

JOE'S BRANCH



Ashley Campbell
City of Daphne
Daphne, AL

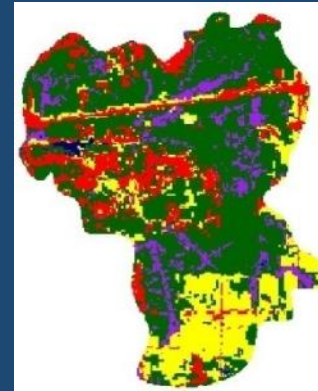
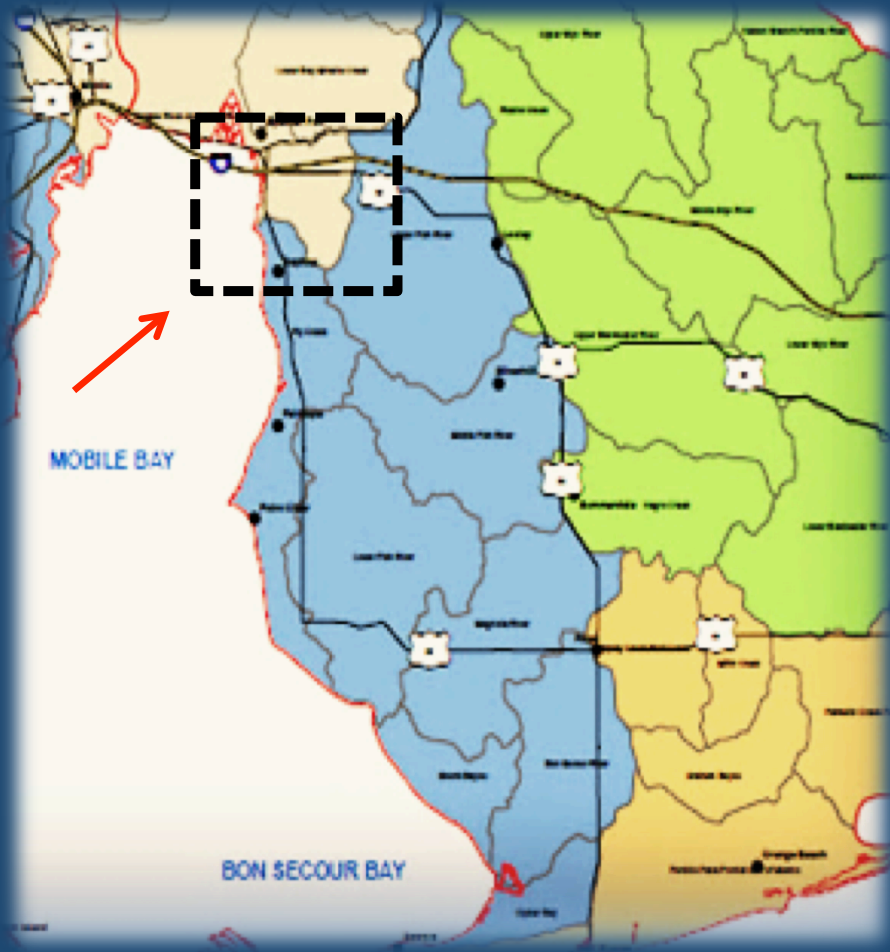


