

Sam Jones – Abiaki Prairie Restoration



Lake Belt Mitigation Committee
August 18, 2022

Presenter

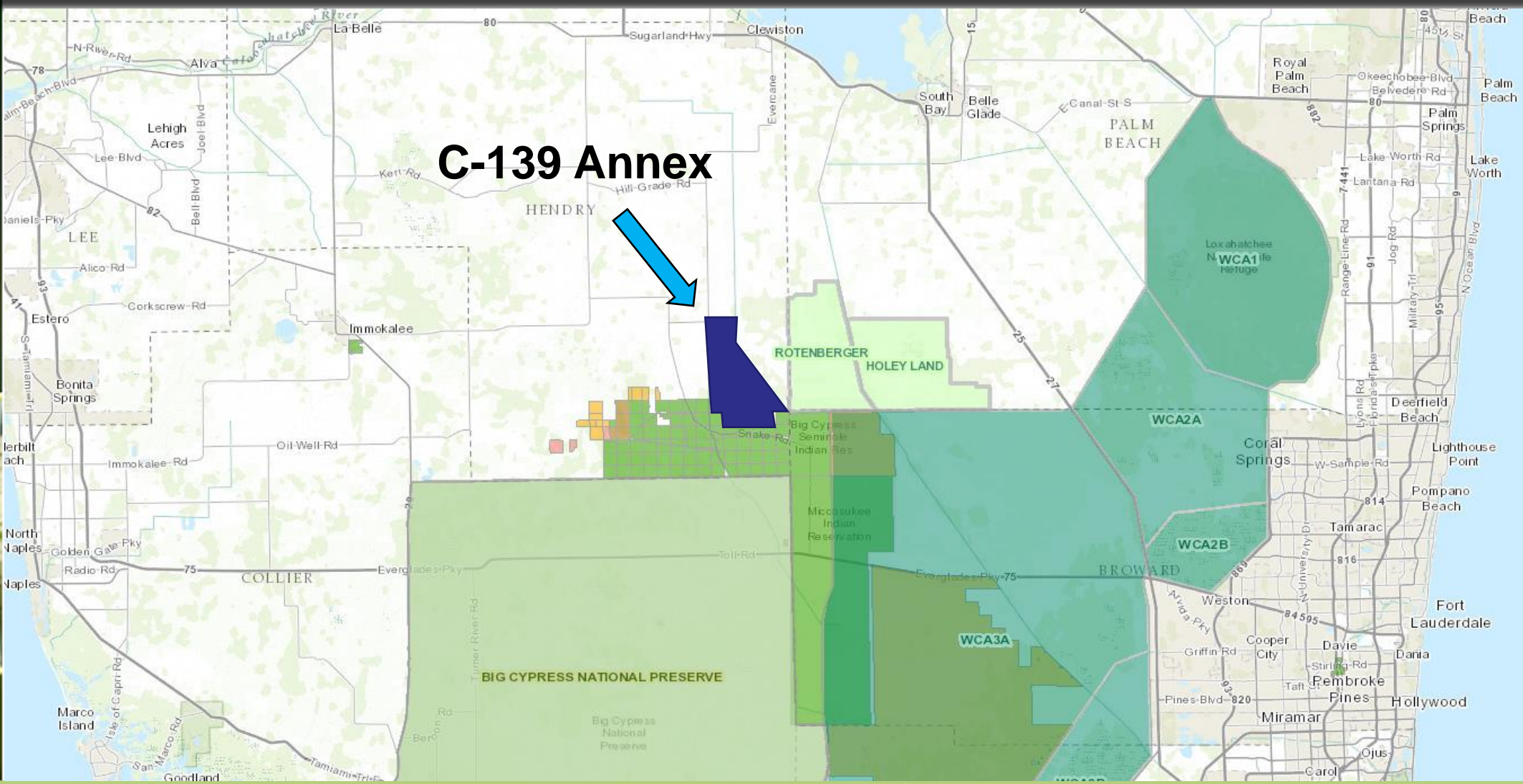
Karyn Allman, Lead Scientist, Land Stewardship

