

**PELICAN BAY SERVICES DIVISION
WATER MANAGEMENT COMMITTEE MEETING
FEBRUARY 26, 2018**

The Water Management Committee of the Pelican Bay Services Division met on Monday, February 26 at 2:00 p.m. at the SunTrust Bank Building, 801 Laurel Oak Drive, Suite 302, Naples, Florida 34108. The following members attended.

Water Management Committee
Tom Cravens, Chairman
Jacob Damouni

Mike Shepherd
Scott Streckenbein (*ex-officio*)

Pelican Bay Services Division Staff
Neil Dorrill, Administrator
Marion Bolick, Operations Manager

Mary McCaughtry, Operations Analyst
Lisa Jacob, Associate Project Manager
Barbara Shea, Recording Secretary

Also Present

Jim Carr, Agnoli, Barber & Brundage

APPROVED AGENDA (AS PRESENTED)

1. Pledge of Allegiance
2. Roll call
3. Agenda approval
4. Approval of 08/03/17 meeting minutes
5. Audience comments
6. Bay Colony beach dune swale maintenance & permit mod to restore drainage
7. Size of weir crest at discharge of OLS/Villages/Las Brisas lake
8. Current lake chemical treatments
 - a. Types of chemicals used
 - b. Established frequency standard of chemical applications
 - c. Annual cost per lake
9. Aerators
 - a. Annual maintenance costs, including service contract costs
 - b. Maintenance issues
 - c. Effectiveness
 - d. Status of installation of aerators – final phase
10. Blue tilapia test lakes
 - a. Annual cost of using blue tilapia (per lake)
 - b. *Authorization for restocking the Ridgewood Park lake
 - c. Consideration of expanded use of blue tilapia
11. Other business
12. Adjournment

**indicates possible action items*

ROLL CALL

All members were present and a quorum was established

AGENDA APPROVAL

Mr. Shepherd motioned, Mr. Damouni seconded to approve the agenda as presented. The motion carried unanimously.

APPROVAL OF 08/03/17 MEETING MINUTES

Mr. Shepherd motioned, Mr. Streckenbein seconded to approve the 08/03/17 meeting minutes as presented. The motion carried unanimously.

AUDIENCE COMMENTS

Mr. Peter Gerbosi commented on a streetlight pole, across from the Willow Brook, that was destroyed by Hurricane Irma. Mr. Dorrill commented that the pole is the subject of an insurance/FEMA claim.

BAY COLONY BEACH DUNE SWALE MAINTENANCE

Residents of the Carlyle condominium in Bay Colony expressed concerns over frequent flooding in their parking garage and related drainage issues. Mr. Dorrill commented on a drainage maintenance project completed last spring, which included removal of vegetation and exotics from the entire beach dune swale, as well as drainage maintenance work at the Brighton and Biltmore which included cleaning pipes and creating a retention area in the swale.

Mr. Dorrill commented that he will direct Earth Tech, our environmental consultant, to evaluate whether removal of additional vegetation from the swale is required. He also suggested a possible cost-sharing project with the Carlyle (similar to the Brighton and Biltmore project) which would include cleaning pipes and creating an additional retention area, to correct/improve the drainage flow from the parking garage to the swale.

SIZE OF WEIR CREST AT DISCHARGE OF OLS/VILLAGES/LAS BRISAS LAKE

Mr. Shepherd commented on flooding of resident property resulting from high water levels of Lake 3-1 during heavy rains. He suggested that the weir which is designed to take water away from this lake, does not have sufficient capacity.

Mr. Dorrill requested that Mr. Carr (our ABB engineer) provide a proposal to complete an engineering analysis and estimate to construct an additional conveyance pipe, pending whatever design and permit review is needed.

CURRENT LAKE CHEMICAL TREATMENTS

TYPES OF CHEMICALS USED

Mr. Cravens commented that tribune and hydrothol are the primary chemicals being used by the PBSB to treat algae. Mr. Bolick commented that on average, the cost of each chemical treatment is \$130 - \$200.

ESTABLISHED FREQUENCY STANDARD OF CHEMICAL APPLICATIONS

Mr. Bolick commented that two spray technicians (on staff) monitor our 45 lakes to determine when they receive chemical applications. There is no set established frequency standard of chemical applications.

ANNUAL COST

Mr. Bolick commented that the annual PBSB FY18 budget for chemicals (to treat lake algae) is \$135,500.

AERATORS

MAINTENANCE ISSUES

Mr. Cravens commented on our numerous malfunctioning solar aerators. Some have been out of service since before Hurricane Irma.

EFFECTIVENESS

Mr. Cravens questioned how the effectiveness of aerators could be measured.

STATUS OF INSTALLATION OF AERATORS – FINAL PHASE

Mr. Shepherd motioned, Mr. Damouni seconded to recommend to the full board that we temporarily suspend our plans to put aerators in the remaining unaerated lakes until the 3 month blue tilapia evaluation is complete, and then we will revisit the plan at that time. The motion carried unanimously.

BLUE TILAPIA TEST LAKES

ANNUAL COST OF USING BLUE TILAPIA

Mr. Cravens commented that he estimates the cost of installing blue tilapia in all 45 lakes would be approximately \$17,000.

CONSIDERATION OF EXPANDED USE OF BLUE TILAPIA

Mr. Cravens commented on the history, costs, and results of our blue tilapia testing in the Ridgewood Park lake and the Community Center lake since June 2014. Upon review of the blue tilapia's efficiency in combatting algae and its cost effectiveness, the committee was in favor of expanding the use of blue tilapia to additional lakes.

Mr. Peter Gerbosi commented on the algae problem in the Willow Brook lake and requested that the PBSB install blue tilapia in this lake.

Ms. Diane Lustig commented on a possible increase in our alligator population resulting from an increase in abundance of blue tilapia.

Mr. Shepherd motioned, Mr. Damouni seconded to recommend to the full board that Mr. Bolick choose 20 of the worst lakes and stock them with an appropriate number of blue tilapia and we reassess in 3 months, and if satisfactory, we expand to the rest of the lakes; and if no material effect,

then we drop back and continue discussion. The motion carried unanimously.

Mr. Shepherd motioned, Mr. Damouni seconded to recommend to the full board that we temporarily suspend application of bacteria in all lakes pending an evaluation of the performance of the blue tilapia after 3 months. The motion carried unanimously.

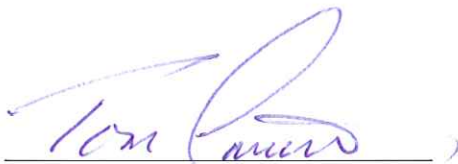
OTHER BUSINESS

LAKE BANK EROSION – REMEDIATION IN FUTURE YEARS

Mr. Shepherd motioned, Mr. Cravens seconded to recommend to the full board that our accrual rate be sufficiently high that we can tend to one additional lake each year starting in FY20 until all the lakes are satisfactorily remediated. The motion carried unanimously.

ADJOURNMENT

The meeting was adjourned at 3:26 p.m.



Tom Cravens, Chairman

Minutes approved [] as presented OR [] as amended ON 4-16-18] date