Boa Constrictor at the Charles Deering Estate at Cutler

Jessica Fiallo, Dallas Hazelton, Elias Horna, Frank Ridgley DVM, Karen Solms, Dustin Smith, Carolina Segarra




EVERGLADES CISMA

History

- Snow reported in 2007 that likely present since the 1970's
- Juveniles and adults found in 1990 after a burn
- Reported possibly breeding in 1992
- 164 removed since 1989 – 58 (35%) of which were YOY

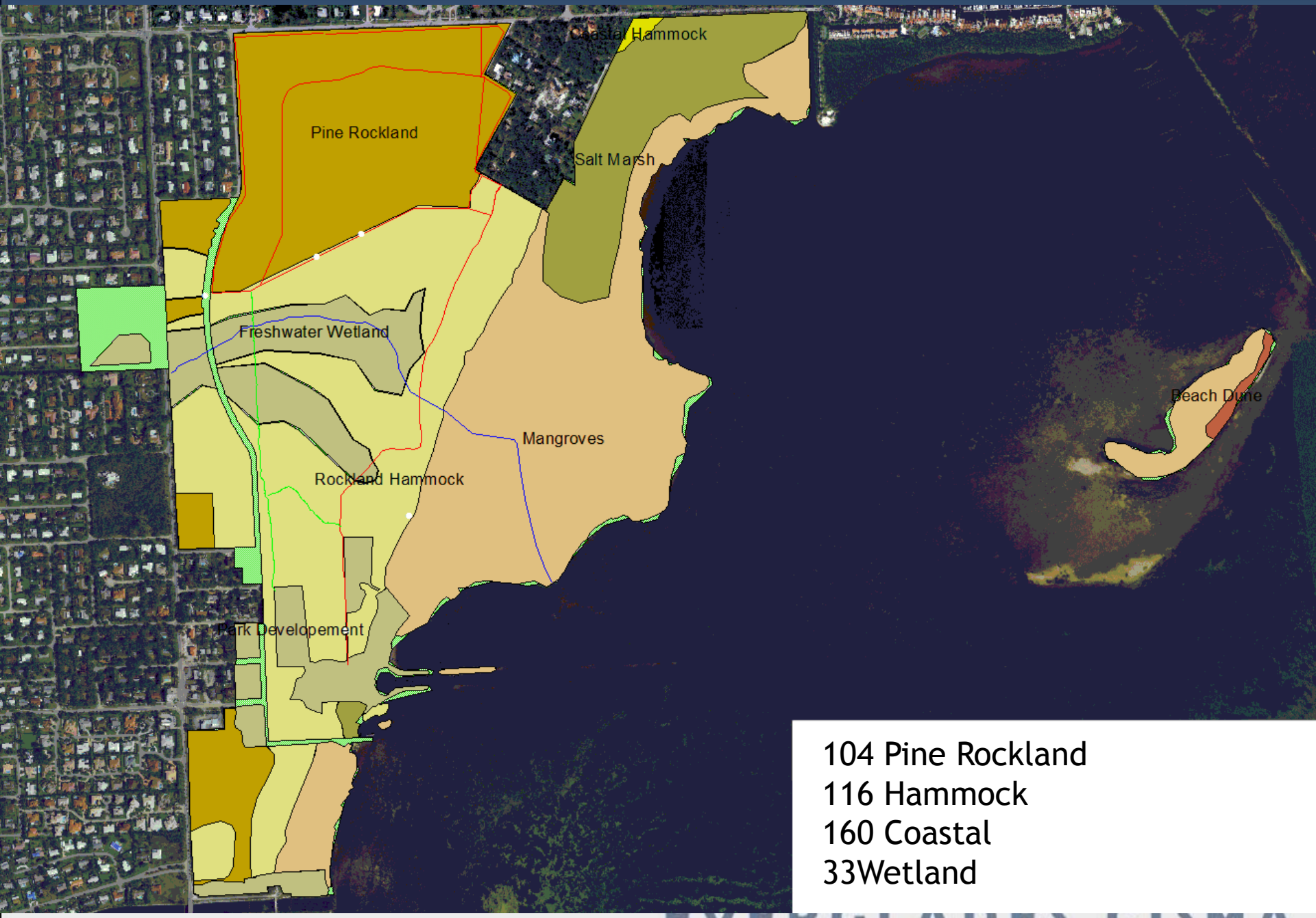
History

- Adjacent resident's cat killed by boa
  - Outcry and website resulted
- FWC surveyed area 12 times with no captures
- Captures appear to be random and by chance
  - Guests, employees,
  - NAM plant crews

Objectives

- Determine the potential impact on the ecosystems
- Use radiotelemetry and visual surveys to determine habitat preference (2.2.2)
- Suggest a management strategy for this species
- Collect genetic samples to potentially determine the origin for the introduced population
  - Develop a reference genetic profile for the population that will allow identification of individuals found outside the site as dispersers or unrelated releases.
- Analyze gut contents and fecal samples to learn about its prey base, possible impacts on the local wildlife populations, and possible implications if the population were to ever disperse to other natural areas.
- Discover any pathology, viruses or parasites that are endemic in the population that may pose a risk to native wildlife.

