

CK
TE

PAYNES PRAIRIE SHEETFLOW RESTORATION



GRUOO
100 YEARS OF SERVICE / 1912-2012

CITY OF **GAINESVILLE**
Every citizen, with passion.
FLORIDA

Wharton-Smith, Inc.
CONSTRUCTED DESIGN GROUP

JONES EDMUNDS

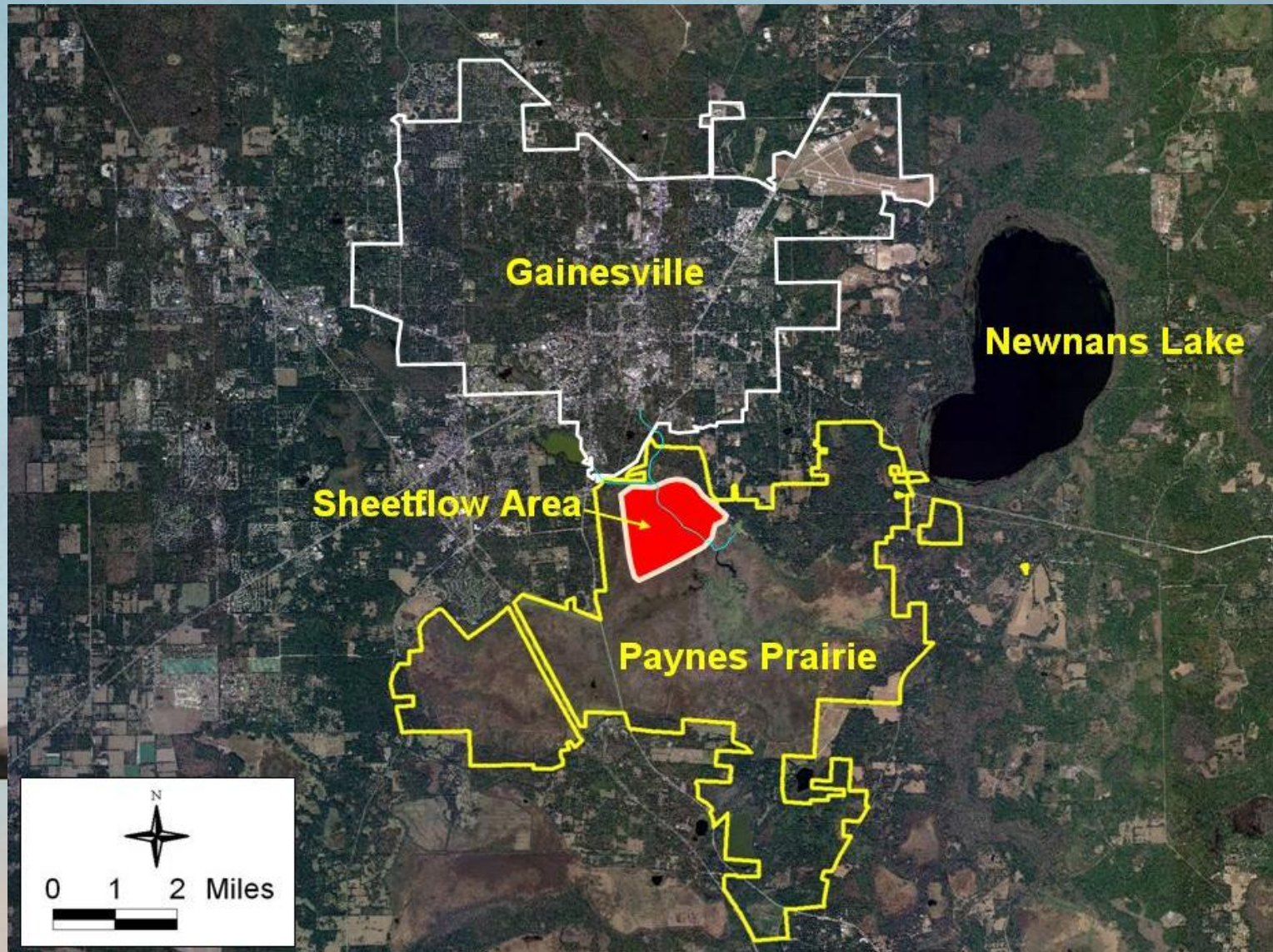
TERRELL BENNETT

JONES JONES

Wetland Solutions, Inc.

Synthetic Inc.

