

# 2015 AGRICULTURAL WATER MANAGEMENT PLAN



July 2017

# **Prepared by Stockton East Water District**

**Pursuant to Water Code Section 10826**

## Preface

Agricultural Water Management Plan was prepared by Stockton East Water District following the requirements of the Water Conservation Act of 2009 (SB x7-7) and Governor Brown's April 1, 2015 Executive Order B-29-15. SB x7-7 requires all agricultural water suppliers greater than 25,000 acres in size to prepare and adopt an Agricultural Water Management Plan as set forth in the California Water Code and the California Code of Regulations on or before December 31, 2015 and every five years thereafter. Governor Brown's April 1, 2015 Executive Order B-29-15 directs agricultural water suppliers to develop a drought management plan and incorporate it into the Agricultural Water Management Plan by the December 31, 2015 deadline.

The resources used to develop this plan were the 2015 Agricultural Water Management Plan Guidebook and Governor Brown's April 2015 Executive Order. The resolution of adoption is provided on the following pages. In 2014, Stockton East Water District received approval for its Water Management Plan from U.S. Bureau of Reclamation. The contents of the federal plan were used in the preparation of this plan in accordance to criteria established by DWR.

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**Glossary of Acronyms and Terms**

<b>Acronym or Term</b>	<b>Meaning</b>
AB 3030	Assembly Bill 3030
ac-ft	Acre-Feet (1 AF = 352,851 gallons)
AWMP	Agricultural Water Management Plan
BMP	Best Management Practice
CALSIM	California Water Resources Integrated Modeling System
CCWD	Calaveras County Water District
CIMIS	California Irrigation Management Information System
CRHCP	Calaveras River Habitat Conservation Plan
CSJWD	Central San Joaquin Water Conservation District
CWC	California Water Code
DJW WTP	Dr. Joe Waidhofer Water Treatment Plant
DWR	California Department of Water Resources
EBMUD	East Bay Municipal Utility District
ETc	Crop Evapotranspiration
EWMP	Efficient Water Management Practice
Executive Order	Executive Order B-29-15, By Governor Brown, April 1, 2015
GWMP	Eastern San Joaquin Groundwater Basin Groundwater Management Plan, Multi Agency, Adopted in 2005
IPCC	Intergovernmental Panel on Climate Change
IRWMP	Integrated Regional Water Management Plan
ITRC	Irrigation Training and Research Center
MGD	Million Gallons per Day
M&I	Municipal and industrial
Reclamation/USBR	United States Bureau of Reclamation
SCADA	Supervisory Control and Data Acquisition
SBx7-7	Water Conservation Act, Senate Bill x7-7 of 2009
SEWD or District	Stockton East Water District
TAF	Thousand Acre Feet
USACE	United States Army Corps of Engineers
UWMP	Urban Water Management Plan, Adopted in June 28, 2016
USBR WMP	United States Bureau of Reclamation Water Management Plan, Adopted in 2014

## **1 Introduction**

### **1.1 District History and Organization**

Stockton East Water District (SEWD) was formed in 1948 under the 1931 Water Conservation Act of the State of California. SEWD was originally organized as the Stockton and East San Joaquin Water Conservation District, an independent political subdivision of the state government. SEWD is responsible for acquiring a supplemental water supply and developing water use practices that will secure a balance between SEWD's surface and groundwater supplies.

From 1948 to 1963, SEWD focused its efforts on water resource planning by evaluating groundwater conditions and determining requirements for supplemental water. These intensive efforts on the part of SEWD and other local agencies resulted in the construction of New Hogan Dam in 1964. SEWD signed a contract for supplemental surface water with the United States Bureau of Reclamation (Reclamation) in 1970 (Attachment A). Also in 1970, SEWD and Calaveras County Water District (CCWD) signed a contract that assigned SEWD 56.5 percent of the yield from New Hogan Reservoir (Attachment A).

From its inception until 1962, SEWD's financial structure was dependent upon property taxes. In 1963, the Governor of California signed a bill establishing SEWD's right to levy groundwater use fees and surface water charges. SEWD used the additional revenue to contract for New Hogan Reservoir water. About this time, SEWD began registering groundwater wells within the district, while check dams were built on the Calaveras River and Mormon and Mosher Sloughs to control surface irrigation water and promote groundwater recharge. In addition, SEWD became actively involved in the pursuit of projects to mitigate significant groundwater issues, which included declining aquifer levels, pumping depressions under urban Stockton, and the continuing threat of saline intrusion in wells near the Delta.

In 1971 by Special Act of the Legislature, SEWD boundaries were expanded from its original 79,500 acres to approximately 114,000 acres to include the entire Stockton urban area and the District was granted additional powers to oversee the groundwater basin. Plans were initiated for a 30 million gallon per day (MGD) drinking water treatment plant. In 1975, a district-wide election resulted in the approval of a \$25 million bond to fund the new plant. The Dr. Joe Waidhofer Water Treatment Plant (DJW WTP) was constructed in 1977 and began operation in 1978. In 1979, the Independent Benefit Commission concluded that the new drinking water treatment plant was a benefit to Stockton's planning areas. In 2005, SEWD annexed an additional 27,000 acres into the district. Today, SEWD's area encompasses approximately 143,300 acres.

In 1983, SEWD and the Central San Joaquin Water Conservation District (CSJWCD) contracted with USBR for annual allocations of 75,000 and 80,000 acre-feet (ac-ft), respectively, from New Melones Reservoir (Attachment B). Also in 1983, SEWD expanded its surface water irrigation capabilities by constructing the 12,000 gallons per minute Potter Creek Pump Facility to facilitate diversions from New Melones Reservoir.

In 1991, the DJW WTP was expanded to 40 MGD to accommodate increased demand from Stockton's urban areas. Construction of the New Melones Conveyance System, in

anticipation of a new water supply from the New Melones Reservoir, was completed in 1994.

In 2005, SEWD implemented a \$7.1 million Efficiency Enhancement Project, which improved the water treatment plant's chemical mixing and settling efficiency and provided delivery of 11 percent more drinking water to the Stockton urban area.

In 2006, SEWD implemented a \$3.8 million upgrade and modernization of its water treatment plant high service pump station. This upgrade allows SEWD to meet the various pumping requirements of its retail customers and increased pump capacity from the Efficiency Enhancement Project. In 2006, SEWD upgraded the WTP to include a parallel 27.6-million gallon per day (MGD) process train north of the existing pretreatment complex for a total treatment capacity of 65 MGD.

Under the current Reclamation operation of New Melones Dam, SEWD and CSJWCD are provided with up to 155,000 ac-ft of water from New Melones Reservoir annually. Water allocation amounts are based on the March-September water forecasted inflow and the February end of month storage in New Melones each year.

## **1.2 Requirements of SB x7-7**

The Water Conservation Bill of 2009 (SBx7-7) amends the California Water Code (CWC) Division 6 with regards to agricultural and urban water management by adding Part 2.55 and replacing Part 2.8. Specifically, SBx7-7 requires all agricultural water suppliers to prepare and adopt an AWMP as set forth in the Bill on or before December 31, 2012. The plan must be updated by December 31, 2015 and then every 5 years thereafter. Additionally, the Bill requires suppliers to implement certain efficient water management practices (EWMPs).

Specifically, under CWC section §10608.48, all agricultural water suppliers are required to implement the following critical EWMPs:

- 1) Measure the volume of water delivered to customers with sufficient accuracy to comply with subdivision (a) of §531.10.
- 2) Adopt a pricing structure for water customers based at least in part on quantity delivered.

Further, suppliers are required to implement the following conditional EWMPs, if they are locally cost effective and technically feasible:

- 1) Facilitate alternative land use for lands with exceptionally high water duties or whose irrigation contributes to significant problems, including drainage.
- 2) Facilitate use of available recycled water that otherwise would not be used beneficially, meets all health and safety criteria, and does not harm crops or soils.
- 3) Facilitate financing of capital improvements for on-farm irrigation systems.
- 4) Implement an incentive pricing structure that promotes one or more of the following goals:
  - a) More efficient water use at the farm level.
  - b) Conjunctive use of groundwater.
  - c) Appropriate increase of groundwater recharge.
  - d) Reduction in problem drainage.

- e) Improved management of environmental resources.
- f) Effective management of all water sources throughout the year by adjusting seasonal pricing structures based on current conditions.
- 5) Expand or pipe distribution systems, and construct regulatory reservoirs to increase distribution system flexibility and capacity, decrease maintenance, and reduce spillage.
- 6) Increase flexibility in water ordering by, and delivery to, water customers within operational limits.
- 7) Construct and operate supplier spill and tailwater recovery systems.
- 8) Increase planned conjunctive use of surface water and groundwater within the supplier service area.
- 9) Automate canal structures.
- 10) Facilitate or promote customer pump testing and evaluation.
- 11) Designate a water conservation coordinator who will develop and implement the water management plan and prepare progress reports.
- 12) Provide for the availability of water management services to water users. These services may include, but are not limited to, all of the following:
  - a) On-farm irrigation and drainage system evaluations.
  - b) Normal year and real-time irrigation scheduling and crop evapotranspiration information.
  - c) Surface water, groundwater, and drainage water quantity and quality data.
  - d) Agricultural water management educational programs and materials for farmers, staff, and the public.
- 13) Evaluate the policies of agencies that provide the supplier with water to identify the potential for institutional changes to allow more flexible water deliveries and storage.
- 14) Evaluate and improve the efficiencies of the supplier's pumps.

Agricultural water suppliers not in compliance with the law are not eligible for state water grants or loans. Section 7 of this document provides details on the federal version of EWMPs. A summary of the status of the EWMPs is included in section 8 of this document.

### **1.3 Other Water Management Activities**

In 1995, SEWD adopted a Groundwater Management Plan (GWMP) in accordance with Assembly Bill 3030 (AB 3030). The goal of the GWMP is to continue the district's efforts to protect existing water supplies, to relieve pressure on the local groundwater basin by seeking supplemental surface water supplies for conjunctive use, and to maintain pressure on USBR to meet the contracted delivery amounts for New Melones water.

In 2005, SEWD adopted the Eastern San Joaquin Groundwater Basin Groundwater Management Plan prepared by the Northeastern San Joaquin County Groundwater Banking Authority in compliance with AB 3030 and SB 1938 and pursuant to California Water Code Section 10750 et seq., replacing the 1995 Plan. The comprehensive plan developed by those agencies that overlay the local groundwater basin reviews, enhances, assesses and coordinates existing groundwater management policies, and programs in Eastern San Joaquin County, and develops new policies and programs to ensure the long-term sustainability of groundwater resources in Eastern San Joaquin County. In 2014, SEWD adopted their federally required Water Management Plan. This 5-year

plan was prepared using the United States Bureau of Reclamation (Reclamation) 2011 Standard Criteria for Evaluating Water Management Plans. Reclamation Water Management Plans are required by the Reclamation Reform Act of 1982 and the Central Valley Project Improvement Act of 1992. The Standard Criteria is used by both agricultural and urban contractors of various sizes and complexities.

In 2016, SEWD adopted a Resolution to become a Groundwater Sustainability Agency (GSA) under the requirements of the Sustainable Groundwater Management Act (SGMA). In 2017, SEWD entered into a Joint Powers Agreement forming the Eastern San Joaquin Groundwater Authority to work with other GSAs to prepare a Groundwater Sustainability Plan for the basin under SGMA.

## **2 Plan Preparation**

### **2.1 AWMP Preparation**

This AWMP was prepared in accordance with SBx7-7.

### **2.2 Public Participation**

Public participation in the development of this Plan included:

- Notification via e-mail to the County of San Joaquin and City of Stockton, of SEWD's intent to prepare an Agricultural Management Plan on July 6, 2017;
- Publication in the Stockton Record on July 12, 2017 and July 17, 2017 of the time and place of a public hearing for public review and comment of the draft Plan;
- Posting of the draft Plan on the SEWD's web page on July 11, 2017, including instructions for reviewers to submit comments;
- Posting of the draft AWMP for public review on July 11, 2017;
- Public hearing of the draft Plan at a regularly scheduled Board of Directors meeting on July 25 2017;
- Adoption of the final AWMP at a regularly scheduled Board of Directors meeting on July 25, 2017; and
- Copies of the adopted AWMP to the following parties within 30 days of adoption:
  - City of Stockton and Cal Water
  - County of San Joaquin
  - Cesar Chavez Central Library
  - Local Agency Formation Commission of San Joaquin County
  - California Department of Water Resources
  - California State Library

The public is invited to attend all Board meetings and time is reserved on each agenda for public comments. The District web site ([www.sewd.net](http://www.sewd.net)) posts the agendas of all Board meetings along with the most recent Board minutes, newsletters, and other important information. Comments can be submitted via e-mail. Documentation of public participation is provided in Attachment M.

SEWD distributes a newsletter biannually to publicize important information. Also, SEWD relies on its staff to keep customers informed of the latest water management information.

### **2.3 Regional Coordination**

SEWD coordinates the operation and maintenance of the District cooperatively with San Joaquin County Flood Control and Water Conservation District, and coordinates with neighboring agencies, as appropriate. The San Joaquin County Flood Control and Water Conservation District Staff, and SEWD have worked cooperatively and adaptively as an ongoing collaborative effort on water management initiatives, programs, and will continue this relationship into the future.

Per Water Code §10821(a) requirements, the District coordinates the preparation of its AWMP with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable. A notice of preparation is sent out, published in the news article, and then a public hearing is held at the District for Public comment.

### 3 Background and Description of SEWD

#### 3.1 District Formation

As described previously, this AWMP has been prepared in accordance with SBx7-7 and by Executive Order B-29-15.

#### 3.2 Size and Location of Service Area

Stockton East Water District is located in San Joaquin County (**Figure 1**) serves agricultural users, and is a wholesale water agency of potable water to retail water suppliers serving the City of Stockton, the California Water Service Company, and San Joaquin County. The District covers 143,000 acres of which between 52,000 to 56,000 acres are irrigated annually. The total population within the District is just under 350,000 (Table 1). Irrigated lands are primarily east of the City of Stockton. Table 1 below shows the population served by the District through the retail water suppliers.

**Table 1. Current and projected 2020 wholesale population.<sup>a</sup>**

Urban Contractors	Wholesale Population	
	Current and Projected	
	2015	2020
City of Stockton <sup>b</sup>	170,417	181,862
Cal Water <sup>c</sup>	170,414	173,676
San Joaquin County <sup>d</sup>	8,184	8,184
Total Population	349,015	363,722

<sup>a</sup>Information taken from the 2015 City of Stockton’s Urban Water Management Plan.

<sup>b</sup>City of Stockton water system population from draft UWMP.

<sup>c</sup>Cal Water population from Water Resources Planning Department Analysis Worksheets for Stockton District, January 2016.

<sup>d</sup>Population within the Lincoln Village and Colonial Heights areas.

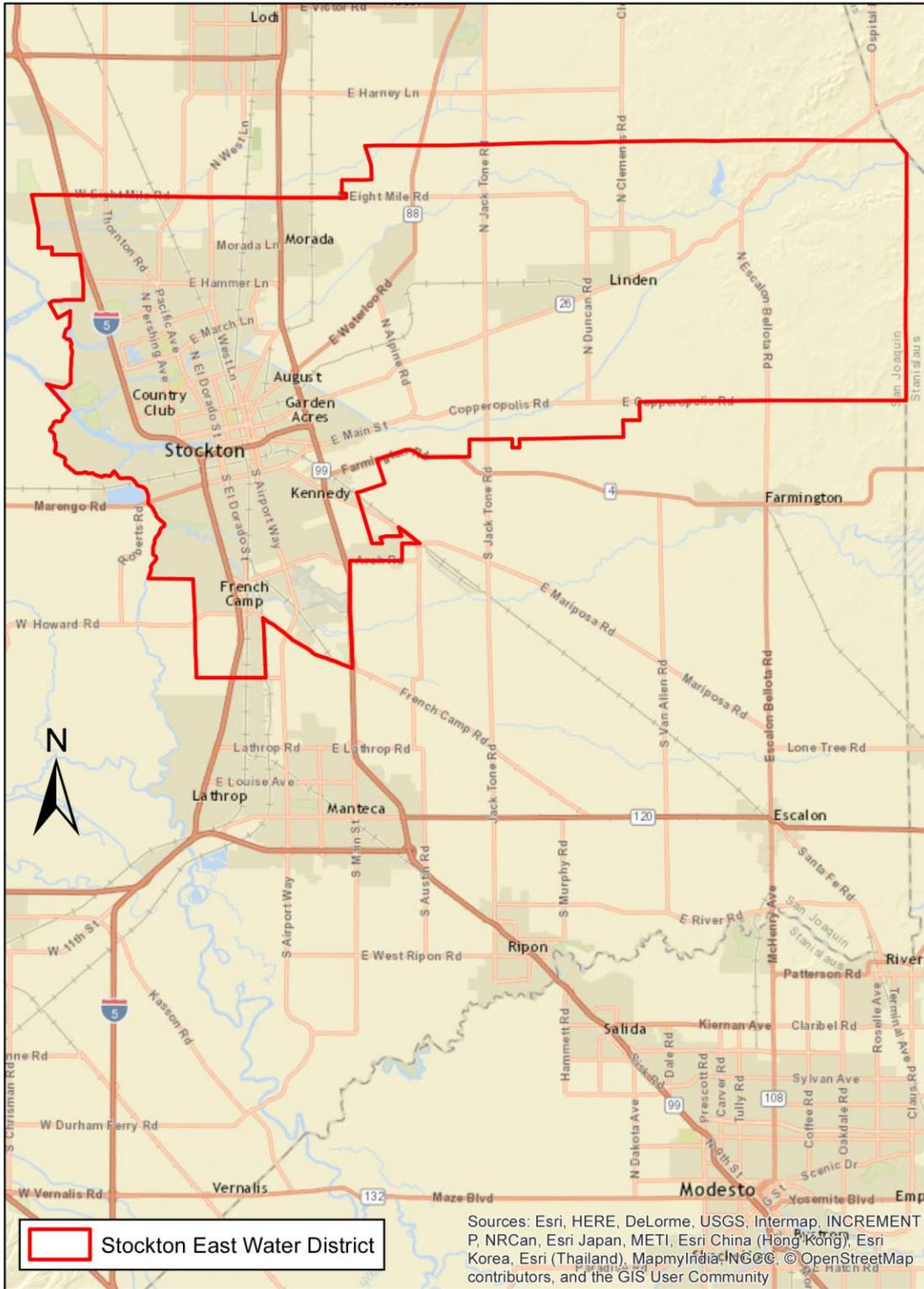


Figure 1. Stockton East Water District service area boundaries.

### **3.3 SEWD Distribution System**

SEWD distributes surface water through unlined natural channels on the Calaveras River, Mormon Slough, Mosher Slough, Potter Creek, and Diverting Canal from which surface water pump water. Irrigation also occurs from the Lower Farmington Canal, a District unlined canal and Peters Pipeline, a distribution pipeline providing water to agriculture and the DJW WTP. SEWD diverts water on the Calaveras River by means of the Bellota Weir that conveys into a 13-mile pipeline to the 65 MGD DJW WTP. Four regulating reservoirs are located at the treatment plant with a capacity of approximately 120 ac-ft. SEWD's distribution system has 17.5 miles of unlined canals and 19 miles of piped conveyance. In addition, there are 64 miles of natural waterways and flood control canals. See Attachment C for a detailed distribution system map.

### **3.4 Terrain and Soils**

SEWD is located on the floor of the San Joaquin Valley in San Joaquin County with the City of Stockton lying at its western end. The land slopes gently upward as it extends to the east, comprised of basin soils (Figure 2) recent alluvial fans, and flood plain soils to an elevation of approximately 100 feet at the edge of the foothills of the Sierra Nevada. Table 2 lists soil types greater than 1,000 acres of area within the District. The eastern boundaries of SEWD are bordered by the adjoining foothills, which rapidly narrow the width of the District to the extent of the irrigable land lying along the Calaveras River within the foothills. SEWD extends along the Calaveras River for approximately 8 to 9 additional miles to the County line, between Calaveras, Stanislaus, and San Joaquin Counties, rising in elevation to approximately 170 feet.

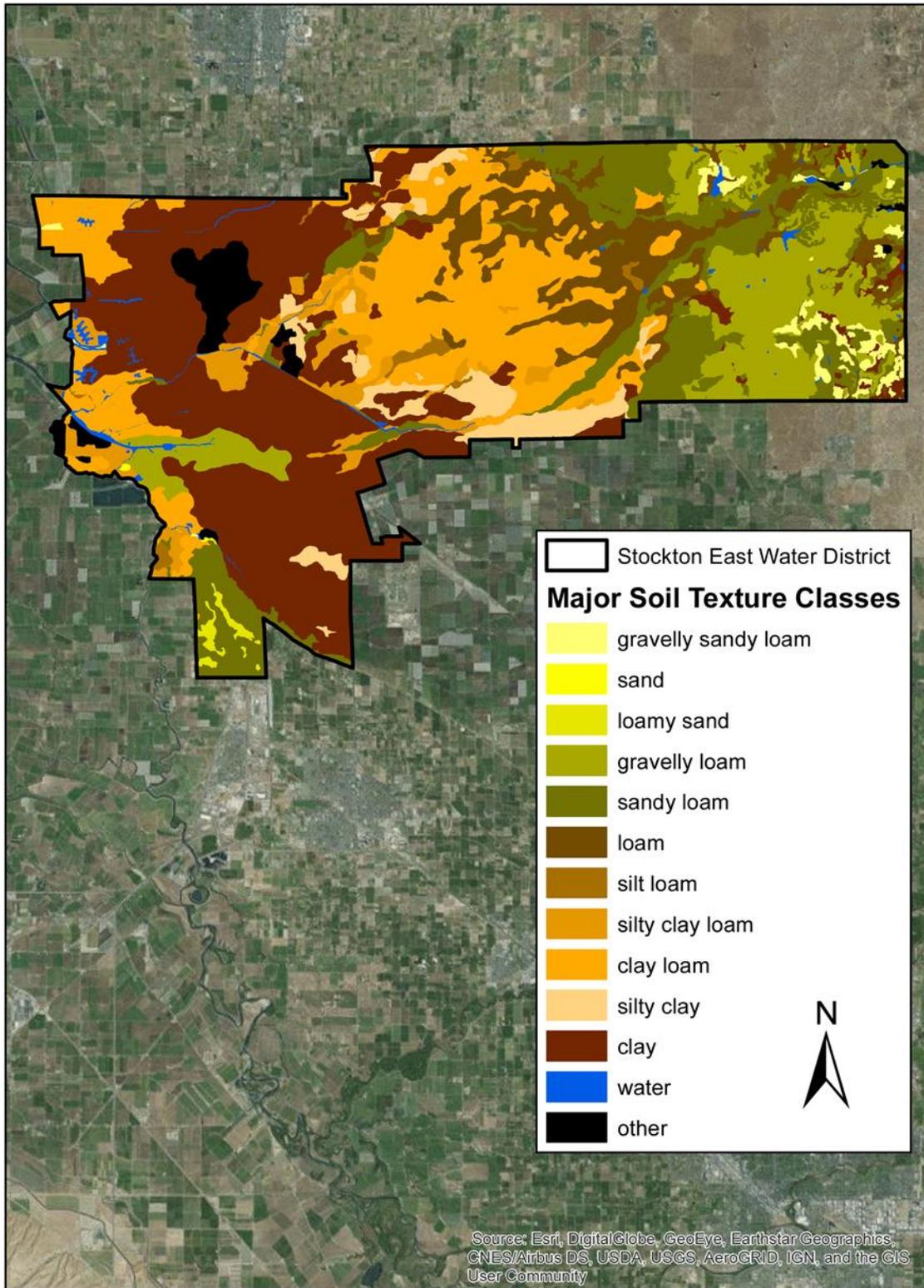


Figure 2. Major soil texture classes within Stockton East Water District service area boundaries.

**Table 2. Soil map units representing areas greater than 1,000 acres within SEWD.**

<b>Map Unit Name</b>	<b>Acres</b>
Archerdale clay loam, 0 to 2 percent slopes	12,439
Cogna loam, 0 to 2 percent slopes	11,953
Redding gravelly loam, 0 to 8 percent slopes, dry, MLRA 17	8,079
Finrod clay loam, 0 to 2 percent slopes	6,459
Hollenbeck silty clay, 0 to 2 percent slopes	5,495
Stockton clay, 0 to 2 percent slopes	4,388
Pentz sandy loam, 15 to 50 percent slopes	3,443
Columbia fine sandy loam, drained, 0 to 2 percent slopes	3,164
Redding gravelly loam, 1 to 30 percent slopes, dry, MLRA 17	2,185
San Joaquin sandy loam, 0 to 2 percent slopes	2,161
San Joaquin sandy loam, 2 to 5 percent slopes	1,958
Jacktone clay, 0 to 2 percent slopes	1,896
Galt clay, 0 to 1 percent slopes, MLRA 17	1,887
Vignolo silty clay loam, 0 to 2 percent slopes	1,830
Pentz-Redding complex, 2 to 15 percent slopes	1,736
Boggiano clay loam, 0 to 2 percent slopes	1,689
Keyes-Redding complex, 2 to 8 percent slopes	1,645
Keyes-Bellota complex, 2 to 15 percent slopes	1,616
Pentz-Bellota complex, 2 to 15 percent slopes	1,406
Cogna fine sandy loam, 0 to 2 percent slopes, overwashed	1,399
Peters clay, 2 to 8 percent slopes	1,223
Stockton silty clay loam, 0 to 2 percent slopes, overwashed	1,072

### 3.5 Climate

SEWD is located in the heart of the fertile Central Valley of California. Based on the historical data (Table 3) obtained from the California Irrigation Management Information System (CIMIS) and the Western Regional Climate Center (WRCC), the District’s service area average minimum and maximum monthly temperature ranges from 37 to 95 °F. Average annual rainfall is normally approximately 15 inches. Table 3 summarizes the District’s climate conditions in representative areas based on the CIMIS and WRCC databases based on monthly averages of historic information.

**Table 3. Precipitation, temperature, and reference evapotranspiration from 1981 to 2015.**

Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Manteca (CIMIS Station No. 70, WRCC Station No. 045303) <sup>a</sup>											Elevation: 40 feet		
Average ETo (in)	1.11	1.92	3.53	5.05	6.78	7.71	7.96	7.03	5.15	3.37	1.67	1.01	52.3
Max Temp. (°F)	53.7	61.1	66.3	72.4	80.9	88.6	93.2	91.5	87.7	77.7	61.1	53.8	--
Min Temp. (°F)	36.3	39.3	42.1	45.2	50.5	55.9	59.2	58.5	55.9	49.2	40.4	35.4	--
Precipitation (in)	1.65	1.35	1.52	0.95	0.21	0.09	0.12	0.23	0.24	0.97	1.58	1.51	10.4
Stockton Metro Airport (WRCC Station No. 048558) <sup>b</sup>											Elevation: 20 feet		
Max Temp. (°F)	53.7	60.6	65.9	72.8	81	88.5	94.2	92.7	88.3	78.3	64.4	54	--
Mini Temp. (°F)	37.6	40.4	42.6	46.1	51.6	56.9	60.4	59.7	57	50.2	42.2	37.5	--
Precipitation (in)	2.8	2.24	2.03	1.14	0.41	0.1	0.03	0.04	0.25	0.73	1.71	2.3	13.8
<sup>a</sup> Period of record: 1971 to 2000													
<sup>b</sup> Period of record: 1948 to 2015													

Microclimates within the service area are primarily based on elevation. Most of the Stanislaus River watershed lies in the upper elevations (over 7,000 ft mean sea level) of the Sierra Nevada, where there is abundant snowmelt. The headwater elevations in the Calaveras River watershed are about 5,000 ft mean sea level, and precipitation throughout most of the watershed is rarely in the form of snow. Because of the lack of snow storage in the Calaveras River watershed, New Hogan Dam operations are more difficult, since water releases are more frequent for flood control purposes, and not replenished by spring snowmelt.

### 3.6 Operating Rules and Regulations

SEWD maintains rules and regulations necessary for carrying out the provisions of the Special Act creating the District. Rules and regulations cover duties of the general management, employment, allocation of water, waste of surface water, maintenance, surface water diversions, land access, and enforcement and modification of rules.

The following is a summary of SEWD’s agricultural water allocation policy. See Attachment D for more detailed information.

Riparian right users have first call on up to 13,000 acre feet of water from New Hogan Reservoir pursuant to a settlement agreement. Through contract, the urban area is guaranteed 20,000 ac-ft of water if supplies are available. Water is then allocated to all other surface water users.

The agricultural water shortage plan for dry year or drought conditions is described below. As Water Master of New Hogan Reservoir, SEWD assesses the water supply by April of each year. A sufficient volume to supply enough water for a full irrigation season is about 152 TAF to 161 TAF, based on 3 foot per acre irrigation practice for primary crops grown in the area within the district boundary. New Hogan generally has sufficient water to withstand two to three dry years.

As an initial assessment, if a water year is identified as a dry year, SEWD asks its customers for voluntary reductions in use. If a second subsequent year is identified as a dry year, SEWD still requests voluntary reductions, but identifies these reductions as critical. A third subsequent dry year may result in continued voluntary reductions, or may require mandatory reductions SEWD makes this determination at the beginning of the water year.

The District informs its customers of the available water supply, and any need for reductions, through its newsletter, as-well-as postcard reminders and the SEWD website. A final option is to allow diversions only by riparian users and the water treatment plant. In all water years, SEWD requires that its customers call the District in advance of diverting water, so that SEWD can adjust releases at the dam.

Customers are required to provide the following information 24 hours in advance of the diversion: location of diversion, name of owner or operator, beginning diversion time, pumping rate, and ending diversion time. In non-dry years, this request is voluntary. In dry years, the advance notice is mandatory, and the District may enforce penalties on customers who do not advise the District prior to their water use.

The postcard reminds customers of this penalty and official and actual lead times necessary for water orders and shut-off (agricultural only). In 2014, SEWD changed its voluntary notification policy to be mandatory. The District requires for a 48-hour notice. See rule 120 in Appendix D for additional details.

Policies cover return flows (surface and subsurface drainage from farms) and outflow (agricultural only). Soils within SEWD boundaries are permeable, so most irrigation tailwater penetrates rapidly beyond the root zone of the crops, and presents no problems during the irrigation season. Some drainage water collects in open farm ditches and flows to natural waterways where it is reused for irrigation. Present drainage practices present no problems to agriculture.

Transfer water policy is in the SEWD Special Act under Section 6. The policy specifies that SEWD can sell water outside the district, as long as the SEWD water users' needs are met first, and water is available. Customers are not allowed to transfer water to other users within the District.

### **3.7 Water Measurement**

Over time SEWD's has improved water measurement to support efficient management of the District's water resources and to support water resources planning. The basic approach is to meter all incoming flows and deliveries. In addition, outflows are monitored to prevent spill. The following sections discuss boundary and delivery measurement.

### **3.7.1 Boundary and System Flow Measurement**

Most of the irrigation water in SEWD is from the New Hogan Reservoir and is provided, on demand, to the best of SEWD's ability and tail end losses are closely monitored. In an average or below average water year, SEWD operates the irrigation water to minimize or prevent any tail end loss. SEWD's mandatory water ordering system and on-demand operations have prevented spills from over-releases, as well as tailwater from over-irrigation.

SEWD measures incoming flow from Goodwin Reservoir and Farmington Dam with ultrasonic meters, and at the DJW WTP with a venturi meter. The USACOE maintains a stilling well for calculating flows out of New Hogan Reservoir (Table 4).

Due to the supervisory control and data acquisition (SCADA) system, there is no loss of SEWD water that is under District control. In above average water years, the irrigation system is operated to ensure maximum recharge opportunities and minimize end of year releases required to evacuate flood control storage space in New Hogan. Wetter years, such as 2005 and 2006, result in higher system end loss. SEWD has no formal agricultural spill recovery system, but with grant funding through a Reclamation 2025 Challenge Grant, is implementing the SCADA system in the agricultural distribution system to help recover spills and minimize the limited system losses.

SEWD is improving its monitoring system to reduce spill and increase efficiency on the Calaveras River, Mormon Slough, Mosher Slough, Potter Creek, and at the Diverting Canal. It is estimated these improvements will ultimately conserve up to 3,600 ac-ft of water in an average or below average water year, which would then be available for agriculture, municipal and industrial, or recharge uses. The Project will enhance water supply reliability for SEWD and improve conditions in the Eastern San Joaquin County Groundwater Basin, which is designated as being in a state of critical overdraft (DWR 1980) and is subject to saline intrusion. The SCADA system remotely monitors 12 sites at key locations within the water distribution system and provides off-site water gate control at three locations. The system includes one flow monitoring and eleven, pool-level, monitoring sites.

At diversion turn out gates, Doppler radar type meters are used from the following manufacturers: MACE, SON TEK, and Gray Line. In addition to the Doppler style meters, the Bellota pipeline outflow at SEWD WTP is metered with a Rosemount venturi style flowmeter. The District employs field-metering staff to keep accurate records of each irrigation outlet calibration, and monitor the meters at the Bellota 54-inch pipe and at the DJW WTP on a daily basis.

**Table 4. Incoming flow measurement locations.**

<b>Incoming Flow Location Name</b>	<b>Physical Location</b>	<b>Type and Manufacturer of Measurement Device</b>	<b>Accuracy</b>
Goodwin Tunnel Outlets	Goodwin Reservoir	ultra sonic (SON TEK-IQ)	+/- 6% <sup>a</sup>
Farmington Dam Diversion	Farmington Dam	ultra sonic (SON TEK-Arogonaut)	+/- 6% <sup>b</sup>
treatment plant influent	Dr. Joe Waidhofer WTP	venturi	+/- 6% <sup>c</sup>
New Hogan Reservoir	New Hogan Reservoir	stilling well calculation	<sup>d</sup> adjusted per stream flow measurements
New Hogan Conveyance	Bellota Intake	(MACE)	+/- 1%
New Hogan Conveyance	Spill Way at Mormon Slough	(MACE)	+/- 1%

<sup>a</sup> The Goodwin Reservoir measurement device is calibrated four times a year, and maintained monthly.

<sup>b</sup> The Farmington Dam Diversion measurement device is calibrated and maintained four times a year.

<sup>c</sup> The DJT WTP measurement device is calibrated annually.

<sup>d</sup> Owned and maintained by USACOE

### 3.7.2 Delivery Measurement

For customers with a delivery measurement device the District uses propeller meters to measure deliveries on a volumetric basis or hour meters. For the delivery locations without a flow meter the District charges a fixed non-metered rate of 2.8 ac-ft per acre. The fixed rate charges are based on the amount of acres irrigated that are reported by the AG customer to the District.

In 2015, SEWD had a total of 201 agricultural delivery connections of which 191 are measured with McCrometer propeller meters (Table 5) and two are measured with hour meters and use an equation to convert to volume (see section 8.4). The eight connections (Attachment J) without measurement devices have been surveyed for retrofit with meters however, the plumbing configurations of the unmeasured connections do not have room for a measurement device. In the near future, the non-metered connections will be assessed for viable repairs, and to explore other types of measuring devices that could volumetrically quantify deliveries. In the interim, SEWD could make comparisons with the groundwater metering usage for customers who are non-metered and help address self-reporting discrepancies regarding the acreage being irrigated.

Irrigation delivery meters are read from mid-April through mid-October on a monthly basis. SEWD's records contain information on the location, acres irrigated, gate numbers, meter

numbers, water usage, crops irrigated, and miscellaneous information on growers' equipment and water history. The District employs field-metering staff to keep accurate records of each irrigation outlet calibration. Additionally, SEWD is looking into developing an ongoing program that would calibrate each meter every 5-years, so the District is in compliance with "SB- 88 and Emergency Regulation for Measuring and Reporting The Diversion of Water."

**Table 5. Listing of delivery point measurement devices along with associated details for 2015.**

Measurement Type	Number	Accuracy (+/- %) <sup>a</sup>	Reading Frequency (Days)	Calibration Frequency (Months)	Maintenance Frequency (Months)
McCrometer Propeller meter	191	+/- 6%	30	As needed	As needed

<sup>a</sup> New meter technology ensures accuracy +/-6% without the need for field calibration. See example of factory certification in Attachment K.

### 3.8 Water Rate Schedules and Billing

SEWD bills using both fixed and volumetric charges (Table 6). On an annual basis, the District evaluates the sufficiency of rates as-well-as possible increases under its enabling legislation and as otherwise required by California law. Therefore, the District will continue to monitor financial results to anticipate future necessary changes to its rate structure. Rate details are in Ordinance 42 (Attachment D).

**Table 6. Fixed and variable water charges for 2015.**

Fixed Charges			
Source	Charge units (\$/acre)	Units billed during year (acre-feet)	\$ Collected (\$ times units)
Surface water	\$23.00/ac-ft	1,323 ac-ft <sup>a</sup>	\$30,429
Groundwater	\$5.06 <sup>c</sup>	140,105 ac-ft <sup>ad</sup>	\$708,931
Volumetric Charges			
Source	Charge units (\$/ac-ft)	Units billed during year (ac-ft)	\$ Collected (\$ times units)
Surface water	\$23.00/ac-ft	9,953 ac-ft <sup>a</sup>	\$228,919 <sup>b</sup>

<sup>a</sup>Source: SEWD Crop Report.

<sup>b</sup>Actual per general ledger.

<sup>c</sup>Groundwater assessments calculated based on 2.8 ac-ft/ac of irrigated land.

<sup>d</sup>SEWD does not sell agricultural groundwater to its customers; SEWD assesses the use of the wells, based on acreage, as part of their mandate to protect the groundwater supply.

### 3.9 Water Shortage Allocation Policies and Contingency Plan

This section provides an overview of SEWD's water shortage allocation policies. Riparian right users have first call on up to 13,000 of water from New Hogan Reservoir. Through contract, the urban area is guaranteed 20,000 ac-ft of water if supplies are available. Water is then allocated to all other surface water users. The agricultural water

shortage plan for dry year or drought conditions is described below. As Water Master of New Hogan Reservoir, SEWD assesses the water supply by April of each year. A sufficient volume to supply enough water for a full irrigation season is 152 TAF to 161 TAF, based on 3 foot per acre irrigation practice for primary crops grown in the area within the district boundary. SEWD generally has sufficient water to withstand two to three dry years.

If a water year has been identified as a dry year, SEWD asks its customers for voluntary reductions in use. If a second subsequent year is identified as a dry year, SEWD still requests voluntary reductions, but identifies these reductions as critical. A third subsequent dry year may result in continued voluntary reductions, or may require mandatory reductions SEWD makes this determination at the beginning of the water year. The district informs its customers of the available water supply, and any need for reductions, through its newsletter, as well as postcard reminders and the SEWD website. A final option is to allow diversions only by riparian users and the water treatment plant.

In all water years, SEWD requires that customers call the District in advance of diverting water, so that SEWD can adjust releases at the dam. Per Rule 120 (Attachment D) customers are required to provide the following information 24 hours in advance of the diversion: name, phone number, pump id number, diversion rate, beginning date and time, end date and time, and run time, location of diversion, name of owner or operator, beginning diversion time, pumping rate, and ending diversion time. The District may enforce penalties on customers who do not contact the district prior to their water use. Postcards are mailed to all customers to remind them of this penalty. See Attachment D for more detailed information.

For an explanation of SEWD operational management strategies during water short years, refer to the Drought Management Plan (Attachment G). The Drought Management Plan was prepared based on Governor Brown's Executive Order B-29-15.

### **3.10 Policies Addressing Wasteful Use of Water**

Rule 120 of SEWD's Rules and Regulation (Attachment D) discusses waste of surface water, and establishes penalties for customers who do not request water 24 hours in advance, or do not inform the District of their cessation of use. A penalty of \$100 is assessed for the first failure to notify; \$200 for the second; and \$500 for each subsequent failure. No procedures have been established for wasting water once the customer diverts the water, as customer's pay for water received, and would not be expected to waste it.

## **4 Inventory of Water Supplies**

### **4.1 Introduction**

This section describes the various water supply sources within SEWD. In addition to the surface water supplied to growers, groundwater has been developed to supplement surface water deliveries. Precipitation also provides water for agricultural production; however, due to the variation in amounts from year to year and the timing of rainfall, outside of the irrigation season, it is not considered a reliable source.

### **4.2 Surface Water**

The District's surface water supplies are from New Melones Reservoir and New Hogan Reservoir. Until 1977, groundwater was the sole source of supply for domestic water users in the Stockton area. A supplemental surface water supply was established when the DJW WTP began operation in 1977. The DJW WTP began operation at 30 million gallons per day (mgd) and is now permitted to 65 mgd. The District receives surface water through agreements with the Reclamation for water from two sources: New Hogan Reservoir and New Melones Reservoir (Attachments A and B).

In general, most of the surface water used for agricultural irrigation in SEWD originates from New Hogan Reservoir. The balance of the agricultural water demands not met by available surface water each year is satisfied with customer pumped groundwater. Customer pumped groundwater is metered and customers are billed by the District for use.

The District has filed several water rights application to divert excess wet weather flow from Calaveras River, Littlejohns Creek, and other tributaries. Environmental review of the applications are nearing completion, and a hearing will likely be required before the State Water Resources Control Board before permits are issued.

#### **4.2.1 Surface Water Supply New Hogan**

The District receives water from the New Hogan Project pursuant to an August 25, 1970 contract with Reclamation, the District and Calaveras County Water District (CCWD). The contract provides for repayment and conservation use of the New Hogan Project. This contract allocates all water available at the reservoir to the two Districts, subject only to storage and release of water for flood control.

The allocation of water between the District and CCWD is subject to an August 25, 1970 contract between the District and CCWD providing for the use, repayment and administration of water from the New Hogan Project (Allocation Contract). The Allocation Contract allocates 56.5 percent of the yield from New Hogan Reservoir to the District, and the remaining 43.5 percent to CCWD. The total annual supply available to both the District and CCWD is approximately 84,100 ac-ft/yr in normal water years. The Allocation Contract also provides that any water not used by CCWD can be used by the District.

At the current level of CCWD use, the District can rely on about 83,000 ac-ft/yr of supply from the New Hogan Project in normal water years under safe yield operation. If CCWD

maintains its percentage entitlement (43.5 percent) and exercises it, the District’s share would be reduced. It is assumed for this analysis that the reasonably available volume to the District is 80,000 ac-ft/yr for municipal and industrial supplies in all year types, as described in Section 5. New Hogan Reservoir receives its water supply primarily from rain runoff. The water storage capacity is 317,000 ac-ft.

The New Hogan Reservoir was constructed in 1964 on the Calaveras River and is located approximately 30 miles east of Stockton, south of State Highway 26 in Calaveras County. The District is the water master and controls dam releases for irrigation and municipal use for the District and CCWD during non-flood control periods. The United States Army Corps of Engineers (USACE) operates the dam for flood control. The New Hogan supply is transmitted from the reservoir through the Calaveras River, a series of creeks, diversion structures, and a dedicated pipeline to be treated at the DJW WTP.

**4.2.2 New Melones**

The District receives water from the New Melones Project pursuant to a December 19, 1983 contract with USBR allocating the District 75,000 acre feet annually. The New Melones supply is transmitted from the Goodwin reservoir through Goodwin tunnel, a series of creeks, diversion structures, and canals to be treated at the DJW WTP.

New Melones Reservoir is a part of the Central Valley Project (CVP), receives its water from rain and snowmelt runoff, and has a capacity of 2.4 million ac-ft. It is located approximately 40 miles east of Stockton, north of State Highway 120 in Stanislaus County. Central San Joaquin Water Conservation District (CSJWCD) also has a water supply contract with USBR for the New Melones Project.

Together the District and CSJWCD are entitled to up to 155,000 ac-ft of water from New Melones Reservoir annually. Water allocation amounts are based on the March-September water forecast inflow and the February end of month storage in the New Melones Reservoir each year, to be used for municipal and industrial or agricultural use. This water is subject to cutbacks based on the the hydrology of the Stanislaus River and State Water Board and other regulatory requirements on New Melones water right permits and operations.

Water obtained from New Hogan Reservoir is distributed within SEWD by its New Hogan Water Conveyance System. Similarly, water obtained from New Melones Reservoir is distributed within SEWD by its New Melones Water Conveyance System. For the reporting period of 2013-2015 deliveries averaged 55,490 acre-feet (Table 7).

**Table 7. Surface water supplies for 2013-2015.**

Source	2013	2014	2015
	acre-feet		
New Melones (CVP)	8,037	8,235	143
New Hogan (Local)	70,781	62,085	17,189
Total	78,818	70,320	17,332

**4.3 Groundwater Supply**

The District currently has five wells located at the DJW WTP site used for emergency purposes only. Historically, the District has not pumped, or provided groundwater for municipal and industrial use. The District does not intend to begin pumping groundwater in the future unless an emergency occurs. If groundwater is needed to supplement surface water, it is blended with surface water from the District for processing through the DJW WTP, and subsequently delivered to the City of Stockton, County of San Joaquin, and Cal Water.

SEWD is a conjunctive use District and overlies the Eastern San Joaquin Groundwater. The basin encompasses 938 square miles (600,320 acres) with a safe yield of 689,920 ac-ft/yr. Full details on the plan are available in the Eastern San Joaquin Groundwater Basin Groundwater Management Plan;

<http://www.gbawater.org/Portals/0/assets/docs/IRWMP-2014/Groundwater-Management-Plan-Final.pdf>

At present, recharge to the groundwater basin within SEWD is furnished by regulated releases from New Hogan Reservoir down the channel of the Calaveras River. These releases are regulated by SEWD to obtain the greatest beneficial use for the District. Recharge of the groundwater occurs from percolation in both the Calaveras River and Mormon Slough. Recharge measurements made of the Calaveras River system indicate that there is an average percolation between New Hogan Dam and Jenny Lind of 6 cfs; and between Jenny Lind and Bellota of >7 cfs (MBK 1969). Without check dams in place, below Bellota the percolation is 13 cfs each in Mormon Slough and the old Calaveras River; with the check dams in place, the percolation rates increase to 19 cfs and 31 cfs, respectively. Current recharge operations verify all but the Mormon Slough percolation quantities.

Assuming that the check dams are in place and full for the maximum period permitted (213 days) and that sufficient water is flowing in the channels, the maximum annual percolation for the remainder of the year (152 days) to permit maximum infiltration is 34,000 ac-ft. However, water during average years there is not sufficient water available for recharge at the maximum period. Recharge for an average year is estimated at 26,000 ac-ft of which approximately 21,000 ac-ft percolates below Bellota.

