

Brooker Creek Preserve: The Challenges of Ecological Management in an Urban Environment



**H. Bruce Rinker, Ph.D.
Department of Environmental Management
Environmental Lands Division
Tarpon Springs, FL**

Management by the Environmental Lands Division (ELD)

Environmental Management

Air Quality

Water and Navigation

Code Enforcement

Environmental Lands

Pollution Prevention

Support Services

Coastal Management

Watershed Management

ELD Mission



© Ernest C. Simmons

**To provide sound stewardship to the County's
wild lands and opportunities for the appreciation
of their intrinsic value**



Environmental Lands Division



Administration

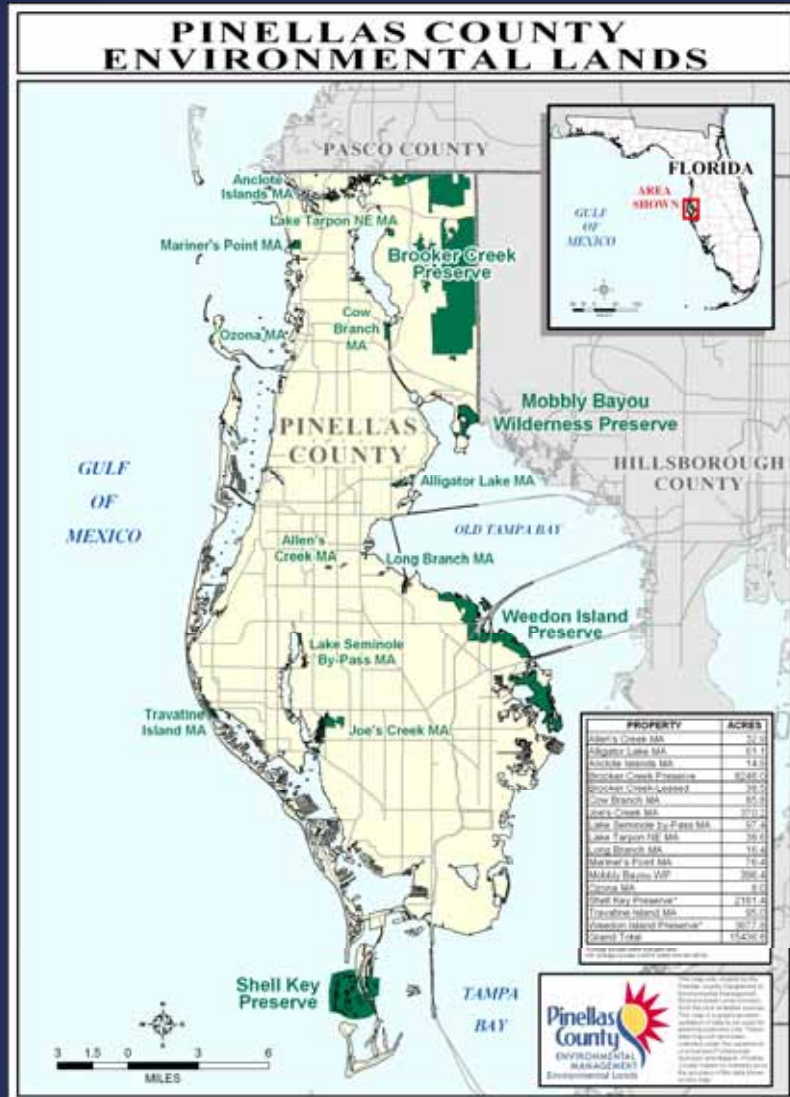
Operations

**Land
Management**

**Ecological
Research**

**Environmental
Education**

**50 staff, 400 volunteers, 7 law enforcement officers, 2 nonprofit “Friends”
groups, Wildland Fire Team**



Environmental Lands:

• 4 Preserves:

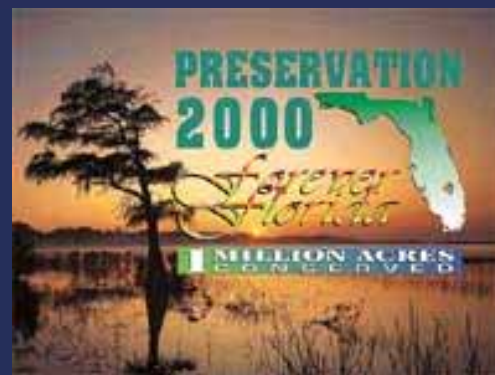
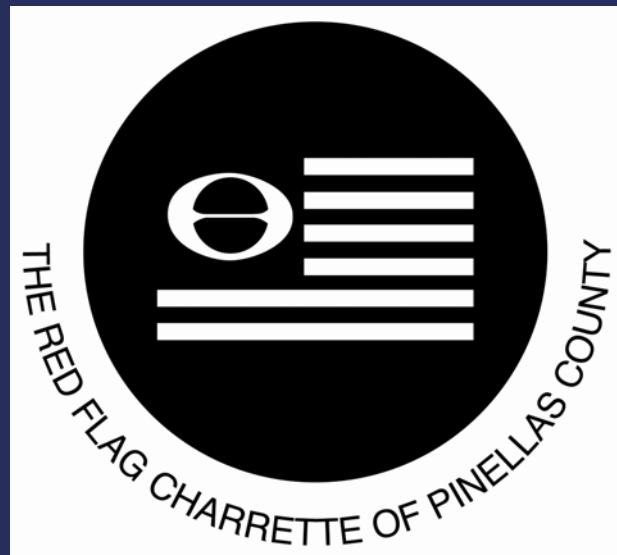
- Brooker Creek Preserve
- Weedon Island Preserve
- Shell Key Preserve
- Mobbly Bayou Preserve

• 11 Management Areas:

