

Deep Creek HWTT Update

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Office of Agricultural Water Policy



Overview

- Quick overview of HWTTs
- Deep Creek HWTT
 - Location and background
 - 2016-Present performance



HWTT – Hybrid Wetland Treatment Technology

- A water treatment technology comprised of both wetland and chemical addition components
 - Minimizes costs and constraints of wetlands (i.e. footprint, size) and chemical treatments (i.e. ongoing expense)



HWTT – Hybrid Wetland Treatment Technology

- System consists of:
 - Chemical additions
 - ex: coagulants
 - Vegetated and non-vegetated aquatic zones
 - Vegetated areas utilize floating and/or submerged plants
- Added chemicals create ‘flocs’ within the system that can be passively or actively reused
 - Re-use of flocs can allow for additional TP removal within the system without the use of additional chemical treatments



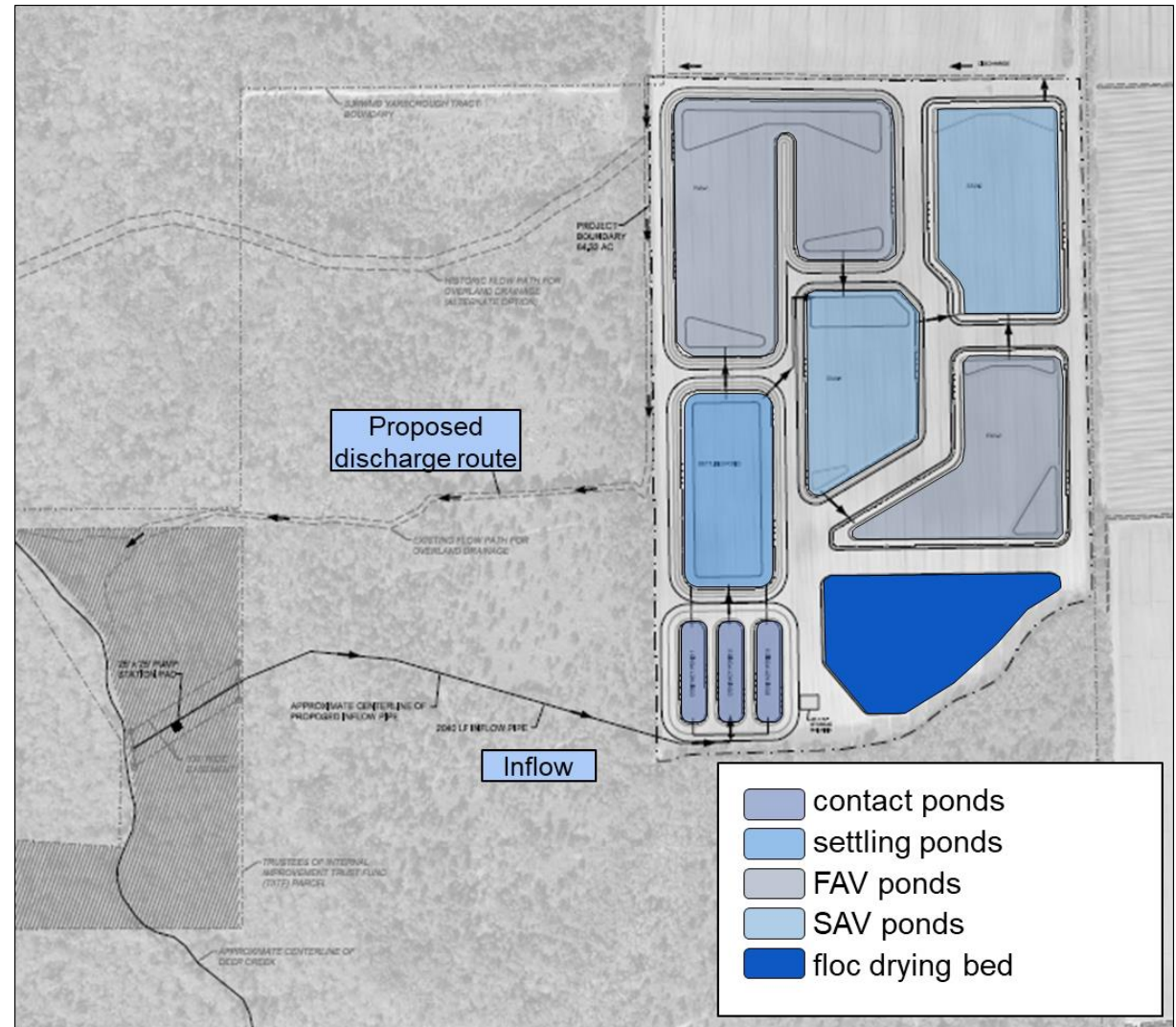
HWTT – Hybrid Wetland Treatment Technology