DWR previously identified critically over drafted basins in Bulletin-118-80 and the 2003 update. The Eastern San Joaquin Subbasin is identified as a critically overdrafted groundwater basin in Bulletin 118. As defined in the SGMA, "A basin is subject to critical overdraft when continuation of present water management practices would probably result in significant adverse overdraft-related environmental, social, or economic impacts." Municipal and agricultural uses of groundwater within San Joaquin contribute to an overall average use of groundwater estimated to be 761,828 ac-ft/yr for agricultural uses and 47,493 ac-ft/yr for municipal and industrial uses. Historically, groundwater elevations have declined from about 40 to 60 feet averaging approximately 1.7 feet per year. As a result, a regional cone of depression has formed in Eastern San Joaquin County creating a gradient that allows saline water underlying the Delta region to migrate northeast within the southern portions of the City.

Groundwater use in SEWD is a mix of District and customer pumping. For the reporting period of 2013-2015 pumping ranged from just under 123,000 in 2013 to just over 146,000 in 2015 a dry year (Table 8). For the three year period the average amount pumped was 131,940 acre-feet.

**Table 8. District and customer groundwater pumping 2013-2015.**

Month	2013		2014		2015	
	Supplier	Customers	Supplier	Customers	Supplier	Customers
	acre-feet					
January	0		0		0	
February	0		0		0	
March	0		0		0	
April	0		0		0	
May	0		0		184	
June	0		0		206	
July	0		0		848	
August	0		0		949	
September	0		0		967	
October	0		0		1,015	
November	0		0		972	
December	0		0		841	
sub-total	0	122,999	0	126,481	5,982	140,358
Total	122,999		126,481		146,340	

#### 4.4 Other Water Supplies

There are no other water supplies within the District. However, the District stores surface water underground via direct recharge into percolation ponds located on District property. Since 2003, the District has directly recharged and stored 54,889 ac-ft of surface water. Between 2011 and 2015 the District stored an average of 4,000 ac-ft/yr. The District will increase groundwater recharge as additional sources of supply become available and with construction of additional percolation basins. Surface water banked supply is therefore currently 54,889 ac-ft. As the District increases the surface water banked in the future, this number will increase.

In addition, the District has stored surface water underground as a result of the in-lieu recharge undertaken by the District since 1976 when surface water deliveries replaced groundwater pumping in both the agricultural and urban area.

#### 4.5 Water Quality Monitoring

There are no current surface water quality problems that limit SEWD' surface water use as an irrigation water source. However, Phytophthora has been identified in Calaveras River water and is of concern to some irrigators due to Phytophthora's potential to impact plants. SEWD's water quality lab staff monitor the following raw water constituents for operational purposes:

- Turbidity –NTU
- pH
- Chlorine Residual
- Cryptosporidium (FGL test samples)

- Back T's (Total Coliform & E. coli)
- Total Organic Carbon (TOC's)
- Heterotrophic Plate Count (HPC)

SEWD does not post the numerical values on the District's website. However, SEWD does publish a information about water quality parameters at;

[http://sewd.net/?page\\_id=386](http://sewd.net/?page_id=386)

In addition, 21 other constituents and indicators are monitored at eight different sampling locations, that are identified in section 4.4.1 below. In general, groundwater quality within the Eastern San Joaquin Subbasin is suitable for municipal, industrial, and agricultural supplies. However, as discussed in Bulletin 118, as a result of declining water levels, poor quality water has been moving east along a 16-mile front on the east side of the Delta (DWR, 1967).

The degradation was particularly evident in the Stockton area where the saline front was moving eastward at a rate of 140 to 150 feet per year. Data from 1980 and 1996 indicate that the saline front has continued to migrate eastward up to about one mile beyond its 1963 extent (USACE 2001). Large areas of elevated nitrate in groundwater exist within the subbasin located southeast of Lodi and south of Stockton and east of Manteca extending towards the San Joaquin – Stanislaus County line. (DWR, 2006) It is expected that additional surface water from New Melones Reservoir and other sources used in groundwater recharge efforts will stabilize the movement of the saline water.

In an attempt to mitigate for reduced surface water supplies available for urban uses in 2015, the District pumped banked surface water. Starting in July 2015, the District pumped from five wells located on District property at a total continuous pumping rate from 4,000 to 7,500 gpm. With this pumping, the District has not detected any contaminants in the pumped stored surface water.

**4.5.1 Surface Water Quality**

SEWD began irrigation water quality monitoring for surface water at seven key points in the irrigation distribution system in 1997. On an annual basis SEWD samples eight offsite locations (Table 9) for typical water quality parameters (Ca, Mg, Na, K, alkalinity, sulfate, Cl, nitrate, B, F, Cu, Fe, Mn, Zn, pH, electrical conductivity, and total dissolved solids) important to agricultural irrigation. See Attachment I for detailed reports for 2010-2016.

**Table 9. Surface water sampling locations.**

<b>Code</b>	<b>Location</b>
CR-1	New Hogan Reservoir
CR-5	Calaveras River at Bellota
MS-1	Beginning of Mosher Slough
MS-2	Mosher Slough after last irrigator
CR-6:	Calaveras River after last irrigator
PC-1	Potter Creek after last irrigator
M-1	Mormon Slough after last irrigator
PP-1	Peters Pipe at Potter Creek siphon

All results indicate a high-quality water supply that is suitable for irrigation of all crops grown in the District. Table 10 lists the average value for 2013-2015 at each monitoring site for the major cations, anions, and other components. For the 2013-2015 period the electrical conductivity ranged from 0.1 to 0.2 dS/m and pH ranged from 7.3 to 8.0 (Table 10). All results are available upon request.

<https://sewd.net/water-quality/>

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**Table 10. Average surface water quality monitoring for major ions and other constituents in irrigation water for 2013-2015.**

Constituent	Monitoring Location (See Table 9 for full name)							
	CR-1	CR-5	MS-1	MS-2	CR-6	PC-1	M-1	PP-1
Cations	mg/l							
Calcium	21.3	20.3	20.7	21.3	21.3	21.0	21.0	6.5
Magnesium	8.0	8.3	8.0	8.7	8.3	8.7	9.0	2.0
Potassium	2.0	1.7	1.7	2.3	2.7	2.7	2.7	1.0
Sodium	6.7	6.3	6.7	7.3	7.0	8.3	8.0	2.5
Anions								
Carbonate	<10	<10	<10	<10	<10	<10	<10	<10
Bicarbonate	97	93	90	93	83	100	103	30
Sulfate	11	11	12	12	13	11	13	2
Chloride	5	5	5	5	6	6	6	1
Nitrate	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
Flouride	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other Constituents								
pH	7.3	7.9	7.7	7.6	7.9	7.5	7.8	8.0
Electrical Conductivity (dS/m)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
Sodium Adsorption Ratio	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.2

**4.5.2 Groundwater Quality**

SEWD does not monitor groundwater on a routine basis but by request from private well owners. The District provides a courtesy monitoring service that can include an assessment for potential water quality issues. For private well owners, SEWD monitors specific conductance of groundwater quality on an as requested basis. Currently one well owner in French Camp requests the service due to conductivity ranging from 600-2,500 umhos/cm (0.6-2.5 dS/m) with an average of 1,000 umhos/cm (1 dS/m).

For the groundwater basin there are two groundwater quality problems; saline intrusion and agricultural chemical contamination. Extensive groundwater pumping has caused movement of the saline waters eastward from under the Delta. Poor quality groundwater in the south Stockton area is barely adequate for some agricultural activities and would not be acceptable for urban uses. The saline front is projected to move beyond State Highway 99 by the year 2020. It is expected that additional surface water from New Melones Reservoir and other sources used in groundwater recharge efforts will stabilize the movement of the saline water.

After detecting dibromochloropropane (DBCP) in groundwater, SEWD conducted a study to investigate groundwater contamination resulting from irrigation practices. The 1986 study found that no major or extensive water quality problems exist within SEWD, except for three pesticides, DBCP/ 1,2-D (1,2 dichloropropane), a contaminant of Telone II, and EDB (ethylene dibromide), which were identified as being of concern. On the borders of SEWD to the north (south of the City of Lodi) is an area where soil and groundwater are contaminated with DBCP and 1,2-D. Groundwater in both areas is expected to enter the SEWD boundaries by the year 2020 and result in the degradation of district groundwater.

## **5 Description of Water Uses**

### **5.1 Introduction**

This section describes the various water uses within SEWD. For each use, a multi-year water accounting covering the period from 2013 to 2015 is presented. This accounting quantifies all significant inflows and outflows of water to and from SEWD.

Drivers of water management in a given year include available surface water supply, precipitation within the SEWD service area, and atmospheric water demand.

### **5.2 Hydrologic Year Types in SEWD**

A multi-year water accounting is necessary to evaluate SEWD water management implications of variability in surface and groundwater water supply, precipitation, and other changes in the hydrology.

For 2013-2015 precipitation and reference evapotranspiration averaged 8.34 and 55.02 inches (DWR CIMIS). Irrigation demand averaged 156,615 acre-feet from 2013 to 2015.

### **5.3 Water Uses**

SEWD supplies irrigation water for agriculture as well as water for urban consumption. The primary use of water by agriculture is for crop consumptive use, which is also stored in the groundwater basin (surface water - banked) for use when needed in the future.

#### **5.3.1 Agricultural**

Agricultural irrigation is the primary water use within the District. Total water required to meet the evapotranspiration needs of the crops grown varied from just under 152,000 to almost 161,000 acre-feet, per irrigation season from 2013-2015 (Table 11). Effective precipitation supplies a portion of each year's demand.

Dominant crops in SEWD include walnuts, cherries, and other orchard crops that account for about 2/3 of total crop water demands. Other uses of irrigation water include leaching to prevent the buildup of salts in the soil profile and frost protection. However, due to the low salinity of surface water, the required leaching fraction is small for the crops grown in the District and is not estimated. Additionally, water applied for frost protection is typically applied outside of the irrigation season and is not estimated.

**Table 11. Water use by crop for 2013-2015.**

Crop	2013		2014		2015	
	Acreage	Water Use (ac-ft)	Acreage	Water Use (ac-ft)	Acreage	Water Use (ac-ft)
Walnut	25,169	70,472	26,708	74,782	28,142	78,797
Cherries	11,033	30,893	11,021	30,858	11,108	31,103
Vineyard	4,819	13,492	5,174	14,486	5,517	15,447
Tomatoes	1,168	3,271	1,209	3,384	1,415	3,962
Pasture	1,804	5,052	1,760	4,928	1,345	3,766
Apples	1,037	2,904	1,013	2,837	1,008	2,821
Corn	1,686	4,721	1,487	4,164	782	2,190
Other	8,139	21,155	8,466	21,536	8,796	22,822
Total	54,855	151,960	56,837	156,975	58,113	160,909

### 5.3.2 Environmental

Since 2001, SEWD has voluntarily implemented several temporary fish passage improvements, including placing sandbags at road crossings to provide better depths and velocities for passage at these structures; installing a temporary Denil fish ladder at the Bellota Weir to allow fish access above the weir; installing a temporary barrier (i.e., net) at the head of the Old Calaveras River channel to prevent juveniles from entering and becoming stranded in the channel; and creating a sandbag wall on the Bellota Weir apron to direct flow into a lower fish ladder so that it would operate more effectively.

The District’s Dam Removal Schedule provides information on the termination of irrigation season and when the winter weir and fish ladder is installed. Schedule is maintained at:

<http://sewd.net/2016-preliminary-dam-removal-schedule/>

SEWD has participated with the California Department of Water Resources (DWR) for a fish passage study with CH2M Hill that followed a CALFED-funded fish screen feasibility study that was completed in 2005. By 2013, fish passage improvements were completed at Budiselich Dam and Caprini Crossing. Two other fish passage improvements are planned for subsequent years; both of these projects may be completed pending additional funding.

SEWD will continue to implement interim fish passage improvements until long-term fish passage and screening solutions are identified and put into operation. All of these studies have been, or are currently being, conducted to collect information that will aid in the design and management of the long-term conservation measures and adaptive management processes that will be incorporated into the Calaveras River Habitat Conservation Plan.

SEWD also supports various research projects funded by the CALFED Bay-Delta Program and the U.S. Fish and Wildlife Service to help learn more about rainbow and steelhead trout in the river. At the request of SEWD, DWR is studying ways to improve fish passage in Mormon Slough and the Old Calaveras River. SEWD has concluded a

CALFED Bay-Delta funded study to evaluate fish screen alternatives for water diversions on the Calaveras River. SEWD is dedicated to creating a balance between environmental and water supply needs.

Additional information is available on the following websites;

- <https://sewd.net/history/>
- <http://www.stocktongov.com>

**5.3.3 Recreational**

SEWD does not provide direct recreational surface water. The City of Stockton has many neighborhood and community parks within the city limits, the largest of which are listed in Table 12 below. The larger regional parks, such as Oak Grove and Micke Grove, are outside of the city limits as well as the SEWD boundaries. In addition, Reclamation provides public recreation (i.e. boating, fishing, camping, picnicking, hiking, bicycling, bird and wildlife watching.) for New Melones and Hogan Reservoir.

**Table 12. Recreational water use within the District's boundary.**

Name	Estimated Acres	Description
Louis Park	74	Located on the San Joaquin River, this city park offers boat ramps and baseball and softball fields as well as the Pixie Woods Amusement Park which features a carousel, train rides, and children's theatre.
Oak Park	61	Located in central Stockton, this city park offers a large tennis complex, an ice arena, baseball and softball fields, pool, and senior citizen center.
Buckley Cove Park	53	Located on the San Joaquin River, this city park offers a boat launch.
Kennedy Memorial Park	18	Located just west of Highway 99 in southern Stockton, this county park features baseball fields, a basketball court and pool.
Giannone County Park	15	Located just west of Highway 99 in southern Stockton, this county park features baseball and soccer fields and a basketball court.

**5.3.4 Municipal and Industrial**

SEWD is under contract to supply wholesale treated surface water to public and private water suppliers within San Joaquin County. However, these supplies are not included in the agricultural water accounting.

**5.3.5 Groundwater Recharge**

Groundwater recharge consists of deep percolation that occurs from applied irrigation water, precipitation, or from delivery and drainage water in conveyance and drainage channels. The primary effort for recharge in SEWD is from the Farmington Groundwater Recharge Program (Program). This Program is led by SEWD, in partnership with the Sacramento division of the USACE. SEWD and the USACE, in a cost-share agreement, created the Farmington Groundwater Recharge Program with the intent of replenishing

the aquifer to help ensure future groundwater supply and protect against further saltwater intrusion.

The goal of the program is to recharge an average of 35,000 acre-feet of water annually into the Eastern San Joaquin Basin by 1) directly recharging surface water to the groundwater aquifer and 2) increasing surface water deliveries in-lieu of groundwater pumping to reduce overdraft and establish a barrier to saline water intrusion. In addition, spreading water on agricultural fields and other recharge basins provides seasonal migratory waterfowl habitat.

A network of agricultural wells is needed to pump stored surface water from recharge efforts and assure reliability of water supply in years when ample surface water is not available. Based on the hydrologic history of the region, more average to wet years occur than below average to critically dry years. Therefore, over the long-term, if the aquifer is recharged during all average to wet years, and groundwater pumping reliance is limited to below average to critically dry years, aquifer levels are expected to rise and stabilize.

The Program identifies areas suitable for recharge and seasonal habitat development, evaluates recharge techniques, and conducts pilot recharge tests. SEWD is continuing to identify and develop new recharge sites for this phased program. Available surplus water from SEWD’s conveyance systems is diverted into recharge cells at the project site. Stored surface water would be pumped from the aquifer for agricultural, municipal, and industrial use. Recharge averaged 3,262 ac-ft between 2013 and 2015 (Table 13).

**Table 13. Groundwater recharge achieved through established recharge ponds.**

Location/Groundwater Basin	Method of Recharge	Planning Cycle		
		2013	2014	2015
		acre-feet		
Commitments/Dedicated	Percolation	4,104	3,552	2,129
Total		4,104	3,552	2,129

The recharge method of choice is field-flooding, a practice where a small perimeter levee is built at the parcel, then flooded to a depth of up to 18 inches. Because many lands in the region have a gradual slope for drainage, typical 40 to 100 acre parcels will have varying water depths ideal for a wide range of migratory waterfowl. By applying this shallow-water recharge process, lands can be rotated in and out of the program quickly and economically. Construction inputs for field flooding do not require specialized heavy equipment and, therefore, can be completed easily by the landowner.

Once a site has been identified, the four stages of the program are initiated: Stage 1, Initial Site Screening; Stage 2, Pilot-Scale Recharge Testing; Stage 3, Demonstration-Scale Recharge Testing; and Stage 4, Long-Term Operation and Maintenance. Data collected and evaluated during each of the first three stages are used to support a decision about whether a site advances to the next stage, is archived for evaluation at a future time, or is eliminated from further consideration for artificial groundwater recharge.

In 2003, SEWD completed the Pilot Phase of the Program, which consisted of 60 acres of recharge ponds and fields adjacent to the DJW WTP. The Demonstration Phase, which began in 2003, aimed to obtain 25 to 30 parcels of land, totaling 1,200 acres, for directly recharging surface water to the groundwater aquifer. District construction of an additional 35 acres of recharge ponds at the DJW WTP is in the planning stages. It is anticipated recharge rates will be slightly more than the existing 60-acre site, which currently averages over 0.5 feet per day.

The development of 1,200 acres into recharge areas is anticipated to return an estimated 35,000 ac-ft/yr of water into the groundwater basin in eastern San Joaquin County. This represents approximately 15 percent of the surface water needed for groundwater recharge on an annual basis to assure the long-term sustainability of groundwater resources for the region. As part of the Program, a Demonstration-Scale Banked Surface Water Infrastructure Project is proposed to recover surface water stored in the ground to agricultural customers and the DJW WTP. This project will include approximately 25 well site locations and associated water pipelines located adjacent to existing SEWD conveyance facilities that may be used as a long-term banked surface water infrastructure project if the demonstration scale testing is successful. The project sites are located at various sites generally east of, but within 13 miles of, the DJW WTP site noted above. The well sites are all relatively small (less than 2,000 square-feet for construction purposes, and less than 200 square-feet as a final footprint).

### **5.3.6 Transfers and Exchanges**

The District has previously purchased water from South San Joaquin Irrigation District and Oakdale Irrigation District. Those contracts have expired. Currently, SEWD does not participate in water transfers or exchanges. In addition, transfers are not allowed between agricultural water users.

### **5.3.7 Other Water Uses**

SEWD does not collect information on other water uses in the District, except for irrigation and municipal usage.

## **5.4 Drainage**

There are three main outflow points within the district that convey surface and subsurface outflow. These outflow points flow to the Calaveras River that subsequently flows to the Delta. Outflow is monitored using SCADA.

### **5.4.1 SEWD Boundary Outflows**

Outflow is monitored using SCADA at three outflow locations within the district; Main Street, McAllen on Calaveras, and Mosher slough. It is estimated that 90 percent of all outflows are measured; however, the actual acreage that drains to a particular discharge location is unknown. See District Facilities Map (Attachment C), for the location of surface and subsurface outflow points, outflow measurement points, outflow water-quality testing locations.

## 5.5 Water Accounting Summary

The District’s water accounting is detailed below. The accounting system was prepared considering two accounting centers: distribution system and irrigated lands.

### 5.5.1 Distribution System

Between 2013 and 2015 surface water deliveries from ranged from 33,120 acre-feet in 2014 to a low of 8,951 acre-feet in 2015 (Table 14). Groundwater pumping varies by year depending on irrigation water demand and surface water supply. There was no groundwater pumping by the District in 2013 and 2014. In 2015, SEWD pumped 5,982 acre-feet (Table 8) for delivery into the distribution system.

**Table 14. Surface water deliveries to agricultural customers 2013-2015.**

System	2013		2014		2015	
	Metered	Unmetered	Metered	Unmetered	Metered	Unmetered
	acre-feet					
New Hogan	24,184	1,821	24,336	2,330	8,951	0
New Melones	2,580	0	2,519	0	0	0
Out of District	5,595	0	3,935	0	0	0
<b>Total</b>	34,180		33,120		8,951	

### 5.5.2 Irrigated Lands

Water supplies for irrigation include farm deliveries from the distribution canals and groundwater pumping. Between 2013 and 2015 farm deliveries ranged from 8,951 acre-feet in 2015 to 29,185 acre-feet in 2014. Customer groundwater pumping ranged from 122,999 acre-feet in 2013 to 140,357 acre-feet per year in 2015 (Table 8).

## 5.6 Water Supply Reliability

Crop production in SEWD requires a reliable water supply to meet crop irrigation demands. The primary crops grown are walnuts, cherries, and other orchards. Acreage planted to tree and vines is increasing as more growers are transitioning to higher priced commodities. In addition, surrounding urban areas are growing thus municipal water demands are also expected to increase. One of the main efforts of SEWD is to proactively secure water supplies for agriculture and M&I uses. Given SEWD’s current water supply and use its supply is considered very reliable.

The District is also involved in groundwater management activities with stakeholder groups and is evaluating conjunctive use strategies to further improve water resources sustainability. By working to integrate water resources planning across jurisdictional boundaries, the District maximizes water resources.

The District is a member of the Eastern Water Alliance, the American Water Works Association, the Association of California Water Agencies, the California Farm Water Coalition, the California Special Districts Association, the Central Valley Project Water Association, the

Central Valley Salinity Alternatives for Long-Term Sustainability (CV Salts) and CV Salts Lower San Joaquin River Committee, the Greater Stockton Chamber of Commerce, the San Joaquin Council of Governments, the San Joaquin County Farm Bureau Federation, and the Water Education Foundation. Additionally, the District seeks opportunities for Federal and State grant monies from the Reclamation and DWR.

## **6 Climate Change**

### **6.1 Introduction**

Climate change has the potential to significantly impact the water resources of eastern San Joaquin County. These impacts include: 1) changes in the volume and timing of availability of surface water supplies, 2) increased water demands 3) reduction in water quality, and 4) increased potential for flooding. These impacts on eastern San Joaquin County were analyzed and documented in the 2014 Eastern San Joaquin Integrated Regional Water Management Plan (IRWMP) (IRWMP, 2014).

The regional planning area of the IRWMP consists of 15 major water agencies, including SEWD. In this section, an analysis of climate change impacts on the water resources of SEWD is conducted by extracting relevant information about such impacts to SEWD from the 2014 IRWMP.

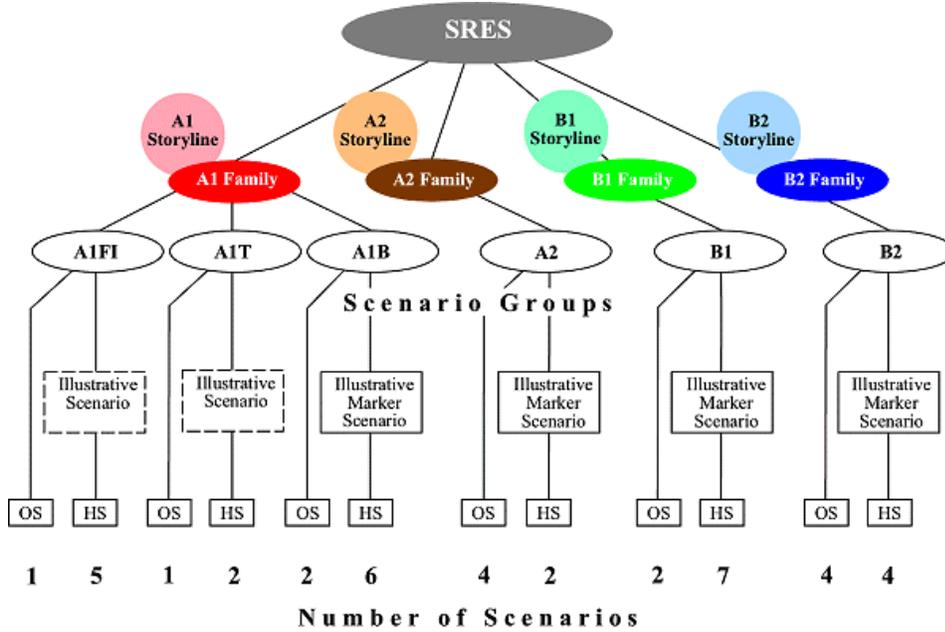
Climate change impacts on future surface water supply, water demand, water quality, and flooding potential were evaluated in the IRWMP for three future scenarios of greenhouse emissions developed by the Intergovernmental Panel on Climate Change in its Special Report on Emissions Scenarios. These three scenarios are denoted as A1B, A2, and B1 and are respectively derived from three different narrative storylines about future population growth, economic development, and energy source and use (Figure 3). Each scenario basically represents a different future in terms of levels of global greenhouse gas emissions with implied impacts on regional climate.

The A1 storyline and scenario family describes a future world of very rapid economic growth, global population that peaks in mid-century (2050) and declines thereafter, and the rapid introduction of new and efficient energy-related technologies. The A1B scenario under the A1 storyline represents a balance in the use of available fossil and non-fossil energy sources in the future. Among the three scenarios evaluated in the IRWMP, the A1B scenario is the highest greenhouse emission scenario resulting in the driest climate.

The A2 storyline and scenario family describes a heterogeneous world with the underlying theme of self-reliance and preservation of local identities. Among the three scenarios, the A2 scenario is a medium greenhouse emission scenario resulting in a moderately wet climate.

The B1 storyline and scenario family describes a convergent world with the same global population, which peaks in mid-century (2050) and declines thereafter. However, the B1 scenario reflects a rapid change in economic structures toward a service and information economy. Among the three scenarios, the B1 scenario is the lowest greenhouse emission scenario resulting in the wettest climate.

Changes in surface water supplies and water demands under the three scenarios are evaluated by comparing them to baseline conditions and are described in the following sections. Climate change impacts to water quality and flooding potential are not directly evaluated under the three emissions scenarios but are considered in a more qualitative manner.



**Figure 3. Climate change narrative storylines and scenarios developed by the Intergovernmental Panel on Climate Change.**

**6.2 Potential Impacts on Water Supply and Quality**

The two major sources of surface water for SEWD are the New Hogan Reservoir and the New Melones Reservoir. The New Hogan Reservoir receives surface water inflow from the above-reservoir region of the Calaveras River watershed. Similarly, the New Melones Reservoir receives its inflow from the above-reservoir region of the Stanislaus River watershed. Potential climate change impacts on average annual inflow to the New Hogan and New Melones reservoirs were evaluated in the IRWMP for the A2 and B1 scenarios. The baseline conditions to which these two scenarios are compared were the monthly inflows in an average year into the New Hogan and New Melones reservoirs, respectively, computed over the historical period of 1922 to 1993. These monthly inflows were extracted from results of the CALSIM II Benchmark Studies. CALSIM is a general water resources planning software developed by the DWR. The Benchmark Studies project was jointly released by DWR and Reclamation to simulate runoff into and releases from the reservoirs in the State Water Project and Central Valley Project.

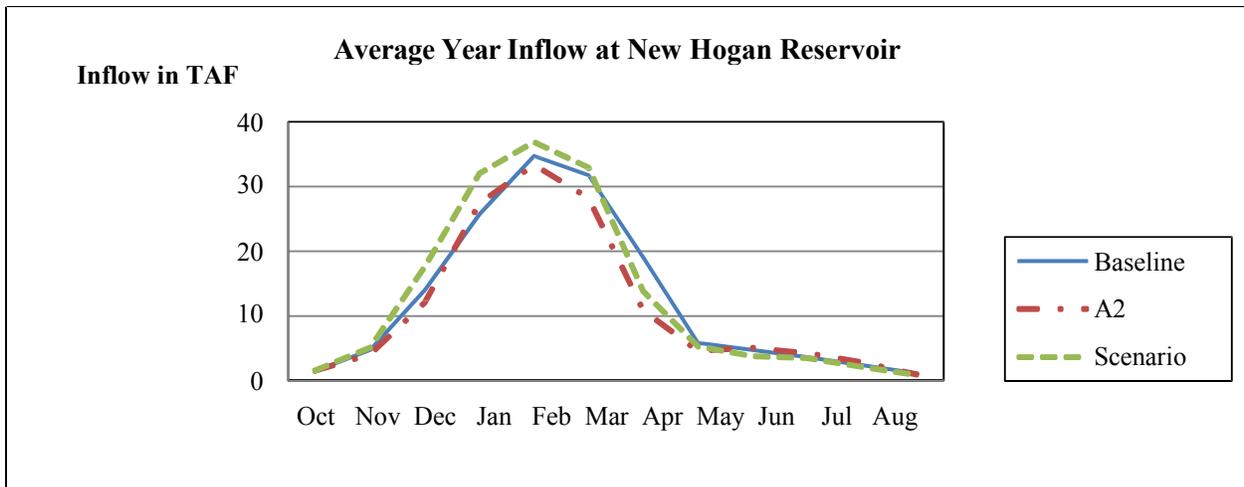
Monthly inflows to the New Hogan Reservoir for an average year under the A2, B1, and baseline scenarios are presented in Figure 4. Overall, the shapes of the three curves in Figure 4 and the volumes of monthly inflow under the three scenarios are very similar. A general observation made in many climate change studies for California is that although it is uncertain whether the average annual volume of precipitation in the state will change significantly in the future, the proportion of dry precipitation relative to the total annual precipitation is expected to decrease. In other words, more precipitation will occur as wet precipitation in the higher elevations of the Sierra Nevada Mountains in the future than as snow.

Historically, the upper region of the Calaveras River watershed has been dominated by wet precipitation with little accumulation of snow. As such, the source of surface water runoff into the New Hogan Reservoir has been predominantly wet precipitation.

Consequently, the timing of inflow into the New Hogan Reservoir as reflected by the shapes of the three curves in Figure 4 is basically the same under the two emission scenarios and the baseline scenario. Given that the surface water supply for agricultural use in SEWD is predominantly from New Hogan Reservoir, the analysis suggests that climate change will not significantly affect the timing and volume of inflow into that reservoir under the two emission scenarios (A2 and B1).

Monthly inflows to the New Melones Reservoir for an average year under the A2, B1, and baseline scenarios are presented in Figure 5. Under the baseline scenario for the New Melones Reservoir, peak runoff historically has occurred during late spring and early summer due to delayed melting of the snowpack in the upper watershed of the Stanislaus River. Peak runoff under the A2 and B1 scenarios occurs during winter and early spring; however, reflecting the general thought by scientists that wet precipitation in the higher elevations of the Sierra Nevada Mountains will increase in the future along with a concomitant decrease in snowpack. The areas under the curves in Figure 5 for scenarios A2 and B1, however, are larger than that of the baseline scenario, suggesting that the total volume of runoff into the New Melones Reservoir may increase in the future due to climate change albeit mostly in the form of wet precipitation. Since surface water supplies from the New Melones Reservoir for SEWD are predominantly used for urban use, the impact on agriculture of the projected shift in the timing of peak runoff from New Melones Reservoir in the future is unclear.

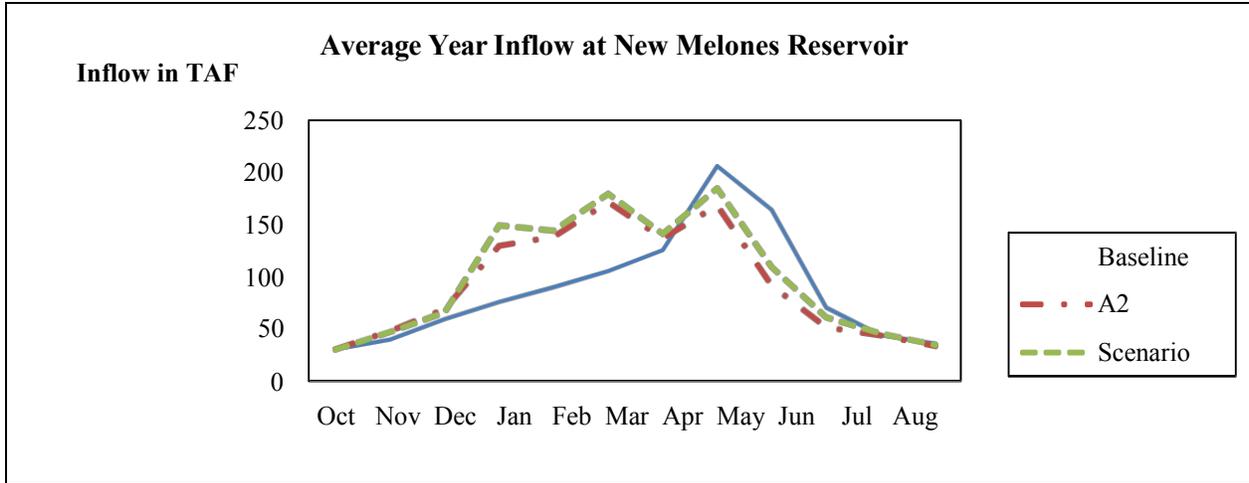
Potential impacts of climate change on the quality of surface water include increases in turbidity, suspended sediments, water temperature, and salinity. Increases in turbidity and suspended sediment load in storm water runoff may occur if severe storms become more frequent and result in an increase in accelerated erosion. An increase in the temperature of surface water runoff is expected given the projected increase in the proportion of wet precipitation occurring during the rainfall season and the overall increase in average daily minimum and maximum temperatures during each season.



**Figure 4. Monthly runoff into the New Hogan Reservoir for an average year under baseline, A2, and B1 scenarios.**

As reported in the IRWMP, sea level rise of up to 12 inches is predicted by 2050 and of up to 66 inches by 2100. An increase in the salinity of both surface water and groundwater may occur, due to sea level rise, if seawater intrusion into the SEWD service

area occurs. However, the City of Stockton lies between the Sacramento-San Joaquin Delta and the western boundary of the SEWD service area. As such, the immediate effects of sea level rise on the potential for seawater intrusion in the SEWD service area is uncertain.



**Figure 5. Monthly runoff into the New Melones Reservoir for an average year under baseline, A2, and B1 scenarios.**

### 6.3 Potential Impacts on Water Demand

Seasonal levels of climate variables for an average year over the future period of 2010 to 2050 were estimated in the IRWMP under greenhouse emission scenarios A1B, A2, and B1. These six variables are precipitation, minimum temperature, maximum temperature, wind speed, evapotranspiration, and runoff. Baseline conditions (seasonal levels for an average year in the past) for the six variables were estimated using historical data for the period of 1971 to 2010. These baseline conditions represented a baseline scenario to which the results of the three emission scenarios were compared in the IRWMP. Changes in the six climate variables relative to the baseline scenario under each of the three scenarios were calculated for each season (winter, spring, summer, and fall) and for the average year in total (Table 15) (IRWMP, 2014).

The highest water use sector in the SEWD service area is irrigated agriculture. A combination of surface water and groundwater has historically been applied to the agricultural lands in the area over typical irrigation cycles (i.e., approximately April through September) to satisfy the evapotranspiration demands of perennial and annual crops grown. In the IRWMP, evapotranspiration during winter was estimated to decrease under scenarios A1B, A2, and B1 by 2.1, 4.4, and 4.8 percent (Table 15). However, evapotranspiration during the spring, summer, and fall was estimated to increase under each of the three future emission scenarios. Overall, annual evapotranspiration was estimated to increase by 5.4, 2.8, and 2.7 percent under scenarios A1B, A2, and B1 (Table 15).

**Table 15. Changes in projected seasonal and annual climate variables between baseline and scenarios A1B, A2, and B1.**

Climate Factor	Climate Scenario	Projected Change				
		Winter	Spring	Summer	Fall	Annual
Precipitation	A1b	4.6	-19.9	-48.2	-8.4	-6.2
	A2	12.6	-24.8	-19.9	-0.3	-2
	B1	15.5	-16.7	-2.6	10.9	4.9
Max Temperature	A1b	8.3	4.6	5.3	6.2	5.8
	A2	3.5	4.4	5	3.8	4.3
	B1	7.4	4.8	3.9	4.8	4.8
Min Temperature	A1b	19.4	9.5	11.7	14.5	12.8
	A2	19.5	12.1	10.1	9.6	11.5
	B1	28.2	8.4	8.9	9.6	11.1
Wind	A1b	0.6	-0.3	0.2	1.1	0.3
	A2	-1.4	2.7	-1.7	-0.2	-0.2
	B1	1.2	-0.05	-0.2	-1	-0.1
Evapotranspiration	A1b	-2.1	4.9	6.7	6.2	5.4
	A2	-4.4	4	4.1	1.2	2.8
	B1	-4.8	3.5	3.8	2.5	2.7
Runoff	A1b	6.6	-15.2	-3.8	-4.2	-2.9
	A2	17.4	-12.7	-1.1	5.5	3.8
	B1	62.1	6.5	-0.8	12.2	34.6

Historically, the rain season in Central Valley has extended from late fall to early spring. In the IRWMP, precipitation during winter was estimated to increase under scenarios A1B, A2, and B1 by 4.6, 12.6, and 15.5 percent (Table 15). Over the course of the average year, however, precipitation was predicted to decrease under scenarios A1B and A2 by 6.2 and 2.0 percent while increasing under scenario B1 by 4.9 percent (Table 15).

A separate analysis estimated the anticipated change in the number of growing-degree days during each season under the three scenarios in comparison to a baseline scenario (Table 16). In general, the number of growing-degree days in each season increased under each scenario in comparison to the baseline scenario of seasonal growing-degree days.

Considered together, the increase in annual evapotranspiration, possible decrease in annual local precipitation, and the increase in the number of growing-degree days for each season; suggest that climate change may result in shorter growing seasons for individual crops with concomitant higher daily evapotranspiration rates during growing seasons of those crops. Increases in minimum and maximum seasonal temperatures, also suggest the possibility of a longer overall growing season for each year that could potentially accommodate multiple-cropping patterns. For an individual crop, it is unclear whether the balance between a shorter growing-season, reduced annual rainfall, and an increase in daily evapotranspiration rates will translate into a greater or lesser overall irrigation demand for the crop during its growing season.

**Table 16. Changes in growing degree-days between scenarios baseline, A1B, A2, and B1 scenarios.**

Climate Factor	Climate Scenario	Projected Change Summer			
		Winter	Spring	Summer	Fall
Growing Degree Days	A1b	155	284	298	292
	A2	98	248	274	184
	B1	70	206	175	142
Heating Degree Days	A1b	-298	-183	-5	-145
	A2	-209	-174	-4	-97
	B1	-147	-139	-2	-78
Cooling Degree Days	A1b	0	29	306	73
	A2	0	14	285	47
	B1	0	17	178	41

#### **6.4 Potential Strategies to Mitigate Climate Change Impacts**

Since its inception, the mission of SEWD has been to manage and protect its groundwater supplies and to provide a reliable supply of surface water to its urban and agricultural customers. SEWD attempts to achieve those goals by managing the surface water and groundwater supplies in its service area conjunctively. To address the uncertain impacts of future climate change on the volume and timing of availability of surface water supplies, SEWD should continue with an aggressive surface water-groundwater conjunctive use management program. It should expand its recharge programs by incorporation of additional percolation basins that will enable SEWD to accept and recharge surface water when it becomes available SEWD should also continue to expand its conveyance system into areas of its service area where farmers traditionally pump groundwater and to areas where additional percolation ponds can be added to its recharge programs.

With respect to adapting to changes in water demands, farmers in the SEWD service area will naturally respond to changes in evapotranspiration demands due to climate change by choosing crops with growing seasons consistent with the local climate and irrigation demands that can be met by available surface water and groundwater supplies. Localized flooding due to the increased occurrence of severe storms can be managed by expansion of the surface water conveyance system to route storm water runoff to dedicated flood and percolation basins for flood control and subsequent groundwater recharge. Dedicated flood and percolation basins can also be a means for improving the water quality of storm water runoff through sedimentation of suspended solids and filtration of turbid surface water by deep percolation through subsurface sediments.

## **7 Best Management Practices**

Under Reclamation criteria there are two categories of best management practices (BMP); critical and exemptible. Critical BMPs are those that every Reclamation agricultural District is required to implement. These BMPs are considered to be the basic elements of good water management. Exemptible practices are those that agricultural Districts should implement unless the District demonstrates that the practice is not appropriate or not cost-effective.

In addition to the narrative on Reclamation BMPs, Table 18 provides the status of the State's efficient water management practices (EWMPs). Reclamation reporting for 2013 through 2015 is listed in Attachment H.

### **7.1 Critical BMPs**

Critical BMPs include water measurement, water conservation coordinator, on-farm water management activities, information on water quality, pricing, and efficiency of District pumps. Details on these BMPs are as follows.

Measure the volume of water delivered by the district to each turnout with devices that are operated and maintained to a reasonable degree of accuracy, under most conditions, to +/- 6%

In 2015, there were 201 connections with 193 of the connections measured with volumetric or hour meters. The 193 measured connections include two connections that were retrofitted in 2015. SEWD is planning on retrofitting two additional connections in 2016. All water meters in service are tested in accordance with the manufacturer's recommendations.

There are several contributing factors for the delivery points that do not have a measuring device. Field conditions contributing to the installation issues are the following: old pump stations (see Attachment L) with complicated plumbing, and insufficient pipe lengths. SEWD is reviewing alternatives for measurement at the eight unmeasured locations (Attachment J).

The District is developing a meter replacement/repair program that it believes it can be implementable over a 5-year period; however, further meter exploration is required before the District can select a device or method for wide scale implementation. This could be accomplished through development of a meter Pilot Program that could begin structuring a meter replacement/installation program to improve delivery point water measurement within the District.

The Pilot Program would have to be locally cost effective and comprised of the following criteria:

- The Program must be locally cost-effective and achieve the most “bang-for-the-buck” during implementation;
- The Program could employ water measurement using a combination of individual customer turnout measurement devices and lateral level (upstream) turnout measurements to multiple customers on private laterals;

- Measurement devices and methods will be standardized as-much-as possible, so that standardized operations can be used at delivery points throughout the district. Devices or methods used for canal and pipeline measurement would likely be different;
- For permanent installations on the largest delivery points, it may be desirable for the measurement device to indicate the instantaneous flow rate and the accumulated volume delivered, and be readable in the field by both District staff as-well-as the agriculture water user. With a provision allowing data to be transmitted to a SCADA system in the future, if desired;
- The measurement device must be a proven technology that the District and the agricultural water user can easily understand; and
- The ability to secure the measurement device is important to prevent, or at least hinder, theft and vandalism.

**7.1.1 Designate a water conservation coordinator to develop and implement the Plan and develop progress reports**

Water Conservation Coordinator;  
Kristin Coon  
6767 East Main Street, Stockton, CA 95215  
209-444-3126  
[kcoon@sewd.net](mailto:kcoon@sewd.net)

**7.1.2 Provide or support the availability of water management services to water users**

This BMP has five categories of support for water management services; on-farm evaluations, real-time irrigation scheduling, water quality information, educational programs and materials, and other.

a. On-Farm Evaluations

1. On farm irrigation and drainage system evaluations using a mobile lab type assessment

Using grant funding from Reclamation, SEWD has provided irrigation evaluations free to its customers since 1999. The evaluations have been promoted through SEWD's annual newsletter, the District Advisory Committee (comprised of stakeholders representing the urban and agricultural areas of SEWD), and through District field personnel. The irrigation evaluation program is voluntary, but is encouraged and supported by SEWD. SEWD will continue to offer this service free to its customers.

The actual cost of an irrigation evaluation is \$2,500. Offering this evaluation free to customers represents greater than a 25 percent discount on the cost of the evaluation, thereby complying with the Reclamation's example of an adequate program per the USBR Water Management Plan 2008 Guidebook: Offer to district water users a rebate or discount of 25 percent off the fair market price of an evaluation. In 2015, one farm was surveyed and seven pumps were tested.

2. Timely field and crop-specific water delivery information to the water user

Meter readings are collected monthly. SEWD prepares an annual crop report on water use per crop, method of irrigation, estimated water use and metered use. This report is posted at the SEWD office.

b. Real-time and normal irrigation scheduling and crop evapotranspiration (ET) information

SEWD provided daily and seven-day-average ET information from the Lodi West (Station 166) and Manteca (Station 70) through its CIMIS Hotline beginning in January 1998. From 1998 to 2004 there were no inquiries; therefore, the hotline was discontinued.

Subsequently, for customers to obtain ET information, SEWD provided a link to the CIMIS web site on the home page of SEWD's web site, and had signage at SEWD's office directing customers to the California Irrigation Management Information System (CIMIS) web site. SEWD's spring and fall newsletters, which are delivered to all of SEWD's customers, also provided the link to the CIMIS website. However, although growers could calculate the ET for their crop based on information available on the CIMIS website, including applying crop coefficients for the particular crop, and entering the age of their crop, the CIMIS website did not provide crop-specific information.

Consequently, the Irrigation Training and Research Center (ITRC) at California Polytechnic State University, San Luis Obispo, working under a technical services agreement with the U.S. Bureau of Reclamation Mid-Pacific Region, undertook a review of the procedure and materials used to create estimates for Irrigation Allowance Index evaluations and Crop Water Requirements for the growers in SEWD. These values can be used to create a real-time, irrigation scheduling tool for growers as well as a simple evaluation of total water use at the end of the irrigation season. A list of crops and crop evapotranspiration (ETc) values was compiled specifically for SEWD to provide growers with a resource for irrigation management. A complete explanation of the methodology, as well as the irrigation allowance values and the irrigation allowance index developed for SEWD growers, is available to growers upon request.

c. Surface, ground, and drainage water quantity and quality data provided to water users

SEWD began irrigation water quality monitoring for surface water at seven key points in the irrigation distribution system in 1997. The results are displayed on SEWD's web site and Water Conservation Information table at the SEWD office.

d. Agricultural water management educational programs and materials for growers, staff, and the public include the Ag. Water Report with a circulation of 6,500 and the State of the City event with 2,000 attendees.

e. Other

Agricultural BMPs are incorporated into SEWD's daily operations.

**7.1.3 Pricing structure - based at least in part on quantity delivered. Describe the quantity-based water pricing structure, the cost per acre-foot, and when it became effective.**

SEWD's surface water pricing structure is based on the quantity of water delivered and is charged at a rate of \$23.00/ac-ft. In most cases quantity of water delivered is based on water meters. In cases where installation of a water meter would require capital improvements to the private owner's water pumping system, water quantity is determined using pump tests and hour meters.

Domestic groundwater users are charged a flat rate of \$43 for a private well. There is no water conservation pricing structure because SEWD is not selling the water, but assessing for the use of a well. In addition, on a volumetric basis agricultural groundwater users are assessed \$5.06 for each acre-foot pumped. Water rates are published annually on the District's website posted as Ordinance 42. A copy of the 2016 rate schedule is included in Appendix D.

