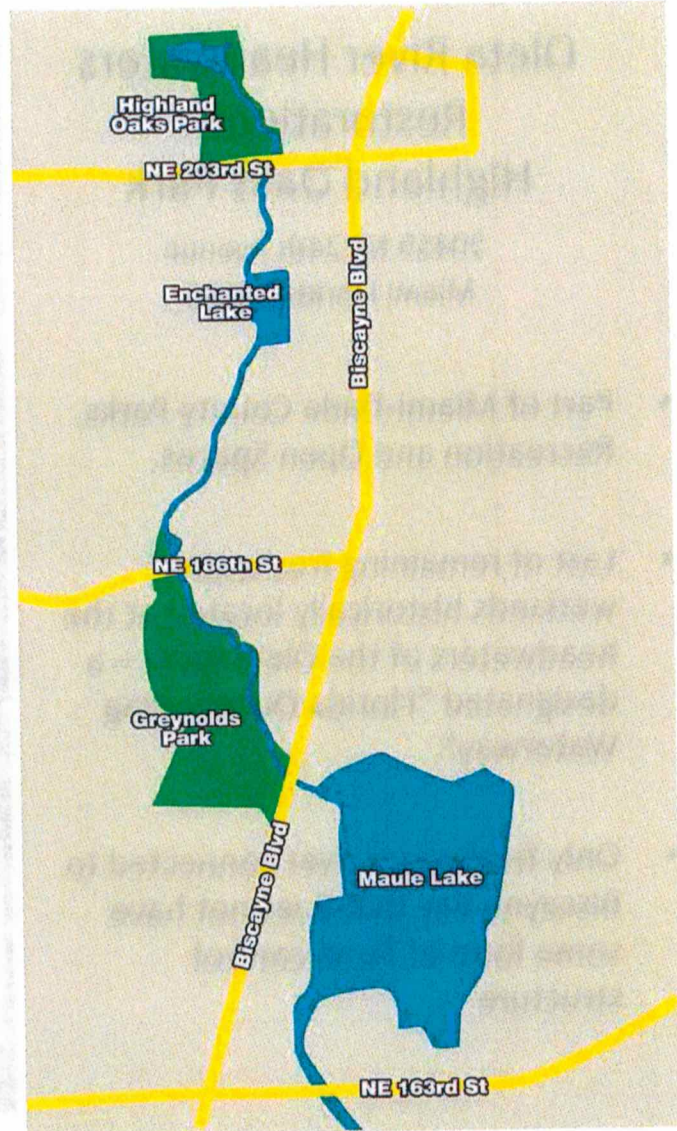




# Headwaters of Oleta River:

Fresh water moves downriver from Highland Oaks Park and surrounding communities, past Greynolds Park, through Maule Lake, and into Biscayne Bay.