444 acres

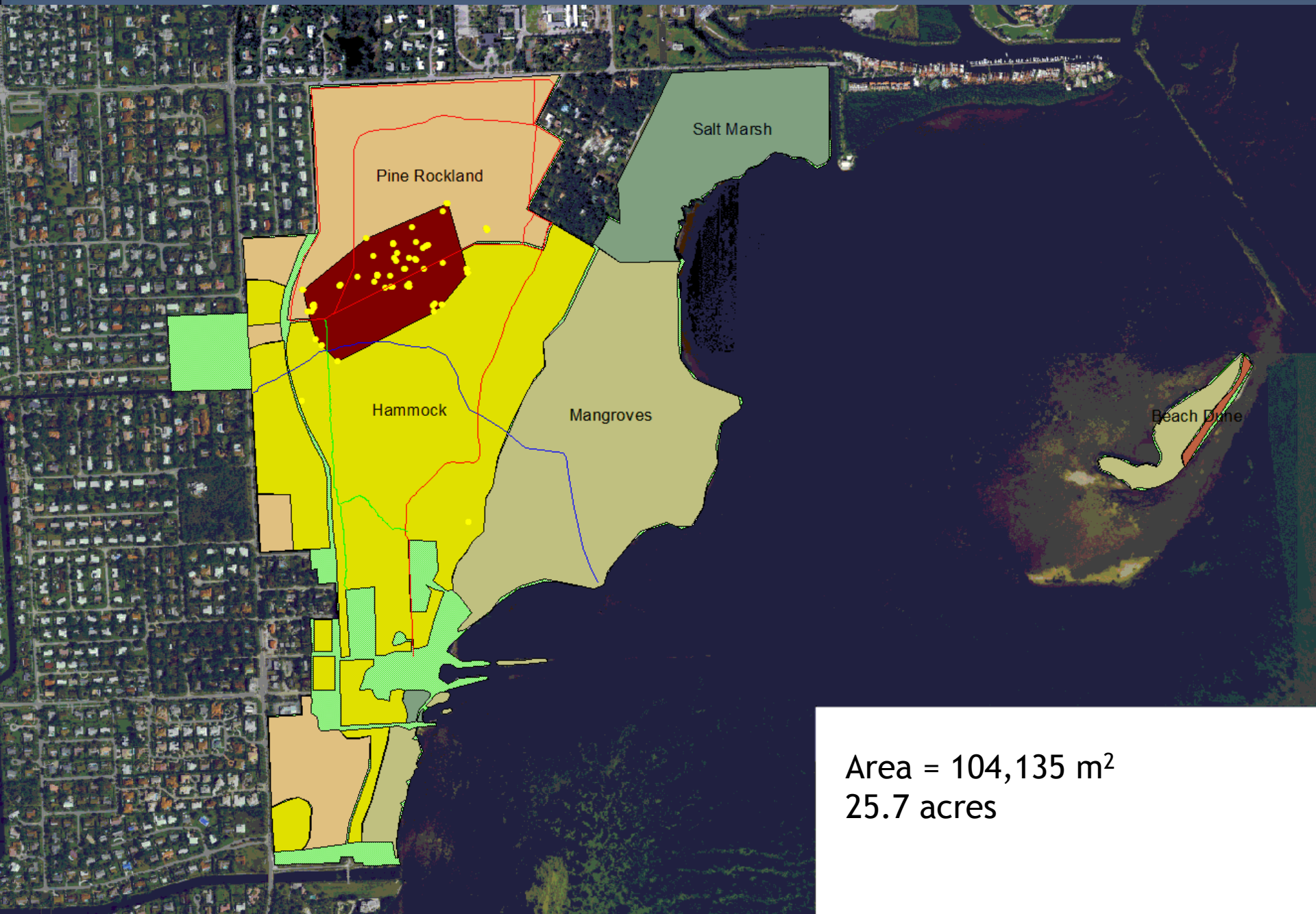


104 Pine Rockland
116 Hammock
160 Coastal
33Wetland

- DB-1, 3, 8, 10, & 12
- DB1
  - SV/ST - 223.4/244.5
  - 8.61 kg
- DB8
  - SV/ST - 163.7/183.0
  - 3.5 kg
- DB10
  - SV/ST - 160.7/179.1
  - 2.58 kg
- DB12
  - SV/ST - 181.2/207.0
  - 7.4 kg

