

Everglades National Park: Water-Quality Overview

Joffre Castro

February 2011

South Florida and DOI's National Parks

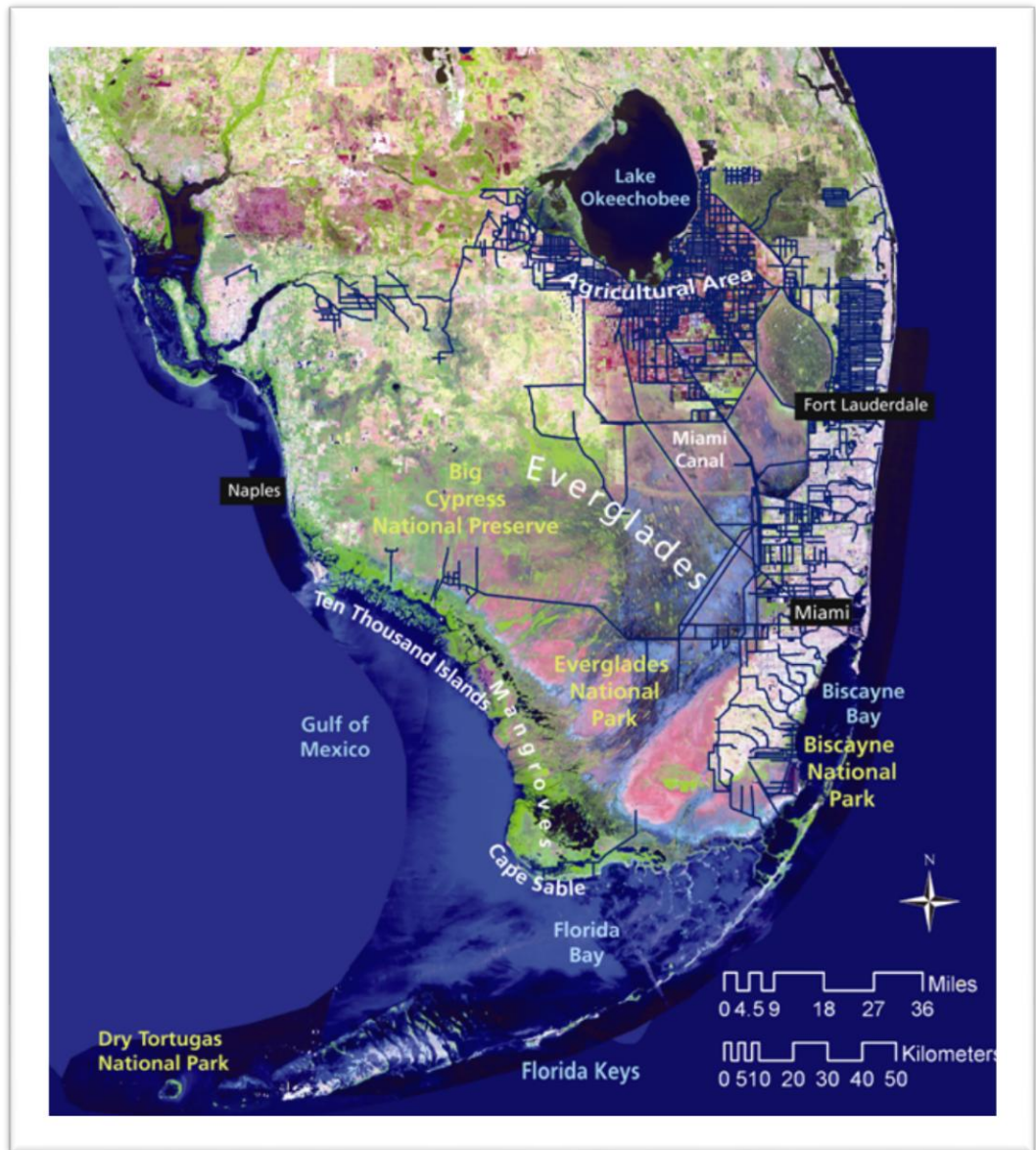


Fig. 1

