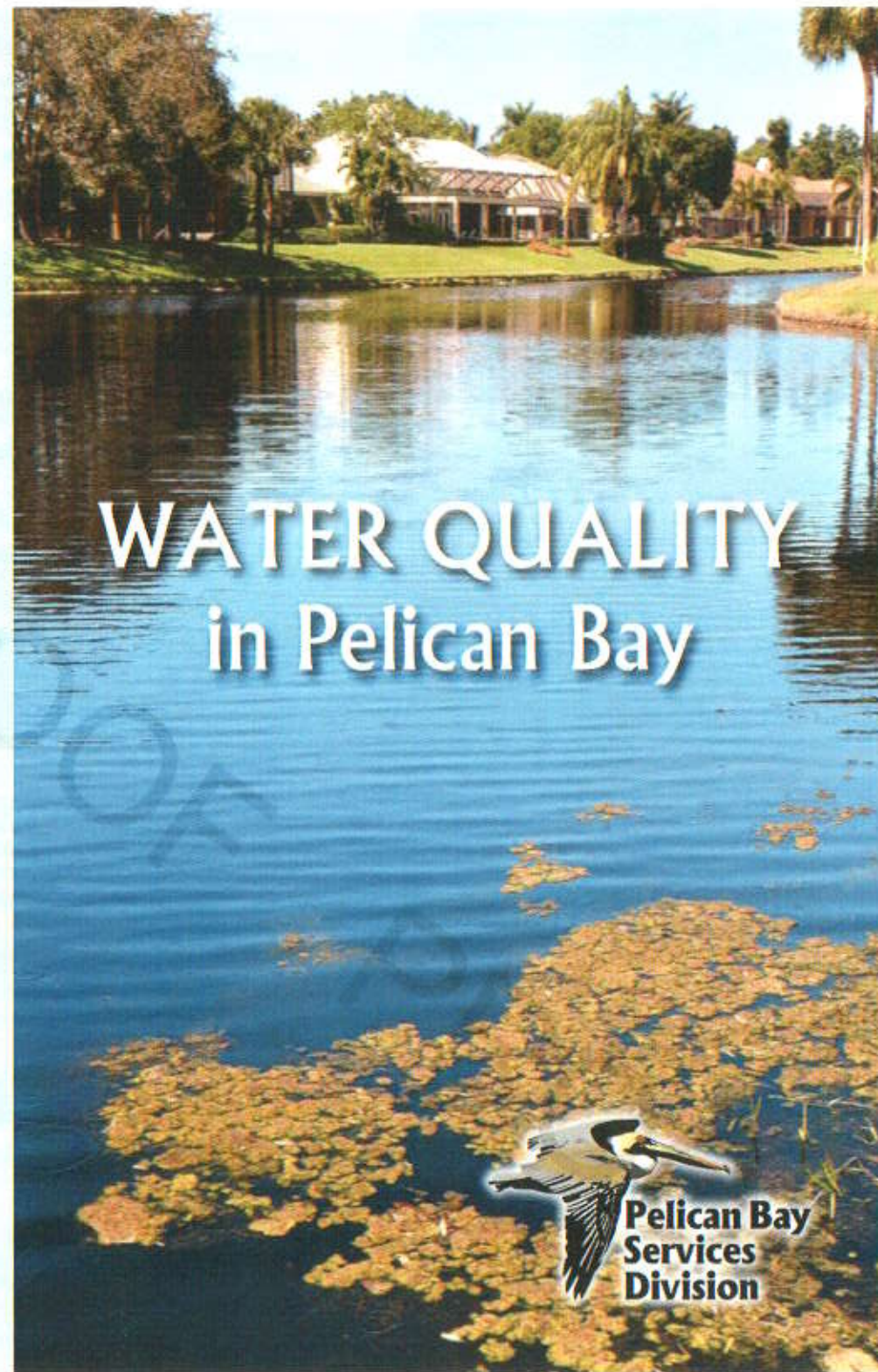
Do Your Best to Ensure Clean Ground Water & Healthy Waterways

- Use only landscape maintenance companies whose technicians are trained and licensed in BMP ("Florida Certification for Urban Landscape Commercial Fertilizer Application"). During fertilizer application, be sure there is appropriate on-site supervision.
- Use fertilizer application rates recommended by the Florida-Friendly Best Management Practices for Protection of Water Resources by the Green Industries. Those can be accessed at http://fyn.ifas.ufl.edu/professionals/GI-BMP_publications.htm.
- Limit nitrogen usage to 4-6 lbs./1000 sq. ft./year.
- Limit phosphorus usage to 0.5 lb./1000 sq. ft./year.
- Whenever possible, use slow-release fertilizer.
- Do not fertilize during the rainy season (June 1-September 30) or prior to forecasted storms.
- Be sure no fertilizer is used within 10 feet of groundwater, including lakes, except to establish new landscape and then for no more than 30 days after planting.
- When installing new landscape, use drought-resistant plants that require minimal fertilization.
- Be mindful that reclaimed water used for irrigation already contains most of the nitrogen and phosphorus needed for grass fertilization. Little or no additional fertilizer may be needed.



**Pelican Bay
Services
Division**

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WATER QUALITY in Pelican Bay



**Pelican Bay
Services
Division**

HERE ARE THE FACTS

Our waterways - inland lakes and Clam Bay - are being polluted by high levels of fertilizer runoff and copper algaecide.