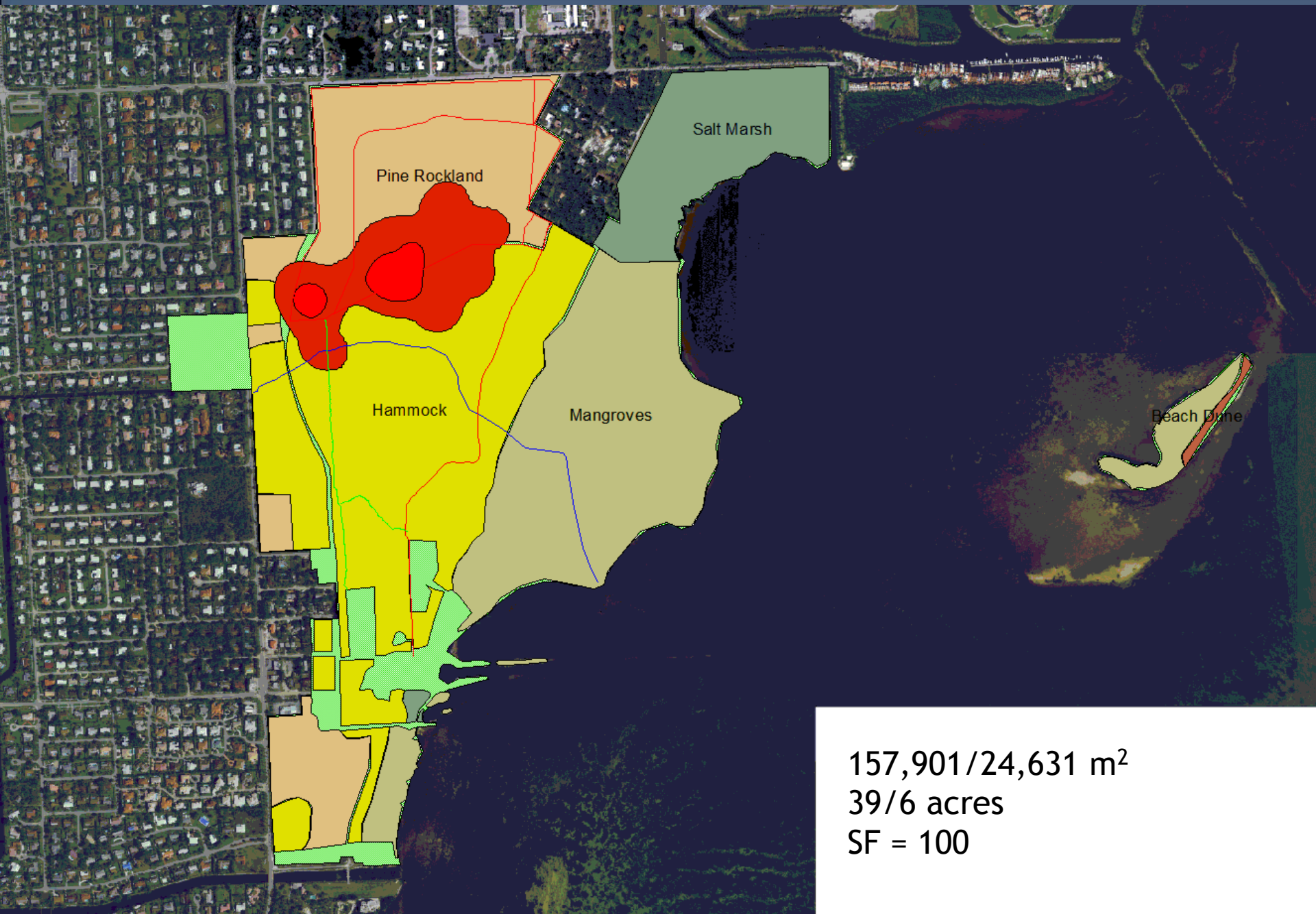
ADES CISMA

DB1 MCP



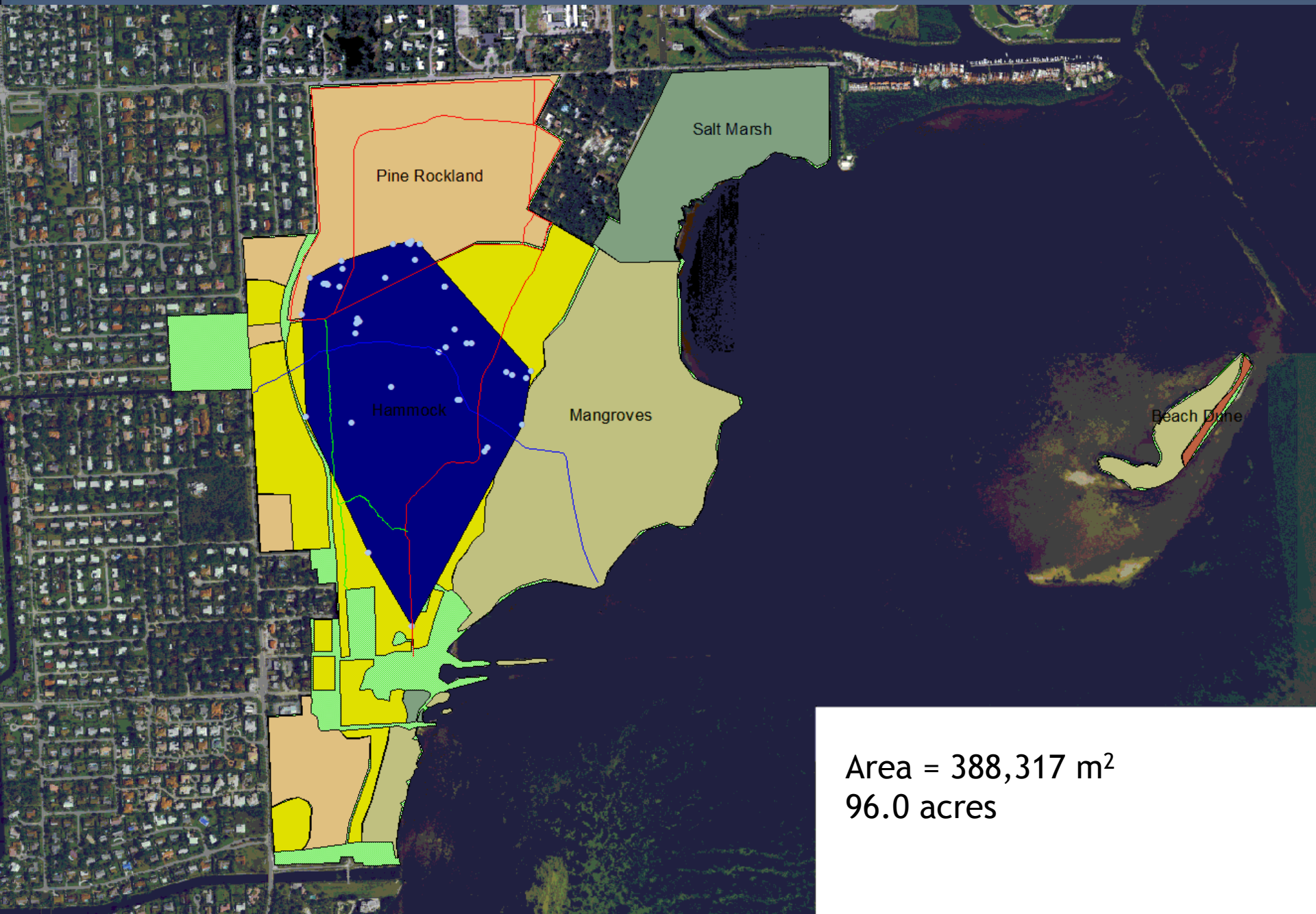
Area = 104,135 m^2
25.7 acres

DB1 Kernal - female



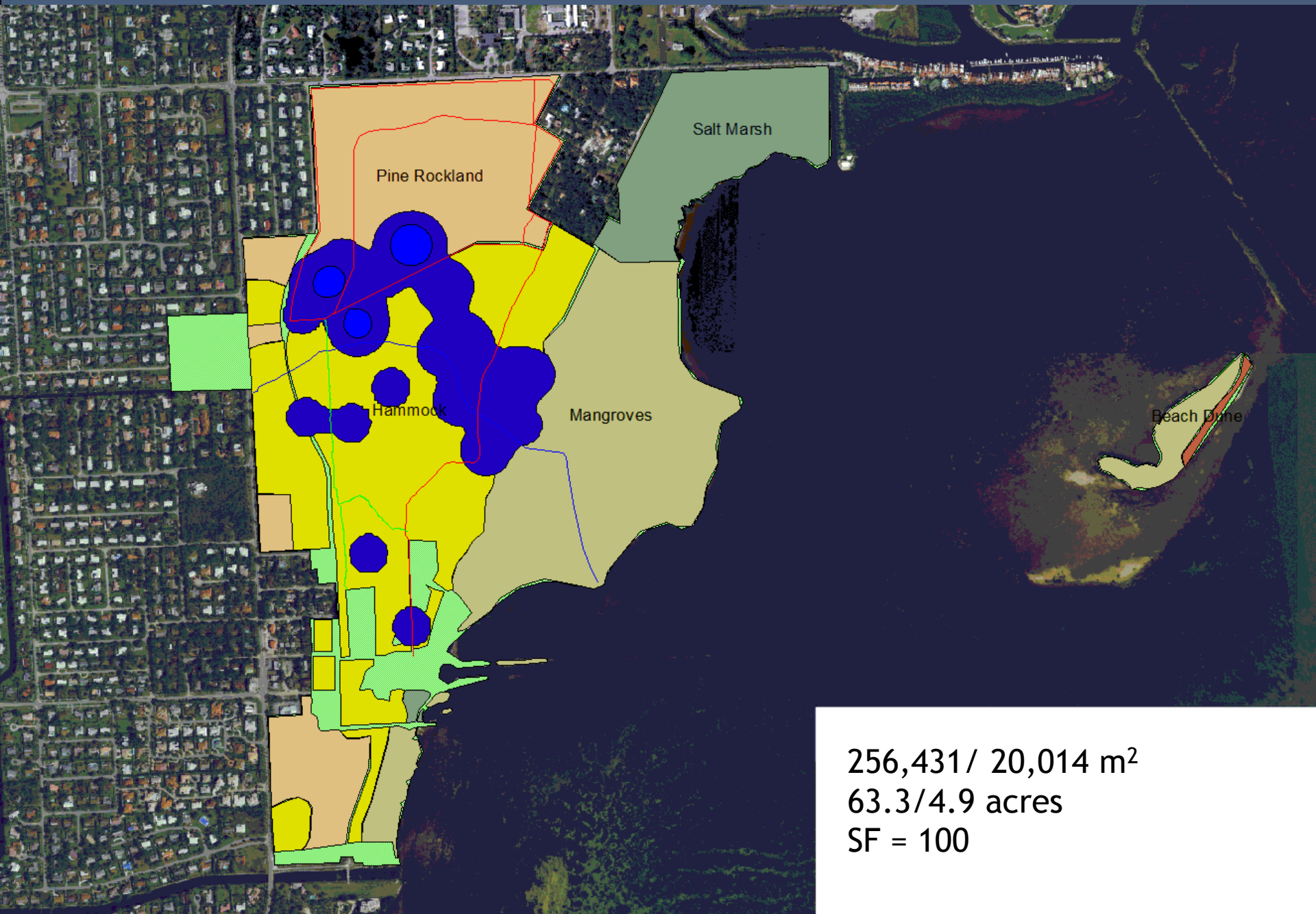
157,901/24,631 m^2