Greater Everglades

Pre-development

Present day

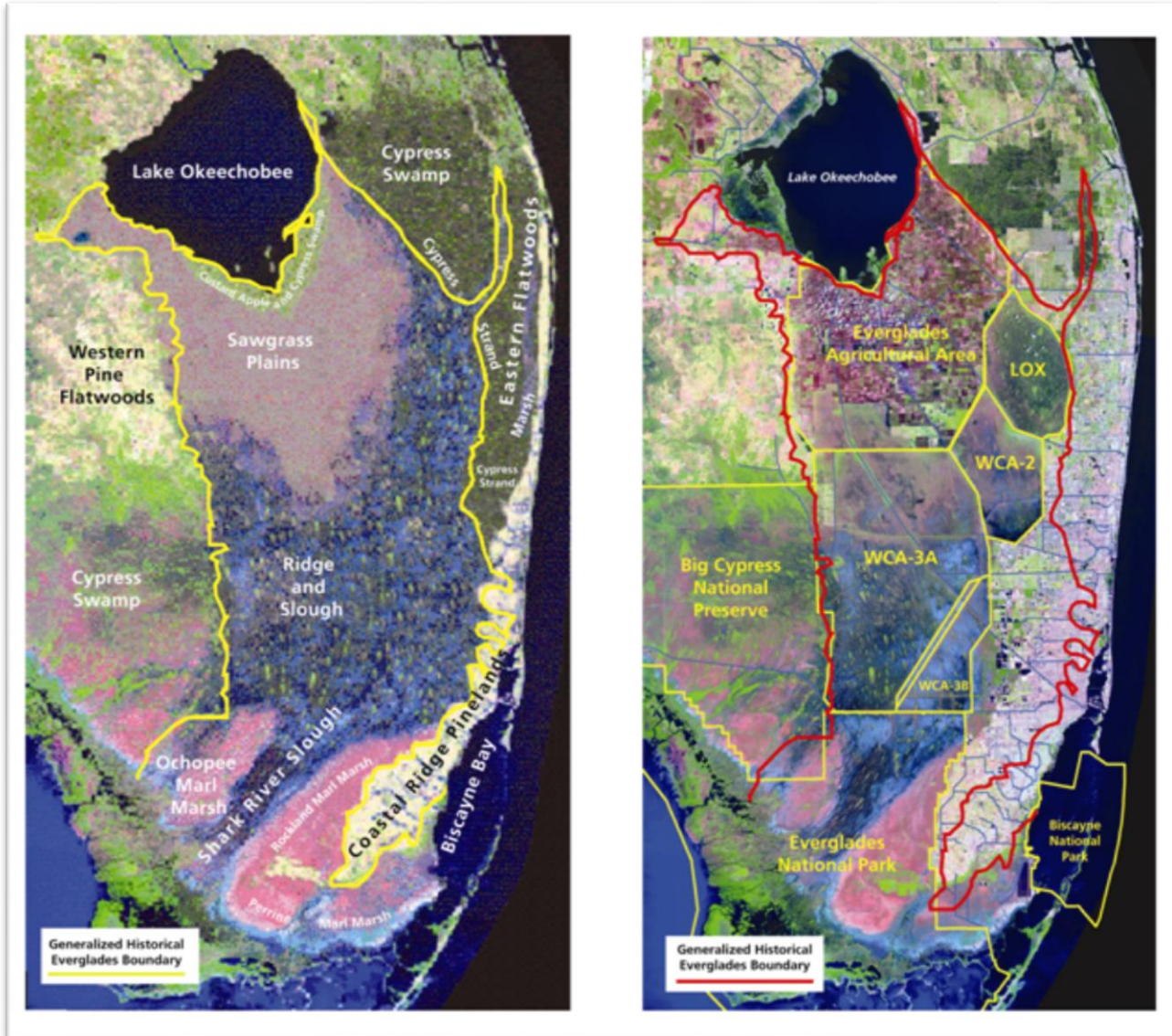


Fig. 2

Freshwater Communities

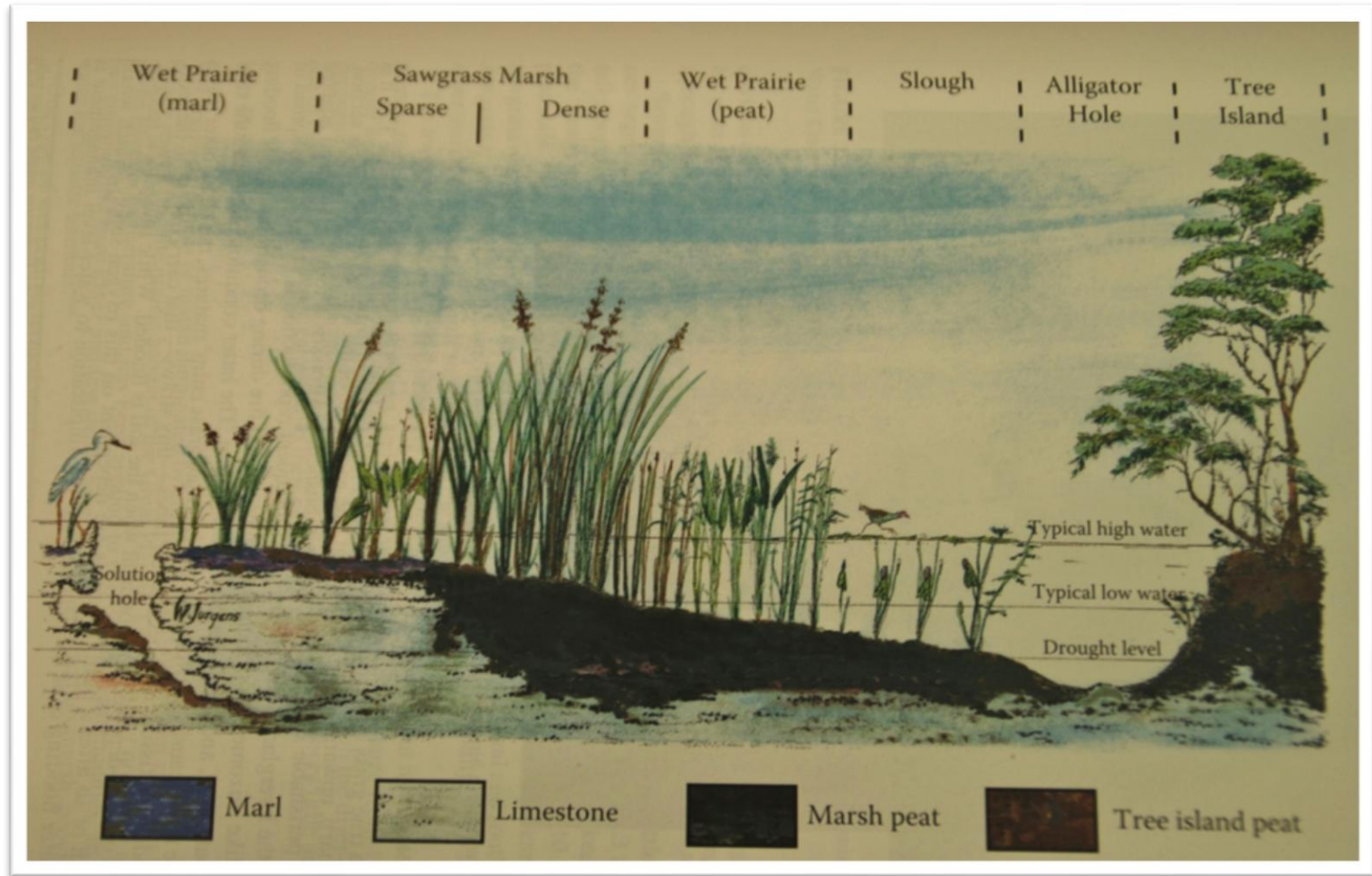


