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**Via Messenger**

November 27, 2000

Mr. Harry M. Schueller
Chief, Division of Water Rights
State Water Resources Control Board
1001 I Street, 14th Floor
Sacramento, California 95814

Re: Petition for Extension of Time -- Application 013156, Permit 10478

Dear Mr. Schueller:

Enclosed please find EBMUD's Petition for Extension of Time for Application 013156, Permit 10478, the district's Camanche M&I right, along with a check for $50.00 to cover the applicable fee. EBMUD has met and continues to meet with North San Joaquin Water Conservation District to discuss coordination of our respective petitions for extension of time.

Very truly yours,

Robert C. Helwick
General Counsel
Enclosures

cc. Dennis M. Diemer, General Manager
Ed Steffani, NSJWCD

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State of California
State Water Resources Control Board

# DIVISION OF WATER RIGHTS

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## PETITION FOR EXTENSION OF TIME

WATER USERS:

Application 013156 Permit 10478

Water Code section 1396 requires an applicant to exercise due diligence in developing a water supply for beneficial use. The State Water Resources Control Board (SWRCB), in considering requests for extension of time, will review the facts presented to determine whether there is good cause for granting an extension of time to complete the project. Where diligence in completing the project is not fully substantiated, the SBRCB may set the matter for hearing to determine the facts upon which to base formal action relating to the permit. Formal action may involve:

1. Revoking the permit for failure to proceed with due diligence in completing the project.
2. Issuing a license for the amount of water heretofore placed to beneficial use under the terms of the permit.
3. Granting a reasonable extension of time to complete construction work and/or full beneficial use of water.

**The time previously allowed in your permit within which to complete construction work and/or use of water has either expired or will expire shortly.**

Please check below the action you wish taken on this permit.

☐ The project has been abandoned and I request revocation of the permit.

_____
Signature

☐ Full use of water has been made, both as to amount and season, and I request license be issued.

_____
Signature

☒ The project is not yet complete. I request the SWRCB's consideration of the following petition for an extension of time.

### PETITION FOR EXTENSION OF TIME
### If START of construction has been delayed

Complete items 1, 2, and 3.

1. What has been done since permit was issued toward commencing construction?

_____

_____

_____

2. Estimate date construction work will begin. _____

3. Reasons why construction work was not begun within the time allowed by the permit.

_____

_____



Continued on next page

## PETITION FOR EXTENSION OF TIME
### If construction work is proceeding

If construction work and/or use of water is proceeding but is not complete, an extension of time may be petitioned by completing items 4 through 16. Statements must be restricted to construction or use of water only under this permit.

4. A forty - year extension of time is requested to complete construction work and/or beneficial use of water. (Indicate period of time. Must be consistent with time frame allowed in "Guidelines for considering Petitions for Extensions of Time.")

5. How much water has been used? See Attachment acre-feet/year _____ cfs

6. How many acres have been irrigated? N/A

7. How many houses or people have been served water? 1.3 Million people

8. Extent of past use of water for any other purpose. See Attachment

9. What construction work has been completed during the last extension? Not applicable. This is the first occasion for which EBMUD has requested an extension of time.

10. Approximate amount spent on project during last extension period. $ Not applicable. See above

11. Estimate date construction work will be completed. See Attachment

12. Estimated year in which water will be fully used. See Attachment

13. Reasons why construction and/or use of water were not completed within time previously allowed. See Attachment

**If the use of water is for municipal (including industrial) and irrigation supplies and is provided or regulated by public agencies and use of the water has commenced, but additional time is needed to reach full use contemplated, the following information must be provided.**

14. What water conservation measures are in effect or feasible within the place of use? See Attachment

15. How much water is being conserved or is it feasible to conserve using these conservation measures? _____ acre-feet per annum. See Attachment

16. How much water per capita is used during the maximum 30-day period? _____ gpd. See Attachment

*I (we) declare under penalty of perjury that the above is true and correct to the best of my (our) knowledge and belief.*

Dated: NOVEMBER 27, 2000, at Oakland, California

Robert C. Helwick — Signature(s) — Office of the General Counsel — (510) 287-0168 Telephone No.

