BOARD OF COUNTY COMMISSIONERS

AGENDA ITEM SUMMARY

Meeting Date: 18 January 2006 Division: Growth Management

Bulk Item: Yes _____ No X Department: Marine Resources

Staff Contact: George Garrett

AGENDA ITEM WORDING:
Update to the Board concerning the Comprehensive Everglades Restoration Plan presented by Tom Van Lent of the Everglades Foundation.

ITEM BACKGROUND:
Doctor Tom Van Lent of the Everglades Foundation made a presentation to the Board in October concerning the on-going Comprehensive Everglades Restoration Plan (CERP). He agreed to make periodic presentations to the Board as the CERP process progressed.

PREVIOUS RELEVANT BOCC ACTION:
None

CONTRACT/AGREEMENT CHANGES:
NA

STAFF RECOMMENDATIONS;
NA

TOTAL COST: NA **BUDGETED:** Yes _____ No _____

COST TO COUNTY: NA **SOURCE OF FUNDS:** _____

REVENUE PRODUCING: Yes _____ No X **AMOUNT Per Month** _____ **Year** _____

APPROVED BY: County Atty NA OMB/Purchasing NA Risk Management NA .

DIVISION DIRECTOR APPROVAL: _____
Timothy McGarry, Director of Growth Management

DOCUMENTATION: Included X Not Required _____

DISPOSITION: _____ **AGENDA ITEM NO.:** _____

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The Comprehensive Everglades Restoration Plan

Update to Monroe County Commission

January, 2006

Thomas Van Lent, Ph.D, P.E.

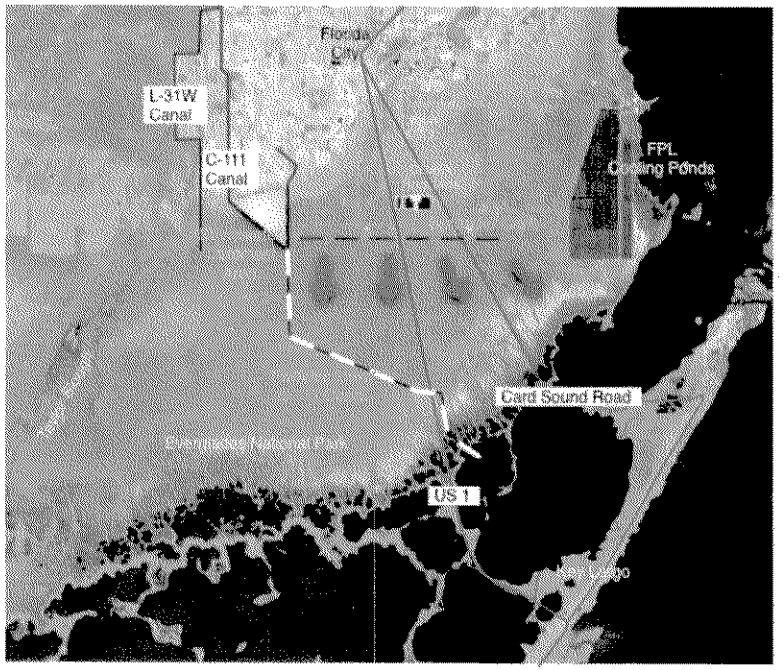
EVER GLADES FOUNDATION

C-111 Spreader Project

January, 2006

EVER GLADES FOUNDATION

C-111 Spreader Project



- Primary components are:
  - –Spreader canal to distribute flood waters rather than direct discharge into Bay
  - –Stormwater treatment area to clean polluted ag/urban drainage
  - –Removal of lower C-111, the canal disrupting flows to Florida Bay

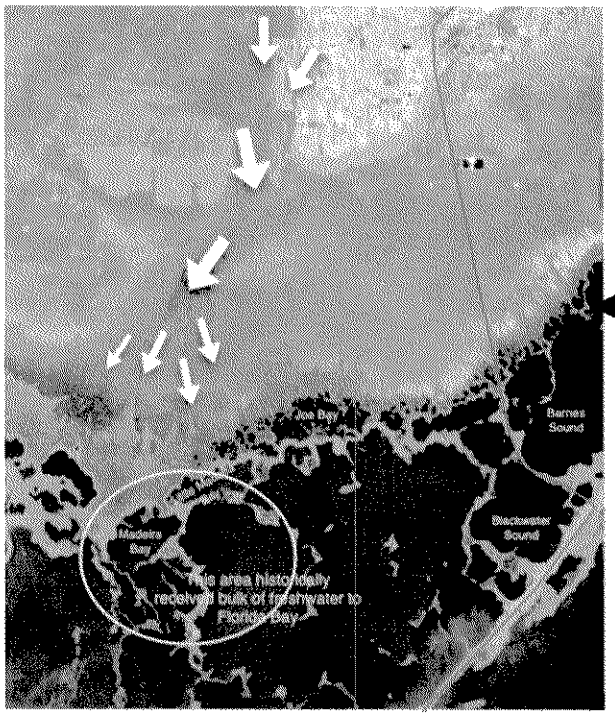
- The C-111 Spreader Project was authorized as part of the original CERP Plan, with an estimated cost of $98 Million, about half of which was land.
- This is the project that has the most effect on Florida Bay; its purpose is to remove the canal that is primarily responsible for disrupting freshwater flows to Florida Bay as well as restore wetlands near US-1 and Card Sound Road.
- The primary issues in the project are:
  - Alignment of spreader canal is a trade-off between environmental benefits and possible flooding effects near Florida City;
  - Land values have increased dramatically;
  - The SFWMD is limited to willing-seller acquisition by State policy against use of eminent domain for environmental projects; some landowners do not wish to sell;
  - Some are concerned that removal of lower C-111, the major environmental accomplishment, could reduce flood protection.