Fig. 3

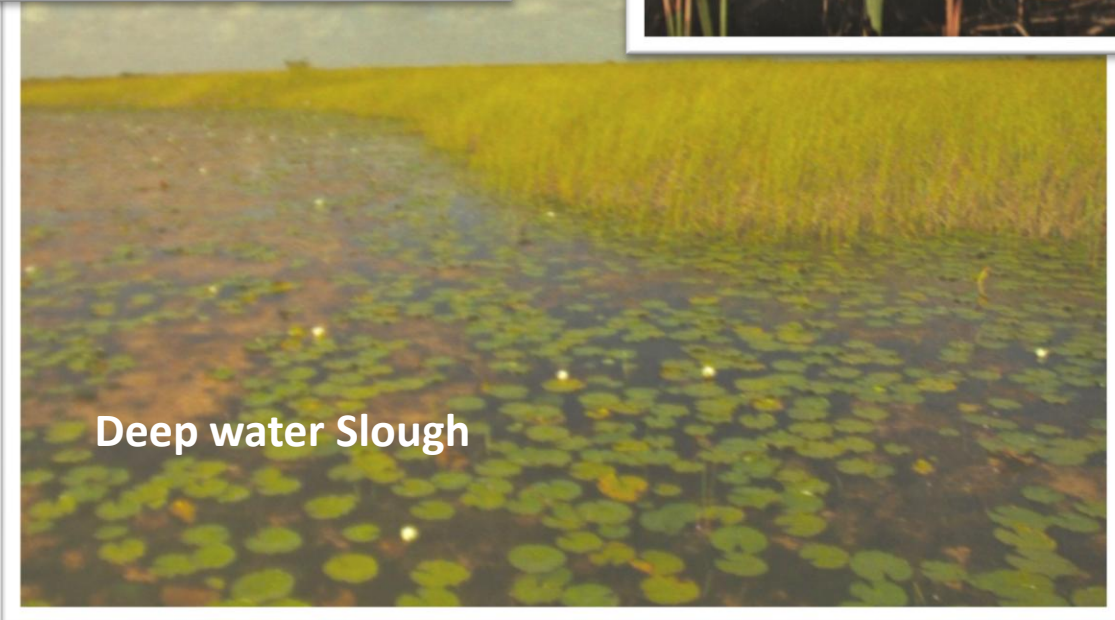
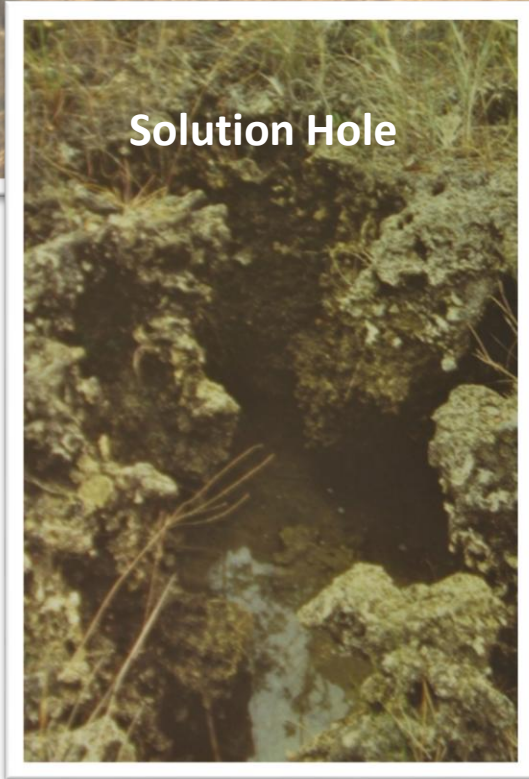
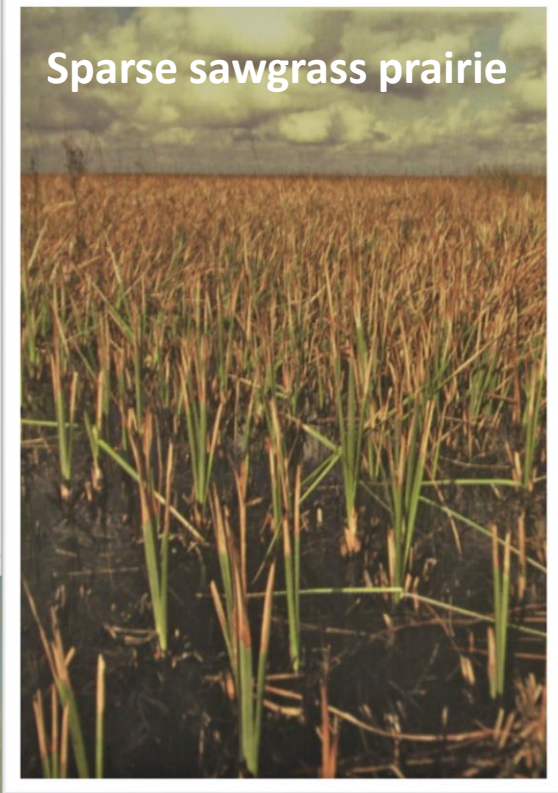
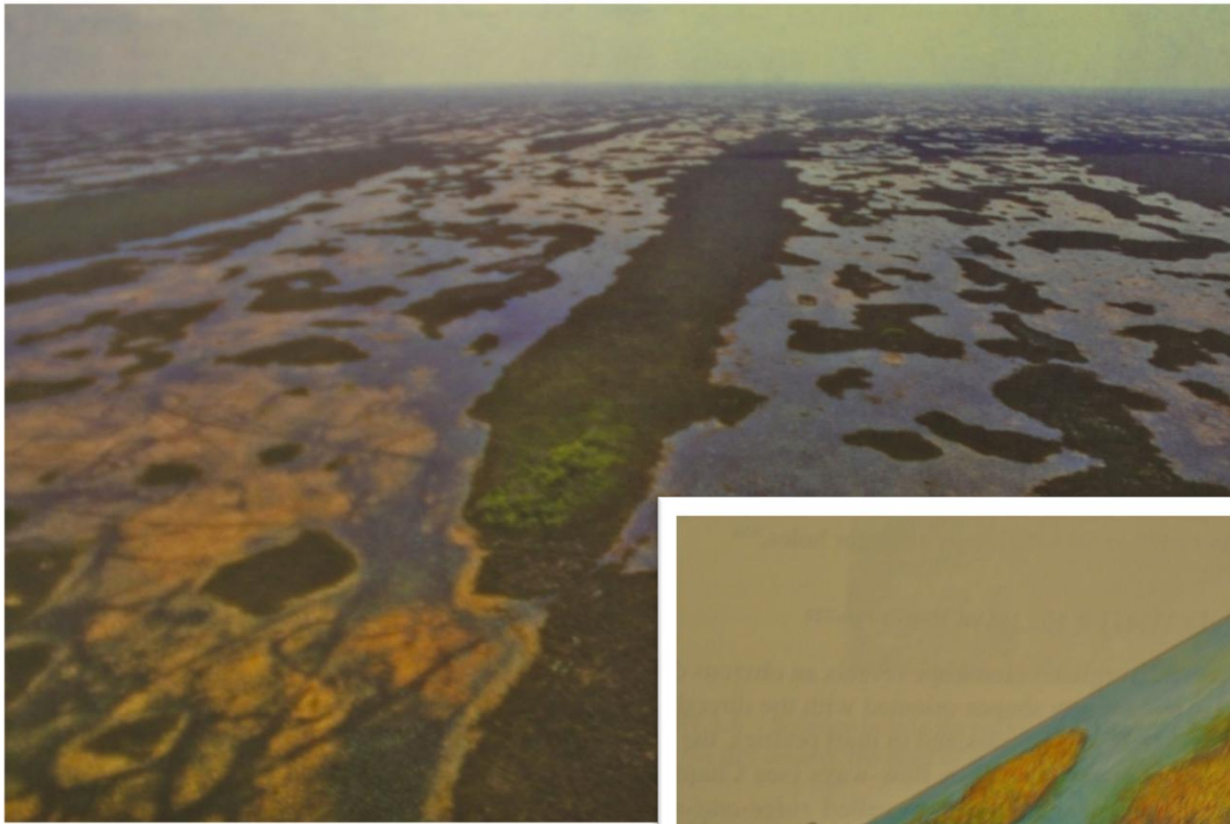