**7.1.4 Evaluate and describe the need for changes in policies of the institutions to which the district is subject**

SEWD has three water contracts all with different contract years. For ease of scheduling and providing the most economical water for our customers, SEWD continues to negotiate for a standard contract year.

**7.1.5 Evaluate and improve efficiencies of District pumps**

*Describe the program to evaluate and improve the efficiencies of the contractor's pumps.*

SEWD owns two pumps that pump water from the Calaveras River into Potter Creek for irrigation. In 2001, modifications were made to SEWD's Bellota Pipeline, which allowed for gravity flow from the SEWD pipeline to Potter Creek. Since no SEWD pumping has been required to supply irrigation water to Potter Creek since 2001, the cost savings realized are comparable to those of 2001 expenses, approximately \$30,000. This practice can only be used when there is an adequate water supply from both the New Melones and New Hogan water contracts. The pipeline is dedicated to M&I use only when SEWD is relying 100 percent on the New Hogan water supply.

**7.2 Exemptible BMPs for Agricultural Contractors**

**7.2.1 Facilitate alternative land use**

*Describe how the contractor encourages customers to participate in these programs.*

No programs have been developed to encourage alternative land uses because SEWD does not include lands that have these chronic issues.

**7.2.2 Facilitate use of available recycled urban wastewater that otherwise would not be used beneficially, meets all health and safety criteria, and does not cause harm to crops or soils**

SEWD's agricultural area is primarily upstream of available urban recycled wastewater and considerable pumping would be required to provide recycled water to SEWD customers. Recycled urban wastewater use was investigated in a 1995 study by the City of Stockton, which operates the wastewater treatment facility. Until recently the City did provide some water to a farmer located near the wastewater treatment plant, but the discharge permit was not renewed and no wastewater is being recycled at this time. SEWD supports the City of Stockton's recycling efforts.

**7.2.3 Facilitate the financing of capital improvements for on-farm irrigation systems**

SEWD currently offers a Surface Water Incentive Program. This program encourages the conversion to surface from groundwater through water pricing. The owner of the pumping facility is charged the groundwater assessment rate for water until the capital costs of the facility have been amortized. This program is noticed in SEWD's Ag Newsletter and on its web page. Three irrigators have taken advantage of this program to date.

In 1996, SEWD provided zero interest loans for a pumping facility to customers who switched from groundwater use to surface water use. SEWD provided \$1.3 million in loans. Funding sources for these loans were the subject of a lawsuit between SEWD and the urban contractors. In 1999, the zero percent loan program was discontinued. SEWD continues to provide information to its customers on other loan programs as they become available.

**7.2.4 Incentive pricing**

SEWD's enabling legislation (Attachment E) limits its ability to offer pricing incentives for water pricing.

**7.2.5 Line or pipe ditches and canals**

SEWD has two canal systems, Upper Farmington Canal and Lower Farmington Canal, which are part of the New Melones Conveyance System. SEWD utilizes natural creeks, sloughs, and rivers to distribute water. Percolation from these natural watercourses provides recharge to the groundwater basin. Over time, SEWD collected data to verify percolation from its unlined canals: Upper Farmington Canal and Lower Farmington Canal. Percolation from both canals was found to be minimal (less than 5 percent). Percolation was addressed in an Environmental Impact Report for the canal system. SEWD and CSJWCD, which also uses the Upper Farmington Canal for transport of New Melones water, are situated over the Eastern San Joaquin Groundwater Basin, which is critically overdrafted. Percolation is reclaimed through groundwater pumping as a component of SEWD's conjunctive use plan. This BMP has been deemed complete.

Leaks can occur on the conveyance canal system that are unlined canals and around concrete structures. The efficiency of the canal system is improved by the District's routine canal inspection and maintenance program that serves to locate, and repair both

potential and current leaks. Once an area of canal is surveyed, a punch list of repair items is compiled and used to correct deterioration and other issues. Due to the destructive nature of rodents, a rodent abatement program is also a component of the District's inspection and maintenance program. This approach allows for many needed repairs to be made before leaks have a chance to occur.

#### **7.2.6 Construct regulatory reservoirs**

The reservoirs surrounding the treatment plant act as buffers during storm events and percolate water, recharging the aquifer at the treatment plant. Reservoir maintenance and groundwater monitoring are ongoing.

Construction of an additional regulatory and percolation pond is in the planning stages. Funding is being sought from the USACE and local funds.

#### **7.2.7 Increase flexibility in water ordering by, and delivery to, water users**

SEWD operates an on-demand system. SEWD requires customers to call or email 24 hours in advance. This advance notice helps SEWD manage its irrigation supplies more efficiently. This system has flexibility in water ordering and delivery to the water user. The overall system is working well; however, SEWD is having problems with the SCADA system and is reviewing new software programs to improve the system.

#### **7.2.8 Construct and operate District spill and tailwater recovery systems**

USBR grant funds are utilized for this BMP. SEWD will continue to apply for these grants as they become available. In 2005, SEWD applied for and was awarded a Challenge Grant in the amount of \$150,255 over two years to implement a SCADA system. SEWD's contribution was \$154,553. Although SCADA is not a spill or tail water recovery system, it allows enhanced surface water management abilities which should minimize already limited system losses. The equipment was installed in 2006; however, SEWD is still adjusting the SCADA system for optimum performance.

There is no plan to pump the limited system losses upstream. SEWD would need to build the costly facilities to pump this relatively small volume of water over 20 miles upstream. Currently, this water flows downstream and is put to beneficial use either by other growers or by flowing into the San Joaquin River. A cost-benefit analysis performed in 2011 and is provided in Attachment F.

#### **7.2.9 Plan to measure outflow.**

Municipalities served by the District system (City of Stockton, CAL Water, and County of San Joaquin) receive water on a bulk basis and are required to meter the water and provide a meter signal back to the District on a continual basis. The District's SCADA screen shows the rate of flow and the total flow for each municipality. The municipalities also provide monthly-totalized statements on water flow that the District uses to track water use and plan water deliveries.

As mention in section 5.4.1 in this document outflow is monitored using SCADA at three outflow locations within the District; Main Street, McAllen on Calaveras, and Leffler on

Mosher. It is estimated that 90 percent of all outflow is measured; however, the actual acreage that drains to a particular discharge location is unknown.

#### **7.2.10 Optimize conjunctive use of surface and ground water**

SEWD's goal is to optimize conjunctive management of surface and groundwater. SEWD secures and provides supplemental water to protect the District's only reliable water supply, groundwater. SEWD is looking for more recharge sites. See Section 4.3 for more information. In 2015, SEWD rehabilitated four wells and constructed a new one for supplemental M&I service.

#### **7.2.11 Automate canal structures**

This BMP is being implemented in conjunction with BMP B7.

#### **7.2.12 Facilitate or promote water customer pump testing and evaluation**

SEWD promotes its own pump-testing program for its customers. SEWD has received USBR grant funding and offered free pump tests and irrigation evaluations to its customers. SEWD completed 3 pump tests in 2010, and three more in 2011. The pump tests are promoted in SEWD's twice annual newsletter, at Stockton East Advisory meetings and through SEWD field personnel communication with customers. For meter installation on existing surface water pumps that require major capital costs, SEWD offers pump hour meter installation in conjunction a with a free pump test to quantify water use.

## **8 Supplemental Information**

This section covers the following supplemental information required by SB x7-7.

- Legal Certification and Apportionment Required for Water Measurement
- Engineer Certification and Apportionment Required for Water Measurement
- Water Measurement Best Professional Practices
- Description of Water Measurement Conversion to Volume
- Device Corrective Action Plan Required for Water Measurement
- Summary of Efficient Water Management Practices

### **8.1 Legal Certification and Apportionment Required for Water Measurement**

SEWD is able to measure approximately 96% of its agricultural meters. However, SEWD faces challenges and is unable to measure water at the farm-gates for customers equipped with this type of system. In addition, there are some laterals (upstream of multiple customers) that cannot be measured due to the type of piping system that's been installed. Therefore, SEWD does not need to submit engineer certification and apportionment required for water measurement.

A recent field investigation conducted by SEWD, determined that ten previously unmetered customer delivery could not be metered. Of those two meters have already been installed, and eight sites remain unmetered. There are constraints at the farm-gates and at some of the irrigation outlets that prevent the installation or operation of water meters. These unmetered locations have been identified in Attachment J.

### **8.2 Engineer Certification and Apportionment Required for Water Measurement**

SEWD can measure water at the farm-gate for all customers and does not measure at the lateral (upstream of multiple customers). Therefore, SEWD does not need to submit engineer certification and apportionment required for water measurement. This DWR Attachment B requirement is not applicable to SEWD.

A 2013 field investigation conducted by SEWD determined that the ten previously unmetered customer delivery points could not be metered, however, two of those meters were installed in 2015. Implementation of a meter replacement/calibration program and new meter Pilot Program is outlined in Section 7.1.

### **8.3 Water Measurement Best Professional Practices**

#### *Water Measurement Data Collection*

Water measurement data are collected via manual readings. SEWD uses a certified pump tester to calibrate their meters. An SEWD engineer reviews and approves the pump tests.

#### *Measurement Frequency*

Meter readings are collected every 30 days during use.

### *Method for Determining Irrigated Acres*

SEWD requests that each of their agricultural customers reports on their agricultural irrigation use for the previous year. Customers are sent an *Owner's Water Use Statement for Calendar Year (the upcoming calendar year)*, and must return it to SEWD by mid-January. Customers are asked to report the following data and information:

1. crops grown,
2. method of irrigation,
3. acres fallow/not irrigated,
4. acres being irrigated with well water, and
5. acres being irrigated with surface water.

The customers are also asked to report non-agricultural irrigation use. The Owner's Water Use Statement requires acknowledgement that the information submitted is truthful under penalty of perjury. If the form is not turned in by the requested date, a 5 percent penalty is added to the customer's water bill.

### *Quality Control and Quality Assurance Procedures*

Information provided by the customers on the Owner's Water Use Statement for Calendar Year (the upcoming calendar year) form sent out annually by SEWD is cross-checked by the District using water meter readings. SEWD first compares customer current water use with historical use to identify potential metering inaccuracies or errors. For any suspected inaccuracies or errors, SEWD then conducts a further investigation with the customer, including conducting a detailed meter inspection or testing.

SEWD conducts water audits for the DJWWTP. SEWD measures their diversions, the amount treated at the DJWWTP, and the amount delivered to its urban customers. Any discrepancies are immediately investigated, and repairs made as necessary.

Since 2013, SEWD has retrofitted 20 connections with meters and upgraded two existing meters. Newly installed meters include certificates of calibration (Attachment K). Currently, there are eight unmeasured connections and the District is looking to implement a meter replacement and calibration program as-well-as a new meter Pilot Program

It was determined that the PG&E hour meters used for eight customers have an accuracy well above +/- 6 percent. SEWD has not replaced the remaining hour meters or has retrofitted the irrigation outlets with only PG&E meters, since they have installation constraints (Attachment J). In order to make appropriate corrections for the irrigation outlets, the District must explore all viable options that are cost-effective, and functional.

The PG&E meters and hour meters that remain throughout SEWD's conveyance system including the following:

- CR-08 – Same Owner, Lower Calaveras
- CR-08A– Same Owner, Lower Calaveras
- C-18A- Upper Calaveras

#### PG&E Meters:

- CR-14 – Lower Calaveras
- CR-30 – Lower Calaveras
- CR-66 – Lower Calaveras

- CR-79A – Lower Calaveras
- M-44 - Mormon Slough
- M-55 - Mormon Slough
- C-16 – Upper Calaveras

#### **8.4 Description of Water Measurement Conversion to Volume**

For SEWD water measurement devices that are not measuring water volume, the water measurements are obtained from flow meters by taking the gallons per minute rating of the pump and the run time reading from each pump system to calculate usage through the following formula:

$$(pump\ flow\ in\ gallons\ per\ minute) \times (1\ ft^3 / 7.481\ gal) \times (1\ acre / 43,560\ ft^2) \times total\ minutes\ pump\ is\ operating = total\ acre-feet\ (volume)$$

A similar water measurement conversion to volume procedure is used for the PG&E or hour meters; however, all pumps measured by pump test, run time or PG&E readings will be replaced over the next three years (by 2015) in order to obtain more accurate volume reading measurements.

#### **8.5 Device Corrective Action Plan Required for Water Measurement**

As stated in section 8.3, SEWD has retrofitted 20 connections since 2013 with meters and currently has eight unmeasured connections that have installation constraints, an implementation program is outlined in Section 7.1. Below is an outline of the corrective actions remaining (Table 17).

**Table 17. Schedule to implement EWMPs (Table E-1. (DWR Table VII.A.3)).**

EWMP	Implementation Schedule	Finance Plan	Budget Allotment
<i>Critical</i> EWMP 1: Water Measurement	Meter options will be explored and potentially piloted at unmeasured turnouts based on feasibility and cost effectiveness.	Monies will be transferred to the water meter maintenance category from the Ag Division Fund 67 budget to cover planned meter installations.	\$6,000 in 2016 <sup>a</sup>
<i>Critical</i> EWMP 1: Water Measurement	A total of 20 meters were replaced from 2013 thru 2015. In addition, 10 irrigation outlets remain that are solely metered by an PG&E and/or hour meter, and viable options will be explored for replacing.	Monies will be transferred to the water meter maintenance category from the Ag Division Fund 67 budget to cover planned meter replacements.	\$13,000/year for 2014 and 2015 <sup>a</sup>
<i>Critical</i> EWMP 1: Water Measurement	A work plan is being developed for replacing and/or calibrating the District's existing water meters each year.	Monies will be transferred to the water meter maintenance category from the Ag Division Fund 67 budget to cover planned meter calibrations.	\$5,000/year

<sup>a</sup> These monies include budget to cover unplanned but needed meter replacements

## 8.6 Efficient Water Management Practices

Table 18 summarizes the implementation status of each EWMP.

**Table 18. Summary of EWMPs (Water Code §10608.56(d)).**

EWMP	Implementation Schedule	Finance Plan	Budget Allotment <sup>1</sup>	USBR 2011/2014 Criteria
<b>Critical</b>				
1 – Water Measurement	All metered	NA	6,277	Critical 1
2 - Volume-Based Pricing	Volumetric pricing	NA	staff time	Critical 4
<b>Conditional</b>				
1 – Alternate Land Use	No problem areas	NA	staff time	Exemptible 1
2 – Recycled Water Use	Not applicable	NA	staff time	Exemptible 2
3 – On-Farm Irrigation Capital Improvements	Surface Water Incentive Program	NA	850	Exemptible 3
4 – Incentive Pricing Structure	Not applicable <sup>2</sup>	NA	staff time	Exemptible 4
5 – Infrastructure Improvements	Implemented	NA	111,000	Exemptible 5a Exemptible 5b
6 – Order/Delivery Flexibility	Implemented	NA	staff time	Exemptible 6
7 – Supplier Spill and Tailwater Systems	On-going	USBR Grant	staff time	Exemptible 7
8 – Conjunctive Use	Implemented	NA	1,200	Exemptible 9
9 – Automated Canal Controls	On-going	USBR Grant	staff time	Exemptible 10
10 – Customer Pump Test/Eval.	On-going	USBR Grant	675	Exemptible 11
11 – Water Conservation Coordinator	On-going	NA	3,000	Critical 2
12 – Water Management Services to Customers	On-going	NA	6,600	Critical 3
13 – Identify Institutional Changes	On-going	NA	staff time	No equivalent
14 – Supplier Pump Improved Efficiency	On-going	NA	staff time	Critical 5
Grand Total all EWMPs				

Note: There is no equivalent USBR Conditional EWMP #13 or #14

1 Amounts are in addition to staff time.

2 SEWD's enabling legislation limits its ability to offer incentive pricing.

## References

- California Irrigation Management Information System. 2010. Accessed October 2011. Website: <http://www.cimis.water.ca.gov/WSNReportCriteria.aspx>
- City of Stockton. 2007. Background Report; Stockton General Plan 2035. December 2007.
- City of Stockton. 2015. 2015 Urban Water Management Plan. July 2016.
- DWR 1967. Evaluation of Groundwater Resource: South San Francisco Bay. DWR Bulletin 118-1.
- DWR 1980. Groundwater Basins in California. DWR Bulletin 118-80.
- Department of Water Resources (DWR). Bulletin 118 for the San Joaquin Valley Groundwater Basin (5-22.01), Updated 2006.
- County of San Joaquin. 1992. San Joaquin County General Plan 2010. July 29, 1992.
- IRWMP, 2014. Eastern San Joaquin Integrated Regional Water Management Plan Update. Eastern San Joaquin County Groundwater Basin Authority. June 2014.
- Irrigation Training and Research Center, California Polytechnic State University, San Luis Obispo. 2013. Draft Technical Memorandum: Crop Water Use for SEWD. Prepared for Stockton East Water District under a technical services agreement with the U.S. Bureau of Reclamation. July 17, 2013.
- Irrigation Training and Research Center, California Polytechnic State University, San Luis Obispo. 2003. California Crop and Soil Evapotranspiration for Water Balances and Irrigation Scheduling/Design. Funded by CalFed, the California Department of Water Resources and the U.S. Bureau of Reclamation. January 2003.
- Murray, Burns, Kienlen (MBK) Engineers, Calaveras River Water Rights Study, February 1969.
- Western Regional Climate Center. Accessed October 2011. Website: <http://www.wrcc.dri.edu/CLIMATEDATA.html>
- Western Regional Climate Center. New Melones Dam HQ Station 2010 Evaporation Data. Assembled by WRCC. October 2011.

**ATTACHMENT A**

**SEWD/ USBR and SEWD/CCWD Contract for New Hogan Project Water Supply**

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R.O. Draft 7/6-1970  
Rev. W.O. 7/20-1970  
Rev. R.O. 8/13-1970

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
New Hogan Project, California

Contract No.  
14-06-200-5057A

CONTRACT BETWEEN THE UNITED STATES OF AMERICA  
AND STOCKTON AND EAST SAN JOAQUIN WATER CONSERVATION DISTRICT  
AND CALAVERAS COUNTY WATER DISTRICT PROVIDING FOR  
REPAYMENT AND CONSERVATION USE OF NEW HOGAN PROJECT

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EXHIBIT "E"

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1 UNITED STATES  
2 DEPARTMENT OF THE INTERIOR  
3 BUREAU OF RECLAMATION  
4 New Hogan Project, California

Contract No.  
14-06-200-5057A

5 CONTRACT BETWEEN THE UNITED STATES OF AMERICA  
6 AND STOCKTON AND EAST SAN JOAQUIN WATER CONSERVATION DISTRICT  
7 AND CALAVERAS COUNTY WATER DISTRICT PROVIDING FOR  
8 REPAYMENT AND CONSERVATION USE OF NEW HOGAN PROJECT

9 THIS CONTRACT, made this 25th day of August,  
10 1970, in pursuance generally of the Act of June 17, 1902 (32 Stat. 388,  
11 43 U.S.C. 391), and acts amendatory thereof and supplementary thereto,  
12 all collectively hereinafter referred to as the Federal reclamation  
13 laws, between THE UNITED STATES OF AMERICA, hereinafter referred to  
14 as the United States, and the STOCKTON AND EAST SAN JOAQUIN WATER  
15 CONSERVATION DISTRICT and the CALAVERAS COUNTY WATER DISTRICT,  
16 hereinafter collectively referred to as Districts and individually  
17 as District, political subdivisions of the State of California, duly  
18 organized, existing, and acting pursuant to the laws thereof, with  
19 their principal place of business in Stockton and San Andreas,  
20 California, respectively,

21 WITNESSETH, That:

22 EXPLANATORY RECITALS

WHEREAS, pursuant to the Act of December 22, 1944 (58 Stat.  
887), the United States Army Corps of Engineers constructed the

Preamble  
Explanatory Recitals--

1 New Hogan Project on the Calaveras River in the State of California  
2 primarily for flood control and secondarily for irrigation and other  
3 water use purposes; and

4 WHEREAS, under the terms of Contract No. 14-06-200-8213,  
5 dated March 2, 1960, hereinafter referred to as the 1960 contract,  
6 between the United States and the State of California, which contract  
7 provides for repayment of that portion of the cost of the Project  
8 allocated to conservation purposes, the United States may enter into  
9 a contract or contracts pursuant to Section 9 of the Reclamation Project  
10 Act of 1939 with other organizations for repayment of the New Hogan  
11 Project; and

12 WHEREAS, this contract is made pursuant to said Act and in  
13 accordance with the provisions of the 1960 contract;

14 NOW, THEREFORE, in consideration of the covenants herein  
15 contained, it is agreed as follows:

16 DEFINITIONS

17 1. When used herein, unless otherwise distinctly expressed or  
18 manifestly incompatible with the intent hereof, the term:

19 (a) "Secretary" or "Contracting Officer" shall mean the  
20 Secretary of the United States Department of the Interior or  
21 his duly authorized representative;

- 1           (b) "District Engineer" shall mean the District Engineer,
- 2           Sacramento District, United States Army, Corps of Engineers,
- 3           or his duly authorized representative;
- 4           (c) "Calaveras District" shall mean the Calaveras County
- 5           Water District, and "Stockton District" shall mean the Stockton
- 6           and East San Joaquin Water Conservation District;
- 7           (d) "New Hogan" shall mean the New Hogan Project;
- 8           (e) "agricultural water" shall mean water used primarily
- 9           in the commercial production of agricultural crops or livestock,
- 10          including domestic use incidental thereto, on tracts of land
- 11          operated in units of more than two (2) acres;
- 12          (f) "municipal, industrial, and domestic water" shall
- 13          mean water used for other than agricultural purposes;
- 14          (g) "year" shall mean the period from April 1 to March 31;
- 15          (h) "conservation storage space" shall mean that space
- 16          in New Hogan which may be utilized, subject to flood control
- 17          requirements, for agricultural and municipal, industrial, and
- 18          domestic water use. It shall be limited to a maximum of three
- 19          hundred and ten thousand (310,000) acre-feet at any one time
- 20          and shall not include the storage space in New Hogan actually
- 21          used for sediment and flood control; and
- 22

1 (i) "water released from New Hogan" shall mean water  
2 released from the outlet works of New Hogan Dam or withdrawn  
3 directly from New Hogan Reservoir.

4 EFFECTIVE DATE

5 2. This contract shall be effective on the date first  
6 hereinabove written and at that time shall supersede Interim  
7 Contract No. 14-06-200-4659A, dated December 31, 1969, between  
8 the United States and the Stockton District relating to the use  
9 of New Hogan.

10 DISTRICTS TO APPOINT WATERMASTER--NONLIABILITY OF THE UNITED STATES

11 3. (a) The Districts by written agreement shall appoint a  
12 watermaster, and shall make his identity known to the Contracting  
13 Officer and the District Engineer. He shall be responsible for the  
14 following:

15 (1) Administration of the diversion into storage,  
16 storage regulation, and release of water pursuant to the  
17 terms of this contract; and

18 (2) Submittal of water use schedules to the  
19 Contracting Officer and the District Engineer pursuant to  
20 Article 5 and the coordination of schedules between the Districts.

21 (b) The United States shall not be liable or responsible  
22 for the carriage, distribution, or diversion of water after its  
23 release and/or diversion from New Hogan pursuant to this contract.



1 (c) After meeting prior downstream water rights entitlements,  
2 the release and entitlement to water from New Hogan shall be in accord-  
3 ance with the schedule submitted pursuant to Article 5.

4 (d) For purposes of subdivision (b) of Article 6 the  
5 Stockton District shall be deemed to have diverted municipal,  
6 industrial, and domestic water during this contract as follows:

7 (1) 1st through 10th year - as determined by actual  
8 deliveries to municipal, industrial, and domestic customers;

9 (2) 11th through 20th year - ten thousand (10,000)  
10 acre-feet or actual municipal, industrial, and domestic water  
11 deliveries, whichever is greater;

12 (3) 21st through 30th year - twenty thousand (20,000)  
13 acre-feet or actual municipal, industrial, and domestic water  
14 deliveries, whichever is greater; and

15 (4) 31st through 40th year - thirty thousand (30,000)  
16 acre-feet or actual municipal, industrial, and domestic water  
17 deliveries, whichever is greater.

18  
19  
20  
21  
22



1 RATE AND METHOD OF PAYMENT

2 6. (a) The Districts shall pay to the United States their  
3 share of the construction, operation, maintenance, replacement, and  
4 contract administration costs of New Hogan in the following manner:

5 (1) Construction Costs - The total reimbursable  
6 construction allocation of New Hogan, which is thirty-six and two-  
7 tenths percent (36.2%) of the construction cost of New Hogan,  
8 excluding any specific costs associated with recreational use,  
9 as determined by the Secretary of the Army, in forty (40) equal  
10 annual installments commencing on September 1 following the  
11 execution of this contract. Payments shall be made to the  
12 Bureau of Reclamation and mailed to 2800 Cottage Way, Sacramento,  
13 California 95825. Revenues received from prior interim contracts  
14 between the Stockton District and the United States for water service  
15 from New Hogan, less operation and maintenance and contract adminis-  
16 tration expenses chargeable to such contracts, shall be credited  
17 to payments due until such credits are depleted. The Contracting  
18 Officer shall notify the Districts in writing by August 1  
19 following execution of this contract the amount of accumulated  
20 credits and the application thereof. If the actual construction  
21 cost shall not have been determined on the date of this contract  
22 the Contracting Officer shall announce the  
23

1 estimated construction cost. Such estimated construction cost shall  
2 govern the amount of the construction obligation until the actual  
3 construction obligation can be determined and a statement thereof  
4 furnished to the Districts. Installments coming due after the  
5 determination of the actual construction cost shall be adjusted  
6 to reflect any difference between the estimated and the actual  
7 construction cost;

8 (2) Operation, Maintenance, and Replacement Costs -

9 The Districts shall pay to the United States thirty-eight  
10 percent (38%) of the total operation, maintenance, and replace-  
11 ment costs of New Hogan, excluding any specific costs associated  
12 with recreational use of New Hogan, to be paid in equal annual  
13 amounts for 5-year periods which shall begin on April 1 of the  
14 first year of each period and end March 31 of the fifth year.  
15 During the first 5-year period beginning April 1 of the year  
16 following the year in which this contract is executed, the  
17 Districts shall pay to the United States annually the sum of  
18 Seventy-two Thousand Two Hundred (\$72,200). This amount is  
19 estimated to cover the annual operation, maintenance, and replacement  
20 costs chargeable to the Districts during the first 5-year period  
21 plus the operation, maintenance, and replacement costs allocated  
22 to the Districts from the date of execution of this contract to  
23 April 1 of the following year. At the end of each 5-year period  
24 an estimate shall be made by the District Engineer of the

1 annual operation, maintenance, and replacement costs for  
2 the next 5-year period payable by the District and the  
3 Districts will be notified of the annual amount within  
4 thirty (30) days after the end of the preceding 5-year  
5 period. After the first 5-year period the annual install-  
6 ments due for succeeding 5-year periods shall be adjusted  
7 to reflect the difference between the actual operation,  
8 maintenance, and replacement costs allocated to the Districts  
9 for the previous 5-year period and the sum advanced by the  
10 Districts. Annual payments for operation, maintenance, and  
11 replacement costs shall be due June 1 of each year and shall  
12 be made payable to the Treasurer of the United States and  
13 deposited with the Disbursing Officer, United States Army,  
14 Corps of Engineers, 650 Capitol Mall, Sacramento,  
15 California 95814; and

16 (3) Contract Administration Costs - Upon execution  
17 of this contract, the Districts shall pay Five Thousand  
18 Dollars (\$5,000) to the Contracting Officer for contract  
19 administration costs. Not later than August 1 of each year  
20 thereafter the Contracting Officer shall furnish to the  
21 Districts a statement of the actual costs of the Bureau of  
22 Reclamation incurred in administering this contract and the  
23 recordable contracts in the preceding fiscal year made in accordance

1 with Article 19 and such amount shall be paid by the Districts.  
2 to the Contracting Officer by September 1 of each year in  
3 order to restore the account to Five Thousand Dollars (\$5,000):  
4 Provided, That this amount may be exceeded to the extent  
5 of the costs of appraisals provided for in Article 20: Provided  
6 further, That at any time it appears that this amount will  
7 be insufficient to cover the costs of appraisals for the  
8 remainder of the year the Districts shall advance within  
9 thirty (30) days after receipt of notice the additional amount  
10 which the Contracting Officer estimates will be necessary  
11 to cover such costs.

12 (b) Each year prior to September 1 the Districts shall  
13 pay interest at two and six-tenths percent (2.6%) annually on  
14 that portion of the unpaid construction obligation which is allocated  
15 to municipal, industrial, and domestic water use computed in the  
16 ratio that such use or contract obligation bears to sixty-nine  
17 thousand (69,000) acre-feet minus one-tenth (0.1) of the amount  
18 of municipal and industrial water contract obligation or water  
19 used. The interest for the period from the date of execution  
20 to the following March 31 shall be computed on that portion of  
21 the unpaid construction obligation allocated to municipal and  
22 industrial water use in the ratio that such use bears to twenty-nine  
23 thousand (29,000) acre-feet.

1 (c) After the construction cost allocated to conservation  
2 has been paid with interest when applicable as provided in sub-  
3 division (b) of this article, the only cost to be paid by the  
4 Districts will be for operation, maintenance, and replacement and  
5 contract administration as provided in subsections (2) and (3) of  
6 subdivision (a) of this article.

7 (d) All payments to be made by the Districts under this  
8 article shall be by certified check, money order, bank draft, or  
9 District warrant.

10 QUALITY OF WATER

11 7. The operation and maintenance of the New Hogan facilities  
12 for the provision of water under this contract shall be performed in  
13 such manner as is practicable to maintain the quality of raw water  
14 released from New Hogan. The United States is under no obligation  
15 to construct or furnish water treatment facilities to maintain or  
16 to better the quality of water. Further, the United States does not  
17 warrant the quality of water to be released from New Hogan pursuant  
18 to this contract.

19 POINTS OF DIVERSION--MEASUREMENT OF WATER

20 8. (a) Water will be made available to the Districts at the  
21 outlet works of New Hogan or at such points adjacent to New Hogan  
22 as may be jointly agreed upon in writing by the Contracting Officer,  
23 the District Engineer, and the watermaster.

1           (b) Water withdrawn directly from New Hogan Reservoir  
2 shall be measured by the Districts at a point located in accordance  
3 with subdivision (a) of this article. Water furnished by the  
4 Districts for municipal, industrial, and domestic use shall be  
5 measured by the Districts at the point or points of delivery to  
6 such users. Measurements shall be made with equipment installed,  
7 operated, and maintained by the Districts: Provided, That upon  
8 the request of the Contracting Officer the Districts shall investigate  
9 the accuracy of all measuring equipment installed by the Districts to  
10 determine the quantity of municipal, industrial, and domestic water  
11 diverted and shall adjust any errors disclosed by such investigation.  
12 The United States shall be afforded reasonable opportunity to be  
13 present during the inspection and testing procedure by the Districts  
14 and the United States shall have full and free access at all reasonable  
15 times to inspect said measuring equipment for the purpose of determining  
16 the accuracy and condition thereof. If said facilities are found to be  
17 defective or inaccurate they shall be readjusted or repaired, or both,  
18 or replaced by the Districts. In the event the Districts neglect or  
19 fail to make such repairs or replacements within a reasonable time as  
20 may be necessary to satisfy the operating requirements of the  
21 Contracting Officer, the United States may cause the repairs or replace-  
22 ments to be made and charge the costs thereof to the Districts, which  
23 charge the Districts shall pay to the United States on or before June 1  
24 of the year following that in which the cost was incurred and a state-  
25 ment thereof furnished by the Contracting Officer.

SUBCONTRACTS

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9. The Districts shall be responsible for the furnishing of agricultural water from New Hogan only to lands within the confines of each District's area of jurisdiction. Nothing herein shall prohibit the Districts or water users within the Districts from commingling municipal, industrial, and domestic water from New Hogan with water from other sources and exporting an amount of municipal, industrial, and domestic water not in excess of the water from those other sources beyond the boundaries of the Districts. Each District, without the consent of the other District or of the Contracting Officer, may enter into subcontracts for the furnishing of agricultural or municipal, industrial, and domestic water, and each such subcontract shall contain a provision whereby the subcontractor specifically agrees to be bound by the provisions of this contract. Nothing contained in any such subcontract shall be deemed in any way to release the Districts from their primary liability to the United States with respect to each and all of the obligations undertaken by each District pursuant to this contract. Copies of subcontracts for the furnishing of New Hogan water shall be furnished to the Contracting Officer.

1                    UNITED STATES NOT LIABLE FOR WATER SHORTAGE--RESPONSIBILITY  
2                    OF DISTRICTS--RETURN FLOWS--RIGHT OF ACCESS TO WORKS

3                    10. (a) In no event shall any liability accrue against the  
4                    United States or any of its officers, agents, or employees for any  
5                    damage, direct or indirect, arising from a shortage of water on  
6                    account of errors in operation, drought, or other unavoidable causes  
7                    whatsoever.

8                    (b) The Districts agree to take water released from New Hogan  
9                    pursuant to this contract at the delivery points established pursuant  
10                   to Article 8 hereof and to perform any and all acts necessary thereafter  
11                   to maintain control over such water. The Districts assume full responsi-  
12                   bility for the control and distribution of such water: Provided, That  
13                   the United States reserves the right to all waste, seepage, and  
14                   return-flow water derived from water furnished to the Districts which  
15                   escapes or is discharged beyond the Districts' boundaries, and nothing  
16                   herein shall be construed as an abandonment or a relinquishment by the  
17                   United States of any such water, but this shall not be construed as  
18                   claiming for the United States any right, as waste, seepage, or return  
19                   flow, to water being used pursuant to this contract for surface  
20                   irrigation or underground storage within the Districts' boundaries by  
21                   the Districts.  
22

1           (c) All works, including pipelines, pumps, and meters  
2 necessary to enable the Districts to take and distribute water from  
3 New Hogan pursuant to this contract shall be constructed, operated,  
4 and maintained, or caused to be constructed, operated, and maintained  
5 by the Districts without cost or expense to the United States. An  
6 easement is necessary and will be granted pursuant to 10 U.S.C. 2669  
7 for the installation, operation, and maintenance of these works on  
8 property of the United States. In addition, it is understood that  
9 installation, operation, and maintenance of such works on property of  
10 the United States shall also be subject to such restrictions and  
11 regulations as to location, method of installation, operation, and  
12 maintenance as may be prescribed by the Contracting Officer and the  
13 District Engineer and subject further to the provisions of subdivision (d)  
14 of this article. It is specifically recognized and agreed that this  
15 contract does not grant to the Districts any right of access to the  
16 stored waters at New Hogan or to the adjacent lands of the United States  
17 for any purpose except as provided herein for installation, operation,  
18 and maintenance of facilities.

19           (d) Works installed pursuant to subdivision (c) of this  
20 article shall be installed in accordance with plans and specifications  
21 approved by the Contracting Officer and the District Engineer. The  
22 Contracting Officer and the District Engineer shall have the right of  
23 ingress and egress at all reasonable times over and across the land of  
24 the Districts for the purpose of inspecting and reading the meters which  
25 may be installed and the Districts hereby grant a right-of-way to said  
26 parties for such purpose.

1 (e) The Districts do not assume any obligation, liability,  
2 or responsibility for conditions arising out of the operation of  
3 New Hogan for flood control or the release of any water for flood  
4 control, or for any defect in or failure of New Hogan works.

5 WATER POLLUTION CONTROL

6 11. The Districts agree that they will comply fully with all  
7 applicable Federal laws, orders, and regulations, and the laws of  
8 the State of California, all as administered by appropriate authorities,  
9 concerning the pollution of streams, reservoirs, groundwater, or water  
10 courses with respect to thermal pollution or the discharge of refuse,  
11 garbage, sewage effluent, industrial waste, oil, mine tailings, mineral  
12 salts or other pollutants. The Districts agree further that any  
13 contract they may enter into with a third party for the furnishing  
14 of New Hogan water will contain a similar water pollution control  
15 article.

16 TITLE AND PHYSICAL OPERATIONS TO BE WITH THE UNITED STATES

17 12. (a) Title to all of New Hogan works shall be and remain  
18 in the name of the United States.

19 (b) Any and all physical operations of New Hogan pursuant  
20 to this contract shall be performed by the Corps of Engineers on  
21 behalf of the United States.

22



1                                    ALL BENEFITS CONDITIONED UPON PAYMENT

2            14. (a) It is agreed that the payment of charges upon the  
3 terms and conditions provided for herein is a prerequisite to the  
4 right to the use of water released to the Districts pursuant to  
5 this contract.

6            (b) Should the Districts fail to levy the assessments,  
7 tolls, or charges against any lands or water user required to meet  
8 the Districts' obligation to the United States under this contract or,  
9 having levied, should the Districts be prevented from collecting such  
10 assessments, tolls, or charges by judicial proceedings, or otherwise  
11 fail to collect them, such lands or water users shall not be entitled  
12 to receive water from New Hogan and the Districts, except as otherwise  
13 ordered by a court of competent jurisdiction, shall not deliver water  
14 to such lands or water users from New Hogan unless and until arrange-  
15 ments for its delivery satisfactory to the Contracting Officer have  
16 been made.

17                                    COVENANT AGAINST CONTINGENT FEES

18            15. The Districts warrant that no person or selling agency has  
19 been employed or retained to solicit or secure this contract upon an  
20 agreement or understanding for a commission, percentage, brokerage,  
21 or contingent fee, excepting bona fide employees or bona fide established  
22 commercial or selling agencies maintained by the Districts for the

1 purpose of securing business. For breach or violation of this warranty  
2 the United States shall have the right to annul this contract without  
3 liability, or in its discretion to add to the contract repayment  
4 obligation or consideration the full amount of such commission, percentage,  
5 brokerage, or contingent fee.

6 PENALTY FOR DELINQUENT PAYMENTS

7 16. The Districts shall pay a penalty on installments or charges  
8 which become delinquent computed at the rate of one-half of one percent  
9 per month of the amount of such delinquent installments or charges for  
10 each day from the date of such delinquency until paid: Provided, That  
11 no penalty shall be charged to the Districts unless such delinquency  
12 continues for more than thirty days.

13 BOOKS, RECORDS, AND REPORTS

14 17. The Districts shall establish and maintain accounts and other  
15 books and records pertaining to their financial transactions, land use  
16 and crop production, water use, and to such other matters as the  
17 Contracting Officer may require. Reports thereon shall be furnished  
18 to the United States in such form and on such date or dates as may be  
19 required by the Contracting Officer. Each party shall have the right,  
20 during office hours, to examine and make copies of the other parties'  
21 books and official records relating to matters covered by this contract.



1 consideration involved in such sales the United States may instruct  
2 the District by written notice to refuse to furnish any water subject  
3 to this contract to the land involved in such fraudulent sales and  
4 the District thereafter shall not furnish said water to such lands.

5 (b) If New Hogan water furnished to a District pursuant  
6 to this contract reaches the underground strata of excess land owned  
7 by a large landowner, as defined in Article 21, who has not executed  
8 a recordable contract and the large landowner pumps such New Hogan  
9 water from the underground, the District will not be deemed to have  
10 furnished such water to said lands within the meaning of this contract  
11 if such water reached the underground strata of the aforesaid excess  
12 land as an unavoidable result of the furnishing of New Hogan water  
13 by the District to nonexcess lands or to excess lands with respect  
14 to which a recordable contract has been executed.

15 VALUATION AND SALE OF EXCESS LANDS

16 20. (a) The value of the excess irrigable lands within a  
17 District as defined in Article 21, held in private ownership of  
18 large landowners as defined in said article, for the purposes of  
19 this contract, shall be appraised in a manner to be prescribed by  
20 the Secretary. At the option of the large landowner, however, the  
21 value of such land may be appraised, subject to the approval thereof  
22 by the Secretary, by three appraisers. One of said appraisers shall

1 be designated by the Secretary and one shall be designated by the respective  
2 District in which the land is located, and the two appraisers so appointed  
3 shall name the third. If the appraisers so designated by the Secretary and  
4 the District are unable to agree upon the appointment of the third, the  
5 Presiding Justice of the Third District Court of Appeal of the State of  
6 California shall be requested to name the third appraiser.

7 (b) The following principles shall govern the appraisal:

8 (1) No value shall be given such lands on account  
9 of the existing or prospective possibility of securing water  
10 from New Hogan; and

11 (2) The value of improvements on the land at the  
12 time of said appraisal shall be included therein, but shall  
13 also be set forth separately in such appraisal.

14 (c) The excess land of any large landowner shall be  
15 reappraised in the manner provided in subdivision (a) hereof at  
16 the instance of the United States or at the request of said land-  
17 owner. The cost of the first two appraisals of each tract of excess  
18 land shall be paid by the United States. The cost of each appraisal  
19 thereafter shall be paid by the party requesting such appraisal.

20 (d) Any improvements made or placed on the appraised land  
21 after the appraisal hereinabove provided for prior to sale of the  
22 land by a large landowner may be appraised in like manner.

1           (e) Excess irrigable lands sold by large landowners  
2 within a District shall not carry the right to receive water  
3 made available pursuant to this contract for such land and the  
4 Districts agree to refuse to furnish such water to lands so sold  
5 until, in addition to compliance with the other provisions hereof,  
6 a verified statement showing the sale price upon any such sale shall  
7 have been filed with the District and the sale price is not in excess  
8 of the appraised value as provided herein.

9           (f) Each District agrees to take all reasonable steps  
10 requested by the Contracting Officer to ascertain the occurrence  
11 and conditions of all sales of irrigable lands of large landowners  
12 in such District made subsequent to the execution of this contract  
13 and to inform the United States concerning the same.

14           (g) A true copy of this contract, of each recordable  
15 contract executed pursuant to this article and Articles 19 and 21  
16 hereof, and of each appraisal made pursuant thereto shall be furnished  
17 to the respective District by the United States and shall be maintained  
18 on file in the office of said District and like copies in such offices of the  
19 Bureau of Reclamation as may be designated by the Contracting Officer  
20 and shall be made available for examination during the usual office  
21 hours by all persons who may be interested therein.



1 herein provided and at a price not to exceed the approved,  
2 appraised value of such excess land and within a period of  
3 ten (10) years after the date of the execution of said  
4 recordable contract and agreeing further that if said land  
5 is not so disposed of within said period of ten (10) years,  
6 the Secretary shall have the power to dispose of said land  
7 at the appraised value thereof fixed as provided herein or such  
8 lower price as may be approved by the owner of such land, subject  
9 to the same conditions on behalf of such large landowner; and  
10 each District agrees that it will refuse to furnish said water  
11 to any large landowner other than for his nonexcess lands until  
12 such owner meets the conditions precedent herein stated; and

13 (2) Within thirty (30) days after the date of notice  
14 from the United States requesting such large landowner to  
15 designate his irrigable lands within a District which he  
16 desires to designate as nonexcess lands, file in the office of  
17 such District, in duplicate, one copy thereof to be furnished by  
18 said District to the Bureau of Reclamation, his written designation  
19 and description of lands so selected to be nonexcess lands and  
20 upon failure to do so the District shall make such designation  
21 and mail a notice thereof to such large landowner, and in the  
22 event the District fails to act within such period of time as

1 the Contracting Officer considers reasonable, such designation  
2 will be made by the Contracting Officer, who will mail a notice  
3 thereof to the District and the large landowner. The large  
4 landowner shall become bound by any such action on the part of  
5 the District or the Contracting Officer and the District will  
6 furnish said water only to the land so designated to be nonexcess  
7 land. A large landowner may with the consent of the Contracting  
8 Officer designate land other than that previously designated as  
9 nonexcess land: Provided, That an equal acreage of the land  
10 previously designated as nonexcess, shall, upon such new  
11 designation, become excess land thereafter subject to the  
12 provisions of this article and Articles 19 and 20 hereof and  
13 shall be described in an amendment of such recordable contract  
14 as may have been executed by the large landowner, in the same  
15 manner as if such land had been excess land at the time of  
16 the original designation.

17 REPEAL OR AMENDMENT OF FEDERAL RECLAMATION LAWS

18 22. In the event that the Congress of the United States repeals  
19 the so-called excess land provisions of the Federal reclamation laws,  
20 Articles 19, 20, and 21 of this contract will no longer be of any force  
21 or effect, and, in the event that the Congress amends the excess-land  
22 provision or other provisions of the Federal reclamation laws, the

1 United States agrees, at the option of the Districts, to negotiate  
2 amendments of appropriate articles of this contract, all consistently  
3 with the provisions of such amendment.

4 WATER ACQUIRED BY DISTRICTS OTHER THAN FROM THE UNITED STATES

5 23. (a) The provisions of this contract shall not be applicable  
6 to or affect water or water rights now owned or hereafter acquired by  
7 the Districts or landowners within the Districts other than from the  
8 United States. Water furnished pursuant to the terms of this contract  
9 may be transported by means of the same facilities as water now avail-  
10 able or which may become available to the Districts or landowners  
11 within the Districts other than pursuant to the terms of this contract  
12 if the Contracting Officer determines that such mingling is necessary  
13 to avoid a duplication of facilities; and notwithstanding such mingling  
14 of water, the provisions of this contract shall be applicable to the  
15 quantity of water furnished to the Districts pursuant to the terms  
16 hereof, and such mingling of water shall not in any manner subject to  
17 the provisions of this contract the quantity of water acquired by or  
18 available to the Districts or landowners within the Districts other than  
19 from the United States.

20 (b) With respect to the facilities or portions thereof in  
21 which mingling is permitted as provided in subdivision (a) hereof,  
22 the Districts shall take or cause to be taken such action as may in

1 the opinion of the Contracting Officer be necessary to assure that  
2 the quantity of water furnished by the United States during each  
3 24-hour period will be delivered by the Districts only to lands  
4 eligible to receive the same under Articles 19, 20, and 21 herein.  
5 The Districts shall be deemed to be in breach of this article and  
6 Articles 19, 20, and 21 of this contract if at any time there is  
7 furnished to excess lands not covered by recordable contracts  
8 and served by the facilities or portions thereof in which mingling  
9 is permitted, a quantity of water which is greater than that which the  
10 District or landowners within the Districts have introduced into said  
11 facilities from the supply available other than pursuant to this contract..