Sam Jones – Abiaki Prairie Restoration



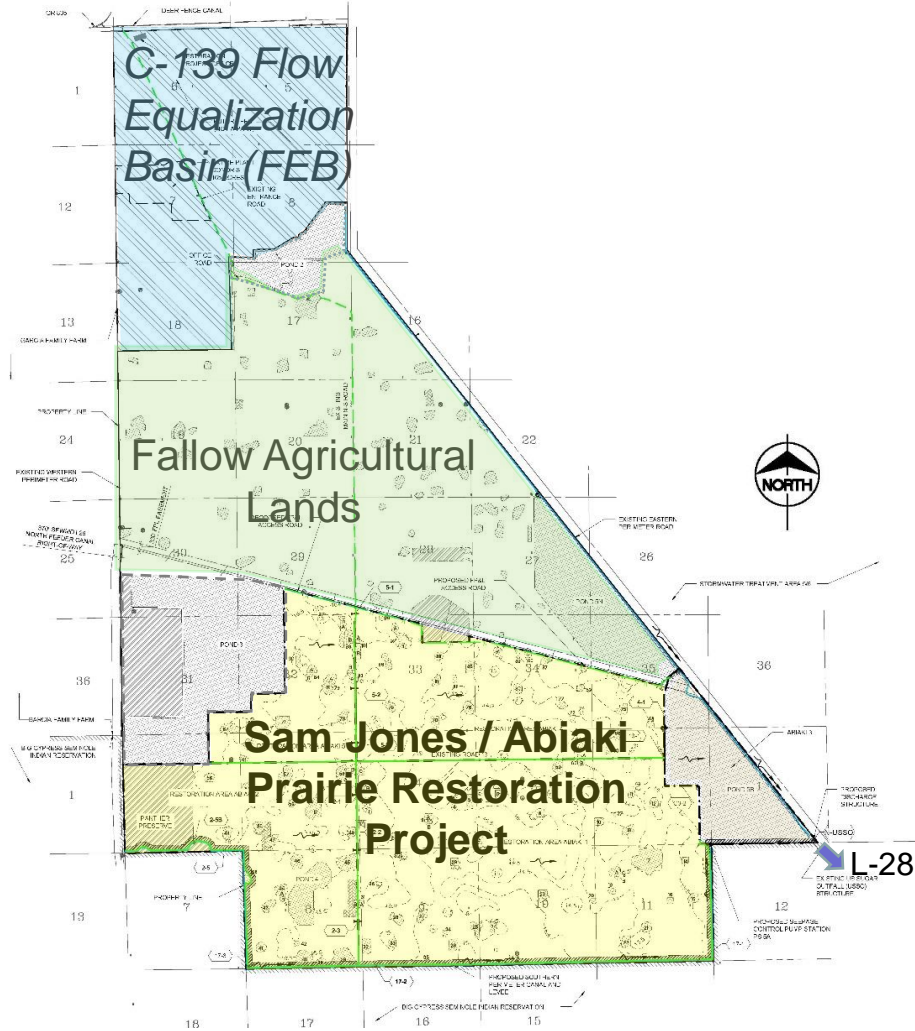
Project Background

Project Location

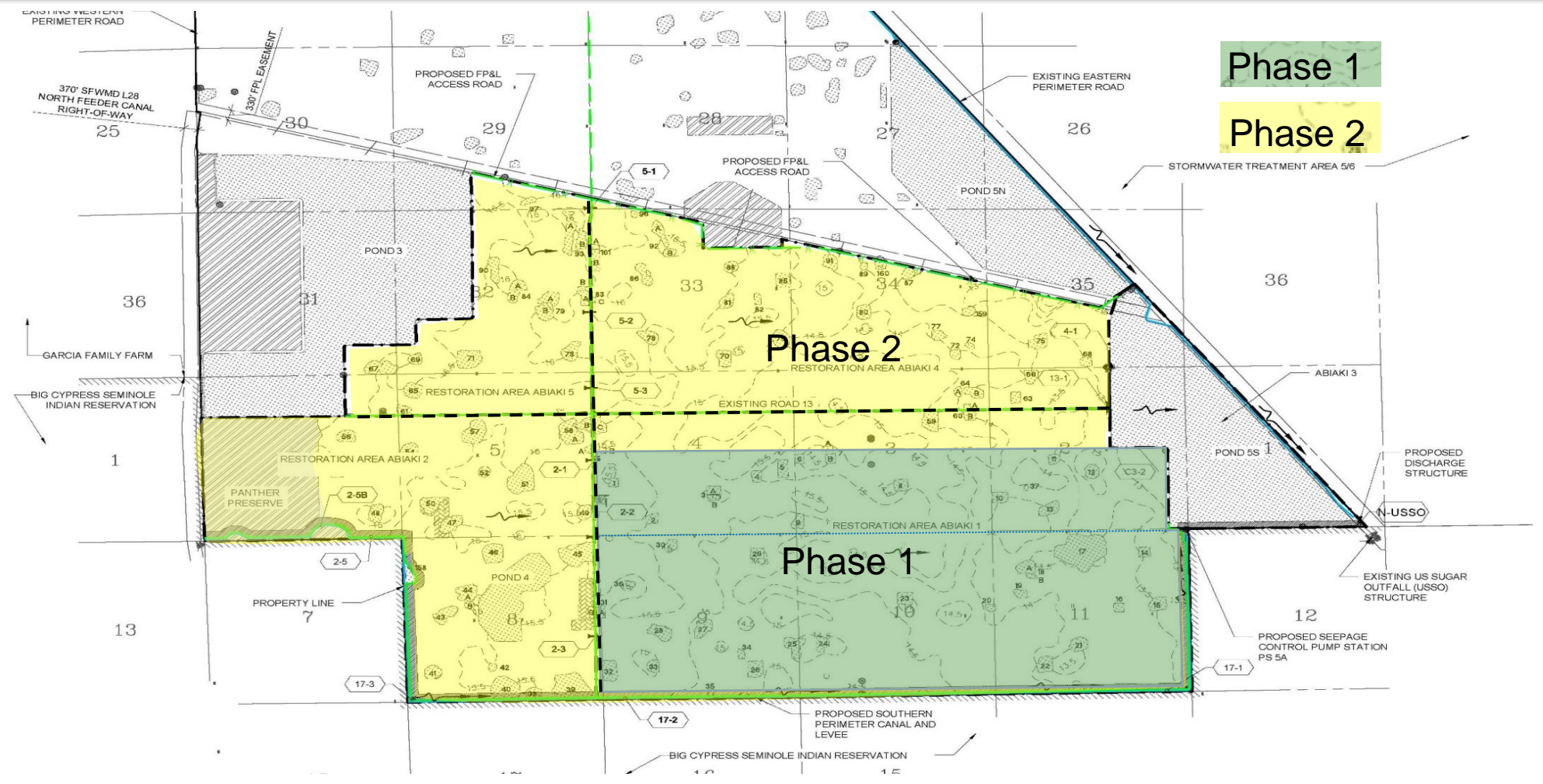


C-139 Annex

C-139 Annex Components



Sam Jones – Abiaki Prairie Project Phases



Sam Jones – Abiaki Prairie Project

Project Goal:

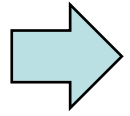
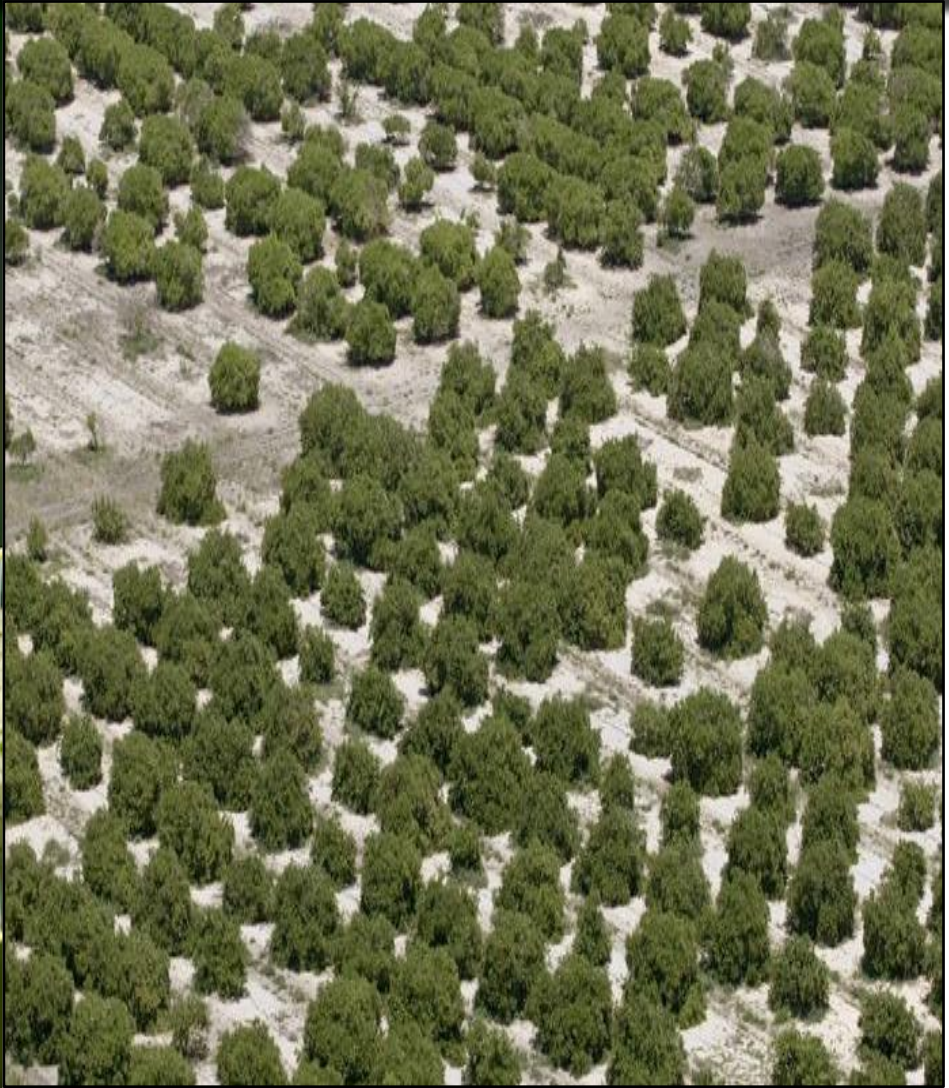
Restore citrus groves to Everglades wetland habitat.

