

MK Ranch Hydrologic Restoration

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NFWF



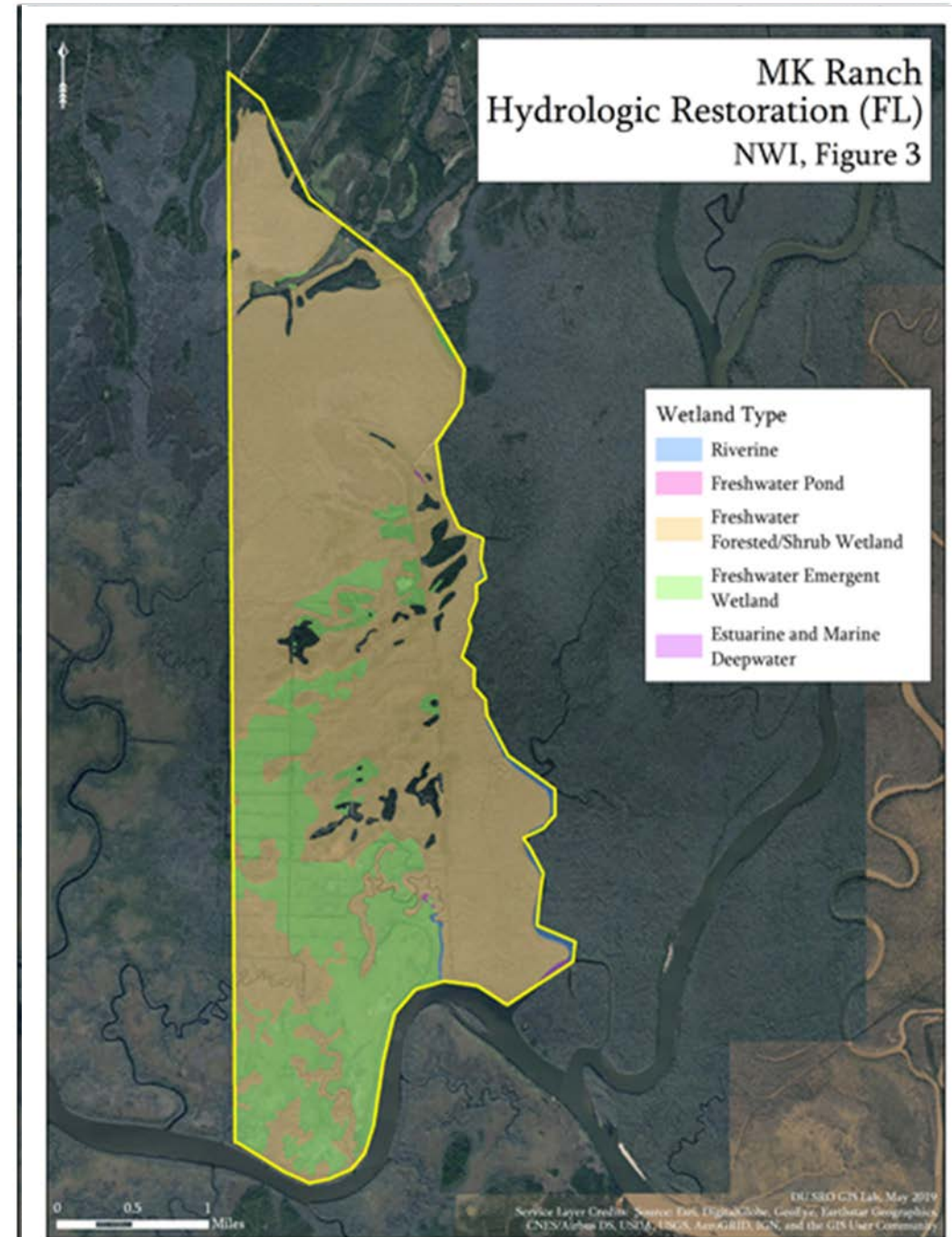
wood.

Partners

Project Background

MK Ranch

- 6,259 acres of historic floodplain swamp and tidal marsh within Apalachicola River Wildlife and Environmental Area
- Early to mid-1970s, MK Ranch's previous landowner excavated approximately 55 miles of ditches and constructed multiple embankments
- Activities resulted in extensive loss of wetland habitat and alteration of wetland community structure.
- Adversely impacted water quality, habitat and reduced water storage and interruption of freshwater delivery patterns.

