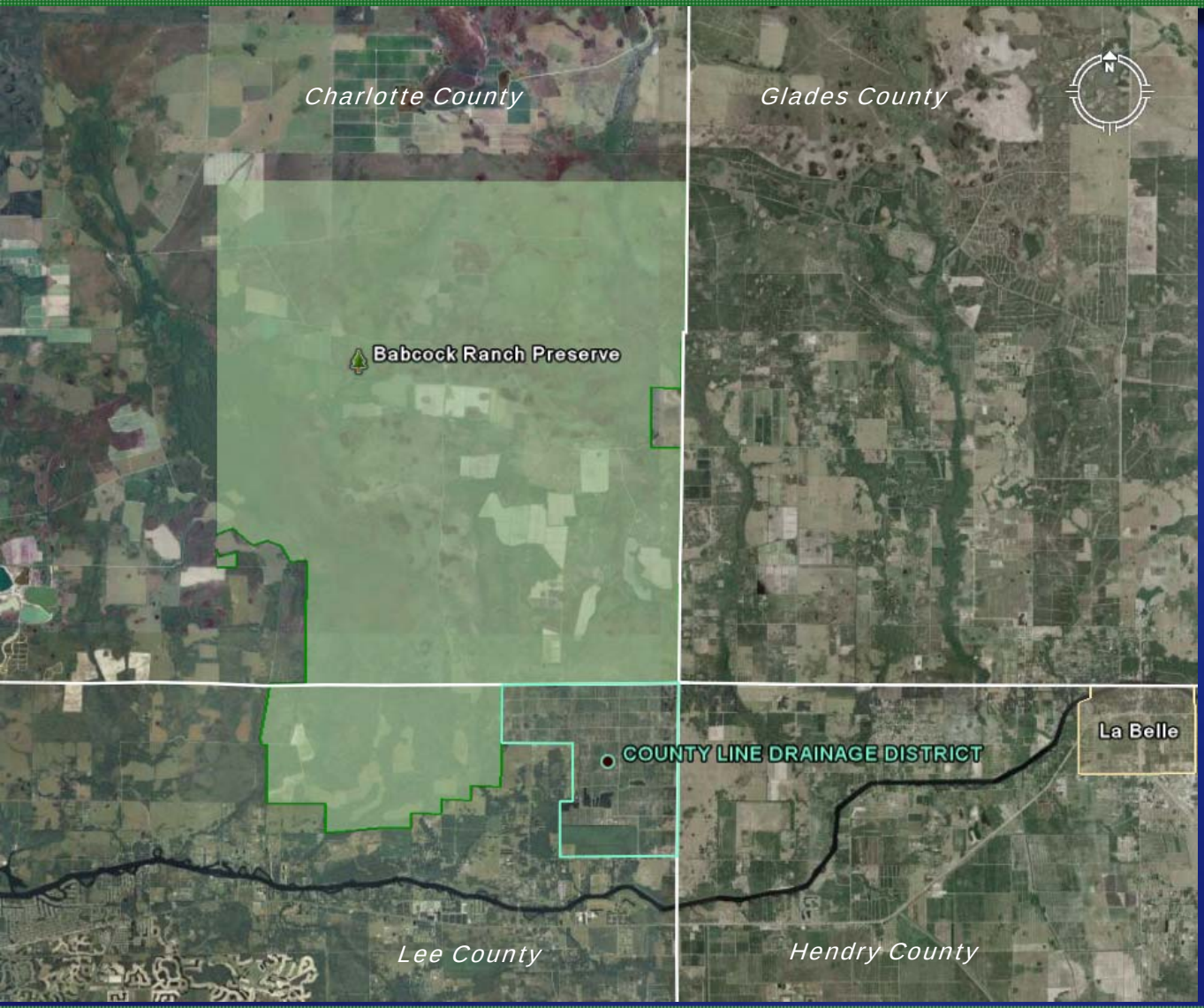
FOUR CORNERS WATERSHED ECOLOGICAL RESTORATION PROJECT



WRAC

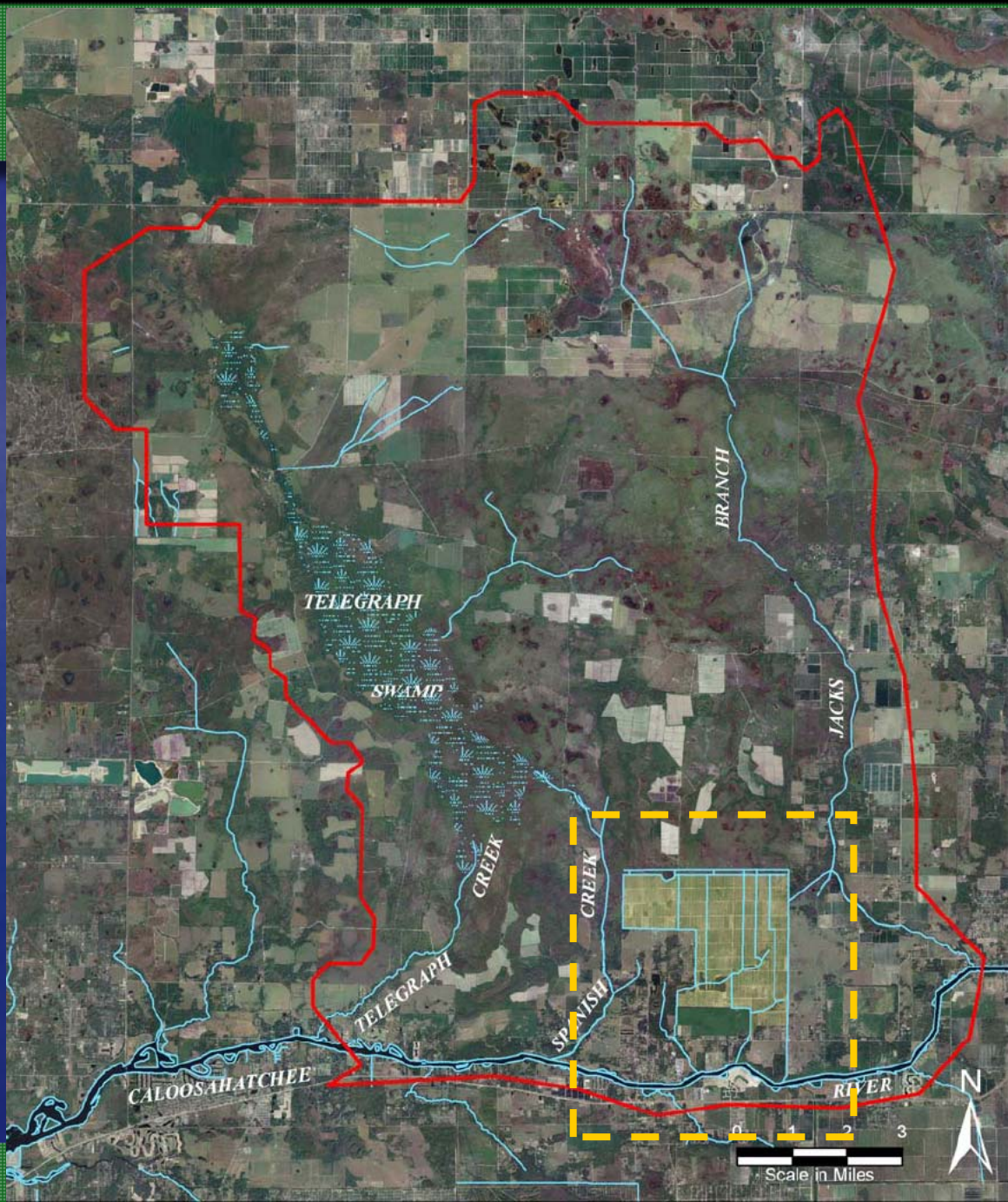