Project Location



Historical Impacts



- **1800s to present:** Urbanization of Gainesville
 - Stormwater runoff
 - Trash & sediment
 - WW Effluent
 - Septic Tanks
- **1930s:** Sweetwater Branch channeled directly to Alachua Sink
 - 1,300 acres of wetlands impacted.
 - Direct flow path from Gainesville to Alachua Sink
- **1930s:** Portion of Prairie Creek flow diverted away from Paynes Prairie

**1. Main Street WRF
Enhancements**

**2. Enhancement
Wetland**

3. Sheetflow Distribution

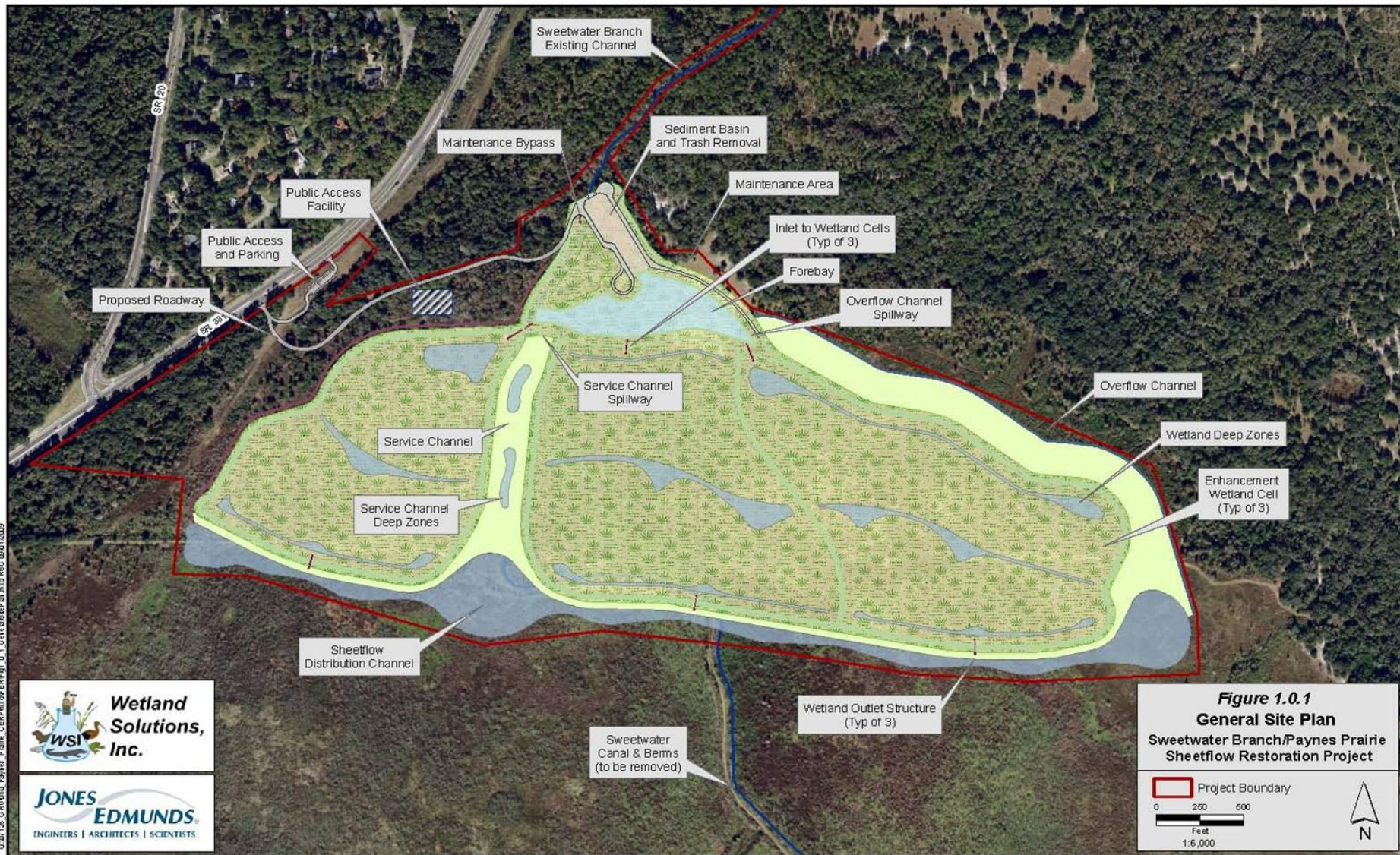
Sheetflow Restoration Area

Sweetwater Branch

4. Backfill Existing Canal

Alachua Sink





Environmental Benefits

Water Quality Benefits

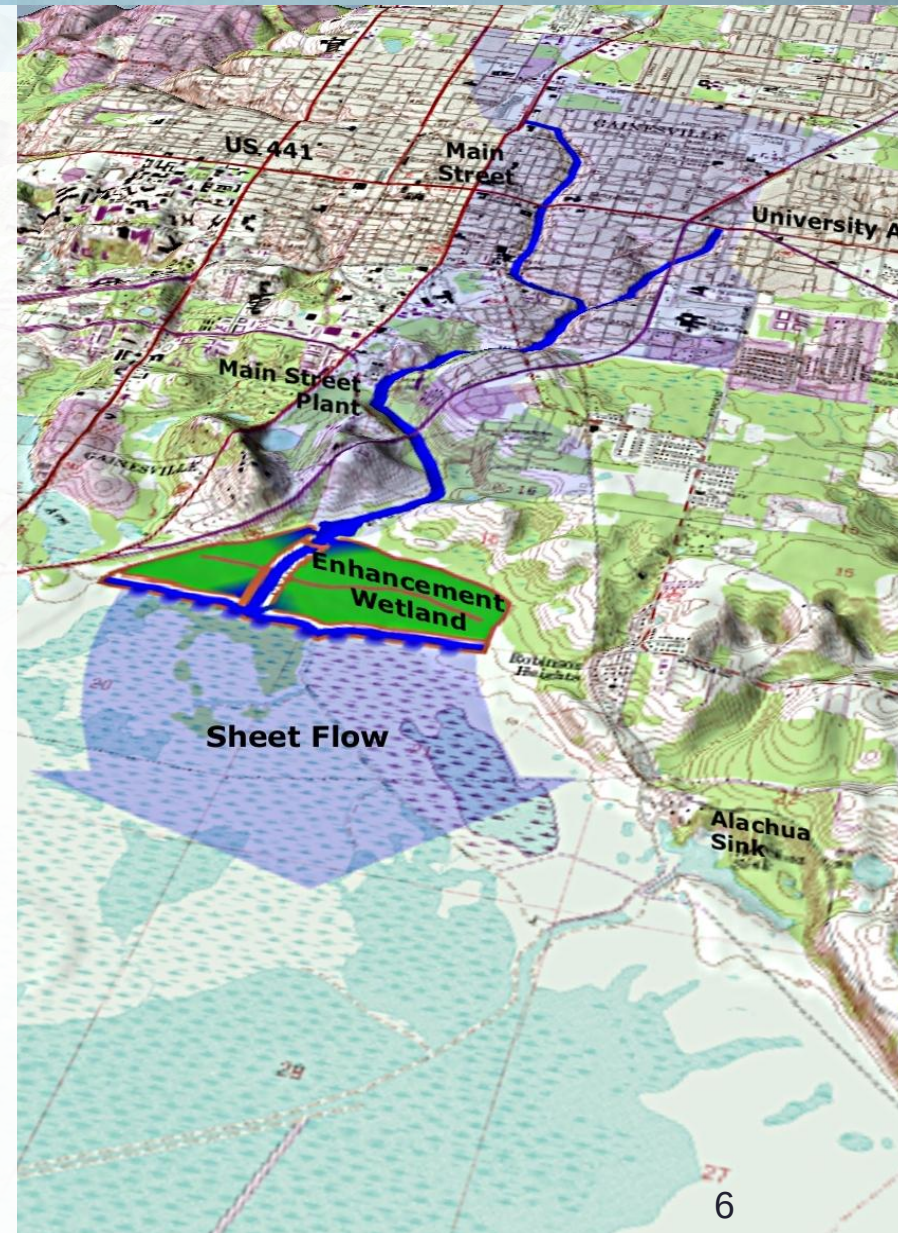
- ***Exceeds total N TMDL***
- ***Achieves background total N and P on Prairie***
- ***Removes sediment and trash***