12 CONTINGENT ON APPROPRIATION OR ALLOTMENT OF FUNDS

13 24. The expenditure of any money or the performance of any work  
14 by the United States hereunder which may require appropriation of money  
15 by the Congress or the allotment of funds shall be contingent upon such  
16 appropriation or allotment being made. The failure of the Congress so  
17 to appropriate funds or the absence of any allotment of funds shall not  
18 relieve the Districts from any obligations then accrued under this con-  
19 tract and no liability shall accrue to the United States in case such  
20 funds are not appropriated or allotted.



1 (b) The designation of the addressee or the address given  
2 above may be changed by notice given in the same manner as provided  
3 in this article for other notices.

4 (c) This article shall not preclude the effective service  
5 of any such notice or announcement by other means.

6 ASSIGNMENT LIMITED--SUCCESSORS AND ASSIGNS OBLIGATED

7 27. The provisions of this contract shall apply to and bind the  
8 successors and assigns of the parties hereto, but no assignment or  
9 transfer of this contract or any part or interest therein shall be  
10 valid until approved by the Secretary.

11 REMEDIES UNDER CONTRACT NOT EXCLUSIVE--WAIVERS

12 28. Nothing contained in this contract shall be construed as in  
13 any manner abridging, limiting, or depriving the United States of any  
14 means of enforcing any remedy, either at law or in equity, for the  
15 breach of any of the provisions hereof which it would otherwise have.  
16 Any waiver, at any time by either party to this contract of its rights  
17 with respect to a default, or any matter arising in connection with  
18 this contract, shall not be deemed to be a waiver with respect to any  
19 subsequent default or matter.

20  
21  
22



1 including the making of this contract and the validity of the pro-  
2 visions hereof; and this contract shall not be binding on the United  
3 States until each District's organization and proceedings and this  
4 contract shall have been so confirmed by a court of competent juris-  
5 diction or pending appellate action in any court if ground for appeal  
6 be laid. The Districts shall furnish to the Contracting Officer  
7 certified copies of such decree and of all pertinent supporting  
8 documents.

9 TITLE VI, CIVIL RIGHTS ACT OF 1964

10 31. (a) The Districts hereby agree that they will comply with  
11 Title VI of the Civil Rights Act of 1964 (P.L. 88-352) and all require-  
12 ments imposed by or pursuant to the Department of the Interior  
13 Regulation (43 CFR 17) issued pursuant to that title, to the end that,  
14 in accordance with Title VI of that Act and the Regulation, no person  
15 in the United States shall, on the ground of race, color, or national  
16 origin be excluded from participation in, be denied the benefits of,  
17 or be otherwise subjected to discrimination under any program or  
18 activity for which the Districts receive financial assistance from  
19 the Bureau of Reclamation and hereby give assurance that they will  
20 immediately take any measures to effectuate this agreement.

21 (b) If any real property or structure thereon is provided  
22 or improved with the aid of Federal financial assistance extended to

1 the Districts by the Bureau of Reclamation, this assurance obligates  
2 the Districts, or in the case of any transfer of such property, any  
3 transferee for the period during which the real property or structure  
4 is used for a purpose involving the provision of similar services or  
5 benefits. If any personal property is so provided, this assurance  
6 obligates the Districts for the period during which they retain  
7 ownership or possession of the property. In all other cases, this  
8 assurance obligates the Districts for the period during which the  
9 Federal financial assistance is extended to them by the Bureau of  
10 Reclamation.

11 (c) This assurance is given in consideration of and for  
12 the purpose of obtaining any and all Federal grants, loans, contracts,  
13 property, discounts, or other Federal financial assistance extended  
14 after the date hereof to the Districts by the Bureau of Reclamation,  
15 including installment payments after such date on account of arrange-  
16 ments for Federal financial assistance which were approved before such  
17 date. The Districts recognize and agree that such Federal financial  
18 assistance will be extended in reliance on the representations and  
19 agreements made in this assurance, and that the United States shall  
20 reserve the right to seek judicial enforcement of this assurance. This  
21 assurance is binding on the Districts, their successors, transferees,  
22 and assignees.



1           (c) The Districts will send to each labor union or  
2 representative of workers with which they have a collective  
3 bargaining agreement or other contract or understanding, a  
4 notice, to be provided by the agency Contracting Officer,  
5 advising the labor union or workers' representative of the  
6 Districts' commitments under this Equal Opportunity clause,  
7 and shall post copies of the notice in conspicuous places  
8 available to employees and applicants for employment.

9           (d) The Districts will comply with all provisions  
10 of Executive Order No. 11246 of September 24, 1965, as amended,  
11 and of the rules, regulations, and relevant orders of the  
12 Secretary of Labor.

13           (e) The Districts will furnish all information and  
14 reports required by said Executive Order and by the rules,  
15 regulations, and orders of the Secretary of Labor, or  
16 pursuant thereto, and will permit access to their books,  
17 records, and accounts by the contracting agency and the  
18 Secretary of Labor for purposes of investigation to  
19 ascertain compliance with such rules, regulations, and  
20 orders.

21           (f) In the event of the Districts' noncompliance with  
22 the Equal Opportunity clauses of this contract or with any

Article 32(c) - (f)--

EQUAL OPPORTUNITY

1  
2 32. During the performance of this contract, the Districts  
3 agree as follows:

4 (a) The Districts will not discriminate against any  
5 employee or applicant for employment because of race, color,  
6 religion, sex, or national origin. The Districts will take  
7 affirmative action to ensure that applicants are employed,  
8 and that employees are treated during employment, without  
9 regard to their race, color, religion, sex, or national  
10 origin. Such action shall include, but not be limited to,  
11 the following: Employment, upgrading, demotion, or transfer;  
12 recruitment or recruitment advertising; layoff or termination;  
13 rates of pay or other forms of compensation; and selection  
14 for training, including apprenticeship. The Districts agree  
15 to post in conspicuous places, available to employees and  
16 applicants for employment, notices to be provided by the  
17 Contracting Officer setting forth the provisions of this  
18 Equal Opportunity clause.

19 (b) The Districts will, in all solicitations or  
20 advertisements for employees placed by or on behalf of the  
21 Districts, state that all qualified applicants will receive  
22 consideration for employment without regard to race, color,  
23 religion, sex, or national origin.

1           (c) The Districts will send to each labor union or  
2 representative of workers with which they have a collective  
3 bargaining agreement or other contract or understanding, a  
4 notice, to be provided by the agency Contracting Officer,  
5 advising the labor union or workers' representative of the  
6 Districts' commitments under this Equal Opportunity clause,  
7 and shall post copies of the notice in conspicuous places  
8 available to employees and applicants for employment.

9           (d) The Districts will comply with all provisions  
10 of Executive Order No. 11246 of September 24, 1965, as amended,  
11 and of the rules, regulations, and relevant orders of the  
12 Secretary of Labor.

13           (e) The Districts will furnish all information and  
14 reports required by said Executive Order and by the rules,  
15 regulations, and orders of the Secretary of Labor, or  
16 pursuant thereto, and will permit access to their books,  
17 records, and accounts by the contracting agency and the  
18 Secretary of Labor for purposes of investigation to  
19 ascertain compliance with such rules, regulations, and  
20 orders.

21           (f) In the event of the Districts' noncompliance with  
22 the Equal Opportunity clauses of this contract or with any

1 of the said rules, regulations, or orders, this contract  
2 may be canceled, terminated, or suspended, in whole or in  
3 part, and the Districts declared ineligible for further  
4 Government contracts in accordance with procedures authorized  
5 in said Executive Order, and such other sanctions may be  
6 imposed and remedies invoked as provided in said Executive  
7 Order, or by rule, regulation, or order of the Secretary  
8 of Labor, or as otherwise provided by law.

9 (g) The Districts will include the provisions of  
10 subdivisions (a) through (g) in every subcontract or purchase  
11 order unless exempted by rules, regulations, or orders of the  
12 Secretary of Labor issued pursuant to section 204 of said  
13 Executive Order so that such provisions will be binding upon  
14 each subcontractor or vendor. The Districts will take such  
15 action with respect to any subcontract or purchase order as  
16 the contracting agency may direct as a means of enforcing  
17 such provisions, including sanctions for noncompliance:  
18 Provided, however, That in the event the Districts become involved  
19 in, or are threatened with, litigation with a subcontractor or  
20 vendor as a result of such direction by the contracting agency,  
21 the Districts may request the United States to enter into such  
22 litigation to protect the interests of the United States.



1 IN WITNESS WHEREOF, the parties have executed this  
2 contract the day and year first herein written.

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Rita Inger  
Appd. Sol. Off.

THE UNITED STATES OF AMERICA

By [Signature]  
Regional Director, Region 2  
Bureau of Reclamation

STOCKTON AND EAST SAN JOAQUIN  
WATER CONSERVATION DISTRICT

(SEAL)

ATTEST:

[Signature]  
Secretary

By [Signature]  
President

(SEAL)

ATTEST:

[Signature]  
Secretary

CALAVERAS COUNTY WATER DISTRICT

By [Signature]  
President

APPROVED:

DEPARTMENT OF THE ARMY

By [Signature]

Date: September 15, 1970

Q

Q

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RESOLUTION NO. 1255

RESOLUTION OF THE BOARD OF DIRECTORS OF THE  
CALAVERAS COUNTY WATER DISTRICT  
AUTHORIZING EXECUTION OF CONTRACT BETWEEN THE  
UNITED STATES OF AMERICA AND THE STOCKTON & EAST SAN JOAQUIN  
WATER CONSERVATION DISTRICT AND THE CALAVERAS COUNTY  
WATER DISTRICT PROVIDING FOR REPAYMENT AND  
CONSERVATION USE OF NEW HOGAN PROJECT

---

WHEREAS, there has been presented to this Board a proposed "Contract Between the United States of America and Stockton & East San Joaquin Water Conservation District and Calaveras County Water District Providing for Repayment and Conservation Use of New Hogan Project Numbered R.O. Draft 7/6-1970, Rev. W.O. 7/20-1970, Rev. R.O. 8/13-1970"; and

WHEREAS, said contract has been approved by the United States Department of the Interior and the Corps of Army Engineers; and

WHEREAS, the Secretary - Manager of this District recommends that said Contract be approved by this Board and that the President and Secretary of this District be authorized to execute said Contract on behalf of this District;

NOW, THEREFORE, BE IT RESOLVED:

That said Contract is approved and the President and Secretary of this District are authorized and directed to execute said "Contract Between the United States of America and the Stockton & East San Joaquin Water Conservation District and Calaveras County Water District Providing for Repayment and Conservation Use of the New Hogan Project" on behalf of this District.

PASSED AND ADOPTED this 19th day of August 1970, by the following vote:

AYES: Directors Irvin Tanner, Elliott McCombs, Oliver Turner,  
Kenneth Mitchell and William Hart

NOES: None

ABSENT: None

CALAVERAS COUNTY WATER DISTRICT

RESOLUTION NO. 1255

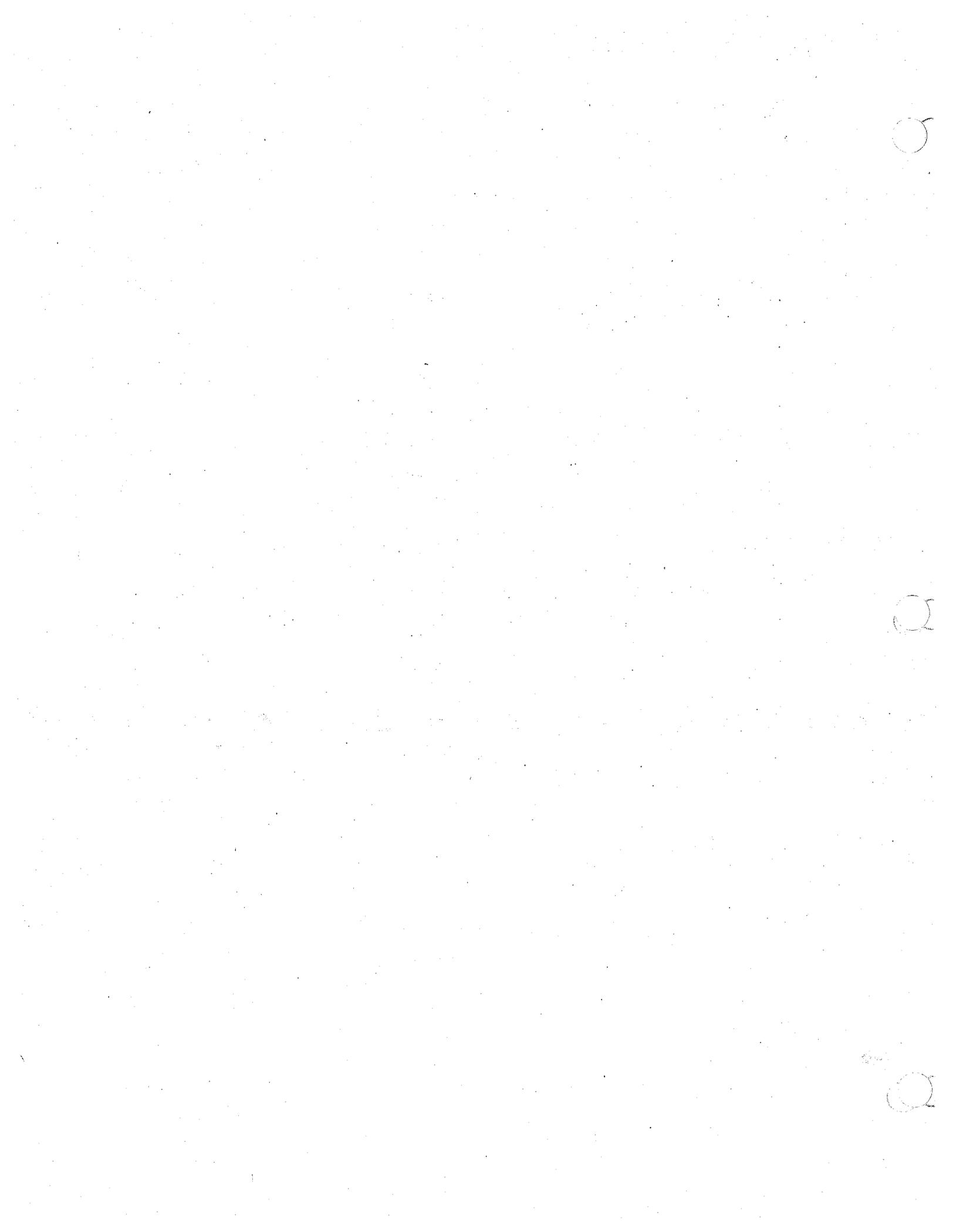
William D. Hart  
President of the Board of Directors  
of Calaveras County Water District

ATTEST:

Stanley Edwards  
Secretary of the Board of Directors  
of Calaveras County Water District

CERTIFIED A TRUE COPY  
Stanley Edwards  
SECRETARY  
Calaveras County Water District





Contract No.  
14-06-200-5057A  
Amendatory

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
New Hogan Project, California

AMENDATORY CONTRACT AMONG THE UNITED STATES OF AMERICA,  
STOCKTON EAST WATER DISTRICT AND CALAVERAS COUNTY WATER DISTRICT  
PROVIDING FOR REPAYMENT AND CONSERVATION USE OF NEW HOGAN PROJECT

THIS AMENDATORY CONTRACT, made this 25<sup>th</sup> day of March, 1988

between the UNITED STATES OF AMERICA, hereinafter referred to as the United States, represented by the Contracting Officer executing this amendment, and STOCKTON EAST WATER DISTRICT AND CALAVERAS COUNTY WATER DISTRICT hereinafter referred to as the Contractors,

WITNESSETH, That:

EXPLANATORY RECITALS

WHEREAS, the parties have entered into a repayment contract, dated August 25, 1970 and identified as contract No. 14-06-200-5057A, as amended, which provides repayment and conservation use of New Hogan Dam and Reservoir and is hereinafter referred to as the repayment contract; and

WHEREAS, pursuant to Section 212 of Public Law 97-293 the Reclamation Reform Act of October 12, 1982, the Contractors' water supply from the abovestated reservoir is exempt from the provisions of Federal reclamation law; and

WHEREAS, the Contractors desire to amend the repayment contract to reflect the intent so stated in Section 212 of Public Law 97-293;

NOW, THEREFORE, in consideration of the mutual and dependent stipulations and covenants herein contained, it is mutually agreed by the parties hereto as follows:

1. The following changes to the repayment contract between the United States and the Contractors, shall be effective commencing October 12, 1982.

2. Articles 19, 20, 21 and 22 of the repayment contract and all references to such articles in other articles of the repayment contract are hereby deleted in their entirety.

3. Nothing in this amendatory contract shall terminate, cancel or affect any sales of land heretofore made under recordable contract.

4. Except as herein amended, all provisions of the repayment contract shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have signed their names as of the day and year first above written.

UNITED STATES OF AMERICA

ACTING By *Wesley Shild*  
Regional Director, Mid-Pacific Region  
Bureau of Reclamation

STOCKTON-EAST WATER DISTRICT

(SEAL)  
Attest: *[Signature]*  
Secretary

By *Roger M. Jenkins*  
President

(SEAL)

CALAVERAS COUNTY WATER DISTRICT

Attest:

*Steve Feltz*  
Secretary  
CORP20

By *[Signature]*  
President

RESOLUTION NO. 87-160

WHEREAS, the Bureau of Reclamation has proposed amendments to the contract for New Hogan Water to delete those sections relating to ownership or pricing limitations of Federal Reclamation Law.

BE IT RESOLVED that the Board of Directors of CALAVERAS COUNTY WATER DISTRICT does hereby authorize the execution of the "Amendatory Contract Among the UNITED STATES OF AMERICA, STOCKTON EAST WATER DISTRICT and CALAVERAS COUNTY WATER DISTRICT Providing For Payment and Conservation Use of the New Hogan Project."

BE IT FURTHER RESOLVED that the President is hereby authorized to execute said Amendatory Contract.

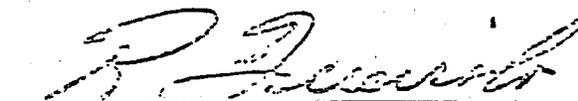
PASSED AND ADOPTED this 10th day of December, 1987 by the following vote:

AYES: Directors Clark, Johnson, Neilsen, Gleason and Queirolo

NOES: None

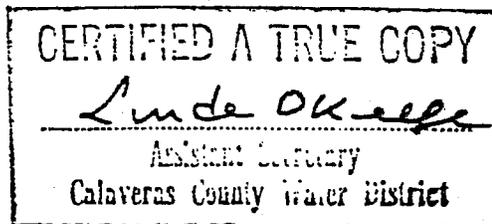
ABSENT: None

CALAVERAS COUNTY WATER DISTRICT

  
President

ATTEST:

  
Secretary



MAR 17 1988

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**RESOLUTION OF THE BOARD OF DIRECTORS  
OF STOCKTON EAST WATER DISTRICT**

**RESOLUTION 87-88-26**

**RESOLUTION AUTHORIZING SIGNATURES ON AMENDMENT TO CONTRACT  
FOR USE OF NEW HOGAN WATER**

WHEREAS, on February 16, 1988 the Board of Directors of Stockton East Water District adopted the Amendatory Contract Among the United States of America, Stockton East Water District and Calaveras County Water District Providing For Repayment And Conservation Use of New Hogan Project; and

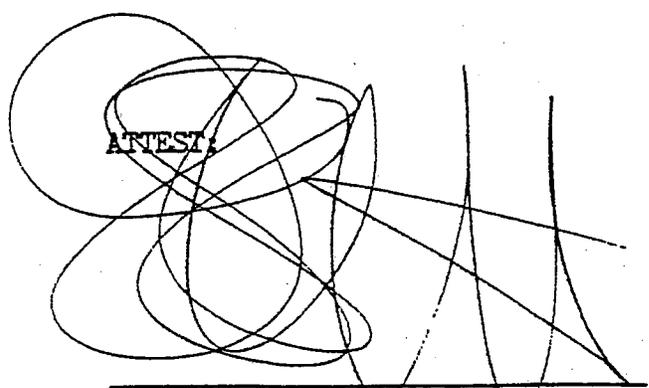
WHEREAS, the United States of America has requested that signatures on the Amendatory Contract be authorized by Resolution of the Board of Directors of Stockton East Water District;

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of Stockton East Water District approves and authorizes the Board President and Secretary of the Board to execute and sign the Amendatory Contract approved at the February 16, 1988 Board meeting.

PASSED AND ADOPTED by the Board of Directors of Stockton East Water District at a regular meeting held on March 15, 1988, by the following vote:

- AYES: Solari, Dondero, Laven, Bozzano, MacNear, Huckins
- NOES: None
- ABSENT: None

*Roger M. Huckins*  
 \_\_\_\_\_  
 ROGER M. HUCKINS, President  
 Stockton East Water District

ATTEST: 

EDWARD M. STEFFANI, Secretary  
 Stockton East Water District

SECRETARY'S CERTIFICATE

I, EDWARD M. STEFFANI, Secretary of the Board of Directors of the STOCKTON-EAST WATER DISTRICT, Stockton, California, do hereby certify as follows:

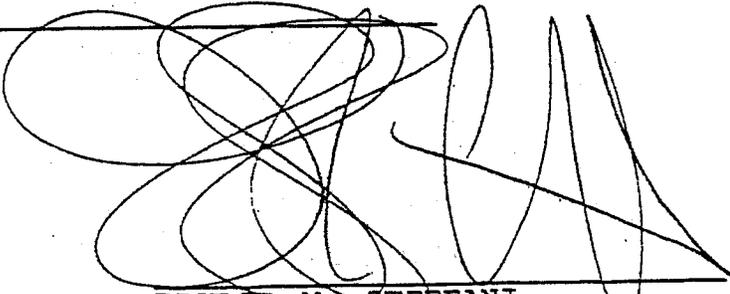
The foregoing is a full, true and correct copy of a resolution duly adopted at a Regular Meeting of the Board of Directors of said District duly and regularly and legally held at the regular meeting place thereof on March 15, 1988, of which meeting all of the members of said Board of Directors had due notice and at which a majority thereof were present.

I have carefully compared the same with the original minutes of said meeting on file and of record in my office, and the foregoing is a full, true, and correct copy of the original resolution adopted at said meeting and entered in said minutes.

Said resolution has not been amended, modified, or rescinded since the date of its adoption, and the same is now in full force and effect.

Dated: \_\_\_\_\_

3/15/88



EDWARD M. STEFFANI  
Secretary of the Board  
STOCKTON-EAST WATER DIST

(SEAL)

MEMORANDUM OF UNDERSTANDING  
BETWEEN  
CALAVERAS COUNTY WATER DISTRICT  
AND  
STOCKTON EAST WATER DISTRICT

WHEREAS, on August 25, 1970 Calaveras County Water District (Calaveras) and Stockton East Water District (Stockton) entered into a contract with the United States of America providing for repayment and conservation use of New Hogan Project; and

WHEREAS, on August 25, 1970 Calaveras and Stockton entered into a contract providing for the use, repayment and administration of water from the New Hogan Project; and

WHEREAS, the New Hogan Project is operated by the US Corps of Engineers as a multi-purpose reservoir for recreation, flood control and conservation use; and

WHEREAS, contract between Calaveras, Stockton and United States reserves a storage basin of 15,000 acre feet for silting and storage of water for recreational and incidental uses; and

WHEREAS, the US Corps of Engineers through the District Engineer has developed an operational plan for the storage, regulation and release of flood control waters; and

WHEREAS, Calaveras filed an Application with the Federal Energy Regulatory Commission (FERC) for License to construct an electrical generating facility at New Hogan Dam; and

WHEREAS, it is the desire of Calaveras and Stockton to maximize the combined conservation and power generation potential of New Hogan and the Calaveras watershed.

NOW, THEREFORE, BE IT RESOLVED that Calaveras and Stockton are entering into this Memorandum of Understanding (MOU) to cooperatively pursue the greater use of water from New Hogan, to clarify the application of various contract terms, to resolve the conflict of the parties with respect to the proposed New Hogan Power Plant Project and to jointly investigate the availability and development of additional water supplies.

The Contract between Calaveras and Stockton provides for a distribution of the conservation yield based on a yield study prepared by Murray, Burns and Kienlen dated May 4, 1970. As a result of a study dated November 4, 1980 by Murray, Burns and Kienlen, Calaveras and Stockton wish to consider modification of the parameters used to develop the original yield study and thus increase the amount of water yield and assume risks which differ from those on which the 1970 study was based. In so doing, each party recognizes the need to protect and provide for certain needs and therefore wish to define the minimum delivery amounts which shall dictate the maximum reservoir drawdown. ~~Calaveras shall have reserved for its uses up to 7,700 acre feet plus 350 acre feet for water rights and Stockton shall have reserved for its uses up to 15,000 acre feet plus 12,650 acre feet for water rights.~~

The parties recognize that certain contract provisions may be conflicting due to this MOU but agree that at such time as conflicts arise the parties shall confer to resolve any conflict in keeping with the concepts developed in

this MOU. With respect to the provisions of Paragraph 5(A)(1) of the District's contract, the definition of "P", project water, shall be "Project Water, but in no event less than 71,100 acre feet".

Stockton shall prepare and submit to Calaveras a revised Operations Plan which Calaveras shall in good faith review and comment on, and then the parties shall jointly agree on a Final Operations Plan no later than December 31, 1982. This Plan may thereafter be modified by agreement of the parties.

Calaveras shall review its ultimate use and buildup schedule set forth in said August 25, 1970 contract and shall submit a revised use and buildup schedule to Stockton for good faith review and comment by July 1, 1983.

Calaveras filed an Application for License on October 13, 1981 with the Federal Energy Regulatory Commission (FERC) for Project No. 2903-001, a proposed 2.5 megawatt unit at New Hogan Dam. Stockton, on February 19, 1982, filed a petition to intervene and a Notice of Intent to file a competing application. In recognition of the desires and interests expressed in this MOU, and immediately upon mutual agreement between Calaveras and Stockton of this MOU or any modification thereof, then Stockton agrees to withdraw its petition, not file a competing application and to cooperate with Calaveras' efforts to develop and operate the hydroelectric project.

Stockton and Calaveras have a mutual need for additional water supplies as noted above, and Calaveras has submitted to Stockton a number of options for developing additional water supplies within Calaveras County. The parties agree that they shall investigate joint development of these options and in so doing Calaveras shall provide to Stockton its records, maps and other data regarding those options. The parties shall then jointly consider the feasibility of

pursuing in additional detail development of one or more of those alternative projects. It is further understood that if one party desires not to proceed, the other may do so independently, and will not be hindered or opposed by the non-participating party.

PASSED AND ADOPTED by the Board of Directors of STOCKTON-EAST WATER DISTRICT on the 15th day of June, 1982 by Resolution No. 82-83-07.

STOCKTON-EAST WATER DISTRICT

By Perry H. Jaff  
President

ATTEST:

James R. Beard II  
Secretary

PASSED AND ADOPTED by the Board of Directors of CALAVERAS COUNTY WATER DISTRICT on the 10th day of June, 1982 by Resolution No. 3441.

CALAVERAS COUNTY WATER DISTRICT

By David J. Silveira  
President

ATTEST:

Steve Felts  
Secretary

Resolution No. 82-83-07 (

RESOLUTION OF THE BOARD OF DIRECTORS OF THE STOCKTON-EAST WATER DISTRICT RELATIVE TO ADOPTION OF THE MEMORANDUM OF UNDERSTANDING BETWEEN CALAVERAS COUNTY WATER DISTRICT (CCWD) AND STOCKTON-EAST WATER DISTRICT (SEWD) REGARDING THE PROPOSED NEW HOGAN POWER PLANT PROJECT AND RELATIVE TO JOINTLY INVESTIGATING THE AVAILABILITY AND DEVELOPMENT OF ADDITIONAL WATER SUPPLIES

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WHEREAS, on August 25, 1970 Stockton-East Water District (SEWD) and Calaveras County Water District (CCWD) entered into a contract with the United States of America providing for repayment and conservation use of New Hogan Project; and

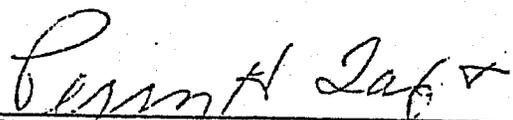
WHEREAS, on August 25, 1970 SEWD and CCWD entered into a joint contract providing for the use, repayment and administration of water from the New Hogan Project; and

WHEREAS, it is the desire of SEWD and CCWD to maximize the conservation use and power generation potential of New Hogan and the Calaveras watershed; and

WHEREAS, it is the desire of SEWD and CCWD to enter into a Memorandum of Understanding to cooperatively pursue the greater use of water from New Hogan, to clarify the application of various contract terms, to resolve the conflict of the parties with respect to the proposed New Hogan Power Plant Project and to jointly investigate the availability and development of additional water supplies.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of SEWD approves and adopts said Memorandum of Understanding, dated May 25, 1982.

PASSED AND ADOPTED BY THE BOARD OF DIRECTORS OF THE  
STOCKTON-EAST WATER DISTRICT ON THE 15TH DAY OF JUNE,  
1982.



PERRY H. TAFT, President  
Board of Directors  
Stockton-East Water District

ATTEST



JAMES D. BEARD, II, Secretary  
Board of Directors  
Stockton-East Water District

(SEAL)

SECRETARY'S CERTIFICATE

I, JAMES D. BEARD, II, Secretary of the Board of Directors of the STOCKTON-EAST WATER DISTRICT, Stockton, California, do hereby certify as follows:

The foregoing is a full, true and correct copy of a resolution duly adopted at a Regular Meeting of the Board of Directors of said District duly and regularly and legally held at the regular meeting place thereof on \_\_\_\_\_ of which meeting all of the members of said Board of Directors had due notice and at which a majority thereof were present.

I have carefully compared the same with the original minutes of said meeting on file and of record in my office, and the foregoing is a full, true, and correct copy of the original resolution adopted at said meeting and entered in said minutes.

Said resolution has not been amended, modified, or rescinded since the date of its adoption, and the same is now in full force and effect.

Dated: \_\_\_\_\_

4/15/82

  
JAMES D. BEARD, II  
Secretary of the Board  
STOCKTON-EAST WATER DISTRICT

(SEAL)

RESOLUTION NO. 3441

WHEREAS, CALAVERAS COUNTY WATER DISTRICT (CCWD) and STOCKTON EAST WATER DISTRICT (SEWD) entered into an agreement with the U.S. Corps of Engineers on August 25, 1970 for use of water out of New Hogan Reservoir, and also entered into an agreement jointly concerning use, repayment and administration of water from said New Hogan Reservoir; and

WHEREAS, it is the desire of CCWD and SEWD to maximize the combined conservation and power generation potential of New Hogan and the Calaveras watershed; and

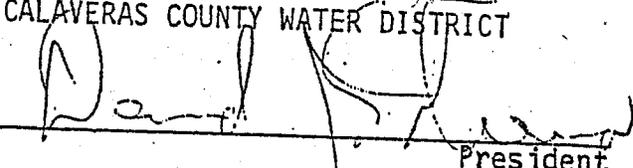
WHEREAS, CCWD and SEWD have hereby decided to enter into a Memorandum of Understanding to cooperatively pursue the greater use of water from New Hogan; to clarify the application of various contract terms, to resolve the conflict of the parties with respect to the proposed New Hogan Power Plant Project and to jointly investigate the availability and development of additional water supplies.

NOW, THEREFORE, BE IT RESOLVED that the President of the Board of Directors of CALAVERAS COUNTY WATER DISTRICT be authorized to execute said Memorandum of Understanding.

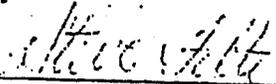
PASSED AND ADOPTED this 10th day of June, 1982, by the following vote:

AYES: Directors Queirolo, Neilsen, Sisco and Silveira  
NOES: None  
ABSENT: Director Johnson

CALAVERAS COUNTY WATER DISTRICT

  
\_\_\_\_\_  
President

ATTEST:

  
\_\_\_\_\_  
Secretary



Q

Q

Q

Execution Copy

August 25, 1970

CONTRACT BETWEEN THE STOCKTON & EAST SAN JOAQUIN  
WATER CONSERVATION DISTRICT AND THE CALAVERAS  
COUNTY WATER DISTRICT PROVIDING FOR THE USE, RE-  
PAYMENT, AND ADMINISTRATION OF WATER FROM THE NEW  
HOGAN PROJECT OF THE UNITED STATES.

THIS CONTRACT is made this 25th day of August, 1970, between the STOCKTON & EAST SAN JOAQUIN WATER CONSERVATION DISTRICT, a political subdivision of the State of California, and the CALAVERAS COUNTY WATER DISTRICT, a political subdivision of the State of California.

EXPLANATORY RECITALS

I.

The United States of America has agreed that the two contracting parties herein may contract for the water of the New Hogan Project, upon terms to be mutually agreed, provided that prior to the execution of any contract with the United States the two contracting parties herein enter into an operating agreement providing among other things for the division between the parties of the water from the New Hogan Project, the payment of the costs becoming due the United States under the proposed contract, and the appointment of a watermaster.

II.

The contracting parties herein, that is the DISTRICTS, have jointly requested and reviewed a yield study for the New Hogan Project prepared by the United States Bureau of Reclamation dated August 1968, have sponsored for their respective service areas a study of water use and water rights on the Calaveras River prepared by Murray, Burns & Kienlen Civil Engineers dated February 7, 1969, and have caused to be made an Operation Study, and on the

basis of the information contained in those studies have apportioned the New Hogan Project water as set forth by this CONTRACT.

III.

The parties recognize that STOCKTON DISTRICT may enter into a separate long-term contract with the United States for delivery of water from Folsom South Canal to supplement the supplies available to STOCKTON DISTRICT under this CONTRACT, the Bureau Contract, and otherwise.

IV.

The Bureau is authorized and is now constructing Folsom South Canal pursuant to Congressional authorization and said canal will have a hydraulic capacity substantially in excess of the requirements of the service area in Sacramento and San Joaquin Counties. Said excess capacity is anticipated to be used to convey water for the proposed East Side Division of the Central Valley Project, the feasibility of which has been reported on by the Bureau of Reclamation and is now under review by the State of California. The parties recognize that when and if said East Side Division is authorized and constructed the CALAVERAS DISTRICT may be able to obtain additional supplemental water supplies from said Division.

THEREFORE, IN CONSIDERATION OF THE TERMS AND CONDITIONS HEREIN CONTAINED, IT IS AGREED AS FOLLOWS:

1. Definitions. As used herein, the following terms shall have the stated meanings:

1. (A) "accounting year" shall mean the twelve consecutive calendar months beginning April 1 of each year and ending March 31 of the succeeding year.

2.

III to 1(A)

1. (B) "agricultural water" shall mean Project Water used primarily in the commercial production of agricultural crops or livestock, including domestic use incidental thereto, on tracts of land operated in units of more than two (2) acres.

1. (C) "Articles" are preceded by an Arabic number; "Sub-articles" are preceded by a capital-case letter in parenthesis; "Paragraphs" are preceded by an Arabic number in parenthesis; "sub-paragraphs" are preceded by a lower-case letter in parenthesis.

1. (D) "assumed water rights" shall mean the rights to the natural flow of the Calaveras River, including the percolation losses necessary to deliver the water required to satisfy said rights as agreed upon by the parties in this CONTRACT.

1. (E) "Bureau" shall mean the Bureau of Reclamation of the United States Department of the Interior.

1. (F) "Bureau Contract" shall mean a repayment contract signed by the DISTRICTS and the United States.

1. (G) "CALAVERAS DISTRICT" shall mean the CALAVERAS COUNTY WATER DISTRICT.

1. (H) "DISTRICTS" shall mean the CALAVERAS DISTRICT and the STOCKTON DISTRICT collectively.

1. (I) "Folsom South Canal" shall mean the Folsom South Canal of the American River Division of the Central Valley Project, California.

1. (J) "Initial Delivery Date" shall mean January 1st of the year in which the Secretary of the Interior of the United States announces that water from the Folsom South Canal is first available for delivery to STOCKTON DISTRICT under a long-term contract.

1. (K) "irrigation season" shall mean the first seven consecutive calendar months of each accounting year, i.e., the period

extending from April 1 to October 31 of each such year.

1. (L) "M & I Water" shall mean Project Water other than agricultural water.

1. (M) "New Hogan Project" shall mean the New Hogan Project of the United States located on the Calaveras River, in Calaveras County, California.

1. (N) "Operations Study" shall mean that study prepared by Murray, Burns & Kienlen under date of May 4, 1970, a copy of which is on file in each of the DISTRICT offices.

1. (O) "Project Water" shall mean the total amount of water available to the DISTRICTS from New Hogan Reservoir each year under the Bureau Contract less the amounts of water necessary to satisfy assumed water rights. Project Water may be determined by the following formula:  $P = D + C_r - W_c - W_s$ .

1. (P) "Repayment Obligation" is the amount set out in the Bureau Contract as the "total reimbursable construction allocation".

1. (Q) "STOCKTON DISTRICT" shall mean the STOCKTON AND EAST SAN JOAQUIN WATER CONSERVATION DISTRICT.

1. (R) "water entitlement" shall mean the percent of the Project Water that each DISTRICT at a given time is entitled to in accordance with the provisions of this CONTRACT. Any computation using this term shall be made using the water entitlement as it exists at the time of the computation.

1. (S) "Watermaster" shall be as defined in Article 11 herein.

1. (T) (Letters):

1. (T) (1) "AF" shall mean acre feet.

1. (T) (2) " $C_c$ " shall mean annual diversions to CALAVERAS DISTRICT, including  $W_c$ , from the channel of the Calaveras River downstream from New Hogan Dam measured in AF.

1. (T) (3) " $C_{cm}$ " shall mean the portion of  $C_c$  used as M & I water.

1. (T) (4) "C<sub>r</sub>" shall mean annual diversions from the New Hogan Reservoir pool to CALAVERAS DISTRICT measured in AF.

1. (T) (5) "C<sub>rm</sub>" shall mean the portion of C<sub>r</sub> used as M & I water.

1. (T) (6) "D" shall mean the annual releases from the New Hogan Reservoir Pool in AF measured at the gage located on the Calaveras River approximately 1/2 mile downstream from New Hogan Dam which releases are made pursuant to direction of the Watermaster (thus excluding spills and flood control releases).

1. (T) (7) "P" shall mean Project Water as defined in Subarticle (O) of this Article.

1. (T) (8) "S" shall mean the quantity of water in AF available annually to STOCKTON DISTRICT determined by the following formula:  $S = D - C_c$ .

1. (T) (9) "S<sub>m</sub>" shall mean the portion of S used as M & I water.

1. (T) (10) "W<sub>c</sub>" shall mean the quantity of water in AF necessary annually to satisfy the assumed water rights within CALAVERAS DISTRICT. The parties agree that, subject to revision as provided in Subarticle 3(A), said quantity of water necessary for CALAVERAS DISTRICT is 350 AF.

1. (T) (11) "W<sub>s</sub>" shall mean the quantity of water in AF necessary annually to satisfy the assumed water rights within STOCKTON DISTRICT. The parties agree that, subject to revision as provided in Subarticle 3(A), said quantity of water necessary for STOCKTON DISTRICT is 12,650 AF.

2. Payment of Obligations Under the Bureau Contract.  
STOCKTON DISTRICT, subject to the execution of the Bureau Contract, shall pay the charges imposed by the Bureau Contract.

3. Determination of Project Water.

3. (A) It is agreed by the parties that initially the sum of W<sub>c</sub> and W<sub>s</sub> shall equal 13,000 AF and that release of this quantity

annually from New Hogan Reservoir to the Calaveras River will satisfy the assumed water rights within the DISTRICTS. The amounts of water necessary to satisfy  $W_C$  and  $W_S$  shall be considered to remain constant for ten year periods, the first of which shall begin with the date of this CONTRACT. At any time after the expiration of a ten year period either DISTRICT can request that a redetermination be made whether either or both  $W_C$  or  $W_S$  should be changed to reflect changes in use of lands by owners having rights to use of the natural flow of the Calaveras River under the laws of the State of California. If the DISTRICTS cannot agree on the changes, if any, to be made, the issue shall be submitted to a civil engineer experienced in water matters and his decision shall be final. If the DISTRICTS cannot agree on an engineer, the matter shall be submitted to arbitration as set out in Article 12. After any agreement between the DISTRICTS to change  $W_C$  or  $W_S$ , or both, or after any decision rendered by a civil engineer or by arbitration as provided herein, no new request for such a redetermination may be made by either DISTRICT until the expiration of the new ten year period commencing with the date of the preceding request for a redetermination.

3. (B) Water shall be scheduled by the DISTRICTS as follows:

3. (B) (1) (a) On or before March 15 of each accounting year, CALAVERAS DISTRICT shall furnish to Watermaster an initial schedule setting forth its desired monthly quantities of water in AF for the next succeeding accounting year. The total of the monthly amounts of water in said initial schedule shall not exceed, by more than the amount of  $W_C$ , the maximum water entitlement of CALAVERAS DISTRICT under this CONTRACT during the succeeding accounting year. The initial schedule shall be accompanied by the advance payment specified in Subarticle 5(D) below.

3. (B) (1) (b) Watermaster shall combine the initial schedule furnished by CALAVERAS DISTRICT with a similar initial

schedule for STOCKTON DISTRICT to determine the total amount of water and the scheduled availability thereof as desired by both DISTRICTS during the succeeding accounting year.

3. (B) (1) (c) The total amount of water scheduled initially pursuant to subparagraph 3(B)(1)(b) above shall not exceed 84,100 AF.

3. (B) (2) On April 1 of each accounting year the Watermaster, using the total amounts of water initially scheduled pursuant to Paragraph 3(B)(1) above, shall estimate whether a reduction should be made in the total amount of water from that initially scheduled by both DISTRICTS for the accounting year. The estimate shall be based on a forecast of the content in AF of New Hogan Reservoir on the last day of the current irrigation season, which forecast shall be made by the Watermaster as follows:

3. (B) (2) (a) Utilizing the techniques employed in the Operation Study and beginning with the amount of water in, and the surface area of, the reservoir on March 31, the monthly quantities of total water initially scheduled by both DISTRICTS during the irrigation season shall be assumed withdrawn as scheduled. Inflows to the reservoir and rates of evaporation each month shall be assumed to occur as set forth in the following table:

<u>Month</u>	<u>Inflow (AF)</u>	<u>Evaporation Rate (feet per month)</u>
April	3,500	0.3
May	2,800	0.4
June	1,900	0.6
July	1,600	0.9
August	1,400	0.7
September	900	0.5
October	600	0.3

Amounts of evaporation in AF each month shall be the product of the evaporation rate for that month and the area of reservoir water

surface corresponding to the amount of water in storage at the end of the prior month.

3. (B) (2) (b) In the event the estimate made pursuant to subparagraph 3(B)(2)(a) above indicate that withdrawal of the total water initially scheduled by the DISTRICTS will result in less than 71,400 AF of water remaining in the reservoir on the last day of the irrigation season, the total amount of water available for both DISTRICTS during the accounting year shall be reduced by 17,800 AF so that such total amount of available water will not exceed 66,300 AF.

3. (B) (2) (c) In the event said reduction of 17,800 AF in total scheduled water is required pursuant to subparagraph 3(B)(2)(b) above, and subject to the provisions of Subarticle 4(C) below, Watermaster shall adjust downward the total amount of water available to CALAVERAS DISTRICT from that scheduled initially under subparagraph 3(B)(1)(a) above. Said downward adjustment shall be made by reducing the total water scheduled by CALAVERAS DISTRICT during the irrigation season by the product of 17,800 AF and the percent of Project Water initially scheduled by CALAVERAS DISTRICT in the schedule submitted pursuant to subparagraph 3(B)(1)(a) above.

3. (B) (2) (d) Watermaster, after adjusting downward CALAVERAS DISTRICT'S initial schedule as provided in subparagraph 3(B)(2)(c) above, shall adjust downward STOCKTON DISTRICT'S initial schedule, subject to the provisions of Subarticle 4(C), so the total water scheduled by both DISTRICTS for the accounting year shall not exceed 66,300 AF.

As an example illustrating the adjustments to the initial schedules of both DISTRICTS under subparagraphs 3(B)(2)(c) and (d) above in the event the total of the water desired by both DISTRICTS during the accounting year must be limited to 66,300 AF pursuant to subparagraph 3(B)(2)(b) above, let it be

assumed that, with applicable  $W_c$  at 350 AF, CALAVERAS DISTRICT initially schedules 4,350 AF of water for diversion during the accounting year, an amount which does not exceed its maximum water entitlement at the time. STOCKTON DISTRICT initially schedules the remaining 79,750 AF of the total scheduled supply of 84,100 AF.

Thus, Project Water initially scheduled by CALAVERAS DISTRICT is 4,350 minus 350, or 4,000 AF, or 5.63% of the total Project Water (71,100 AF) initially scheduled. Pursuant to subparagraph 3(B)(2)(c), the 4,000 AF of Project Water initially scheduled for diversion during the irrigation season by CALAVERAS DISTRICT will be reduced by  $17,800 \times 0.0563$ , or 1,002 AF, to 2,998 AF, and the total diversion by CALAVERAS DISTRICT during the accounting year will be limited to 2,998 plus 350, or 3,348 AF. STOCKTON DISTRICT will adjust its initial schedule for the accounting year to accord with the remainder of the available Project Water which is 66,300 minus 13,000 minus 2,998, or 50,302 AF, and accordingly will have available during the accounting year 50,302 plus 12,650, or 62,952 AF.

3. (B) (2) (e) For use in the forecasting provided in this Paragraph 3(B)(2) the Watermaster shall treat any releases scheduled from New Hogan Reservoir during November through March following the irrigation season as though such releases were made during the irrigation season and during the month of October.

3. (B) (2) (f) For the purposes of computing the reductions in total scheduled water pursuant to subparagraphs 3(B)(1)(c) and (d) above, the Watermaster shall treat any irrigation releases scheduled from New Hogan Reservoir during January, February, and March immediately preceding the irrigation season as though such releases had been made during the irrigation season and during April and shall treat any irrigation releases scheduled from the

reservoir in November and December as though such releases were made in October.

