

Status Update: Floating Treatment Wetlands

Pond Apple Park

August 2nd, 2016



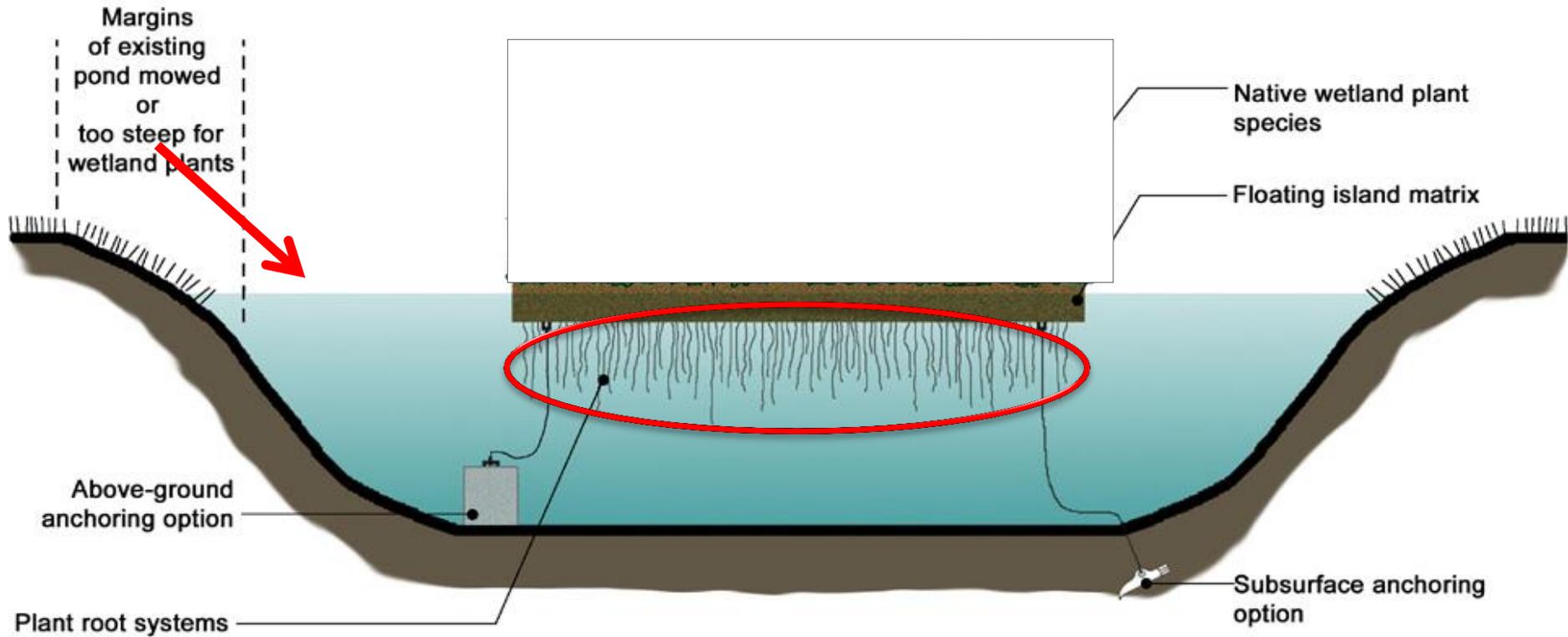
Dana Dettmar: Conservation Officer



What are Floating Treatment Wetlands (FTWs)?



How do FTWs work?



Benefits of FTWs

- * Reduce nutrients in the waterbody
- * Compete with algae for resources
- * Release chemicals that “kill” algae
- * Provide surface area for beneficial micro-organisms
- * Provide habitat for wildlife



Photo Credit: SCCF



Before



After



Photo Credit: Mike Bauer

FTWs as a Best Management Practice on Sanibel

- * Sanibel Community Lakes Best Management Practice (BMP) Program



Seagull Estate



Day of installation



Day of installation



One month after installation



Two months after installation



DIRECTION 26.44571°N ACCURACY 5 m
77 deg(T) 82.04583°W DATUM WGS84



Dana Dettmar Nat. Resources 7/14/16
Con. Officer City of Sanibel 12:03:37 PM





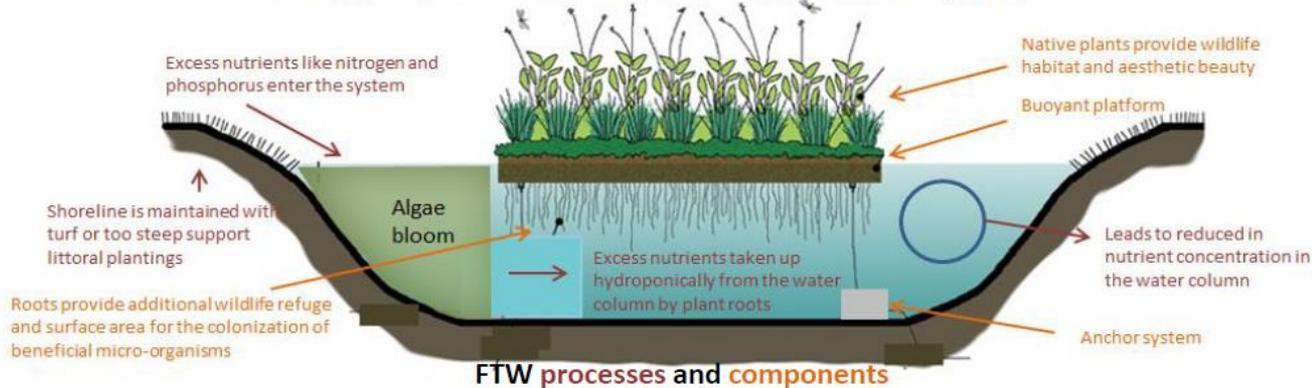
Future Goals

Install educational sign at Pond Apple Park



Floating Treatment Wetlands

A natural filter for the improvement of water quality



Floating treatment wetlands (FTWs) consist of plants grown hydroponically on a floating mat which uptake nutrients from their roots, removing nutrients from the water column so they are unavailable to algae.

