Audubon of Florida's Comments on the Lake Okeechobee Protection Plan Update 2011

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Overview

- More than 400 citizens signed a letter supporting water quality improvements in the LOPP Update
- A look at the science: Why are we concerned?
- Proposed solutions
- Conclusion

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Environmental Impacts

- Phosphorus and nitrogen in Lake Okeechobee contribute to:
  - hypoxia
  - foul odors
  - turbidity
  - expansion of noxious plants
  - algae blooms (sometimes toxic)

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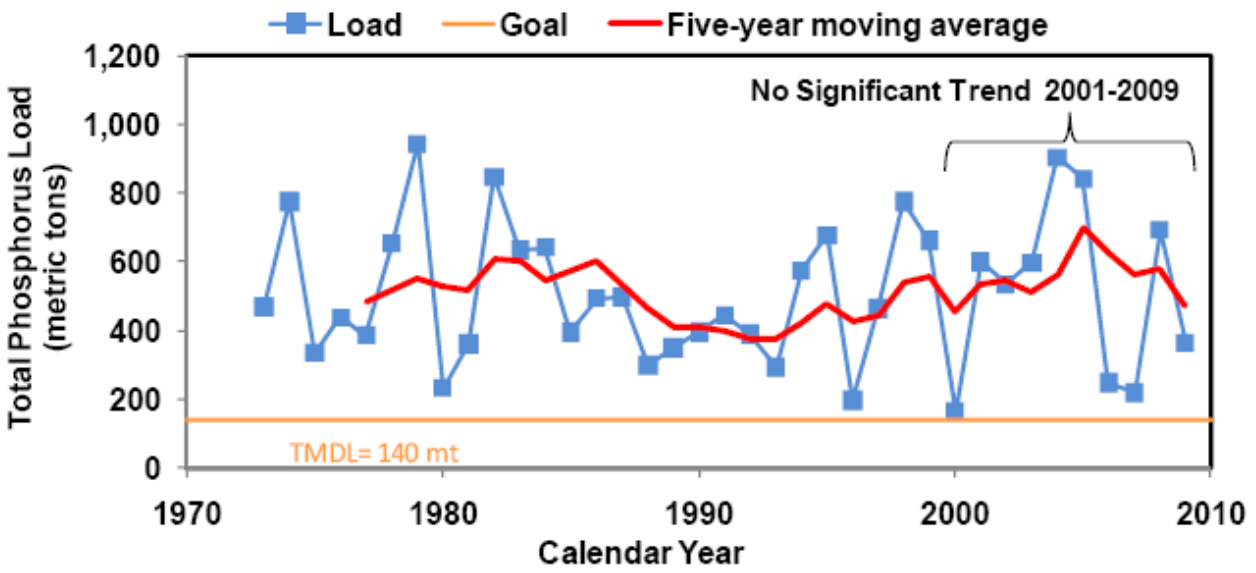
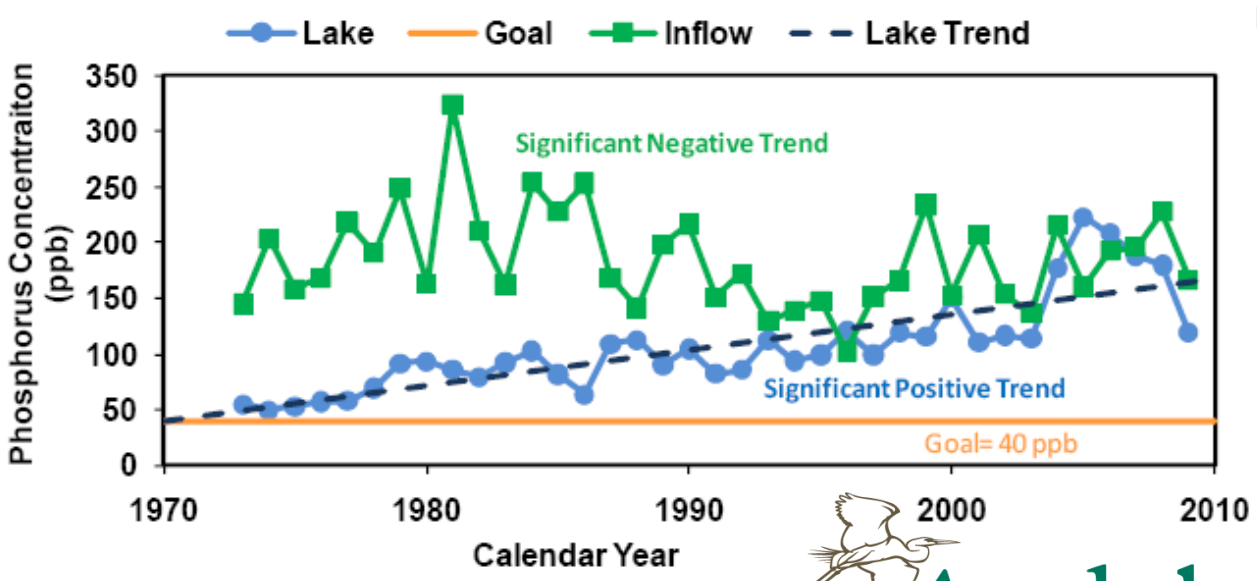
P inflows remain far above TMDL



