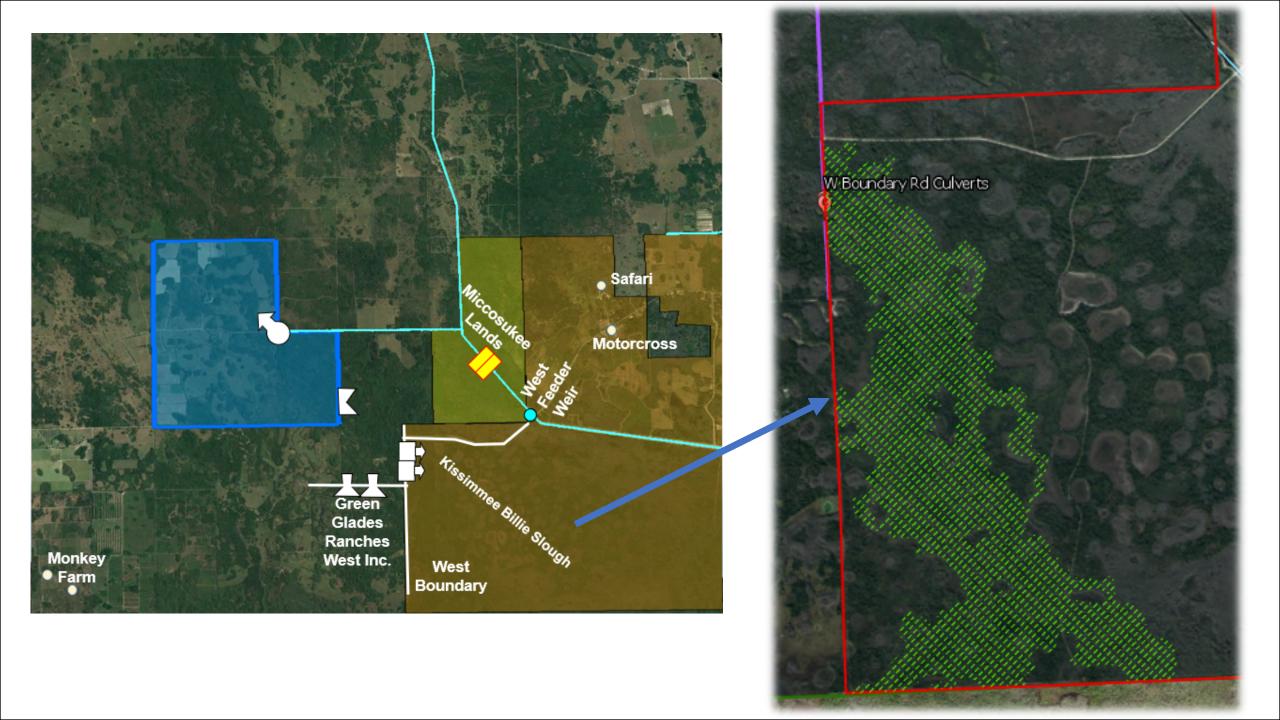
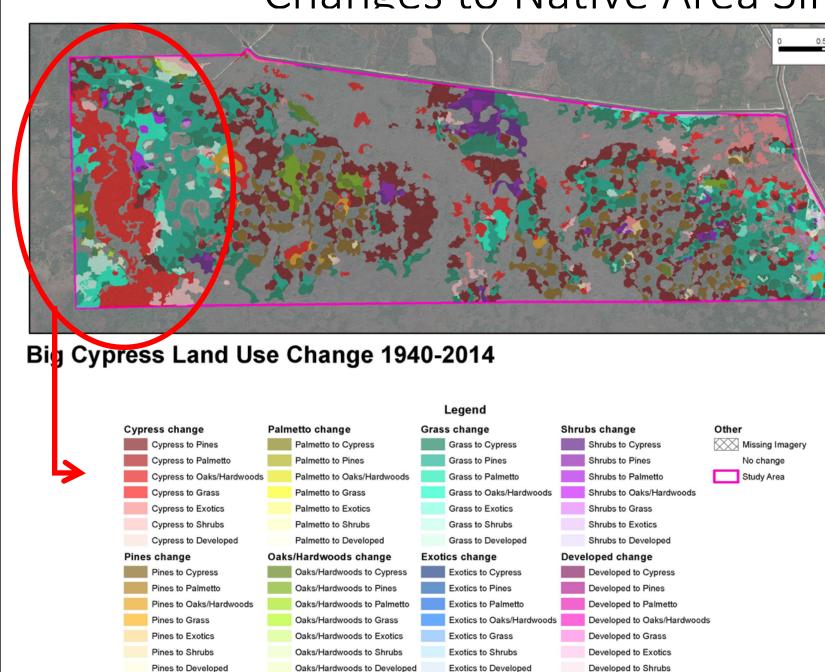
# Environmental Issues Impacting Big Cypress Reservation

