

Compensatory Mitigation



Compensatory Mitigation is provided by Mosaic through Onsite and Offsite Mitigation

Onsite Mitigation Elements:

- Onsite mitigation focuses on the mine (site) wide reclamation plan to optimize compensatory mitigation in terms of enhancing wildlife corridors (IHN)
- Preservation and protection of avoided lands
- In-kind establishment to replace wetlands, streams and their associated functions
- Protection of established wetlands and streams via perpetual conservation easements



What is Offsite Mitigation?



- Projects that offset wetland impacts by preserving offsite wetlands (outside the project boundary, but in addition to onsite mitigation) within the same watershed
- Offsite mitigation projects or initial phases must be in place providing wetland function prior to mining activities
 - Reduces Temporal Lag
- Mosaic's offsite mitigation projects are incorporated into the proposed mining permits
- Offsite Mitigation Projects:
 - Involve larger, more ecologically valuable parcels
 - Rigorous scientific and technical analysis, planning and implementation
 - Significant investment of financial resources

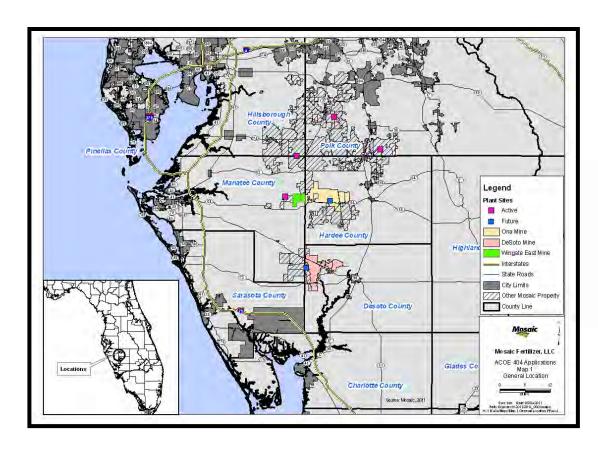
Mosaic[®]

Offsite Mitigation Projects



- Projects focus on benefits at watershed/ regional scale as well as site specific benefits
- The CHNEP Comprehensive Conservation and Management Plan (CCMP) meets the definition of a watershed plan
- CCMP Four Priority Problems:
 - Water Quality Degradation
 - Hydrologic Alterations
 - Fish and Wildlife Habitat Loss
 - Stewardship Gaps
- Offsite mitigation projects will employ state-ofthe-art wetland and stream restoration techniques

Wingate East Mine Update



Federal CWA 404 Permit

- Project Evaluated as Part of the AEIS
- November 26, 2014, Submitted Revised Application Incorporating AEIS Framework and Findings