**NOTE:** A $50 FEE MADE PAYABLE TO THE State Water Resources Control Board must accompany a petition for an extension of time. An $850 feet made payable to the Department of Fish and Game must accompany all but the first petition for an extension of time.

4. As a municipal water supplier, East Bay Municipal Utility District makes every effort to protect its Mokelumne River appropriative rights for existing and future uses in accordance with Water Code Section 106.5. The District has undertaken significant conservation measures to maximize efficient use of its supply and meet the demands within its service area. The extension of time requested, forty years, allows the District to satisfy the water needs resulting from population increases, while continuing its efforts to conserve water. Recognizing that the District cannot project with certainty what its service area population will be or what water use will be forty years from now, the District anticipates that it may have to seek further extensions of time as necessary to meet the municipal water supply needs of the East San Francisco Bay metropolitan area.

5. Operation of Camanche Reservoir, and the District's Pardee Reservoir, Mokelumne Aqueducts and local storage reservoirs is completely integrated, therefore water use under the District's various water rights is not segregated. Camanche Reservoir is critical to the District's municipal supply as it is operated to meet downstream Mokelumne River obligations that must be met prior to District diversions from the Mokelumne River. Maximum reservoir storage and maximum system diversions are provided below.

   The maximum quantity of water directly diverted (December 1 through July 1) through the Mokelumne aqueducts was 472 cfs in June 1997.

   The maximum quantity diverted to storage in Camanche reservoir over the storage season (December 1 through July 1) was 341,730 acre-feet in 1978.

8. Although the District's service area needs have not yet fully been developed, water diverted to and released from Camanche Reservoir has been consistently put to beneficial use by meeting the District's downstream Mokelumne River obligations. These obligations include flood control, recreation, fishery releases, and satisfying the prior rights of riparian landowners and senior appropriators. The District's use of Camanche Reservoir to meet the needs of downstream users and uses enables the District to meet its consumptive water supply needs from deliveries through the Mokelumne Aqueducts.

   The District has also provided water for the following purposes through permanent and temporary changes in the permitted place of use.

**City of Brentwood**

A SWRCB Order, dated January 26, 1983 approved a change in the place of use to include delivery of a water supply to the City of Brentwood. The Order required that delivery be made only after development and continued implementation of a water conservation program or actions. Water was delivered to the City of Brentwood from July 1985 through September 1988. A total of 3,074 acre-feet was delivered to Brentwood to provide a temporary water supply because of high levels of nitrates in its well water supply.

**Contra Costa Water District**

A temporary change in place of use due to transfer of water was approved by the SWRCB on November 20, 1987. The transfer of up to 44 acre-feet of water for use in a prototype water treatment plant located within Contra Costa Water District was allowed. A total of 31 acre-feet was transferred to Contra Costa Water District in 1987.

A temporary change in place of use and the transfer of up to 5,000 acre-feet of water to Contra Costa Water District was issued by the SWRCB on October 22, 1985. A total of 2,474 acre-feet was transferred to Contra Costa Water District in November and December of 1985.

**Conjunctive Use Pilot Test**

A SWRCB Order authorizing temporary changes in place of use and purpose of use was granted on October 3, 1997. The District provided 379 acre-feet of Mokelumne River water to the East San Joaquin Parties Water Authority for a conjunctive use pilot project. The test period was from January 13, 1998 through September 23, 1998.

11. As a municipal supplier, the District continually upgrades and expands its water distribution system to meet the increasing water demands of the growing population within the District's service area. For example:

- The District is implementing a $189 million, 10-year, Seismic Improvement Program to strengthen the water distribution system and minimize damage to critical infrastructure from a major earthquake on the Hayward, Calaveras or Concord faults in the East Bay.

- In July 2000, the District certified an EIR for the Walnut Creek-San Ramon Valley Improvement Project (WC-SRV Project) and approved the Project. The approximately $184 million Project includes expansion of treatment and treated water storage capacity at the Walnut Creek Water Treatment Plant (WTP), construction of 4.4 miles of large-diameter transmission pipeline from Walnut Creek to Alamo, expansion of the Danville Pumping Plant in Alamo, and flow control improvements at the Lafayette WTP. The WC-SRV Project also includes a number of improvements within individual pressure zones in the service area.