September 3, 2009

Jeff Kivett, PE
Engineering Department Director

Everglades Restoration and Capital Projects

FOUR CORNERS – Study Area

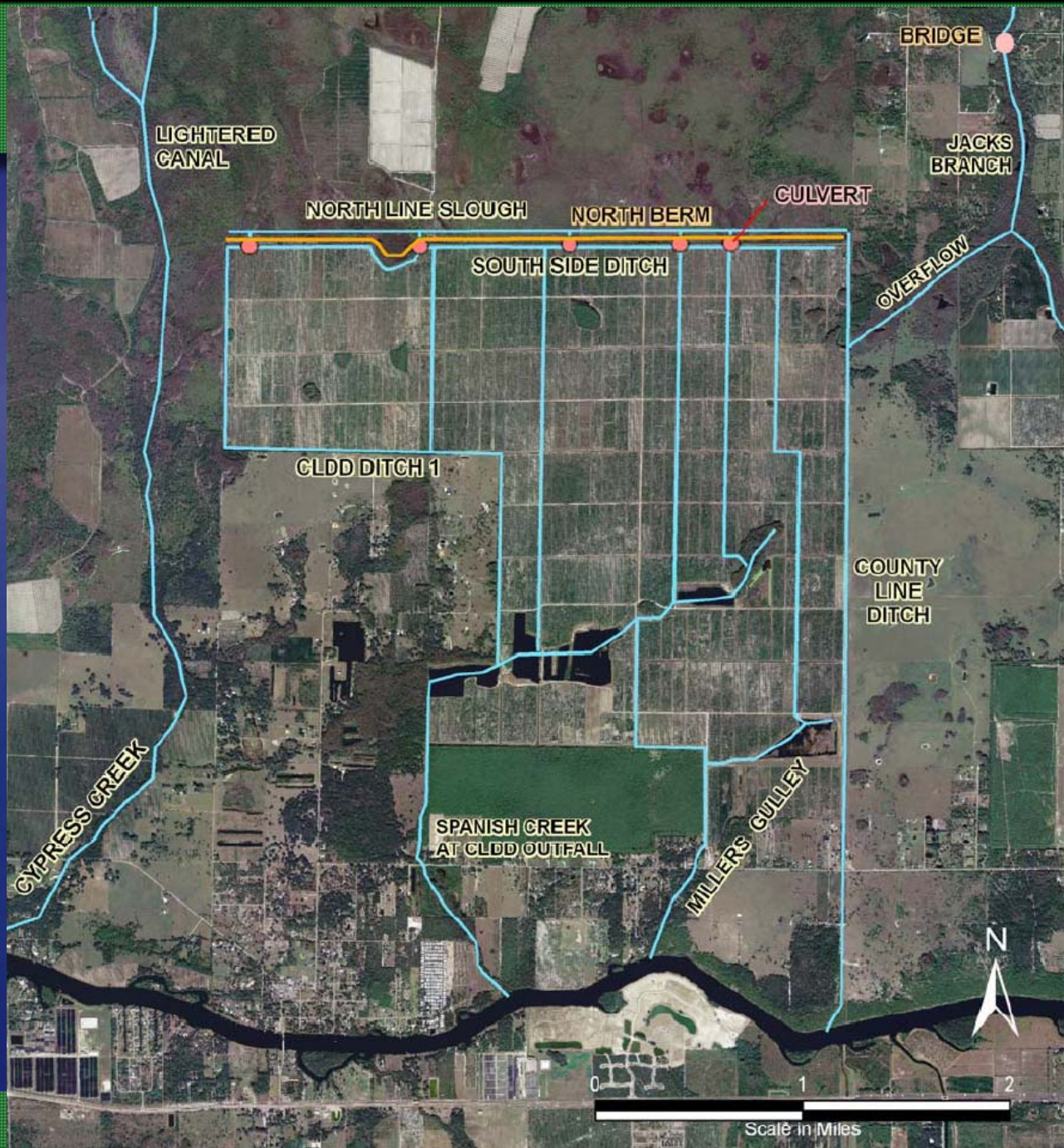
- MikeSHE Model
- Over 200 Sq. Miles



FOUR CORNERS – Study Area

Features in MikeSHE Model Near County Line Ditch

(SDI 2007)