Dedicated to the restoration of America's Everglades

EVERGLADES FOUNDATION

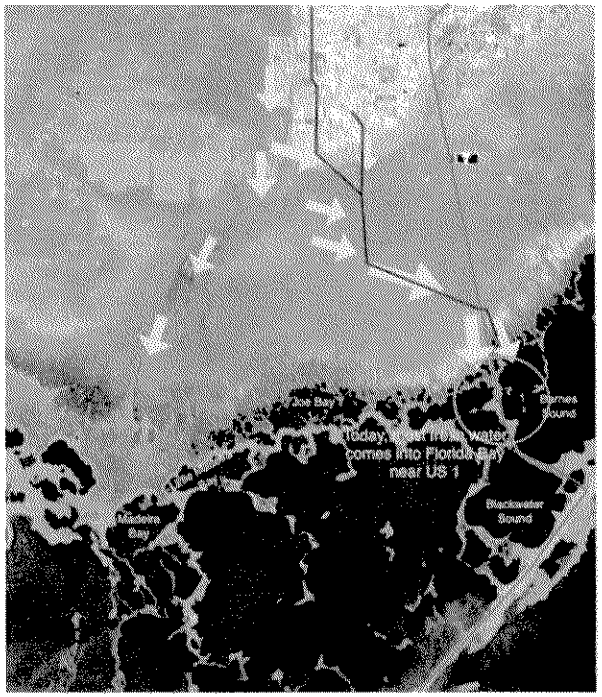
Why Backfill C-111?

- Historically, freshwater entered Florida Bay through Taylor Slough. The largest flows were in the October through January, and were largest around Maderia Bay.
- Today, the C-111 Canal pulls water from Taylor Slough and releases it near US-1. The largest flows are now in June through October. Occasional bursts are sent to Barnes Sound. This is too far east to circulate well. **The C-111 canal is the primary disrupter of freshwater flows into Florida Bay.**
- Backfilling C-111 will significantly help to restore where and when freshwater enters Florida Bay; it is the primary CERP benefit to Florida Bay and Monroe County.
- Simply closing gates, but leaving the canal in place, will not restore timing and distribution, as the canal will remain as a major conveyance feature, capturing groundwater and sheetflow and directing them towards US-1.

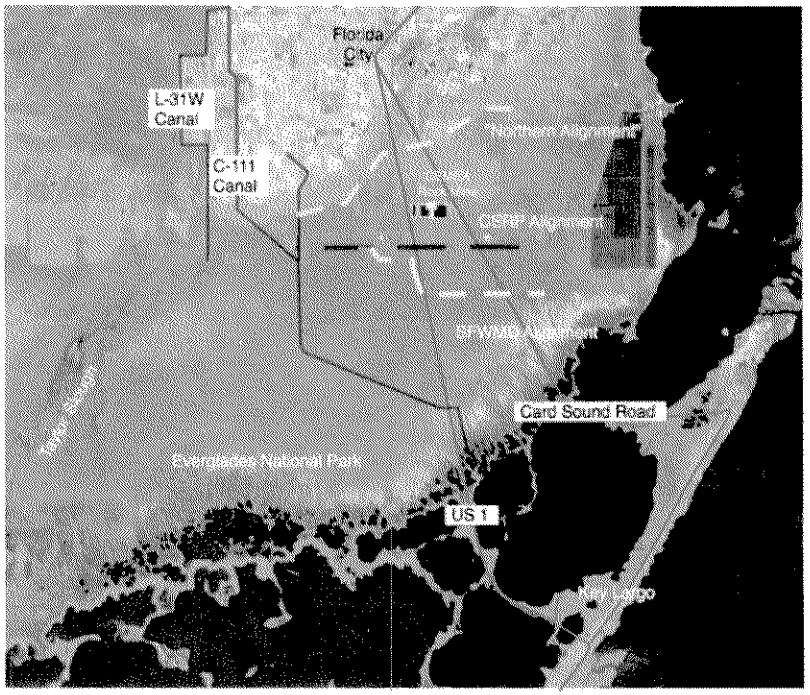


Historically, most freshwater entered Florida Bay in the central portion of the Bay and arrived in early dry season.