In-lake P levels keep increasing



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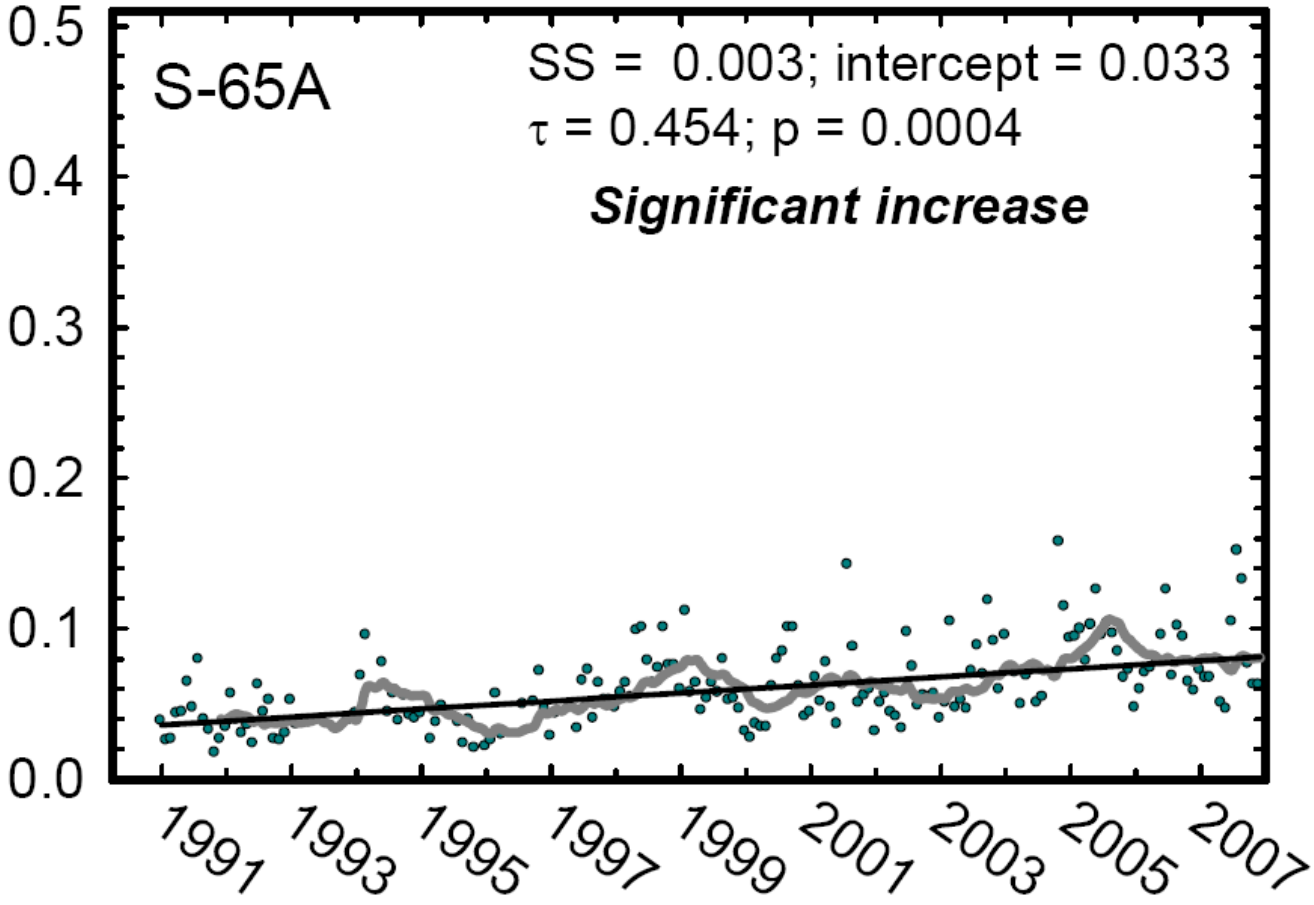
Phosphorus levels are increasing in the Kissimmee Chain region (40% of watershed)



