

# CHALLENGES OF COMPETING INTERESTS, LOGISTICS, AND PAYOFFS IN TWO DIFFERENT RESTORATION PROJECTS IN SOUTHWEST FLORIDA

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- Southwest Florida has been experiencing rapid population growth for several decades. Along with that development come intense habitat alterations including hydrological modifications and suppression of fire.
- I am working on two habitat restoration projects, with the help of Service-learning students from Florida Gulf Coast University (FGCU).
- Similar challenges exist with both projects, including: balancing competing interests, funding, need for education of humans, and logistics of working in a highly altered habitats surrounded by residences.



Gophers @ Barefoot Beach

**THE MISSION OF THE  
GOPHERS@BAREFOOT  
PROJECT IS TO  
RESTORE AND  
ENHANCE THE HABITAT  
FOR GOPHER  
TORTOISES AT THE  
BAREFOOT BEACH  
PRESERVE.**





Gophers @ Barefoot Beach



Service-Learning

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# CHALLENGES

Logistics:

organizing events

where to put horticulture waste, parking during season

Competing interests:

preserve vs beach access

hurricane protection or forage optimization,

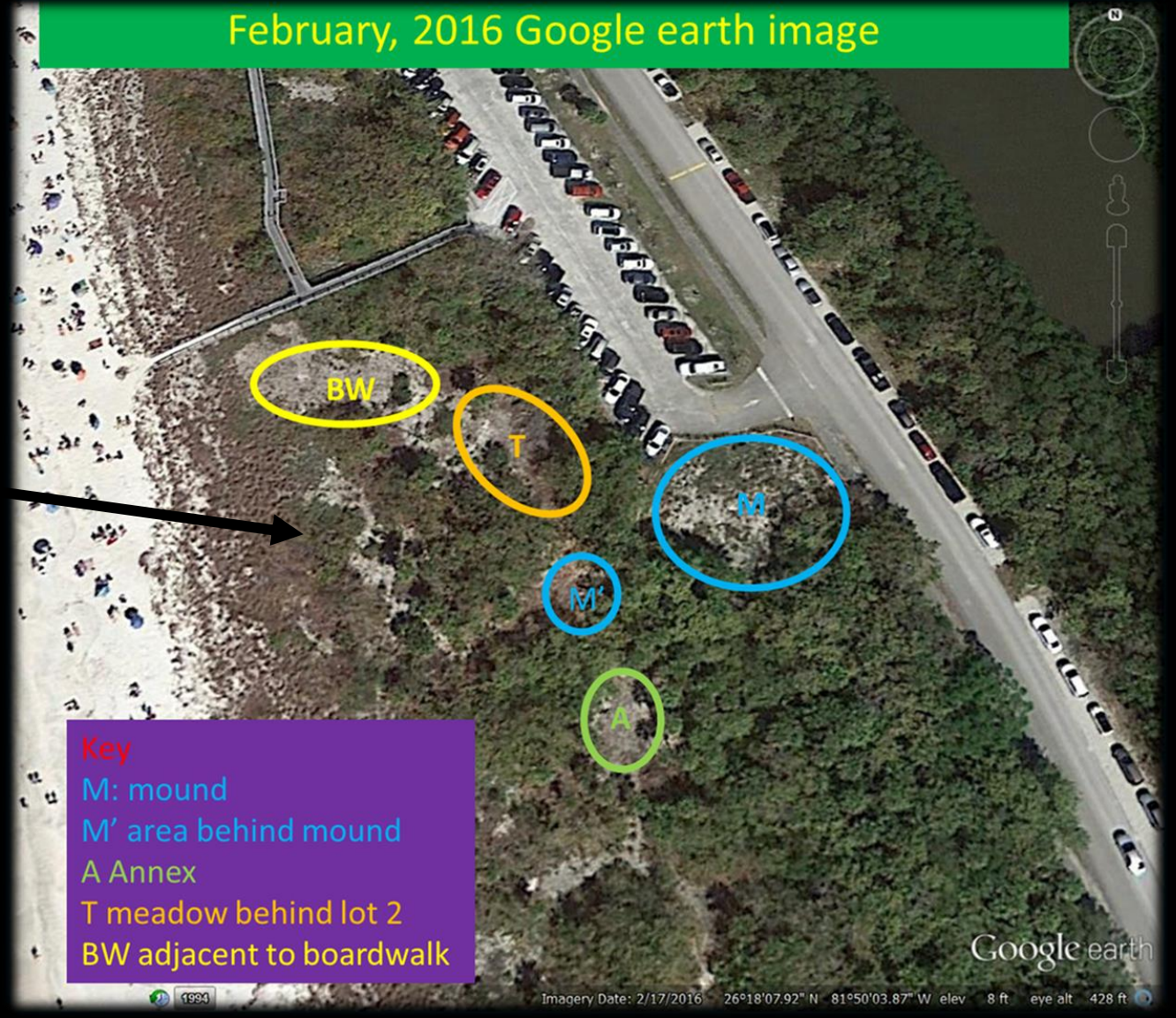
“unsightly” piles

weeding cactus garden for FoBBP removed food for gophers





## February, 2016 Google earth image



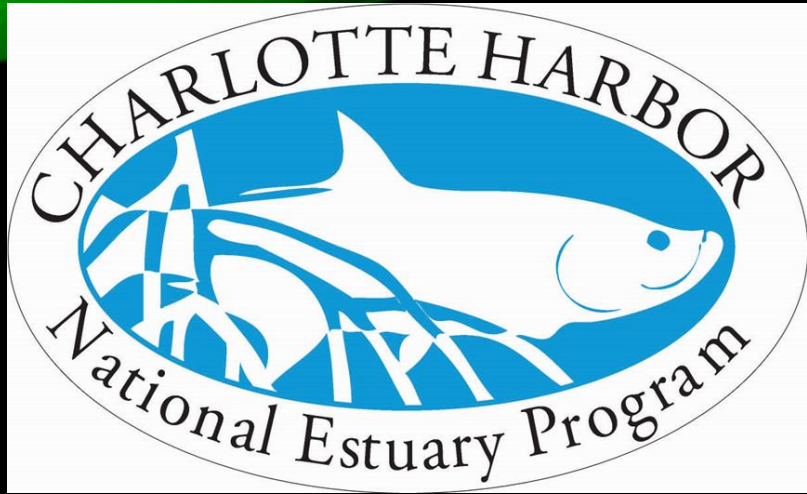
**Key**  
M: mound  
M' area behind mound  
A Annex  
T meadow behind lot 2  
BW adjacent to boardwalk

## Gophers@Barefoot service-learning hours

| date   | # participants | total hours | total contribution | accomplishments  |
