

**PELICAN BAY SERVICES DIVISION  
WATER MANAGEMENT COMMITTEE MEETING  
OCTOBER 20, 2016**

The Water Management Committee of the Pelican Bay Services Division met on Thursday, October 20 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

Scott Streckenbein (*absent*)  
Dave Trecker

**Pelican Bay Services Division Staff**  
Neil Dorrill, Administrator  
Marion Bolick, Operations Manager (*absent*)

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

**Also Present**

Mike Shepherd, PBSB Board  
Rafael Vazquez-Burney, CH2M Hill

**APPROVED AGENDA (AS PRESENTED)**

1. Pledge of Allegiance
2. Roll call
3. Agenda approval
4. Approval of 9/27/16 meeting minutes
5. Audience comments
6. CH2M Hill proposal for non-stoichiometric lake treatment to reduce phosphorus
7. Adjournment

**ROLL CALL**

Mr. Streckenbein was absent and a quorum was established

**AGENDA APPROVAL**

**Dr. Trecker motioned, Mr. Cravens seconded to approve the agenda as presented. The motion carried unanimously.**

**APPROVAL OF 09/27/16 MEETING MINUTES**

**Dr. Trecker motioned, Mr. Cravens seconded to approve the 09/27/16 meeting minutes as presented. The motion carried unanimously.**

**AUDIENCE COMMENTS**

None.

**CH2M HILL PROPOSAL FOR NON-STOICHIOMETRIC LAKE TREATMENT TO REDUCE PHOSPHORUS**

Mr. Rafael Vazquez-Burney, a consultant with CH2M Hill, provided a presentation on micro-alum dosing for algae management in stormwater lakes. He provided background information which included:

- High levels of nitrogen and phosphorus continue to persist in PB lakes.
- The source of these nutrients is run-off into the lakes.
- Algae requires both nitrogen and phosphorus to thrive.
- Limiting one of these two nutrients would drastically reduce lake algae.
- Phosphorus contained in the lake sediment continuously goes back into solution.

Mr. Vazquez-Burney provided an explanation of ultra-low alum dosing which included:

- Alum dosing causes lake phosphorus to be sequestered in the sediment.
- Aeration systems can be used to disperse the alum into the lake water.
- This process is low cost, low tech, and low risk.
- It takes approximately three weeks to complete one lake's alum dosing.
- After a dosing, positive effects (clear lake water) are immediate.
- The estimated effectiveness is six months.
- Subsequent to a dosing, phosphorus levels must be monitored to determine when the next dosing is needed.

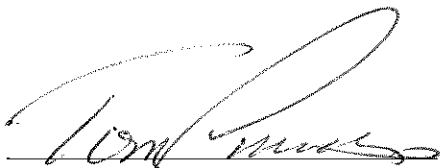
Mr. Vazquez-Burney suggested that the PBSB develop a test plan for a few PB lakes to evaluate the results of alum dosing.

Dr. Trecker commented that he believes "alum dosing" warrants serious consideration. He suggested a trial in two test lakes which have consistently high levels of phosphorus. He emphasized that the test lakes cannot receive any other algae treatment during the trial period.

Mr. Cravens suggested that Mr. Vazquez-Burney provide the same presentation to the full board at the November 2 PBSB Board meeting, and requested that an approximate cost of a trial be provided as well. Mr. Vazquez-Burney agreed to attend the November 2 meeting to provide his presentation.

**ADJOURNMENT**

**The meeting was adjourned at 2:50 p.m.**



Tom Cravens, Chairman

Minutes approved [  ] as presented OR [  ] as amended ON [ 11-18-16 ] date