FOUR CORNERS – PROJECT OBJECTIVES

2007 SDI Study:

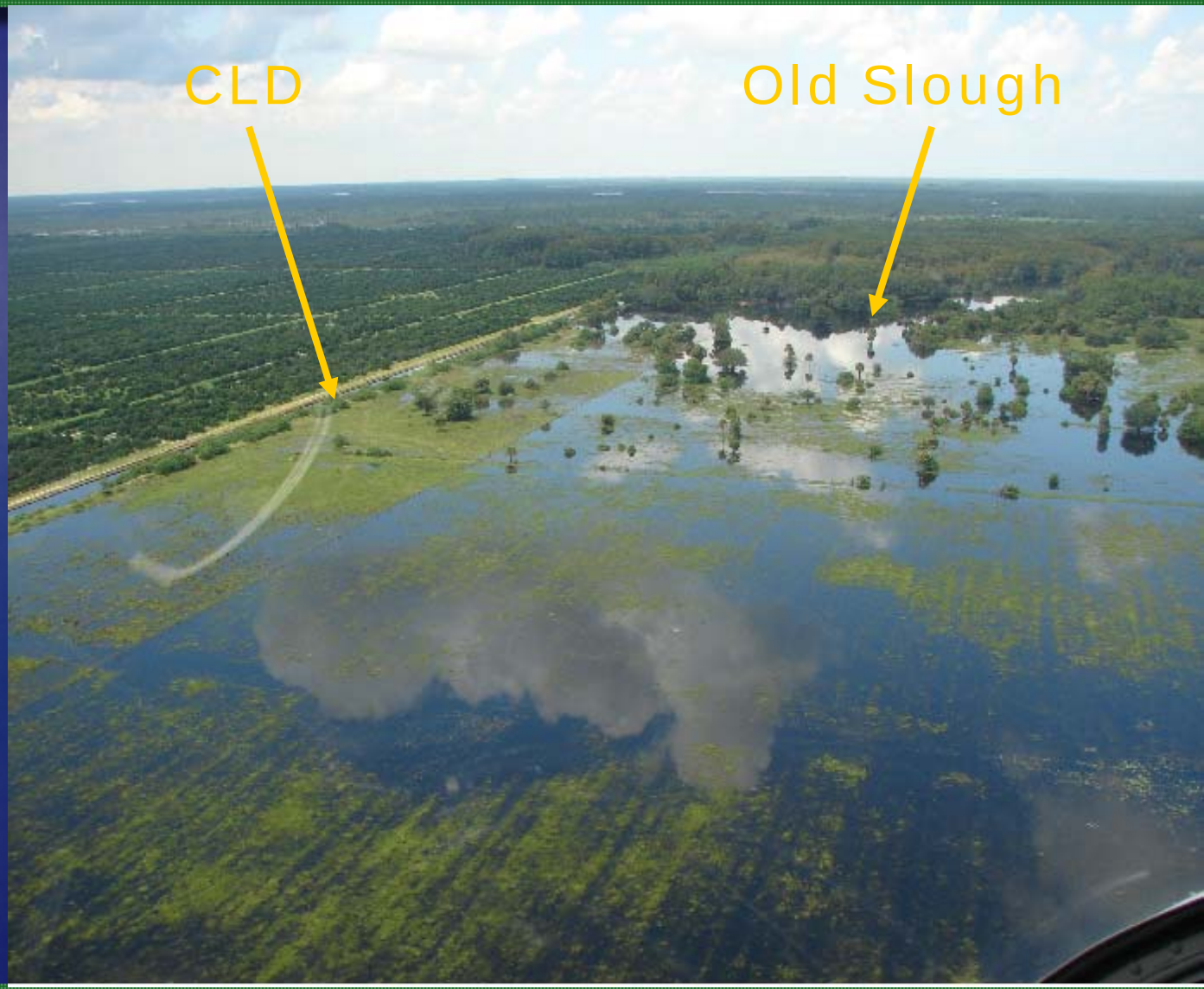
- Improvement of existing levels of flood protection consistent with county comprehensive plans, and State and regional growth management plans
- Restoration of flows disconnected by construction of the County Line Drainage District
- Improvement of water quality prior to discharging into the River
- Restoration of ecosystem where practicable
- Improvement of water retention and aquifer recharge potential
- Coordination with other regional studies and CERP

Spanish Creek/Four Corners Phase I

- Caloosahatchee River Watershed Protection Plan
  - The Spanish Creek Four Corners Project is a management measure
  - The overall goal of this multi-phase restoration project is to provide flow-way restoration, water quality improvement, and aquifer recharge
  - Implementation of the larger restoration project is based on future funding opportunities
- Phase I of the larger project is included under Caloosahatchee River Watershed Protection Plan Phase I (2009-2012) project list