Project Funding:

Miami-Dade Limestone Products Association will reimburse SFWMD for the design, construction, land acquisition, and long-term operations and maintenance costs as wetland mitigation.



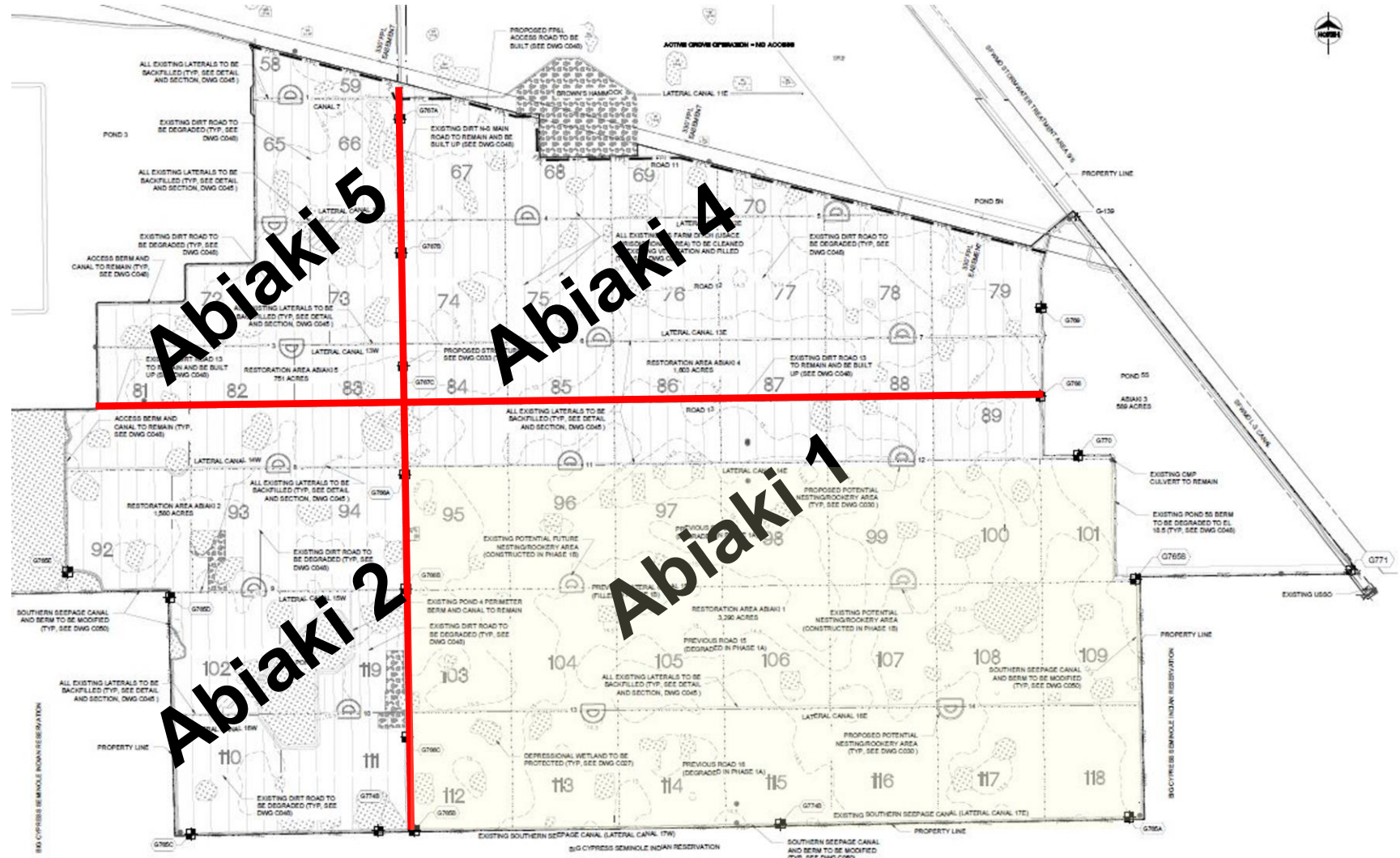