- Ozona
- Lake Tarpon NE
- Allen's Creek
- Travertine Island
- Others

• Over 15,000 acres altogether

The Formative Years



**2004 “County Leadership in Conservation” Award
Trust for Public Lands and National Association of
Counties**



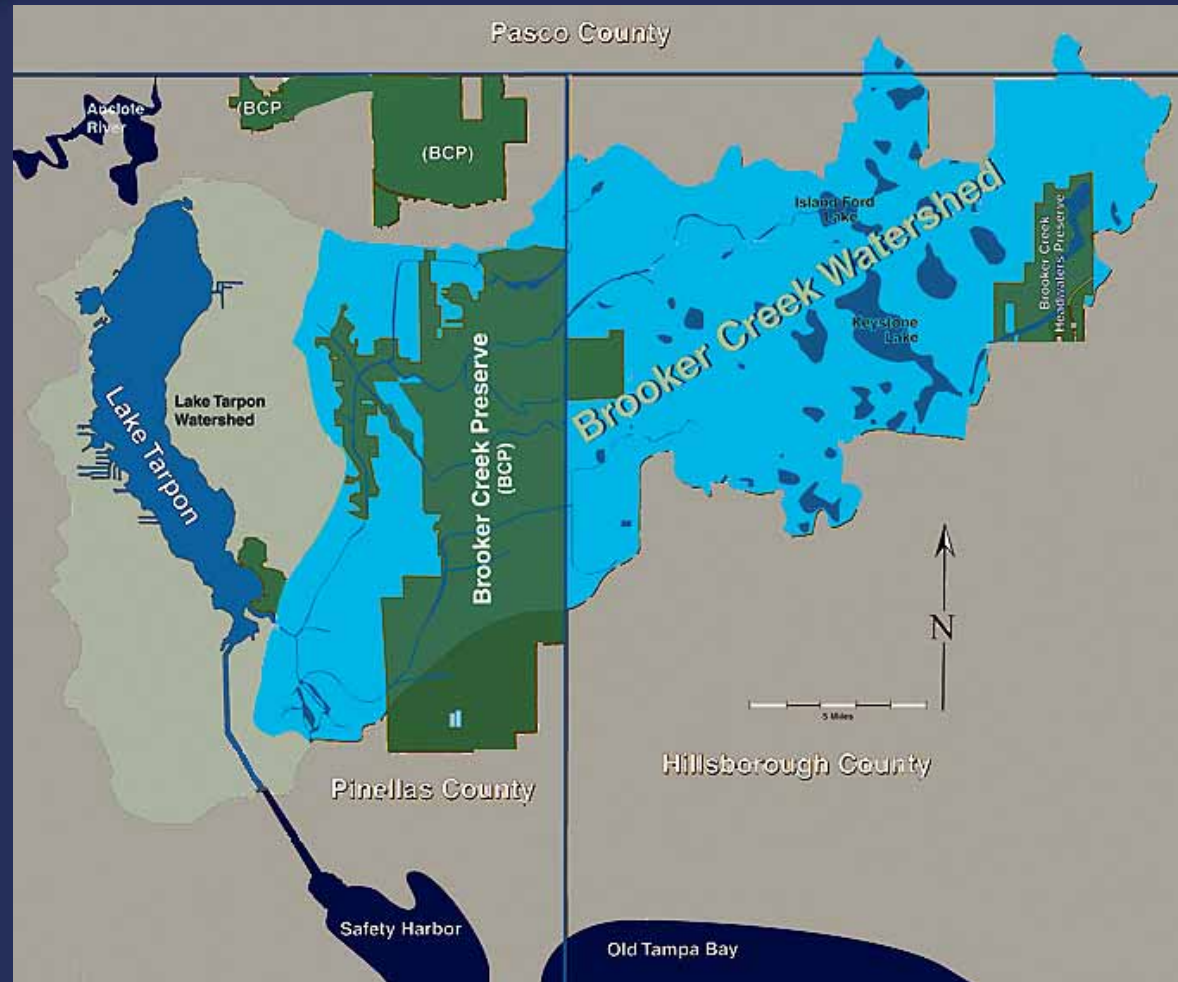


The Urban/Wild Context for Pinellas County:

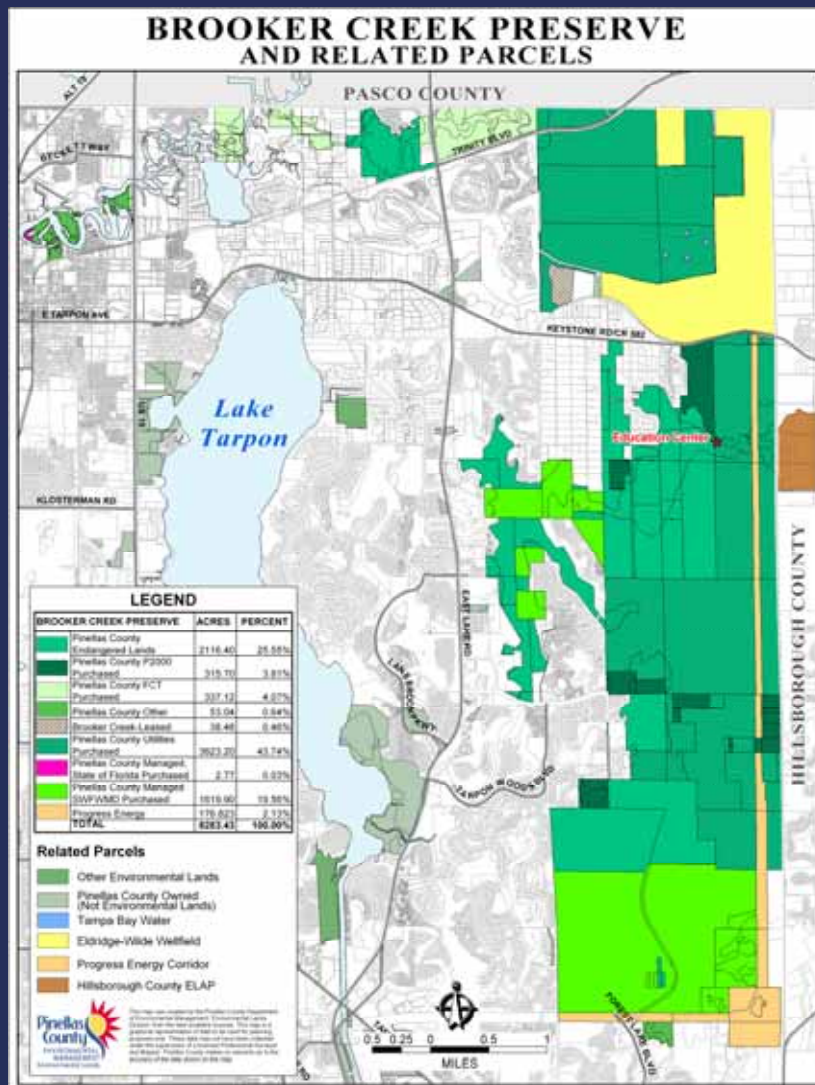
- Population just under 1 million
- Over 3000 persons per square mile vs. 300 persons per square mile for the State:
 - 86% White
 - 9% African American
 - 5% Hispanic
- Median age = 43 years; median family income = approx. \$47,000
- 280 square miles of land with 11% set aside as parks and preserves
 - 20,000 acres in public trust
 - > \$2 billion real estate value
- ∴ Multiple, sometimes conflicting, pressures on open spaces

