Lake Apopka Project Update
April 2021

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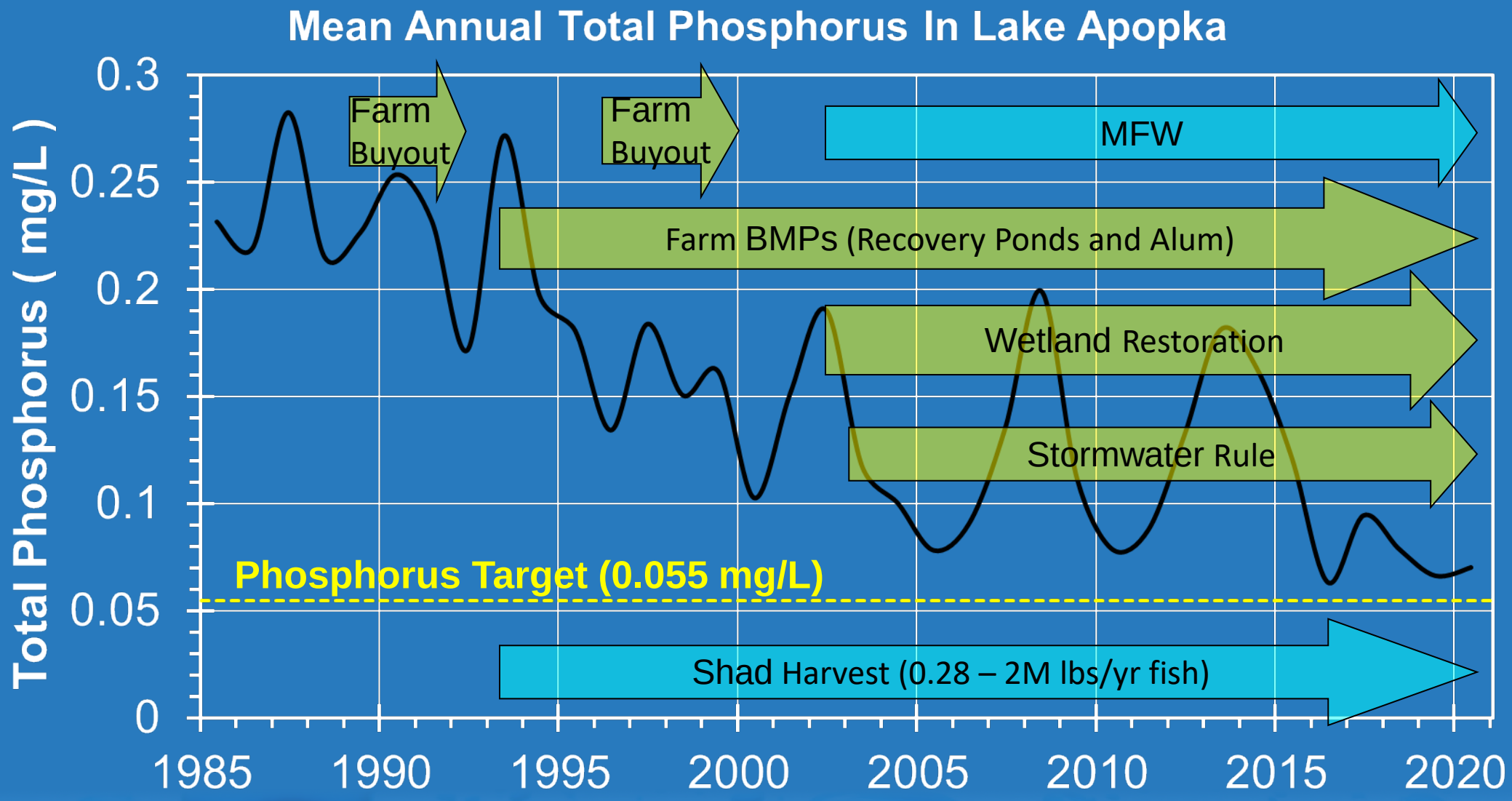
St. Johns River
Water Management District

