

**DRAFT ENVIRONMENTAL REPORT
for the
MODESTO SURFACE WATER TREATMENT PLANT**

Executive Summary

October, 1989

1. EXECUTIVE SUMMARY

The domestic water supply for the Modesto area is currently supplied solely by groundwater. Overpumpage has led to declines in groundwater levels, accompanied by a deterioration in groundwater quality. To assure a long-term, high quality water supply, the Modesto Irrigation District, the City of Modesto, and the Del Este Water Company are conducting a joint study on the use of surface water from the nearby Tuolumne River. River water to which the Modesto Irrigation District has water rights would be delivered to a new water treatment facility and then piped into the water distribution system serving the Modesto area. The water treatment plant would be constructed at one of three, 30-acre sites under consideration in this Environmental Impact Report (EIR), all located east of Modesto (Figure 1-1). The treatment plant would be constructed in two phases of 30 million gallons per day (MGD) treatment capacity, each. Phase 1 would be operational by 1993. Phase 2 could be operational by 2005, depending upon the increase in water demand in the system.

There are four basic project alternatives. The preferred alternative is Alternative A. Alternative A would obtain project water directly from the Modesto Reservoir. Four proximate sites for the water treatment plant (Sites A1, A2, A3, and A4) are under consideration. Alternative B would involve delivery of project water to an industrial site (Site B) on the east side of Modesto via the Main Canal and Lateral 1. Alternative C would involve delivery of project water via the Main Canal to a location several miles north-east of Modesto (Site C). For Alternative D, the treatment plant site would be identical to that of Alternative B (i.e., Site B). However, project water would be released to the Tuolumne River and conveyed to a diversion point in the vicinity of the treatment plant from whence it would be pumped to the plant. Alternatives D1, D2, and D3 involve different methods of delivering project water via the river. Under Alternative D1 no project water would be released as long as the river flow at the project diversion point near Modesto was adequate to meet project needs. During periods of unusually low flow, project water would be released below La Grange Dam in amounts sufficient to augment flows at the diversion point to the levels needed by the water treatment plant. For Alternative D2, the project water would be diverted at La Grange Dam into the District's water system. The water would flow through Modesto Reservoir and into the Main Canal. The water would be released to the river at the Poletti Spill, located just east of Waterford. Alternative D3 would involve release of project water below La Grange Dam in an amount equivalent to that diverted to the treatment plant, downriver.

All four alternatives would involve the construction of four water storage tanks at locations around Modesto. An extensive system of water transmission mains would also be built, on existing right-of-way, to link the new water treatment plant with the existing water distribution system.