Low Impact Development Summit
April 9-10, 2014
Clanton, AL

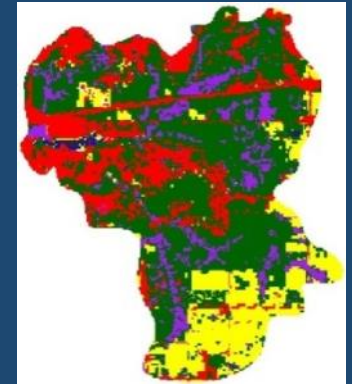
The Mobile Bay Watershed



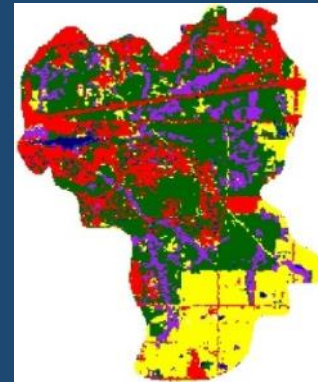
The D'Olive Watershed



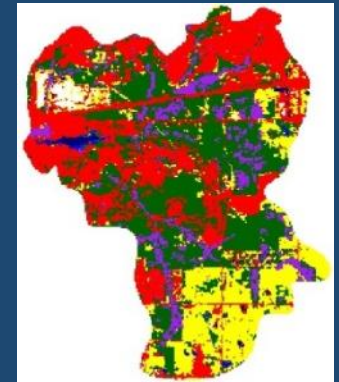
1974



1984



1996



2008

THE CHALLENGE



NASA LANDSAT, 1974

THE STAKEHOLDERS

- ADCNR
- ADEM
- ALDOT
- AT&T
- Baldwin County
- City of Daphne
- City of Spanish Fort
- CACWP
- Cypress/Spanish Fort LLP
- GSA
- Lake Forest Improvement Committee
- Lake Forest POA
- Malbis Properties
- MBNEP
- MASGC
- NRCS
- State Rep Randy Davis
- Tonsmeire Properties
- USACE
- USFWS
- US Rep Joe Bonner

IMPLEMENTATION

BASELINE

PLAN

Figure 11.—Estimated annual total sediment loads for selected streams in the D'Olive and Tiawasee Creek watersheds.

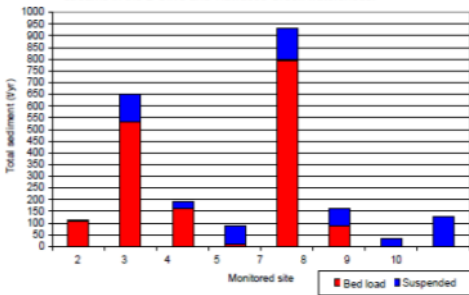
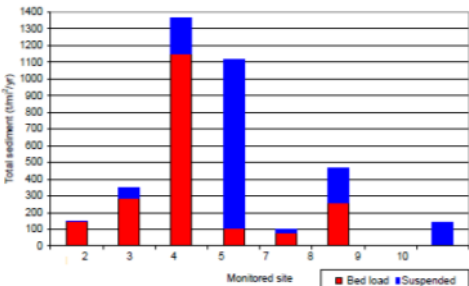






Figure 12.—Estimated normalized annual total sediment loads for selected streams in the D'Olive and Tiawasee Creek watersheds.



Watershed Management Plan:
D'Olive Creek, Tiawasee Creek,
and Joe's Branch Watersheds

Daphne, Spanish Fort, and Baldwin County, Alabama
FINAL - August 2010



thompson
ENGINEERING



Westminster Village -
could be retrofitted with
Green Infrastructure to slow the
storm water down. This could include many phases.

