TEMPLATE FOR REGULATORY TEAM REVIEW OF SOLUTIONS PLANNING TEAM PROJECTS

Project name and description:

City of Winter Garden - Conceptual Plan for Stormwater Capture, Reuse & Aquifer Recharge

The Conceptual Plan for Stormwater Capture, Reuse and Aquifer Recharge is developed by Andreyev Engineering, Inc., to present an approach to capturing stormwater runoff for reclaimed water augmentation and for artificial aquifer recharge when irrigation water is not required. The project includes the following: cost analysis, aquifer recharge basin analysis, storage capacity, ground-water flow modeling, review of available properties for recharge, identify and review available surface water bodies, identification and selection of source stormwater sites, identification of artificial aquifer recharge sites to discharge the excess reclaimed water sources, and review of the drainage basin data from the City's Drainage Master Plan and estimation of the amount of runoff. The projected stormwater capture and augmentation of the reclaimed water sources is 2.0 million gallons per day (mgd) and the projected aquifer recharge is up to 1.5 mgd.

Planning Level Review for Permittability

The conceptual level details provided in the project summary indicate an excellent potential for permittability. The described activities at the four sites, which include the construction of ponds and rapid infiltration basins, conversion of wetlands to recharge systems, conveyance infrastructure, and a mechanical filter and disinfection system, all appear reasonably permittable from a planning perspective. The project activities will require ERP (Environmental Resource Permits) prior to construction, as the described activities exceed ERP threholds. The project may also require a WUP/CUP (Water Use/Consumptive Use Permit) for proposed pumping of stormwater from a pond to a reclaimed water system, if permitting thresholds are exceeded. Other 403 permits may also be required from the FDEP (Florida Department of Environmental Protection) for the construction of rapid infiltrations systems or water treatment system. The ERP permit review process will need to address the potential for adverse quantity and quality impacts, and will need to address potential wetland impacts to demonstrate no functional loss of wetlands. Co-mingling of reclaimed water into ponds that discharge to impaired water bodies may need to demonstrate net improvement of water quality for the combined discharges.

Identification of consumptive use permit program inconsistencies between the water management districts which may impact the project:

None identified

Identification of Chapter 373, F.S., impediments, if any, associated with project:

None identified

Identification of unusual, non-Chapter 373, F.S., considerations:

None identified