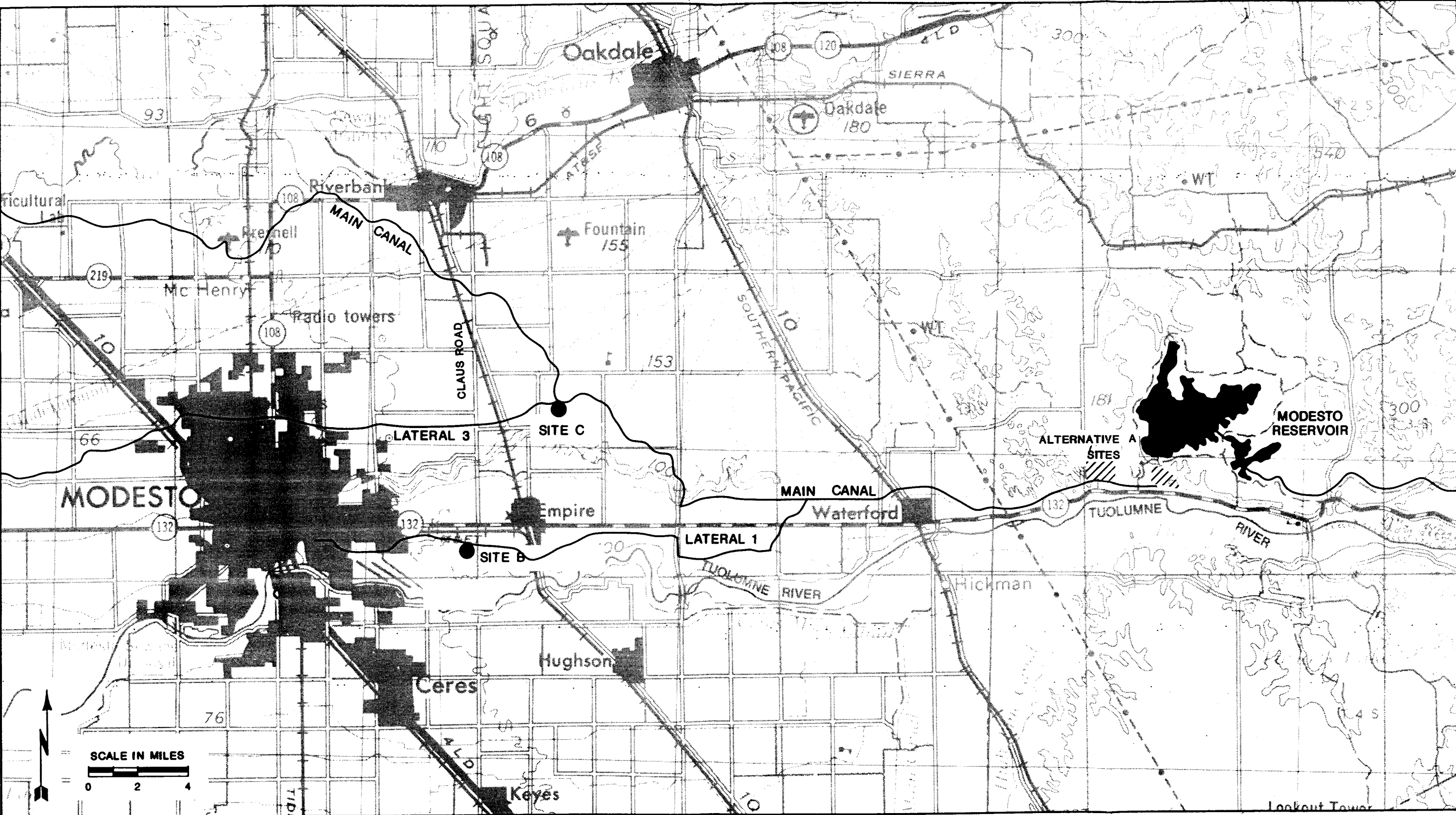


FIGURE 1-1

ALTERNATIVE TREATMENT
PLANT SITES

● APPROXIMATE LOCATION
OF ALTERNATIVE SITES

Under the No-Project Alternative groundwater would continue to be the sole source of water supply for Modesto. However the past practice of drilling wells near areas of water demand would change considerably in the future. Increasingly stringent drinking water quality standards coupled with declines in well water quality will require that water treatment processes be installed at individual wells (wellhead treatment) in order to keep them in service. New wells may need to be drilled at some distance from Modesto to obtain water of adequate quality. This would entail the construction of pumping stations, water storage tanks, and transmission mains. The operation and maintenance of the water system would become increasingly complex and expensive.

The project impacts are summarized in a matrix in Table 3-1. The project would result in a shift to surface water as the primary source of water supply for Modesto. Groundwater would be pumped primarily to meet peak, seasonal demands. The project would significantly benefit the water supply system by providing a large, new source of high quality water to meet growing water demands. Substantially reduced groundwater pumping, which would result from the project, would significantly benefit the groundwater resource, allowing groundwater levels to recover and possibly reversing the declining trend in groundwater quality.

All of the project alternatives could have potentially significant adverse impacts to cultural resources, farming, transportation (traffic), and reservoir recreation (Don Pedro Reservoir). Cultural resource impacts could be mitigated or avoided by performing a survey of the selected site prior to site disturbance. Farming and reservoir recreation impacts can be mitigated by a coordinated program of temporarily increased groundwater pumpage coupled with agricultural and urban water conservation measures during periods of drought. The traffic impacts would be short term.

Biologically significant vernal pools may exist at three of the Alternative A sites. A biological survey of the selected site, coupled with construction avoidance of any identified vernal pools would avoid this impact. The possible removal of a home located at Site A2 would result in a significant land use impact due to relocation of the residents. Relocation assistance or a leasing agreement allowing the residents to remain would avoid this impact. Alternative B has no additional significant impacts. Additional, potentially significant noise and visual impacts could occur at Site C due to the proximity of several homes. A combination of careful siting of the treatment plant, noise attenuation measures, berming, and landscaping can mitigate these impacts.

Any of the Alternative D options would have significant visual and short term water quality impacts due to construction of the river diversion structure. Alternative D1 would have additional significant water resource, biological and river recreation impacts due to substantial seasonal depletion of river flow downstream of the diversion structure. Due to the limited amount of Project water

used, this is the only alternative which would not significantly impact farming and reservoir recreation. Alternative D2 would have no additional significant impacts. By augmenting seasonal low flows below La Grange Dam, Alternative D3 would result in significant beneficial impacts to water resources, biological resources (fisheries) and river recreation.

The No-Project Alternative would result in substantial changes in the existing water supply system. Well abandonment and/or wellhead treatment of municipal wells with inferior water quality is anticipated on an increasingly frequent basis, based upon recent experience. Substantial numbers of new wells may need to be drilled at some distance from Modesto, necessitating storage tanks and transmission pipelines, similar to the proposed project. Groundwater declines and the trend in deteriorating groundwater quality in the Modesto area would be likely to continue. This would result in significant adverse impacts to water supply and groundwater.