- Cut off of "Native Area," particularly Kissimmee Billie Slough, from natural sheet flow of water, as a result it is losing natural habitat.
- Spread of invasive species throughout "Native Area" as a result.
- Low quality water entering Big Cypress Reservation through North Feeder and West Feeder Canals.



### Changes to Native Area Since 1940



- Western portion of Native Area (roughly KBS path) has transitioned away from cypress habitat to drier habitats.
- Exotic/Invasive
   Species have
   proliferated.

Imagery: 2014

# Why Water is Essential for Re-Hydration of the Kissimmee Billie Slough

- Importance of Re-Hydration of the Kissimmee Billie Slough (KBS) to the Seminole Tribe:
- Native Area and KBS in particular are areas of great cultural significance to tribal members, this is the most pristine habitat Seminole Tribe owns.
- Without rehydration, Native Area is expected to continue its decline.
- Reconnection of KBS to clean upstream/historic flows is vital to rehydrating, rehabilitating, and preserving the Native Area.
- Some water quality treatment is necessary to make sure water entering Native Area will achieve restoration purposes and not do unintended additional harm to the area.

## History of the STA

- Treating runoff upstream from the North and West Feeder Canals with STAs
  was part of the original Yellow Book ("YB")(1999) component dedicated to
  addressing the hydrologic issues for the Big Cypress region.
- YB included a total of 1,900 acres of STAs for water quality treatment, but anticipated that the "final size, depth and configuration" of the STAs would be determined with more detailed planning and based on STOF and BCNP water quality criteria.
- WERP AltHR includes ~7,400 acres of STAs, 4,000 for Wingate Mill STA and 3,400 for the North Feeder STA.
- These acreages were determined based on current water quality data and an FDEP-calculated restoration target for BCNP water quality.

#### 9.1.6 Big Cypress Region

### 9.1.6.1 Big Cypress/L-28 Interceptor Modifications (CCC)

This feature includes modification of levees and canals, water control structures, pumps, and stormwater treatment areas with a total storage capacity of 7,600 are footbast durithin and adjacent to the Microsules and Seminole Indian Reservations in Collier and Hendry Counties. The initial design of the stormwater treatment areas assumed a total acreage of 1,900 acres with the water level fluctuating up to 4 feet above grade. Conceptual sizes of the stormwater treatment areas were based on interim phosphorus concentration targets in the conceptual plan for the Everglades Construction Project. The final size, depth and configuration of this facility, including the stormwater treatment areas, will be determined through more detailed planning and design. Design of the stormwater treatment areas will be based on water quality criteria of the Seminole Tribe and criteria applicable to Big Cypress National Preserve, as appropriate.

The purpose of this feature is to reestablish sheetflow from the West Feeder Canal across the Big Cypress Reservation and into the Big Cypress National Preserve, maintain flood protection on Seminole Tribal lands, and ensure that inflows to the North and West Feeder Canals meet applicable water quality standards. Consistency with the Seminole Tribe's Conceptual Water Conservation System master plan will be maintained.

Upstream flows entering the West and North Feeder Canals will be routed through two stormwater treatment areas to be located at the upstream ends of the canals. Sheetflow will be reestablished south of the West Feeder Canal by a system to be developed consistent with the Seminole Tribe's Conceptual Water Conservation System master plan. After conversion to a pump station, S-190 will also push flows south into the L-28 Interceptor Canal where sheetflow to the southwest will also be reestablished with backfilling of and degradation of the southwest levee of the canal