Abiaki Prairie restoration project

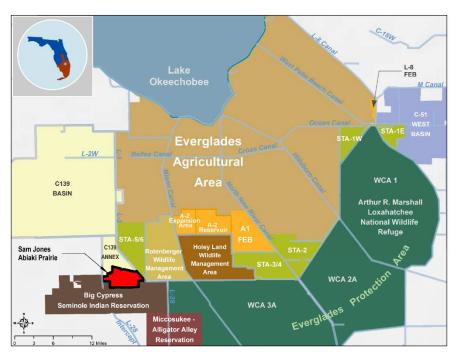






Abiaki 1 construction

LBMC Meeting 8/19/2021



Abiaki Prairie

- Approved by the Committee in 2012
- Project has evolved since 2012:
 scope has changed and cost has gone up
- Corps permit was issued last summer
- 4,298 WRAP credits awarded based on construction / biological success criteria
- More than enough credits for the full Lake Belt Plan mine-out
- SFWMD signed the Phase 2 construction contract in 2021, at a cost below the 2020 internal cost estimate

Updated project footprint – southern portion of C-139 Annex

2020 estimate: **\$151.7 million** 6,314 acres

Construction \$ 80.6 Long-term mgmt. \$ 21.4 Land reimbursement \$ 49.7

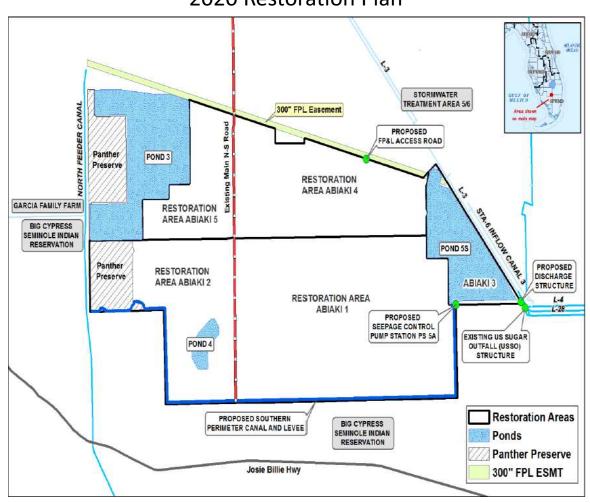
Construction complete by 2027

Cost estimate includes 20 years of long-term management

Abiaki 1: 3,108 acres mostly constructed / planted Abiaki 2-4-5: 3,206 acres

contractor selected /

2020 Restoration Plan



Abiaki Prairie Phase 1



Corps Permitted Restoration WRAP Units (2020)

WRAP SCORES	Phase 1 & 2 Acres	Pre-Project WRAP Scores	Post Project WRAP Scores Estimated	Post Project Functional Units (FU) Estimated
LATERAL CANALS	31	0	0.7	21.7
DITCHES	388	0.3	0.7	155.2
CULTIVATED	5895	0	0.7	4126.5
WETLAND	497	N/A	N/A	N/A
ROADS/LEVEES	96	0	0	N/A
DEVELOPED/FILLED	26	0	0	N/A
PROTECTED AREAS	291	0	0	N/A
TOTAL ACREAGE (PHASES 1 & 2)	7224			
*TOTAL RESTORATION ACREAGE & FUNCTIONAL UNITS	6,314			4,303.4
SOUTHERN SEEPAGE BERM IMPACTS	Acres	Pre-Project WRAP Scores	Post Project WRAP Score	Post Project Functional Units (FU)
Seepage Berm	5.16	0.51	0	-2.63
Seepage Berm in Panther Preserve	5.36	0.51	0	-2.73
Xeric Habitat (upland - not counted towards total)	6.00	0	0.7	
IMPACTED ACREAGE & FUNCTIONAL UNITS	10.52			-5.36
TOTAL PROJECT FUNCTIONAL UNITS LESS BERM IMPACTS				4,298

^{*} Calculation does not include previously permitted mitigation in remnant wetlands, protected hammock, canals to be created/remain, roads/levees, filled areas, or Pond 5S.