Fig. 4



Periphyton is a complex assemblage of bacteria

Fig. 5



**Ridge and slough
repeating patterns**

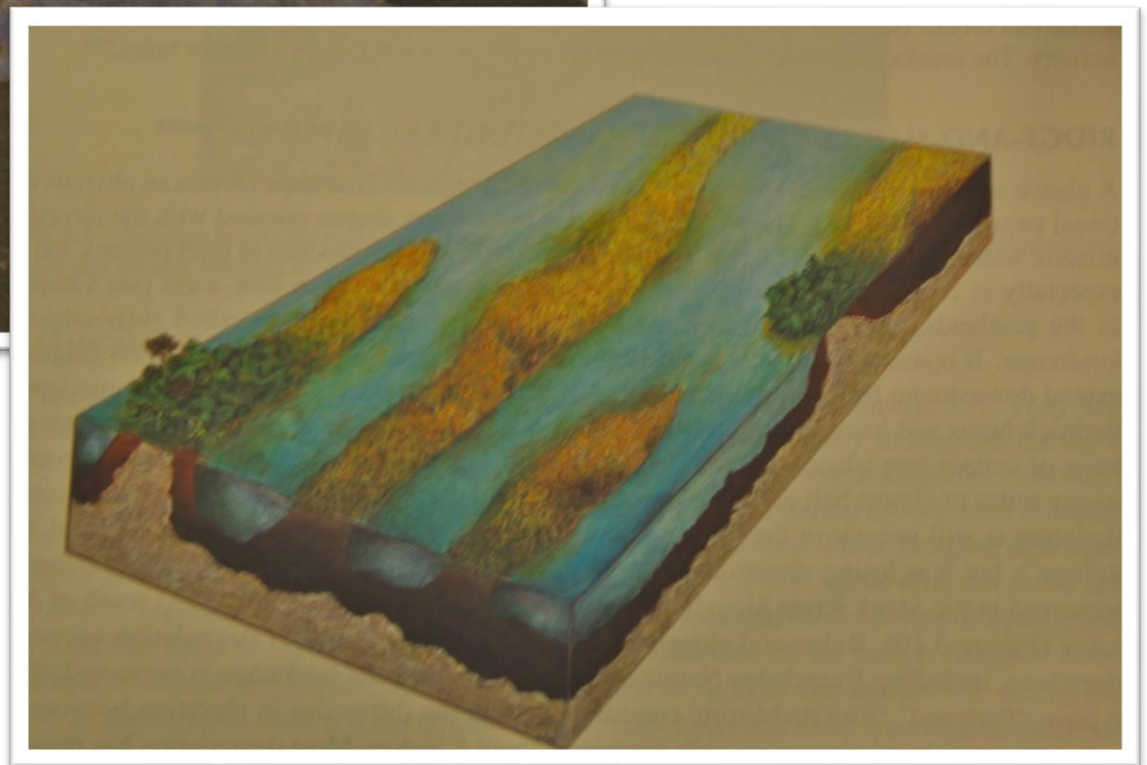


Fig 6

**Tree Islands –higher ground,
elongated land features– in
WCA-3A**

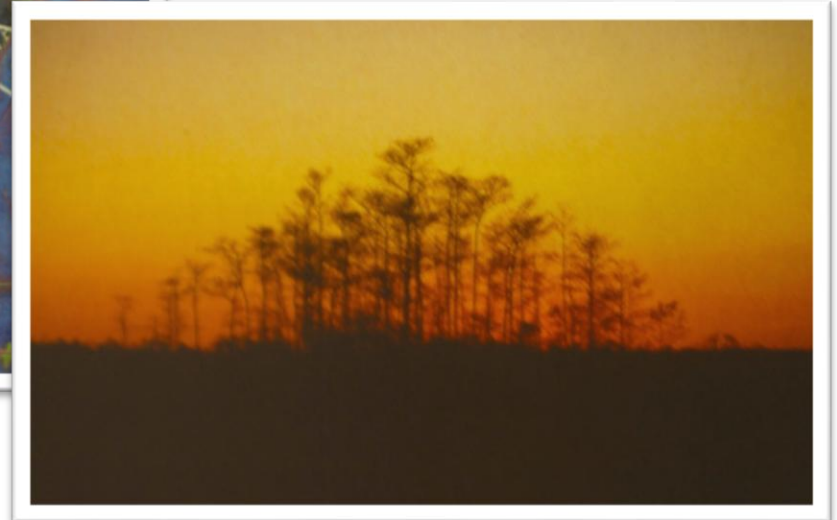
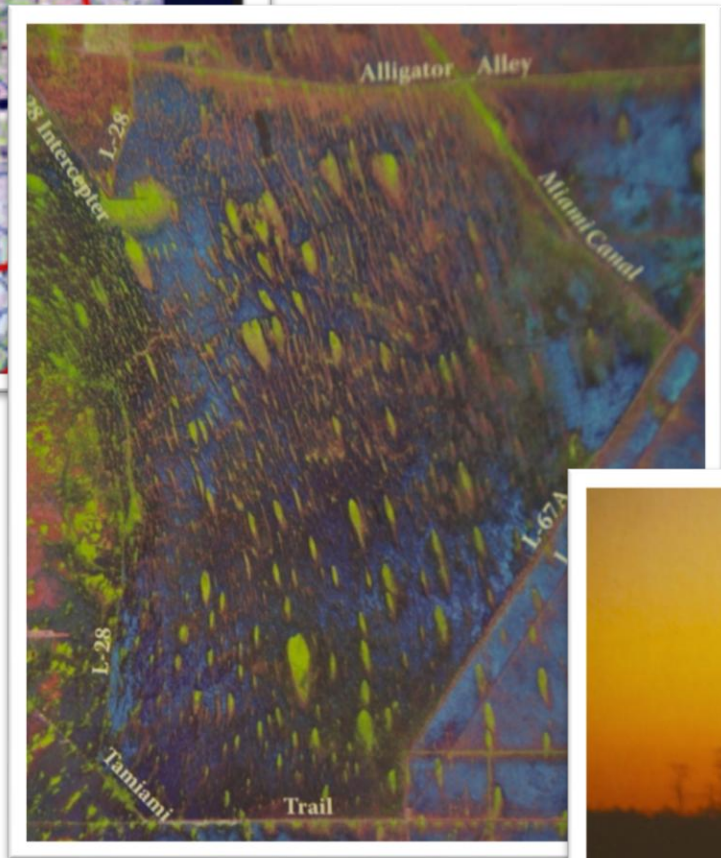
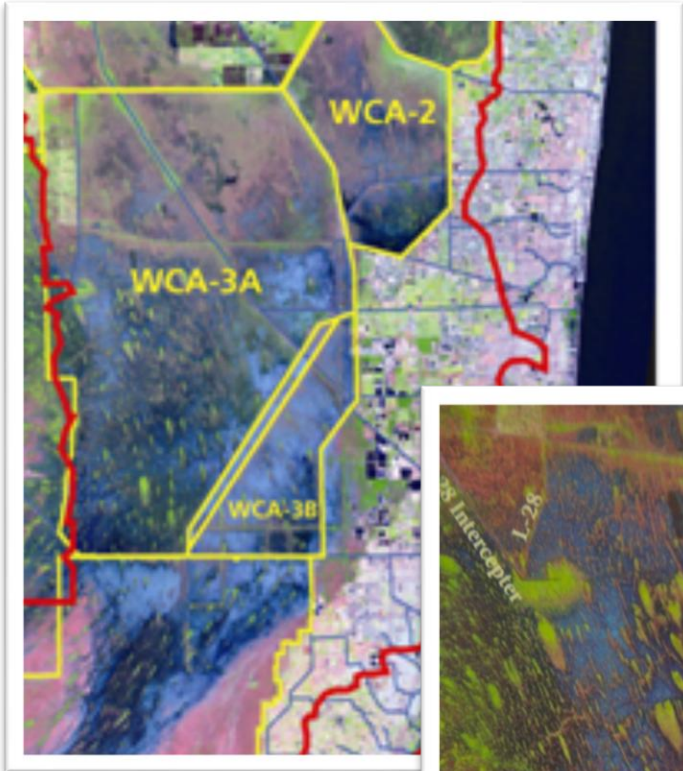