Phosphorus is still being added

- Phosphorus imports to the Okeechobee watershed remain at 6,088 metric tons (mt).

- Legacy p is increasing every year

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How can the LOPP Update help solve this?

1. Source Control- Preventing sources of pollution

A. Articulate to the Legislature that funding is needed to fully implement existing BMPs.

B. Require BMPs to be evaluated for effectiveness in preventing water quality impacts and revise where needed.

C. Encourage the completed phaseout of biosolids use in the Lake Okeechobee Watershed.

2. Prioritize cost saving private partnership solutions

A. Increase the use of edge of farm treatment.

B. Increase funding for cost-share BMPs.

C. Fund dispersed water management projects that include treatment benefits.

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Reevaluate Agricultural Best Management Practices (BMPs)

- Section 373.4595 (3)(c)(1)(d), Florida Statutes states:

"Where water quality problems are detected for agricultural nonpoint sources **despite the appropriate implementation of adopted best management practices**, the Department of Agriculture and Consumer Services, in **consultation with the other coordinating agencies** and affected parties, shall institute a reevaluation of the best management practices and make appropriate changes to the rule adopting best management practices."

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How are BMPs falling short?

- Relationship to water quality goals is unclear.
- Fertilizer applications are based on plant growth needs rather than water quality.
- Not enough funding is available for cost share, implementation or monitoring.

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Residuals (human solid waste) in Okeechobee's watershed

- Audubon estimates that ***at least*** 1,523 tons of phosphorus (363 and 1,160 for Class B and AA, respectively) are being added to Lake O's watershed annually
- One year at Kissimmee Site: 2,755 tons of solids; 277 tons of N; 109 tons of P at 141 pounds/acre

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Solution:

- Enforce Class B Residuals Prohibition (new DEP rule effective August 31, 2010)

- The District should work with DEP/SFWMD/DACS to proceed with regulatory revisions to assure that Class AA biosolids are not dumped. Applications should be limited to only the amount needed as fertilizer, according to soil and plant tissue tests required under the BMP rule.

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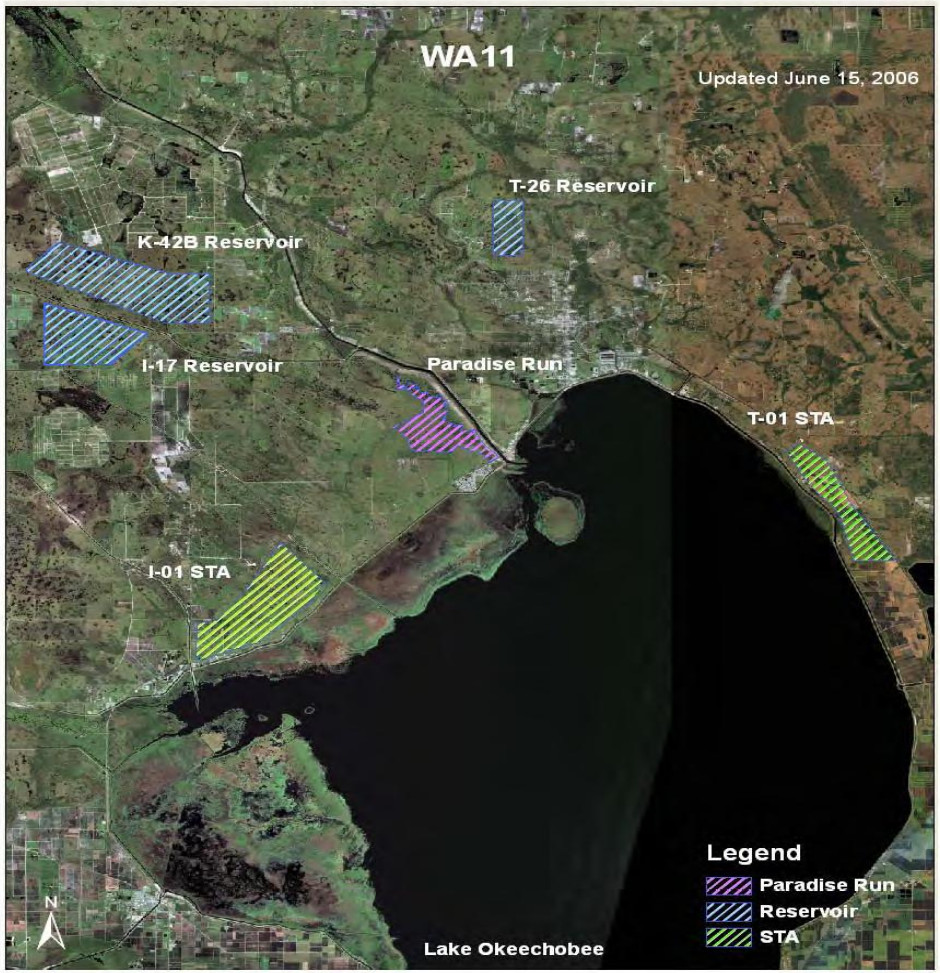
Exploring and funding private partnerships for cost effective water storage