SW = Storm water

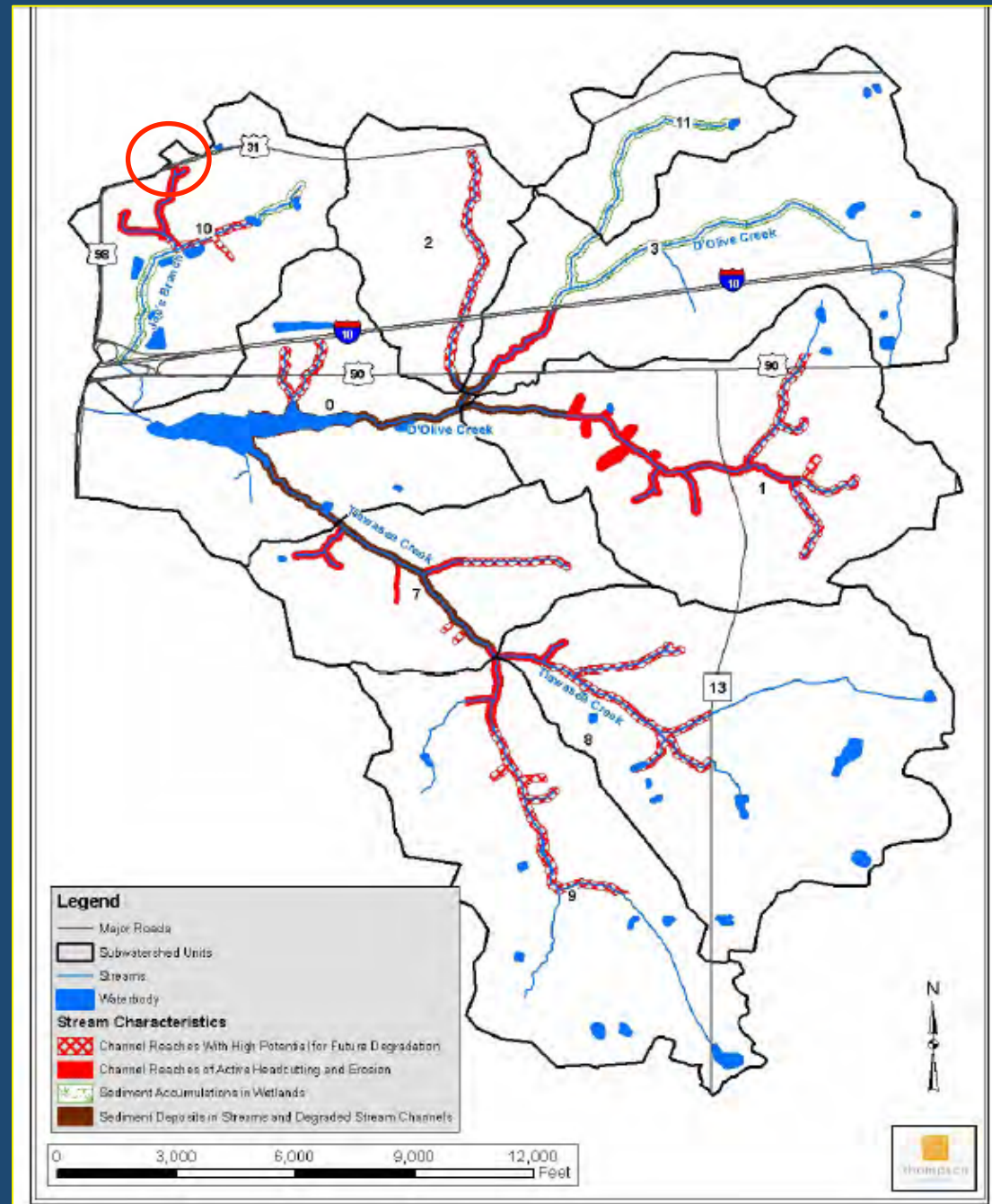
CRISIS LOOMING...