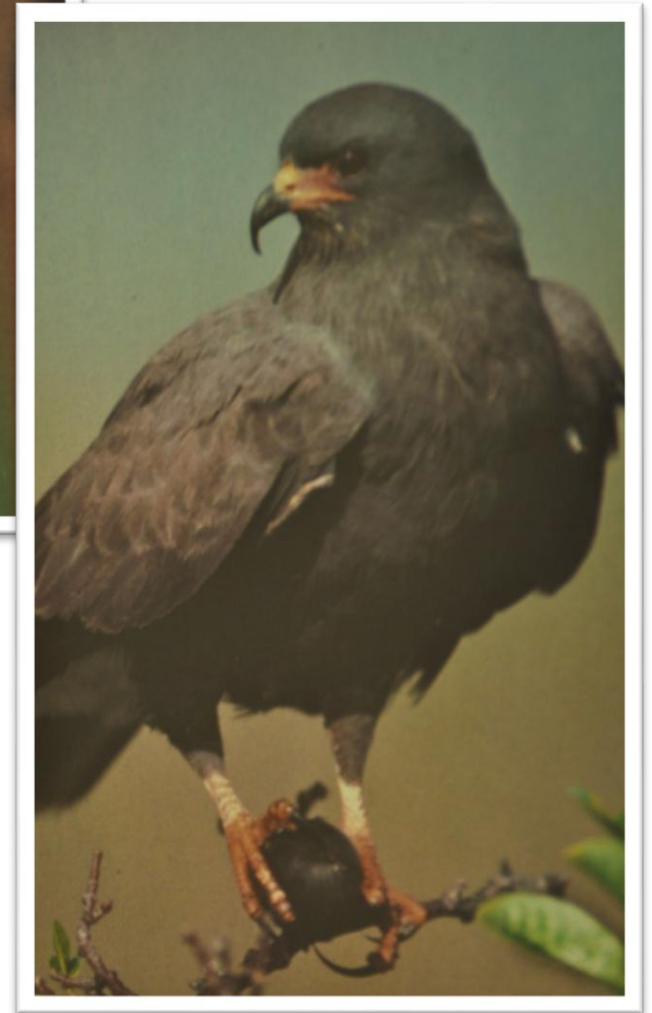
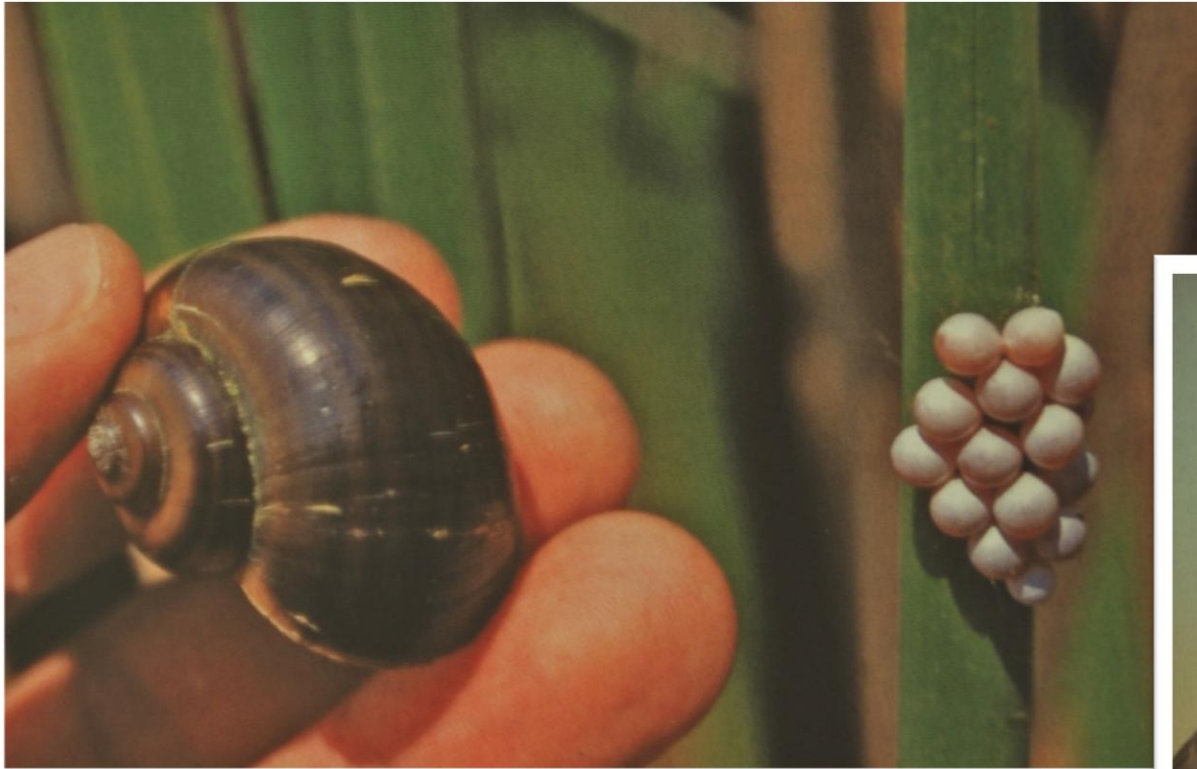
Fig. 7



**Natural fires help preserve
wet prairie communities**



Fig. 8



Florida applesnail and Everglades snail Kite

Fig 9

Historic, present, and proposed water flows

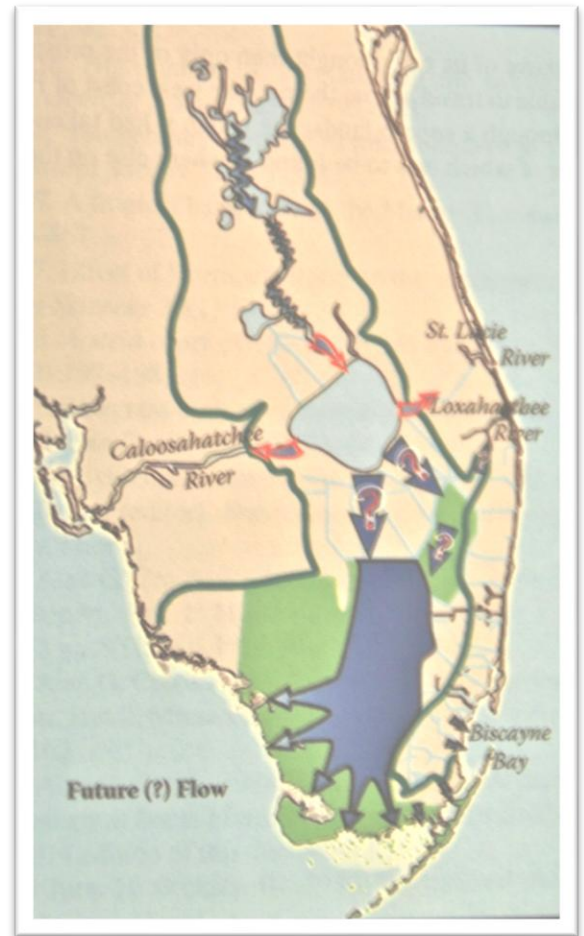
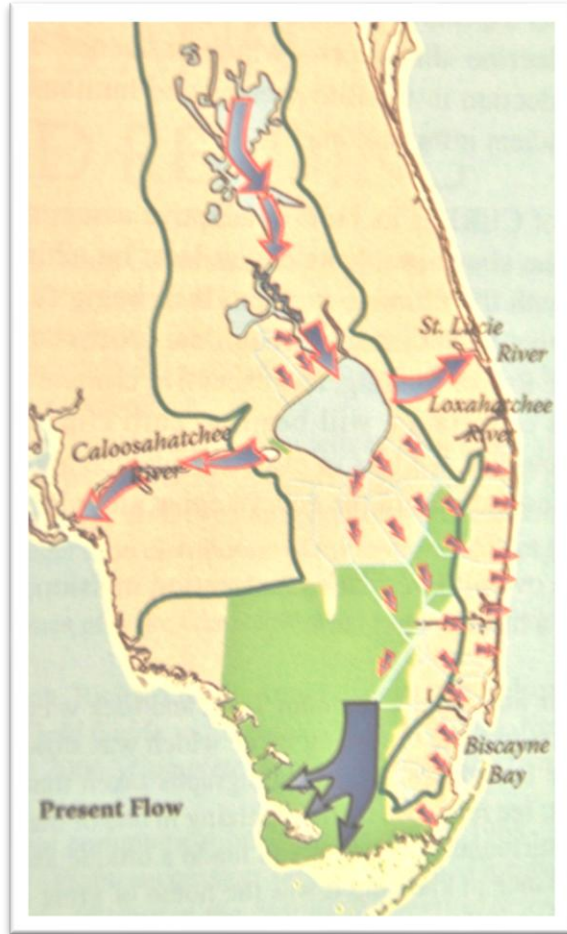
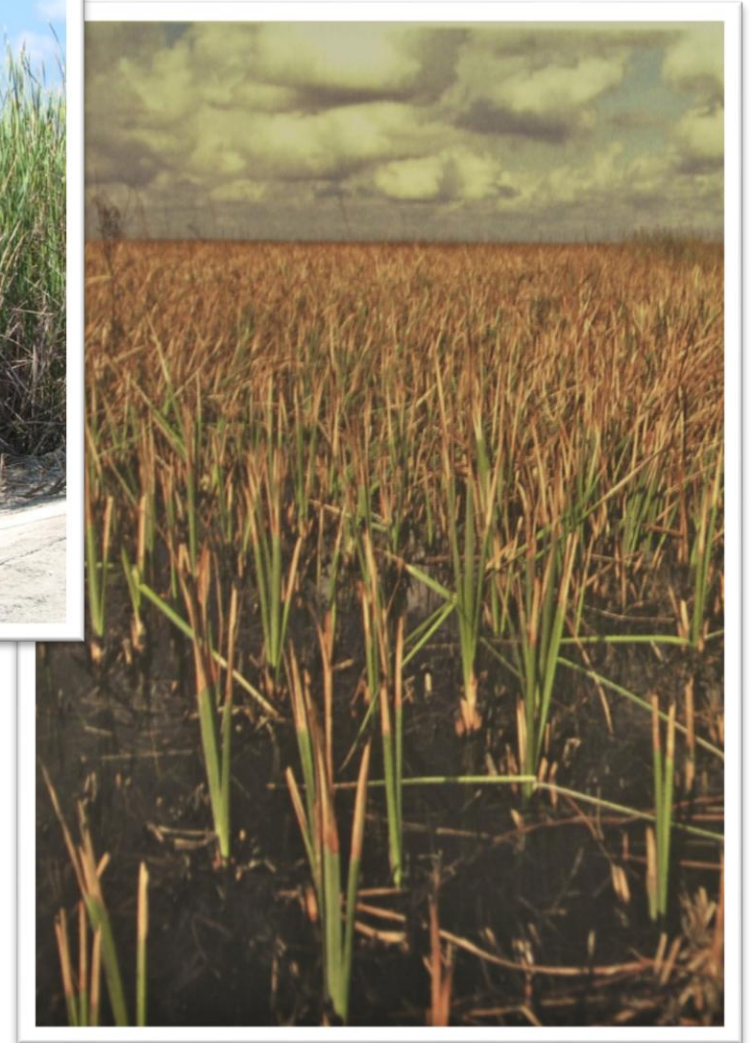