Sam Jones – Abiaki Prairie Project



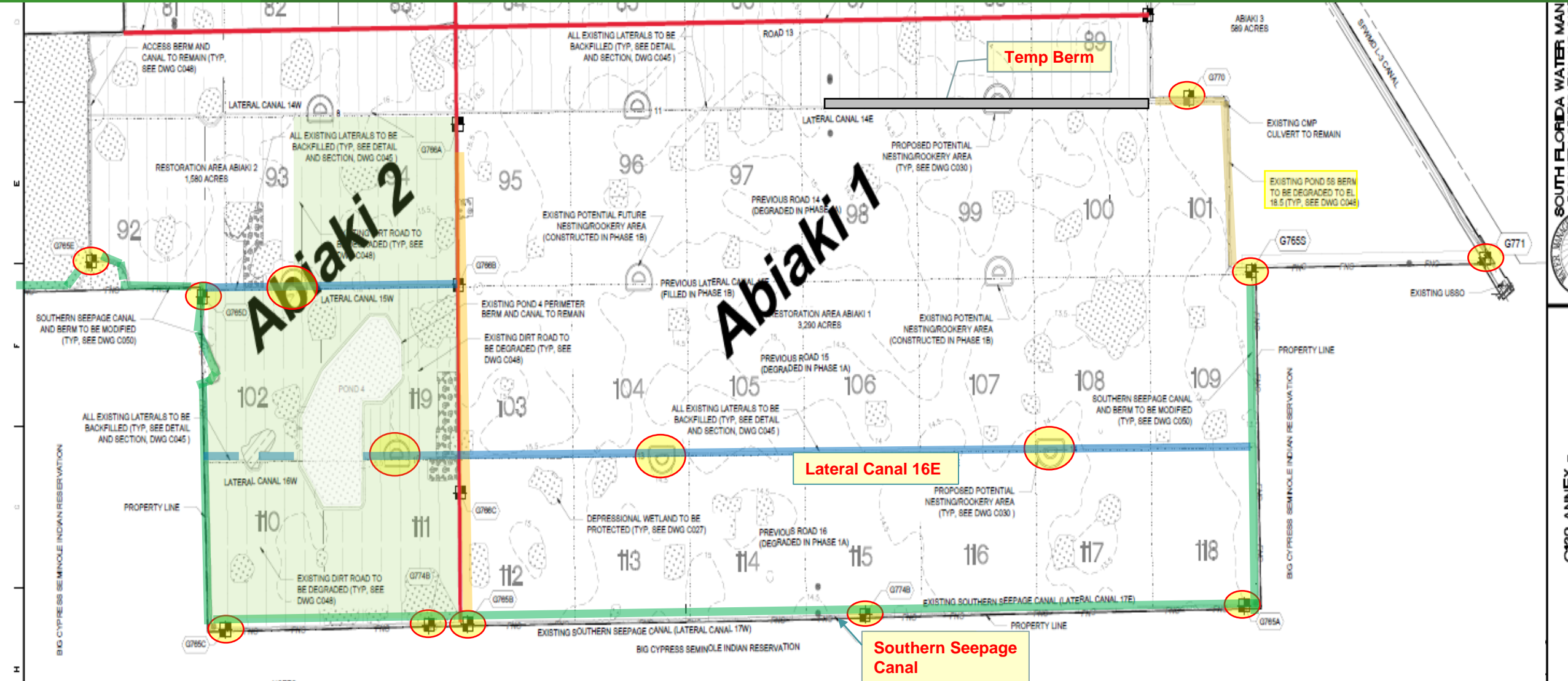


Construction Update

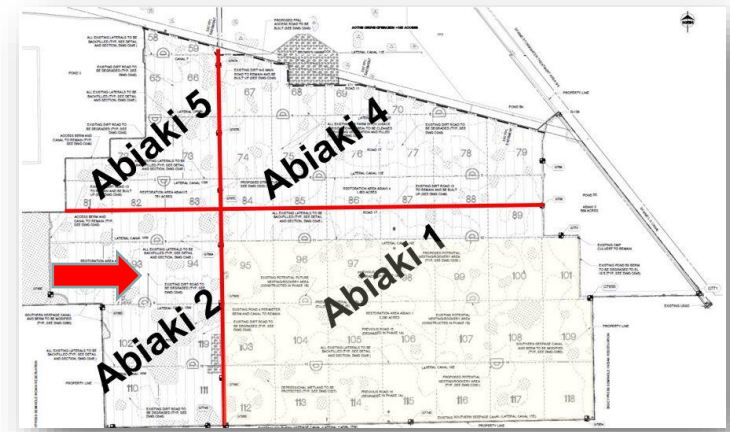
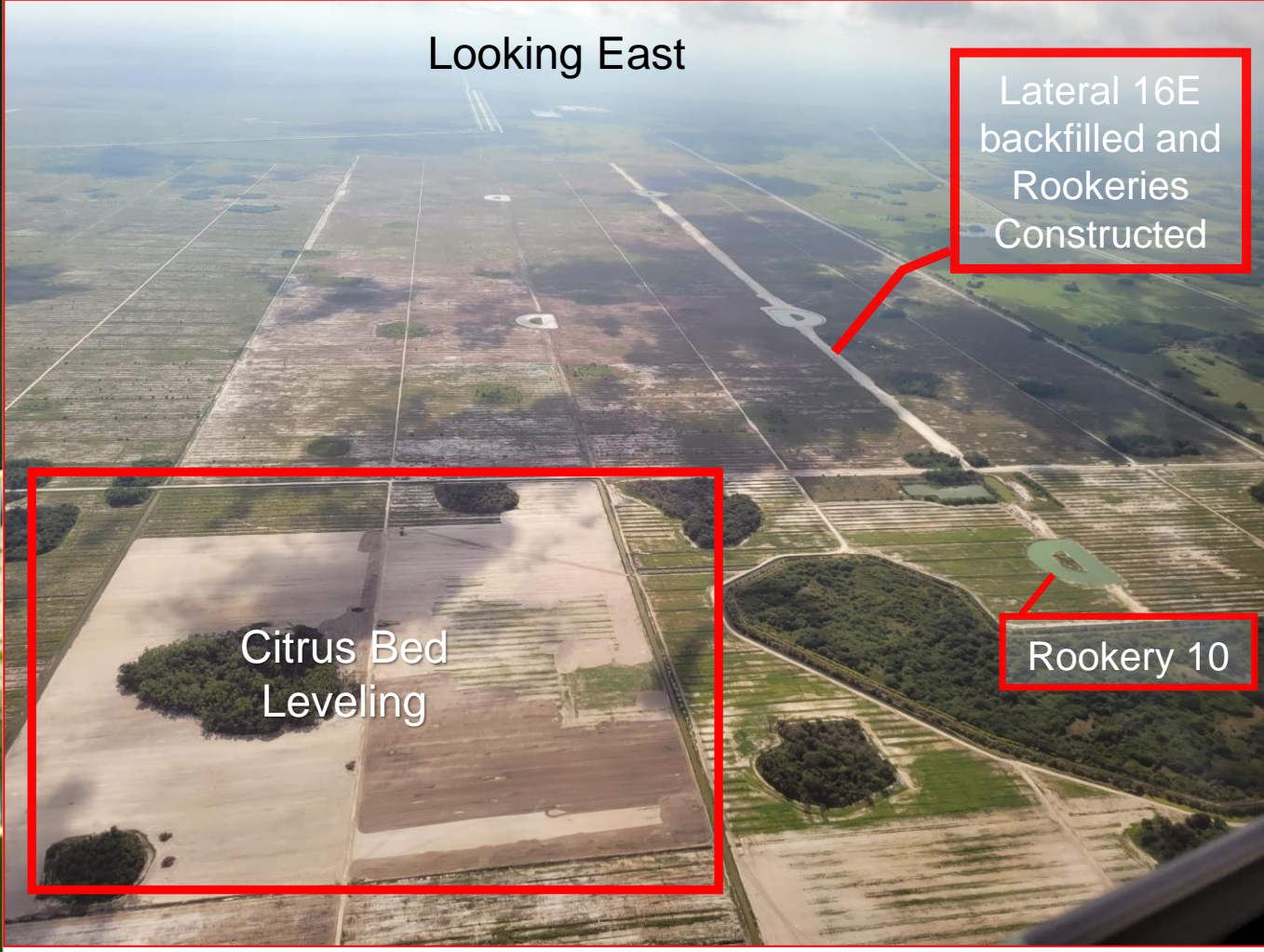
Construction Sequencing



