

Feather Sound Tidal Wetland Restoration Project

Wednesday December 9, 2009

1:30 – 3:30 PM

PROJECT MANAGER: Lindsay Cross

PURPOSE: Project Status Meeting, Tampa Bay Regional Planning Council

ATTENDEES: Lindsay Cross, Ed Sherwood (TBEP), Shelley Thornton P.E., Jennette Seachrist (SWIM), Pam Leasure (PCDEM), Mark Flock (PCDEM), Rob Burns (PCDEM), Caqmeron Guenther (FWC-FWRI), Thomas Ries, James Fine, Jose Cuarta, P.E. (Scheda), Jennifer Shannon, P.E., Cassandra Thomas, PhD. (CardnoTBE)

- 1. Introductions** – Each team member attending introduced themselves and Tom Ries provided an update on the project status as of the last October 14, 2009 meeting. Tom detailed the coordination efforts that have taken place with representatives from the Feather Sound Golf Course (FSGC), TBEP, PCDEM and SWFWMD. He discussed that the course is very interested in becoming a cooperative partner in the project. He mentioned that the golf course is currently owned by a single entity and that it is in the preliminary redesign phase. This redesign phase includes 15 to 30 acres of turf removal and replanting native species in previously sodded areas. This will reduce the requirements of fertilizer, while also providing more natural land cover. He went on to say that this is very fortunate since Scheda's proposed concepts could easily be incorporated into the golf courses ultimate plan.
- 2. Drainage Review** - Jennifer Shannon discussed the proposed stormwater retrofit preliminary concepts and the resulting nutrient reduction that can be anticipated for the proposed stormwater retrofit. Through the use of strategically placed meandering streams, sediment sumps and areas where water can pool (attenuate) it is anticipated that a significant amount of nitrogen can be removed prior to discharging to Tampa Bay. This reduction in nutrients is anticipated to potentially assist in the recovery of seagrasses in the projects vicinity. Nitrogen removals were estimated using the following scenario:

To estimate nitrogen removal within proposed meandering streams constructed within the Feather Sound Golf Course, it was assumed the streams had a ten foot wide toe of slope with five foot wide littoral shelves at least five feet deep between nodes ND1180 to ND3010 and nodes ND1175 to ND1170. As the water elevation of the streams in the aerials is at the 1 ft contour and the highest elevation is at the 6 ft contour, the streams were assumed to be approximately 20 feet wide in order to accommodate the 5 foot wide littoral shelves on each side. The surface area of the proposed meandering streams were drawn into GIS maps and measured in GIS.

The Feather Sound Golf Course is in Tributary D of the Roosevelt Creek Watershed Master Plan. A uniform annual loading for nitrogen was assumed over all tributaries within the watershed. After determining the total acreage of the affected basins in the proposed meandering stream scenario, the existing annual nitrogen loading was established. After reviewing the percentage of rainstorms that could be treated through the meandering streams, the nitrogen removal rate was conservatively estimated with a 14-day wet detention removal efficiency of 30% for the 4 basins. Cumulatively, these meandering streams will provide approximately 500 pounds per year of estimated nitrogen removal for approximately 3 acres of wetland creation.

3. Restoration Opportunities - Tom went on to say that there still are opportunities to provide restoration within the public lands. These would include hand filling mosquito ditches that appear to have been dug within and adjacent to the historical saltern areas. And with the re-establishment of key elevations (set the elevations to only allow the high spring tides to overtop into the saltern area) it is anticipated that the salterns should re-establish successfully.

4. Timeline and Schedule –

- Project has a nine month schedule.
- Kickoff Meeting, October 14, 2009;
- Project Update Meeting, December 9, 2009
- Stakeholder Meeting with FSGC, December 18, 2009
- Monitoring, March 2010
- Conceptual Plan, May 2010

- Project End Date, August 2010;
- Bid Process, September 2010;
- Design and Permitting, October/November 2010
- Construction, February 2011
- Next team meeting with entire group is February 17, 2010 at 1:30 at the TBRPC office.

5. Pre-restoration Monitoring

Mark Flock was provided an external hard drive that he would be putting LIDAR data on for the county. This LIDAR data is to be used to assist in the drainage design.

6. Next Steps

Tom said that a letter for FSCG would be drafted, this letter would detail some of the specifics associated with the proposed activities and implications of the activities to the golf course. This letter referred to as "Letter of Agreement in Principle" would be from FSGC to the TBEP. SWFWMD and Pinellas county staff requested an opportunity to review and comment on the content of this letter prior to sending to FSGC. The requirements for the FSGC are outlined in this public private partnership (P3) agreement and include the following conditions:

1. A perpetual conservation easement over the restored areas
2. Post-project maintenance
3. Some public visibility or access

7. Additional Items