In addition to improvements in the service area, the District continues to upgrade the Camanche Reservoir facilities and raw water delivery system to maximize the beneficial use of Mokelumne River water. For example:

- The District is carrying out a $39.8 million Mokelumne Aqueduct Seismic Improvement Project to upgrade the District's aqueduct system and increase the reliability of the District's water supply following a major earthquake. The survival of the Mokelumne Aqueducts in an earthquake is essential to the District's ability to deliver water to its customers.

- The District is investing up to $12.5 million to upgrade and expand the Mokelumne River Fish Hatchery. This investment demonstrates the District's continuing commitment to work with the California Department of Fish and Game to provide mitigation for the Mokelumne River fishery and to provide additional opportunities for enhancement of the fishery through a partnership agreement among EBMUD, U.S. Fish and Wildlife Service, and the California Department of Fish and Game.

- The District installed and began operating in 1993, a state-of-the-art Hypolimnetic Oxygenation System (HOS) to add pure oxygen to the Camanche Reservoir hypolimnion. The HOS increases the dissolved oxygen concentration and prevents the formation of hydrogen sulfide in the Camanche Reservoir hypolimnion.

12. The year in which the water will be fully used cannot be forecasted with certainty at this time. Although growth in the District's service area is predicted, several changing and competing factors complicate the District's ability to precisely determine the time when the water will be fully utilized.

The factor most influencing water use is population. The State of California Department of Finance (DOF) has projected the population of California to increase 70% by the year 2040. The DOF also estimates the population of Contra Costa and Alameda counties, the two counties encompassing the District service area, will increase 41% and 36% respectively by the year 2040. Although these figures do not indicate the specific growth in the District service area, they do indicate the trend towards increasing population.

Land use is another significant factor in water use. The District does not have jurisdiction over the land use planning decisions of the local cities and counties within its service area, but those decisions do impact the amount of water the District may be obligated to supply.

Estimating future water use is further complicated by the effect of water conservation and reclamation programs. The District has taken a leadership role in promoting the state policy of encouraging water conservation and has implemented extensive programs and policies (see response to Question 14) to conserve its fresh water resources. With these programs and policies the District's water consumption has been significantly lower than it would have otherwise been.

The extent to which these programs will delay water use in the future is difficult to predict. As water efficiency measures are implemented there is a "hardening" of demand. In other words, as District customers install water efficient fixtures and change habits in response to District promotion of conservation, their ability to further reduce water use in the future, to levels below their already reduced levels, becomes constrained. This demand hardening makes it more difficult to achieve future water use reductions and leads to uncertainty in long-term demand projections.

Given the significant uncertainty of what may arise 40 years from now with respect to future water use, population growth in the service area, the impact of land use decisions, and the long-range effect of water conservation and reclamation measures, it is reasonable and prudent that the District's extension request be granted.

The water supply for municipal areas must keep a step ahead of the needs of its inhabitants. For this reason, municipal supplies must be secured in amounts that exceed present needs and allow for future growth. California has recognized the special circumstances of a municipality in meeting demand in Water Code §106.5 which states, " It is hereby declared to be the policy of this State that the right of a municipality to acquire and hold rights to the use of water should be protected to the fullest extent necessary for existing and future uses." The District is acting in accordance with the state policy set forth in Water Code §106.5 to protect its water rights for existing and future uses, and at the same time is ensuring that no waste of the valuable resource occurs.

13. While the District's water use has generally increased since the issuance of the permit, the growth of water use in the District has been slowed in part by the District's comprehensive water efficiency measures that maximize the beneficial use of the resource. These measures are listed below and are more fully described in the response to Question 14.

- An ongoing program to minimize distribution system losses including corrosion control, leak detection, and regular pipe replacement
- Water service regulations to encourage efficient water use and prohibit its waste
- Metering of water usage and use of an inclining rate structure to encourage efficient water use
- A Water Reclamation Master Plan and associated Program
- A Water Conservation Master Plan and associated Program

These water efficiency measures have been effective in reducing the District's historic and current water demand and will continue to limit demand in the long-term.