Florida ERP Permit

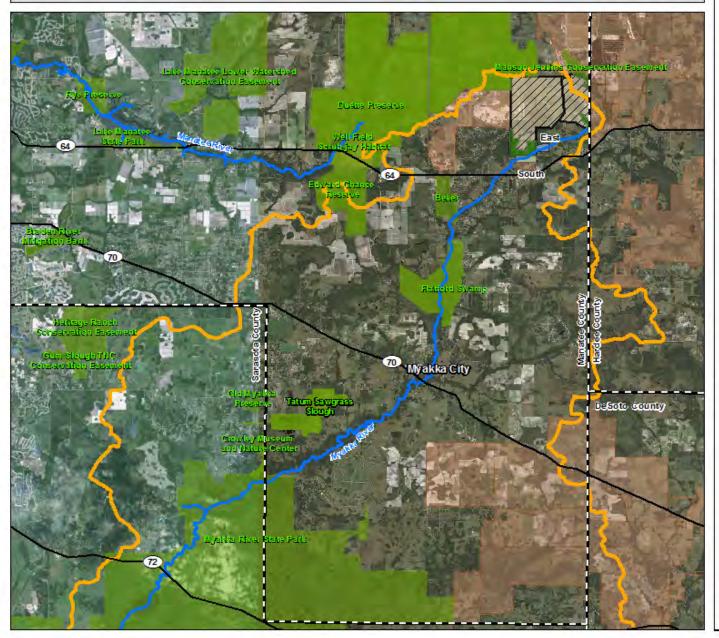
Issued November 13, 2015

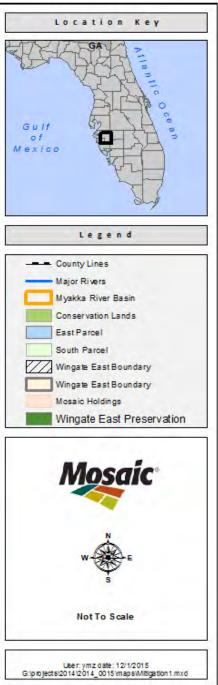
Manatee County

 Deemed Complete November 16, 2015

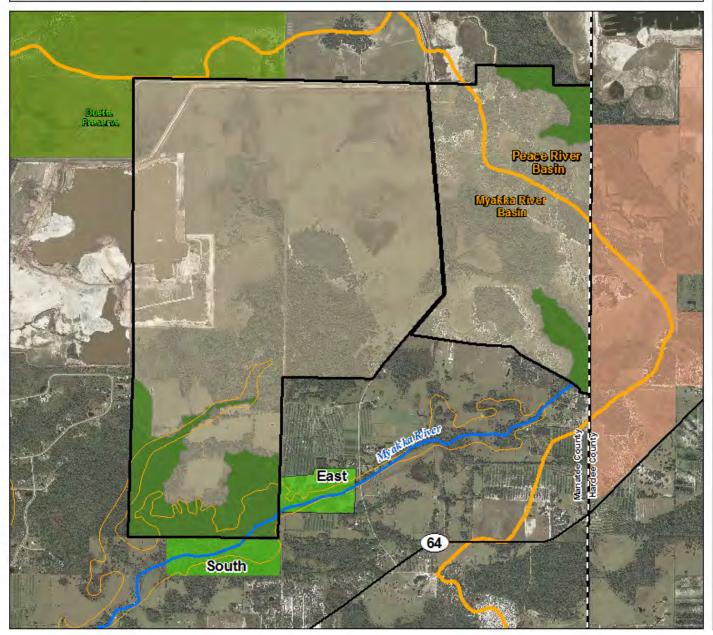


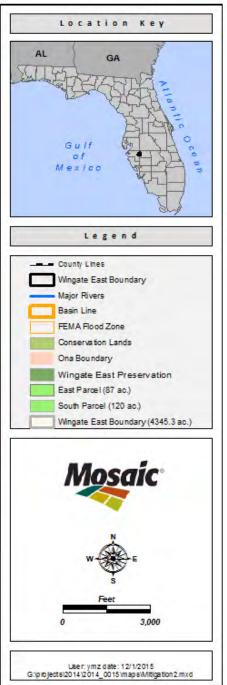
Myakka River Basin Conservation Lands



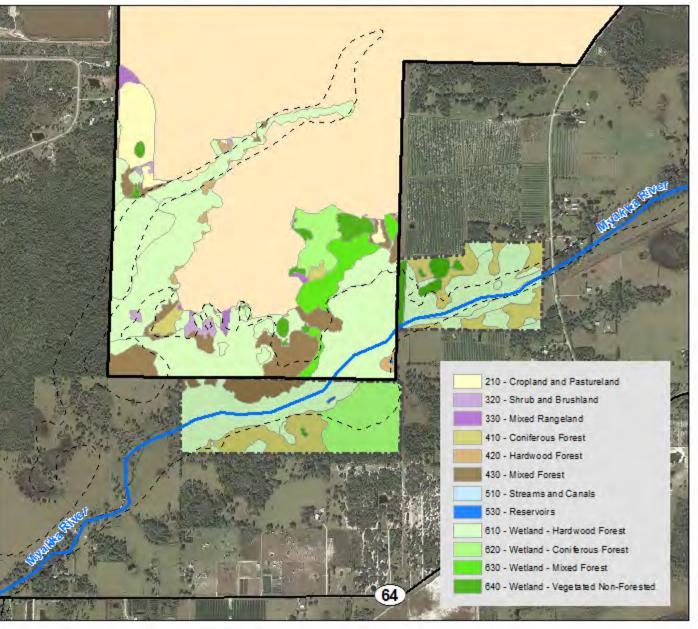


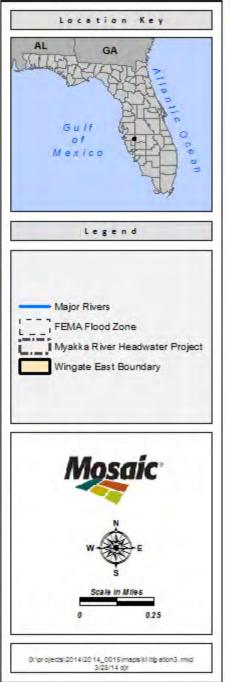
Myakka River Headwaters Project Parcels





Myakka River Headwater Project

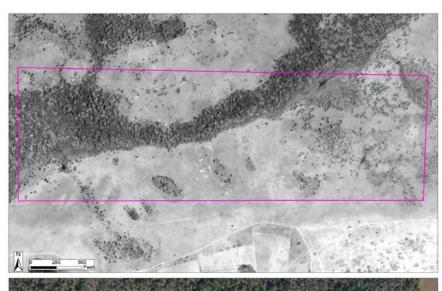




1940's Historical Aerials vs Today

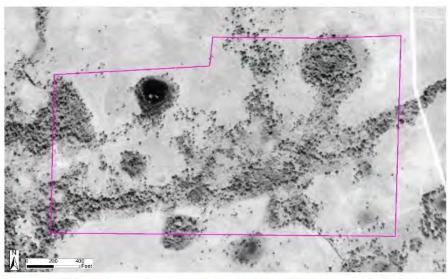
SOUTH PARCEL

EAST PARCEL







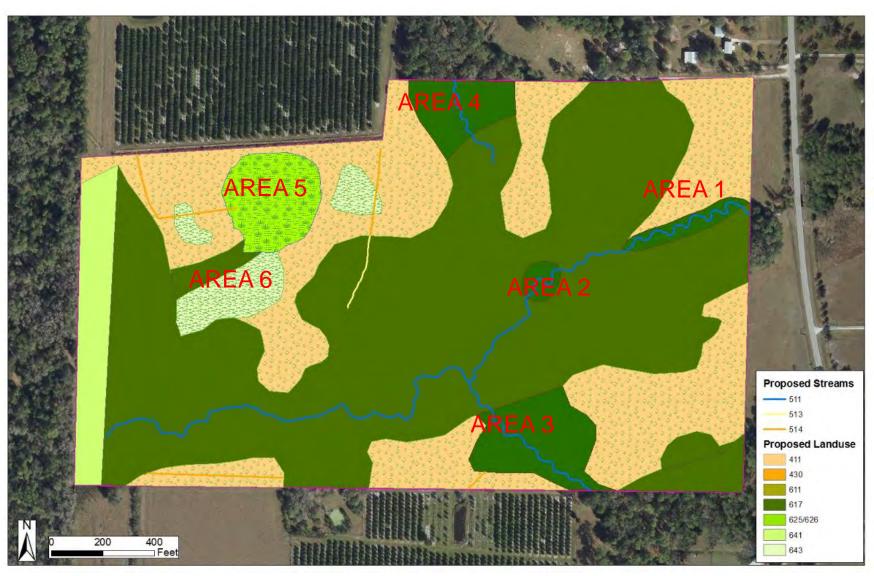




East Parcel– Existing Conditions



East Parcel – Proposed Conditions



Stream and Wetland Restoration Activities

Existing Conditions

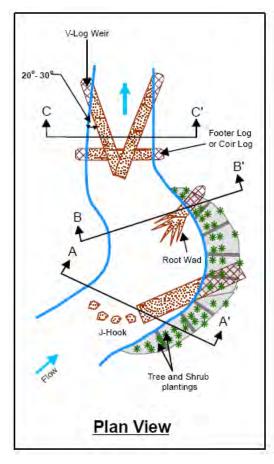


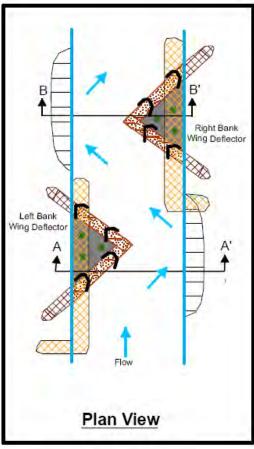




Stream and Wetland Restoration Activities

