

Project Name: **24 MG Earthen Inflow Holding Basin and Return Flow Pumping Station**

Utility Name and Location: **City of Pulaski
Pulaski, Tennessee**

Key Personnel: J. Gregory Davenport, P.E.
Stephen C. Lee, P.E.
David K. Pine, P.E.

Project Description: The project consisted of a wastewater treatment plant (WWTP) renovation to allow for peak inflow storage and an increased hydraulic capacity for the biological treatment units. The biological treatment unit design capacity is 6.0 MGD although the headworks can treat up to 20.0 MGD. After the entire wastewater flow is screened and degrittied, up to 6.0 MGD flows to biological treatment and the excess flow is diverted by gravity over four 6-0" weirs to a 24 MG earthen peak flow storage basin. After the peak flow subsides below 6.0 MGD, the WWTP control system automatically starts one of two 75 HP variable speed submersible pumps which transport up to 4.0 MGD back to the biological portion of the plant. As the influent raw wastewater flow decreases, the return flow from the basin is increased which allows the basin to be emptied in anticipation of the next rain event.

Construction Cost: \$6,495,654

Engineering Services: Planning, Detailed Design, Bidding and Award, Construction Administration, and Resident Observation



24 MG Inflow Holding Basin-
Return Flow Pumping Station in Foreground



24 MG Earthen Inflow Holding Basin



24 MG Inflow Holding Basin – Return Pumping Station in Background