|--|----------------|-------------|--------------------|--|
| <b>RUNNING TOTAL</b>                               | 284            | 1457        | \$41,139.38        |  |
| <b>2013 (June)</b>                                 | 20             | 100         | \$2,125.00         | pulled ragweed from botton 1.5 meters of mound                     |
| <b>2014 (4 days in June, 2 Colloquium classes)</b> | 99             | 495         | \$10,617.75        | pulled ragweed, raked seagrapes, planted wildflowers and wiregrass |
| <b>2015 May, June and Aug WOW</b>                  | 140            | 737         | \$15,653.88        | pruned sea grapes/weeded cactus garden                             |
| <b>2016 February Make a difference day</b>         | 25             | 125         | \$12,742.75        | broke down brush piles/weeded cactus garden                        |



# PARTNERS AND SPONSORS MAKE IT HAPPEN!



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# San Carlos Park Mulloch Creek Restoration Initiative



State of Florida



Lee County, Florida



East Mulloch Drainage District

The mission of the San Carlos Park/Mulloch Creek Restoration Initiative is to restore, maintain and beautify the East Mulloch Drainage District (EMDD) in San Carlos Park.



The community, in the greater Everglades, was developed beginning in the 1960's during the ditch and drain mentality years.

The restoration project began in 2007 with the creation of a "Florida Friendly" demonstration yard in a local community center (Drews House).