3. (B) (3) In the event the March 31 reservoir content and anticipated inflow to and evaporation from the reservoir indicate that reservoir content on the last day of the irrigation season will exceed 162,000 AF, Watermaster may, and at the request of CALAVERAS DISTRICT shall, make an estimate in a manner similar to that provided for in Paragraph 3(B)(2) above to determine whether water will be available in excess of the total amount scheduled for use during the irrigation season in the initial schedules prepared pursuant to Paragraph 3(B)(1). Said estimate may be made any time during the month of April but shall be considered tentative until confirmed or revised to reflect the content of the reservoir on April 30. The difference between 162,000 AF and the reservoir content estimated pursuant to this Paragraph 3(B)(3) to exist on the last day of the irrigation season shall be available to either or both DISTRICTS for use during the irrigation season as follows:

3. (B) (3) (a) Watermaster shall inform CALAVERAS DISTRICT promptly of the results of any forecast made pursuant to this Paragraph 3(B)(3) and CALAVERAS DISTRICT shall have the option of increasing the amounts of water initially scheduled by it under Paragraph 3(B)(1) for diversion during the irrigation season. The amount of said increase shall be not more than the product of the percent of Project Water initially scheduled by CALAVERAS DISTRICT and the forecasted excess over 162,000 AF of the reservoir content on the last day of the irrigation season. CALAVERAS DISTRICT shall inform Watermaster whether it chooses to exercise the option herein provided within five days after being notified that excess water is available and shall furnish to Watermaster a schedule revised to conform with this subparagraph 3(B)(3)(a) at the time CALAVERAS DISTRICT so informs Watermaster. No additional advance payment shall accompany any schedule revised in accordance with this subparagraph 3(B)(3)(a).

3. (B) (3) (b) STOCKTON DISTRICT shall have the option of using all water available under Paragraph 3(B)(3) above, and not desired by CALAVERAS DISTRICT under its option exercised pursuant to subparagraph 3(B)(3)(a). Watermaster shall revise STOCKTON DISTRICT'S initial schedule of water use during the irrigation season to conform with the water available to it under this subparagraph 3(B)(3)(b), and shall inform CALAVERAS DISTRICT promptly of the revised schedule.

3. (B) (3) (c) In the event Watermaster estimates prior to April 30 of an accounting year that excess water will be available to DISTRICTS under Paragraph 3(B)(3) and the confirming forecast reflecting the actual reservoir content on April 30 indicates that withdrawal of the excess water scheduled pursuant to subparagraphs 3(B)(3)(a) and (b) will result in a reservoir content of less than 162,000 AF on the last day of the irrigation season, the amounts of the excess water tentatively made available to each DISTRICT shall immediately be reduced proportionately in such total amounts as will result in an estimated reservoir content of not less than 162,000 AF on the last day of the irrigation season.

3. (B) (4) On or before April 2 of each year the Watermaster shall deliver to the office of CALAVERAS DISTRICT a written report showing his estimates of the total amounts of water to be available to each DISTRICT during the accounting year beginning April 1, as determined pursuant to Paragraphs 3(B)(2), and the monthly schedule of deliveries of such totals. If the total water available to both DISTRICTS during the irrigation season is reduced in accordance with subparagraphs 3(B)(2)(c) and (d) the revised schedule prepared by Watermaster for CALAVERAS DISTRICT shall adjust the monthly amounts initially scheduled each month proportionately and the revised schedule for STOCKTON DISTRICT shall conform to said revised schedule of CALAVERAS DISTRICT within the total amount of water available to both DISTRICTS during the accounting

year. If CALAVERAS DISTRICT is for any reason in disagreement with the foregoing determination and report by Watermaster, CALAVERAS DISTRICT shall give written notice of said disagreement to Watermaster on or before April 5. If such a notice of disagreement is received by the Watermaster on or before April 5, Watermaster shall arrange a joint meeting of the Boards of Directors of the DISTRICTS to be held not later than April 10. Said determination of the Watermaster may be revised at said joint meeting by action approved by a majority of each Board of Directors. If said Boards do not agree on a revision and CALAVERAS DISTRICT continues to object to the determination made by the Watermaster, then the matter shall be submitted to a civil engineer experienced in water matters and his decision shall be final. If the DISTRICTS cannot agree on a civil engineer, the matter shall be submitted to arbitration pursuant to Article 12 of this CONTRACT. During the period following April 2 and until the determination of the Watermaster has been modified by agreement of the Boards of Directors or by a decision of a civil engineer or through arbitration, the scheduled amounts of water set forth in the report of the Watermaster shall be complied with by both DISTRICTS.

3. (B) (5) In the event the forecast made pursuant to Paragraph 3(B)(3) indicates that water in excess of the initial schedules prepared pursuant to Paragraph 3(B)(1) will be available during the irrigation season and CALAVERAS DISTRICT informs the Watermaster that it chooses to exercise its option in accordance with subparagraph 3(B)(3)(a), such action of CALAVERAS DISTRICT shall be deemed to indicate its approval of the determination of the Watermaster. In the event CALAVERAS DISTRICT does not choose to exercise said option and also, within the five days provided it for such choice, informs Watermaster of its disagreement with the Watermaster's estimate that excess water will be available during the irrigation season, Watermaster will arrange for a joint meeting

of the Boards of Directors of the DISTRICTS to be held on one of the days May 1-5, inclusive, when results of the confirming forecast made pursuant to Paragraph 3(B)(3) may be revised at said joint meeting by action of a majority of each Board of Directors. If said Boards do not agree on a revision and CALAVERAS DISTRICT continues to object to the determination made by the Watermaster, then the matter shall be submitted to a civil engineer experienced in water matters and his decision shall be final. If the DISTRICTS cannot agree on a civil engineer, the matter shall be submitted to arbitration as set out in Particle 12. During the period following CALAVERAS DISTRICT'S notification of disagreement with the determination of the Watermaster made pursuant to Paragraph 3(B)(3) and until that determination has been confirmed or modified by agreement of the Boards of Directors or by decision of a civil engineer or through arbitration, only the amounts of water initially scheduled pursuant to Paragraph 3(B)(1) shall be available to each DISTRICT.

3. (B) (6) In entering into this CONTRACT the DISTRICTS are agreed that scheduling of, and diversion and releasing of water from, New Hogan Reservoir and the channel of Calaveras River by each DISTRICT and the individual water users therein, shall be so administered as to enable the water entitlements of each DISTRICT to be fully supplied, subject to all of the applicable provisions of this Article 3 and of Article 4, during a recurrence of the water-supply conditions of the period of years covered by the Operation Study. If as shown in the calculations made pursuant to Paragraph 5(D)(3) CALAVERAS DISTRICT has taken in excess of the total amount of water scheduled pursuant to Paragraph 3(B)(1) or as that schedule may have been revised pursuant to Paragraphs 3(B)(2), 3(B)(3), or 5(D)(2), or if Watermaster has caused to be released from New Hogan Reservoir water in excess of the total amount scheduled for STOCKTON DISTRICT pursuant to Paragraphs 3(B)(1) or as that schedule may have been revised pursuant to Paragraphs 3(B)(2) or 3(B)(3), the DISTRICTS recognize that in subsequent years the ability of either or both DISTRICTS to fully secure its or their water entitlements

under said water-supply conditions may be jeopardized. Accordingly, if CALAVERAS DISTRICT has so taken excess water, or if Watermaster has so caused excess water to be released to STOCKTON DISTRICT, the following actions shall be taken.

3. (B) (6) (a) If CALAVERAS DISTRICT has taken water during an accounting year in excess of the amounts so scheduled, Watermaster in the succeeding accounting year, shall reduce the total amount of water scheduled by STOCKTON DISTRICT pursuant to subparagraphs 3(B) (1) (b) and (c), or 3(B) (2) (b) and (d), by the amount of such excess taking by CALAVERAS DISTRICT, and CALAVERAS DISTRICT shall make the payment to STOCKTON DISTRICT provided for in Paragraph 5(D) (4) below.

3. (B) (6) (b) If Watermaster has caused to be released from New Hogan Reservoir water in excess of the total amount scheduled for STOCKTON DISTRICT, then Watermaster, in the succeeding accounting year, shall reduce the total amount of water scheduled by STOCKTON DISTRICT pursuant to subparagraphs 3(B) (1) (b) and (c), or 3(B) (2) (b) and (d), by the amount of such excess releases.

3. (B) (6) (c) The actions provided for in this Paragraph 3(B) (6) shall not be required if either flood control releases are made during the November through March portion of the accounting year in which the excess taking or releasing of water occurred, or, if the Watermaster in a forecast made pursuant to Paragraph 3(B) (3) anticipates an October 31 reservoir content of more than 162,000 AF in the accounting year following the one in which the excess diversions or releases occurred.

3. (B) (7) Subject to the provisions of Subarticle 5(D) below, CALAVERAS DISTRICT may change its rates of diversion or its monthly schedule of diversion during the accounting year as follows:

3. (B) (7) (a) Rates of diversion at points located on the reservoir above New Hogan Dam may be changed at any time.

3. (B) (7) (b) Notification of a desire to change the rates of diversion from the channel of Calaveras River below New Hogan Dam shall be furnished the Watermaster a reasonable time in advance of the desired time of change to enable Watermaster to communicate with the District Engineer as provided in the Bureau Contract. The change in rate of diversion shall be made at the time established by the District Engineer and the Watermaster shall inform CALAVERAS DISTRICT of said time.

3. (C) (1) The Operation Study was adopted by the DISTRICTS to express certain principles of operating New Hogan Reservoir and to define certain limiting conditions governing operation of said reservoir. The Operation Study is based on the anticipated characteristics of the requirements of the DISTRICTS for water at the time of negotiating and executing this CONTRACT, which requirements are anticipated to be for irrigation service only, except for the use by CALAVERAS DISTRICT of a nominal quantity of M & I water. In the event either DISTRICT begins to deliver significant water from New Hogan Project for municipal and industrial purposes, and from time to time as such deliveries for municipal and industrial purposes are increased or decreased, it may be necessary to revise said Operation Study to conform with such changed use and to accordingly redefine the limiting conditions governing operation of said Reservoir. Upon the request of the Board of Directors of either of the DISTRICTS the Watermaster shall prepare, or cause to be prepared, such a revised study. Any such revisions shall employ the basic data in the Operation Study or agreed upon modifications of such data and shall comply with the following principles: First, the revised requirements on the Reservoir shall be so established as to make it unnecessary to reduce the content of New Hogan Reservoir below 15,000 AF at any time. Second, requirements by either DISTRICT for municipal and industrial water to the extent provided in

Subarticle 4(C) shall at all times be served without deficiency. Third, new operating limitations similar to those provided in subparagraphs 3(B)(1)(c), 3(B)(2)(b), and Paragraph 3(B)(3) shall be determined. Fourth, each revised Operation Study shall cover the same period of years, or an extension thereof, as were employed in the Operation Study.

3. (C) (2) Upon approval of any revised Operation Study by both DISTRICTS, said revised study shall become the Operation Study defined in Subarticle 1(N), and the limitations provided in subparagraphs 3(B)(1)(c), 3(B)(2)(b), and Paragraph 3(B)(3) shall be automatically amended accordingly.

3. (C) (3) If the DISTRICTS are unable to agree upon such a revised Operation Study or upon the need to make a revision in the Operation Study all of said issues shall be submitted to a civil engineer experienced in water matters and his decision shall be final, and if the DISTRICTS cannot agree on an engineer the matter shall be submitted to arbitration as set out in Article 12.

4. District Water Entitlements. The water entitlements of the DISTRICTS shall be as follows:

4. (A) The maximum water entitlement of CALAVERAS DISTRICT shall be 43.50% of the Project Water, provided that:

4. (A) (1) Until April 1, 1985, or until April 1 of the accounting year which begins after the initial delivery date, whichever is earlier, the CALAVERAS DISTRICT shall not take more than 10,000 AF of Project Water per year.

4. (A) (2) In the event CALAVERAS DISTRICT does not pay 43.50% of 1/40th of the repayment obligation in the 15th accounting year after the initial delivery date, the maximum water entitlement of CALAVERAS DISTRICT shall be reduced to such lesser percentage of 1/40th of the repayment obligation which the CALAVERAS DISTRICT does in fact pay in the 15th accounting year after the

initial delivery date. For example, if in the 15th accounting year referred to, CALAVERAS DISTRICT'S payment is 43.50% of 1/40th of the repayment obligation, then no adjustment shall be made in CALAVERAS DISTRICT'S maximum water entitlement. If, however, CALAVERAS DISTRICT'S payment in said 15th accounting year amounts to 25.00% of 1/40th of the repayment obligation, then CALAVERAS DISTRICT'S maximum water entitlement shall thereafter be no more than 25.00%.

4. (A) (3) It is anticipated, based on information presently available to the DISTRICTS, that the Folsom South Canal water service contract which hereafter may be made between the United States and STOCKTON DISTRICT will contain an option, which option may be exercised by STOCKTON DISTRICT at any time or times prior to the end of the 15th year after the initial delivery date, and which option will permit STOCKTON DISTRICT to take at least 30,928 AF more water than it is otherwise obligated to take under such Folsom South Canal water service contract. Insofar as concerns securing said option to take at least 30,928 AF within 15 years STOCKTON DISTRICT, in the course of negotiations with the Bureau, shall consult with CALAVERAS DISTRICT and shall permit CALAVERAS DISTRICT to participate in said negotiations. If STOCKTON DISTRICT enters into a contract for water service from the Folsom South Canal and such water service contract does not contain the full option set forth above but contains either, or both, an option period shorter or longer than 15 years, or an option which will not permit it to take at least 30,928 AF more than it is otherwise obligated to take, then Paragraph 4(A)(2) shall be automatically amended as follows:

4. (A) (3) (a) If said 15 year option period is reduced to a lesser period, or increased to a longer period, then the time in which CALAVERAS DISTRICT may build up to its maximum water entitlement shall be reduced or increased to the length of option

time granted to the STOCKTON DISTRICT in said Folsom South Canal water service contract.

4. (A) (3) (b) Upon execution of this CONTRACT by the parties, CALAVERAS DISTRICT will have an option to a water entitlement of 43.50% of the Project Water ( $0.4350 \times 71,100$ ) or 30,928.50 AF taken for purposes of calculations herein as 30,928 AF. If the amount of water subject to an option on the part of the STOCKTON DISTRICT in the Folsom South Canal water service contract is less than 30,928 AF then, not later than April 1 of the accounting year which begins after the initial delivery date, said maximum water entitlement of 43.50% shall be reduced by multiplying said 43.50% by the ratio of the amount of water in AF which the STOCKTON DISTRICT has under option to 30,928 AF, provided, however, that CALAVERAS DISTRICT, at its option, may avoid any part or all of such reduction by commencing and continuing annual payments toward the repayment obligation, which payments are proportional to the maximum water entitlement which CALAVERAS DISTRICT chooses to retain. For example, if the option accorded STOCKTON DISTRICT in its Folsom South Canal contract is for 20,000 AF, CALAVERAS DISTRICT's maximum water entitlement will be reduced to  $\frac{20,000 \times 100}{30,928} \times 0.4350$ , or 28.13%; however, if CALAVERAS DISTRICT chooses under its option to avoid this reduction in maximum water entitlement, and instead wishes to retain a maximum water entitlement of 43.50%, it shall commence and continue paying annually not less than 43.50 minus 28.13, or 15.37% of 1/40th of the repayment obligation. In the same example, with STOCKTON DISTRICT securing an option to only 20,000 AF in its Folsom South Canal contract, if CALAVERAS DISTRICT chooses to retain a maximum water entitlement of 40.00%, then it shall commence and continue paying annually 40.00 minus 28.13, or 11.87% of 1/40th, of the repayment obligation. Payments made under this subparagraph 4(A) (3) (b) shall in all respects be treated as though they were payments made for water actually used.

4. (A) (4) At any time that this CONTRACT is in effect CALAVERAS DISTRICT may obtain a supply of water from the proposed East Side Division of the Central Valley Project or from any other source and may exchange water so obtained for water to which STOCKTON DISTRICT has become entitled pursuant to this CONTRACT provided that STOCKTON DISTRICT shall in any event be entitled to take without exchange 56.50% of the Project Water, and provided further, that water shall not be so exchanged unless:

4. (A) (4) (a) It is delivered to STOCKTON DISTRICT without additional charge to STOCKTON DISTRICT.

4. (A) (4) (b) It is delivered to STOCKTON DISTRICT without the STOCKTON DISTRICT being required to make any expenditure for purposes of receiving such exchange water which it would not otherwise be required to make were it not for the delivery of such exchange water.

4. (A) (4) (c) Such exchange water is of a quality equal to or better than the quality of water flowing in the Folsom South Canal at its intersection with the Calaveras River.

4. (A) (4) (d) Such exchange water is delivered to the STOCKTON DISTRICT at a point within the DISTRICT at or east of the Folsom South Canal and at an elevation not lower than the water surface in the Folsom South Canal at its intersection with the Calaveras River.

The right to so exchange water as set forth above in this Paragraph 4(A)(4) shall immediately terminate at any time that the CALAVERAS DISTRICT fails to comply with each and every condition set forth above in this Paragraph 4(A)(4).

4. (B) Subject to the payment obligations imposed on STOCKTON DISTRICT by this CONTRACT, STOCKTON DISTRICT shall be entitled, at its option, to take and use all Project Water CALAVERAS DISTRICT is not entitled to under this CONTRACT, or does not in fact use.

4. (C) In the event the Watermaster determines pursuant to Paragraph 3(B)(2) above that the total amount of available water

in any accounting year shall be 66,300 AF or less, the DISTRICTS shall apply the reduction in water available to each proportionately to so much of the water otherwise scheduled by each as is in excess of an amount of 7,700 AF plus  $W_c$  for use in CALAVERAS DISTRICT and 10,000 AF plus  $W_s$  for use in STOCKTON DISTRICT, which amounts shall be available to each DISTRICT respectively without deficiencies to the extent of assumed water rights and estimated municipal, industrial, and domestic use. Estimated municipal, industrial, and domestic use shall be determined from actual use during the preceding accounting year plus anticipated new uses for the current accounting year.

5. Payments By The Calaveras District.

5. (A) CALAVERAS DISTRICT shall pay to STOCKTON DISTRICT a sum equal to the product of CALAVERAS DISTRICT'S ultimate water entitlement determined pursuant to Paragraph 4(A)(2), expressed as a percentage, and the total Repayment Obligation as payment in full thereof by CALAVERAS DISTRICT of its share thereof. Said payment shall be made in the following manner until the entire amount with interest, where applicable, is paid:

5. (A) (1) During each accounting year no less than that percentage of the equal annual installment of the total Repayment Obligation, whether or not such an installment is due and payable in that particular accounting year, equal to the percentage of Project Water used by CALAVERAS DISTRICT during that accounting year; said percentage of the equal annual installment being determined by the formula  $100 \frac{(C_r + C_c - W_c)}{P}$ . If a balance is still outstanding at the time STOCKTON DISTRICT completes full repayment of the Repayment Obligation, the total amount then payable by CALAVERAS DISTRICT must be paid within 15 accounting years after STOCKTON DISTRICT completes full repayment of the total Repayment Obligation. During each accounting year of said 15 year period

CALAVERAS DISTRICT must pay no less than 1/15th of its total obligation due on the date said period begins.

5. (A) (2) During each accounting year, that percentage of the interest payable by STOCKTON DISTRICT to the Bureau for the use of M & I water that equals the percentage of M & I water used by CALAVERAS DISTRICT of the entire amount of M & I water allocated to that year under the Bureau Contract; said percentage of interest payable being determined by the formula  $\frac{(C_{rm} + C_{cm})}{C_{rm} + C_{cm} + S_m} 100$ .

Payments under this Paragraph 5(A) (2) shall not be credited to CALAVERAS DISTRICT'S obligation under Subarticle 5(A) above.

5. (A) (3) When any payment provided for in Paragraph 5(A) (1) herein is due and payable in an accounting year subsequent to STOCKTON DISTRICT'S full repayment of the Repayment Obligation due under the Bureau Contract, CALAVERAS DISTRICT shall pay interest annually at the rate of four and one-half percent (4½%) on the full unpaid decreasing balance due under Subarticle 5(A).

5. (B) CALAVERAS DISTRICT shall pay to STOCKTON DISTRICT for each accounting year a sum equal to that percentage of the administration costs and operation, maintenance, and replacement costs that STOCKTON DISTRICT must pay to the Bureau each accounting year under the Bureau Contract that equals the percentage of Project Water used by CALAVERAS DISTRICT during that year; said percentage of contract administration costs and operation, maintenance, and replacement costs being determined by the formula  $\frac{(C_r + C_o - W_c)}{P} 100$ .

5. (C) Subject to the provisions herein on maximum use, CALAVERAS DISTRICT shall pay for, per accounting year, as a minimum, the amount of water shown on its buildup schedule attached hereto as Exhibit "A".

5. (D) An advance payment shall be made and adjusted as follows:

5. (D) (1) Upon submitting the initial schedule provided for in Paragraph 3(B) (1), CALAVERAS DISTRICT shall pay to STOCKTON DISTRICT an advance payment for the number of AF of Project Water ordered in such schedule. Such advance payment shall be computed as follows:

$\frac{\text{Total AF scheduled minus } W_c}{40 \times 71,100} \times \text{Repayment Obligation}$

plus

$\frac{\text{Total AF scheduled minus } W_c}{71,100} \times \text{The operation, maintenance, replacement, and administrative costs to be paid by STOCKTON DISTRICT for the current year pursuant to the Bureau Contract.}$

5. (D) (2) At any time CALAVERAS DISTRICT may request a revision in its then current schedule of monthly AF for the remainder of the accounting year. Such request for revision shall be submitted in writing to STOCKTON DISTRICT. If the request is for an increase in the total quantity of water scheduled for the accounting year, an additional advance payment shall be submitted to the Watermaster along with the request to STOCKTON DISTRICT; said additional advance payment shall be computed in the same manner as set forth in Paragraph 5(D) (1) above. Upon receipt of said request STOCKTON DISTRICT shall consider the same and shall within its sole discretion determine whether or not it will grant the request of CALAVERAS DISTRICT. STOCKTON DISTRICT shall reply to the request of the CALAVERAS DISTRICT within ten days. If an increase has been requested and STOCKTON DISTRICT does not approve said request for increase or approves a lesser amount than is covered by the additional payment accompanying the request for an increase, the Watermaster shall immediately make an appropriate refund of the advance payment or a proportional part thereof. If the request was for a reduction in the scheduled amount and STOCKTON DISTRICT has approved said reduction, the Watermaster shall immediately make a refund to

CALAVERAS DISTRICT, said refund to be calculated in the same manner as set forth in Paragraph 5(D)(1).

5. (D) (3) The Watermaster shall calculate the final amounts owed by CALAVERAS DISTRICT as of March 31 of each accounting year and shall present his calculations in a statement to CALAVERAS DISTRICT by June 1 of the succeeding accounting year. Failure of the Watermaster to present his calculations as provided herein shall not affect CALAVERAS DISTRICT'S obligations under this Article, but CALAVERAS DISTRICT shall not be in default for failure to pay said amounts during any period of such failure by the Watermaster. The Watermaster shall show in said statement any additional sums due STOCKTON DISTRICT because of water use in excess of the amount covered by the advance payment provided for in Paragraph 3(B)(1) and the amount of interest due for the preceding accounting year under Paragraphs 5(A)(2) and (3). Within 30 days after receiving the statement of the Watermaster CALAVERAS DISTRICT shall pay to STOCKTON DISTRICT any additional sums due STOCKTON DISTRICT.

5. (D) (4) In the event that as shown in the calculations made pursuant to Paragraph 5(D)(3) the use of CALAVERAS DISTRICT during the preceding accounting year has not been in accordance with its schedule as submitted pursuant to Paragraph 3(B)(1) or as said schedule may have been revised pursuant to Paragraphs 3(B)(2) or 5(D)(2), then in such event if the use has been less than scheduled STOCKTON DISTRICT shall retain any advance funds having been paid to it for that accounting year and the same shall be accounted for as though CALAVERAS DISTRICT had used the scheduled water in that accounting year. If CALAVERAS DISTRICT has taken in excess of the amount so scheduled and STOCKTON DISTRICT in the ensuing accounting year reduces its total scheduled water in accordance with the provisions of subparagraph 3(B)(6)(a), then CALAVERAS DISTRICT shall pay STOCKTON DISTRICT \$15.00 for each acre foot of such

reduction by STOCKTON DISTRICT. Any amount due under this Paragraph 5(D)(4) shall be included in the statement rendered by the Watermaster to CALAVERAS DISTRICT on or before June 1 of each accounting year. In the event that STOCKTON DISTRICT is required to reduce its total scheduled water in accordance with the provisions of subparagraph 3(B)(6)(a) for one or more successive years, then for each of such successive years after the first year said sum of \$15.00 for each AF shall be increased for each successive year by \$5.00; that is, in the second successive year the rate per AF would be increased to \$20.00 and in the fourth successive year the rate would be increased to \$30.00. Said sums of \$15.00 and \$5.00 may from time to time be increased or decreased as the cost of water in the general area increases or decreases. Either DISTRICT may at any time request such an increase or decrease and if the DISTRICTS cannot agree upon the question of an increase or decrease the matter shall be submitted to a civil engineer experienced in water matters and his decision shall be final. If the DISTRICTS cannot agree on a civil engineer, the matter shall be submitted to arbitration pursuant to Article 12 of this CONTRACT. The provisions of this Subarticle 5(D) shall not relieve CALAVERAS DISTRICT from the obligation to use not more than the amount of water scheduled nor shall it in any way relieve the Watermaster from taking necessary action to enforce use of water by both DISTRICTS in accordance with applicable schedules.

5. (E) Irrespective of any of the foregoing, the total sum to be paid to STOCKTON DISTRICT by CALAVERAS DISTRICT for each accounting year pursuant to Paragraph 5(A)(1) until the Repayment Obligation under the Bureau Contract has been fully discharged, shall be not less than the amount paid the preceding accounting year.

6. Remedies of Stockton District. The right of CALAVERAS DISTRICT and the water users within that DISTRICT to receive Project Water is dependent upon performance by CALAVERAS DISTRICT of its obligations under this CONTRACT. If CALAVERAS DISTRICT fails for any reason to pay any sum due STOCKTON DISTRICT under this CONTRACT:

6. (A) Interest shall be payable by CALAVERAS DISTRICT on the delinquent sum at the rate of nine percent (9%) per annum on the delinquent amount.

6. (B) If any sum due under this CONTRACT remains delinquent for 12 months or longer, STOCKTON DISTRICT prior to any such sum being fully repaid, may upon written notice cause CALAVERAS DISTRICT'S water entitlement to Project Water to be reduced by the percentage that said delinquent sums bear to the total obligation at that time of the CALAVERAS DISTRICT under Subarticle 5(A). Any amounts so used to reduce CALAVERAS DISTRICT'S water entitlement and the interest on any such amounts shall no longer be an obligation of CALAVERAS DISTRICT and shall be deemed fully compensated by the increased water entitlement of STOCKTON DISTRICT. For example, during the period to the 15th accounting year referred to in Paragraph 4(A)(2) CALAVERAS DISTRICT'S maximum water entitlement is 43.50% and its Repayment Obligation under Subarticle 5(A) is  $0.435 \times \$5,597,000$  (said sum of \$5,597,000 shall be automatically adjusted if the total reimburseable construction allocation announced by the Secretary of the Army pursuant to the Bureau Contract is a different sum), or \$2,434,695. If CALAVERAS DISTRICT orders 7,110 AF of Project Water in such an accounting year, its advance payment which should accompany that order is 10% ( $\frac{100 \times 7,110}{71,100}$ ) of the annual payment of \$210,000 due from the STOCKTON DISTRICT to the Bureau (assuming \$140,000 due on Repayment Obligation = \$65,000 O, M, & R + \$5,000 administration). If the advance payment does not accompany the order and a 12-month period goes by, then the \$2,434,695 will be reduced in the amount of \$21,000 (10% of \$210,000) to \$2,413,695, and thereafter the CALAVERAS DISTRICT'S maximum water entitlement is  $\frac{100 \times 2,413,695}{5,597,000}$ , or 43.12%.

6. (C) If any sum due under this CONTRACT remains delinquent for 36 months or longer, STOCKTON DISTRICT, acting as Water-master or otherwise, upon 30 days written notice to CALAVERAS DISTRICT, may terminate the total water entitlement of CALAVERAS DISTRICT, and STOCKTON DISTRICT in such event is authorized to sell.

and dispose of the water to which CALAVERAS DISTRICT would otherwise but for such nonpayment be entitled, to any person, firm, or corporation within or without the DISTRICTS upon such terms and conditions as the STOCKTON DISTRICT shall determine, provided, that CALAVERAS DISTRICT may reacquire its said water entitlement at such time, if any, as said water entitlement is not disposed of or committed to others or in use in place of other water supplies which the STOCKTON DISTRICT has relinquished. If only a portion of such water entitlement is so available, then the CALAVERAS DISTRICT may reacquire such portion that is available. The ability of the CALAVERAS DISTRICT to reacquire water entitlement pursuant to this Subarticle 6(C) shall be subject to reduction by the operation of Subarticle 6(B), Paragraph 4(A)(2), and Paragraph 4(A)(3). Such right to reacquire water shall be subject to the condition that CALAVERAS DISTRICT shall pay to STOCKTON DISTRICT a sum calculated as follows: All delinquent sums including sums becoming delinquent after the exercise of the STOCKTON DISTRICT'S rights under this Subarticle 6(C), plus interest as set forth in Subarticle 6(A), less any income that STOCKTON DISTRICT has had during the period of termination from the sale or other disposition of the subject water, plus actual expenses of STOCKTON DISTRICT in temporarily disposing of water subject to such termination.

6. (D) During any period that CALAVERAS DISTRICT is in default under this CONTRACT, STOCKTON DISTRICT may require that CALAVERAS DISTRICT and all users of Project Water within CALAVERAS DISTRICT cease diversion from any pumps or other diversion works owned, operated, maintained, or authorized by CALAVERAS DISTRICT, whether such pumps or other diversion works are located at the New Hogan Reservoir pool or below, and if said diversion or any part

of it does not cease, CALAVERAS DISTRICT authorizes the Watermaster to shut off, and in any reasonable fashion, temporarily disable any such pump or other diversion works. CALAVERAS DISTRICT expressly gives authority to the United States and the Watermaster during the period of such default to shut off, and by any reasonable means, temporarily disable any of said pumps or other diversion works, provided, however, that within the limits of CALAVERAS DISTRICT'S water entitlement the Watermaster shall furnish water to CALAVERAS DISTRICT water users upon payment in advance by those users of a charge per AF not in excess of what STOCKTON DISTRICT charges its water users for water of a similar type for a similar use. All amounts collected pursuant to this Subarticle 6(D) shall be credited, less actual expenses, to the delinquent sums owed by CALAVERAS DISTRICT.

6. (E) The remedies under this Article are cumulative and non restrictive. STOCKTON DISTRICT may use any, or any combination of, the remedies specified in this Article 6 and any other remedy or remedies allowed to it in law or equity, whether based upon breach of contract or otherwise.

6. (F) Any water use or diversion agreements made by CALAVERAS DISTRICT with its water users shall be expressly made subject to this CONTRACT and the remedies herein.

7. Remedies of Calaveras District. The right of STOCKTON DISTRICT and the water users within that DISTRICT to receive Project Water is dependent upon performance by the STOCKTON DISTRICT of its obligations under this CONTRACT.

7. (A) If STOCKTON DISTRICT fails to pay any sum due under the Bureau Contract, or fails to perform any other obligation due thereunder, the CALAVERAS DISTRICT may in its stead perform said obligation. To the extent that CALAVERAS DISTRICT pays any sum due under the Bureau Contract, such sum shall be credited to CALAVERAS DISTRICT'S obligation under Subarticle 5(A) herein. To the

extent that CALAVERAS DISTRICT'S payments exceed the amount that CALAVERAS DISTRICT would have had to pay under Subarticle 5(A) herein, such excess amount shall be deemed immediately delinquent and STOCKTON DISTRICT shall pay interest on said delinquent amounts at the rate of nine percent (9%) per annum until paid.

7. (B) If STOCKTON DISTRICT fails to pay any sum due under the Bureau Contract, or fails to perform any obligation due thereunder, including but not limited to the performance of the duties of the Watermaster, on 30 days written notice in advance to STOCKTON DISTRICT, CALAVERAS DISTRICT may exclude the STOCKTON DISTRICT as Watermaster hereunder and without any other authorization than herein contained, CALAVERAS DISTRICT is authorized to take over and perform all of the duties and responsibilities of STOCKTON DISTRICT as Watermaster, and to substitute CALAVERAS DISTRICT in all respects as Watermaster. Said right to so function as Watermaster shall continue until such time as STOCKTON DISTRICT has corrected the delinquency in payment or other failure.

7. (C) If any sum due under this CONTRACT remains delinquent for 36 months or longer, CALAVERAS DISTRICT, acting as Watermaster or otherwise, upon 30 days written notice to STOCKTON DISTRICT, may terminate the total water entitlement of STOCKTON DISTRICT, and CALAVERAS DISTRICT in such event is authorized to sell and dispose of the water to which STOCKTON DISTRICT would otherwise but for such nonpayment be entitled, to any person, firm, or corporation within or without the DISTRICTS (to the extent permitted by the Bureau Contract or any amendment thereto) upon such terms and conditions as the CALAVERAS DISTRICT shall determine, provided, that the STOCKTON DISTRICT may reacquire its said water entitlement at such time, if any, as said water entitlement is not disposed of or committed to others or in use in place of other water supply which CALAVERAS DISTRICT has relinquished. If only a portion of such water entitlement

is so available, then STOCKTON DISTRICT may reacquire such portion that is available. Such right to reacquire water shall be subject to the condition that STOCKTON DISTRICT shall pay to CALAVERAS DISTRICT a sum calculated as follows: All delinquent sums including sums becoming delinquent after the exercise of CALAVERAS DISTRICT'S rights under this Subarticle 7(C), plus interest as set forth in Subarticle 7(A) above, less any income that CALAVERAS DISTRICT has had during the period of termination from the sale or other disposition of the subject water, plus actual expenses of CALAVERAS DISTRICT in temporarily disposing of water subject to such termination.

7. (D) The remedies under this Article are cumulative and nonrestrictive. CALAVERAS DISTRICT may use any, or any combination of, the remedies specified in this Article 7 and any other remedy or remedies allowed to it in law or equity, whether based upon breach of contract or otherwise.

7. (E) Any water use or diversion agreements made by STOCKTON DISTRICT with its water users shall be expressly made subject to this CONTRACT and the remedies herein.

8. Delay in Payment. If, due to adverse economic conditions, or for any other reason, either or both DISTRICTS are unable to make payments required under this CONTRACT, or by the Bureau Contract, and the United States because of such inability grants a delay of a definite or indefinite period for payment under the Bureau Contract, then such delay shall be applied for the benefit of the DISTRICT experiencing such inability to make payments, and if both DISTRICTS are subject to such inability then the benefit of such delay shall be applied pro rata on the basis of the affected then current payment obligations of the respective DISTRICTS. This Article 8 shall be liberally construed to the end that any loss of water, the right to use water, or water entitlement by either DISTRICT, as a result of adverse economic conditions, or other causes beyond the control of a DISTRICT, shall be reduced or eliminated.

9. Vesting of Water Entitlements; Continuation of Agreement.

At the conclusion and complete performance of both the Repayment Obligation of the Bureau Contract and the repayment provided under Subarticle 5(A) of this CONTRACT, both DISTRICTS shall become vested with the water entitlements for which they have respectively paid, subject only to what rights remain in the United States at the conclusion of the Repayment Obligation of the Bureau Contract. This CONTRACT shall then continue in effect in perpetuity, subject to all of its terms.

10. Area of Water Use. The CALAVERAS DISTRICT expressly agrees that no water from the New Hogan Project shall be used by it or through it by a third party beyond the boundaries shown on the attached map marked Exhibit "B". All water sales, use, or distribution contracts made by CALAVERAS DISTRICT shall be expressly subject to the provisions of this Article 10.

11. Watermaster.

11. (A) The STOCKTON DISTRICT is hereby appointed Watermaster under this CONTRACT and the Bureau Contract. The function of the Watermaster shall be exercised by the Secretary-Manager of STOCKTON DISTRICT or by any other person or position designated by resolution of the Board of Directors of STOCKTON DISTRICT. It shall be the duty of the Watermaster to:

11. (A) (1) Exercise general supervision over the administration of this CONTRACT and general administration on behalf of the DISTRICTS over the operation of the Bureau Contract.

11. (A) (2) Exercise general supervision over the diversion and use of water from the New Hogan Project by the DISTRICTS.

11. (A) (3) Administer the diversion into storage, the storage regulation and the release of water.

11. (A) (4) Compile and submit water use schedules to the Contracting Officer and the District Engineer as set forth in the Bureau Contract.

11. (A) (5) Calculate and determine the sums, including interest, owed by CALAVERAS DISTRICT to STOCKTON DISTRICT under this CONTRACT.

11. (A) (6) Exercise such other duties given to the Watermaster elsewhere in this CONTRACT.

11. (B) CALAVERAS DISTRICT shall pay the expenses of the Watermaster directly attributed to that DISTRICT'S activities on the following basis: Two (2) times the hourly wage or salary of any non-CALAVERAS DISTRICT personnel used, for the actual hours of time spent by such personnel, and other costs, actually incurred, including automobile and truck costs, insurance costs, and audit costs, all as may be agreed upon by the DISTRICTS from time to time in writing. If the DISTRICTS are unable at any time to agree upon the amount of the Watermaster's expenses properly chargeable to CALAVERAS DISTRICT, then the matter shall be submitted to arbitration as set forth in Article 12.

11. (C) All diversions from the Calaveras River from the New Hogan Reservoir pool or from below New Hogan Dam within CALAVERAS DISTRICT shall be metered by meters of a type approved by the Watermaster. These meters shall be installed, serviced, maintained, and replaced as necessary by CALAVERAS DISTRICT and the Watermaster shall be free to inspect any such meter at any reasonable time. CALAVERAS DISTRICT shall read and inspect all of the aforementioned meters monthly and shall supply the information required by the Watermaster and certify the correctness of the meters to the Watermaster by the 10th day of each following month. If a diversion is unmetered, or if the meter is not approved, or

if the data from an approved meter is not supplied as required, the Watermaster may estimate the amount of water used for each such diversion, using, when possible, the criteria then in use by STOCKTON DISTRICT within its own DISTRICT for estimating the consumption of water for various types and classes of water use. The Watermaster shall determine the amount of M & I water used by the CALAVERAS DISTRICT. In determining the total quantity of Project Water diverted by CALAVERAS DISTRICT each year for use in preparing the statement provided for in Paragraph 5(D)(3) above, the Watermaster shall do so either by adding the amounts metered or estimated monthly, or alternatively, at the option of STOCKTON DISTRICT, by subtracting from D, as defined in Paragraph 1(T)(6) the amount of water entering STOCKTON DISTRICT in the Calaveras River and adding  $C_r$  as defined in Paragraph 1(T)(4). In case the alternative method is employed, the amount of water entering STOCKTON DISTRICT shall be measured by a device whose type, location, and installation is approved by CALAVERAS DISTRICT and which is installed and maintained by STOCKTON DISTRICT entirely at STOCKTON DISTRICT'S expense, and representatives of CALAVERAS DISTRICT may inspect any such measuring device at any reasonable time. The determination of the Watermaster is bound by the data supplied by an approved meter unless the Watermaster can show that the information recorded by meter is substantially in error.

11. (D) The Watermaster shall cause to be measured by meter diversions for M & I use within STOCKTON DISTRICT ( $S_m$ ). Representatives of CALAVERAS DISTRICT may inspect such meters at any reasonable time.

11. (E) STOCKTON DISTRICT by undertaking and performing the functions of Watermaster does not warrant to either CALAVERAS DISTRICT or to the water users of CALAVERAS DISTRICT, as to conditions beyond the control of said Watermaster, a supply of water of any given quantity at any given time, or of any particular quality.

11. (F) By July 1 of each year the Watermaster shall submit a report to each DISTRICT giving a full accounting of the use of New Hogan water for the preceding accounting year, all money paid to the Bureau under the Bureau Contract, and all money paid to STOCKTON DISTRICT under this CONTRACT. Said report shall contain any suggestions for improving operations under this CONTRACT. The Watermaster shall cause an annual audit to be made of the financial transactions under this CONTRACT by a certified public accountant and shall send a copy of each said annual audit to each DISTRICT.

12. Arbitration. In any instance in which the DISTRICTS fail to reach agreement as required herein, or in any instance in which a DISTRICT disagrees with a determination of the Watermaster, a DISTRICT may submit the disagreement to arbitration in the manner provided in this Article 12. Matters for which arbitration is specifically provided elsewhere in this CONTRACT shall also be subject to the procedures set forth in this Article 12. The procedure for arbitration shall be as follows:

12. (A) Either party may give notice requesting arbitration to the other.

12. (B) Within ten (10) days of the giving of a notice pursuant to Subarticle 12(A) of this Article, the DISTRICTS shall each select one arbitrator and the two arbitrators so selected shall together select a third arbitrator. If the third arbitrator has not been appointed by the expiration of the ten (10) day period specified above in this Subarticle 12(B) then either party may request the American Arbitration Association to make the selection of any arbitrator or arbitrators who have not been so selected. During the fifteen (15) days next following the selection of the third member of said board of arbitration, the board of arbitration shall meet together from time to time and hear evidence and arguments orally and in writing from the DISTRICTS relative to the matters before it and shall then render its decision with respect

to any matter submitted to it. The decision of said board of arbitration with respect to any matter submitted to it pursuant to this Article 12 shall be final and binding on both parties. The Watermaster shall cause notice of any decision of a board of arbitration hereunder to be given to both DISTRICTS.

12. (C) The costs of arbitration pursuant to this Article 12, including the fees and expenses of the members of the board of arbitration, if any, shall be borne equally by the DISTRICTS.

12. (D) As to any matter not specifically provided for herein as to the procedure for arbitration, the rules of the American Arbitration Association shall apply unless the DISTRICTS agree to the contrary.

13. Attorneys' Fees and Costs. In any case where court action is instituted by one DISTRICT against the other to interpret this CONTRACT, the rights of the parties thereunder, or to enforce a right or obligation created by this CONTRACT, the prevailing party shall receive its costs and reasonable attorneys' fees to be set by the court.

14. Captions and Calculations. The captions to the Articles herein are not part of this CONTRACT, and are not to be used in its interpretation. Any computations made pursuant to this CONTRACT concerning numbers of AF shall be carried out to the nearest acre foot. Any computations made pursuant to this CONTRACT involving percentages shall be carried out to the closest 1/100th of one percent.

15. Binds and Inures. This CONTRACT shall bind and inure to the legal successors of the DISTRICTS and is not made for the benefit of any third party.

16. Subordinate to Bureau Contract. This CONTRACT at all times is subject and subordinate to the provisions of the Bureau Contract.

17. Notices. Notices required to be given under this CONTRACT shall be made by prepaid registered or certified mail deposited

in a United States Post Office mail box addressed as follows:

CALAVERAS DISTRICT:

Secretary-Manager  
Calaveras County Water District  
P. O. Box 846  
San Andreas, California 95249

STOCKTON DISTRICT:

Secretary-Manager  
Stockton and East San Joaquin  
Water Conservation District  
P. O. Box 5157  
Stockton, California 95205

Notices so posted shall be deemed delivered on the second day following said posting. Changes in these addresses shall be given in writing by the method specified herein.

18. Effective Date and Delay in Payment.

18. (A) This CONTRACT shall not be effective until the Bureau Contract has been signed and approved by the United States.

18. (B) It is understood that certain of the water users identified in the Murray, Burns & Kienlen Civil Engineers study dated February 7, 1969 and located within CALAVERAS DISTRICT have for some time been making diversions for agricultural purposes from the Calaveras River below New Hogan Dam and that said diversions have included, in part, stored water which has been released from the New Hogan Project pursuant to interim contracts now and heretofore in effect between the STOCKTON DISTRICT and the Bureau by which contracts the STOCKTON DISTRICT has paid the Bureau at the rate of \$4.00 per AF for said release of stored water and will so pay the Bureau during 1970. It is anticipated by the parties that in 1971 and subsequently these water users will divert water, part of which will be Project Water and part of which will be  $W_c$  as defined in this CONTRACT. It is further understood that CALAVERAS DISTRICT may need to complete certain internal arrangements before it can pay STOCKTON DISTRICT for the Project Water diverted by these users. CALAVERAS DISTRICT shall include within the initial schedules submitted on March 15, 1971 pursuant to Paragraph 3(B)(1) the monthly quantity of water estimated to be required by the aforementioned diverters during the 1971 year and shall similarly include the amount so required in the initial schedules submitted on March 15 of each year thereafter. Notwithstanding the provisions of Paragraph 3(B)(1) and Subarticle 5(D) related to advance payments, the advance payment made by CALAVERAS DISTRICT on March 15, 1971 need not include the amount representing planned diversions by these water users but

may be deferred by the CALAVERAS DISTRICT to and including April 1, 1972, provided that any sum so deferred pursuant to this Subarticle 18(B) shall bear interest at the rate of nine percent (9%) per annum until paid in full. On March 15, 1972 and in all years thereafter, the water and advance payment therefor for these users shall be included in the initial schedules and advance payments submitted by CALAVERAS DISTRICT pursuant to Paragraph 3(B) (1).

IN WITNESS WHEREOF, the parties have executed this CONTRACT the day and year first herein written.

CALAVERAS COUNTY WATER DISTRICT

By

William D. Hart  
President

ATTEST:

Stanley Edmund  
Secretary

STOCKTON & EAST SAN JOAQUIN WATER  
CONSERVATION DISTRICT

By

William C. Davis  
President

ATTEST:

Robert B. ...  
Secretary

EXECUTION OF THE FOREGOING CONTRACT APPROVED BY THE  
DEPARTMENT OF THE INTERIOR OF THE UNITED STATES.