39/6 acres
SF = 100

DB8 MCP



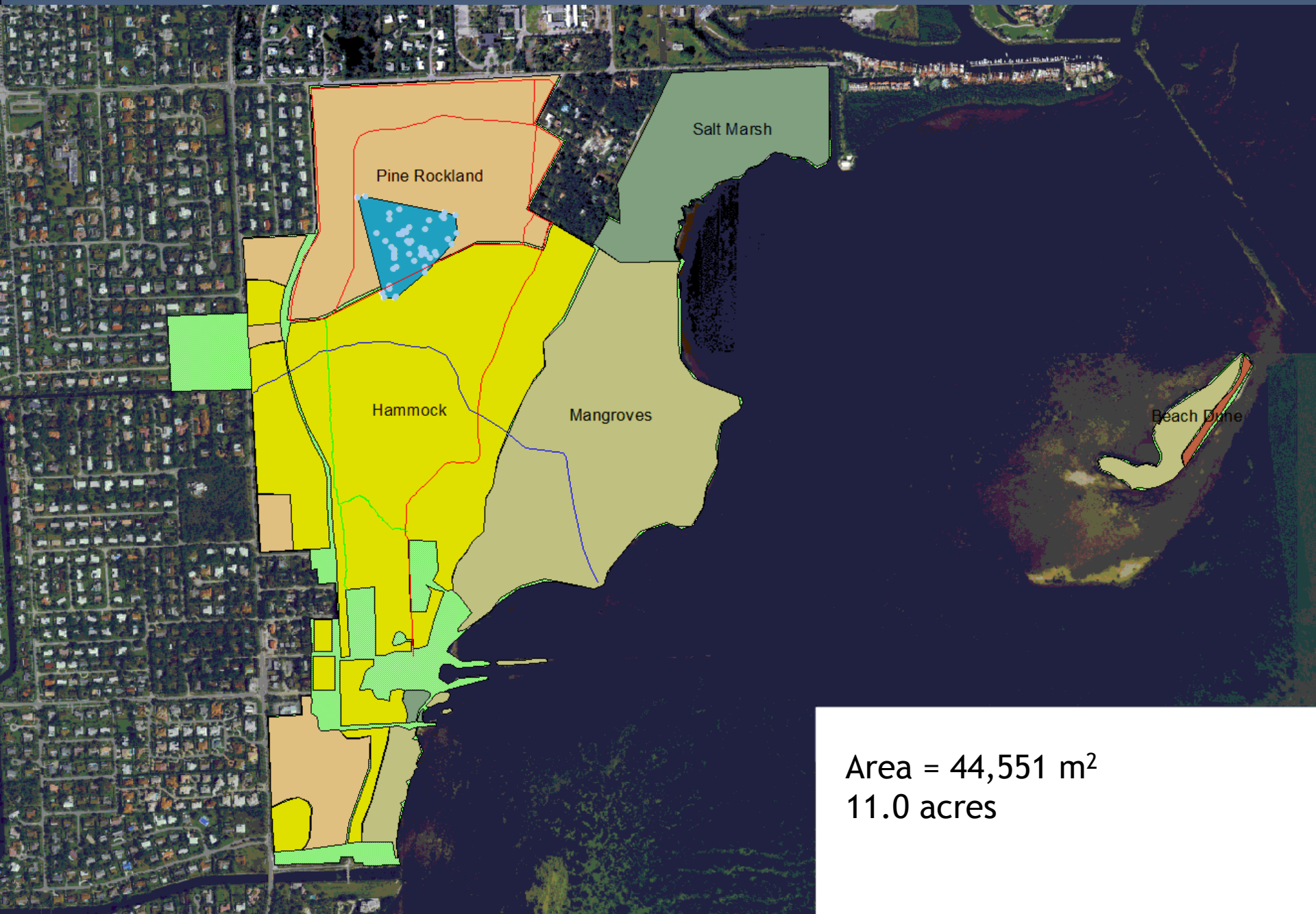
Area = 388,317 m^2
96.0 acres

DB8 Kernal - male



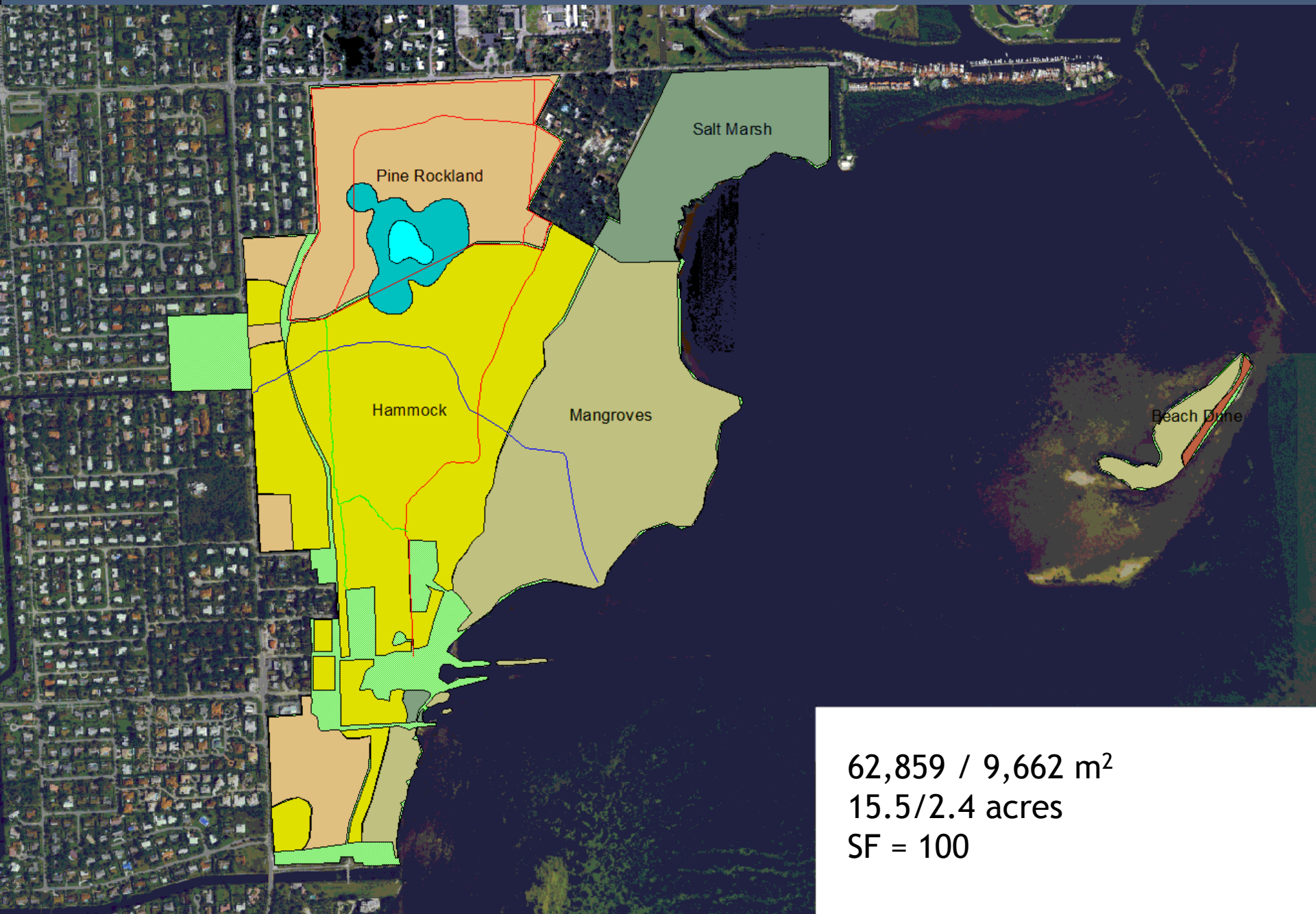
256,431/ 20,014 m^2
63.3/4.9 acres
SF = 100