*A tributary to Joe's Branch
...Threatening a highway*

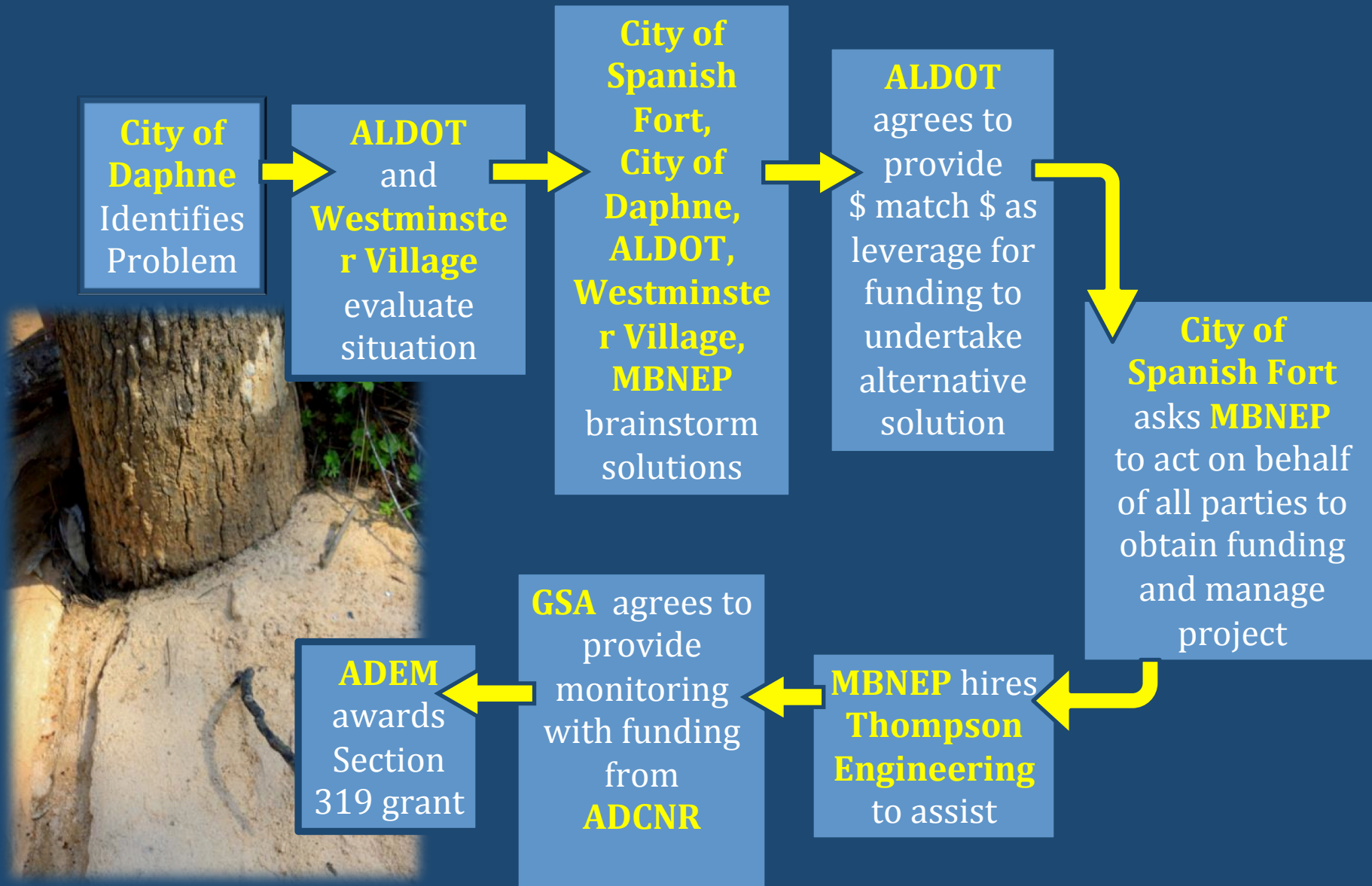
Enter

- City of Daphne
- City of Spanish Fort
- ALDOT
- Westminster Village (Property Owner)
- GSA
- ADCNR
- MBNEP- Thompson Engineering

**ADEM Section 319
Grant**



COORDINATING EFFORTS





THE VALUE OF PARTNERSHIPS













CROSS-JURISDICTIONAL PARTNERSHIP

Daphne + Spanish Fort + Baldwin County = D'Olive Intergovernmental Task Force

- **Recommended by CWMP**
- **Guides implementation of CWMP**

A NEW WAY OF MANAGING STORMWATER

TRADITIONAL is defined as:		WATERSHED is defined as:
✓ Drainage Systems		✓ Ecosystems
✓ Reactive (Solve Problems)		✓ Proactive (Prevent Problems)
✓ Engineer-driven		✓ Interdisciplinary Team-driven
✓ Protect Property		✓ Protect Property and Resources
✓ Pipe and Convey		✓ Mimic Natural Processes
✓ Bureaucratic Decisions		✓ Consensus-based Decisions
✓ Local Government Ownership		✓ Partnerships with Others
✓ Narrow Scope of Work (drainage focus only)		✓ Holistic Scope of Work (stormwater integrated with land use)