Proposed Conditions



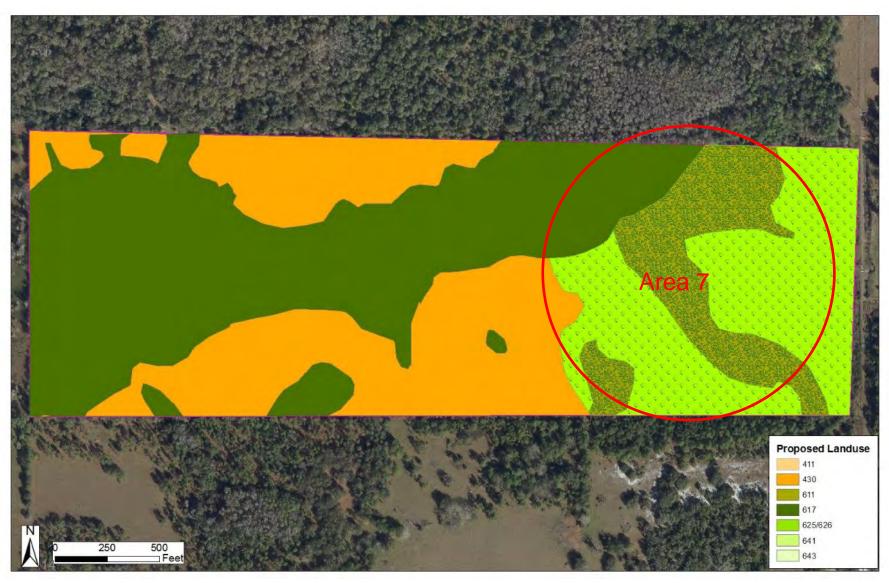




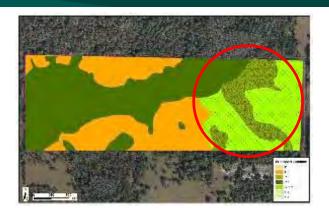
Wing deflector (Maron Run)

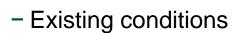


South Parcel – Proposed Conditions



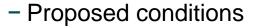
Area 7 - Wetland Enhancement



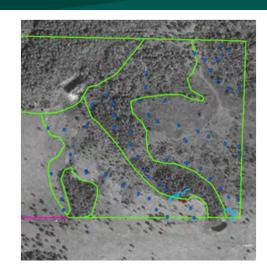


Extensive encroachment of pines

35.7 acres slash pine swamp



- 23.2 acres hydric pine flatwoods/savanna,
- 12.5 acres bay strands







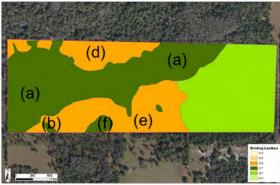




Conservation Opportunities Within Properties

- Myakka River bottomlands (a) & (c)
- Seepage Swamps (b)
- Hammocks (d)
- Pine flatwoods/hammocks (e)
- Palustrine hardwood swamps (f)





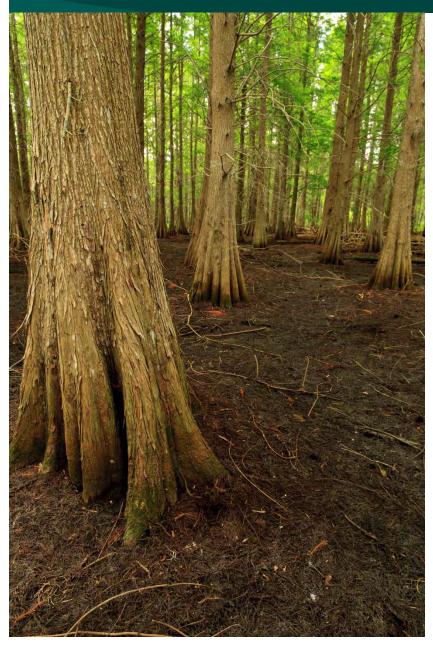








Myakka River Headwaters Project Summary



- Regionally significant project within the Myakka River Watershed
 - Conserves a 207-acre portion of Myakka River's headwater corridor
 - 46% property to be ecologically improved
 - » Restore fire ecology
 - » Increase diversity
 - » Reduce erosion (2,243 LF stream stabilization)
 - Widens and lengthens the preserved Wingate East preservation corridor
 - Permanently preserves and extensively buffers 1.5 miles of the Myakka River

Incorporation of CHNEP Priority Actions

Offsite Mitigation Plan Objectives	CHNEP Priority Action	Method of Implementation
Myakka River Headwaters Project	WQ-E	Offset anthropogenic impacts elsewhere in watershed
	FW-C	Restore freshwater wetlands
	FW-F	Restore and protect aquatic and terrestrial native habitat
	FW-H	Increase conservation lands
	FW-L	Remove exotic vegetation
	HA-N	Restore lands with changed hydroperiods and reverse historic removal of flood storage capacity
	WQ-D	Reduce non-point source pollutants associated with stormwater runoff
	WQ-E	Protect water quality to offset anthropogenic impacts elsewhere in watershed

Questions