DB10 MCP



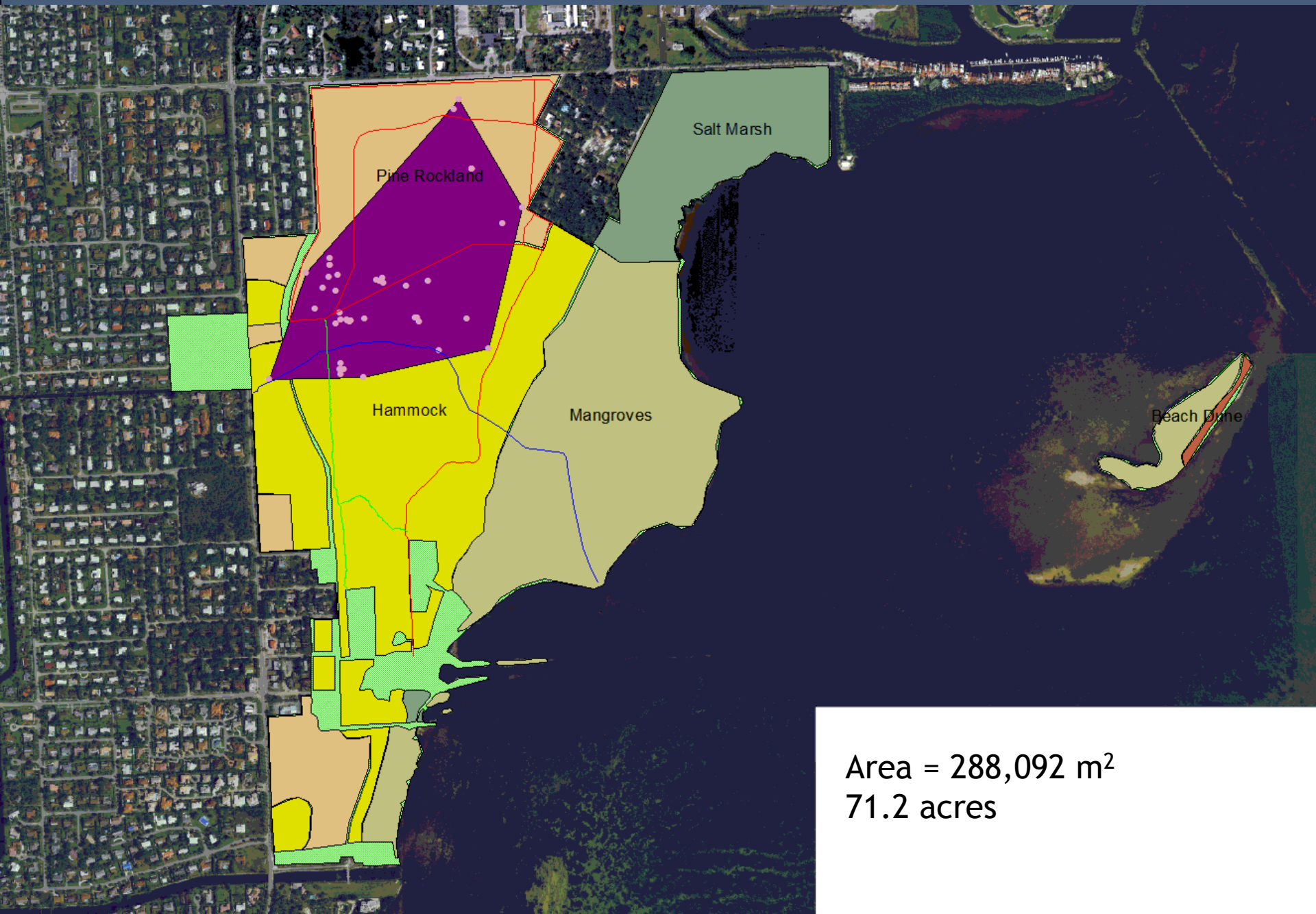
Area = 44,551 m^2
11.0 acres

DB 10 Kernal - female



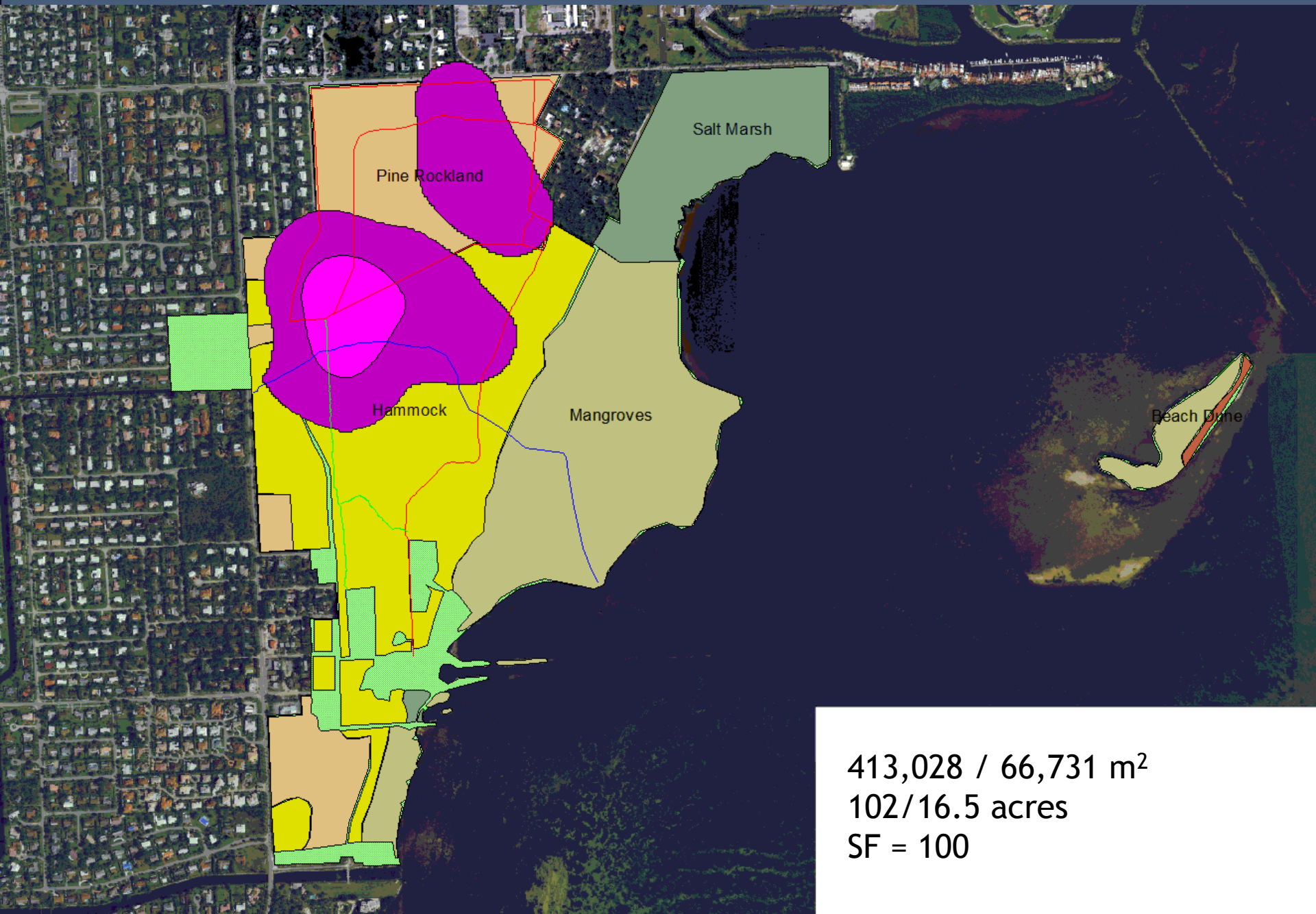
62,859 / 9,662 m^2
15.5/2.4 acres
SF = 100