Declining Phosphorus Concentration



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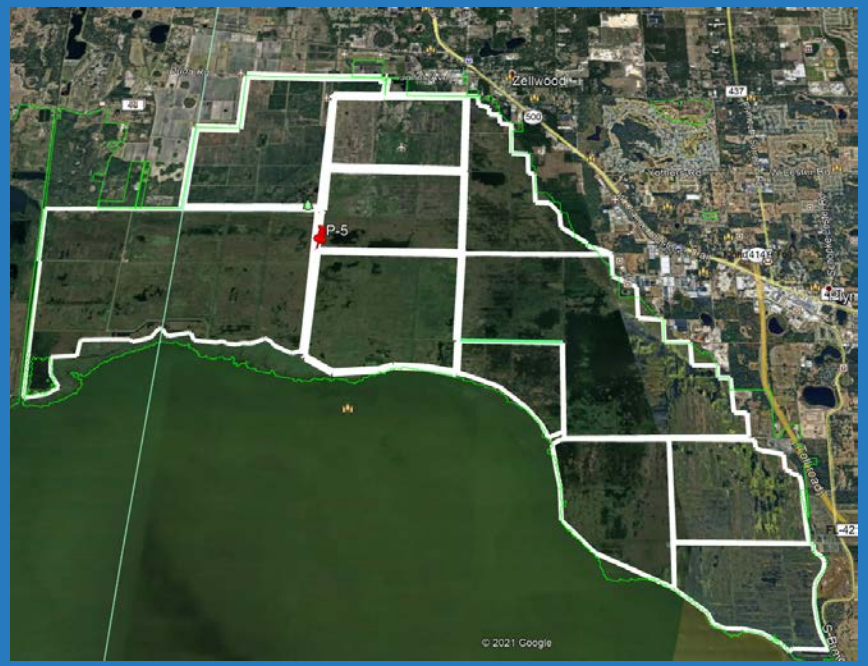
Duda Water & Phosphorus Management Improvements

- **Cost: $2.2 Million**
- **Construction: 12/20 – 07/21**
- **Water quality benefit:**
  - **390 lbs/year phosphorus load reduction to lake**

Duda Interconnect Pump Station

- **$2M; Complete: 09/21**
- **Reduces P load to lake by 118 lbs/year**

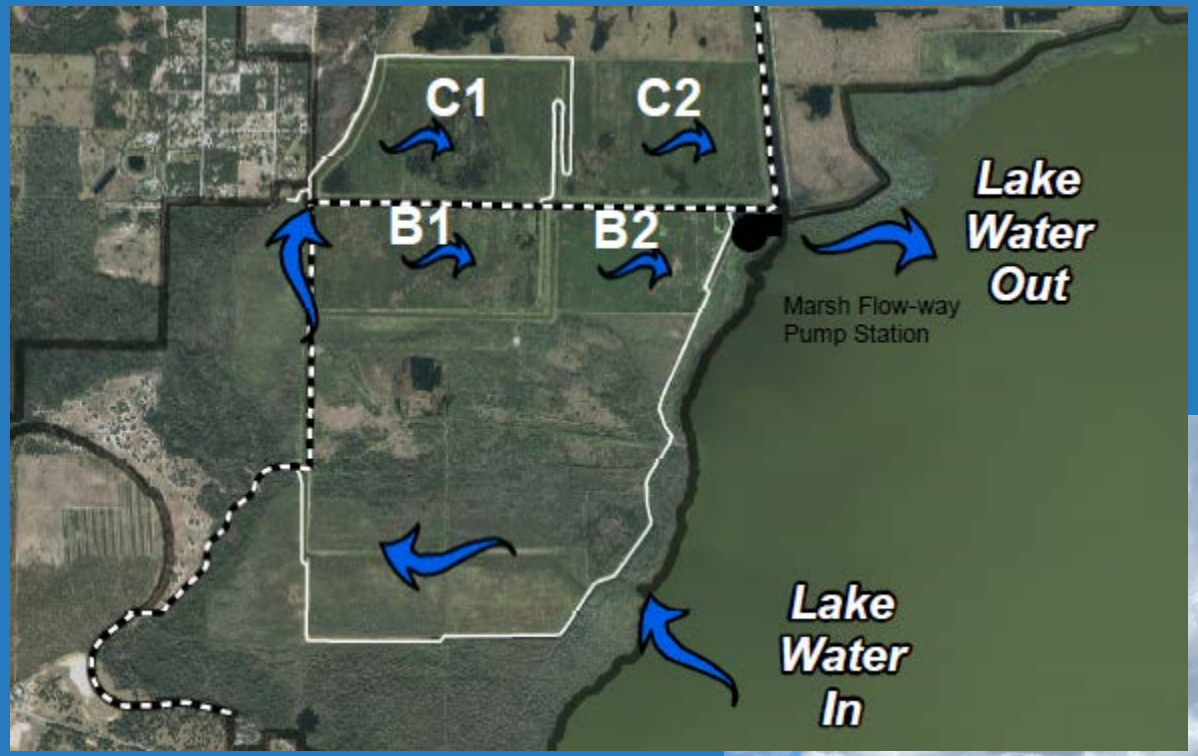


Phase 4 Pump Station and Levee Improvement

- **$2.5M**
- **Completed 12/20**
- **Provides an additional 700 MG water storage and reduces P loading to lake by 143 lb/year**

Marsh Flow-Way Improvement Project

- One of two ongoing P diet projects
- Recirculating wetland
- $2.4M in maintenance construction complete next month
- Treats ~40% of the lake's volume/year



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New Phosphorus Removal Project
Phosphorus Free Water Solutions

Rough Fish Harvest

- 3 year contract at $810,000/year with fish processor who sells the shad
- 773,332 lbs of fish removed this year, for 6,503 lbs of P
- ~29M lbs of fish since 1993, for 238,825 lbs of P removed from the lake.