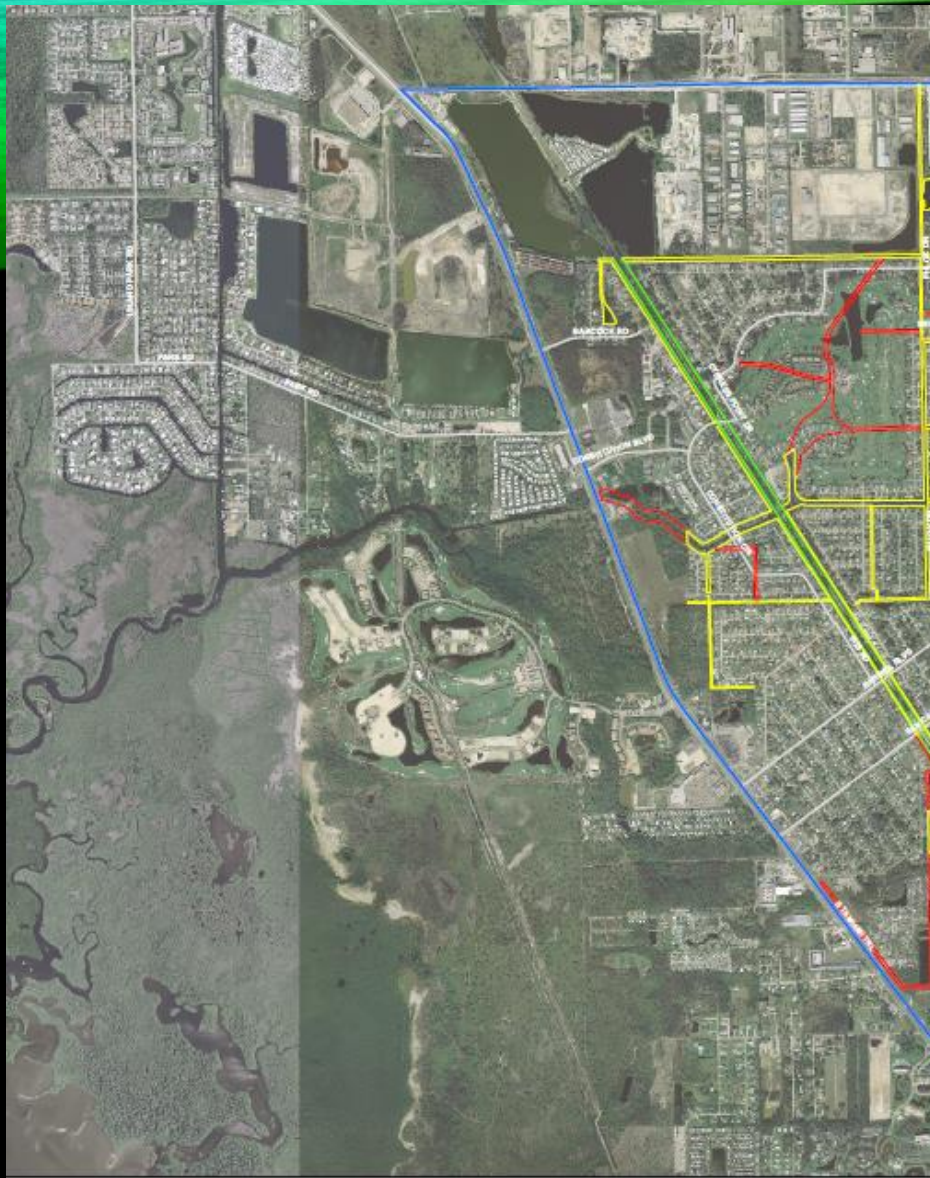


We also have a demonstration shoreline stabilization project underway, and have just installed another butterfly garden at another (Three Oaks) community park.



- 3,046 acres of land
- over 8,000 homes, most on  $\frac{1}{4}$  acre lots and using septic tanks
- approximately 21 miles of canals, 20 retention ponds, and 9 drainage structures.
- proliferation of invasive exotic plants brought on by the hydrological alterations
- Cumulative impacts has led to eutrophication and sedimentation nearly a meter deep in some areas.







# CHALLENGES

## Funding for drainage district non- advalorum

Currently about \$7.00/home site  
(\$70K/year)

- estimated cost to maintain \$140K/yr after restoration (\$4M)
- Need act of state government to increase maintenance fee
- Elected officials unwilling to consider 'tax' increase-
- But this year we are in progress to change to a 5 person elected board with NO CAP!!