How realistic are tens of thousands of acres of new STAs north of Lake Okeechobee? Several billion in cost?



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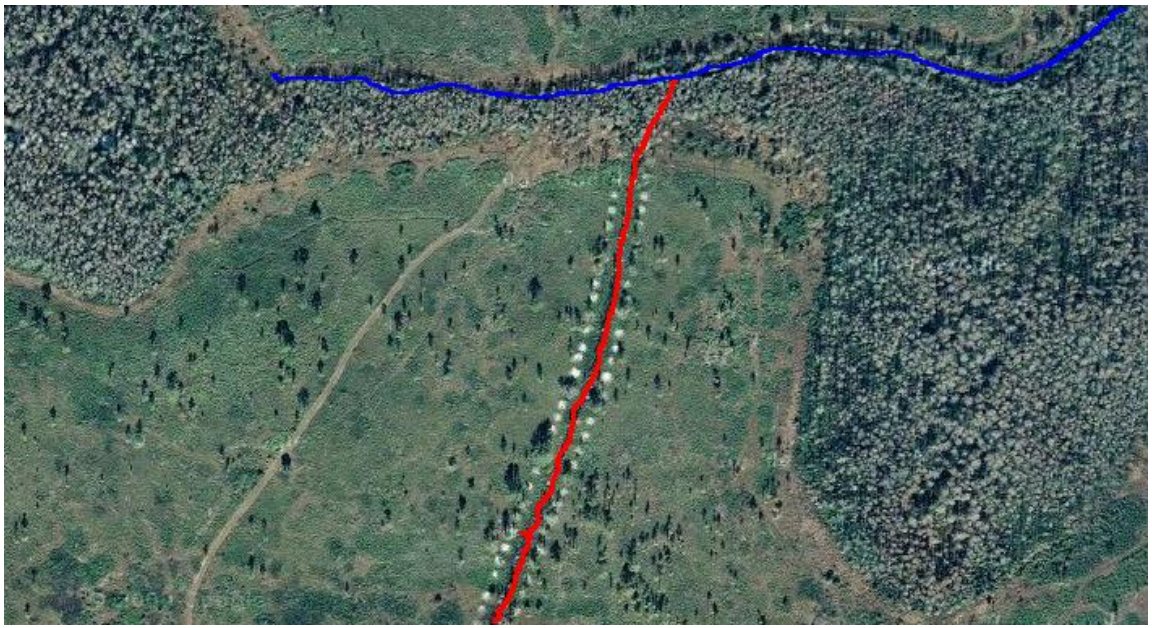
Dispersed Water Management

- Thousands of miles of uncontrolled drainage ditches in the Kissimmee/Okeechobee Basin…



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Impoundments behind small structures slow water flowing toward Okeechobee & reduce flow through ET losses. Some projects can be designed to function like STAs for nutrient uptake.

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Solutions

- Develop a clear budget and timeline for expanding Dispersed Water Management projects.

