



UNITED STATES MARINE CORPS
MARINE CORPS BASE
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CAMP PENDLETON CALIFORNIA 92055-5008

IN REPLY REFER TO:
5090.7C
ENVSEC/427
November 4, 2008

Mr. Robert Pierce
WRC Engineer
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, California 92123

SUBJECT: TOTAL DISSOLVED SOLIDS LIMIT, MASTER RECLAMATION PERMIT FOR UNITED STATE MARINE CORPS, CAMP PENDLETON. TENTATIVE ORDER NO. R9-2008-0089

This letter requests a monthly average Total Dissolved Solids (TDS) limit of 1300 mg/l for Camp Pendleton's Master Reclamation Permit (Tentative Order No. R9-2008-0089). A monthly average TDS limit of 1300 mg/L would allow for an increase of 550 mg/L over the concentration of TDS in the source water, which is consistent with guidance contained in the draft State Water Resources Control Board Recycled Water Policy. According to Camp Pendleton's 2007 Consumer Confidence Report, the average TDS of the source water is 755 mg/L (range: 632 to 856 mg/l). A 550 mg/L increase over the average TDS concentration of 755 mg/L equates to discharge limit of 1305 mg/L or approximately 1300 mg/L.

We believe the Regional Water Quality Control Board has used this approach to set TDS limits for other reclaimed water dischargers in the San Diego region. We are aware that other dischargers face similar reclamation challenges due to high, ambient concentrations of TDS in their source water. An effluent limit that is based on source water TDS concentrations allows for reasonable TDS increases from municipal inputs, such as residential water softeners. In addition to high TDS, Camp Pendleton's source water is also very hard, and as a result many base housing residents have opted to lease residential water softeners at their own expense. We noted that the Governor recently chose against expanding the ability of local agencies to ban the use of residential water softeners by vetoing AB 2270; we also note the Governor is a strong proponent of water conservation, of which reclaimed water use is an integral component.

As previously discussed during meetings on this matter, we do not believe that the application of reclaimed water at the proposed reclamation sites, to include the front gate area, will adversely impact groundwater quality or impair beneficial uses. The following reiterates our position:

Reclaimed Water Sites in the San Luis Rey River Watershed. The golf course, horse pastures, and main side parade/athletic field reclamation sites are within the San Luis Rey River watershed where the TDS limit for discharges to groundwater is 1500 mg/L.

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Reclaimed Water Site in the Santa Margarita River Watershed. Although the front gate area reclamation site is in the Santa Margarita River watershed where a TDS limit of 750 mg/L applies, we wish to reiterate that:

1. We seek a reclaimed water permit to irrigate the root zone, not recharge the water table.
2. The application of reclaimed water will not constitute a constant source of head and, therefore, will not establish a continuous hydraulic connection with the underlying water table.
3. We estimate that the water table below the front gate reclamation site is at least 64 to 107 feet below the surface elevation of the irrigated root zone.
4. The 34-acre front gate reclamation site sits at the bottom of the 480,000-acre Santa Margarita River watershed. The reclamation site is approximately ¼ mile east of Interstate 5, where to the west a TDS limit does not apply. The reclamation site is also approximately ½ mile southeast of the Santa Margarita River estuary, where the concentration of TDS in the groundwater naturally exceeds 750 mg/L due to influence of the inbound diurnal tides and the fact that salt water, with a TDS of 30,000-40,000 mg/L, is heavier than fresh water.
5. The front gate irrigation site is 4.2 miles downstream of the lower most portion of the aquifer that supports sustainable drinking water resources (i.e., municipal beneficial use).

Marine Corps Base Camp Pendleton appreciates this opportunity to provide information relevant to Tentative Order No. R9-2008-0089. If there are any questions or concern, please contact Luis Ledesma at (760) 725-0141.