Fig 10



Cattail stand and sparse sawgrass prairie

Fig. 11

Stormwater Treatment Areas (STAs) in northern Everglades

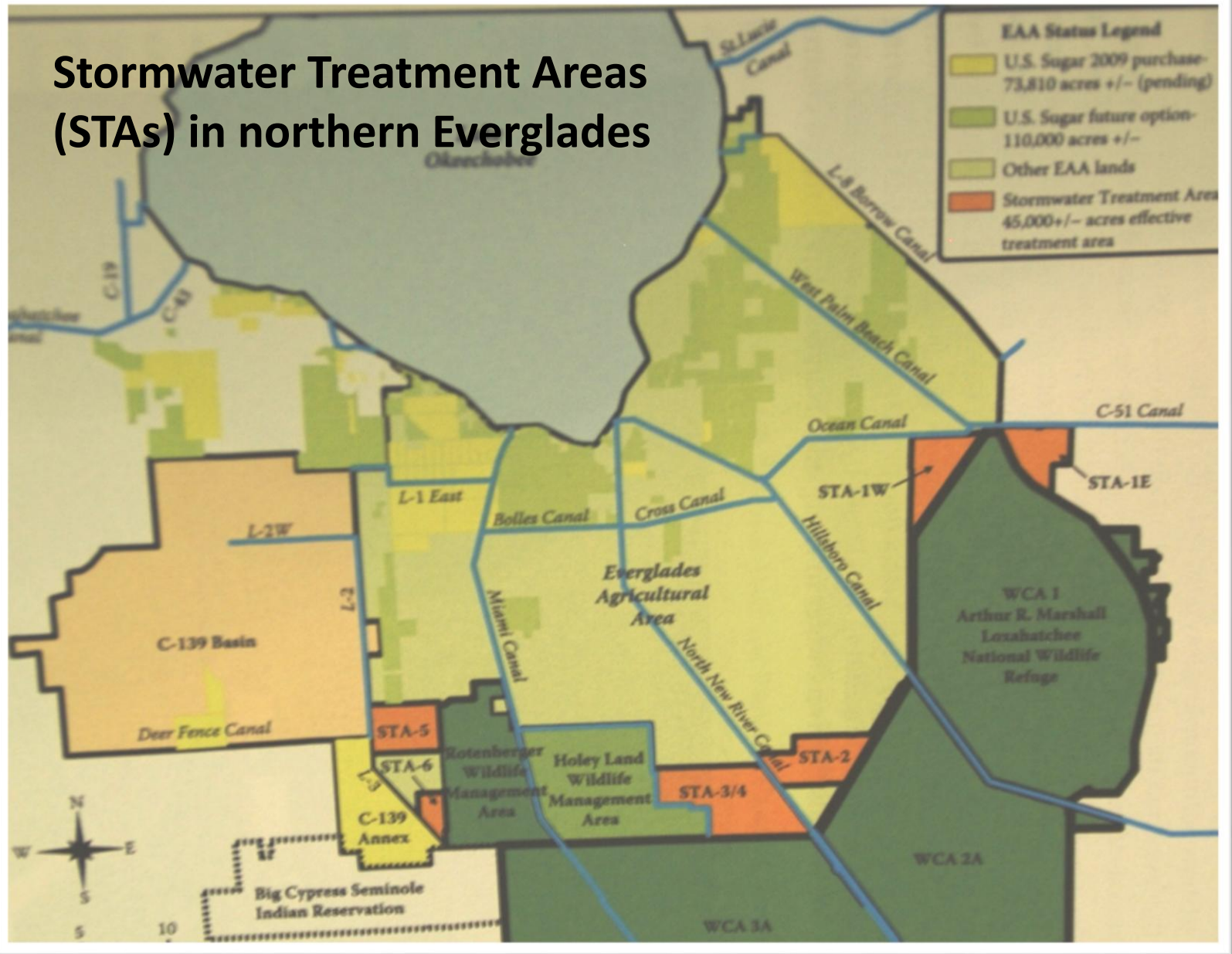
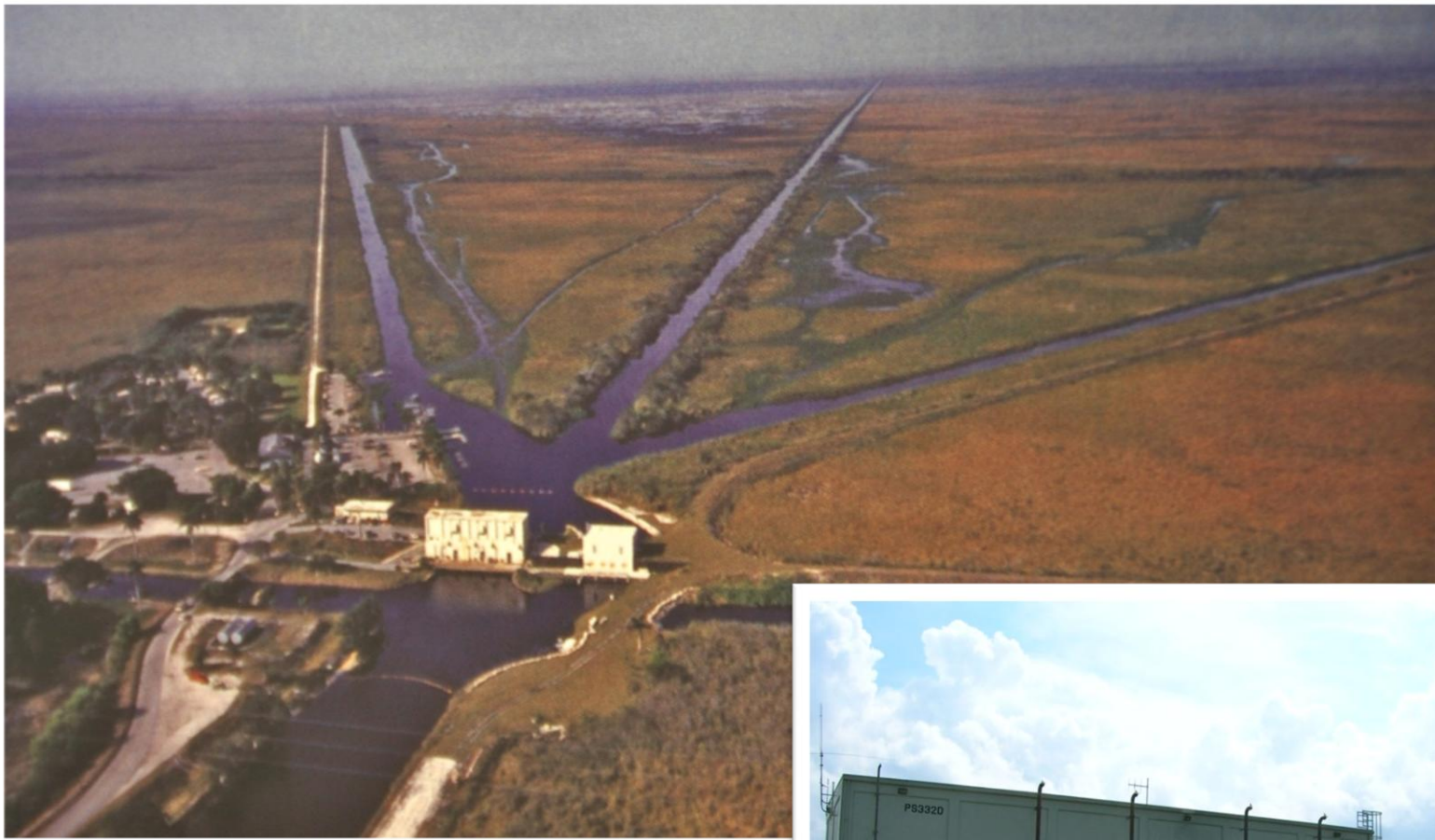


