

Implementation Ease



Permitting: No pilot studies are anticipated for this project based on the successful implementation of similar projects by GRU.



Political/Public Opinion: It is anticipated that public opinion will be favorable related to establishing wetland recharge sites that could potentially enhance recreation or environmental conditions in the surrounding areas. However, the project will divert flow that would otherwise be going to Sweetwater Wetlands Park. Therefore, the effects of the project on Sweetwater Wetlands and Paynes Prairie will need to be evaluated to ensure that there is no negative ecological impact.



Land Acquisition: The project is anticipated to require 50-60 acres that have favorable underlying geological conditions to achieve the desired recharge efficiency.



Conveyance Obstacles: Few or no conveyance obstacles were identified for this project. Most transmission is through non-congested public rights-of-way.

Operational Complexity



Governance: This project will require multiple agencies to form a cooperative agreement to provide the resources for ongoing operation, maintenance, and monitoring of the proposed facilities. It is anticipated the GRU will maintain operations over treatment facilities located at the WRF, while the SRWMD will lead operations at the recharge wetland.



Monitoring: Monitoring will likely be required within the wetland to confirm water quality treatment meets AWT standards prior to discharge to the environment.



Training and Operations: If the lower treatment scenario is implemented, most of the treatment processes are passive and will require minimal operator training. If the higher treatment scenario is implemented, the addition of LPRO will require additional operator training.

Key Assumptions

- Since the geology of the area does not accommodate deep well injection, additional evaluation of PFAS removal alternatives and byproduct disposal will be required in future analyses.
- Costs for treatment capacity and raw wastewater transfer upgrades are not included in this screening level estimate but will need to be evaluated in future analyses.

Key Questions to be Answered by Further Study

Treatment:

- Identify and develop costs for required raw wastewater transmission and treatment plant capacity upgrades.
- Define treatment wetland capabilities with regard to nutrient reduction and PFAS removal to determine treatment needs.
- Identify viable treatment methodology for PFAS removal including any byproduct disposal.

Recharge:

- Identify likely locations for construction of recharge wetlands. Based on specific site characteristics, determine needed size of recharge wetlands.

References

Saint Johns River Water Management District (2023) "Updated Cost Equation for Apr 2023" SJRWMD. Provided April 2024.
Gainesville Regional Utilities (No Date) "GRU_SWNP_ROM_jd_21_9". Provided May 2024.