Nutrients from the runoff - dissolved nitrogen and phosphorus - cause algae blooms which are a threat to aquatic plants and wildlife. To deal with algae buildup, a copper algaecide has been applied over an extended period of time. Through accumulation, copper - itself a pollutant - has reached troublesome levels in our lakes and Clam Bay.

The maximally acceptable concentration for copper in Clam Bay is 3.7 micrograms per liter. Copper levels in Upper and Inner Clam Bay over the past several years have averaged 9.1 and 5.2, respectively. In 2012 the Florida Department of Environmental Protection classified Clam Bay "impaired for copper" and gave the community five years to come up with a plan to fix the problem.

The copper in Clam Bay comes from algaecide treatment in our 63 freshwater lakes - an interconnected storm water drainage system that empties into Clam Bay. Continuing copper buildup in the lakes will lead to further migration into Clam Bay and worsen an already serious problem.

It is essential that we, as a community, deal with this problem.



HERE IS THE SOLUTION

(1) The Pelican Bay Services Division (PBSD) is exploring ways to reduce nutrient levels in the lakes as a means of controlling algae buildup. Aeration, selective bacteria and littoral plantings - alone and in various combinations - are being tested in nine of our lakes. The best of these treatments will be extended to the other lakes. In the meantime, any algae that does form will be treated with a non-copper algaecide.

(2) To deal with fertilizer misuse, the source of the problem, the PBSD is urging the community to follow Best Management Practices (BMP) in applying fertilizer. This is consistent with a recent county ordinance (11-24) that mandates BMP be followed throughout Collier County.

A list of things every condominium association, homeowner association and individual homeowner can and should do is highlighted on the next page.

Dealing with this problem is everyone's responsibility. If we are to have clean groundwater and healthy waterways in Pelican Bay, it is essential that fertilizers be used in accordance with BMP.

January 14, 2015

Prepared by H. Bachman

Water Management Committee; Jan 26, 2015 meeting
Proposed Agenda Item

I request that the following be made an agenda item for our forthcoming Water Management Committee meeting:

Prepare an RFP for consulting services to assist the Board with water quality matters in the upland lakes and Clam Bay.

It has been suggested that we are not yet prepared to outline a scope of work. I do not agree with that in light of the work we have already done monitoring the dissolved copper and nutrients in the lakes and Clam Bay, and our understanding of the problems as outlined in Chairman Trecher's presentation; 20141210_wm_presentation.pptx
PBSD.

Suggested Scope of Work

This may require one or more consultants as has been the case for managing other aspects of the Clam Bay NRPA and may be accomplished in stages, if/as advised by the consultants, and would ultimately led to the plan to be submitted to the FDEP.

Consultant(s) to advise PBSD with regard to three, related we believe, issues:

1. how to address the copper impairment in Clam Bay
 - a. verify the sources
 - b. prevent further impairment
 - c. reduce the level of impairment to acceptable levels
2. if/how upland lakes contribute to the copper impairment in Clam Bay and how to prevent further impairment
 - a. determine the likely trend in the equilibrium level of dissolved copper in the lakes
 - b. determine the relation between the level of dissolved copper in the lakes and that in Clam Bay
3. the best alternative(s) to copper-based algaecides for preventing algae build up in the upland lakes
 - a. appropriate means; aeration, littoral plantings, bacteria, others?
 - b. criteria for deployment

ResnickLisa

From: david trecker [djtreyker@yahoo.com]
Sent: Wednesday, January 14, 2015 1:48 PM
To: ResnickLisa
Subject: Water Quality Guru

Lisa - Please forward the following as a one-way message to the directors and Neil. Thanks, Dave

The board has expressed interest in locating an expert to oversee/coordinate water-quality programs in the upland lakes and Clam Bay. The rationale is that the programs are complex, interrelated and would benefit at this time from management by a true expert. Among the issues are copper monitoring and, perhaps, remediation; water quality in Clam Bay vs FDEP guidelines; non-copper-based algae/duckweed control in the lakes. I have been involved in these programs for some time and, along with others, have interacted with a number of possible candidates for such a job. I recently spoke by phone with three of them.

Dr. David Tomasko (ESA/Water) has consulted extensively with Collier County and the PB Foundation and was instrumental in drafting FDEP nutrient standards for Clam Bay. He is well known and respected and has broad knowledge about Clam Bay and its water-quality status. He is very well plugged into the FDEP. He would be interested in a management/oversight role.

Jim Bays (CH2M Hill) has an M.S. in Environmental Engineering and has consulted with us on a number of occasions. He is an expert on both freshwater lakes and brackish-water estuaries and knows our issues well. He too would be interested in such a consulting position.

Steve Gong (retired, formerly with CH2M Hill) has an M.S. in Marine Ecology. He previously coordinated our lake sampling, analysis and reporting and, as such, knows our situation well. He has had extensive experience dealing with the FDEP. He indicated he might be interested in a management/oversight role.

Dr. Serge Thomas (FGCU) is the fourth candidate. He is a true expert on water-quality problems in lakes and estuaries. I have not spoken with him because of his constraints as an academic.

I have some idea of costs and can review these with the WM and CB Committees.

The take-home message is that there are people out there who could coordinate and manage our water-quality programs.

Dave