Fig. 12

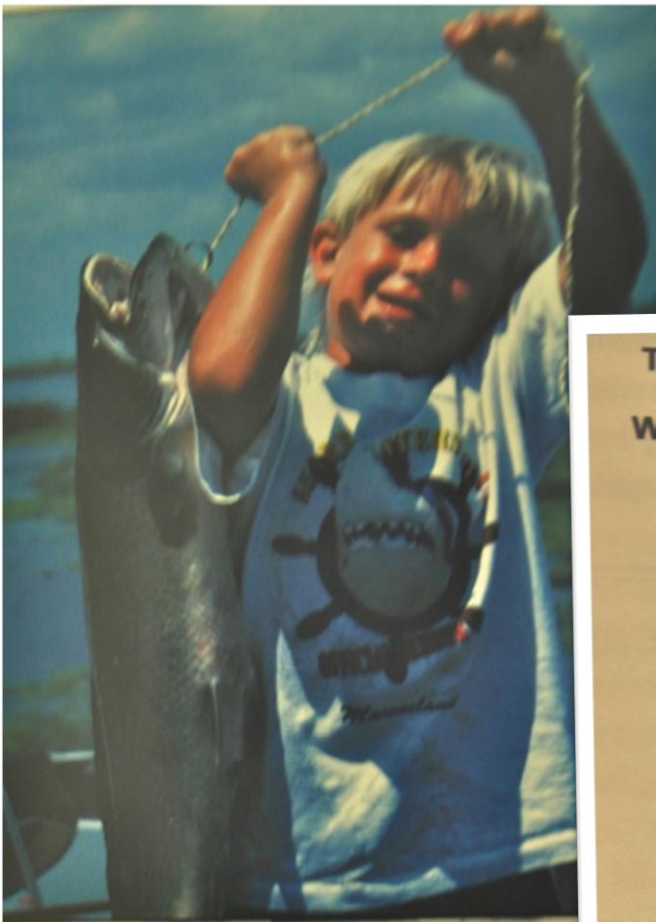


**Pumps, canals, and gates
redirect natural flows in
the Everglades**

Fig. 13



Mercury contamination of fish



WARNING

The Florida Department of Health and Rehabilitation Services has issued a health advisory urging the reduction of consumption of largemouth bass and warning that consumption of fish caught in certain portions of the Everglades due to excessive accumulation of the element mercury.

