

MEMORANDUM

TO: Governing Board Members

FROM: Chip Merriam, Deputy Executive Director, Water Resources

DATE: February 19, 2008

SUBJECT: Approve Water Use Permit Modification Application 071114-4 for Palm Beach County Water Utilities Department for the projected demands with the previous 20-year permit duration (Palm Beach County)

SUMMARY

Staff recommends approval of the modification Water Use Permit 50-00135-W, Palm Beach County Water Utilities Department, to continue with the projected allocation of 31,751.35 million gallons per year (MGY), which equates to 129.62 million gallons per day (MGD) with a 20-year permit duration from date of issuance March 13, 2003. The modification authorizes the utilization of two existing Aquifer Storage and Recovery (ASR) wells for direct saline water withdrawals from the Floridan Aquifer System (FAS) for blending with Surficial Aquifer System withdrawals at the respective wellfields. The wells are located at Water Treatment Plant 3 (WTP-3), located in the Boynton Beach area and Water Treatment Plant 9 (WTP-9), located in the Boca Raton area. The wells will continue to be utilized as ASR wells. There are no other changes to the permit.

BACKGROUND

Palm Beach County Utilities operates four water treatment plants with the Surficial Aquifer System being the primary withdrawal source. The utility has two existing and two proposed Aquifer storage and Recovery (ASR) Wells located at each water treatment plant. The applicant is requesting 2 MGD from Well ASR-3 and 5 MGD from Well ASR-9. The wells will be operated when the ASR storage bubble of freshwater is depleted and a Phase Water Shortage declaration is in effect for the service area. The permittee proposes to change the two wells to multi-purpose wells. There are no other changes to the permit including the expiration date of March 13, 2023 and Surficial Aquifer withdrawals.

MFL RECOVERY and CERP ISSUES

The utility was evaluated for a projected 2023 demand 31,773 MGY (129.62 MGD) for the March 13, 2003 renewal/modification of the permit and was found to meet the Minimum Flows and Levels and Comprehensive Everglades Recovery Program criteria. The applicant is requesting no changes to the existing allocation. The permittee had proposed to meet additional demands in the 2003 by the utilization of ASR technology and reclaimed water. The addition of the existing ASR wells as blending wells as a mean to reduce seepage from the regional system is in conformance with the Regional Water Availability Rule (Basis of Review for Water Use Permits Section 3.2.1 E) enacted in 2007.

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