By

R. J. Pufford Jr.  
Contracting Officer

Year	Delivery AF/Annum		Total AF/Annum
	AG	M & I	
1972	6340	60	6400
1973	6632	75	6707
1974	6923	93	7016
1975 -	7215	110	7325
1976	7507	133	7640
1977	7798	156	7954
1978	8090	182	8272
1979	8382	210	8592
1980 -	8673	240	8913
1981	8965	275	9240
1982	9257	310	9567
1983	9548	355	9903
1984	9840	400	10240
1985 -	11560	450	12010
1986	13280	500	13780
1987	15000	570	15570
1988	16720	630	17350
1989	18440	700	19140
1990 -	20160	790	20950
1991	21880	880	22760
1992	23600	940	24540
1993	25290	1010	26300
1994	27040	1080	28120
1995 -	27040	1160	28200
1996	27040	1250	28290
1997	27040	1340	28380
1998	27040	1440	28480
1999	27040	1550	28590
2000 -	27040	1680	28720
2001	27040	1780	28820
2002	27040	1880	28920
2003	27040	1990	29030
2004	27040	2150	29190
2005 -	27040	2220	29260
2006	27040	2340	29380
2007	27040	2480	29520
2008	27040	2630	29670
2009	27040	2790	29830
2010 -	27040	2960	30000

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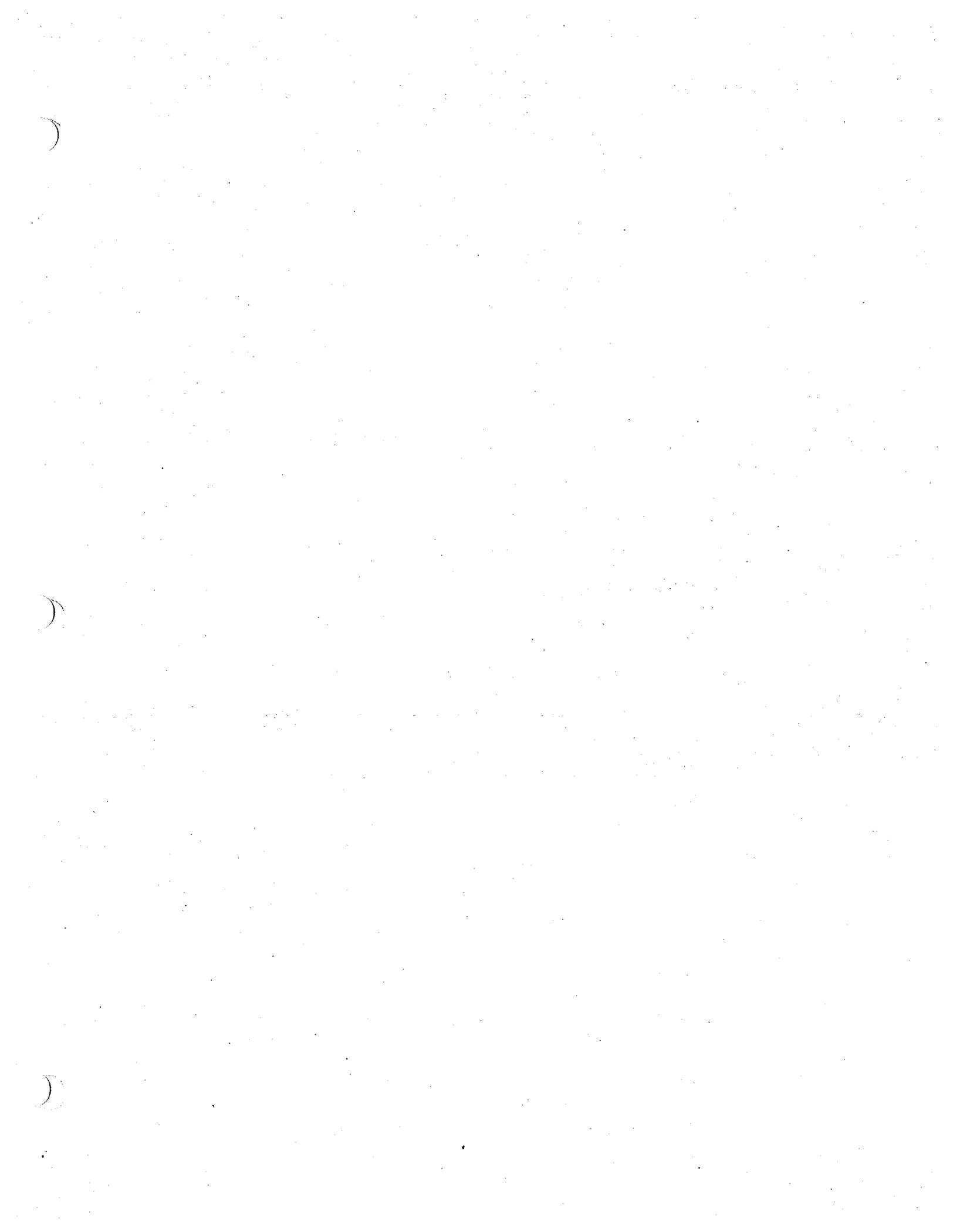
AG - Agriculture  
M & I - Municipal &  
Industrial  
AF/Annum - Acre Feet Per  
Annum

EXHIBIT "A"  
Water Delivery  
For  
New Hogan Project  
Calaveras County Water District

1972	6340	60	6400
1973	6632	75	6707
1974	6923	93	7016
1975 -	7215	110	7325
1976	7507	133	7640
1977	7798	156	7954
1978	8090	182	8272
1979	8382	210	8592
1980 -	8673	240	8913
1981	8965	275	9240
1982	9257	310	9567
1983	9548	355	9903
1984	9840	400	10240
1985 -	11560	450	12010
1986	13280	500	13780
1987	15000	570	15570
1988	16720	630	17350
1989	18440	700	19140
1990 -	20160	790	20950
1991	21880	880	22760
1992	23600	940	24540
1993	25290	1010	26300
1994	27040	1080	28120
1995 -	27040	1160	28200
1996	27040	1250	28290
1997	27040	1340	28380
1998	27040	1440	28480
1999	27040	1550	28590
2000 -	27040	1680	28720
2001	27040	1780	28820
2002	27040	1880	28920
2003	27040	1990	29030
2004	27040	2150	29190
2005 -	27040	2220	29260
2006	27040	2340	29380
2007	27040	2480	29520
2008	27040	2630	29670
2009	27040	2790	29830
2010 -	27040	2960	30000

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AG - Agriculture  
M & I - Municipal &  
Industrial  
AF/Annum - Acre Feet Per  
Annum





R.O. Draft 10/16-1987

Contract No.  
14-06-200-5057A  
Amendatory

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
New Hogan Project, California

AMENDATORY CONTRACT AMONG THE UNITED STATES OF AMERICA,  
STOCKTON EAST WATER DISTRICT AND CALAVERAS COUNTY WATER DISTRICT  
PROVIDING FOR REPAYMENT AND CONSERVATION USE OF NEW HOGAN PROJECT

THIS AMENDATORY CONTRACT, made this 25<sup>th</sup> day of March, 1988

between the UNITED STATES OF AMERICA, hereinafter referred to as the United States, represented by the Contracting Officer executing this amendment, and STOCKTON EAST WATER DISTRICT AND CALAVERAS COUNTY WATER DISTRICT hereinafter referred to as the Contractors,

WITNESSETH, That:

EXPLANATORY RECITALS

WHEREAS, the parties have entered into a repayment contract, dated August 25, 1970 and identified as contract No. 14-06-200-5057A, as amended, which provides repayment and conservation use of New Hogan Dam and Reservoir and is hereinafter referred to as the repayment contract; and

WHEREAS, pursuant to Section 212 of Public Law 97-293 the Reclamation Reform Act of October 12, 1982, the Contractors' water supply from the abovestated reservoir is exempt from the provisions of Federal reclamation law; and

WHEREAS, the Contractors desire to amend the repayment contract to reflect the intent so stated in Section 212 of Public Law 97-293;

NOW, THEREFORE, in consideration of the mutual and dependent stipulations and covenants herein contained, it is mutually agreed by the parties hereto as follows:

1. The following changes to the repayment contract between the United States and the Contractors, shall be effective commencing October 12, 1982.

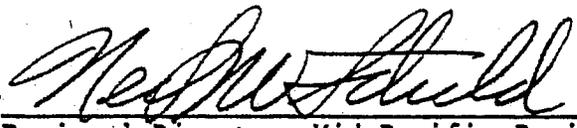
2. Articles 19, 20, 21 and 22 of the repayment contract and all references to such articles in other articles of the repayment contract are hereby deleted in their entirety.

3. Nothing in this amendatory contract shall terminate, cancel or affect any sales of land heretofore made under recordable contract.

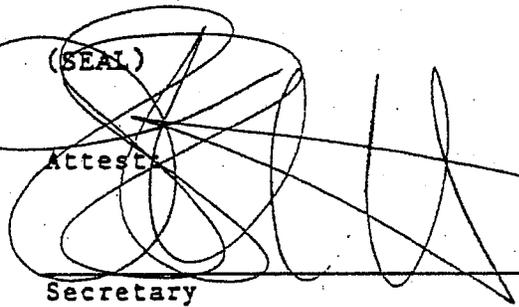
4. Except as herein amended, all provisions of the repayment contract shall remain in full force and effect.

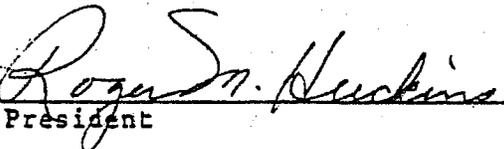
IN WITNESS WHEREOF, the parties hereto have signed their names as of the day and year first above written.

UNITED STATES OF AMERICA

By   
ACTING Regional Director, Mid-Pacific Region  
Bureau of Reclamation

STOCKTON-EAST WATER DISTRICT

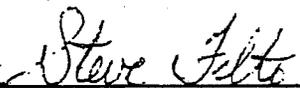
(SEAL)  
Attest:   
Secretary

By   
President

(SEAL)

CALAVERAS COUNTY WATER DISTRICT

Attest:

  
Secretary  
CORP20

By   
President

RESOLUTION NO. 87-160

WHEREAS, the Bureau of Reclamation has proposed amendments to the contract for New Hogan Water to delete those sections relating to ownership or pricing limitations of Federal Reclamation Law.

BE IT RESOLVED that the Board of Directors of CALAVERAS COUNTY WATER DISTRICT does hereby authorize the execution of the "Amendatory Contract Among the UNITED STATES OF AMERICA, STOCKTON EAST WATER DISTRICT and CALAVERAS COUNTY WATER DISTRICT Providing For Payment and Conservation Use of the New Hogan Project."

BE IT FURTHER RESOLVED that the President is hereby authorized to execute said Amendatory Contract.

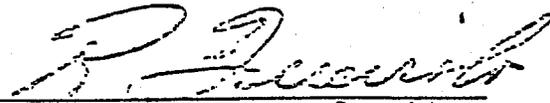
PASSED AND ADOPTED this 10th day of December, 1987 by the following vote:

AYES: Directors Clark, Johnson, Neilsen, Gleason and Queirolo

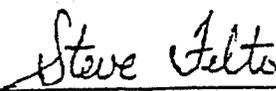
NOES: None

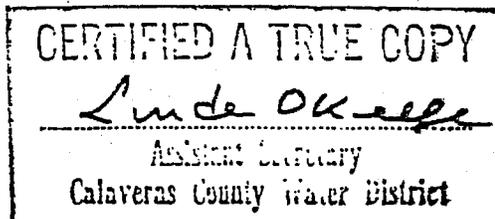
ABSENT: None

CALAVERAS COUNTY WATER DISTRICT

  
President

ATTEST:

  
Secretary



BUREAU OF RECLAMATION	
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FILE	DATE
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**RESOLUTION OF THE BOARD OF DIRECTORS  
OF STOCKTON EAST WATER DISTRICT**

**RESOLUTION 87-88-26**

**RESOLUTION AUTHORIZING SIGNATURES ON AMENDMENT TO CONTRACT  
FOR USE OF NEW HOGAN WATER**

WHEREAS, on February 16, 1988 the Board of Directors of Stockton East Water District adopted the Amendatory Contract Among the United States of America, Stockton East Water District and Calaveras County Water District Providing For Repayment And Conservation Use of New Hogan Project; and

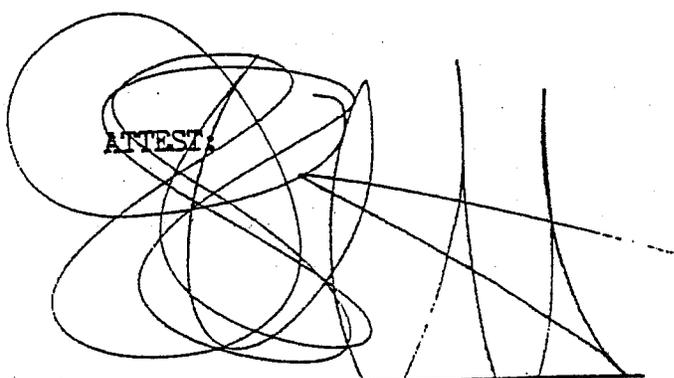
WHEREAS, the United States of America has requested that signatures on the Amendatory Contract be authorized by Resolution of the Board of Directors of Stockton East Water District;

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of Stockton East Water District approves and authorizes the Board President and Secretary of the Board to execute and sign the Amendatory Contract approved at the February 16, 1988 Board meeting.

PASSED AND ADOPTED by the Board of Directors of Stockton East Water District at a regular meeting held on March 15, 1988, by the following vote:

- AYES: Solari, Dondero, Laven, Bozzano, MacNear, Huckins
- NOES: Tone
- ABSENT: None

*Roger M. Huckins*  
 ROGER M. HUCKINS, President  
 Stockton East Water District

ATTEST:  


EDWARD M. STEFFANI, Secretary  
 Stockton East Water District

SECRETARY'S CERTIFICATE

I, EDWARD M. STEFFANI, Secretary of the Board of Directors of the STOCKTON-EAST WATER DISTRICT, Stockton, California, do hereby certify as follows:

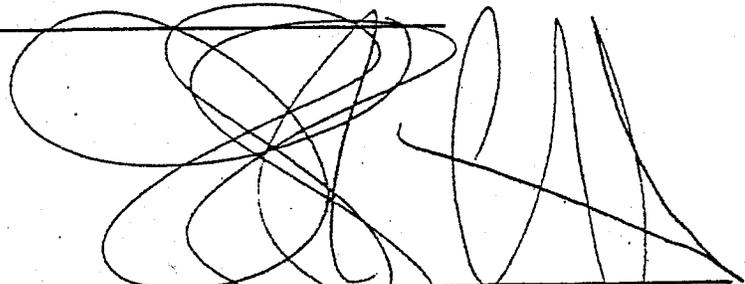
The foregoing is a full, true and correct copy of a resolution duly adopted at a Regular Meeting of the Board of Directors of said District duly and regularly and legally held at the regular meeting place thereof on March 15, 1988, of which meeting all of the members of said Board of Directors had due notice and at which a majority thereof were present.

I have carefully compared the same with the original minutes of said meeting on file and of record in my office, and the foregoing is a full, true, and correct copy of the original resolution adopted at said meeting and entered in said minutes.

Said resolution has not been amended, modified, or rescinded since the date of its adoption, and the same is now in full force and effect.

Dated: \_\_\_\_\_

3/15/88



EDWARD M. STEFFANI  
Secretary of the Board  
STOCKTON-EAST WATER DIST

(SEAL)

**ATTACHMENT B**

**SEWD/ USBR and SEWD/CSJWCD Contract for Central Valley Project Water Supply (New Melones)**

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R.O. Draft 4/30-1982  
 Rev. R.O. 7/21-1982  
 Rev. R.O. 8/10-1982  
 Rev. R.O. 9/15-1982  
 Rev. R.O. 9/20-1982  
 W.O. Draft 10/28-1982  
 Rev. R.O. 2/17-1983  
 Rev. R.O. 2/28-1983  
 Rev. R.O. 3/2-1983  
 Rev. R.O. 9/7-1983

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 BUREAU OF RECLAMATION  
 Central Valley Project, California  
CONTRACT BETWEEN THE UNITED STATES  
AND  
STOCKTON-EAST WATER DISTRICT  
PROVIDING FOR PROJECT WATER SERVICE

Contract No.  
 4-07-20-W0329

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Contract No.  
4-07-20-W0329

1 UNITED STATES  
2 DEPARTMENT OF THE INTERIOR  
3 BUREAU OF RECLAMATION  
4 Central Valley Project, California

5 CONTRACT BETWEEN THE UNITED STATES  
6 AND  
7 STOCKTON-EAST WATER DISTRICT  
8 PROVIDING FOR PROJECT WATER SERVICE

9 THIS CONTRACT, made this 19<sup>th</sup> day of December 1983, in  
10 pursuance generally of the Act of June 17, 1902 (32 Stat. 388), and acts  
11 amendatory or supplementary thereto including but not limited to the Act  
12 of August 26, 1937 (50 Stat. 844), as amended and supplemented, and the  
13 Act of August 4, 1939 (53 Stat. 1187), as amended and supplemented, all  
14 collectively hereinafter referred to as the Federal reclamation laws  
15 between THE UNITED STATES OF AMERICA, hereinafter referred to as the  
16 United States, and STOCKTON-EAST WATER DISTRICT, hereinafter referred  
17 to as the Contractor, a public agency of the State of California, duly  
18 organized, existing, and acting pursuant to the laws thereof, with  
19 its principal place of business in Stockton, California.

20 WITNESSETH, That:

21 EXPLANATORY RECITALS

22 WHEREAS, the United States is constructing and operating the  
23 Central Valley Project, California for the purpose, among others, of  
24 furnishing water for irrigation, municipal, industrial, domestic, and  
25 other beneficial uses; and

WHEREAS, pursuant to the Flood Control Acts of December 22, 1944  
(58 Stat. 887) and October 23, 1962 (76 Stat. 1173), the Corps of Engineers,  
United States Army was authorized to construct the New Melones Dam on the

1 Stanislaus River, California, for the multipurpose uses of flood control,  
2 irrigation, municipal and industrial, power generation, and recreation,  
3 among other beneficial purposes; and

4 WHEREAS, pursuant to said acts, New Melones Dam and Reservoir were  
5 constructed by the Corps of Engineers and transferred to the Secretary of  
6 the Interior to become an integral part of the Central Valley Project to be  
7 operated and maintained pursuant to the authorizing acts and Federal  
8 reclamation laws; and

9 WHEREAS, investigations by the United States indicate that the  
10 Contractor has a present and potential need for an irrigation and municipal  
11 and industrial water supply; and

12 WHEREAS, Stockton-East Water District has sought a long-term water  
13 supply from the Folsom South Canal of the Central Valley Project which is not  
14 currently available; and

15 WHEREAS, the Flood Control Act of 1962 provides "That before initiating  
16 any diversions of water from the Stanislaus River Basin in connection with the  
17 operation of the Central Valley project, the Secretary of the Interior shall  
18 determine the quantity of water required to satisfy all existing and  
19 anticipated future needs within that basin and the diversions shall at all  
20 times be subordinate to the quantities so determined . . ."; and

21 WHEREAS, in the Record of Decision dated June 29, 1981, the Secretary  
22 determined the Stanislaus River Basin and the needs therein; and

23 WHEREAS, although Stockton-East Water District is not within the  
24 Basin, said Secretarial determination and investigations by the United States  
25 indicate that there will be an interim water supply available from the

1 Central Valley Project for furnishing to the Contractor for surface  
2 diversion and direct application for irrigation and municipal and  
3 industrial and other purposes; and

4 WHEREAS, the Contractor desires to contract pursuant to Federal  
5 reclamation laws and the laws of the State of California, for water service  
6 from the Central Valley Project pursuant to the conditions hereinafter set forth;

7 NOW, THEREFORE, in consideration of the covenants herein contained,  
8 it is agreed as follows:

9 DEFINITIONS

10 1. When used herein, unless otherwise distinctly expressed or manifestly  
11 incompatible with the intent hereof, the term:

12 (a) "Secretary" or "Contracting Officer" shall mean the Secretary  
13 of the Interior or his duly authorized representative;

14 (b) "Project" shall mean the Central Valley Project, California,  
15 of the Bureau of Reclamation;

16 (c) "year" shall mean calendar year;

17 (d) "Basin" shall mean the Stanislaus River Basin area for which  
18 a reservation of water is required by the Flood Control Act of 1962 and which  
19 is defined in the special report entitled "New Melones Unit, Central Valley  
20 Project, California, Stanislaus River Basin Alternative and Water Allocation,  
21 September 1980," approved by the Under Secretary in his June 29, 1981,  
22 Record of Decision;

23 (e) "agricultural water" shall mean water used primarily in the com-  
24 mercial production of agricultural crops or livestock including domestic

1 use incidental thereto, on tracts of land operated in units of more  
2 than five acres;

3 (f) "municipal, industrial, and domestic water" (hereinafter  
4 referred to as M&I) shall mean water used for other than agricultural  
5 purposes;

6 (g) "interim water supply" shall mean that portion of the water  
7 supply available from the New Melones Unit during the buildup to full  
8 Basin requirements which will be withdrawn as the needs within the Basin  
9 develop.

10 TERM OF CONTRACT--RIGHT TO USE OF WATER

11 2. (a) This contract shall be effective on the date first hereinabove  
12 written and shall remain in effect through December 31, 2022.

13 (b) The Contracting Officer shall provide a written notification  
14 to the Contractor announcing the initial delivery date which shall be January 1  
15 of the year following the date that water from the Project is first available  
16 to the Contractor: Provided, That water availability shall not be declared  
17 until all applicable requirements of State and Federal law with respect to  
18 utilization and delivery of Stanislaus River water for the purpose of this  
19 contract have been complied with: Provided further, That the land classi-  
20 fication requirements of Federal reclamation law must be satisfied prior to the  
21 announcement of water availability.

22  
23  
24

1 (c) If within a period of 5 years, commencing with the year in  
2 which the initial delivery date occurs, the Contractor does not own or have  
3 available to it for the remainder of the term hereof, facilities which in  
4 the opinion of the Contracting Officer are adequate for the conveyance and  
5 distribution of water to be made available pursuant to the terms of this  
6 contract, this contract shall terminate. If in the opinion of the Contracting  
7 Officer, at the end of said 5-year period, the Contractor is diligently pro-  
8 ceeding toward completion of the conveyance and distribution facilities, the  
9 Contracting Officer shall extend said period from year to year to permit com-  
10 pletion of said facilities.

11 WATER TO BE FURNISHED TO THE CONTRACTOR

12 3. (a) The Contractor understands and agrees that the water supply  
13 provided pursuant to this contract is an interim water supply. As the Basin  
14 use develops or if the interim water supply available to Central San Joaquin  
15 Water Conservation District pursuant to its contract with the United States  
16 is increased, the Contractor's interim water supply may be reduced for subse-  
17 quent years as determined by the Contracting Officer upon a minimum of one  
18 year written notification to the Contractor. The Contractor's interim water  
19 supply also may be reduced, as determined by the Contracting Officer, to pro-  
20 vide South Delta Water Agency an interim water supply in dry and critically  
21 dry water years, as determined by the Contracting Officer, but only in the  
22 event that the United States and said Agency execute a contract for that  
23 interim water supply during those dry and critically dry water years.

24 (b) Subject to the terms and conditions herein stated, the United  
25 States shall make available annually to the Contractor a maximum of 75,000

1 acre-feet of interim water: Provided, That this quantity may be increased  
2 pursuant to subdivisions (f) and (g) of this article; Provided further, That  
3 if the total water quantity is reduced pursuant to subdivision (a) of this  
4 article, the maximum and minimum quantities specified in subdivisions (c) and  
5 (d) shall be adjusted proportionately to such reduction or otherwise adjusted  
6 in a manner mutually agreed to by the Contracting Officer and the Contractor:  
7 And provided further, That in the event litigation by a third party prevents  
8 delivery of Project water for a period of time during the term of this contract,  
9 upon approval of the Contracting Officer the minimum payments as described in  
10 subdivisions (c) and (d) of this article during that same period shall be  
11 suspended.

12 (c) The United States shall make available to the Contractor the  
13 annual quantities of agricultural water up to a maximum quantity of 65,000  
14 acre-feet as specified in the schedule submitted by the Contractor in accordance  
15 with Article 4 and the Contractor shall pay for said water in accordance with  
16 Article 5: Provided, That the United States shall make available and the Con-  
17 tractor shall pay for, as a minimum, such quantities of agricultural water as  
18 specified below:

19 (1) Each year, for the first five years commencing with the  
20 year in which the initial delivery date occurs pursuant to Article 2,  
21 the quantity of water specified in a schedule, or any revision thereof,  
22 submitted in accordance with Article 4.

23 (2) Each year for years 6 through 8 a minimum quantity of  
24 22,750 acre-feet and for years 9 and 10 the minimum quantity of 45,500  
25 acre-feet: Provided, That if in any year the Contractor schedules a  
quantity larger than the stated minimum, such increased quantity shall

1 constitute a new minimum for each subsequent year until such time as  
2 the above-stated minimums exceed that quantity.

3 (3) Each year beginning in the 11th year and continuing  
4 for the remaining contract term, the quantity of water scheduled in  
5 the 11th year (which quantity shall be at least equal to or greater  
6 than the quantity made available and paid for in the 10th year except  
7 as reduced pursuant to subdivision (a) of this article). In no event  
8 shall the annual quantity furnished for agricultural purposes exceed  
9 65,000 acre-feet, except as provided pursuant to subdivisions (f) and  
10 (g) of this article: Provided, That the United States shall not be  
11 obligated to furnish any quantity greater than the quantity scheduled  
12 in the 11th year and such quantity shall constitute the new contract  
13 maximum for the remaining contract term.

14 (d) The United States shall make available to the Contractor  
15 the annual quantities of M&I water up to a maximum quantity of 10,000 acre-  
16 feet as specified in the schedule submitted by the Contractor in accordance  
17 with Article 4 and the Contractor shall pay for said water in accordance with  
18 Article 5: Provided, That the United States shall make available and the  
19 Contractor shall pay for, as a minimum, such quantities of M&I water as  
20 specified in the following table except as reduced pursuant to subdivision (a)  
21 of this article: Provided, however, That at any time or times after the  
22  
23  
24  
25

TABLE OF MINIMUM M&I WATER QUANTITIES

(In acre-feet)

<u>Years Beginning With Initial Delivery Date</u>	<u>Minimum Annual M&amp;I Water Delivery</u>	<u>Years Beginning With Initial Delivery Date</u>	<u>Minimum Annual M&amp;I Water Delive</u>
1	100	21	8,700
2	200	22	9,400
3	300	23	10,000
4	400	24	10,000
5	500	25	10,000
6	600	26	10,000
7	700	27	10,000
8	800	28	10,000
9	900	29	10,000
10	1,000	30	10,000
11	1,700	31	10,000
12	2,400	32	10,000
13	3,100	33	10,000
14	3,800	34	10,000
15	4,500	35	10,000
16	5,200	36	10,000
17	5,900	37	10,000
18	6,600	38	10,000
19	7,300	39	10,000
20	8,000	40	10,000

1 Contractor's requirement for M&I water exceeds 10,000 acre-feet per year, any  
2 or all of the Project water to be furnished for agricultural use, as specified  
3 in subdivision (c) of this article, may be converted to M&I use and shall be  
4 added to said 10,000 acre-feet and shall become the minimum quantity the  
5 Contractor shall pay for as M&I water each year thereafter during the term of  
6 this contract. Any time or times water for agricultural use is converted to  
7 M&I use, the minimum quantities of agricultural water for which payment is  
8 required pursuant to subdivision (c) of this article shall be adjusted accordingly.

9 (e) In any year the Contractor schedules a quantity larger than the  
10 minimum stated in the Table of Minimum M&I Water Quantities for that year, such  
11 scheduled quantity shall constitute a new minimum for each subsequent year until  
12 such time as the minimum stated on the Table exceeds that quantity.

13 (f) The Contracting Officer will review the supplemental needs of the  
14 Contractor following restudy of the available groundwater and with the mutual  
15 agreement of the Contractor the maximum water quantity of 75,000 acre-feet may  
16 be adjusted: Provided, That said maximum quantity may be increased only if the  
17 Contracting Officer has determined that additional Project water is available:  
18 Provided, however, That the increase shall not cause the adjusted maximum quantity  
19 to exceed 90,000 acre-feet; And Provided further, That if the total water  
20 quantity is increased pursuant to this subdivision, the maximum and minimum annual  
21 quantities specified in subdivisions (c) and (d) of this article shall be adjusted  
22 proportionately to such increase or otherwise adjusted in a manner mutually  
23 agreed to by the Contracting Officer and the Contractor.

24 (g) If the Contractor in any year requires a quantity of water in  
25 addition to the maximum quantities stated in subdivisions (b), (c), and/or (d)  
26 herein which the United States is obligated to furnish, additional Project

1 water, if available as determined by the Contracting Officer, may be furnished  
2 upon receipt of a schedule from the Contractor indicating the quantity of  
3 water and the desired time of delivery and appropriate payment. The furnishing  
4 by the United States and acceptance by the Contractor of such additional water  
5 shall neither entitle nor obligate the Contractor to receive or pay for such  
6 quantities in subsequent years.

7 (h) The United States and the Contractor by mutual agreement may  
8 reduce the annual quantity of water which the United States is obligated to  
9 make available and the Contractor obligated to pay for during the remainder  
10 of the term of this contract.

11 (i) The Contractor will use all proper methods to secure the  
12 economical and beneficial use of water furnished pursuant to this contract.

13 (j) If in any year after the Contracting Officer has approved a  
14 schedule or any revision thereof submitted by the Contractor, the United States  
15 is unable to furnish any of the water in the quantities and at the times  
16 requested in the schedule or revision thereof and the Contractor does not  
17 elect to receive and does not receive such water at other times during such  
18 year, the Contractor shall be entitled to an adjustment as provided in  
19 Article 6.

#### 20 DELIVERY SCHEDULES

21 4. (a) For each year the Contractor will submit a schedule,  
22 subject to the provisions of Article 3, indicating the amounts of  
23 agricultural and M&I water required monthly. The first schedule  
24 shall be submitted 2 months prior to the initial delivery of water.  
25 Thereafter, annual schedules indicating monthly water requirements  
26 for the subsequent years shall be submitted not later than November 1 of  
27 each year or at such other times as determined by the Contracting Officer

1 to assure coordination of Project operations. The United States shall  
2 attempt to deliver water in accordance with said schedules, or any revisions  
3 thereof satisfactory to the Contracting Officer which are submitted to the  
4 Contracting Officer within a reasonable time before the desired time of  
5 delivery. The inability, failure, or refusal of the Contractor to submit  
6 a schedule shall not relieve it of its payment obligations.

7 (b) If the Contractor during any month is furnished a quantity of  
8 water in addition to that which it has requested for such month in its  
9 schedule and accepts such additional water, the Contractor shall be deemed  
10 to have revised its schedule and ordered and obligated itself to pay for  
11 such additional water and the United States shall be deemed to have accepted  
12 such revision as satisfactory. As soon thereafter as possible the Contractor  
13 shall submit a revised schedule to the United States for the remaining quantity  
14 to be delivered during that year.

15 RATES AND METHOD OF PAYMENT FOR WATER

16 5. (a) The rates of payment to be made by the Contractor for water  
17 made available pursuant to this contract shall be:

18 (1) \$3.50 per acre-foot for agricultural water:

19 Provided, That this rate shall be redetermined annually in accordance  
20 with reclamation law and the then current agricultural rate policy of  
21 the Project.

22 (2) \$9.00 per acre-foot for M&I water: Provided, That this  
23 rate shall be redetermined annually in accordance with reclamation law  
24 and the then current M&I rate policy of the Project.

25 (b) At the time the Contractor submits the first schedules pursuant  
26 to Article 4 hereof to the Contracting Officer, the Contractor shall pay the  
27 amount payable for water to be delivered during the first two months. Before

1 the end of the first month or part thereof, of delivery of water pursuant  
2 to this contract and before the end of each month thereafter, the Contractor  
3 shall pay for the water to be delivered in accordance with the latest  
4 approved schedules during the second month immediately following. Adjustments  
5 between the payment for the scheduled amounts of water and the payment for  
6 quantities delivered each month shall be made during the following month:  
7 Provided, That any revised schedule which increases the Contractor's water  
8 deliveries shall be accompanied with an appropriate payment to assure water  
9 is not delivered in advance of payment. By December 1 of each year, the Con-  
10 tractor shall make any additional payment it is obligated to make for that  
11 year pursuant to Article 3.

12 (c) In the event the Contractor in any year is unable, fails, or  
13 refuses to accept delivery of the quantities of water scheduled and made  
14 available for delivery and for which payment is required pursuant to this  
15 contract or if the Contractor in any year fails to submit a schedule under  
16 subdivision (a) of Article 4, said inability, failure, or refusal shall not  
17 relieve the Contractor of the obligation to pay for said water and the Con-  
18 tractor agrees to make payment therefor in the same manner as if said water  
19 had been delivered to and accepted by the Contractor in accordance with this  
20 contract.

#### 21 ADJUSTMENTS

22 6. The amount of any overpayment by the Contractor due to the quantity of  
23 water actually available for the Contractor during any year, as determined by  
24 the Contracting Officer, having been less than the quantity for which the Con-  
25 tractor was required to pay shall be applied first to any accrued indebtedness  
26 then due and payable by the Contractor pursuant to this contract. Any amount

1 of such overpayment then remaining shall, at the option of the Contractor,  
2 be refunded to the Contractor or credited upon amounts to become due to the  
3 United States from the Contractor under the provisions hereof in the ensuing  
4 year. Such adjustment shall constitute the sole remedy of the Contractor or  
5 anyone having or claiming to have the right to the use of any of the water  
6 supply provided for herein.

7 POINT OF DIVERSION--MEASUREMENT AND RESPONSIBILITY  
8 FOR DISTRIBUTION OF WATER

9 7. (a) The water to be furnished to the Contractor pursuant to this  
10 contract will be released from Project facilities and diverted at such location or  
11 locations as mutually agreed to by the Contracting Officer and the Contractor.

12 (b) The Contractor shall construct and install, without cost or expense  
13 to the United States, facilities required by the Contractor to take and convey the  
14 water from the point or points of delivery. In the event the Contractor's  
15 facilities are installed, operated, and maintained on property of the United  
16 States, the Contractor will furnish for approval of the Contracting Officer  
17 drawings showing the construction to be performed by the Contractor at least 6  
18 months before starting said construction. The Contractor will not commence con-  
19 struction of any facilities on the property of the United States without the  
20 Contracting Officer's written approval of the drawings submitted by the Con-  
21 tractor. It is specifically recognized and agreed that this contract does not  
22 grant to the Contractor any right of access to Project water or to lands of the  
23 United States for any purpose except as provided herein for installation, opera-  
24 tion, and maintenance of the Contractor's facilities to take Project water.  
25

1 (c) All water diverted by the Contractor pursuant to this  
2 contract shall be measured with equipment furnished, installed, operated,  
3 and maintained by the Contractor at the point or points of diversion  
4 established pursuant to subdivision (a) of this article. The Contractor's  
5 maintenance program shall be approved by the Contracting Officer.

6 (d) M&I water furnished to the Contractor and delivered to its  
7 customers shall be measured, or caused to be measured, by the Contractor  
8 at the point or points of delivery provided from the Contractor's facilities.  
9 All measuring equipment required to determine such quantities shall be  
10 furnished, installed, operated, and maintained by the Contractor without  
11 expense to the United States.

12 (e) Measuring equipment required by subdivisions (c) and (d) of  
13 this article and its installation, maintenance, and use shall be approved by  
14 the Contracting Officer: Provided, That at least once each year, or upon  
15 request of the Contracting Officer, the Contractor shall investigate the  
16 accuracy of all measuring equipment used pursuant to subdivisions (c) and (d)  
17 of this article and shall correct any errors in measurement disclosed by  
18 such investigation. The United States shall be afforded reasonable  
19 opportunity to be present during the inspecting and testing procedure by  
20 the Contractor. The Contracting Officer shall have full and free access  
21 at all reasonable times to inspect said measuring equipment for  
22 the purpose of determining the accuracy and condition thereof.  
23 If said facilities are found to be defective or inaccurate,

24

1 they shall be readjusted or repaired, or both, or replaced without expense  
2 to the United States. In the event the Contractor neglects or fails to  
3 make such repairs or replacements within a reasonable time as may be  
4 necessary to satisfy the operating requirements of the Contracting Officer,  
5 the Contracting Officer may cause the repairs or replacements to be made  
6 and the costs thereof charged to the Contractor, which charge the Contractor  
7 shall pay to the United States on or before March 1 of the year following that  
8 in which the cost was incurred and a statement thereof furnished by the  
9 Contracting Officer to the Contractor.

10 (f) The Contractor shall maintain, in a manner satisfactory to  
11 the Contracting Officer, records of the quantities of water measured by  
12 the Contractor pursuant to subdivisions (c) and (d) of this article and will  
13 a report to the Contracting Officer before the 7th day of each month  
14 following the month in which water is so measured. The difference between  
15 the water measured by the Contractor pursuant to subdivision (d) and all water  
16 furnished by the Contracting Officer as measured pursuant to subdivision (c)  
17 shall be considered to be agricultural water.

18 (g) The United States shall not be responsible for the control,  
19 carriage, handling, use, disposal, or distribution of water beyond the delivery  
20 points and the Contractor shall hold the United States harmless on account  
21 of damage or claim of damage of any nature whatsoever, including property  
22 damage, personal injury or death arising out of or connected with the control,  
23 carriage, handling, use, disposal, or distribution of such water.





1                   WATER ACQUIRED BY CONTRACTOR OTHER THAN FROM THE UNITED STATES

2           11. (a) Water or water rights now owned or hereafter acquired by  
3 the Contractor other than from the United States and Project water furnished  
4 pursuant to the terms of this contract may be transported through distribution  
5 facilities of the Contractor if the Contracting Officer determines that such  
6 mingling is necessary to avoid a duplication of facilities: Provided, That  
7 such water is not transported through the Contractor's facilities constructed  
8 or financed by the United States. Notwithstanding such mingling, the provisions  
9 of this contract shall apply only to the quantity of water furnished to the  
10 Contractor pursuant to the terms hereof and the quantity of water acquired by  
11 or available to the Contractor other than from the United States shall not  
12 in any manner be subject to the provisions of this contract.

13           (b) With respect to the distribution works or portions thereof in  
14 which mingling is permitted as provided in subdivision (a) of this article,  
15 the Contractor:

16                   (1) At the request of the Contracting Officer, the Contractor  
17 will be responsible for the installation, operation, and maintenance of  
18 watermeasuring equipment at delivery points to excess lands and, further,  
19 will be responsible for the installation, operation, and maintenance of  
20 similar equipment for measuring the water available to the Contractor or  
21 landowners within the Contractor's service area other than from the Project,  
22 and the Contracting Officer may check and inspect said equipment at any  
23 time; and

24                   (2) Agrees that the quantity of water furnished to it by the  
25 United States during each 24-hour period will be delivered by the Contractor  
26 through the aforesaid outlets to eligible lands only. The Contractor shall  
27 be deemed to be in breach of this article and Article 12 of this contract

1 if at any time there is furnished to all excess lands not covered by  
2 recordable contracts and served by the distribution works or portions  
3 thereof in which mingling is permitted, a quantity of water which is  
4 greater than that which the Contractor or landowners within the Con-  
5 tractor's service area have introduced into said system from the supply  
6 available other than pursuant to this contract.

7 RULES, REGULATIONS, AND DETERMINATIONS

8 12. (a) The parties agree that the delivery of irrigation water or  
9 the use of Federal facilities pursuant to this contract is subject to the  
10 acreage and ownership limitations and pricing provisions of Reclamation law,  
11 as amended and supplemented, including but not limited to the Reclamation  
12 Reform Act of 1982 (Public Law 97-293, Title II).

13 (b) The Contractor further agrees to abide by final rules and  
14 regulations promulgated by the Secretary of the Interior covering the  
15 enforcement and administration of said limitations and provisions of  
16 Reclamation law as amended and supplemented by the Reclamation Reform  
17 Act of 1982, including the payment of full costs as provided therein.

18 (c) The Contracting Officer shall have the right to make, after  
19 an opportunity has been offered to the Contractor for consultation, rules  
20 and regulations consistent with the provisions of this contract, the laws  
21 of the United States and the State of California, to add or to modify them  
22 as may be deemed proper and necessary to carry out this contract, and to  
23 supply necessary details of its administration which are not covered by  
24 express provisions of this contract. The Contractor shall observe such  
25 rules and regulations.

26 (d) Where the terms of this contract provide for action to be  
27 based upon the opinion or determination of either party to this contract,  
28 whether or not stated to be conclusive, said terms shall not be construed  
29 as permitting such action to be predicated upon arbitrary, capricious, or  
30 unreasonable opinions or determinations. In the event that the Contractor  
31 questions any factual determination made by the Contracting Officer, the  
32 findings as to the facts shall be made by the Secretary only after consul-  
33 tation with the Contractor and shall be conclusive upon the parties.

1                   GENERAL OBLIGATION—BENEFITS CONDITIONED UPON PAYMENT

2           13. (a) The obligation of the Contractor to pay the United States  
3 as provided in this contract is a general obligation of the Contractor  
4 notwithstanding the manner in which the obligation may be distributed  
5 among the Contractor's water users and notwithstanding the default of  
6 the individual water users in their obligations to the Contractor.

7           (b) The payment of charges becoming due hereunder is a condition  
8 precedent to receiving benefits under this contract. No water will be made  
9 available to the Contractor through Project facilities during any period in  
10 which the Contractor may be in arrears in the advance payment of any charges  
11 due the United States. The Contractor shall not furnish water made avail-  
12 able pursuant to this contract for lands or parties which are in arrears  
13 in the advance payment of charges as levied or established by the Contractor.

14                   CHARGE FOR LATE PAYMENTS

15           14. The Contractor shall pay a late payment charge on installments or  
16 charges which are received after the due date. The late payment charge  
17 percentage rate calculated by the Department of the Treasury and published  
18 quarterly in the Federal Register shall be used: Provided, That the late  
19 payment charge percentage rate will not be less than 0.5 percent per month.  
20 The late payment charge percentage rate applied on an overdue payment will  
21 remain in effect until payment is received. The late payment rate for a  
22 30-day period will be determined on the day immediately following the due  
23 date and will be applied to the overdue payment for any portion of the 30-day  
24 period of delinquency. In the case of partial late payments, the amount  
25 received will first be applied to the late charge on the overdue payment  
26 and then to the overdue payment.

27                   QUALITY OF WATER

28           15. The operation and maintenance of Project facilities shall be  
29 performed in such manner as is practicable to maintain the quality of  
30 raw water made available through such facilities as the highest level  
31 reasonably attainable as determined by the Contracting Officer. The  
32 United States does not warrant the quality of water and is under no  
33 obligation to construct or furnish water treatment facilities to  
34 maintain or better the quality of water.

35                   WATER AND AIR POLLUTION CONTROL

36           16. The Contractor, in carrying out this contract, shall comply with  
37 all applicable water and air pollution laws and regulations of the United  
38 States and the State of California and shall obtain all required permits  
39 or licenses from the appropriate Federal, State, or local authorities.



1 (6) In the event of the Contractor's noncompliance with  
2 the nondiscrimination clauses of this contract or with any of the  
3 said rules, regulations, or orders, this contract may be canceled,  
4 terminated, or suspended, in whole or in part, and the Contractor  
5 may be declared ineligible for further Government contracts in  
6 accordance with procedures authorized in said amended Executive  
7 Order, and such other sanctions may be imposed and remedies invoked  
8 as provided in said Executive Order, or by rule, regulation, or  
9 order of the Secretary of Labor, or as otherwise provided by law.

10 (7) The Contractor will include the provisions of paragraphs  
11 (1) through (7) in every subcontract or purchase order unless  
12 exempted by the rules, regulations, or orders of the Secretary  
13 of Labor issued pursuant to Section 204 of said amended Executive  
14 Order, so that such provisions will be binding upon each subcontractor  
15 or vendor. The Contractor will take such action with respect to any  
16 subcontract or purchase order as may be directed by the Secretary of  
17 Labor as a means of enforcing such provisions, including sanctions  
18 for noncompliance: Provided, however, That in the event a Contractor  
19 becomes involved in, or is threatened with, litigation with a  
20 subcontractor or vendor as a result of such direction, the Contractor  
21 may request the United States to enter into such litigation to protect  
22 the interests of the United States.

TITLE VI, CIVIL RIGHTS ACT OF 1964

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18. (a) The Contractor agrees that it will comply with Title VI of the Civil Rights Act of July 2, 1964 (78 Stat. 241) and all requirements imposed by or pursuant to the Department of the Interior Regulation (43 CFR 17) issued pursuant to that title, to the end that, in accordance with Title VI of that Act and the Regulation, no person in the United States shall, on the grounds of race, color, or national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Contractor receives financial assistance from the United States and hereby gives assurance that it will immediately take any measures to effectuate this agreement.

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(b) If any real property or structure thereon is provided or improved with the aid of Federal financial assistance extended to the Contractor by the United States, this assurance obligates the Contractor, or, in the case of any transfer of such property, any transferee for the period during which the real property or structure is used for a purpose involving the provision of similar services or benefits. If any personal property is so provided, this assurance obligates the Contractor for the period during which it retains ownership or possession of the property. In all other cases, this assurance obligates the Contractor for the period during which the Federal financial assistance is extended to it by the United States.

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(c) This assurance is given in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts, property, discounts, or other Federal financial assistance extended after the date hereof to the Contractor by the United States, including installment payments after such date on account of arrangements for Federal financial assistance which were approved before such date. The Contractor recognizes and agrees that such Federal financial assistance will be extended in reliance on the representations and agreements made in this assurance, and that the United States shall reserve the right to seek judicial enforcement of this assurance. This assurance is binding on the Contractor, its successors, transferees, and assignees.





1 WATER CONSERVATION PROGRAM

2 19. (a) While the contents and standards of a given water conserva-  
3 tion program are primarily matters of State and local determination, there  
4 is a strong Federal interest in developing an effective water conservation  
5 program because of this contract. The Contractor shall develop and im-  
6 plement an effective water conservation program for all uses of water  
7 which is provided from, or conveyed through, Federally constructed or  
8 Federally financed facilities for the Contractor's use. The original  
9 water conservation program shall specify definite objectives, appropri-  
10 ate existing and proposed water conservation measures including, but not  
11 limited to, changes in water uses and modifications in the design or  
12 operation of existing or proposed distribution systems, and time schedules  
13 for meeting the water conservation objectives.

14 (b) The original water conservation program shall be submitted  
15 to and approved by the Contracting Officer prior to one or all of the  
16 following: (1) service of Federally stored/conveyed water; (2) transfer  
17 of operation and maintenance of the Project facilities to the Contractor;  
18 or (3) transfer of the Project to an operation and maintenance status.  
19 The distribution and use of Federally stored/conveyed water and/or the  
20 operation of Project facilities transferred to the Contractor shall be  
21 consistent with the approved water conservation program. Following date  
22 of execution of this contract, and at subsequent 5-year intervals, the  
23 Contractor and Contracting Officer shall review the original water con-  
24 servation plan to determine if the objectives set forth therein are being  
25 met. If it is determined that the water conservation measures set forth  
26 therein require modification to further the established objectives, the  
27 Contractor and the Contracting Officer shall work together to formulate  
28 the modifications which the Contractor shall then be required to implement.