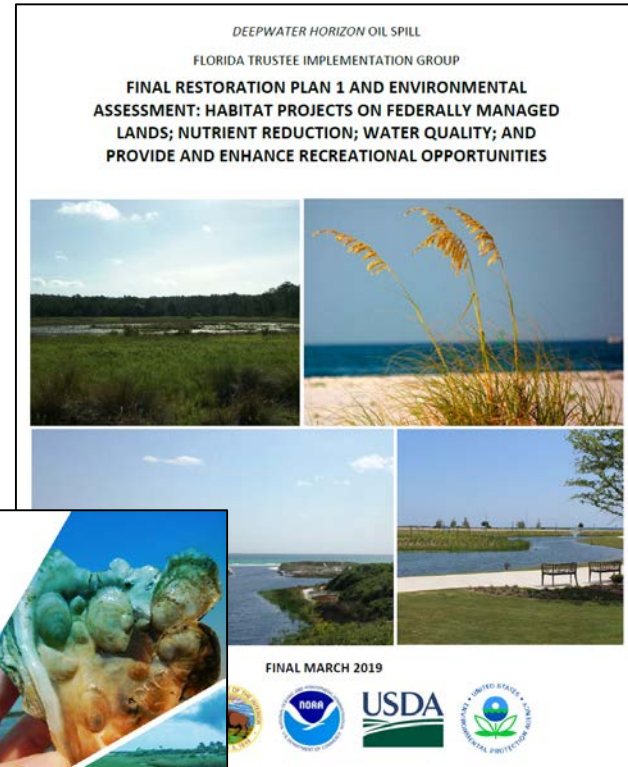
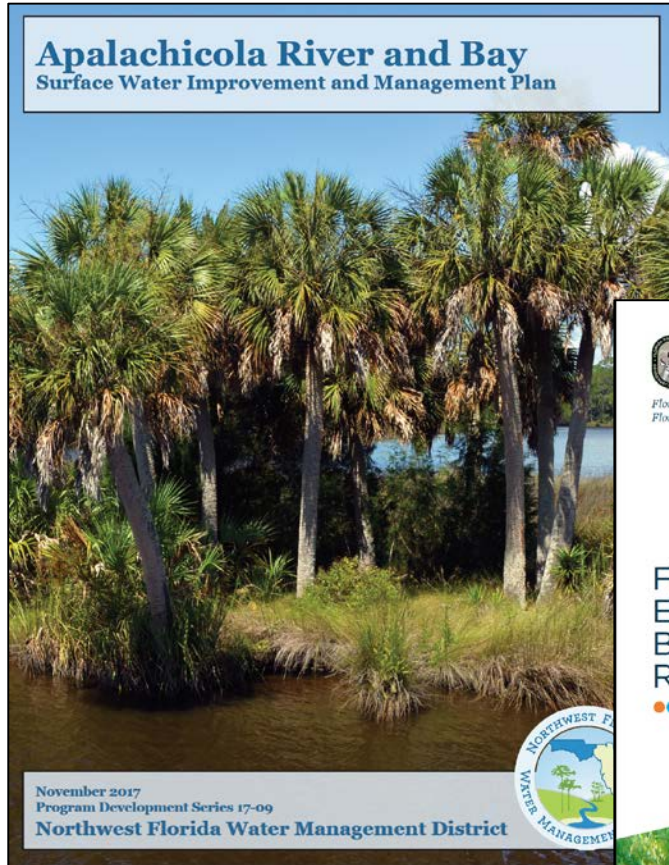




MK Ranch Hydrologic Restoration

- Project Objectives
 - To restore wetland and floodplain function and connectivity
 - Improved water management to benefit water quality and freshwater flows into the Jackson River, Lake Wimico Apalachicola River, Apalachicola Bay and greater Gulf of Mexico.
 - Enhance habitat for species such as migratory birds, oysters, Gulf Sturgeon and other fish species dependent upon nursery areas of the Bay