The Urban/Wild Interface at Brooker Creek Preserve





60% of Brooker Creek Preserve lies inside the Brooker Creek Watershed (= 25,159 acres, crossing three FL counties)



Ownership of Brooker Creek Preserve:

- Pinellas County Government: Environmental Management Department (34%)
- Pinellas County Government: Utilities Department (44%)
- Southwest Florida Water Management District (SWFWMD) (20%)
- Progress Energy (2%)

An Award-Winning Environmental Education Center



**“Empowering citizens to make informed decisions
about natural resources”**

**Our Message through Programs, Signage, and
Exhibits**

Examples of Conservation Partnerships at Brooker Creek Preserve

Friends  of Brooker Creek Preserve



Natural History and Ecology of Brooker Creek Preserve





**Species: 600 plants; 21 amphibians; 39
reptiles; 183 birds; 20 mammals; unknown
numbers for insects, arachnids,
microorganisms; unknown TOTAL
SPECIES (more than
40 “listed” species)**

An Invasive Exotic at Brooker Creek Preserve: the Mexican Weevil, Summer 2006



© Ty Miramonti



© Ty Miramonti



© Jim Castner, UF



© Ty Miramonti



© Ty Miramonti



10 or more different ecosystem types including hardwood hammocks, cypress domes, swamps and marshes, sandhills, pine flatwoods, and ...