Over and above the long-term water savings from water efficiency measures, the District has further reduced water use by instituting a Drought Management Program (DMP) in years with forecasted water supply shortfall. The DMP includes measures to reduce water use up to 25%, one of the highest reduction goals among water agencies. Water demand is typically at peak levels during drought years, however, by implementing the DMP in 1977 and from 1987 to 1991, the District suppressed water use during those periods when demand would otherwise be highest. For example, in 1977 the DMP resulted in a 39% reduction in water use, and during 1987-1991, water use was reduced between 12 to 25%.

In summary, the District has made and continues to make strong and successful efforts in long-term water use efficiency and additional demand reduction during droughts. These efforts have slowed the growth of demand and suppressed peak demands. Yet despite the District's water saving policies and programs, the District's demand for water will increase as the population and economy within the service area continue to grow.

14. The District has conserved its water supply and encouraged conservation among its customers since the early 1970's. The District's conservation efforts are summarized below.

**Water Distribution Improvements**

To prevent distribution system water losses, the District has ongoing corrosion control, leak detection, and pipe and meter replacement programs. With these programs the District's unaccounted-for-water (i.e., leaks, fire-fighting water losses) is substantially less than the national average.

**Tiered Water Rates**

The District uses an inclining rate structure for single-family residential customers to fairly distribute cost and encourage conservation. Water use above a base allocation for residential accounts is billed at increasing rates at incremental steps.

**Reclamation**

The District recognizes the benefits of reclaiming wastewater as a means to conserve freshwater resources and has investigated and implemented reclamation projects. The District uses reclaimed water at its water and wastewater treatment plants and provides recycled water to seven large irrigation customers and one large industrial customer. The District is also actively pursuing an additional recycled water supply of 8 MGD (8960 acre-feet). A summary of the District's reclamation to date is provided in response to Question 15, Table 2.

## Water Conservation Program

In 1994, the District developed a Water Conservation Master Plan (WCMP) to guide District efforts in meeting its long-range water conservation goals. The WCMP evaluated and outlined water conservation elements to be included in the District's Water Conservation Program. The Water Conservation Program continually adapts to new information to ensure resources are invested to achieve the greatest amount of conservation. The current Water Conservation Program elements are divided into five categories; audits, rebates and other incentives, regulatory measures, education, and support. These Program elements are outlined in Table 1 and described below.

**Table 1**
**Water Conservation Program Elements**

| Audits | Rebates/Incentives | Regulatory Measures | Education | Support |
|---|---|---|---|---|
| Single-family Residential | Toilet Rebates | Water Waste Ordinance | Water Education Center | Reports |
| Multi-family Residential | Clothes Washer Rebates | Landscape Standards | Direct Mailings and Program Specific Marketing | Research |
| Large Landscape Irrigation | Large Landscape Irrigation Upgrade Rebates | Plan Review | Booths at Community Events and Trade Shows | Committees and Associations |
| Industrial | Industrial, Commercial and Institutional Rebates | | Articles in Chamber Newsletters and Trade Magazines | Identification of Funding Sources |
| Commercial | Residential Landscape Rebates | | Publications | Cooperative Efforts |
| Institutional | | | Brochure Distribution Stands | Program Evaluation |
| | | | Weather Stations & Evapotranspiration Hotline | |
| | | | Demonstration and School Gardens | |
| | | | Workshops and Conferences | |

Audits

District staff offers and conducts water use audits (both indoor and outdoor) for all customer groups; single and multi-family residential customers, commercial, industrial, and institutional customers, and large landscape irrigation customers to determine water use practices, identify areas for increased efficiency and to describe District conservation education and incentive programs.

Rebates and Other Incentives

The District provides a number of financial incentives through rebates to encourage customers to switch to more efficient water use practices. Rebates are currently offered for installing ultra-low flow toilets, installing water efficient clothes washers, retrofitting landscapes and irrigation systems, and for improving efficiency in commercial, industrial and institutional uses.