Source: Stormwater Planning- A Guidebook For British Columbia

ADAPTIVE MANAGEMENT RESPONSE



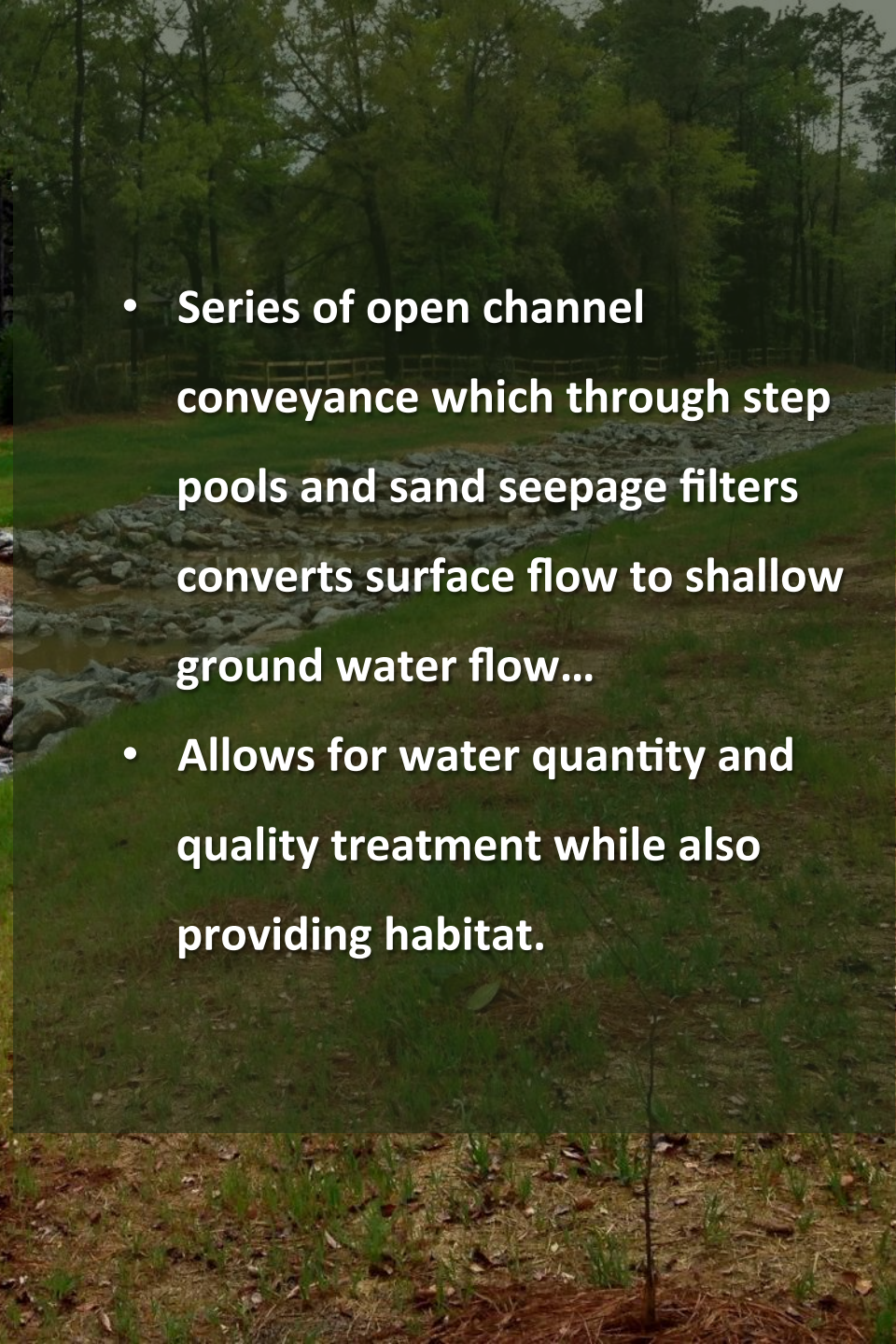
STEP POOL STORM CONVEYANCE SYSTEM




- Facilitate partnership
- Apply for/manage section 319 grant
- Project management



- **Series of open channel conveyance which through step pools and sand seepage filters converts surface flow to shallow ground water flow...**
- **Allows for water quantity and quality treatment while also providing habitat.**



A WATERSHED SCALE MODEL

- 
- Partnering to solve a common problem
 - Innovative , environmentally-friendly approach to stormwater management

The Story Continues...