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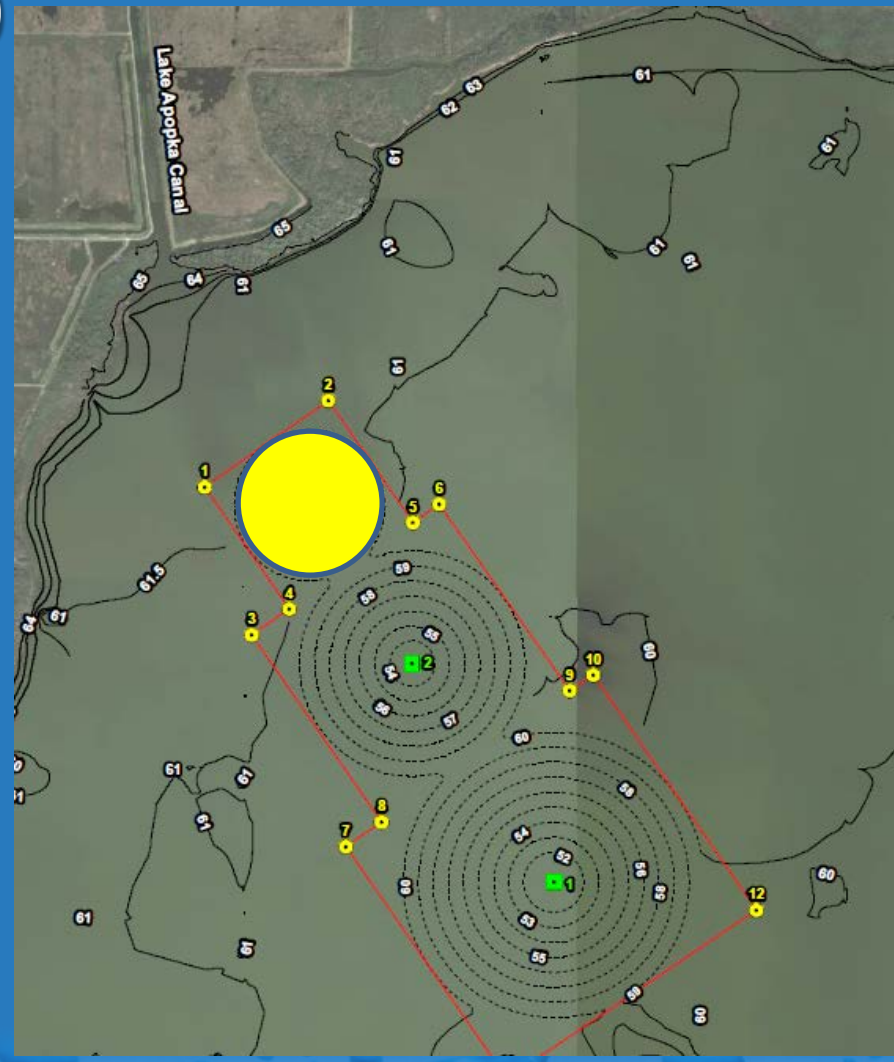
Sediment Sump Project

- Smallest of 3 sumps; completed 12/19
- $4.2M
- 1,200’ Diameter and about 5’ deep
- Located near confluence with Apopka-Beauclair Canal to hopefully reduce sediment transport downstream



In-Lake SAV Planting Evaluation

Large Scale SAV Planting

- **Not to exceed $300,000; expires 09/21**
- **Planting 12 acres of *Vallisneria americana* and 12 acres of *Potamogeton illonensis* at 5,000 plants per acre**

Eelgrass
(Vallisneria americana)

Illinois pondweed
(Potamogeton illinoensis)

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2019 SAV Mapping Results

- **Lake-wide Estimation Naturally Occurring SAH (Without Known Plantings):**

ACRES	SAH	SAV	EFV
Mean acres per transect	0.41	0.18	0.47
Lakewide estimated acres (mean)	**201.9**	**86.5**	**125.5**

- **Acreage of known SAH Plantings (mapped) = 140.5 EFV + 10.7 SAV = 151.2 SAH planted**

- **Total Lake-wide SAH for 2019 = 151.2 planted + 201.9 calculated = 352.1 Acres Total SAH!**

Questions?