29 BOOKS, RECORDS, AND REPORTS

30 20. The Contractor shall establish and maintain accounts and other  
31 books and records pertaining to its financial transactions, land use and  
32 crop census, water use, and other matters as the Contracting Officer may  
33 require. Reports thereon shall be furnished to the Contracting Officer  
34 in such form and on such date or dates as he may require. Subject to  
35 applicable Federal laws and regulations, each party shall have the right  
36 during office hours to examine and make copies of each other's books and  
37 official records relating to matters covered by this contract.



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NOTICES

26. Any notice, demand, or request authorized or required by this contract shall be deemed to have been given, on behalf of the Contractor, when mailed, postage prepaid, or delivered to the Regional Director, Bureau of Reclamation, 2800 Cottage Way, Sacramento, California 95825, and on behalf of the United States, when mailed, postage prepaid, or delivered to the Board of Directors of the Stockton-East Water District, Post Office Box 5157, Stockton, California 95205. The designation of the addressee or the address may be changed by notice given in the same manner as provided in this article for other notices.

IN WITNESS WHEREOF, the parties hereto have executed this contract the day and year hereinabove written.

THE UNITED STATES OF AMERICA

By David S. Houston  
Regional Director, Mid-Pacific Region  
Bureau of Reclamation

(SEAL)

STOCKTON-EAST WATER DISTRICT

Attest: [Signature]  
Secretary

By Robert Bayart  
President

RESOLUTION NO. 83-84-06

RESOLUTION BEFORE THE BOARD OF DIRECTORS OF STOCKTON  
EAST WATER DISTRICT AUTHORIZING EXECUTION OF NEW  
MELONES CONTRACT

WHEREAS, the Bureau of Reclamation has presented to the District a proposed contract between the United States and Stockton East Water District providing for project water service, Contract No. REV. R.O. 9/7-1983; and

WHEREAS, the District has reviewed this contract; and

WHEREAS, it is to the District's advantage to execute this contract providing for access to water from New Melones Reservoir; and

WHEREAS, the contract may be terminated within a period of five (5) years if the District does not own or have available to it facilities adequate for the conveyance and distribution of water;

NOW, THEREFORE BE IT RESOLVED and it is hereby resolved that Stockton East Water District shall enter into this contract with the United States Department of Interior, Bureau of Reclamation; and

BE IT FURTHER RESOLVED that the President and Secretary of the Board of Directors of the District are hereby authorized and directed to execute all necessary documents in order to carry out this resolution.

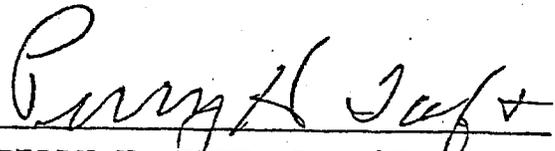
PASSED AND ADOPTED this 4th day of October, 1983 at a regular meeting of the Board of Directors of Stockton East Water District by the following vote. TO WIT:

AYES: EILERS, DONDERO, TAFT, HUCKINS, BOZZANO

NOES: NONE

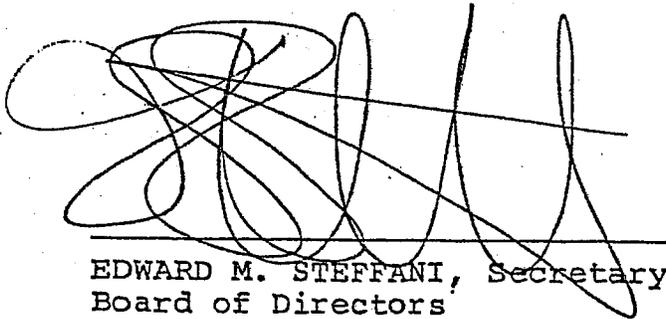
ABSTENTION: NONE

ABSENT: MACNEAR



PERRY H. TAFT, President  
Board of Directors  
Stockton East Water District

ATTEST:



EDWARD M. STEFFANI, Secretary  
Board of Directors  
Stockton East Water District

(SEAL)



SECRETARY'S CERTIFICATE

I, EDWARD M. STEFFANI, Secretary of the Board of Directors of the STOCKTON-EAST WATER DISTRICT, Stockton, California, do hereby certify as follows:

The foregoing is a full, true and correct copy of a resolution duly adopted at a Regular Meeting of the Board of Directors of said District duly and regularly and legally held at the regular meeting place thereof on OCTOBER 4, 1983, of which meeting all of the members of said Board of Directors had due notice and at which a majority thereof were present.

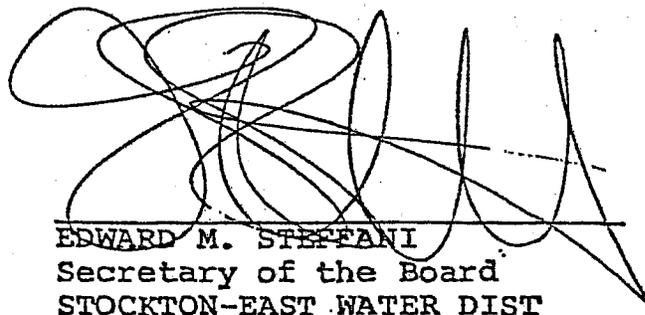
I have carefully compared the same with the original minutes of said meeting on file and of record in my office, and the foregoing is a full, true, and correct copy of the original resolution adopted at said meeting and entered in said minutes.

Said resolution has not been amended, modified, or rescinded since the date of its adoption, and the same is now in full force and effect.

Dated: October 4, 1983



(SEAL)



EDWARD M. STEFFANI  
Secretary of the Board  
STOCKTON-EAST WATER DIST

JM

CONTRACT BETWEEN  
CENTRAL SAN JOAQUIN WATER CONSERVATION DISTRICT  
AND  
STOCKTON EAST WATER DISTRICT

THIS CONTRACT, made this 29<sup>th</sup> day of August, 1991, between Central San Joaquin Water Conservation District, hereinafter referred to as "CSJWCD", a public agency of the State of California, duly organized, existing and acting pursuant to the laws thereof, with its primary place of business in Stockton, California, and Stockton East Water District, hereinafter referred to as "SEWD", a public agency of the State of California, duly organized, existing and acting pursuant to the laws thereof, with its primary place of business in Stockton, California.

RECITALS

WHEREAS, CSJWCD has executed a Water Service Contract with the United States, providing for the delivery and purchase of Project Water from the New Melones Unit of the Central Valley Project in the annual quantity of 80,000 acre feet; and

WHEREAS, SEWD has executed a Water Service Contract with the United States, providing for the delivery and purchase of Project Water from the New Melones Unit of the Central Valley Project in the annual quantity of 75,000 acre feet; and

WHEREAS, SEWD is constructing and will be constructing various components of a water conveyance system to bring Project water into its service area; and

WHEREAS, CSJWCD and SEWD have executed a Wheeling contract

wherein SEWD has agreed to transport and convey Project Water for CSJWCD to its service area; and

WHEREAS, CSJWCD is designing and will construct an internal distribution system to convey and transport its Project Water throughout its service area; and

WHEREAS, SEWD is constructing as part of its water conveyance facilities a Lower Farmington Canal from Farmington Dam into its service area; and

WHEREAS, said Lower Farmington Canal can be designed, constructed, and utilized to allow the conveyance of CSJWCD Project Water into the Duck Creek system of its service area;

WHEREAS, CSJWCD and SEWD wish to cooperate and utilize facilities to the joint and mutual benefit of each of the parties for the conveyance of Project Water;

NOW, THEREFORE, in consideration of the covenants herein contained, it is agreed as follows:

1. Definition: When used herein, unless otherwise distinctly expressed or manifestly incompatible with the intent hereof, the term:

(a) "Internal Distribution Facility" shall mean such channel clearing, crossing, piping, check dams, and other necessary improvements within each party's separate service area;

(b) "Lower Farmington Canal" shall mean a canal approximately 9.6 miles in length from Farmington Dam to the SEWD service area;

(c) "Project Water" shall mean water available to each party pursuant to the terms of a water service contract with the United

States for delivery of water from the New Melones unit of the Central Valley Project;

2. **Purpose of Agreement:** The purpose and intent of this contract is to specify the terms on which SEWD will convey Project Water of CSJWCD through the Lower Farmington Canal to the service area of CSJWCD.

3. **Covenant of Cooperation:** The parties to this contract do hereby covenant to cooperate in good faith to enable CSJWCD to take delivery of its Project Water in conformance with this contract.

4. **Construction of Lower Farmington Canal:** SEWD has designed, and intends to place out for bid, a water conveyance canal called the Lower Farmington Canal with a design capacity at a minimum flow of 200 CFS. Construction is intended to be completed by the latter part of 1991. SEWD agrees that CSJWCD will prepare an addendum to the Lower Farmington Canal design contract documents dated July, 1990, changing and modifying the first Fourteen Thousand (14,000) feet of the Canal to allow a minimum flow of 300 CFS and adding gates at the Funck Road pipe crossing and one (1) turnout structure. Such modification shall allow diversion of Project Water into the Duck Creek area of CSJWCD.

SEWD shall be fully responsible for the construction and construction schedule of the Lower Farmington Canal. SEWD shall bear no responsibility nor liability caused by delays in the construction schedule, for whatever reason.

5. **Use of Facility:** SEWD agrees to utilize the canal for, among other uses, conveyance of Project Water of CSJWCD to the

service area of CSJWCD at a maximum rate of 100 CFS. Nothing herein shall prevent the parties from agreeing to other sharing or utilization of other available capacity. It is understood that a separate agreement will be executed by the parties setting forth the specific terms for operation and delivery of water through the Canal by SEWD on behalf of CSJWCD.

6. **Compensation for Use of Lower Farmington Canal:** CSJWCD shall pay to SEWD an amount equal to the additional bid cost for gates at the Funck Road pipe crossing, one (1) turnout structure, an amount equal to the additional cost for increased excavation and improvement to expand the canal capacity, from 200 CFS to 300 CFS, an amount equal to the additional cost for increasing the Rock Creek Diversion structure capacity from 200 to 300 CFS, and an amount equal to the cost for increasing the Highway 4 pipe crossing capacity from 200 to 300 CFS. Said increased excavation cost shall be calculated on the unit price bid for excavation multiplied by the additional excavation quantity. CSJWCD shall make payment to SEWD for said modifications during the construction of the Lower Farmington Canal and at such time as SEWD is obligated to pay under the terms of the construction contract.

Any additional unforeseen costs which may arise as a result of oversizing the project for CSJWCD participation shall be borne by CSJWCD.

Upon receipt of bids for construction and prior to award of a construction contract thereof, should CSJWCD, in its sole discretion, deem the bided costs to be excessive or unacceptable

then CSJWCD may withdraw from this agreement and the terms and conditions herein will be void.

7. **Additional Compensation:** Notwithstanding any other provision of this Agreement, if, and only if, the amounts paid by CSJWCD pursuant to Paragraph 6 of this Agreement are less than Two Hundred Thousand Dollars (\$200,000.00), then CSJWCD shall pay to SEWD an additional sum, which shall be Two Hundred Thousand Dollars (\$200,000.00) less the amount paid pursuant to Paragraph 6 of this Agreement. CSJWCD shall pay the additional compensation within thirty (30) days of SEWD acceptance of completion of the Lower Farmington Canal.

8. **Operation and Maintenance:** The operation and maintenance expense for the first fourteen thousand (14,000) feet of the Canal shall be determined annually by multiplying the actual operation and maintenance cost by the quotient of total acre feet wheeled for CSJWCD divided by the total acre feet wheeled for CSJWCD plus the total acre feet conveyed for SEWD. Operation and maintenance costs shall not include costs for repair and replacement due to faulty or negligent construction of the Canal or negligent operation and maintenance. Annual review of all operation and maintenance costs shall be provided to CSJWCD. CSJWCD shall be notified of any Committee and Board Meetings when operation and maintenance procedures and costs are discussed. CSJWCD shall pay operation and maintenance costs annually on January 31, for the previous calendar year.

9. **Term of Contract:** This Contract shall be effective on

the date first above written and shall remain in effect through December 21, 2022 or until such time as both parties Water Service Contract with the United States shall terminate; provided, however, that this Contract shall automatically renew for a period of one (1) year, and at the expiration of such renewal period, or any subsequent renewal period, for one (1) year, unless either party shall give notice of non-renewal in writing prior to thirty (30) days before the commencement of any renewal period.

10. **Attorneys fees and Costs:** In any case where court action is instituted by one or more parties against one or more other parties to interpret this Agreement, the rights of the respective parties hereunder, or to enforce a right or obligation created by this Agreement, the prevailing party or parties shall receive costs and reasonable attorneys fees to be set by the court.

11. **Specific Performance:** By reason of the specialized nature of the water service to be rendered, and for the further reason that the extent of any damage caused to any party by another by reason of any breach of this Agreement may be extremely difficult to determine, it is agreed by the parties hereto that an action for damages is an inadequate remedy for any breach, and that specific performance, without precluding any other remedy available in equity or at law, will be necessary to furnish any party hereto with an adequate remedy for the breach by any other party hereto of any covenant or obligation for the benefit of the aggrieved party.

12. **Partial Invalidity:** If any term of this Agreement is held by a court of competent jurisdiction to be void or unenforceable,

the remainder of the contract terms shall remain in full force and effect and shall not be affected.

13. **Assignability:** The provisions of this contract shall apply to and bind the successors and assigns of the parties hereto, but no assignment or transfer of this contract or any part or interest therein shall be valid until approved in writing by the parties.

14. **Notices:** Any notice, demand, or request authorized or required by this contract shall be deemed to have been given, on behalf of the Contractor, when mailed, postage prepaid, or delivered to the Central San Joaquin Water Conservation District, 311 East Main Street, Suite 202, Stockton, California , 95202, and on behalf of SEWD when mailed postage prepaid, or delivered to Stockton East Water District, 6767 East Main Street, Stockton, California, 95205. The designation of the addressee or the address may be changed by notice given in the same manner as provided in this article for other notices.

IN WITNESS WHEREOF, the parties hereto have executed this contract the day and year hereinabove written.

CENTRAL SAN JOAQUIN WATER  
CONSERVATION DISTRICT

STOCKTON EAST WATER DISTRICT

By:

  
GRANT THOMPSON, President

By:

  
JACK FONE



CONTRACT BETWEEN  
CENTRAL SAN JOAQUIN WATER CONSERVATION DISTRICT  
AND STOCKTON EAST WATER DISTRICT

This Contract, made this 4th day of January, 2000, BETWEEN CENTRAL SAN JOAQUIN WATER CONSERVATION DISTRICT (CSJWCD), a public agency of the State of California, duly organized, existing and acting pursuant to the laws thereof, with its primary place of business in Stockton, California, and the STOCKTON EAST WATER DISTRICT (SEWD), a public agency of the State of California, duly organized, existing and acting pursuant to the laws thereof, with its primary place of business in Stockton, California.

1. Recitals.

- a. CSJWCS has executed a Water Service Contract with the United States Bureau of Reclamation, providing for the delivery and purchase of Project water from the New Melones Unit of the Central Valley Project in the annual quantity of 80,000 acre feet.
- b. SEWD has executed a Water Service Contract with the United States Bureau of Reclamation, providing for the delivery and purchase of water from the New Melones Unit of the Central Valley Project in the annual quantity of 75,000 acre feet.
- c. SEWD has constructed a water conveyance system to bring water from the New Melones Project into its service area.
- d. CSJWCD and SEWD have executed a Contract dated January 30, 1990, wherein SEWD has agreed to transport and convey water from the New Melones Project for CSJWCD to its service area (1990 Wheeling Agreement).
- e. SEWD has constructed a Lower Farmington Canal for the conveyance of water from Farmington Dam into its service area.
- f. CSJWCD and SEWD have executed a second Contract dated August 29, 1991, providing for the conveyance of CSJWCD water from the New Melones Project through the Lower Farmington Canal and into the Duck Creek system of its service area (1991 Wheeling Agreement).
- g. CSJWCD and SEWD wish to cooperate and utilize facilities to the joint and mutual benefit of each of the parties for the conveyance of water from the New Melones Project.

NOW, THEREFORE, in consideration of the covenants herein contained, it is agreed as follows:

2. Definitions. When used herein, unless otherwise distinctly expressed or manifestly incompatible with the intent hereof, the term:
  - a. "Internal Distribution Facility" shall mean such channel clearing, crossing, piping, check dams and other improvements within the CSJWCD service area owned, operated and maintained by CSJWCD.
  - b. "Lower Farmington Canal" shall mean a canal approximately 9.6 miles in length from Farmington Dam to the SEWD service area owned, operated and maintained by SEWD.
  - c. "CJWCD Project Water" shall mean irrigation water available to CSJWCD pursuant to the terms of its water service contract with the United States for delivery of water from the New Melones Unit of the Central Valley Project.
  - d. "SEWD Project Water" shall mean irrigation water available to SEWD pursuant to the terms of its water service contract with the United States for delivery of water from the New Melones Unit of the Central Valley Project.
  - e. "Year" shall mean the calendar year.
3. Purpose of Agreement. The purpose and intent of this Contract is to specify the terms on which CSJWCD and SEWD will convey water belonging to the other party through their respective facilities to the service area of the other party. The parties intend that each party will convey a like amount of water for the other party, that actions will be taken by the parties to insure equivalency and that the parties will try to maximize the use of surface water within their respective service areas.
4. Covenant of Cooperation. The parties to this Contract do hereby covenant to cooperate in good faith each to enable the other to take delivery of water in conformance with this Contract.
5. Use of Lower Farmington Canal. SEWD agrees to utilize the Lower Farmington Canal for conveyance of quantities of CSJWCD Project Water into the service area of CSJWCD below the turnout for Duck Creek, in accordance with the terms and conditions of this Contract.
6. Use of Internal Distribution Facilities. CSJWCD agrees to utilize its Internal Distribution Facilities for conveyance of quantities of SEWD Project Water into the service area of SEWD in accordance with the terms and conditions of this Contract.

7. Quantities of Water. The quantity of wheeling capacity available in each facility for the use of the other party shall be that capacity not being utilized at the time of conveyance by the party owning the facility, up to the design capacity of the facility.
8. Prior Approval. The quantity and timing of water to be conveyed pursuant to this Contract each Year shall be approved in writing by the conveying party. The party requesting conveyance shall submit requests in writing to the other party by February 1 of each Year, and written response shall be provided by March 1 of each Year. Such written request shall include the total quantity of water to be conveyed, location and purpose of use, facilities to be utilized, plans and specifications for any proposed facilities to be constructed, proposed method of measurement, and duration of conveyance.
9. Improvements. Upon receipt of written approval of the terms of the conveyance, as set forth above, the party to convey water shall construct any and all improvements determined to be needed by the approving party in accordance with the terms of approval.
10. Record Keeping and Accounting. Each party shall keep records of the quantities of water wheeled through its facilities for the other party hereto pursuant to this Contract. At the end of each Year, the parties shall prepare an accounting of the quantities of water conveyed ("Annual Accounting"). It is the intent of the parties that the quantities of water conveyed by each party be approximately equivalent.
11. Compensation. This is intended to be a trade of equivalent value for the conveyance of like quantities of water by each party. As a result, no monetary compensation is intended to be paid from either party to the other for the rights, duties, and obligations expressed herein, provided the Annual Accounting indicates the original intention of this agreement is being achieved.
12. Term. This Contract shall be effective upon the first date written and shall remain in effect until terminated by either party as provided herein. Either party may terminate by providing notice to the other in writing by December 31 of any year.
13. Indemnity. Each party to this Contract shall indemnify, defend, and hold harmless the other party, its employees, agents, and officers, and their respective successors and assigns, from and against any and all claims, demands, losses, liability, or damages, including, but not limited to, attorneys' fees and court costs incurred in defending against the same, for personal injury, death, or property damage arising from, or in any way connected with, that party's operation of its water conveyance system as provided in this Contract.
14. Attorneys Fees and Costs. In any case where court action is instituted by a party against another party to interpret this Contract, the rights of the respective parties hereunder, or to enforce a right or obligation created by this Contract, the prevailing party or parties shall receive costs and reasonable attorneys fees to be set by the court.

15. Assignability. The provisions of this Contract shall apply to and bind the successors and assigns of the parties hereto, but no assignment or transfer of this Contract or any part or interest therein shall be valid until approved in writing by the parties.
16. Notices. Any notice, demand, or request authorized or required by this Contract shall be deemed to have been given, on behalf of the party, when mailed, postage prepaid, or delivered to a party at the following address:

Central San Joaquin Water Conservation District  
311 East Main Street, Suite 202  
Stockton, California 95202

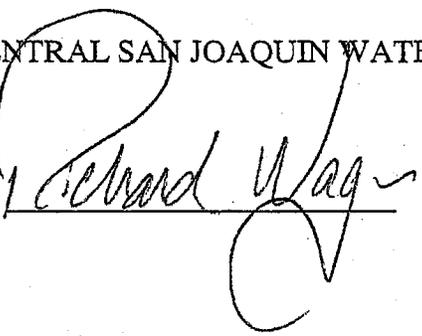
Stockton East Water District  
Post Office Box 5157  
6767 East Main Street  
Stockton, California 95205

The designation of the addressee or the address may be changed by notice given in the same manner as provided in this article for other notices.

17. Continued Validity. Nothing in this Contract shall alter the terms of the 1990 Wheeling Agreement or the 1991 Wheeling Agreement.

CENTRAL SAN JOAQUIN WATER CONSERVATION DISTRICT

By

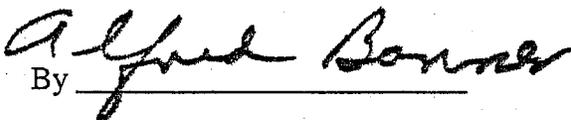


Attest:



STOCKTON EAST WATER DISTRICT

By



Attest:

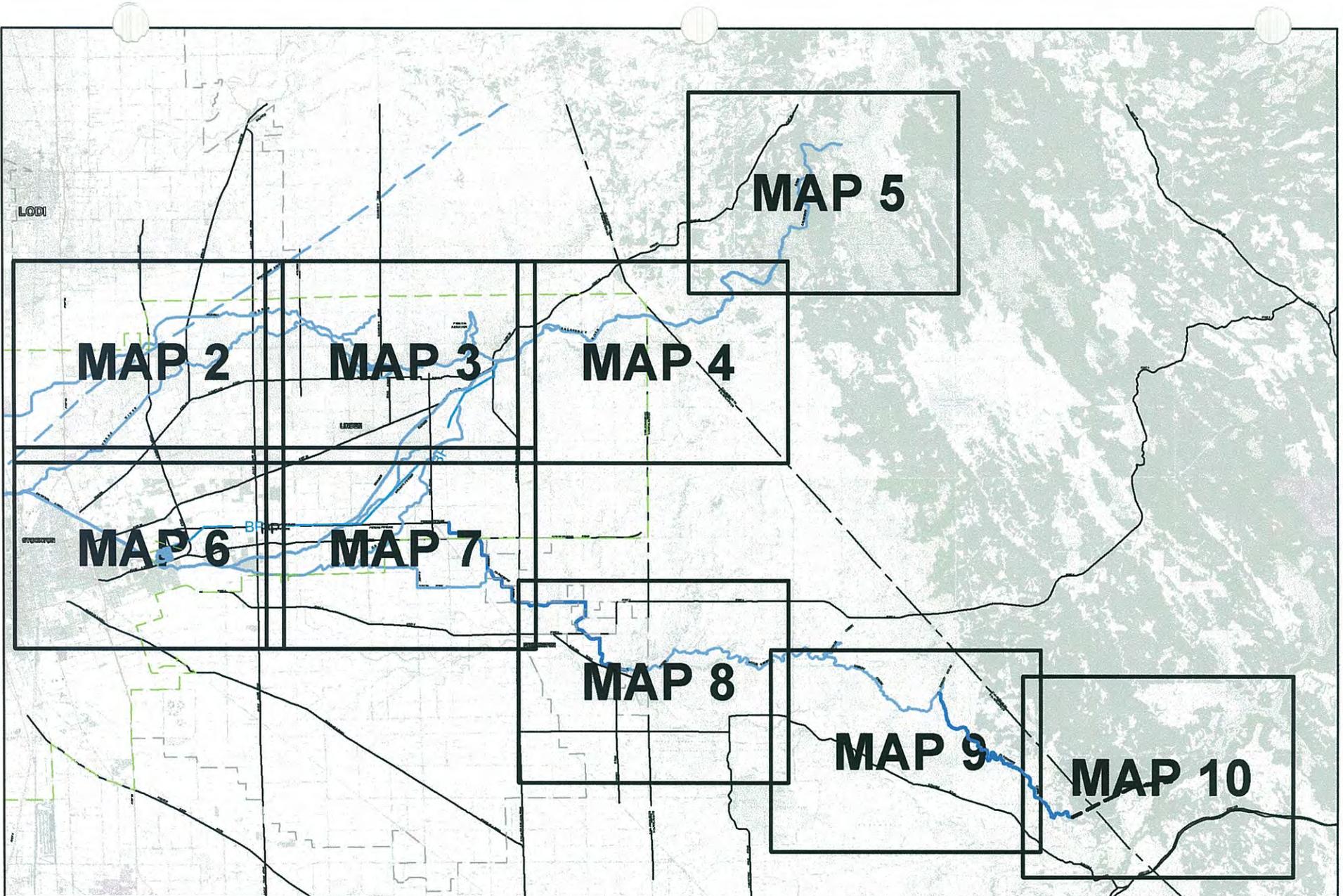


Kevin M. Kauffman, Secretary

Attachment C

District Facilities Map

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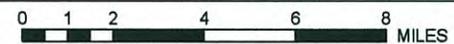


**LEGEND**

	MEASURED TURNOUTS (RIVER PUMPS)
	MEASURED POINTS OF DELIVERY
	POSSIBLE END LOSS
	MONITORING SITES
	DISTRICT WELLS



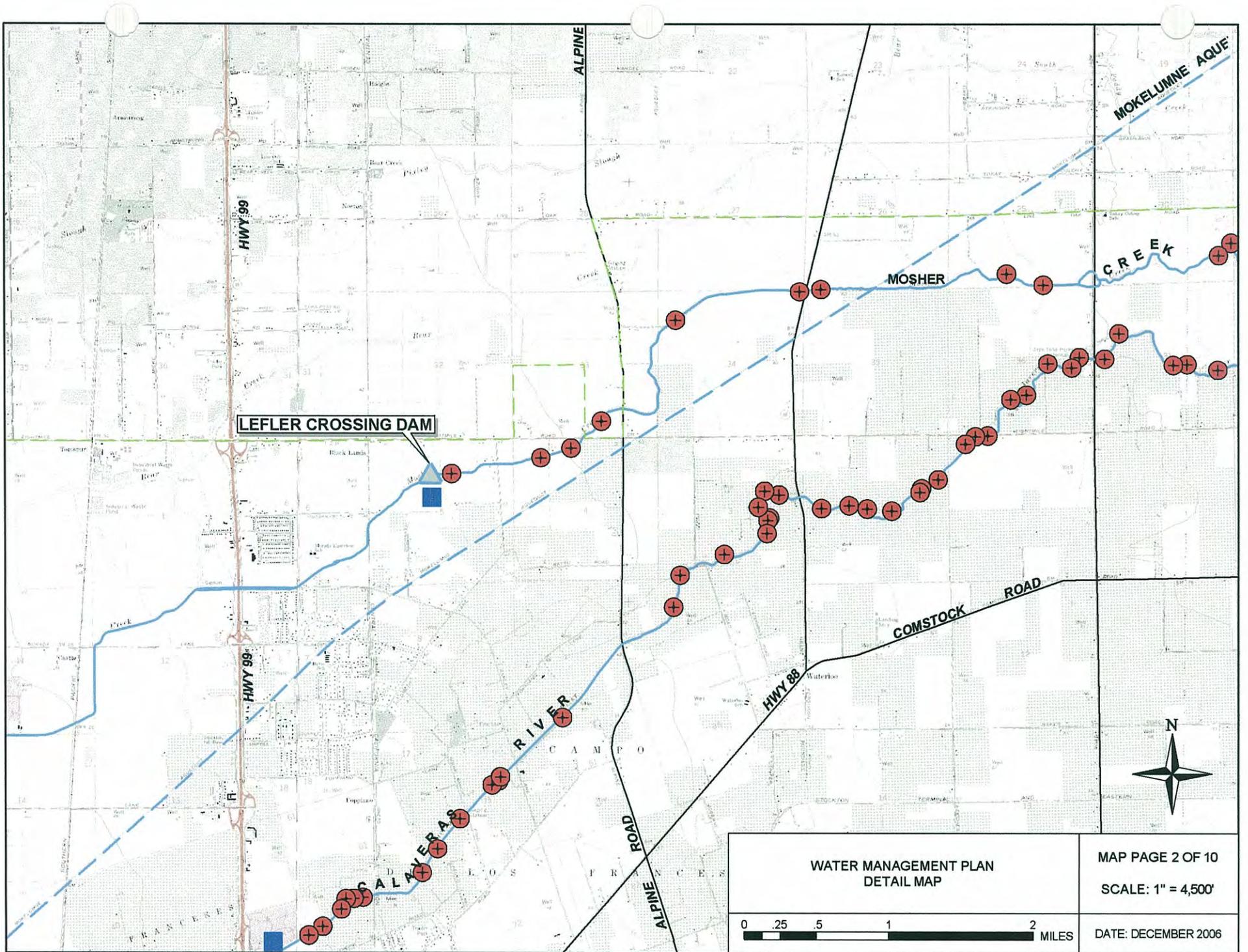
**WATER MANAGEMENT PLAN  
INDEX MAP**



MAP PAGE 1 OF 10

SCALE: 1" = 22,000'

DATE: DECEMBER 2006



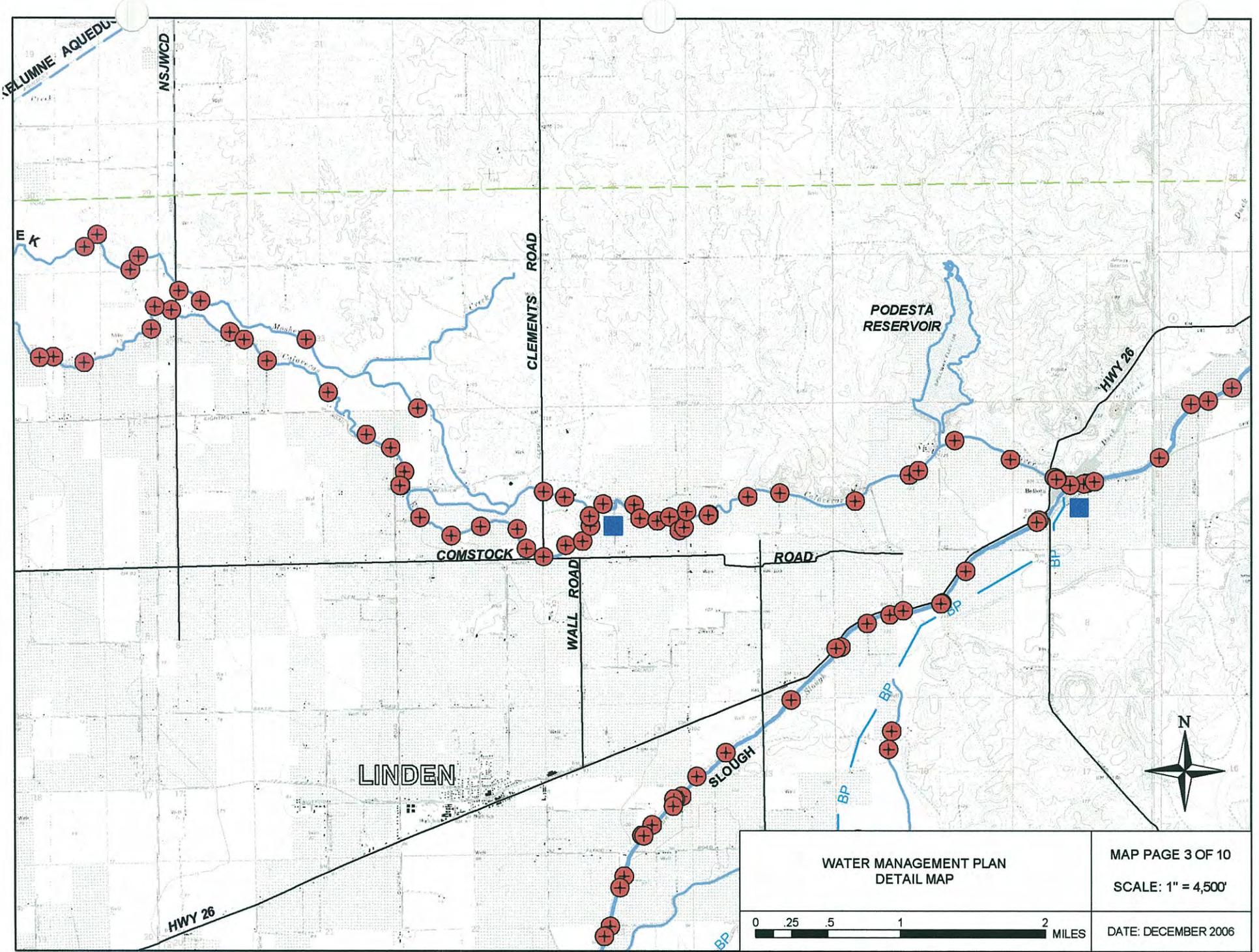
**LEFLER CROSSING DAM**

**WATER MANAGEMENT PLAN  
DETAIL MAP**

**MAP PAGE 2 OF 10  
SCALE: 1" = 4,500'**



**DATE: DECEMBER 2006**



WATER MANAGEMENT PLAN  
DETAIL MAP

MAP PAGE 3 OF 10

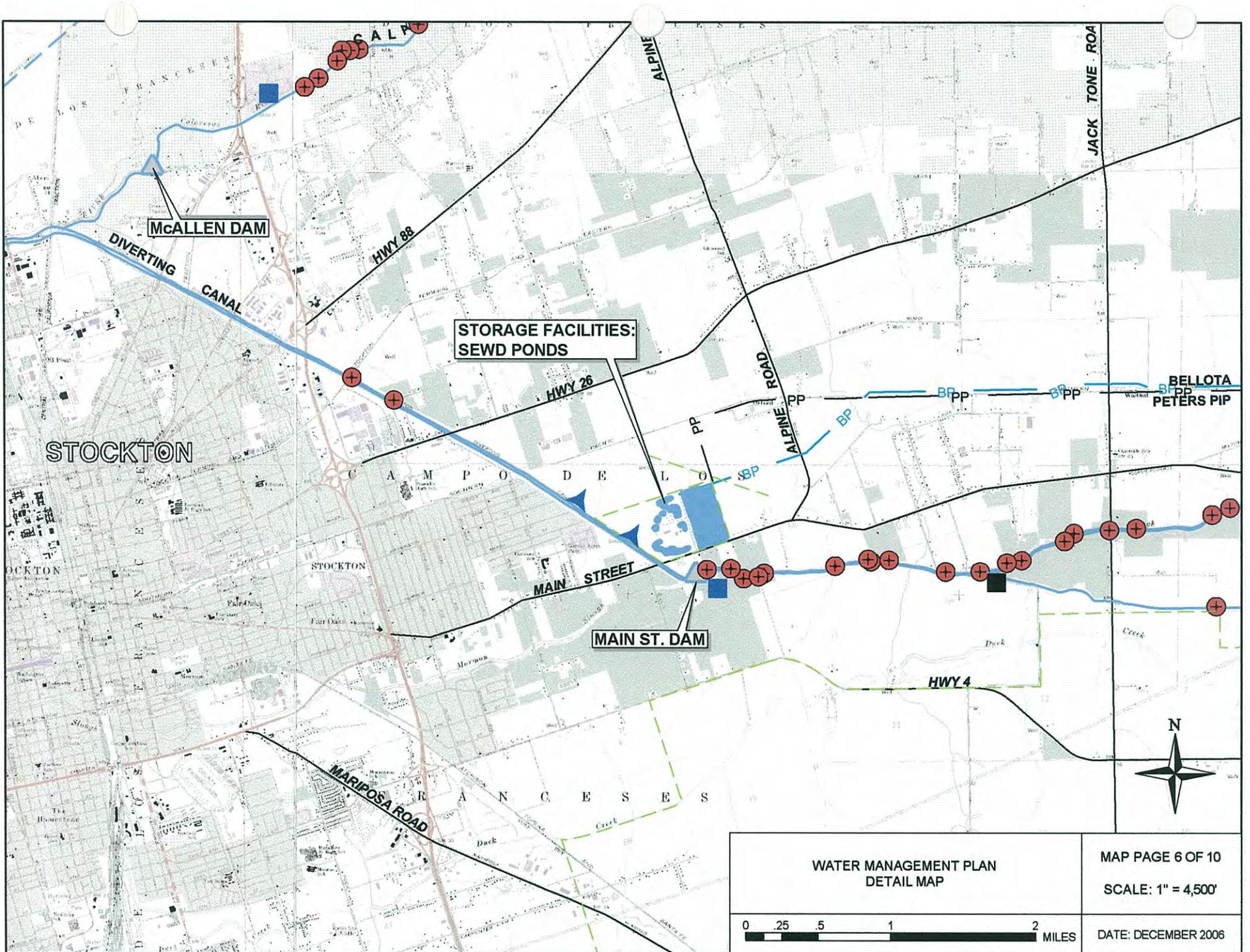
SCALE: 1" = 4,500'



DATE: DECEMBER 2006



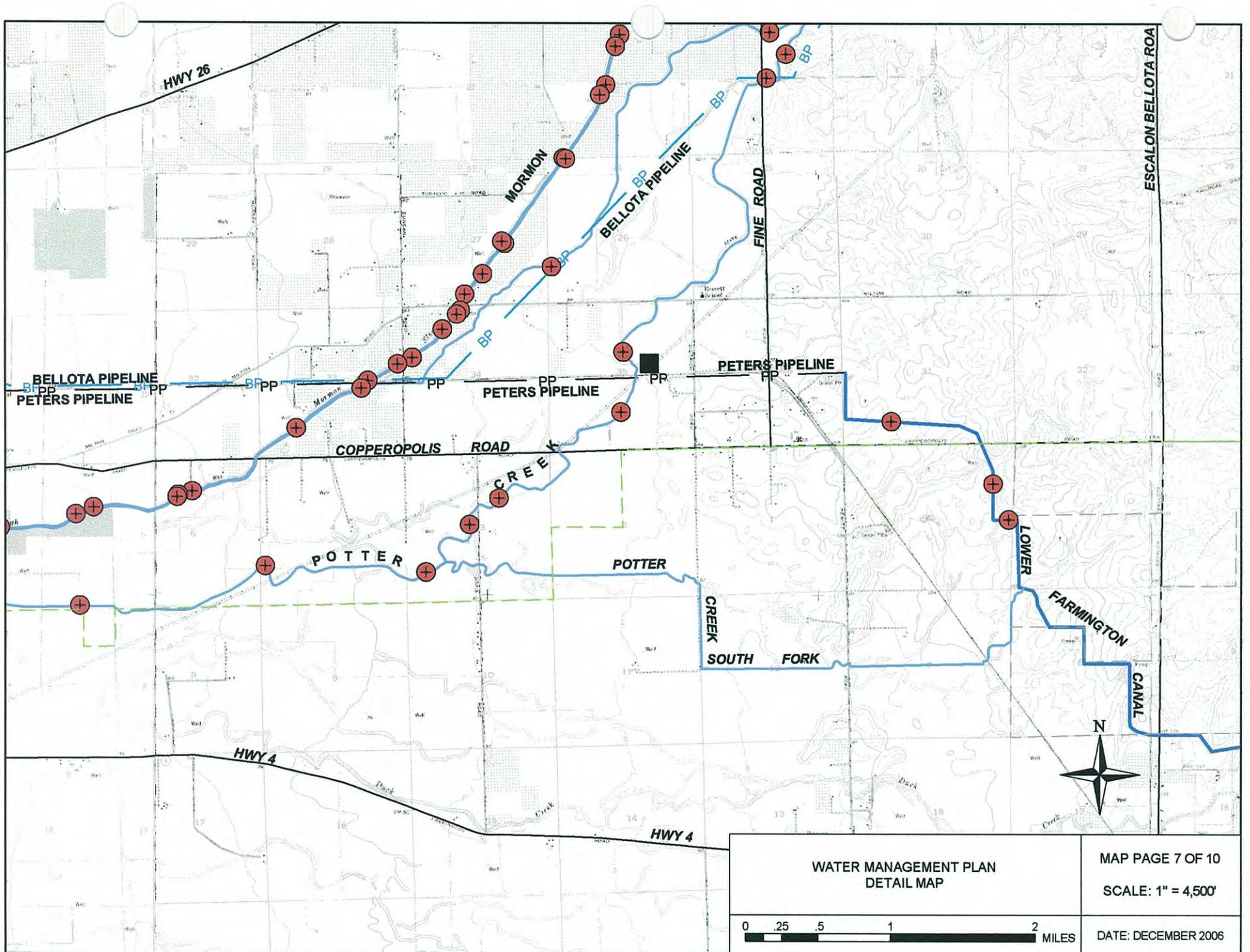


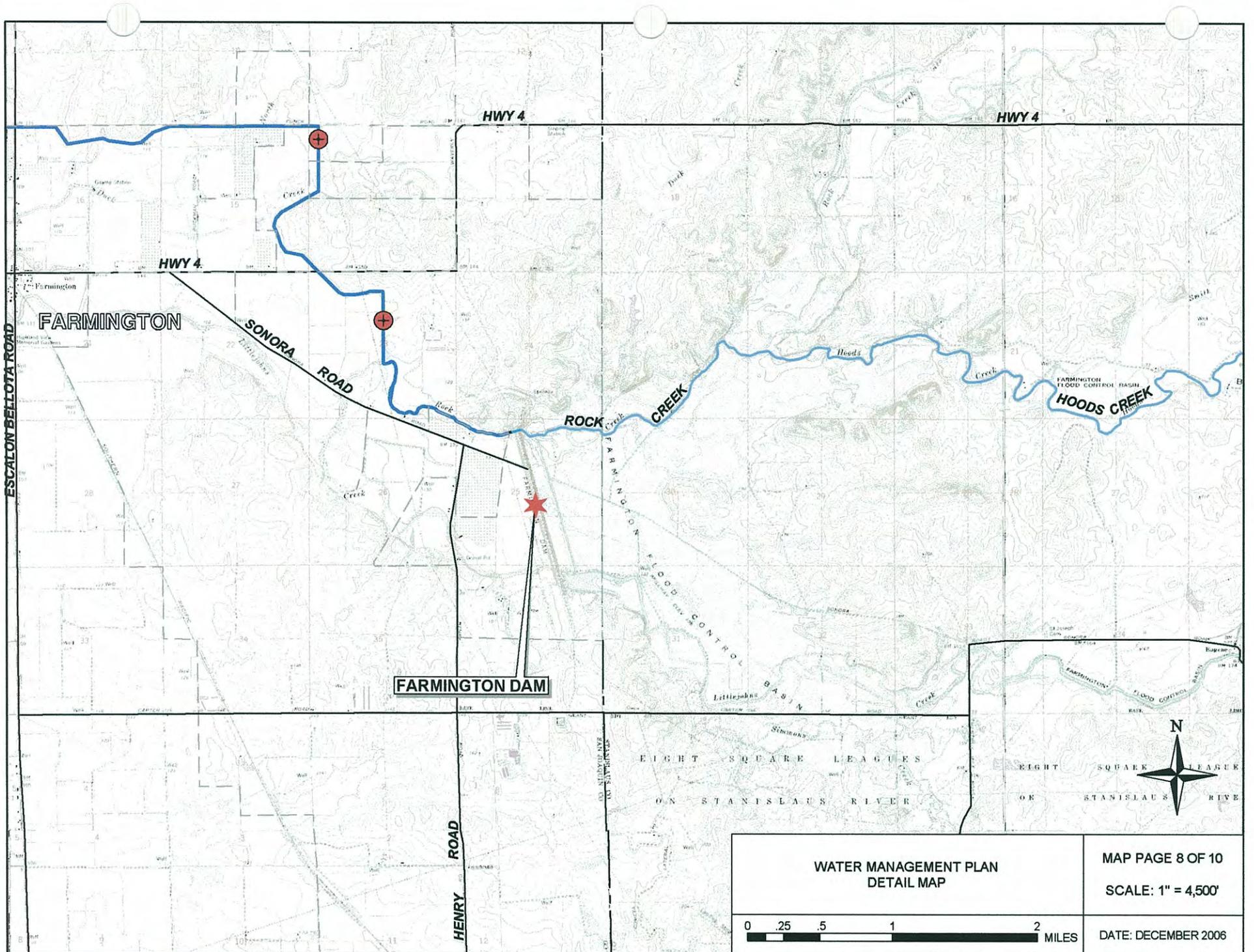


WATER MANAGEMENT PLAN  
DETAIL MAP

0 .25 .5 1 2 MILES

MAP PAGE 6 OF 10  
SCALE: 1" = 4,500'  
DATE: DECEMBER 2006





FARMINGTON

HWY 4

SONORA ROAD

HWY 4

HWY 4

ROCK CREEK

HOODS CREEK

FARMINGTON DAM

HENRY ROAD

WATER MANAGEMENT PLAN  
DETAIL MAP

MAP PAGE 8 OF 10

SCALE: 1" = 4,500'