DB12 MCP



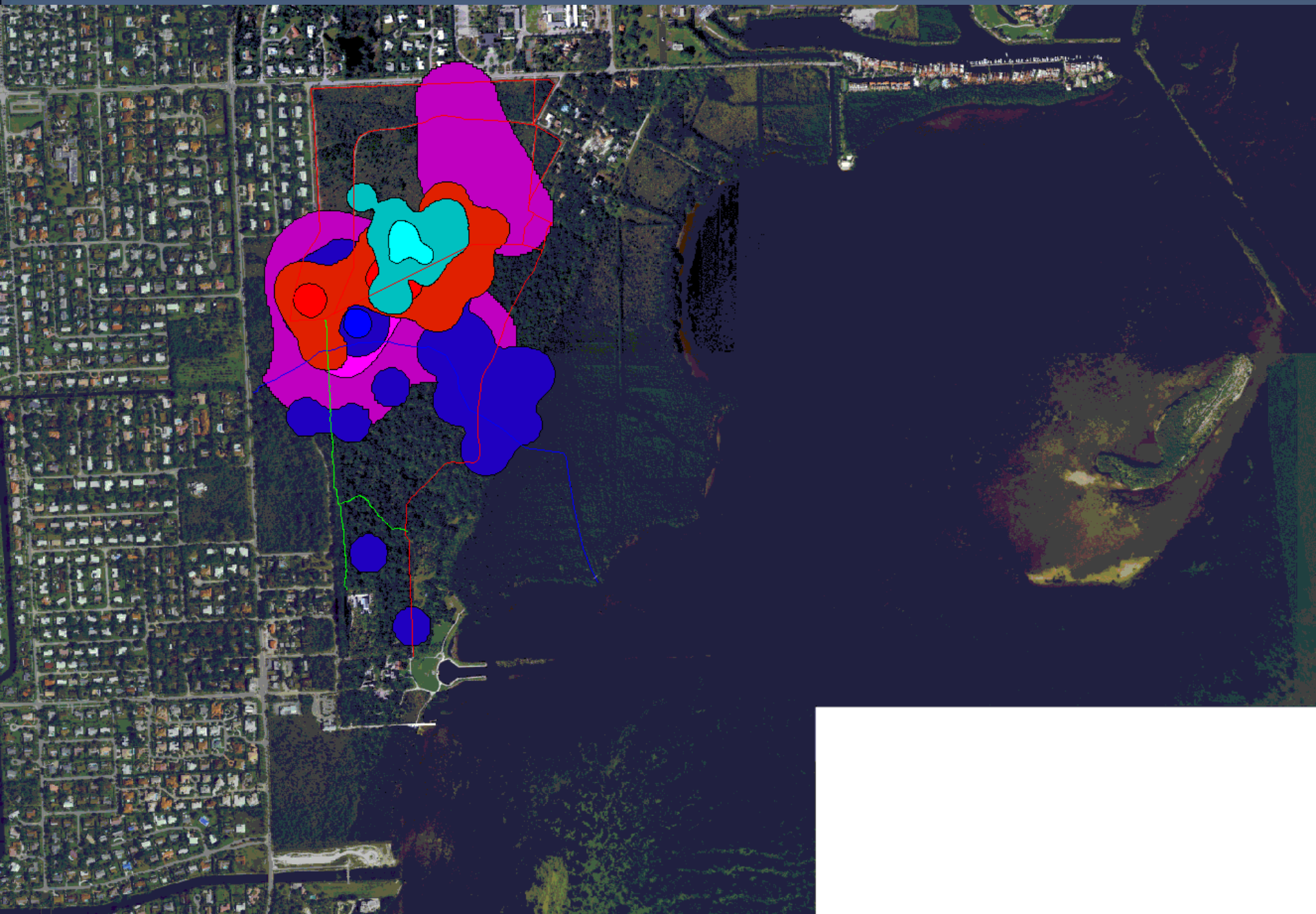
Area = 288,092 m^2
71.2 acres

DB12 Kernal - male

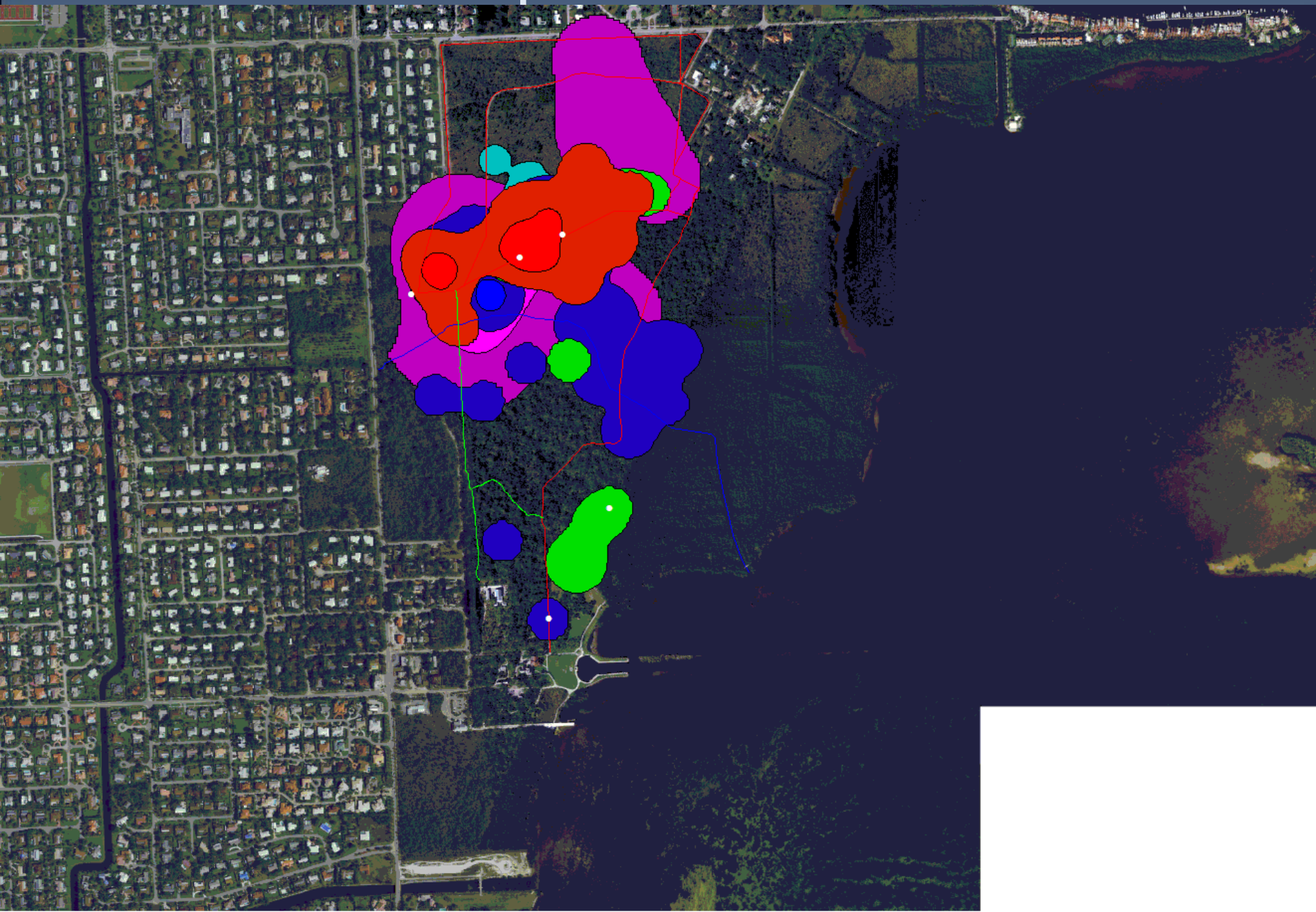


413,028 / 66,731 m^2
102/16.5 acres
SF = 100

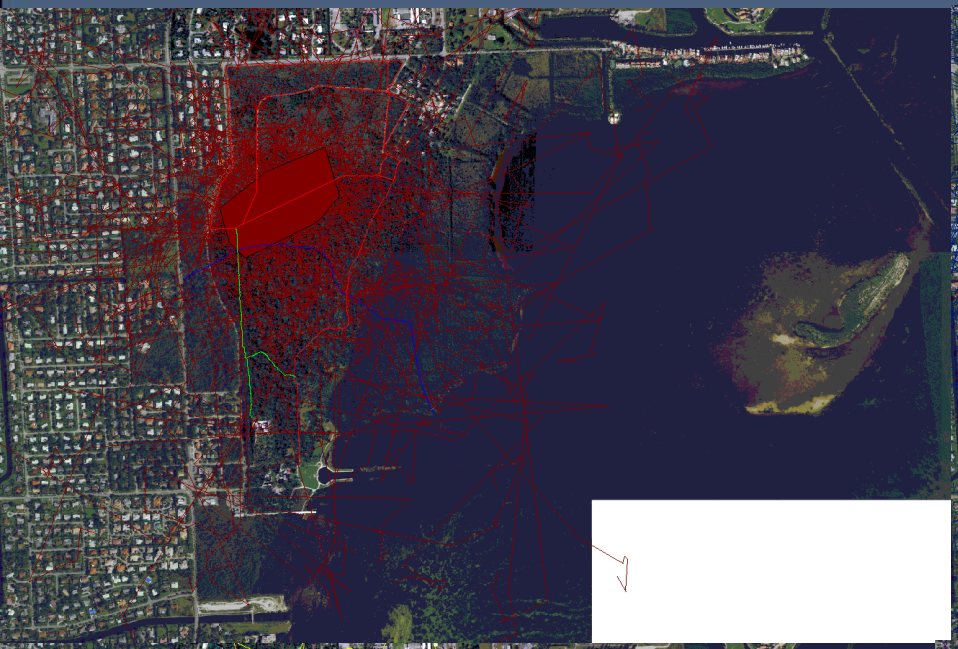
Combined Kernals

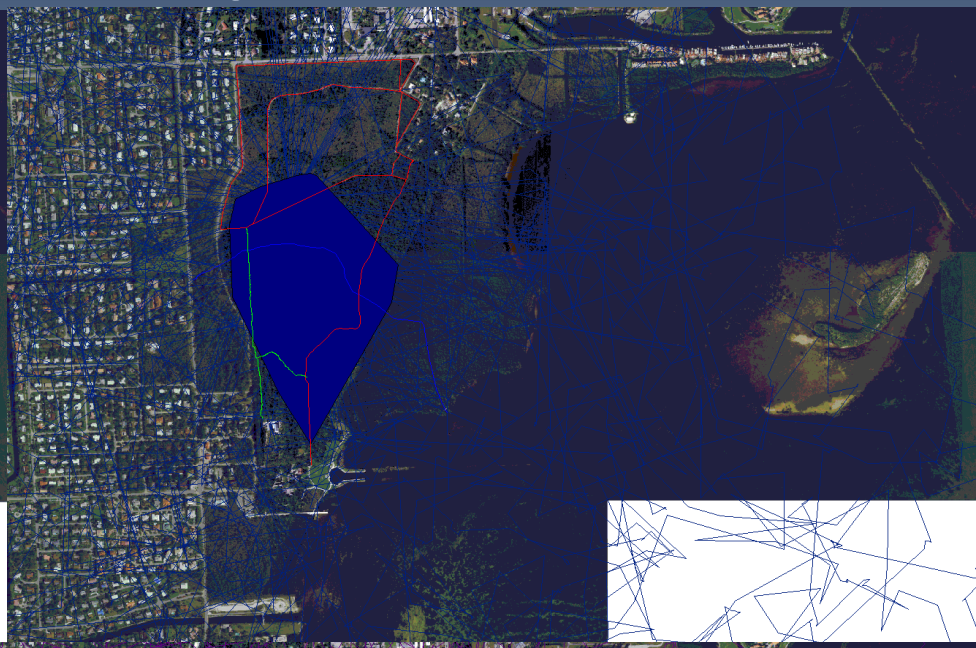


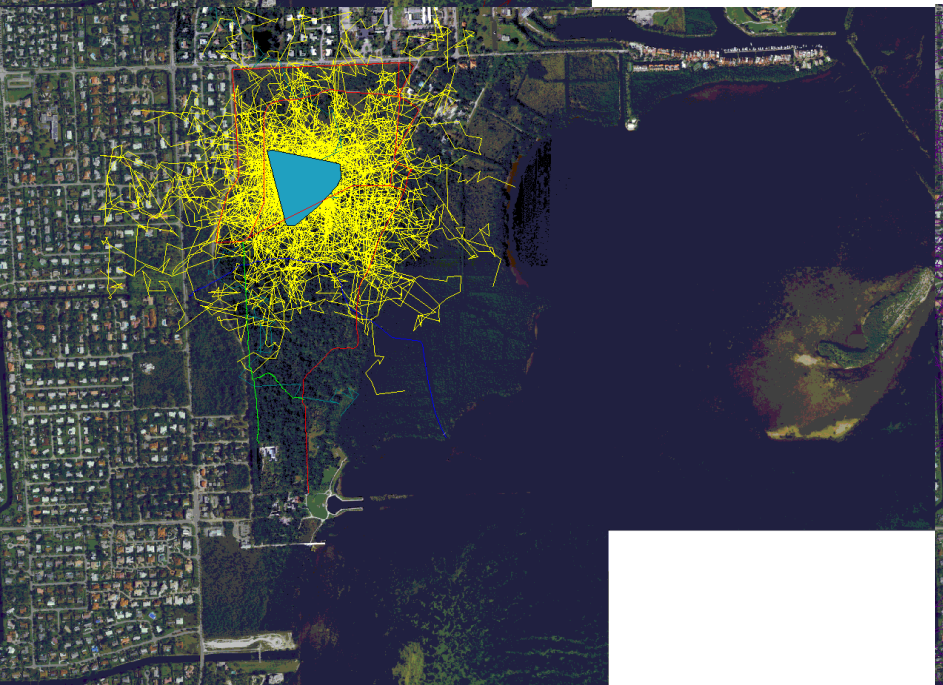
Capture Points

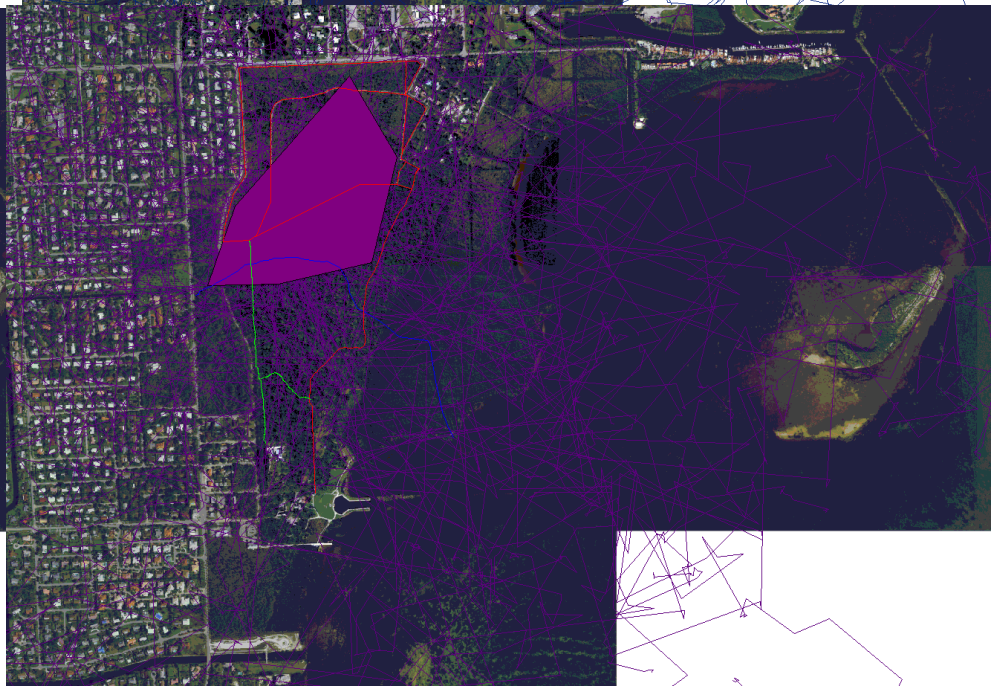


Site Fidelity









Timeframe and Points

- DB1- Dec 10, 2012 to Nov 13, 2013 – 102 points
- DB3- Aug 28, 2013 to Nov 1, 2013 – 18 points
- DB8- Oct 28, 2013 – still tracking – 53 points