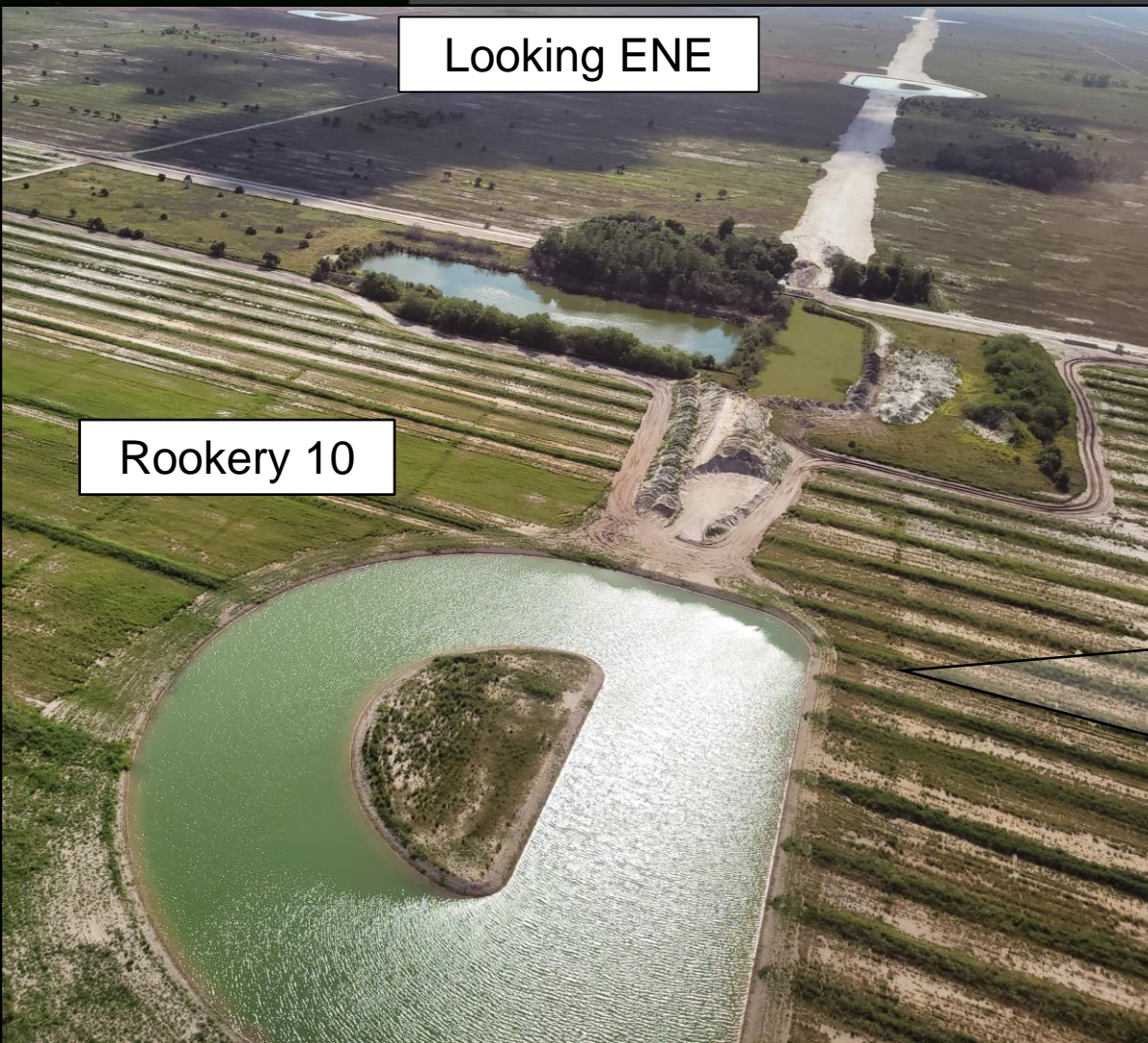
Construction Status



Construction Progress

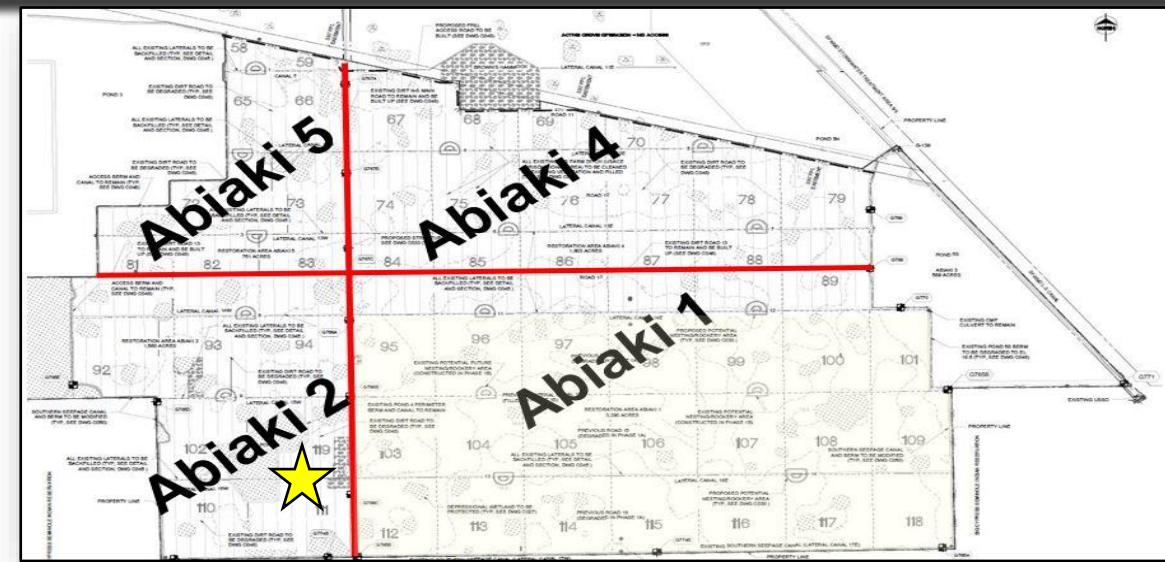