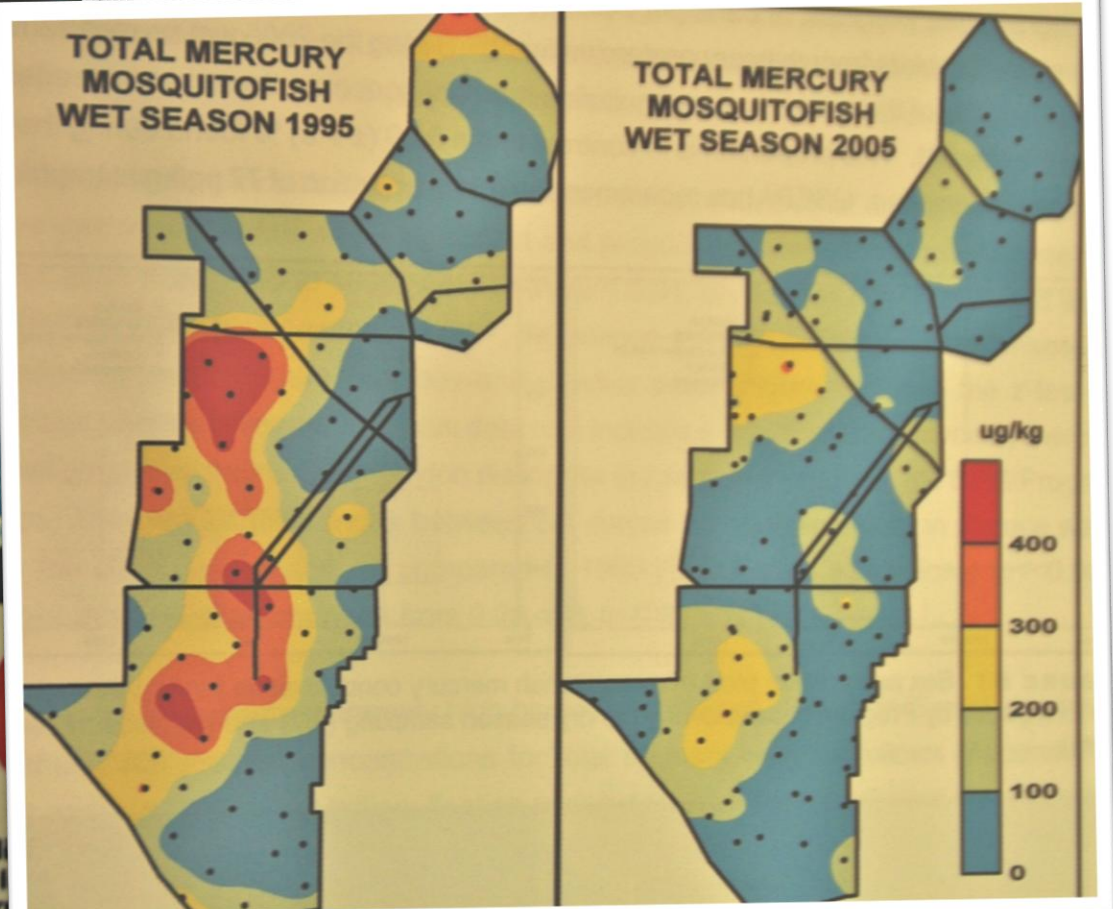


Fig 14

Sulfate concentration and its north-to-south gradient

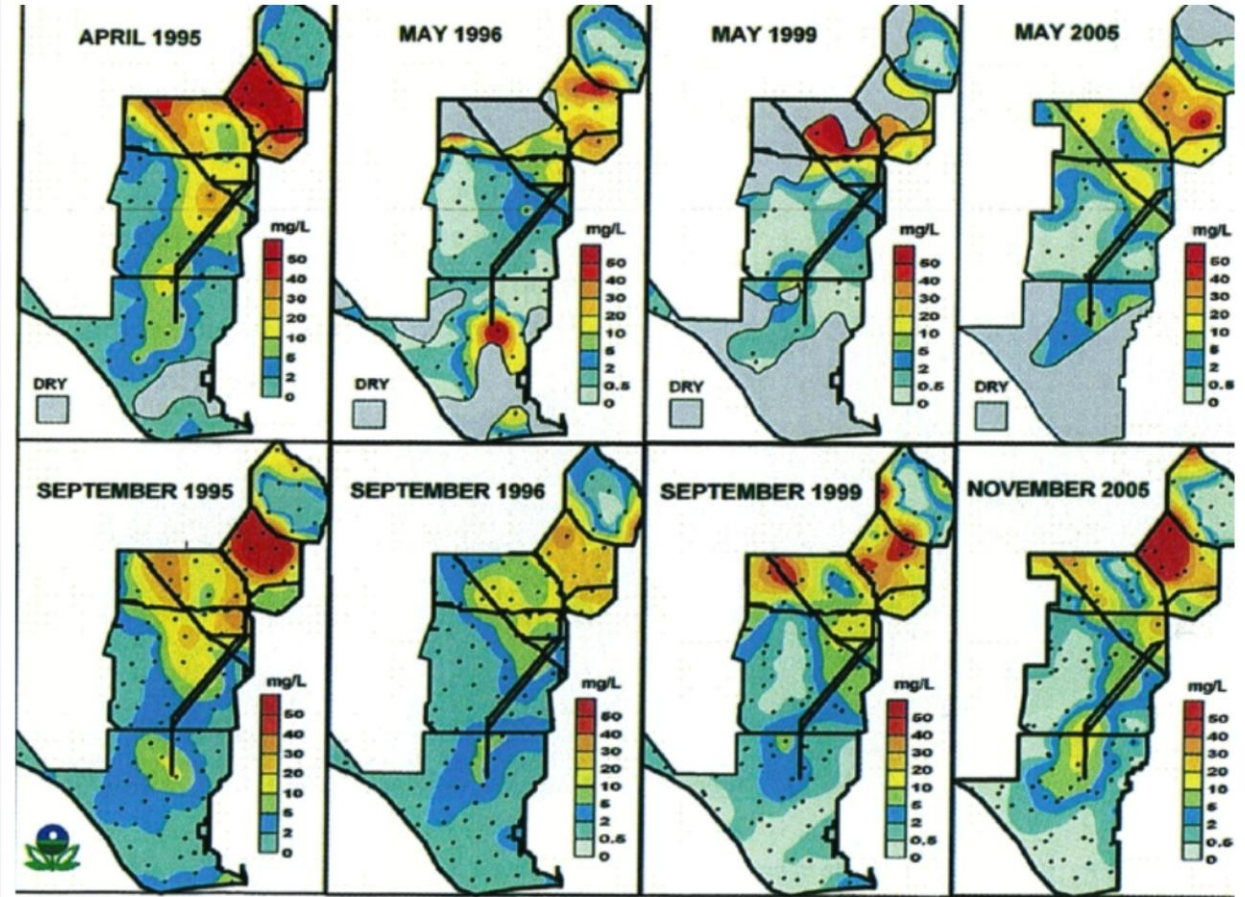
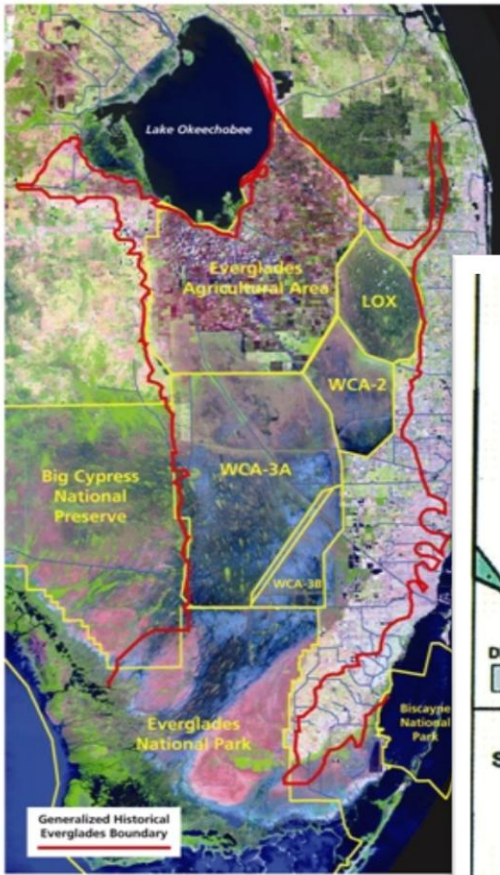


Fig 15

FIGURE 28. Surface water sulfate concentration (mg/L) in the Everglades marsh during the dry season (top) and wet season (bottom) sampling events from 1995-2005.

Homestead Agricultural Area and C-111 Canal

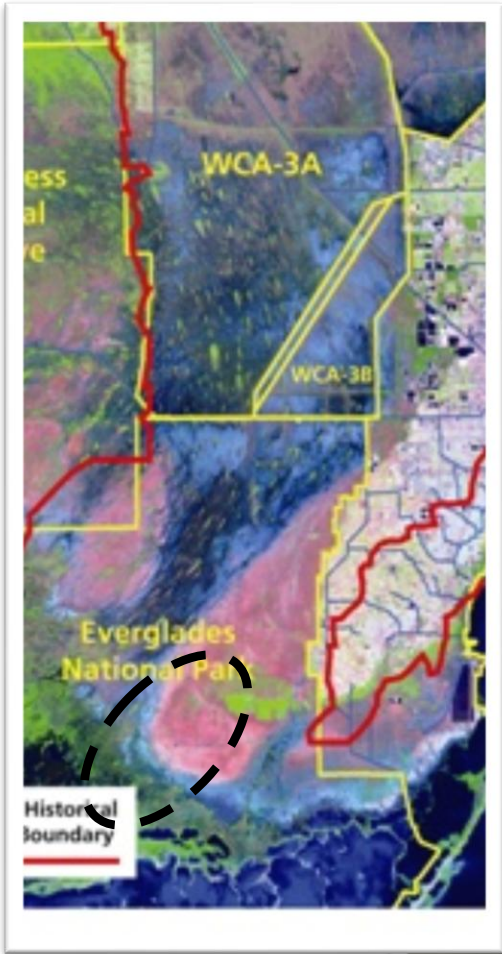


Fig 16