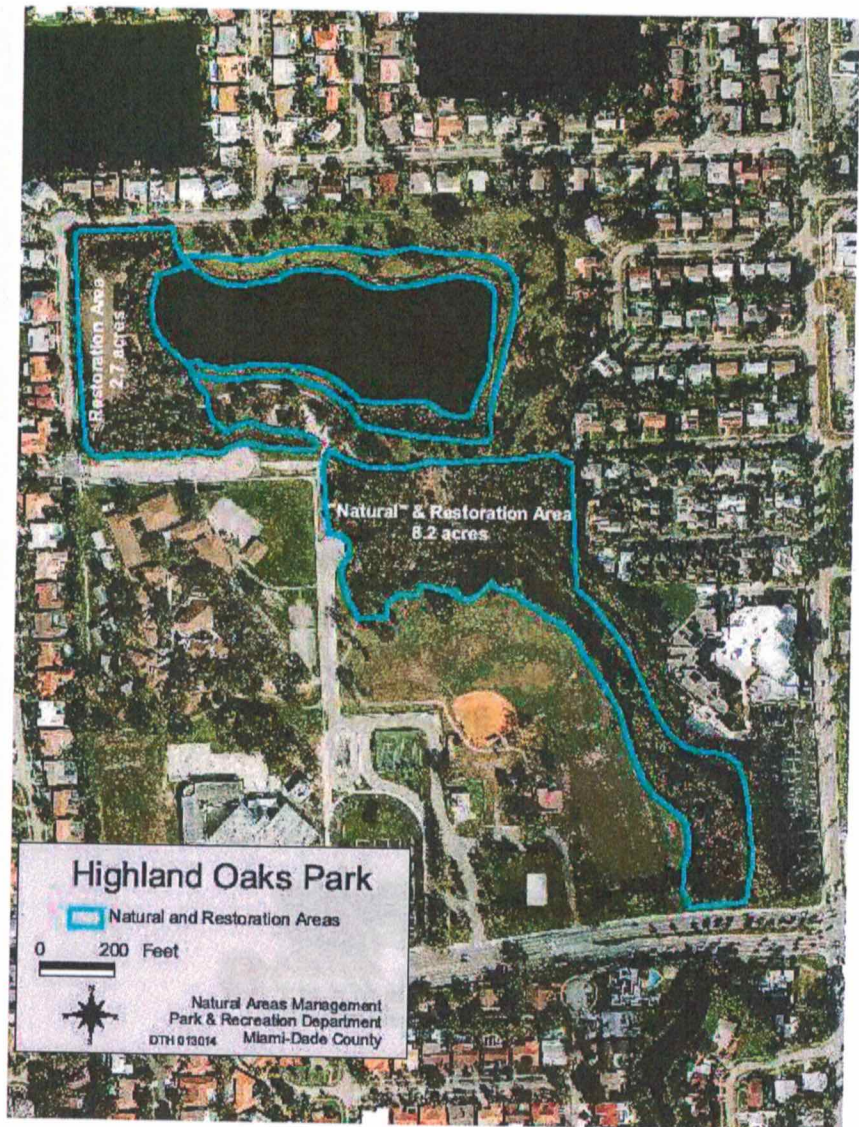




## Oleta River Headwaters Restoration – Highland Oaks Park

20459 NE 24th Avenue  
Miami Florida 33180

- Part of Miami-Dade County Parks, Recreation and Open Spaces.
- Last of remaining freshwater wetlands historically located at the headwaters of the Oleta River – a designated “Florida Outstanding Waterway”.
- Only freshwater river connected to Biscayne Bay that does not have some form of flood control structure.

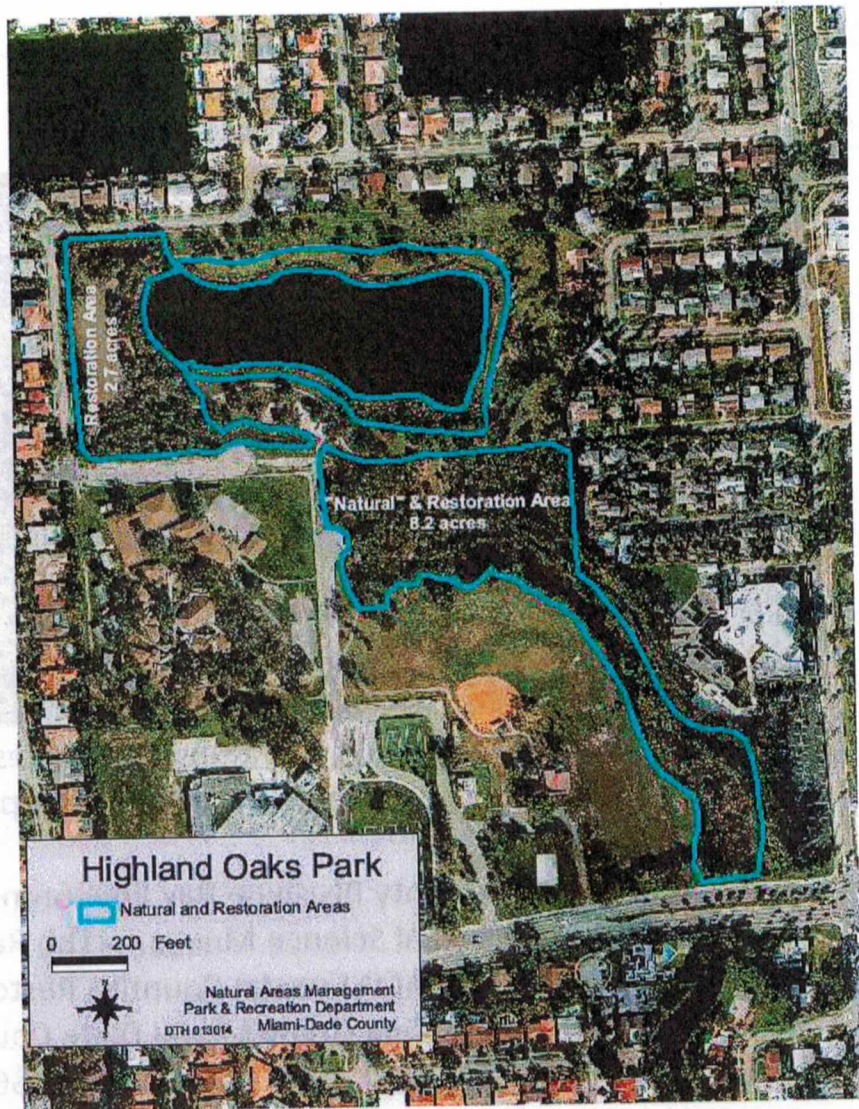




# Highland Oaks

## Protected Natural Areas:

- **10.9 acres** restored as **Protected Natural Areas** composed of freshwater wetland and upland habitats.
- **Southern** 8.2 acres restored via three (3) regulatory mitigation projects for wetlands impacts from urban development in north Miami-Dade county from 1997 – 2005.
- **South Florida Water Management District** holds **Conservation Easement** on southern natural areas that requires these areas be maintained exclusively for conservation.
- Community benefits over long term from enhanced **Ecosystem Services** resulting from restoration including cleaner air and water, better storm protection, carbon sequestration and many others.