**... a remnant old-growth
forest with stratified
epiphytes and 80-foot
canopy nearby**

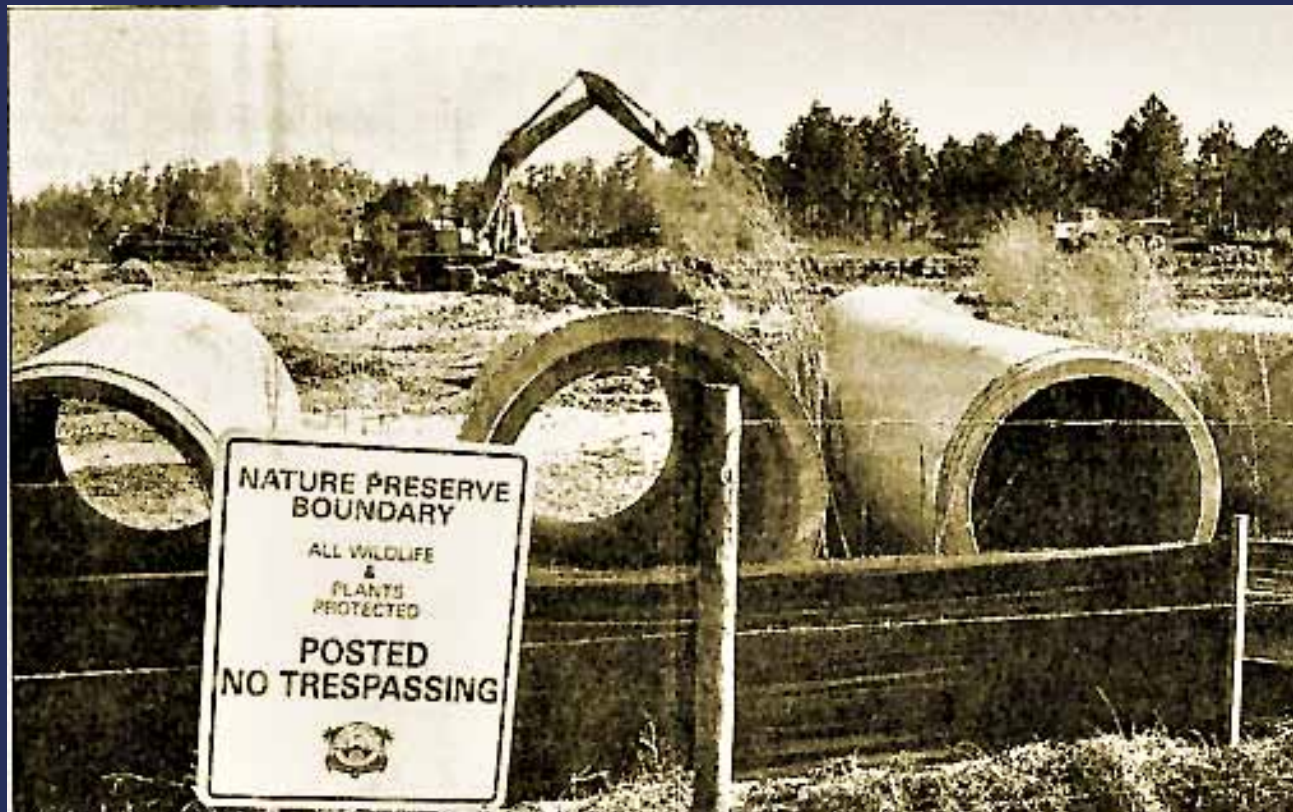
A History of Use and Abuse





Restoration Ecology: The science of sustaining biodiversity and re-establishing an ecologically healthy relationship between nature and culture

Issues of Conflict at Brooker Creek Preserve





Issues of Conflict at Brooker Creek Preserve:

- Ball-fields (late 1990's)
- Therapeutic Horse Center (late 1990's)
- Well-head Reactivation (late 1990's)
- Blending Facility (early 2000's)
- Recently denied proposals have included ATV trails, pet access, a wildlife rehabilitation facility, and extended hiking trails into the heart of the Preserve from local neighborhoods.



Issues of Conflict at Brooker Creek Preserve:

- Ball-fields (late 1990's)
- Therapeutic Horse Center (late 1990's)
- Well-head Reactivation (late 1990's)
- Blending Facility (early 2000's)
- Recently denied proposals have included ATV trails, pet access, a wildlife rehabilitation facility, and extended hiking trails into the heart of the Preserve from local neighborhoods.



Issues of Conflict at Brooker Creek Preserve:

- Ball-fields (late 1990's)
- Therapeutic Horse Center (late 1990's)
- Well-head Reactivation (late 1990's)
- Blending Facility (early 2000's)
- Recently denied proposals have included ATV trails, pet access, a wildlife rehabilitation facility, and extended hiking trails into the heart of the Preserve from local neighborhoods.

ELD Fundamentals:

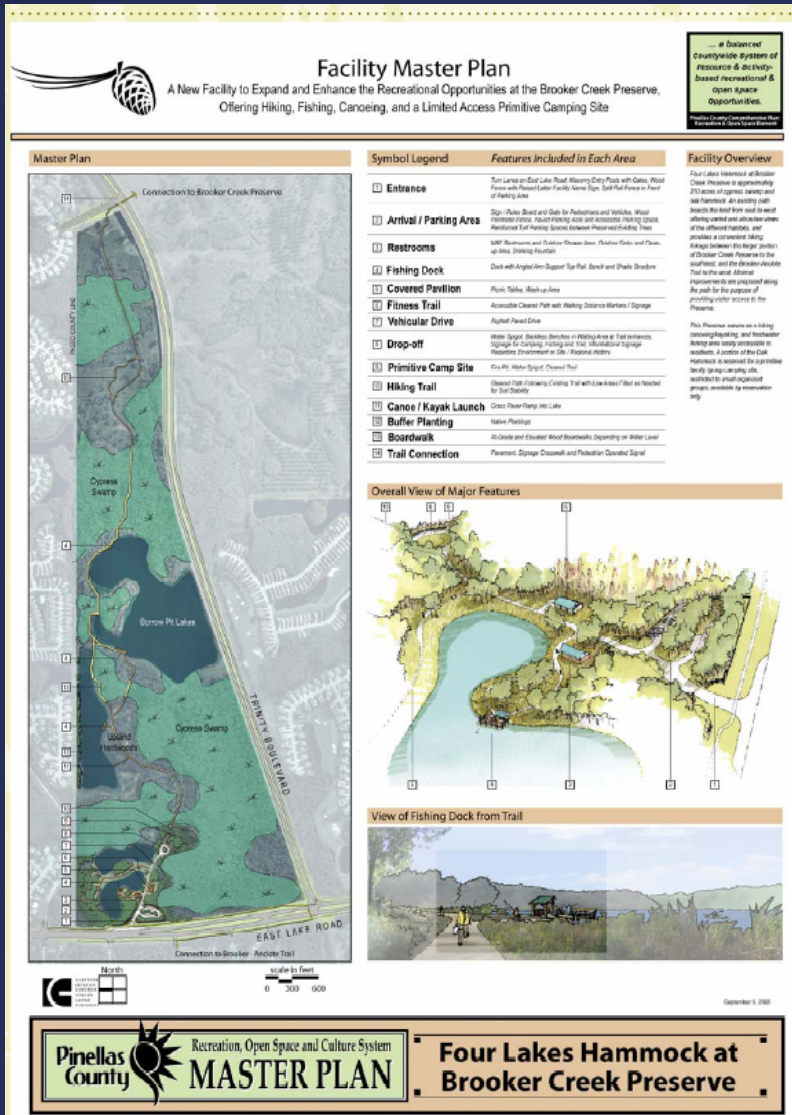
- **Actively manage ecological resources in an urban setting with an eye toward future generations; conservation vs. preservation.**
 - **Practice and promote the best science available.**
- **Employ a systems approach, focusing on ecological processes in our programs, plans, decisions, and partnerships.**
- **Provide environmental programs that have local, regional, and national relevance.**
 - **Allow for sustainable passive public recreational uses (resource-based) that are compatible with approved management plans and applicable ordinances and laws.**
 - **Acknowledge conditions of multiple ownership.**

The Road Ahead ...?



The Road Ahead ...

- **Comprehensive Plan (1982)**
- **BCP Management Plan (1993)**
- **Penny for Pinellas (1989, 1997, 2007)**
- **Ordinance 02-6 (2002)**
- **Glatting-Jackson Report (2005)**
- **Pinewood Study (2006)**
- **Responsible public-private enterprise (ongoing)**



Glatting-Jackson Report

- Initiative #5: Increase protection for regional parks and preserves.
- Initiative #6: Inject life, color and energy into regional parks and preserves.

A Guarantee for Our Children's Children?



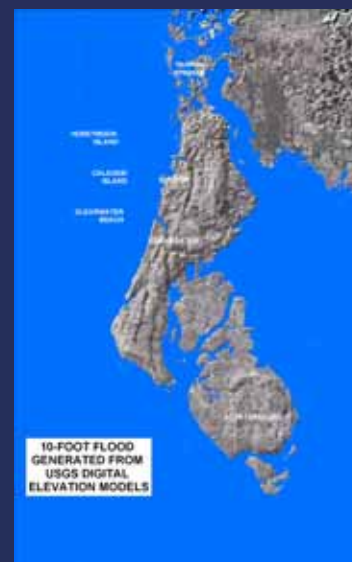
Global Climate Change Predictions



Current Level



2100



2200



Melt of West Antarctic Ice Sheet



“One small pale blue dot ...”
Carl Sagan



***Voyager I*, 14 February
1990**

For More Information:



**H. Bruce Rinker, Ph.D.
Division Director
Department of Environmental Management
Environmental Lands Division
3620 Fletch Haven Drive
Tarpon Springs, FL 34688
727-453-6912
www.pinellascounty.org/environment**