- Reconsider funding for Phase 2 of the Lakeside Ranch STA and evaluate reprogramming funds to Dispersed Water Management. Phase 2 expansion should await an evaluation of phosphorus removal efficacy utilizing chemical pre-treatment before any work on Phase 2 is restarted.

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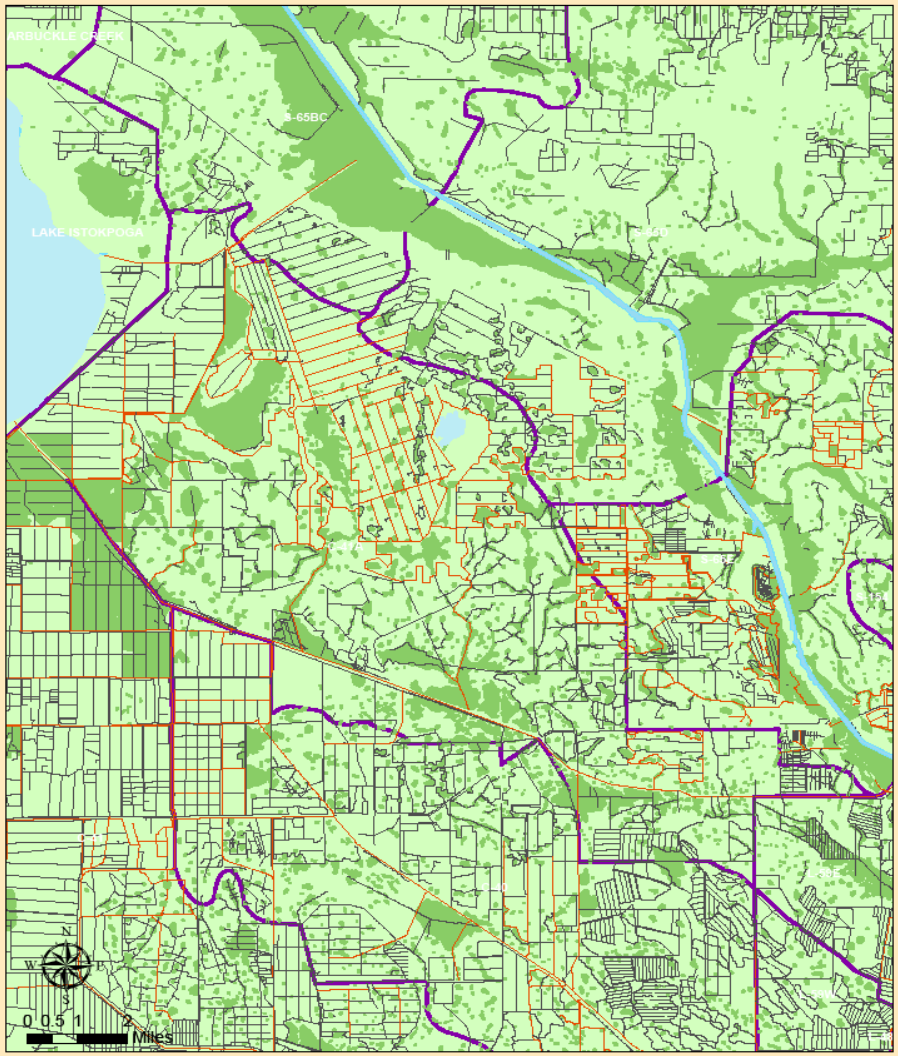
Edge of Farm Treatment = many opportunities



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Solutions

- The LOPP should encourage proposals to evaluate and implement Edge of Farm treatment wherever it can be effective.
  - Can be as simple as holding water

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Conclusions

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- Recommend new funding in appropriate agency budgets along with timelines for full implementation and monitoring of BMPs.
- Develop a schedule of efforts to reevaluate and revise BMPs.
- Develop proposals to evaluate and implement Edge of Farm treatment where possible.
- Encourage the elimination of biosolid use in the Okeechobee Watershed. Revise regulations to assure that Class AA biosolids are not dumped in the basin absent site specific soil and plant tissue tests demonstrating the need for fertilizer application, and which limit applications to only the amount needed as fertilizer.
- Prepare a clear budget and timeline for Dispersed Water Management projects.
- Reevaluate Phase 2 of the Lakeside Ranch STA to consider whether funding can be reprogrammed for Dispersed Water Management. Phase 2 expansion should await a full evaluation of phosphorus removal efficacy utilizing chemical pre-treatment.

Thank you

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