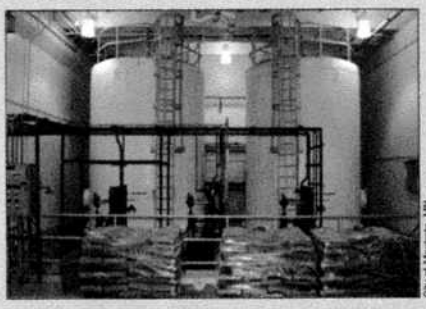
# water/wasterwater

# 10 *to* watch



City of Mankato, MN

## Mankato Water Reclamation Facility

**Mankato, MN**
**Newly Completed**

This facility is one of the first in the U.S. to produce high-quality water for reuse in electricity generation. Treated effluent from the Mankato WTP is piped to a nearby energy facility for use in cooling at the natural gas-fired turbine which simultaneously reduces demands on the local surface and groundwater supplies and improves the quality of the reused water that is eventually returned to the river.

Kleinfelder

## Natomas Cross Canal

**Sacramento, CA**
**Completion: Ongoing**

The $500-million renovation project of the Natomas levees in Sacramento and Sutter Counties, California, will raise or widen nearly 25 miles of levees over the next three years, thereby restoring at least 100-year flood protection for the deep-flood basin and preventing levee under seepage that threatens the basin's more than 70,000 residents. The project also includes construction of a new "piggy-back" levee adjacent to existing levees.

Stantec

## Nogales International WTP Upgrade

**Nogales, Arizona**
**Under Construction**
**Completion: October 2009**

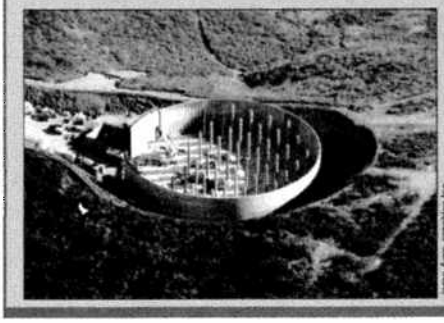
The design of the $53-million, 14.74 MGD BNR plant upgrade incorporates a two-stage construction sequence so contractors can build the clarifiers and aeration basins under ideal groundwater conditions reducing dewatering requirements with significant construction cost savings. The design replaced existing detritors with vortex grit tanks, 6 mm screens downstream of the existing 25 mm coarse screens, biofilters for plant wide odor control, and three secondary process trains for nitrification and denitrification.

Stantec

## Seymour Capilano Filtration Plant Project

**Vancouver, British Columbia, Canada**
**Under Construction**
**Completion: Fall 2008**

This filtration plant includes one of North America's largest direct filtration plants, greenfield water treatment plant and drinking water facility that uses UV disinfection to provide water to two million people in the Greater Vancouver area. Key features include a 20 m/hr high-rate, deep-bed filtration, individual filter area of 170 sq m and uses geothermal heating and cooling by extraction of heat from water stored in clearwells. The Operations and Maintenance Centre is targeting LEED Gold certification.



Jerry Avro graphics Inc.

## Freeport Regional Water Project

**San Francisco, CA**
**Under Construction**
**Completion: June 2009**

A cooperative effort of the Sacramento County Water Agency (SCWA) and East Bay Municipal Utility District (EBMUD) of Oakland, this project will supply surface water from the Sacramento River to customers in central Sacramento County and the East Bay. A portion of the project includes the Folsom South Canal Connection project to divert water from the Sacramento River to Freeport and then pump the water south through the Folsom South Canal for water deliveries to the District.