The C-111 canal pulls water from the marsh and sends to eastward, where it enters Florida Bay near US1, too far east to circulate in the Bay.



Acceler8 Component



•Options for spreader alignment:

–SFWMD alignment: no land acquisition, benefit to 56 square miles

–Northern alignment: high land costs, potential to affect Florida City; benefit to 174 square miles

–CERP alignment: land acquisition costs; benefit to 112 square miles

- <u>The SFWMD proposes to split the C-111 Spreader Project into the Acceler8 (state) portion and the federal portion. Acceler8 is currently limited to the spreader canal and pumping station. Water quality components and backfill of C-111 will be left to the federal government.</u>
- *Without backfill of C-111, this project will have significantly lower benefits to Florida Bay*; under several plausible scenarios, it could worsen impacts to Florida Bay.
- The land ownership in this area is complex; there are numerous small parcels sold as part of swamp-peddling schemes. Even if funds were available, sorting out titles will take years.
- Land prices are rapidly escalating, likely because speculators are anticipating UDB changes; land costs alone are now estimated at 4 times the price tag for the entire original CERP project estimate.
- SFWMD has proposed southern alignment, primarily because it requires no land acquisition (uses either State, County, or FPL lands).
- Schedule: SFWMD will complete analysis by Jan. 15, 2005. SFWMD and Corps will choose alignment in February, 2006. FDOT has promised to construct bridge as part of US1 project.

C-111 Spreader Summary

- Without backfilling lower C-111, this project will have, at best, a much reduced benefit to Florida Bay. It will make little progress toward restoring when and where Florida Bay receives fresh water.
- The project adds large pumps, and without lower C-111 filled in, they could be combined with the existing canals and structures to amplify existing problems with freshwater flow to Florida Bay.
- Deferring the water quality components to the federal process will likely raise issues between the state and federal partners over responsibility for water quality protection and clean-up.
- Detailed modeling is not yet available, as simulations to date have assumed lower C-111 has been removed and earlier modeling efforts have been abandoned. The technical information is expected on mid-January, 2006.
- SFWMD will vote in February on alignment; no public meets are scheduled. Corps will chose alignment in February; no EIS is currently available.

Florida Bay/Florida Keys Feasibility Study

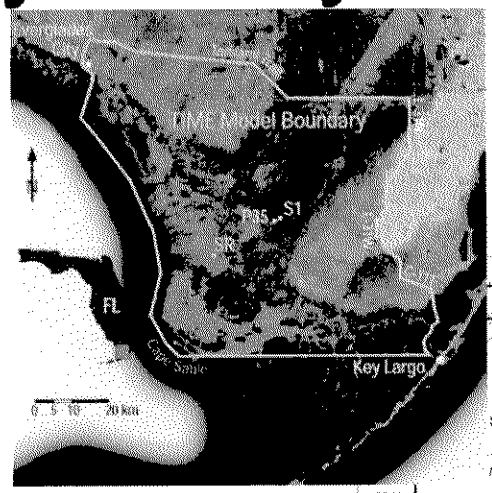
Update to Monroe County Commission

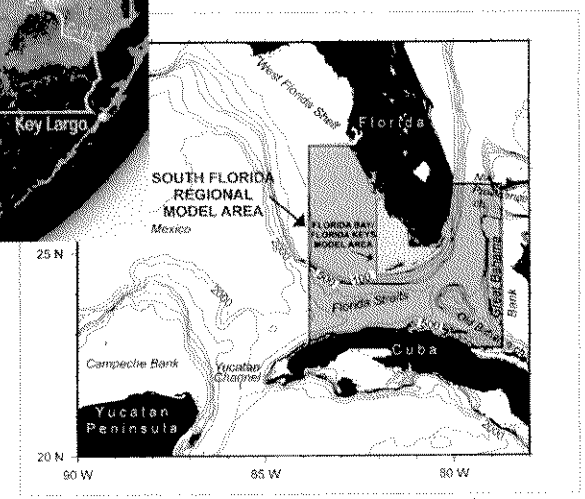
January, 2006

EVER GLADES FOUNDATION

Florida Bay/Florida Keys Feasibility Study

- Purpose of study is to develop computer that would:
  - Predict how freshwater moves in Florida Bay
  - Assess seagrass responses to freshwater
  - Determine movements of nutrients and potential contaminants
  - Model ocean currents affecting reefs and Florida Bay
- Models remain under development--expecting deployment in 6 months.





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