FOUR CORNERS – Flooding Issues

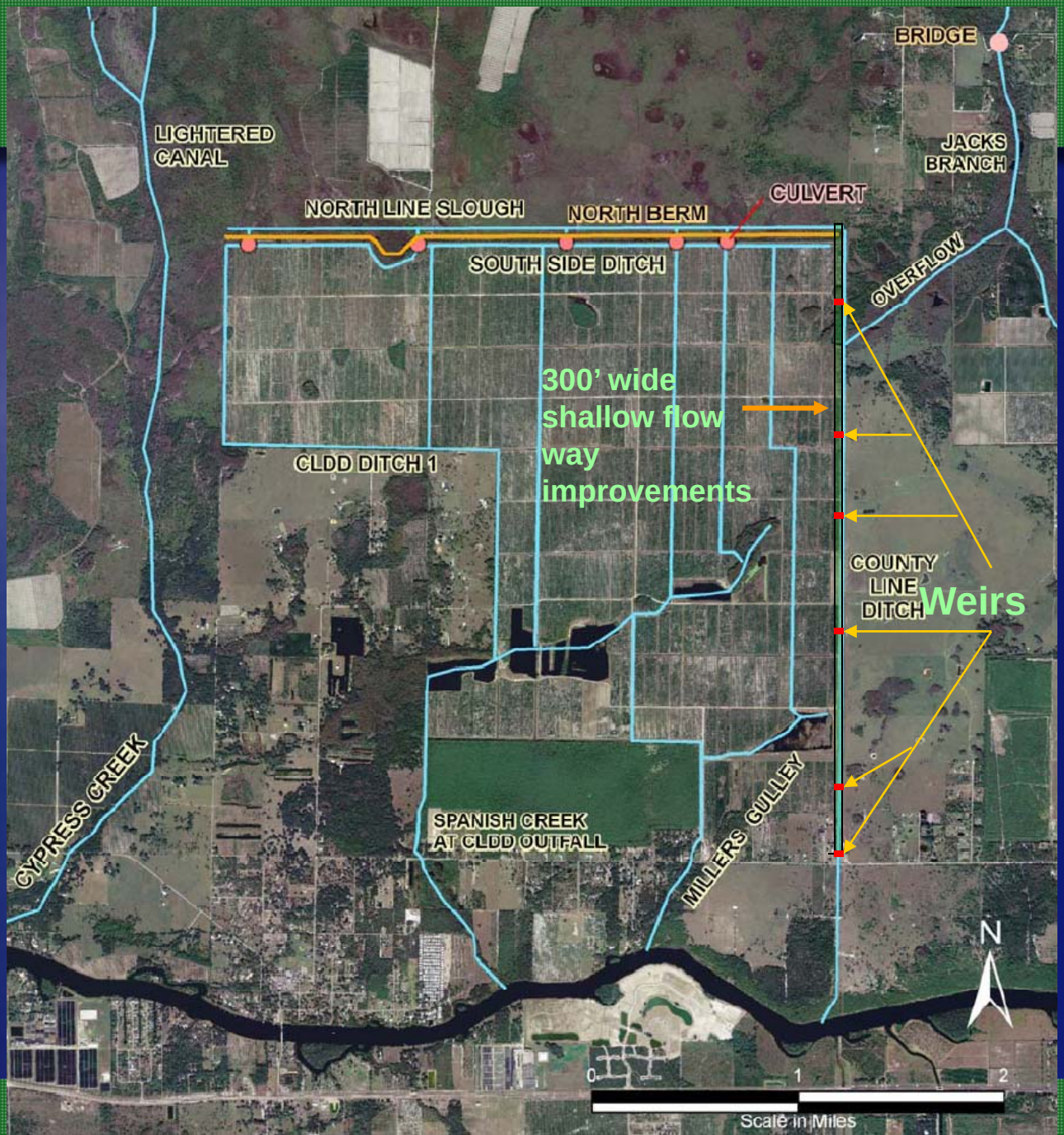
Flooding East of County Line Ditch After Tropical Storm Faye