Sincerely,



A. C. ENTINGH
Head, Environmental Compliance Department
Assistant Chief of Staff, Environmental Security
By direction of the Commanding Officer

Enclosures: 1. Santa Margarita River Watershed
2. Front Gate Irrigation Area

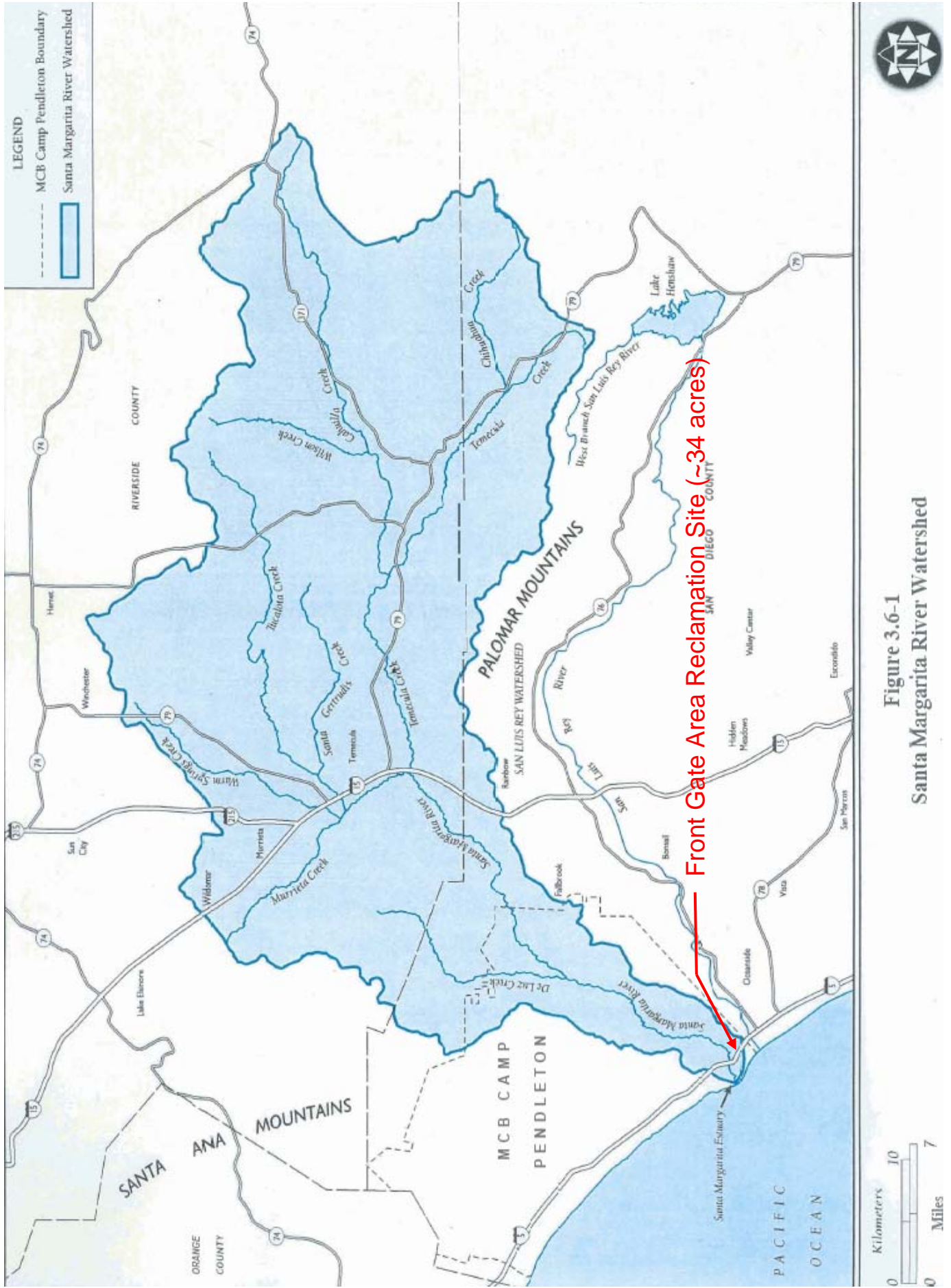


Figure 3.6-1
Santa Margarita River Watershed