Cost Estimate / Payment Schedule

- Pay \$80 million construction costs by 2026
- Pay \$21 million long-term management costs over 20 years (2028-2047)
- Pay \$50 million land acquisition costs over 25 year period (2028-2052)
- Payments are approved by LBMC one year in advance of cost estimate

Sam Jones / Abiaki Prairie Restoration Project							
	Project costs			more energial and a second second	o .		
	Design & Construction	Long-term Management	Land Reimbursement	Total	LBMC approvals	Project Balance	
FY 13-19	10,599,996			10,599,996	37,000,000	26,400,004	
FY20	2,598,152			2,598,152	2,000,000	25,801,852	
FY21	8,553,069			8,553,069	2,000,000	19,248,783	
FY22	13,565,473			13,565,473	7,000,000	12,683,310	
FY23	11,465,583			11,465,583	7,000,000	8,217,726	
FY24	7,494,441			7,494,441	7,000,000	7,723,286	
FY25	7,771,850			7,771,850	8,000,000	7,951,436	Construction payments
FY26	7,610,310			7,610,310	9,000,000	9,341,125	through FY27
FY27	9,099,973			9,099,973	1,000,000	1,241,153	80,000,000
FY28	800,857			800,857	3,300,000	3,740,296	
FY29	440,882	1,071,032	1,987,900	3,499,814	3,300,000	3,540,482	
FY30	328,060	1,071,032	1,987,900	3,386,992	3,100,000	3,253,490	
FY31	90,740	1,071,032	1,987,900	3,149,672	3,100,000	3,203,818	
FY32	90,740	1,071,032	1,987,900	3,149,672	3,100,000	3,154,146	
FY33	90,740	1,071,032	1,987,900	3,149,672	3,100,000	3,104,474	LTM + land payments
FY34		1,071,032	1,987,900	3,058,932	3,100,000	3,145,542	FY28-52
FY35		1,071,032	1,987,900	3,058,932	3,100,000	3,186,610	71,718,997
FY36		1,071,032	1,987,900	3,058,932	3,100,000	3,227,678	
FY37		1,071,032	1,987,900	3,058,932	3,100,000	3,268,746	Total payments
FY38		1,071,032	1,987,900	3,058,932	3,100,000	3,309,814	151,718,997
FY39		1,071,032	1,987,900	3,058,932	3,100,000	3,350,882	
FY40		1,071,032	1,987,900	3,058,932	3,100,000	3,391,950	
FY41		1,071,032	1,987,900	3,058,932	3,100,000	3,433,018	
FY42		1,071,032	1,987,900	3,058,932	3,100,000	3,474,086	
FY43		1,071,032	1,987,900	3,058,932	3,100,000	3,515,154	
FY44		1,071,032	1,987,900	3,058,932	3,100,000	3,556,222	
FY45		1,071,032	1,987,900	3,058,932	3,100,000	3,597,290	
FY46		1,071,032	1,987,900	3,058,932	3,100,000	3,638,358	
FY47		1,071,032	1,987,900	3,058,932	3,100,000	3,679,426	design & construction cost
FY48		1,071,029	1,987,900	3,058,929	2,000,000	2,620,497	80,600,866
FY49			1,987,900	1,987,900	2,000,000	2,632,597	long-term management cost
FY50			1,987,900	1,987,900	2,000,000	2,644,697	21,420,637
FY51			1,987,900	1,987,900	2,000,000	2,656,797	land reimbursement cost
FY52			1,987,900	1,987,900	1,318,997	1,987,894	49,697,494
FY53			1,987,894	1,987,894		0	Total project cost
Total	80,600,866	21,420,637	49,697,494	151,718,997	151,718,997		151,718,997

Future Expenditures

- All future Committee expenditures will go to
 - Abiaki Prairie restoration,
 - long-term DBL structure maintenance, and
 - water quality monitoring
- No funding for additional Pennsuco acquisitions or other mitigation projects
- The MDLPA will work with the Legislature to raise the mitigation fee to \$0.10/ton in the next few years to assure long-term funding needs are met

