

## **WESTERN WAKE PARTNERS**

### **Report to the Policy Advisory Committee (PAC12-04)**

Date: July 13, 2011  
To: Policy Advisory Committee  
From: Technical Advisory Committee (TAC)  
Prepared by: Alexandra Jones, P.E., Project Manager, Town of Cary  
Subject: Consideration of revisions to Effluent Conveyance Facilities

#### **Background**

The technical memorandum "Effluent Conveyance Facilities Impact of Holly Springs Withdrawal with Scenario 3 and Scenario 4" prepared by Hazen and Sawyer, attached, presents detailed information. The Effluent Pump Station and Effluent Pipeline projects (also referred to as the Effluent Conveyance Facilities) were originally designed to convey treated wastewater from the Western Wake Regional Water Reclamation Facility (WWRWRF) as well as treated wastewater from the Utle Creek Wastewater Treatment Plant in Holly Springs. With the withdrawal of the Town of Holly Springs from the Western Wake Partnership, it is only necessary for the Effluent Pump Station and Pipeline to convey flows contributed by the Towns of Apex, Cary, and Morrisville at the WWRWRF.

Four different scenarios for modifying the design of the Effluent Conveyance Facilities to account for the withdrawal of Holly Springs from the Partnership were evaluated. Scenario 1 includes relatively straightforward design changes to reduce the capacity of pumping equipment and the pipeline. Scenario 2 includes the same changes as the first scenario with the addition of more complex design revisions to reduce the size of the pump station building. Scenario 3 includes design changes to reduce the capacity of pumping equipment as well as significant design changes to reduce the pipeline capacity to handle Phase 1 flows only with Phase 2 flows to be handled by a future, parallel pipeline. Scenario 4 includes only the design changes needed to reduce the capacity of pumping equipment with no changes made to the pipeline.

#### **Recommendation**

The Technical Advisory Committee recommends the Policy Advisory Committee approve modifying the design of the effluent pipeline and pump station projects with the changes described in Scenario 1 of the technical memorandum "Effluent Conveyance Facilities Impact of Holly Springs Withdrawal with Scenario 3 and Scenario 4" prepared by Hazen and Sawyer.