- Treatment process can be installed within existed stormwater detention or wetland systems
- Can have a smaller footprint compared to conventional treatment wetlands
- Provides environmental benefits
 - Wetland and wildlife habitat creation/restoration

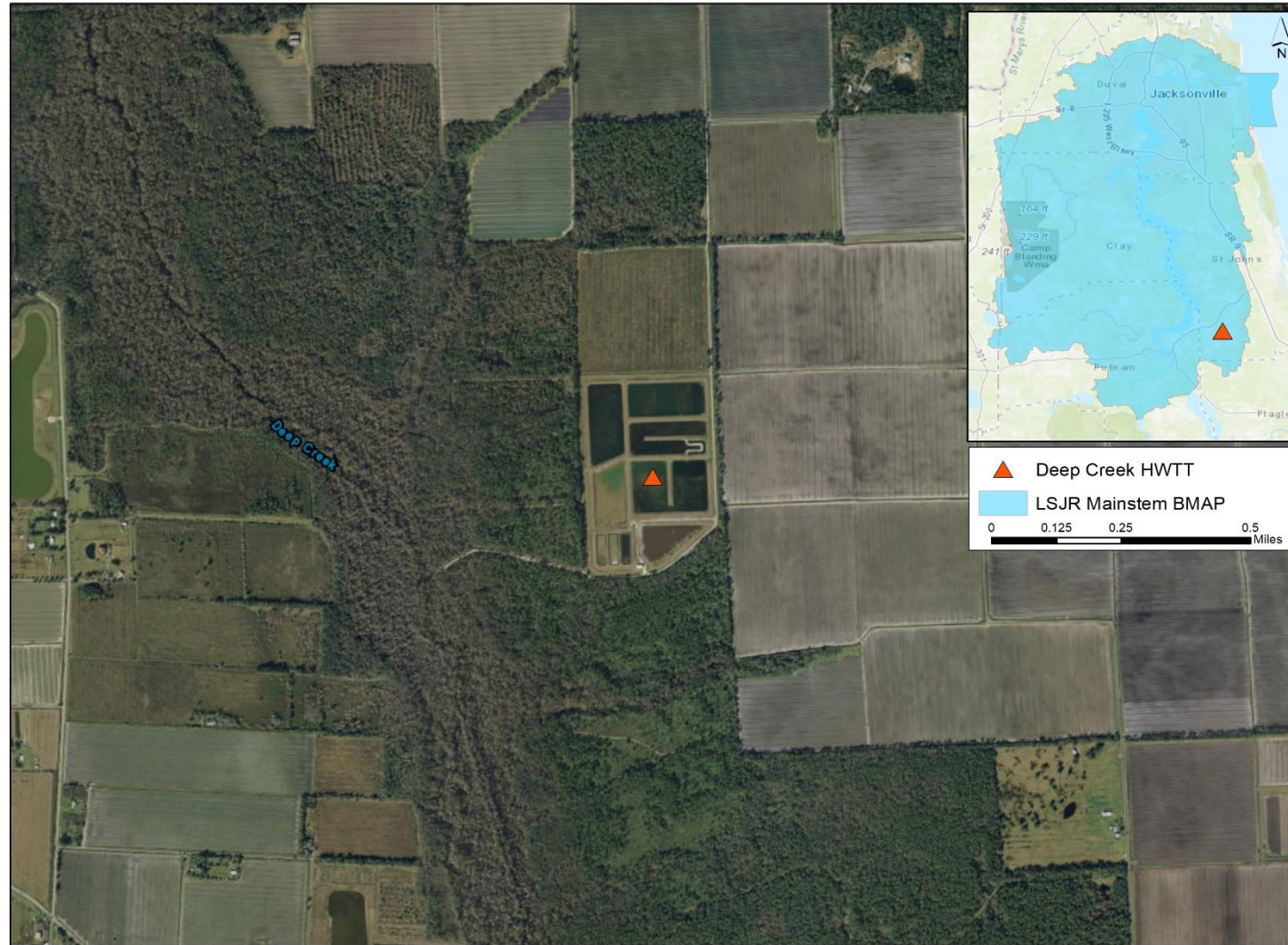


Deep Creek HWTT

- Came online ~2016
- Facility located east of Hastings
- System connected to both Deep Creek and Sixteen Mile Creek basins



Deep Creek HWTT



Deep Creek HWTT

	TP Inflow (lbs)	TP Outflow (lbs)	Total TP Removed (lbs)	TN Inflow (lbs)	TN Outflow (lbs)	Total TN Removed (lbs)
2016-2017	1,341	69	1,272	15,641	4,202	11,439
2017-2018	5,043	331	4,712	28,607	12,998	15,609
2018-2019	4,564	227	4,337	22,984	7,891	15,093
2019-2020	5,634	223	5,412	23,496	10,512	12,985

Total P Removed (2016-2020):

15,733 lbs/P

Total N Removed (2016-2020):

55,126 lbs/N



Questions?

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