Construction Progress



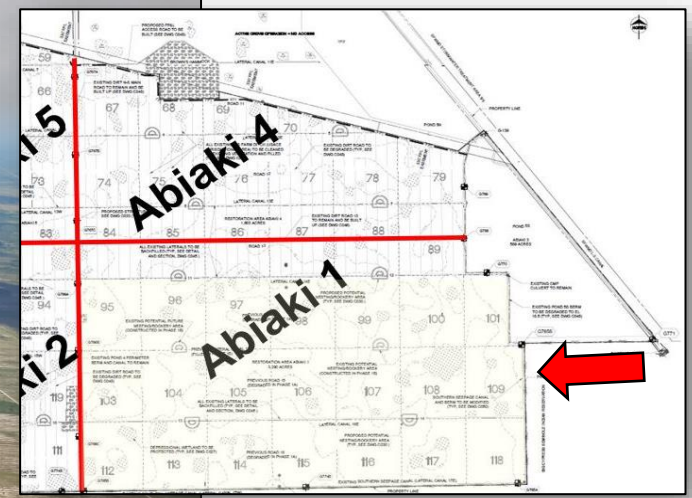
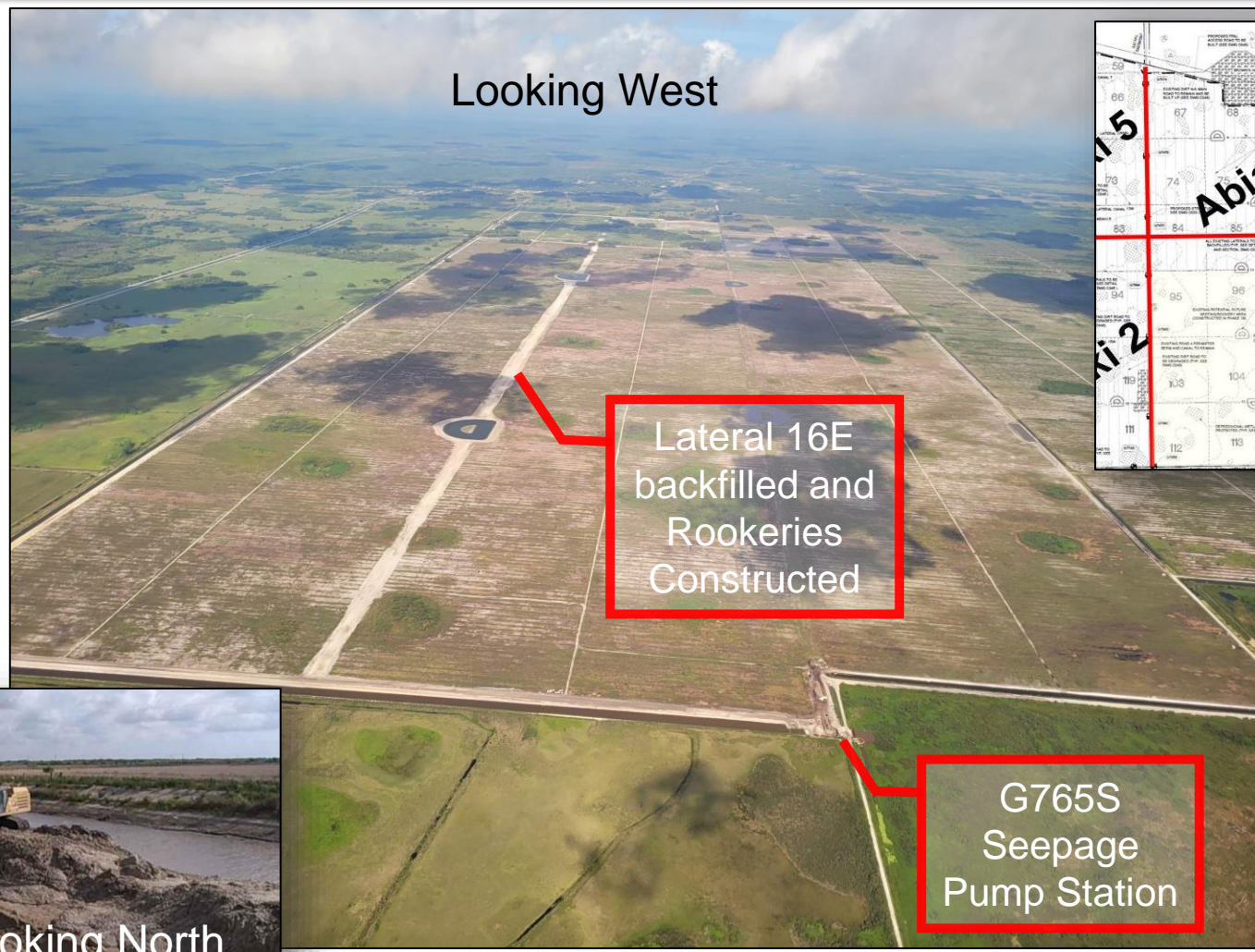
Looking ENE