- DB10- Nov 12, 2013 – still tracking – 58 points
- DB12- Nov 26, 2013 – still tracking – 49 points
- DB13 & 17 juveniles currently tracking

Macrohabitat Usage

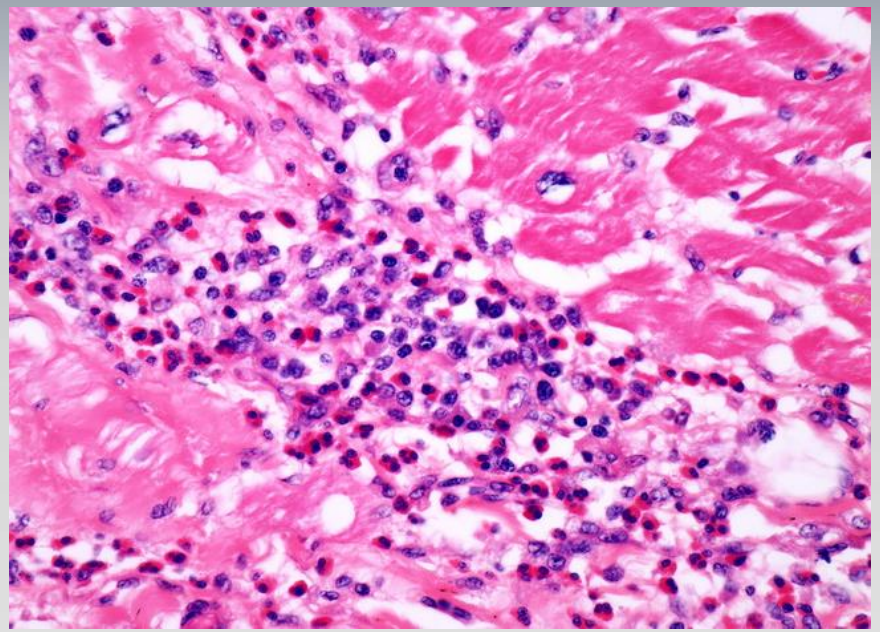
- Pine Rockland – 62.5%
- Rockland Hammock – 35.7%
- Mangroves – 1.8%

Microhabitat

- Underground – 59.6%
- Filtering Canopy – 18.2%
- Under cover – 9.6%
- Fully exposed – 4.6%
- Tree – 2.9%
- Water – 1.8%
- Unknown – 3.2%

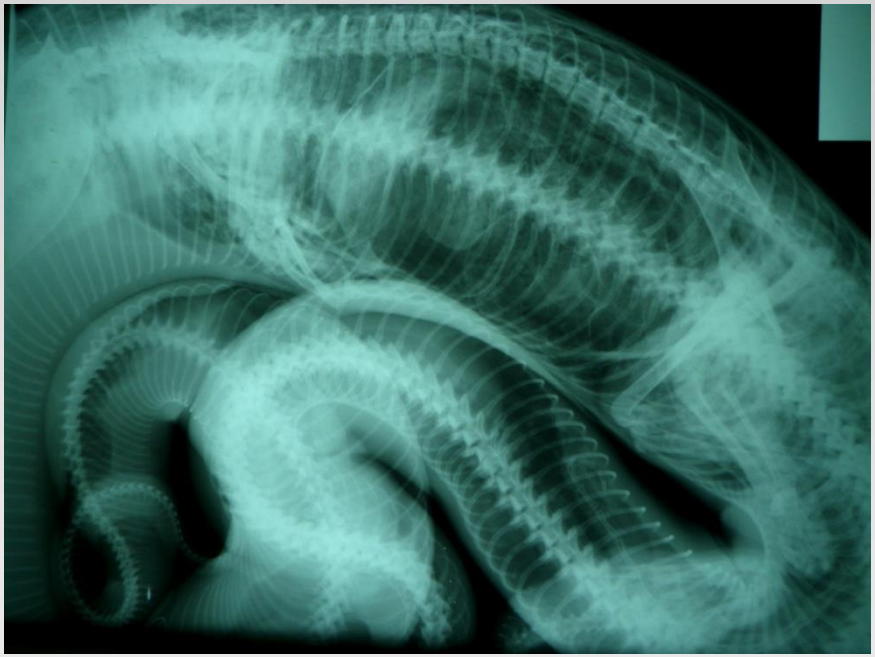
Histopathology

- Evidence of parasite migration in tissues but no actual parasites have been seen in slide sections
- Some parasites found in the lungs but have not been submitted yet for identification
- No evidence of IBD
- Most were remarked to be in good health and physical condition based on tissue samples



Diet

- Virginia Opossum
- Grey Squirrel
- Feral Cat
- Rat
- Otter?



Management Suggestions

- Still preliminary results
  - small sample size
- Map out burrows/solution holes in pine rockland and monitor
- Maintain adults with transmitters near breeding season and monitor closely ~Oct-Nov
  - November 1st
- Search areas immediately around where neonates are found – May-Sept