SECTION 9.0

ACRONYMS

CHAPTER 9.0

ACRONYMS

This section presents a list of acronyms used throughout this document.

ACL	Administrative Civil Liability
ADF	Average daily flow
AFY	acre feet per year
AQMP	Air Quality Management Plan
ARB	Air Resources Board
bgs	below the ground surface
BMPs	Best Management Practices
BOD	biological oxygen demand
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CCB	chlorine contact basin
CCRWQCB	Central California Regional Water Quality Control Board
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulation
CHRIS	California Historical Resources Information System
CNDDB	California Natural Diversity Database
CNPS	California National Plant Society
CO	carbon monoxide
COE	U.S. Army Corps of Engineers
CRHR	California Register of Historical Resources
CT	contact time
CVP	Central Valley Project
CWA	Clean Water Act
dBA	Decibels
DFG	California Department of Fish and Game
DHS	California Department of Health Services
DO	dissolved oxygen
DPMC	dual power, multicellular
DPR	Department of Parks and Recreation
DWSI	Domestic Wastewater System Improvements
DWTP	Domestic Wastewater Treatment Plant
EIR	Environmental Impact Report

~~water systems. The difference between the blue lines and red/orange lines is the effect of additional municipal pumping. The impacts on water levels are greater in Layer 5 than in Layer 1, because the pumping is assigned to model layers 3 through 5. Layer 5 water levels are typically 2 feet lower during normal and wet years and up to 5 feet lower during droughts near both of the large municipal wells.~~

~~Because deep aquifers tapped by water wells are confined, pumping tends to affect water levels over a large area in those aquifers. **Figure 4.7-2** shows contours of groundwater elevation in Layer 5 in the region where Hollister and Sunnyslope municipal wells are located[1]. The red contours show the impact to water levels near municipal wells from increased groundwater use under drought conditions (top) and high groundwater wet conditions (bottom). Water levels under the Phase I are lower by a maximum of approximately 5 feet, and the area where water levels are affected extends from the Ridgemark development to the airport on the east side of the Calaveras fault and from Hospital Road to Buena Vista Road on the west side of the fault.~~

~~The effects of deep pumping also propagate up to layer 1, where they lower the simulated water levels by 1-2 feet near Hollister Well No.5 and 3-4 feet near Sunnyslope Well No. 8.~~

~~The lowered groundwater levels increase seepage losses from the San Benito River to adjacent aquifers as it passes through the Hollister West subbasin. Average annual seepage from the river increased by 605 AFY in the Phase I simulation, and seepage to the river decreased by 189 AFY. This shift accounted for most of the increase in groundwater pumping, and the increase in seepage from the river would have a long-term beneficial impact on groundwater salinity.~~

~~The lowering of groundwater levels near municipal wells would slightly increase pumping costs. However, the amount of lowering is small compared to the range of water level variation associated with cycles of drought and wet periods. Also, the project proponents, who presumably are willing to absorb the additional pumping costs as part of the overall project, operate the most impacted wells. Accordingly, this impact is considered less than significant for Phase I.~~

~~For Phase II, impacts to municipal wells were analyzed by assuming groundwater pumping at all active Hollister and SCWD municipal wells would increase to 7,221 AFY. The effects on groundwater levels are similar to but proportionally larger than for Phase I. **Figure 4.7-3** shows hydrographs for the same wells that were evaluated for Phase I. Under the Phase II municipal water use scenario, layer 5 water levels near Hollister Well No. 5 would be approximately 6 feet lower during normal and wet periods and up to 14 feet lower during droughts. The minimum water level during the simulation (204 feet above sea level) is nevertheless considerably higher than the minimum historical water level of 165 feet at nearby well 12S/5E 34P1, which has been monitored by SBCWD since 1976. Therefore, the decrease in water level is considered less than significant. There is no comparable monitoring well near Sunnyslope Well No. 8, but the simulated water level decline between 1983 and 1991 (15 feet of drought decline plus 20 feet of decline from additional pumping) is still small relative to the 60 feet of recovery wells in that region experienced during the 1990s. This relationship is probably true throughout the area affected by increased municipal pumping. If Hollister and Sunnyslope were to meet all future increases in demand with~~

[1]The exact locations of municipal well are not shown to comply with general security precautions used to protect public facilities.

~~groundwater, it is very likely that additional wells would be installed for that purpose. This would tend to decrease the amount of water level depression that would occur near existing municipal wells, which would lessen the impact on nearby well operators. Thus, these simulation results probably overestimate the local impact of additional municipal pumping.~~

Mitigation Measure

No mitigation is necessary.

Impact

4.7.5 During Phase I, to supply some recycled water projects, recycled water from the DWTP would be blended with CVP water to reduce TDS levels. During critically dry years, CVP water may not be available. This could result in the inability to utilize recycled water for some projects, which could result in insufficient disposal capacity and could potentially result in an emergency release of treated effluent. The impact is considered potentially significant.

Blending of treated effluent from the DWTP with CVP water is proposed for recycle water use at San Juan Oaks Golf Club to meet TDS requirements for sensitive grasses on golf course greens. The development of other sprayfields and recycled water projects may also require blending to suit specific crops. As a result of blending requirements, a significant shortfall in the availability of CVP water could result in a proportional reduction in the amount of recycled water able to be utilized. This could result in the insufficient disposal capacity for DWTP treated effluent and an emergency release of treated effluent. A release could occur at the DWTP, if storage capacity is insufficient to contain treated effluent that could not be disposed by recycled water projects.

The SBCWD is entitled to 35,550 acre-feet per year of CVP water for agricultural purposes. In normal years, CVP deliveries are expected to be 65% of the contract entitlements for agricultural uses, or about 23,108 AFY. For the 2004 water year, about 20,267 acre-feet of CVP water was used in San Benito County for agricultural purposes. Based on recent deliveries, it is expected that during normal years sufficient CVP water would be available for blending. However, during critically dry years, it is possible that no CVP water would be provided to the SBCWD for agricultural purposes. This could prevent the ability to dispose of recycled water at sites requiring blending. This could significantly impact the ability to dispose of DWTP treated effluent.

Mitigation Measure

4.7.5 Implement Mitigation Measure 4.3.8(b), which identifies the completion of a Comprehensive Effluent Disposal Plan. This plan will include an Annual Operation Water Balance that will address the availability of CVP water.

Significance After Mitigation

Less than significant.