Rookery 10



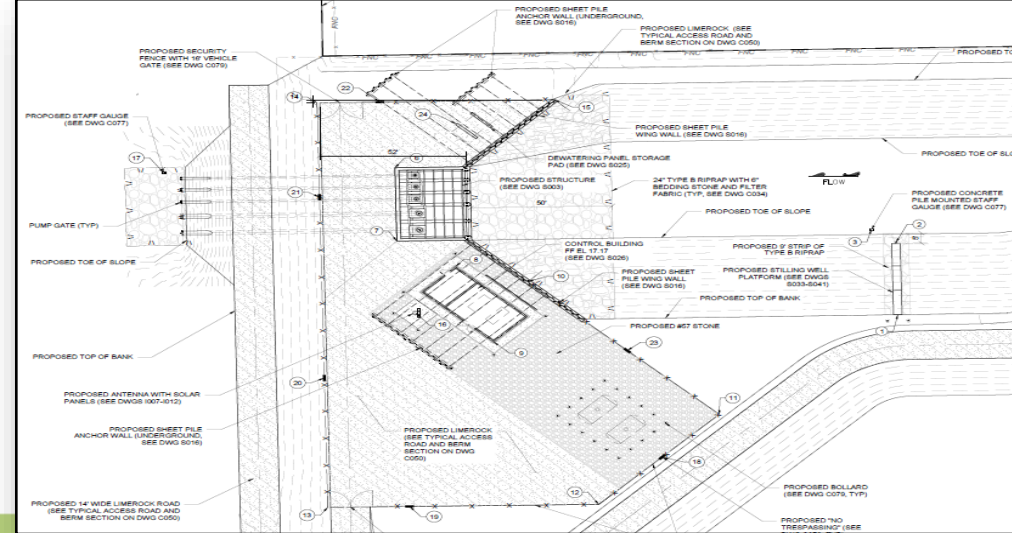
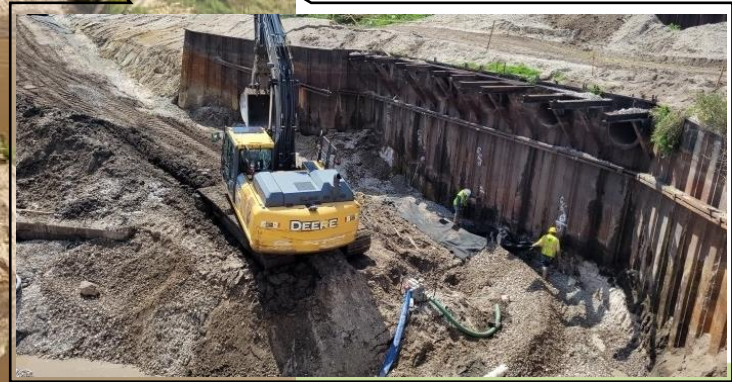
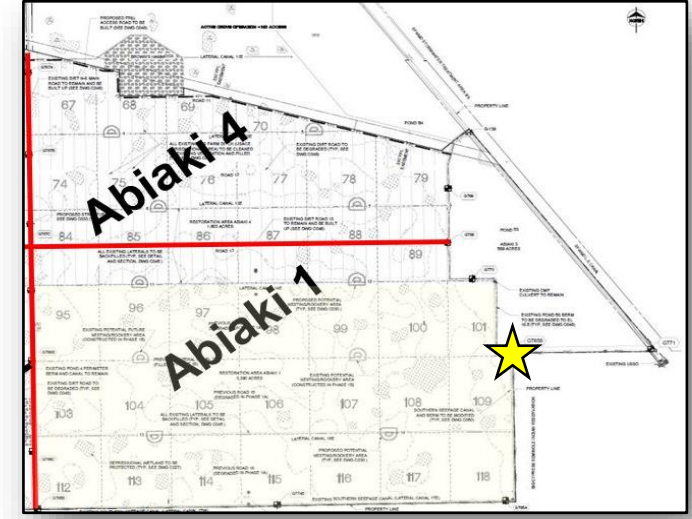
Looking WNW

Construction Progress



Construction Progress

G-765S Seepage Pump Station



Construction Progress

Southern Seepage Canal

Looking West



Looking North



Looking North



Sam Jones – Abiaki Prairie Restoration Budget

Budget Estimate from Two-Party Agreement

DESCRIPTION	ESTIMATED COST*	EXPENDED (May 2022)
Design and Construction	\$80,600,866	\$21.2M (~26%)
Long Term Management	\$17,135,010	\$0
Long Term Management – Contingency	\$4,285,627	\$0
Land Reimbursement of 6,314 acres	\$49,697,494	\$0
TOTAL	\$151,718,997	\$21.2M (~26%)

*Adjustments to the budget are anticipated due to increasing costs associated with construction and restoration.





Land Management Update

Native Plantings

- Approximately 2,300 acres of Maidencane planted as of Feb. 2022 in Abiaki 1 and portions of Abiaki 2
- Natural native plant recruitment and expansion of previously planted species
- Invasive species treatments



Newly planted Maidencane Abiaki 2



Invasive species treatment in Abiaki 1

Maidencane Harvest & Planting



Maidencane Harvest & Planting



Wildflower Diversity Planting

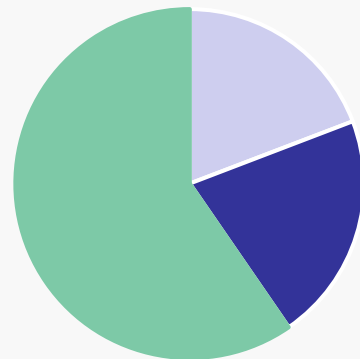


Wildflower/diversity plantings are evaluated and continue to multiply/re-seed around the project

Vegetation Monitoring

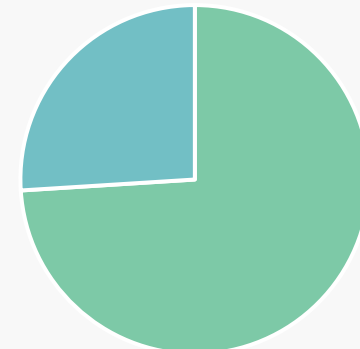
- Vegetation transect monitoring indicates Abiaki Phase 1 is trending towards success

MONITORING TRANSECTS
VEGETATION COVER



■ 19% Exotic ■ 21% Open Ground ■ 59% Desirable Species

MONITORING TRANSECTS
WETLAND SPECIES



■ 74% Wetland ■ 26% Upland



Hydrology

- Remote access monitoring wells installed in Abiaki 1
- Additional monitoring wells to be installed in Abiaki 2



New Well Abiaki 1



New Well Abiaki 1

Wildlife Usage



Thirteen species of mammals, including the Florida panther (*Puma concolor coryi*) were documented in 2021.