Highland Oaks Park – Oleta River  
Headwaters Restoration  
**Goal: to re-establish hydrologic regime**



In 2012 northern wetlands, streambed and lakeshore restored and enhanced to re-establish the hydrologic regime via partnerships with and grant funding through:

- \*Miami-Dade County Biscayne Bay Environmental Enhancement Trust Funds
  - \*Miami Science Museum (The Reclamation Project)
  - \*NaCO Coastal Counties Restoration Initiative
  - \*Sea Grant-Miami Dade County Extension
- Total project costs: \$621,065.

# Highland Oaks

## Protected Natural Areas

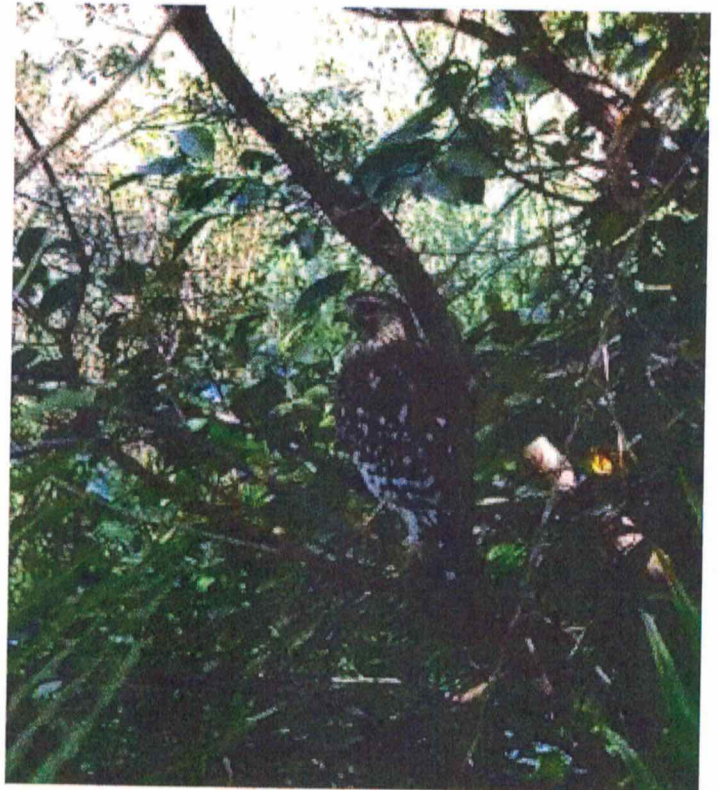
- Photos of Southern natural areas, mitigation work completed in 2005: freshwater wetland restoration and enhancement.





# Unique Features and Community Benefits:

- Prior to restoration the site was a disturbed tidal wetland dominated by invasive non-native Australian pine (*Casurina equisetifolia*) and Brazilian pepper (*Schinus terebinthifolius*).
- Restorations involved clearing exotic woody species, followed by excavation that transformed the property to a mixture of low marsh community, preserved islands of native vegetation, and marginal transitional areas.
- Estuarine and freshwater marsh have been restored benefitting wildlife and enhancing biodiversity.



# Unique Features and Community Benefits:

- **Rapid urbanization** in Miami-Dade County has left residents and communities without many renewal and stabilization services previously provided by natural ecosystems.
- **Ecosystem Services** provided include those that clean air and filter water, bacteria that decompose and recycle wastes, bees and invertebrates that pollinate flowers so that fruit and vegetables develop, and tree roots that hold soil in place to prevent erosion.





# Unique Features and Community Benefits:

- Restored Oleta River Headwaters provide the lower salinity environment needed to fulfill life history habitat requirement necessary for some important commercial and recreational fishery industry.



Two large striped mullet (*Mugil cephalus*) foraging within the restored wetlands at Highland Oaks Park (Oleta River Headwaters).



# We Need Your Help

- Highland Oaks Park contains valuable and beautiful natural resources that have been enhanced and restored, and need to be protected.
- Greater better wildlife use and improved wildlife viewing.
- Enhanced biodiversity and improved Ecosystem Services ultimately means a better quality of life for the community.