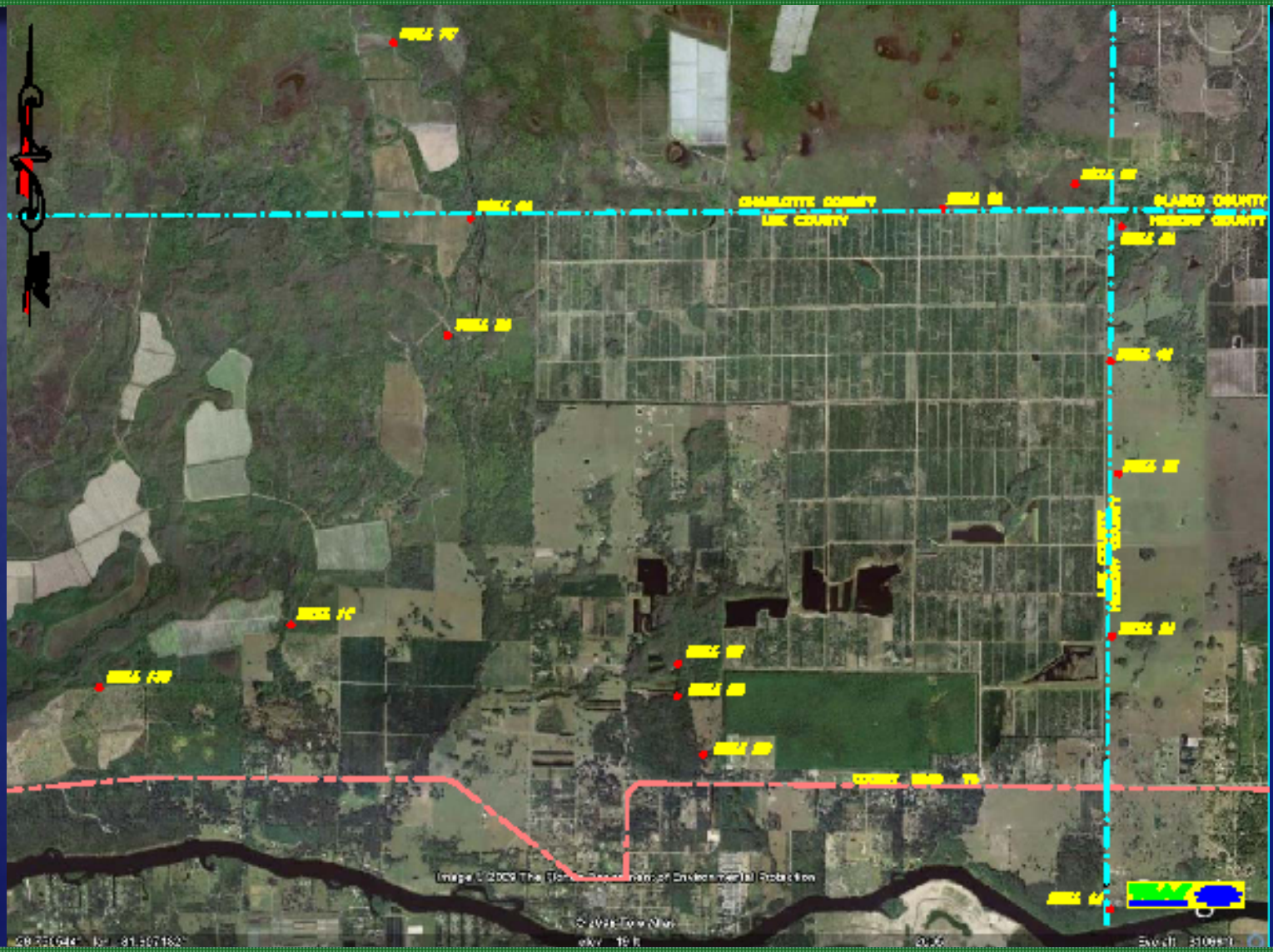
FOUR CORNERS – County Line Ditch

Conceptual Plan Summary

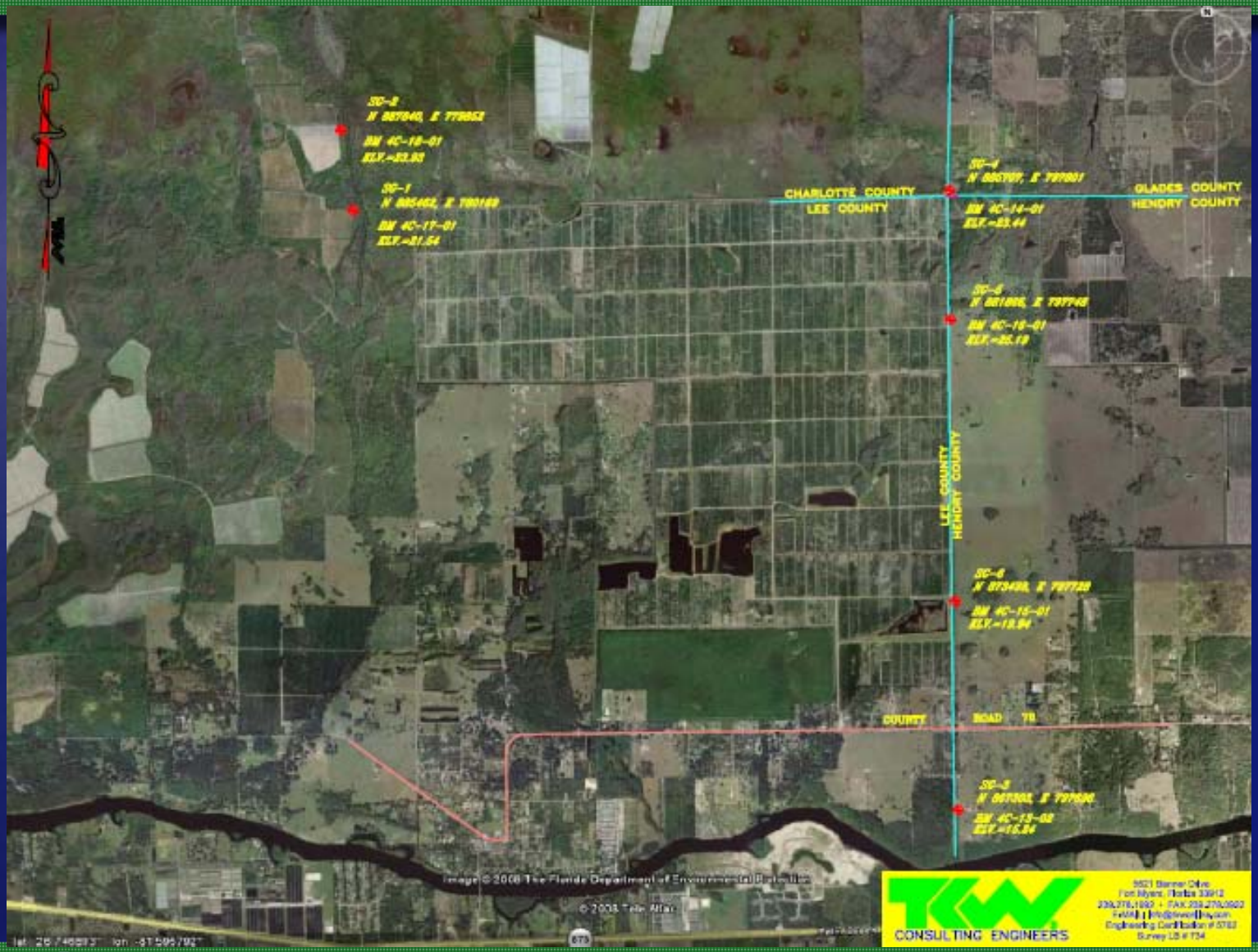
- Improvements north of CR 78 to four county corner
- Wide shallow flow way with a 10’ wide deeper meandering channel interior
- 5 Weirs with rectangular slots



FOUR CORNERS – COUNTY LINE DITCH
Monitoring Well Locations



FOUR CORNERS – COUNTY LINE DITCH
Installed Staff Gauges



FOUR CORNERS – COUNTY LINE DITCH GOLPHER TORTOISE RELOCATION

TORTOISE

CANAL CLEANING BY HENDRY COUNTY

Center Line Ditch/Four Corners Phase I

- Completed several major tasks under Phase I:
  - Installation of monitoring wells and staff gages
  - County Line Ditch Clearance south of CR-78 and associated gopher tortoise relocation
  - Topographic surveys to obtain cross sections of County Line ditch and associated infrastructure
- On- going efforts:
  - Gathering data from monitoring wells
- Next Step: Modeling of alternatives with the new survey data
  - Compare alternatives to improve the capacity of CLD to meet local drainage goals

FOUR CORNERS -

QUESTIONS