2020 Annual Report table adjusted for updated Abiaki Prairie cost estimate (\$35,300 / WRAP credit)

Lake Belt Mitigation Committee Activities (Update - 2021)

Year	Pennsuco Acquisition, Restoration, & Long-Term Management (Acres)	Pennsuco Restoration, & Long-Term Management ² (Acres)	Other Projects ⁴ (Acres)	Abiaki Prairie ⁵ (Acres)	Adjustments ³ (Acres)	Committee Approved Mitigation Acres	Committee Approved Mitigation WRAP units ¹
2002	455.6	1240.6				1,075.9	269.0
2003	0	2134.8				1,067.4	266.9
2004	160.0				-0.5	159.5	39.9
2005	320.9		,			320.9	80.2
2006	142.4					142.4	35.6
2007	124.4					124.4	31.1
2008	10.0					10.0	2.5
2009	0	1708.0	100.0			954.0	238.5
2010	10.0		1549.0		-4.7	1,554.3	388.6
2011	20.0		600.0			620.0	155.0
2012				340.0		340.0	85.0
2013				906.4		906.4	226.6
2014	30.0			906.4		936.4	234.1
2015	5.0		2409.2	906.4		3,320.6	830.2
2016	59.7			566.4	-1.2	624.9	156.2
2017	1734.4	-1708.0		340.0	-0.1	1,220.3	305.1
2018				226.8	-0.1	226.7	56.7
2019				226.8	-0.1	226.7	56.7
2020	23.2			226.8	-0.1	249.9	62.5
2021						0.0	0.0
Total	3,095.6	3,375.4	4,658.2	4,646.0	-6.8	14,080.7	3,520.2

Updated LBMC mitigation table

2020 Annual Report table adjusted for updated Abiaki Prairie cost estimate (\$35,300 / WRAP credit)

Lake Belt Mitigation Balance (Update - 2021)

Year	Committee Approved Mitigation Acres ¹	Lake Belt Wetland Impacts In New Permit Areas (Acres)	Mitigation Needed to Offset Wetland Impacts (Acres) ²	Annual Balance (Acres)	Cumulative Balance (Acres)	Cumulative Balance (WRAP units)
2002	1,075.9	34	85	990.9	990.9	247.7
2003	1,067.4	135	337.5	729.9	1,720.8	430.2
2004	159.5	87	217.5	-58.0	1,662.8	415.7
2005	320.9	87	217.5	103.4	1,766.2	441.6
2006	142.4	567	1417.5	-1,275.1	491.1	122.8
2007	124.4	9	22.5	101.9	593.0	148.3
2008	10.0	5	12.5	-2.5	590.5	147.6
2009	954.0	1	2.5	951.5	1,542.0	385.5
2010	1554.3	108	270	1,284.3	2,826.3	706.6
2011	620.0	134	335	285.0	3,111.3	777.8
2012	340.0	30	75	265.0	3,376.3	844.1
2013	906.4	114	285	621.4	3,997.7	999.4
2014	936.4	246	615	321.4	4,319.1	1,079.8
2015	3320.6	241	602.5	2,718.1	7,037.2	1,759.3
2016	624.9	244	610	14.9	7,052.1	1,763.0
2017	1220.3	261	652.5	567.8	7,619.9	1,905.0
2018	226.7	230	575	-348.3	7,271.6	1,817.9
2019	226.7	318	795	-568.3	6,703.3	1,675.8
2020	249.9	169	422.5	-172.6	6,530.7	1,632.7
2021		not yet available				
Total	14,080.7	3,020	7,550.0	6,530.7		

Updated LBMC mitigation balance

Motion

Approve the expenditure of \$7.0 million for FY22 Abiaki Prairie Restoration Project funding per the updated cost estimate. At an updated cost of \$35,300 per WRAP credit, this expenditure authorizes the award of 198.3 WRAP credits (793.2 Pennsucoequivalent mitigation acres) for 2021.