Hydrologic Restoration Benefits

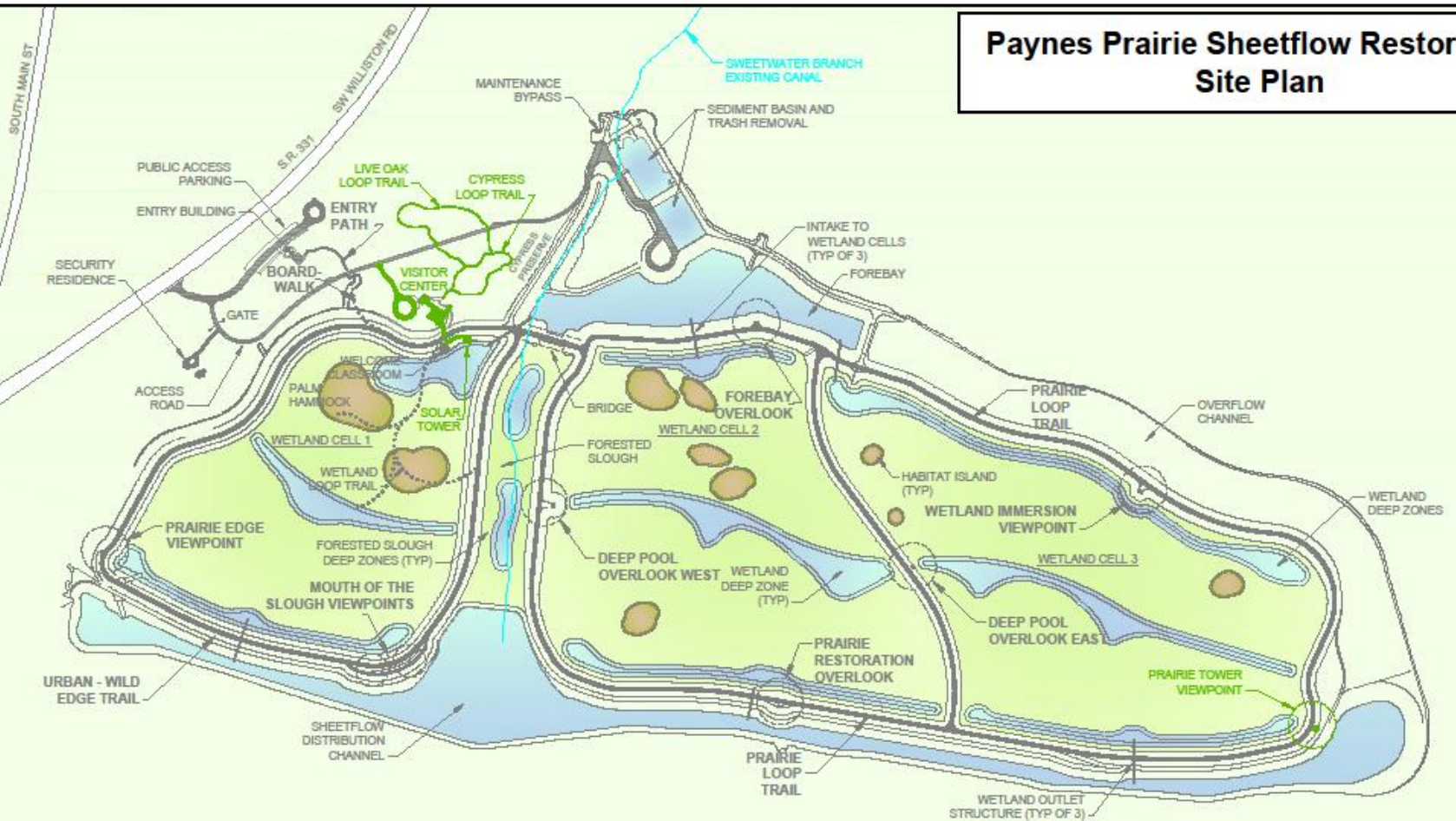
- ***Restores Sweetwater Branch sheetflow to about 1,300 acres***
- ***Removes 2 miles of Sweetwater Branch Canal***

Conservation

- ***Adds 264 acres to the State Park***



Paynes Prairie Sheetflow Restoration Site Plan

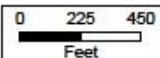


Current Construction Contract

- | | | |
|-----------------------------------|---------------|----------------------|
| Access Road/Parking | Berm Trails | Viewpoints/Overlooks |
| Entry Building | Nature Trails | Shallow Water |
| Security Residence | Boardwalk | Deep Water |
| Sediment & Trash Removal Facility | Bridge | Habitat Island |

Future Park Improvements

- Visitor Center Complex
- Solar Viewing Tower
- Prairie Tower Viewpoint





Sweetwater Branch/Paynes Prairie Sheet Flow Restoration

Image # 121001 0016
Aero Date : 10.01.2012
Photo 888.542.0231



Sweetwater Branch/Paynes Prairie Sheet Flow Restoration

Image # 121219 2035
Aero Date : 12.19.2012
Photo 888.542.0231



Sweetwater Branch/Paynes Prairie Sheet Flow Restoration

Image # 130220 2031
Aero Date : 02.20.2013
Photo 888.542.0231











Sweetwater Branch/Paynes Prairie Sheet Flow Restoration

Image # 130402 2017
Aero Date : 04.02.2013
Photo 888.542.0231













Sweetwater Branch/Paynes Prairie
Sheet Flow Restoration

Image # 130702 0019
Aero Date : 07.02.2013
Photo 888.542.0231

















Questions?