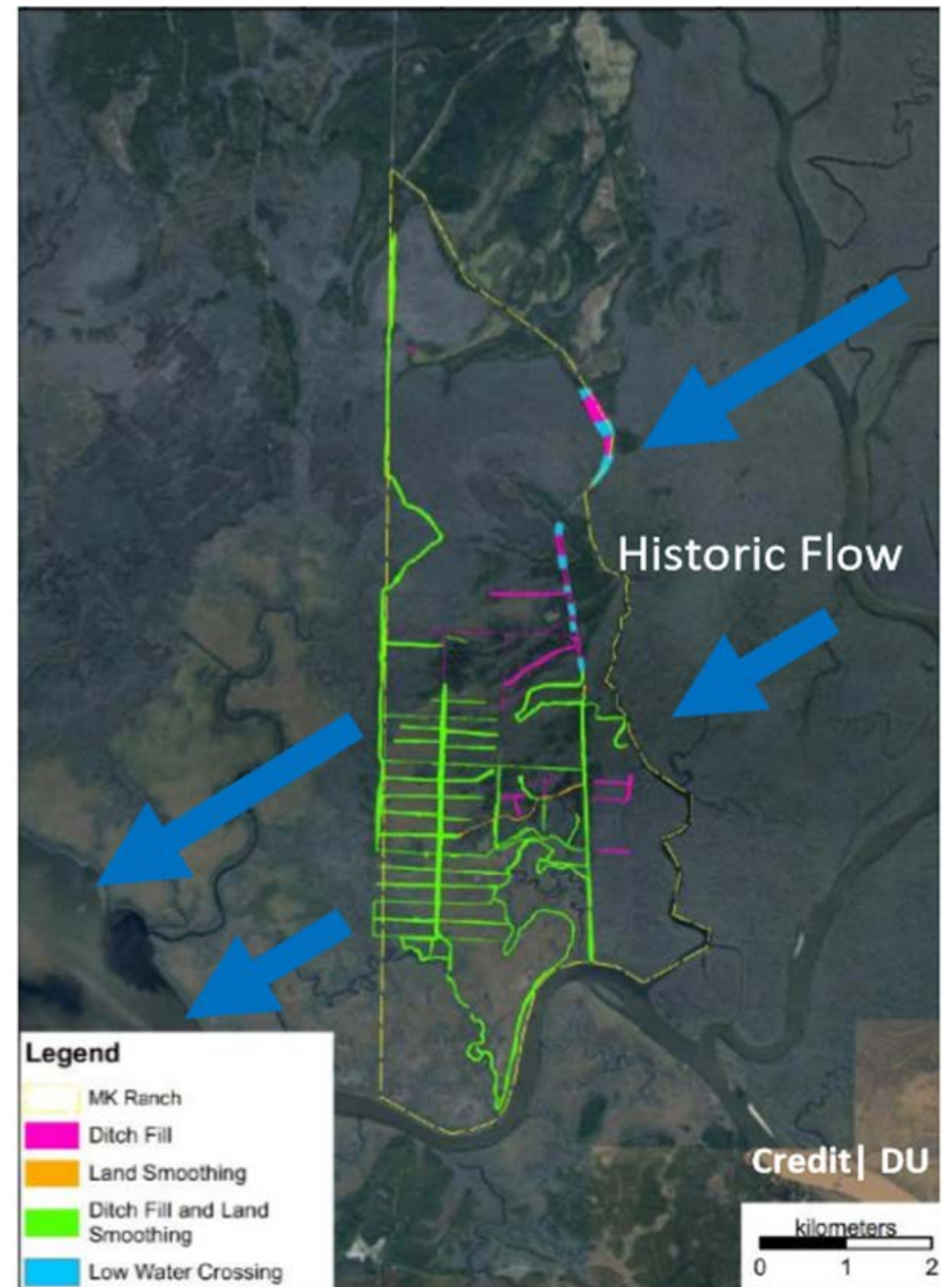
Resource Planning



Scope of Work

Initial Assessment Plan

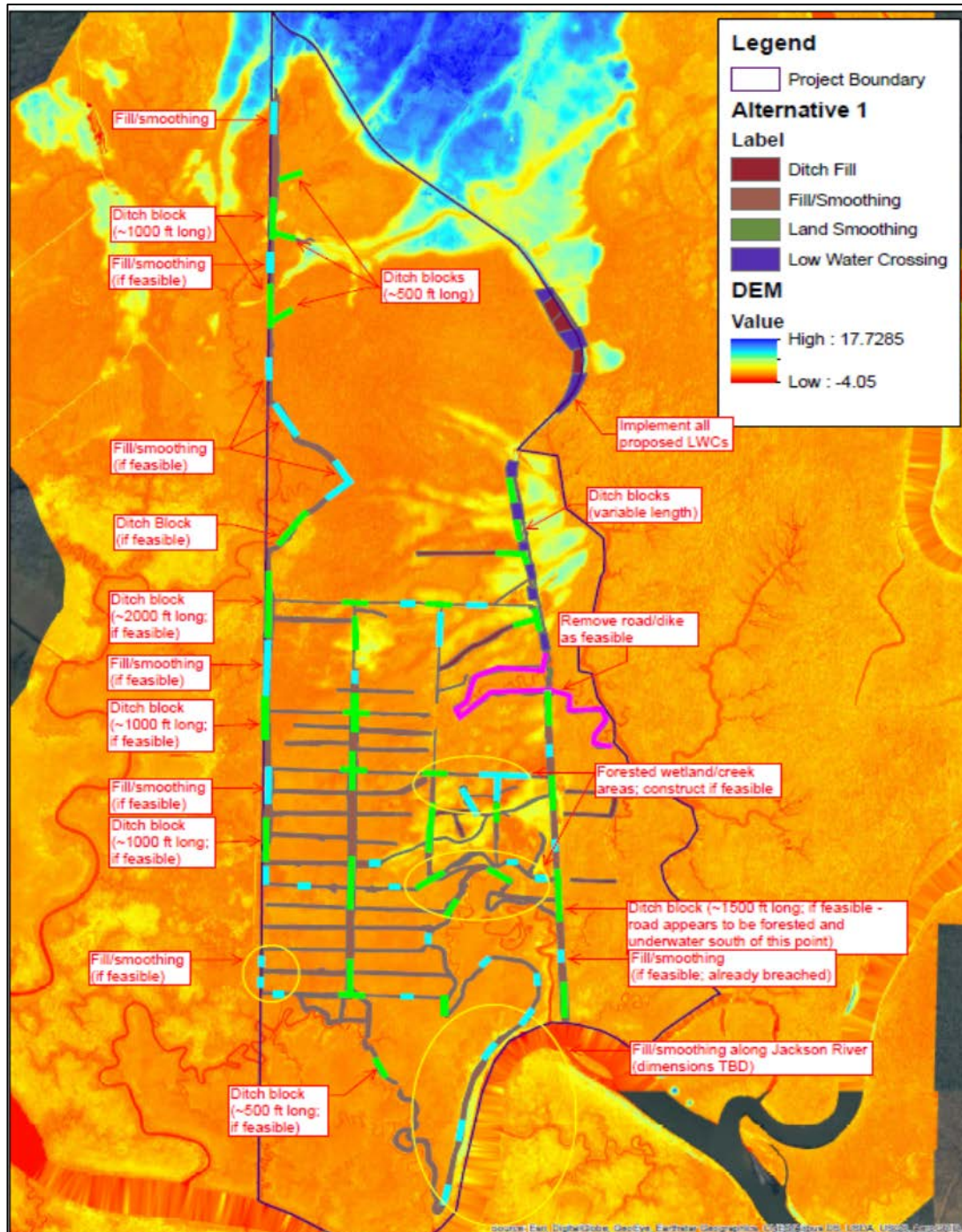
- Removal of embankments, roads and berms
- Filling of ditches
- Installation of strategic low-water crossings to improve the flow of water across the landscape.



Scope of Work

Project Planning & Design

- Scoping Meetings
- Data Collection
 - Topographic Surveys
 - Geotechnical investigations
 - Ecological evaluations
 - Historic preservation surveys
- Initial Engineering & Design





Monitoring & Evaluation

- Development of a Monitoring and Adaptive Management Plan
 - Measure Hydrologic & Vegetative Responses
 - Designed to support an adaptive approach such that results inform management decisions and future projects



Proposed Project Schedule

	2019												2020												2021											
Proposal Project Tasks	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12				
Task 1 - Project Development	[Orange]												[Orange]																							
Task 2 - Project Planning and Preliminary Design (30%)													[Grey]																							
Task 3 - Project Permitting																									[Blue]											
Task 4 - Final Design																									[Yellow]											
Task 5 - Restoration Implementation																									[Green]											
Task 6 - Project Monitoring																									[Yellow]											
Task 7 - General Project Management & Coordination	[Red]												[Red]												[Red]											
Proposal Project Tasks	2022												2023												2024											
Proposal Project Tasks	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6						
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MK Ranch
Hydrologic Restoration (FL)
Figure



Conservation For All

Photo credits: Kayla Kimmel:USFWS, Ducks Unlimited, Apalachicola Riverkeeper, Florida Wildlife/Russell Sparkman,visitgulf.com