Why are FTWs used?

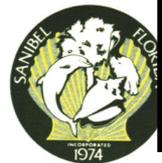
1. Pond banks are too steep to allow successful colonization of littoral (shoreline) plants
2. The littoral area alone does not provide sufficient filtration of excess nutrients
3. There is limited space for constructed wetlands, so a "wetland" is put on the water body itself



Benefits of FTWs

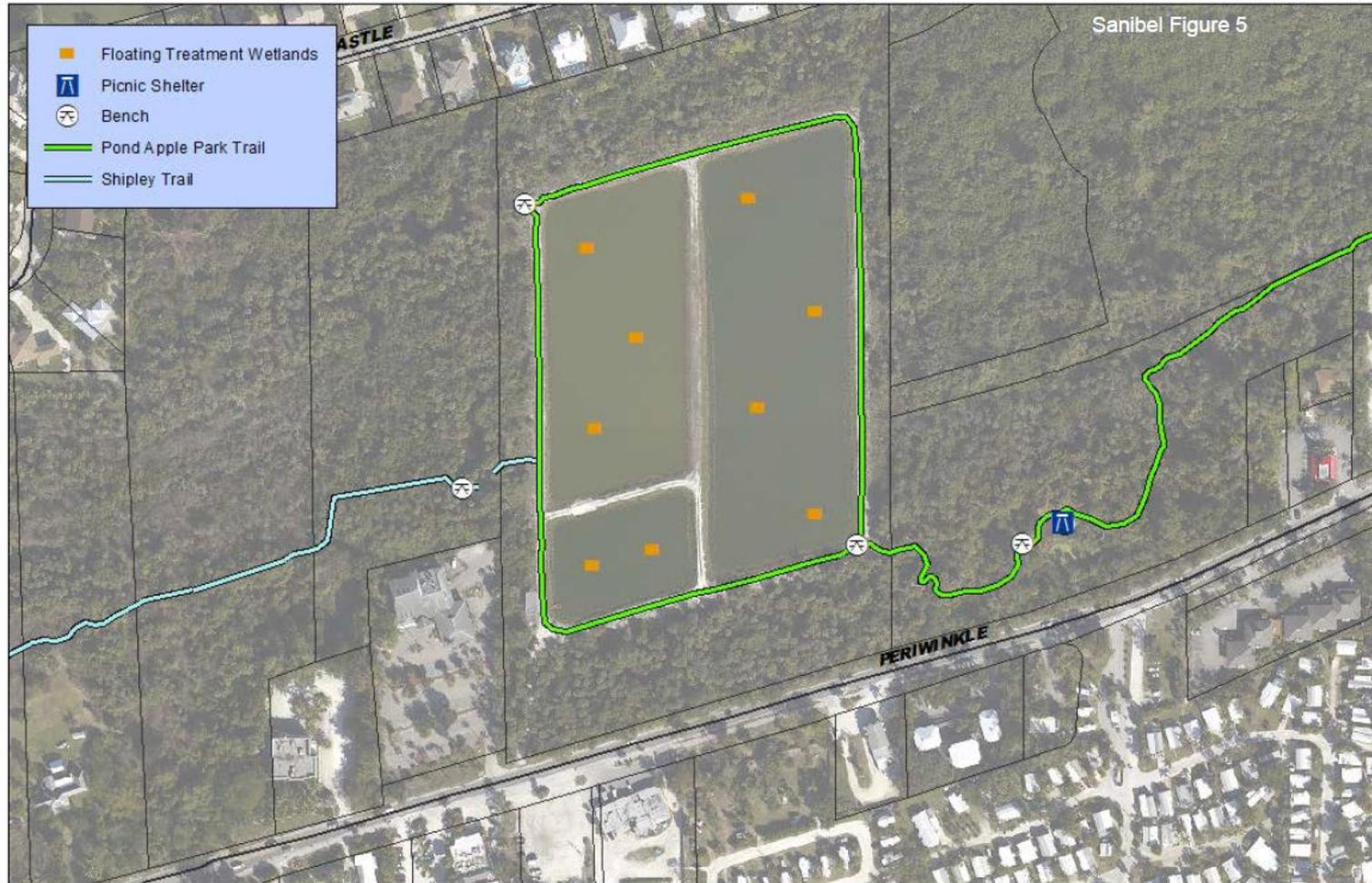
1. Plant roots take up excess nutrients
2. Provides substrate for nutrient reducing microbes
3. Certain plants release chemicals that deter algal growth
4. Plant biomass above and below the water surface creates additional habitat for wildlife

For more information on FTWs please contact the City of Sanibel's Natural Resources Department: 239-472-3700 or san.dnr@mysanibel.com
 You can also visit our website at <http://www.mysanibel.com/Departments/Natural-Resources>



Future Goals

Obtain funding to expand the FTW project at Pond Apple Park



 City of Sanibel 800 Dunlop Road Sanibel, FL 33957 (239) 472-3700		SFWMD Cooperative Funding Program Application	
		FTW Nutrient Removal Project Conceptual Site Plan	
	Date: May 10, 2016	