D'Olive Watershed Restoration

Estimated Costs

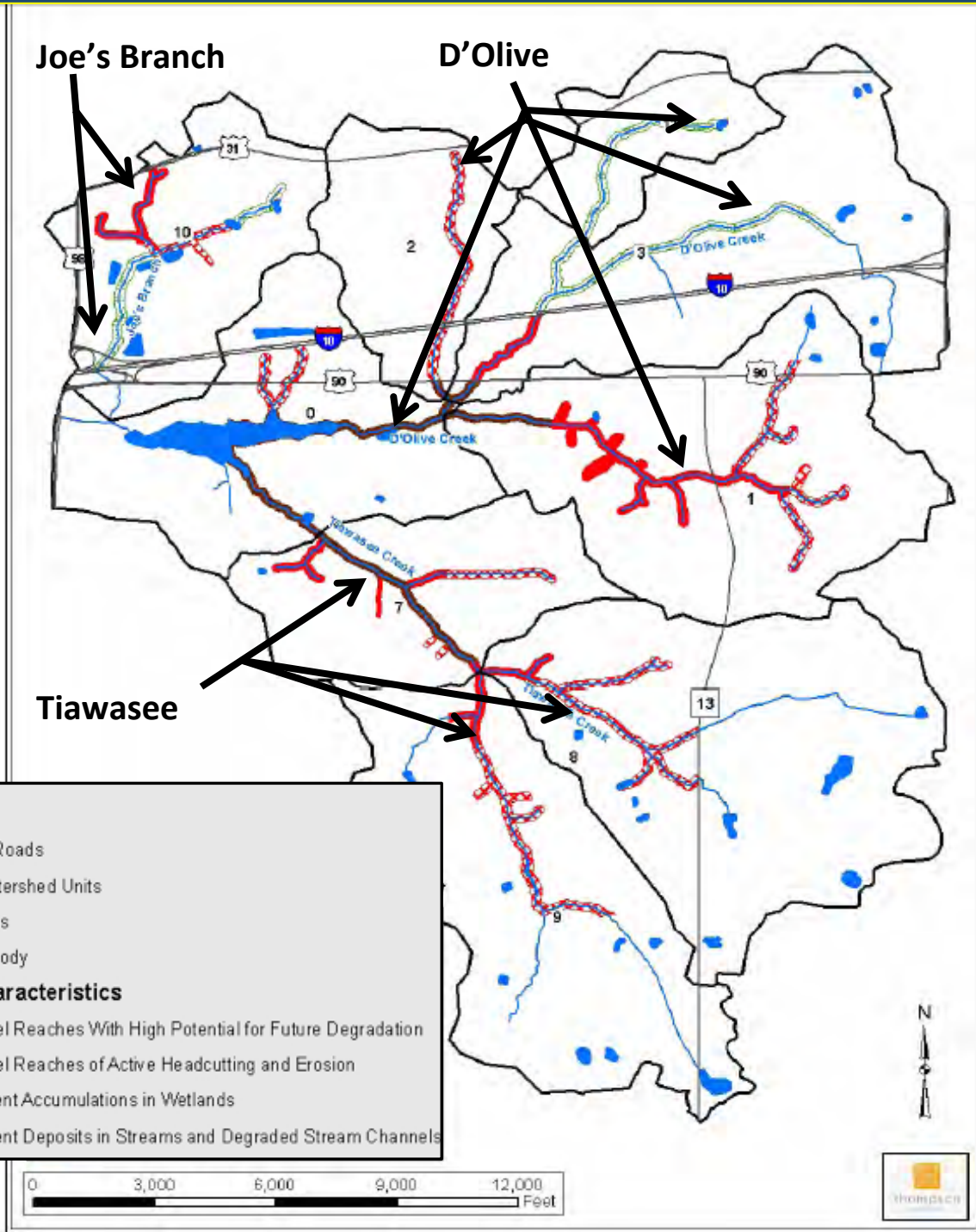
Watershed Restoration
13 Stream Segments located in
D'Olive Creek
Joes Branch
Taiwasee Creek

Total : \$ 6,781,000

Partners

City of Spanish Fort
City of Daphne
Baldwin County
Private Landowners
ALDOT, ADEM, GSA
Mobile Bay NEP

*Restoration in progress.
Past Investment totals over
\$1,100,000*



THE MOBILE BAY NATIONAL ESTUARY PROGRAM

Mission: *To promote the wise stewardship of the water quality and living resources of Alabama's estuaries*

- Funded by U. S. EPA, State, local governments and private interests
- One of 28 “nationally significant estuaries” in the United States
- In existence for 18 years
- Guided by a Comprehensive Conservation Management Plan (CCMP)
- Coordinates interests and efforts of many to restore past impacts and improve future management of estuarine resources

▣ JOE'S BRANCH VIDEO