# LOGISTICS

- Access between and behind homes limited by fences, sheds, decks.  
makes big equipment and removal of exotics challenging



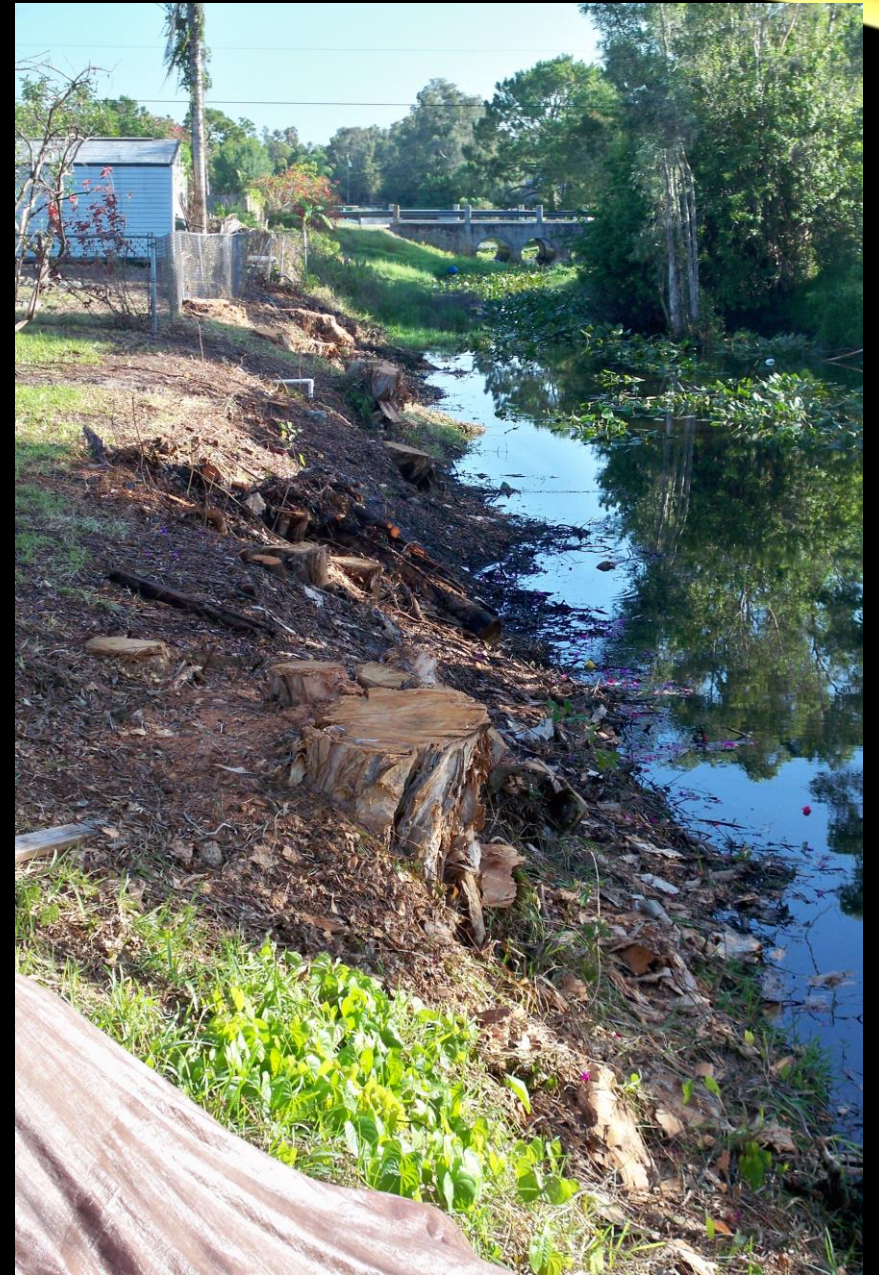
New Jersey, Leg

© 2016 Google

Google Earth



April 2009





June, 2009









June 2009 newly planted





June, 2014





April, 2016





# INTERESTS- OR LACK OF

- Don't know an invasive from a native
- Don't want the wall of greenery removed
- Don't know who is supposed to take care of the canal
- Don't know why spraying the lettuce would be a problem
- Might not want (native) plants that encourage wildlife
  
- Are upset that yard is sliding into canal
- Have no recourse or communication with district





Thank you for listening!