Regulatory Measures

The District currently has three regulatory measures in effect, a water waste regulation, landscape standards for new development and plan review for new water service applicants. These measures are briefly described below.

The District's Water Waste Ordinance, Section 29, prohibits the wasteful use of water. District staff routinely investigates and responds to complaints of water waste by performing an inspection of the offending site and contacting the customer in person, by phone or by mail.

Landscape standards were developed as a condition of water service for developments in the Crow Canyon Corridor. Homeowners were notified of the landscape requirement and the compliance process as they moved in. Nearly 2,500 homes, including the common areas in 10 developments were subject to the landscape standards.

Plan reviews are conducted by District staff in determining required services to meet demand. District staff also offers landscape and irrigation design reviews upon request to promote conservation best management practices for applicants.

Education

Education is key to changing customer attitudes and behavior to achieve conservation water savings. The District's water conservation education activities include an interactive Water Education Center, program specific marketing and direct mailings, booths at community events and trade shows, articles in Chamber newsletters and trade magazines, publications, brochure distribution stands, weather stations and an evapotranspiration information hotline, demonstration gardens, school gardens, workshops and conferences. These activities increase public awareness about the value of water, encourage customers to take steps to increase water use efficiency, and provide the information customers need to implement conservation measures.

Support

The District supports activities that promote the implementation of the Water Conservation Program. These activities include; consumption monitoring, water use studies, new technology research, committee and association work, identification of conservation funding sources, areas of cooperative efforts, and preparation of internal and external reports.

15. Current estimates of water conserved and reclaimed are provided in Table 2. The District continues to refine its estimation of these quantities.

**Table 2**
**Summary of Conserved Water**

| Year | Quantity of Water Conserved (AF) | Quantity of Water Reclaimed (AF) |
|---|---|---|
| 1981 | 51,112 | 962 |
| 1982 | 56,888 | 752 |
| 1983 | 56,499 | 781 |
| 1984 | 39,849 | 642 |
| 1985 | 31,702 | 889 |
| 1986 | 31,416 | 4,453 |
| 1987 | 53,312 | 2,770 |
| 1988 | 80,037 | 2,859 |
| 1989 | 81,458 | 2,969 |
| 1990 | 46,941 | 4,568 |
| 1991 | 68,437 | 6,752 |
| 1992 | 60,183 | 8,726 |
| 1993 | 51,574 | 7,683 |
| 1994 | 50,500 | 7,582 |
| 1995 | 55,042 | 7,857 |
| 1996 | 53,101 | 7,567 |
| 1997 | 34,666 | 8,861 |
| 1998 | 55,958 | 6,747 |
| 1999 | 51,675 | 7,566 |

16. The District does not have per capita water use data. Table 3 provides the number of customer accounts and consumption for the District's thirteen customer categories.

**Table 3**
**Water Use by Customer Category, Maximum Month – August 1987**
**Thousand Gallons**

| Customer Category | 1987 Accounts[1] | August 1987 Consumption[1] |
|---|---|---|
| Agriculture, Construction | 532 | 35,184 |
| Food Processing | 268 | 167,041 |
| Wood, Paper, Chem | 776 | 94,242 |
| Petroleum | 54 | 503,133 |
| Metal, Plate, Clay | 998 | 174,460 |
| Transportation, Communication | 1,853 | 100,073 |
| Electric, Gas, Steam | 164 | 13,289 |
| Wholesale, Resale | 14,104 | 422,783 |
| Cemetery, Park Golf | 3,975 | 1,733,985 |
| Multi-Family Units | 26,430 | 1,122,062 |
| Laundry, Lab, Autos | 2,163 | 167,623 |
| Schools, Hospitals | 4,317 | 392,062 |
| Private Homes | 289,507 | 3,613,217 |
| **Total Metered Water Use** | 345,141 | 8,539,154 |
| **Unaccounted for Water and District Use[2]** | | 107,482 |
| **Total** | | 8,646,636 |

(1) Water Consumption Information System 1987, all pressure zones
(2) Sum of Unaccounted for Water and District Water Use:
Water Supply Section Statistical Reports for Fiscal Year 1988