First Coast Expressway Wetland Mitigation

FPID 422938-2-52-01 (St. Johns County) & 422938-3-52-01 (Clay County)



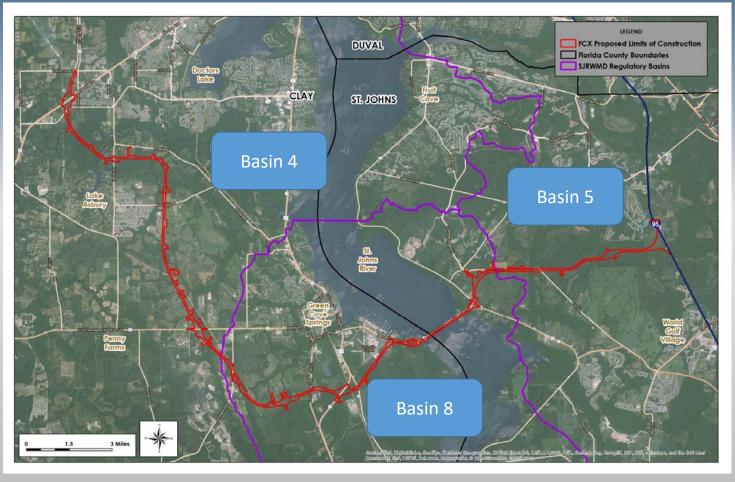
Overview

- Estimated Direct Wetland Impacts by Basin
- Summary of Mitigation Banks
- Submerged Aquatic Vegetation (SAV)
- Tidal Freshwater Essential Fish Habitat (EFH)





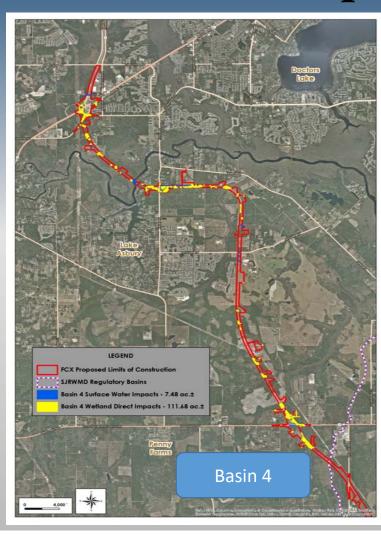
SJRWMD Regulatory Basin Boundaries





Estimated Direct Wetland Impacts

- ➢ Basin 4 111.68 acres
- Mitigation Bank Credit Requirements:
 - ➢ 98.56 UMAM





Estimated Direct Wetland Impacts

- ➤ Basin 8 91.91 Acres
- Mitigation Bank Credit Requirements:
 - ➤ 75.97 UMAM





Estimated Direct Wetland Impacts

- **Basin 5** 199.49 Acres
- Mitigation Bank Credit Requirements:
 - ➤ 147.52 UMAM





Mitigation Banks Utilized

State Credits

- Greens Creek
- > Nochaway
 > Sundew
- Lower St. Johns

- > Star 4
- Loblolly > Town Branch

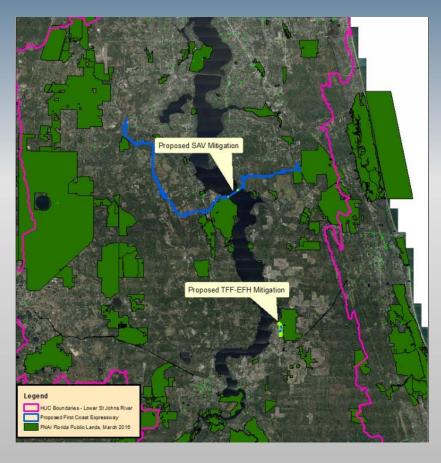
- Federal Credits
 - > Loblolly
 - > Longleaf
 - > Tupelo
 - > Sundew





Submerged Aquatic Vegetation (SAV) & Tidal Freshwater Essential Fish Habitat (EFH)

- SAV & EFH impacts occur within Basin 8
- No SAV or EFH Basin 8 Mitigation Bank credits available
- Restoration & enhancement used to mitigate impacts via Senate Bill

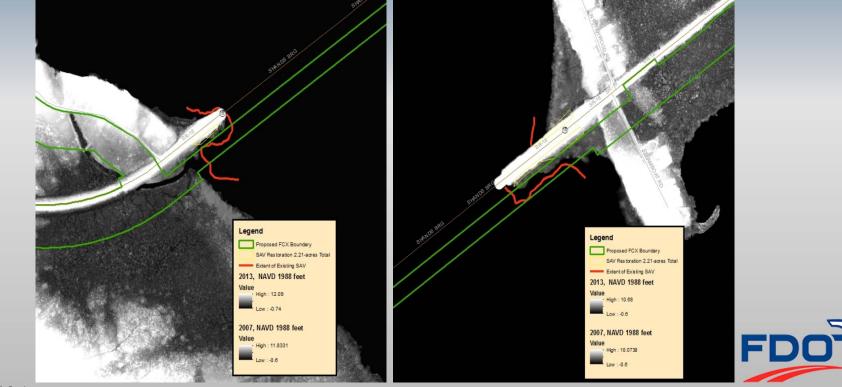




Submerged Aquatic Vegetation (SAV)

