



## CITY OF MODESTO

July 1, 2008

**TO:** Councilmembers

**FROM:** Nick Pinhey, Public Works Director

**SUBJECT:** Wastewater Master Plan Supplement

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### **RECOMMENDED ACTION:**

This report is an informational update as requested by the Finance Committee. No action is required.

A copy of the Wastewater Master Plan (WWMP) Supplement will be distributed at the July 1, 2008 Stakeholder's Meeting. The City will solicit comments to the WWMP Supplement at a follow-up meeting on July 17, 2008.

### **BACKGROUND:**

Typically, municipal WWMPs are updated every five to seven years to incorporate additional growth, current operations, and new planning data. Having a current and comprehensive WWMP is a critical step in keeping the City ahead of the replacement requirements of an aging infrastructure system and the pressures of expanding urban growth.

The City Council, on January 27, 2004, by Resolution No. 2004-050, approved an agreement with Carollo Engineers, P.C. (Carollo), of Walnut Creek, California to update the City's WWMP, and it was completed and adopted in 2007. The 2007 WWMP was prepared using City-furnished population growth rates available from 2005-2006. In addition, the plan relied upon anticipated wastewater discharge permit conditions for the Jennings Road Secondary Treatment Facility based on several meetings and lengthy discussions with staff of the Regional Water Quality Control Board (RWQCB).

However, recent housing and resultant near-term population growth has slowed considerably in the last 12 months. In addition, the RWQCB issued a new tentative waste discharge order (TO) on January 15, 2008, with limits more restrictive than those indicated from previous communications. The TO included unprecedented limits for seasonal secondary effluent discharges into the San Joaquin River, especially ammonia limits. The RWQCB issued the City's new permit with the new limits on April 25, 2008.

The City Council, by Resolution 2008-187, on April 1, 2008, approved an agreement with Carollo to prepare a WWMP Supplement, due to Carollo's familiarity with the City's wastewater treatment facilities, as well as their ongoing work with the Phase 1A Tertiary

Treatment Facility and their current task of analyzing alternatives to meet new discharge permit requirements.

The WWMP Supplement was prepared to revise the City's strategic plan to meet these new discharge requirements and accommodate revised growth projections, reprioritize the capital improvement program and revise the projected cash flow curve, to be used by others, to update future wastewater rates.

The key new changes between the 2007 WWMP and the WWMP Supplement are summarized as follows:

**Population growth:** Population projections were revised based on current and historical trends. The build-out (2030) wastewater flows reduced from 41.5 million gallons per day (MGD) to 40.7 MGD.

**Ammonia:** This limit will require additional treatment (nitrification) to achieve compliance for the seasonal and year-round secondary effluent discharge. According to the City's records, the current effluent has consistently exceeded the new ammonia limit during the seasonal discharges since 2001. A more robust wastewater treatment process (activated sludge) is proposed to help the City meet these requirements.

**Compliance Schedule:** Based on the new Waste Discharge Requirements (WDRs), the City must meet the effluent limits by 2013. Therefore the City will need to accelerate its compliance date for BNR/tertiary from 2016 to 2013. As a result, portions of Phase 1B and Phase 2, from the 2007 WWMP, will be combined for new Phase 2. It is projected that the will need to construct an additional 18.4 mgd capacity plant to meet the discharge requirements by 2013.

**Revised Wastewater Treatment Improvement Phasing:** Related to the revised compliance schedule, non-critical Sutter Ave. improvements identified in Phase 1B of the 2007 WWMP will be deferred to 2018.

**Salinity Limits:** Salinity limits are addressed in the new WDR. The City will need to develop a plan to reduce salinity by 2022.

#### **REASONS FOR RECOMMENDATION:**

This report is for information only regarding the status of ongoing wastewater related projects.

#### **EXISTING POLICY / RELATIONSHIP TO STRATEGIC PLAN:**

As related to the Strategic Plan, this project supports the Council goal of having a properly planned, designed, and operating wastewater system. This action is also consistent with the Council goal of a well-functioning system that has sufficient capacity to meet the needs of all current and future economic growth.

**POLICY ALTERNATIVES:**

None.

**FISCAL IMPACTS:**

Although, this item is presented for information only, specific recommendations from the WWMP Supplement, if adopted by council, will have fiscal impacts.

**INTERDEPARTMENTAL COORDINATION:**

Ongoing coordination will continue between the Public Works and Finance Departments for funding future improvements.

**PUBLIC PARTICIPATION:**

There are meetings scheduled for July 1, 2008, to provide background and present findings and recommendations to interested parties, and a follow-up meeting on July 17, 2008, to receive feedback on the WWMP Supplement.

**ENVIRONMENTAL REVIEW:**

The preparation of the WWMP Supplement is not subject to CEQA. The City Council approved Resolution No. 2007-178 certifying the Final Master Environmental Impact Report (Master EIR) for the City of Modesto Wastewater Master Plan Update (SCH No. 2006052076) in accordance with the California Environmental Quality Act on March 13, 2007. Any capital projects not covered by the 2007 Master EIR may require additional environmental review.

**STEPS FOLLOWING APPROVAL:**

Revise the current financing program to fund the proposed improvements identified in the WWMP Supplement.