Sixty-two species of birds were documented in the Phase I area during 2021 wildlife monitoring surveys



Wildlife Usage



Wildlife Usage





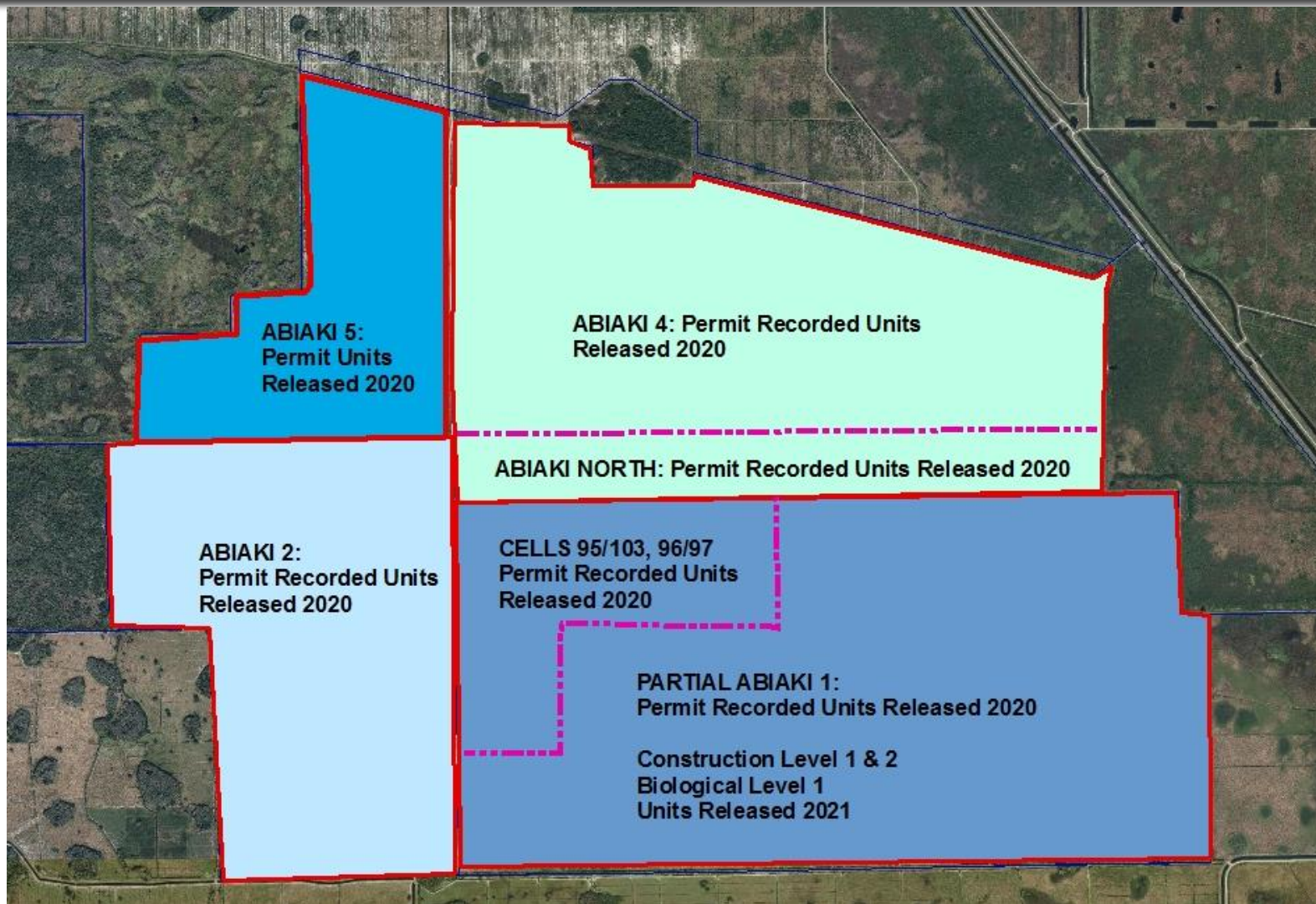
Functional Unit Releases

Functional Unit Disbursement Criteria



Restoration Activity	Benchmark/Percent of Units Released
Administrative/Legal	Record Permit 5%
Construction: Level 1	Clear Citrus Groves 10%
Construction: Level 2	Level Beds 15%
Construction: Level 3	Backbone Infrastructure 25%
Biological: Level 1	Restoration Planting 20%
Biological: Level 2	Ongoing Restoration Activities 15%
Biological: Level 3	Final Permit Compliance 10%
	TOTAL 100%

Functional Unit Releases 2020-2021



Functional Unit Release Estimated Timetable



MDLPA Needed Project Functional Units: ~4,000

Total Functional Units Projected to Be Released by 2025: **1955.76 (~49% of total needed)**

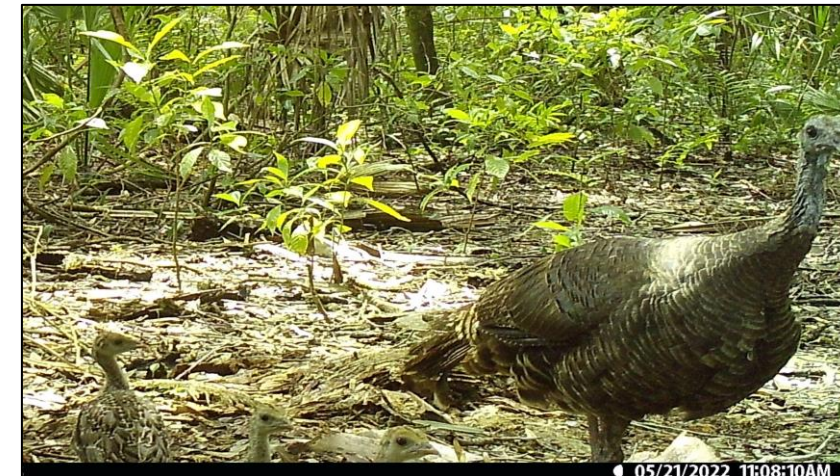
CREDITS RELEASED AS OF 2021			
Date	Activity Description	Units Released	% of FUs
7/28/2020	Permit Recorded (5%)	215.17	5%
4/1/2021	Partial Phase I - Construction (Level 1)	147.57	4%
4/1/2021	Partial Phase I - Construction (Level 2)	221.36	6%
4/1/2021	Partial Phase I - Biological (Level 1)	295.14	7%
TOTAL		879.24	22%

Pending / Anticipated Functional Unit Release 2022 - 2025		
Year	Pending units	% of FUs
2023	161.46	4%
2024	399.58	10%
2025	515.48	13%
Subtotal	1,076.52	27%

Remaining Construction and Restoration Activities

- Backfill remaining lateral canals
- Modify surface water system and decommission agricultural ponds
- Complete seepage management berm and pump station
- Replace USSO structure with G-771
- Complete clearing and leveling of agricultural beds AB4 and AB5
- Install internal water control structures
- Continue to plant with appropriate native vegetation
- Continue invasive/nuisance vegetation control
- Monitoring and adaptive management to optimize success

Estimated construction completion date: 2027-2028



DISCUSSION