Survey completed and verified by SJRWMD in April 2016

> 2.21 acres of impacts within proposed ROW



SAV Mitigation

- Removal of old bridge fill material
- Harvest & transplant existing SAV

2.21 acres of restoration

FC

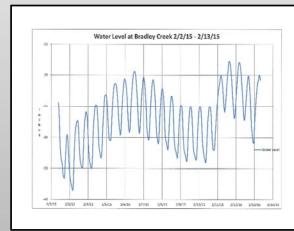
Control of invasive exotic species



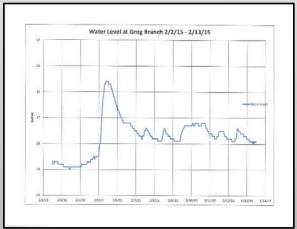
Tidal Freshwater Essential Fish Habitat (EFH)

Six crossings were determined to be Tidal Freshwater

Creek/River System	Tidal Freshwater Forested EFH Impacts	Tidal Freshwater Forested EFH Shade Impacts	Tidal Freshwater Forested EFH Temporary Impacts	Tidal Freshwater Surface Water EFH Shade Impacts	Tidal Freshwater Surface Water/SAV EFH Shade Impacts	Tidal Freshwater Surface Water EFH Temporary Impacts	Tidal Freshwater Surface Water/SAV EFH Temporary Impacts
Trout Creek	4.91	0.14	0.49	0.17	-	0.62	-
St. Johns River	26.82	5.04	3.52	27.22	2.13	-	0.15
Bradley Creek	3.03	0.45	0.65	-	-	-	-
Black Creek	-	-	-	1.31	-	1.84	-
Lower Grog Branch	0.97	0.50	0.76	-	-	-	-
Upper Grog Branch	-	0.21	0.26	-	-	-	-



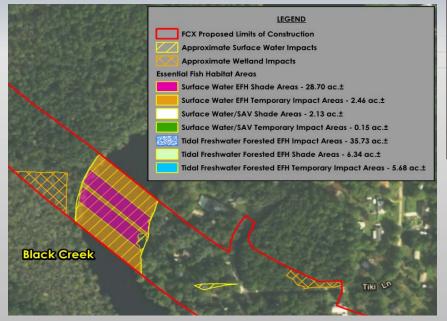


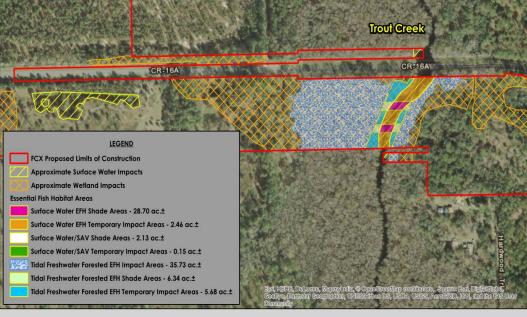




Tidal Freshwater Essential Fish Habitat (EFH)

Black Creek Crossing





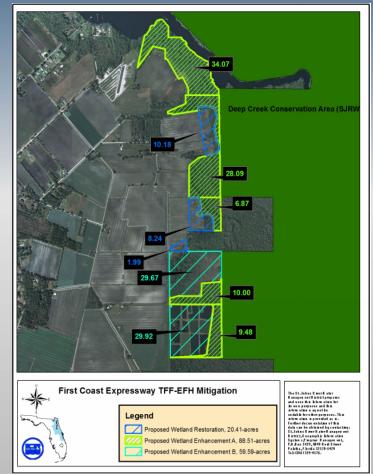
Trout Creek Crossing



Tidal Freshwater EFH Mitigation

Deep Creek Mitigation Area

- Adjacent to Deep Creek Conservation Area
- Altered agricultural fields to be returned to forested wetlands
- Forested systems to be reconnected to tidal activity associated with St Johns River
- ➢ 20.41 acres of restoration
- > 148.10 acres of enhancement





Tidal Freshwater EFH Mitigation

Deep Creek Mitigation Area Additional Benefits:

- Reduction of invasive exotic species
- Removal of berms/dikes
- Reconnection of aquaculture ponds to existing floodplains
- Improved water quality