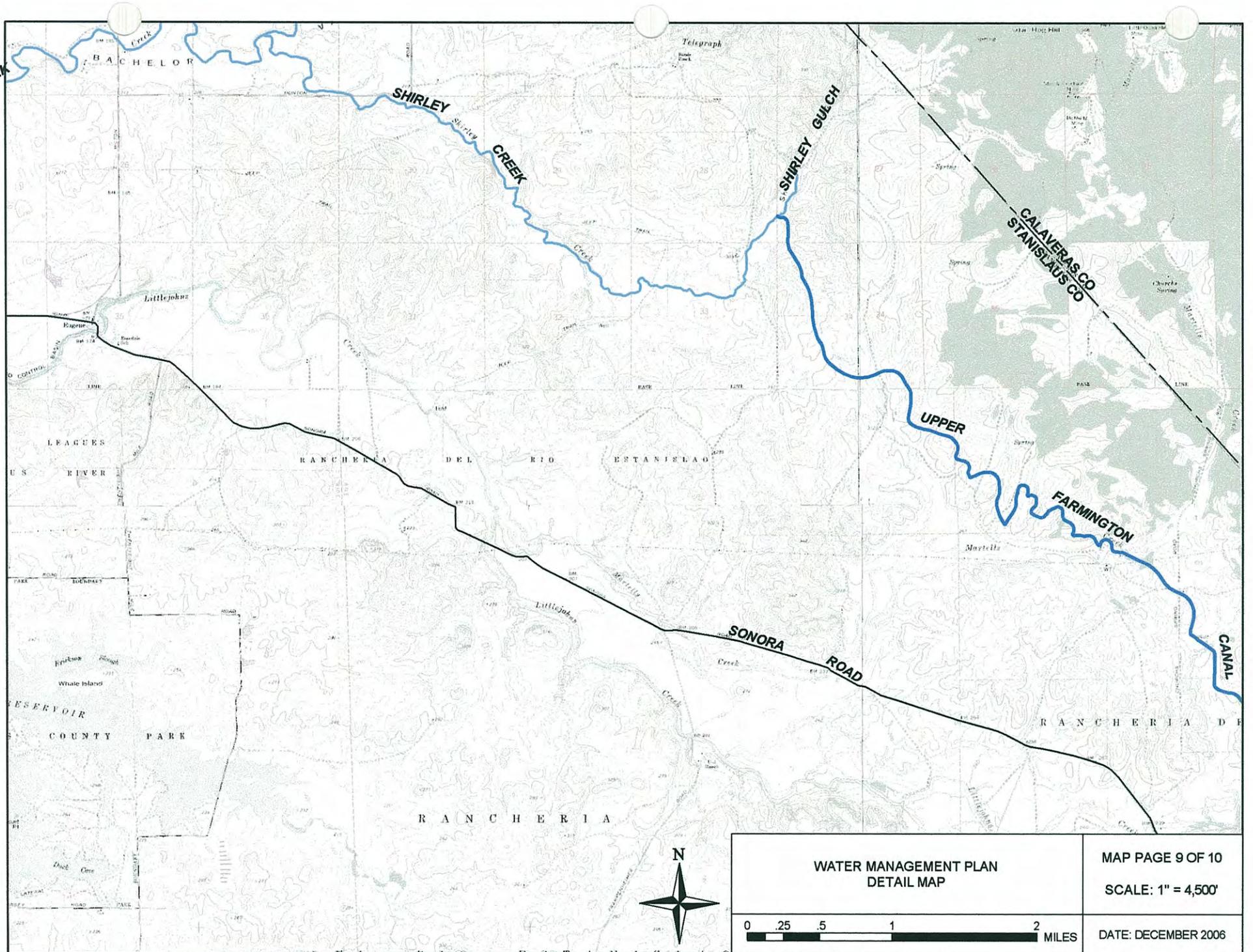


DATE: DECEMBER 2006

EIGHT SQUARE LEAGUES  
ON STANISLAUS RIVER

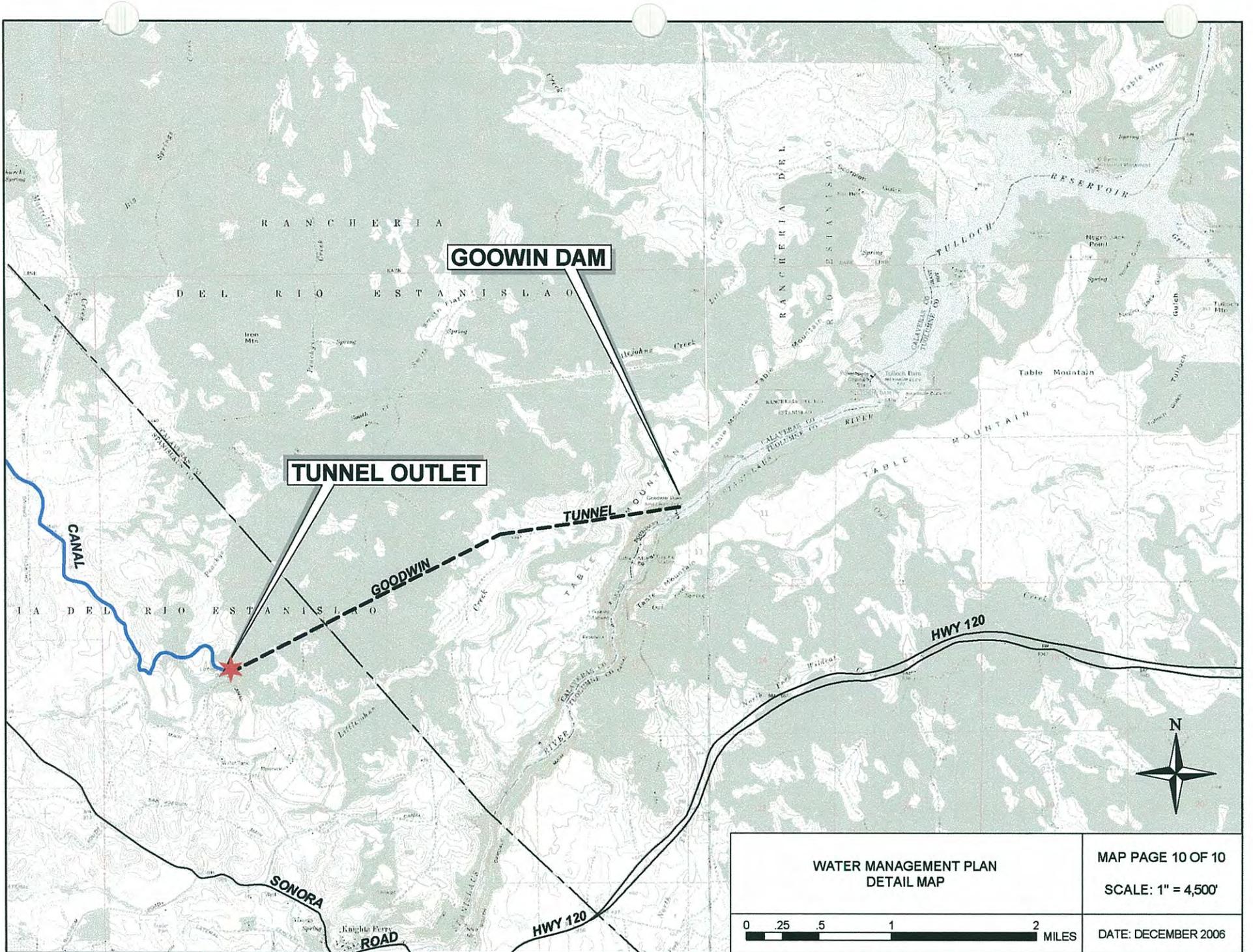
EIGHT SQUARE LEAGUES  
ON STANISLAUS RIVER





<b>WATER MANAGEMENT PLAN DETAIL MAP</b>	
0 .25 .5 1 2 MILES	

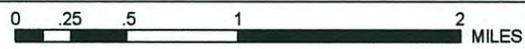
MAP PAGE 9 OF 10
SCALE: 1" = 4,500'
DATE: DECEMBER 2006



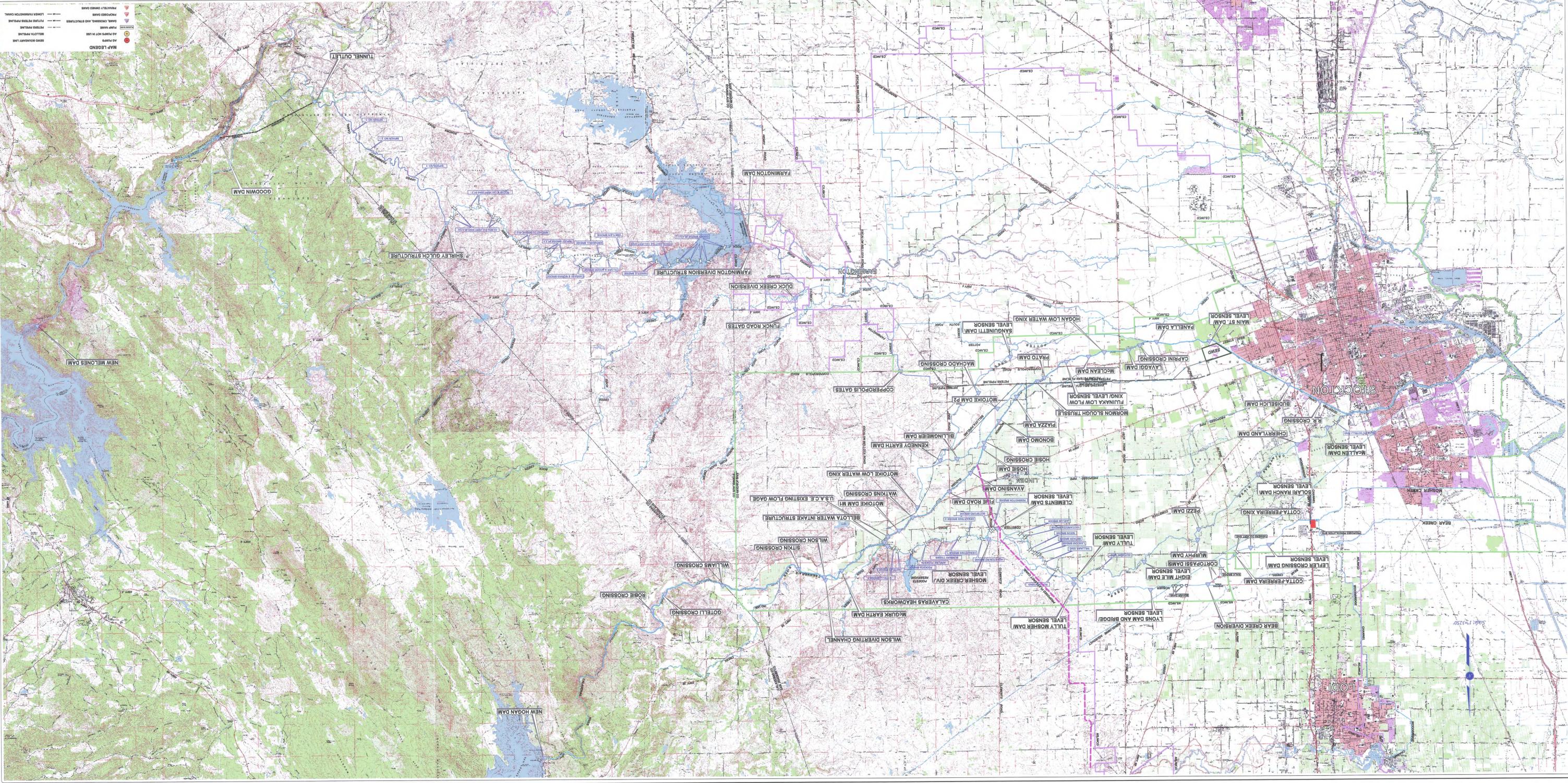
**WATER MANAGEMENT PLAN  
DETAIL MAP**

MAP PAGE 10 OF 10

SCALE: 1" = 4,500'



DATE: DECEMBER 2006



**MAP LEGEND**

- AD PUMP
- AD PUMP WITH FLOW
- AD PUMP WITH FLOW AND PRESSURE
- AD PUMP WITH FLOW AND PRESSURE AND VIBRATION
- AD PUMP WITH FLOW AND PRESSURE AND VIBRATION AND TEMPERATURE
- AD PUMP WITH FLOW AND PRESSURE AND VIBRATION AND TEMPERATURE AND HUMIDITY
- AD PUMP WITH FLOW AND PRESSURE AND VIBRATION AND TEMPERATURE AND HUMIDITY AND AIR QUALITY
- AD PUMP WITH FLOW AND PRESSURE AND VIBRATION AND TEMPERATURE AND HUMIDITY AND AIR QUALITY AND SOIL MOISTURE
- AD PUMP WITH FLOW AND PRESSURE AND VIBRATION AND TEMPERATURE AND HUMIDITY AND AIR QUALITY AND SOIL MOISTURE AND WEATHER
- AD PUMP WITH FLOW AND PRESSURE AND VIBRATION AND TEMPERATURE AND HUMIDITY AND AIR QUALITY AND SOIL MOISTURE AND WEATHER AND WATER QUALITY

Scale 1:2500

Attachment D

District Rules and Regulations

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ORDINANCE NO.42

Adopted 05/31/2016

AN ORDINANCE REVISING MUNICIPAL GROUNDWATER ASSESSMENTS, AGRICULTURAL GROUNDWATER ASSESSMENTS, DOMESTIC GROUNDWATER ASSESSMENTS, CHARGES FOR STREAM-DELIVERED WATER AND CHARGES FOR **OUT-OF-DISTRICT WATER** FOR CALENDAR YEAR 2016

The Board of Directors of Stockton East Water District does hereby ordain as follows:

Section 1: The Municipal Groundwater Assessment for calendar year 2016 shall be Three Hundred Twenty Nine Dollars and Ninety Eight Cents (\$329.98) for Rate Equalization and Three Dollars and Sixty Cents (\$3.60) for base Groundwater Production Assessment or a Total Municipal Groundwater Assessment of Three Hundred Thirty Three Dollars and Fifty Eight Cents ( $\$329.98 + \$3.60 = \$333.58$ ) per acre foot of water.

Section 2: The Agricultural Groundwater Assessment for calendar year 2016 shall be Five Dollars and Six Cents (\$5.06) per acre foot of water.

Section 3: The Domestic Groundwater Assessment for calendar year 2016 shall be Forty Three Dollars (\$43.00) per Domestic Use Unit.

Section 4: The rate for sales of stream-delivered water for calendar year 2016 shall be Twenty-Three Dollars (\$23.00) per acre foot of water.

**Section 5: The rate for sales of out-of-district water from New Hogan Reservoir, or from New Melones Reservoir pursuant to the District's Central Valley Project Contract, for calendar year 2016 shall be the stream-delivered rate of Twenty-Three Dollars (\$23.00) set in Section 4 plus the New Melones Conveyance System wheeling rate of Thirty Five Dollars and Four Cents (\$35.04) for a total of Fifty Eight Dollars and Four Cents ( $\$23.00 + \$35.04 = \$58.04$ ) per acre foot of water.**

**Section 6: The rate for sales of out-of-district water from other sources shall be the cost of water designated under the purchase contract PLUS the New Melones Conveyance System wheeling rate of Thirty Five Dollars and Four Cents (\$35.04) per acre foot of water.**

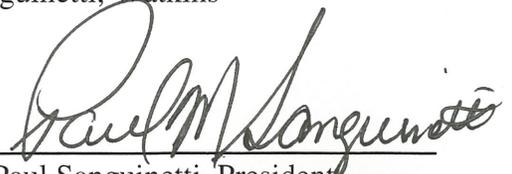
Section 7: This ordinance shall take effect thirty (30) days after its final passage, and shall be published at least once in a newspaper of general circulation within fifteen (15) days after its final passage, with the names of the members of the Board of Directors voting for and against the same.

AYES: Atkins, Cortopassi, McGaughey, McGurk, Panizza, Sanguinetti, Watkins

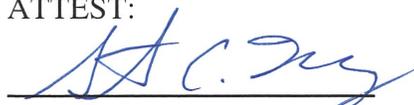
NAYES: None

ABSTAIN: None

ABSENT: None

  
Paul Sanguinetti, President  
Board of Directors

ATTEST:

  
Scot A. Moody, Secretary  
Board of Directors



RULE NO. 155  
ADOPTED 03/29/05

**RULE FOR RATE EQUALIZATION - CALENDAR YEAR 2005**

WHEREAS, the District Act authorizes the Board to adopt rules and regulations as it deems necessary and proper for carrying out the provisions of the Act; and

WHEREAS, paragraph 6D (3) of the Second Amended Contract among SEWD; City of Stockton, County of San Joaquin and California Water Service Company states that "Stockton East shall annually levy a municipal groundwater assessment, pursuant to its enabling legislation such that the cost of groundwater use is equivalent to the cost of surface water use";

NOW, THEREFORE, THE BOARD OF DIRECTORS OF STOCKTON EAST WATER DISTRICT HEREBY ENACTS AND ESTABLISHES THE FOLLOWING RULES TO LEVY A GROUNDWATER ASSESSMENT TO EQUALIZE THE COST OF GROUNDWATER AND SURFACE WATER FOR 2005:

1. POWER COST -- Use actual power costs submitted by owner to accommodate for differences in water depth, pumping efficiency, system pressure, etc. In the absence of actual power costs, the cost of \$70 per acre foot will be assumed.
2. OPERATION AND & MAINTENANCE COST -- Includes labor, repairs, chemicals, treatment costs and the current \$3.60 assessment. The cost of \$30 per acre foot will be assumed.
3. AMORTIZATION AND DEPRECIATION COST -- Includes well and equipment replacement. The cost of \$10 per acre foot will be assumed.
4. FORMULA FOR RATE EQUALIZATION -- Surface water costs plus Groundwater costs divided by total M & I water production equals cost per acre foot. The assumed costs and water production for 2005 are as follows:

Ground water	26,435 AF X \$110.00 =	\$2,907,850
Surface water	<u>42,000 AF</u> X \$293.73 =	<u>\$12,336,602</u>
Totals	68,435 AF	\$15,244,452

The total cost of \$15,244,452 divided by total use of 68,435 AF equals \$222.76 per acre foot. The assumed 2005 additional groundwater assessment is \$222.76 less \$110 (total of items 1-3 above), or \$112.76.

5. Any municipal groundwater user has the right to appeal the amount of this additional \$112.76 per acre foot rate equalization assessment if it can be demonstrated that actual groundwater production costs are higher than the assumed \$110 per acre foot. The appeal process will begin with the Administration Committee of the District Board and if necessary can be appealed to the full Board.
6. Any appeal which is granted shall entitle the appellant to a refund of the amount demonstrated to have been over-collected, less the actual costs to the District of processing the appeal and refund, provided that no overpayment shall be refunded unless the request for appeal has been filed with the Secretary of the District within three years of such overpayment.

SELECTED OPERATING RULES,  
ORDINANCES, AND RESOLUTIONS

STANDARD PROCEDURES

- Definitions and Rules of Interpretation Rule 100
- Board and District Procedures and Organization Resolution 92-93-01A \*
- Amendment to PERS Contract to include Directors Resolution 92-93-01
- Procedure for Enacting Ordinances Rule 126
- Policy for the Purchase of Services, Supplies, and Equipment; and for the surplusings of Supplies and Equipment Rule 130
- Regulating Waste of Surface Water (1992) Rule 139

WATER DIVERSIONS

- Flash Board Dams Rule 103
- Maintenance of Live Stream Rule 113
- Required Notice to District by Owner of Diversion of Stream Delivered Water Rule 120
- Stream Diversion Call-In Rule (4/86)
- Stream Diversion Access Rule (4/86)
- Allocation of New Hogan Water, May-Oct. 1992 Rule 140

WATER MEASUREMENT

- The Measurement of Water Produced from Both Ground and Surface Sources and Used on One Parcel of Land Rule 104
- The Measurement of Water Produced by Water Producing Facilities Without Approved Water Measuring Devices Rule 107
- Alternate Procedures, Water Producing Facilities Equipped With Water Measuring Devices Rule 110
- Meters Rule 123
- Revised Rule for Meters (6/92) Rule 142

WATER RATES

- Refunds of Overpayments Rule 111
- Municipal Ground Water Assessments, Domestic Ground Water Assessments, and Charges for Stream-Delivered Water for Calendar Year 1993 Ordinance No. 16
- Rates for Use of Agricultural Water Produced by Districted Operated Deep Well Pumping Plants Rule 128
- Procedures and Regulations for Establishing Flat Rate and Special Class Water Production Rule 131
- Base Monthly Payment for Period April 1, 1993 to March 31, 1994 Resolution 92-93-05
- Revised Base Monthly Payment for Period April 1, 1993 to March 31, 1994 Resolution 92-93-20
- Rate Equalization - Calendar Year 1993 Rule 143
- No Groundwater Benefit, No Groundwater Assessment Assessed Resolution 90-91-02

WATER RIGHTS

- Water Rights Claims Rule 109

ADOPTED June 20, 1972

RULE 100. DEFINITIONS AND RULES OF INTERPRETATION.

WHEREAS, the Act authorizes the Board to make such rules and regulations as it deems necessary and proper for carrying out the provisions of the Act;

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE STOCKTON-EAST WATER DISTRICT HEREBY ENACTS AND ESTABLISHES THE FOLLOWING RULE:

For the purposes of construction and interpretation of all subsequent rules adopted by the Board, the following rules of construction and interpretation are adopted:

A. Definitions in Act. Unless otherwise provided, any word defined by Chapter 819 of the Statutes of 1971 shall have the meaning set forth in Chapter 819 of the Statutes of 1971.

B. Act. "Act" means Chapter 819 of the Statutes of 1971.

C. Domestic Water Producing Facility. "Domestic Water producing facility" means a water producing facility which produces water used solely upon a parcel of two (2) acres or less.

D. Continuation of Prior Rules. The provisions of any rule adopted by the Board, insofar as they are substantially the same as provisions contained in a prior or existing rule, are re-statements and continuations of such existing rule or rules and not new enactments.

SECRETARY'S CERTIFICATE

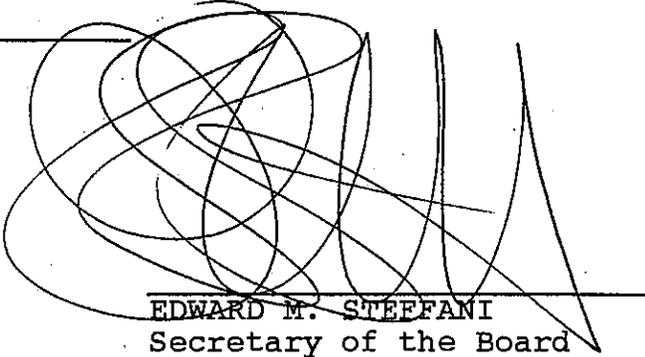
I, EDWARD M. STEFFANI, Secretary of the Board of Directors of the STOCKTON EAST WATER DISTRICT, Stockton, California, do hereby certify as follows:

The foregoing is a full, true and correct copy of a resolution duly adopted at a Regular (Regular/Special) Meeting of the Board of Directors of said District duly and regularly and legally held at the regular meeting place thereof on April 14, 1992, of which meeting all of the members of said Board of Directors had due notice and at which a majority thereof were present.

I have carefully compared the same with the original minutes of said meeting on file and of record in my office, and the foregoing is a full, true, and correct copy of the original resolution adopted at said meeting and entered in said minutes.

Said resolution has not been amended, modified, or rescinded since the date of its adoption, and the same is now in full force and effect.

Dated: 4/14/92



EDWARD M. STEFFANI  
Secretary of the Board  
STOCKTON EAST WATER DISTRICT

(SEAL)

THIS COPY  
SHOWS  
CHANGES  
MADE

RESOLUTION NO. 92-93-01A

TO REVISE RESOLUTION NO. 83-84-17  
WITH RESOLUTION NOS. 84-85-08  
AND 90-91-13 INCORPORATED.

RELATING TO BOARD AND DISTRICT  
PROCEDURES AND ORGANIZATION

---

WHEREAS, it is necessary and desirable to reevaluate and revise certain Board procedures, certain administrative procedures, and the administrative organization for the operation and government of the District;

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

I

REPEAL OF CONFLICTING RESOLUTIONS

Resolution 79-80-19 and all other Resolutions, or portions thereof, in conflict with this Resolution are hereby repealed; and

II

1. **Regular Meetings.** The Board of Directors of the Stockton East Water District (hereinafter referred to as Board) shall hold regular meetings at its office at ~~2526//East//Fremont~~ 6767 East Main Street, Stockton, California on the first and third Tuesday of each month. Said regular meetings shall be at ~~7:30//P/M/~~ noon during the portion of the year in which Standard time is in effect and at ~~8:00~~ 7:00 P.M. during the portion of the year in which Daylight Savings time is in effect.

2. **Adjournment of Meetings.** The Board may adjourn any regular, adjourned regular, special or adjourned special meeting to a time and place specified in the order of adjournment. Less

than a quorum may so adjourn from time to time. If all Directors are absent from any regular or adjourned regular meeting, the Secretary of the Board may declare the meeting adjourned to a stated time and place and shall cause a written notice of the adjournment to be given in the same manner as provided in Section 3 below for special meetings, unless such notice is waived as provided for special meetings. A copy of the order or notice of adjournment shall be conspicuously posted on or near the door of the place where the regular, adjourned regular, special or adjourned special meeting was held within 24 hours after the time of the adjournment. When a regular or adjourned regular meeting is adjourned as provided in this section, the resulting adjourned regular meeting is a regular meeting for all purposes. When an order of adjournment of any meeting fails to state the hour at which the adjourned meeting is to be held, it shall be held at the hour specified for regular meetings.

3. Special Meetings. Special meetings may be ordered by the President, or by a majority of the members of the Board, specifying in writing the business to be transacted. Any order calling for a special meeting shall be entered in the minutes of the Board. The Secretary shall give three days' notice of any special meeting to any member of the Board not joining in the order calling the special meeting by mailing written notice to the member at the member's address as disclosed by the District records. Such written notice may be waived by any Director by filing a written waiver of notice with the Secretary. Additionally, such written notice is waived as to any Director who is actually present at the meeting at the time it convenes.

On the day prior to any special meeting, or earlier if possible, but at least 24 hours before the time of such special meeting, the Secretary shall mail a notice of the special meeting to the Stockton Record. The Secretary shall also give notice to any other parties as may be required by law. Only the business specified in the notice may be considered at such special meeting.

4. Oath of Office, Bonds and Effective Date of Taking Office. Elected officials of the District shall take office effective upon the taking and subscribing to an official oath and executing and filing the bond required by law; the newly elected official shall take the Oath of Office and execute the required bond at ~~the next/regular~~ a meeting held of the Board after the ~~date/of~~ general district election, but in no event later than the last day ~~in/November~~ of December.

5. Organization Meetings. At the ~~next///regularly~~ scheduled first meeting of the Board following the time of taking office of the directors elected in the general District election, but in no event later than the last day of ~~November~~ December, the Directors then holding office shall meet and organize as a Board.

5.1 Annual Organization Meetings. Notwithstanding any other provision of this Resolution, the Directors shall hold an organizational meeting at least annually.

6. Officers. At each of its organizational meetings, the Board shall elect a President and a Vice-President from among their number and shall appoint a Secretary, who need not be a member of the Board. Unless otherwise specifically provided by

the Board, the General Manager of the District shall automatically serve as Secretary. Each of the foregoing officers shall hold office at the pleasure of the Board. The duty of the Vice-President shall be to preside at any meeting, or portion thereof, at which the President is not present.

It is the intention of the Board that the offices of President and Vice-President shall be rotated annually among members of the Board. The President shall be chosen from those Directors serving the last two years of his or her term.

7. Voting at Board Meetings.

A. All voting members of the Board present shall vote on all questions coming before the Board either in the affirmative or in the negative, except that on any matter coming before the Board which may present a conflict of interest to one or more members, such member or members shall announce that they have a conflict of interest at the time of the commencement of discussion on the question and said member or members having a conflict shall thereafter refrain from discussion and voting on anything pertaining to such a matter; and further, except that any member of the Board who has not been present to participate in all, or a portion, of the discussion relating to a matter may abstain for that reason. If a member of the Board chooses not to vote on a question coming before the Board when there is no conflict of interest with respect to that member, by absenting himself or herself from the meeting room at the time of the vote, then that member shall not be entitled to discuss the matter either prior to or after the vote. Any member who chooses to discuss a matter shall vote on that matter. Any member who

chooses to discuss a matter and then absents himself or herself to avoid the vote shall be considered, and his or her vote shall be recorded, as voting with the majority, or in the case of no majority, in the affirmative.

B. All votes may be by voice vote with both the "ayes" and "nays" being called. In the event that upon a voice vote being taken it appears to the President, or to any member of the Board, that the vote is not unanimous, a roll call shall then be taken.

8. **Agendas.** On or before the Friday preceding each regular or adjourned regular meeting, the Secretary shall mail an agenda for the forthcoming meeting. Said agenda shall be prepared by the Secretary and upon mailing the same, the Secretary shall accompany the agenda with as much explanatory material relating to the items on the agenda as is reasonably possible. An agenda for each special meeting shall be mailed as early in advance of the special meeting as is reasonably possible and shall be accompanied by such explanatory material as is necessary to advise the Board of the nature of the matter or matters coming before the Board at the special meeting.

9. **Records.** The Secretary of the Board shall keep, and make available to the public, accurate minutes of all proceedings of the Board. The proceedings of the Board shall be recorded by a tape recorder and the Secretary shall then, from the tape record, prepare minutes in summary form. Minutes shall not be read at Board meetings but shall be mailed in advance of meetings to the Board members, so that the same may be considered for approval without being read aloud at Board meetings. Tapes

of Board meetings shall be kept by the Secretary for two years and thereafter may be erased or otherwise destroyed.

10. Order of Business. The order of business at each meeting of the Board, unless suspended or varied, upon order of the President or by majority vote of the board, shall be as follows:

- A. Roll Call;
- B. Consent Calendar;
- C. Public Comment (for non-agenda items);
- D. Scheduled presentations and agenda items  
(to be considered in this order:
  - 1. Staff report
  - 2. Board discussion
  - 3. Public comment on the specific item,  
with time limitations determined by  
the chairperson
  - 4. Board action);
- E. Committee Reports  
(eliminate the committee summary, but  
increase the detail of the committee minutes);
- F. Report of the General Manager  
(continue to list the information items on the  
agenda, but bind this material separately from  
the other agenda material);
- G. Report of the Counsel, if any;
- H. Communications;
- I. Other/Business Agenda planning for next  
meeting;

J. Agenda/planning/for/next/meeting Director  
Reports;

K. Adjournment.

All items of business which, in the judgment of the Secretary require neither Board discussion nor a public hearing, shall be included in the Consent Calendar; provided that the agenda indicate on its face for each such items that such items is included in the Consent Calendar, and provided further that a written report and recommendation of the General Manager on each item so included has been mailed to the Board members with the agenda. The Consent Calendar may include the approval of minutes and expenses. Any Board member or the General Manager may request that any item on the Consent Calendar be removed therefrom for discussion and separate consideration.

11. Committees. There shall be standing committees of the Board as follows: The/Water/Contract/Committee;/the/Finance/Committee;/the/Agricultural/Operations/Committee; /the/Municipal/Operations/Committee; /the/Water/Action/Committee;/the/Personnel/Committee;/the/Administration/Committee;/and/the/Legislative//and/PUBLIC///Relations///Committee Administration, Agricultural Operations and Municipal Operations. Special Other committees may be established from time to time by the President as is required in the opinion of the President. The members of all committees shall be appointed by the President from among the members of the Board. All Directors shall serve on at least one committee, and should there be a minimum of five committees, Directors shall serve on at least two committees.

12. **Quorum and Tie Votes.** In conducting the business of the Board, the following shall apply with respect to quorum requirements:

A. A majority of the Board shall constitute a quorum for the transaction of business;

B. All board actions shall require a vote of the majority of the members present unless otherwise provided by law or this Resolution; and

C. A tie vote shall be considered a negative vote, provided that in the event of a tie vote, while the matter shall be considered determined in the negative, the General Manager shall place the matter on the agenda for reconsideration at the next succeeding meeting.

13. **Conduct of Business.** The procedure for the conduct of business shall be as follows:

A. Each agenda item shall be taken up in order by the presiding officer except that all items designated as consent items shall be taken up under the Consent Calendar;

B. The presiding officer shall call upon the General Manager or such other person or persons as may be appropriate to the present the matter to the Board;

C. The matter shall then be discussed by the Board members and such other Staff persons or consultants as may be called upon by the President;

D. As to all matters not included within the Consent Calendar, and including those matters which have been removed from the Consent Calendar as provided herein, if a motion is made in connection with a matter, prior to vote on the motion,

the President shall call for comments on the proposed motion from members of the public. Public comments shall be limited to the motion then before the Board. The President shall have the authority to limit the duration of or refuse to permit public comment if such public comment is repetitive, disorderly, or otherwise not in furtherance of a reasonably expeditious review of the merits of the pending motion;

E. It shall be understood that any member of the public desiring further discussion on an item after a vote is taken, or on an item on which no motion is made, shall take the matter up with the Board member representing the division of the District in which said member of the public resides, or owns or operates property, or with any other Board member after adjournment of the meeting;

F. At the conclusion of public comment on any pending motion, the President shall announce that the time for public discussion of the matter is closed;

G. The foregoing procedure shall not apply to the conduct of "public hearings", and in the case of "public hearings", the requirements of statutes and the duly adopted rules of the District shall prevail;

H. Prior to the commencement of any "public hearing", the President shall request that an attorney for the District, and in the attorney's absence the General Manager, outline the procedure to be observed in the conduct of the "public hearing";

I. The foregoing procedure shall not apply to the Consent Calendar which shall be governed by this subparagraph.

the Consent Calendar shall be approved without discussion by a single vote of those Board members present, except as to items removed from the Consent Calendar as provided herein. In the event of removal, any such items shall be considered in accordance with the procedures outlined in the foregoing subparagraph of this section at the appropriate place on the agenda; and

J. The foregoing procedure shall not apply to the Public Comment Section of the Agenda, which shall be governed by this subparagraph. The Public Comment Section of the Agenda shall be reserved for any member of the public wishing to comment on any matter pertaining to District business other than matters which appear on the same agenda. The President shall have the authority to limit the duration of or refuse to permit public comment if it is repetitive, disorderly, or otherwise not in furtherance of a reasonably expeditious review of District business.

14. Roberts Rules of Order. Roberts Rules of Order Revised are hereby adopted by the Board in all cases not otherwise provided for in this Resolution and not otherwise provided for by applicable law.

### III

#### DUTIES OF THE GENERAL MANAGER

1. Responsibility. The General Manager shall be directly responsible to the Board and subject to the general supervision of the Board. The General Manager shall carry out and execute all policies and directives of the Board. As to matters concerning District policies (as opposed to

non-substantive matters of detail), it is understood that the General Manager is subject to the direction of the Board, acting as a Board, and not to the direction of an individual Board member or group of Board members not acting as a committee.

2. Duties. The General Manager shall, among other things, do the following:

A. Have charge of all activities and functions of the District and all of the office and field personnel of the District;

B. In her or his discretion, appoint and discharge all employees of the District and from time to time, as she or he deems proper, make salary and wage change recommendations to the Board;

C. Receive all communications addressed to the District;

D. Unless another person has been appointed as Secretary, fulfill the duties of Secretary of the District as prescribed by law and in that capacity, have authority to appoint Deputy Secretaries;

E. When he or she deems it necessary, request the President to call special meetings of the Board;

F. Enforce all rules of the District;

G. Prepare and present proposed budgets and recommend replenishment and assessment rates and surface water charges to the Board, in accordance with the requirements of statutes;

H. From time to time, recommend to the Board proposed capital improvements necessary to carry out the purposes and programs of the District;

I. Advise the Board as to when engineering and legal services are required by the District;

J. On behalf of the District, without further action of the Board, be authorized to file protests to any application filed with the State Water Resources Control Board for appropriation of water from the Calaveras River or any tributary or distributary thereof. Any such protest so filed shall thereafter be subject to the control and direction of the Board; and

K. Be authorized to call such committee meetings as from time to time may be necessary, to carry on the business of the District.

#### IV

#### POLITICAL ACTIVITY

It is hereby declared by this Board that the General Manager of this District, the General Counsel for the District, and all of their subordinate employees are employed for the purpose of administering and executing the policies, rules, programs, and directives established by the Board as the policy making agency of the District. They shall not be subjected to personal or political pressure nor shall they participate in any of the political affairs of the District, including but not limited to any election campaign for a District office.

**FLEXIBILITY**

The foregoing policies, procedures, and requirements are intended to be applied flexibly to meet the needs of the District and it is intended by the Board that they shall be revised from time to time as is necessary and appropriate to further meet the needs of the District.

PASSED AND ADOPTED by the Board of Directors of the Stockton East Water District on the 14th Day of April, 1992, by the following vote:

AYES: Directors Alonzo, Clayton, Dondero, Laven, Tone and MacNear

NOES: None

ABSTENTIONS: None

ABSENT: Director George

---

JACK LAVEN, President  
Board of Directors  
Stockton East Water District

ATTEST:

---

EDWARD M. STEFFANI, Secretary  
Board of Directors  
Stockton East Water District

STOCKTON EAST WATER DISTRICT

(Name of Agency)

RESOLUTION No. 92-93- 01

AUTHORIZING AN AMENDMENT TO THE CONTRACT

WHEREAS, the BOARD OF ADMINISTRATION of the PUBLIC EMPLOYEES' RETIREMENT SYSTEM and the BOARD OF DIRECTORS of

(Name of Governing Body)

the STOCKTON EAST WATER DISTRICT entered into a Contract effective on

Name of Public Agency)

AUGUST 26, 1968, providing for the participation of said STOCKTON EAST WATER DISTRICT (Name of Public Agency)

in the Public Employees' Retirement System; and

WHEREAS, it is now desirable to take advantage of certain benefits provided under said Retirement System and not included in said contract;

NOW, THEREFORE, BE IT RESOLVED, that said BOARD OF DIRECTORS (Name of Governing Body)

authorized, and it does hereby authorize, an amendment to said Contract, a copy of said amendment being attached hereto marked Exhibit and by such reference made a part hereof as though herein set out in full; and

NOW, THEREFORE, BE IT FURTHER RESOLVED, that the presiding officer of said BOARD OF DIRECTORS

(Name of Governing Body)

be, and the presiding officer is hereby authorized, empowered and directed to execute said amendment for and on behalf of said STOCKTON EAST WATER DISTRICT

(Name of Public Agency)

Adopted this 7th day of April, 1992.

Attest: [Signature] Edward M. Steffani, Secretary

[Signature] Presiding Officer

AMENDMENT TO CONTRACT  
BETWEEN THE  
BOARD OF ADMINISTRATION  
OF THE  
PUBLIC EMPLOYEES' RETIREMENT SYSTEM  
AND THE  
BOARD OF DIRECTORS  
OF THE  
STOCKTON EAST WATER DISTRICT

The Board of Administration, Public Employees' Retirement System, hereinafter referred to as Board, and the governing body of above public agency, hereinafter referred to as Public Agency, having entered into a contract effective August 26, 1968, and witnessed August 20, 1968, and as amended effective November 19, 1979, December 27, 1982, July 11, 1983, August 18, 1986 and July 15, 1989, which provides for participation of Public Agency in said System, Board and Public Agency hereby agree as follows:

- A. Paragraphs 1 through 10 are hereby stricken from said contract as executed effective July 15, 1989, and hereby replaced by the following paragraphs numbered 1 through 11 inclusive:
1. All words and terms used herein which are defined in the Public Employees' Retirement Law shall have the meaning as defined therein unless otherwise specifically provided. "Normal retirement age" shall mean age 60 for local miscellaneous members.
  2. Public Agency shall participate in the Public Employees' Retirement System from and after August 26, 1968 making its employees as hereinafter provided, members of said System subject to all provisions of the Public Employees' Retirement Law except such as apply only on election of a contracting agency and are not provided for herein and to all amendments to said Law hereafter enacted except those, which by express provisions thereof, apply only on the election of a contracting agency.
  3. Employees of Public Agency in the following classes shall become members of said Retirement System except such in each such class as are excluded by law or this agreement:
    - a. Employees other than local safety members (herein referred to as local miscellaneous members).
  4. In addition to the classes of employees excluded from membership by said Retirement Law, the following classes of employees shall not become members of said Retirement System:
    - a. SAFETY EMPLOYEES; AND
    - b. ALL HOURLY RATED OR HOURLY BASIS EMPLOYEES.

5. The percentage of final compensation to be provided for local miscellaneous members for each year of credited prior and current service shall be determined in accordance with Section 21251.13 of said Retirement Law, subject to the reduction provided therein for service prior to December 31, 1982, termination of Social Security, for members whose service has been included in Federal Social Security (2% at age 60 Full and Modified).
6. Public Agency elected to be subject to the following optional provisions:
  - a. Section 20862.8 (Credit for Unused Sick Leave).
  - b. Section 20614, Statutes of 1978, (Reduction of Normal Member Contribution Rate). From November 19, 1979 and until July 11, 1983, the normal local miscellaneous member contribution rate shall be 0%. Legislation repealed said Section effective September 29, 1980.
  - c. Sections 21380-21387 (1959 Survivor Benefits) including Section 21382.4 (Third Level of 1959 Survivor Benefits).
  - d. Section 20614, Statutes of 1980, (To Prospectively Revoke Section 20614, Statutes of 1978).
  - e. Section 20024.2 (One-Year Final Compensation).
  - f. Section 20492.1 (To Remove the Exclusion of ELECTED OFFICIALS, Prospectively, from the effective date of this amendment to the contract).
7. Public Agency, in accordance with Government Code Section 20740, ceased to be an "employer" for purposes of Section 20759 effective on November 19, 1979. Accumulated contributions of Public Agency shall be fixed and determined as provided in Government Code Section 20759, and accumulated contributions thereafter shall be held by the Board as provided in Government Code Section 20759.
8. Public Agency shall contribute to said Retirement System the contributions determined by actuarial valuations of prior and future service liability with respect to local miscellaneous members of said Retirement System.
9. Public Agency shall also contribute to said Retirement System as follows:
  - a. Public Agency shall contribute \$2.50 per employee, per month on account of the liability for the 1959 Survivor Benefits provided under Section 21382.4 of said Retirement Law. (Subject to annual change.) In addition, all assets and liabilities of Public Agency and its employees shall be pooled in a single account, based on term insurance rates, for survivors of all local miscellaneous members.
  - b. A reasonable amount, as fixed by the Board, payable in one installment within 60 days of date of contract to cover the costs of administering said System as it affects the employees of Public Agency, not including the costs of special valuations or of the periodic investigation and valuations required by law.

c. A reasonable amount, as fixed by the Board, payable in one installment as the occasions arise, to cover the costs of special valuations on account of employees of Public Agency, and costs of the periodic investigation and valuations required by law.

10. Contributions required of Public Agency and its employees shall be subject to adjustment by Board on account of amendments to the Public Employees' Retirement Law, and on account of the experience under the Retirement System as determined by the periodic investigation and valuation required by said Retirement Law.

11. Contributions required of Public Agency and its employees shall be paid by Public Agency to the Retirement System within fifteen days after the end of the period to which said contributions refer or as may be prescribed by Board regulation. If more or less than the correct amount of contributions is paid for any period, proper adjustment shall be made in connection with subsequent remittances. Adjustments on account of errors in contributions required of any employee may be made by direct payments between the employee and the Board.

B. This amendment shall be effective on the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

BOARD OF ADMINISTRATION  
PUBLIC EMPLOYEES' RETIREMENT SYSTEM

BOARD OF DIRECTORS  
OF THE  
STOCKTON EAST WATER DISTRICT

BY \_\_\_\_\_  
CHIEF, CONTRACT SERVICES DIVISION  
PUBLIC EMPLOYEES' RETIREMENT SYSTEM

BY *Jack Brown*  
Presiding Officer

April 7, 1992  
Witness Date

Attest:

*Edward M. Steffani*, Secretary

PERS-CON-702 (AMENDMENT)  
(Rev. 1/92)



Contract Services Division  
 P.O. Box 942709  
 Sacramento, CA 94229-2709  
 (916) 326-3420  
 326-3000 (Telecommunications  
 Device for the Deaf)

CERTIFICATION  
 OF  
 FINAL ACTION OF GOVERNING BODY

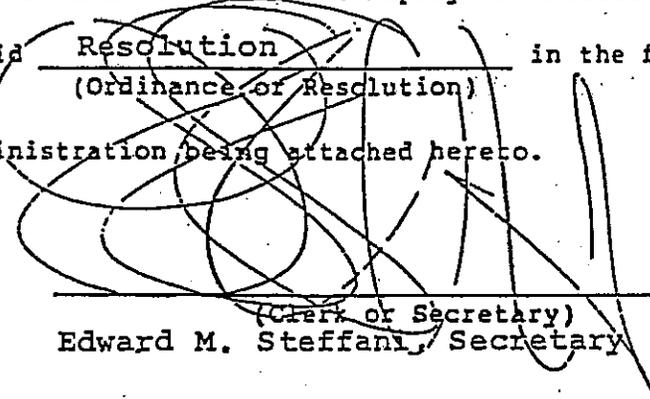
DATE: April 7, 1992

I hereby certify:

That the Board of Directors of  
 (Governing Body)  
 the Stockton East Water District adopted  
 (Public Agency)  
 on April 7, 1992, by an affirmative vote of a majority of the  
 (Date)

members of said Governing Body, Resolution No. 92-93-01  
 (Ordinance or Resolution)

approving the attached contractual agreement between the Governing Body of said  
 Agency and the Board of Administration of the Public Employees' Retirement  
 System, a certified copy of said Resolution in the form  
 (Ordinance or Resolution)  
 furnished by said Board of Administration being attached hereto.

  
 (Clerk or Secretary)  
 Edward M. Steffani, Secretary

Stockton East Water District  
 (Public Agency)

ADOPTED April 1, 1980

RULE 126 . PROCEDURE FOR ENACTING ORDINANCES.

WHEREAS, Chapter 819 of the Statutes of 1971, as amended (hereinafter "Act"), gives the District the power to enact ordinances to establish water rates but provides no standard procedure for enacting ordinances; and

WHEREAS, said Chapter 819 authorizes the Board to make such rules and regulations as it deems necessary and proper for carrying out the provisions of the Act;

NOW, THEREFORE, THE BOARD OF DIRECTORS OF STOCKTON-EAST WATER DISTRICT DOES HEREBY ENACT AND ESTABLISH THE FOLLOWING RULE:

A. The enacting clause of ordinances shall be: "The Board of Directors of Stockton-East Water District does ordain as follows:".

B. Ordinances shall be signed by the President of the Board of Directors and attested by the Secretary of the Board of Directors.

C. Ordinances shall require a vote of the majority of the voting members present for passage.

D. Ordinances shall be introduced only at a regular or adjourned regular meeting of the District. On introduction, ordinances shall be read in full, except when, after reading the title, further reading is waived by regular motion adopted by unanimous vote of the voting members of the Board present. The Board may direct such changes in the introduced ordinance as it deems necessary. The Board shall set a time and place of public hearing on the ordinance, which shall be no less than 10 days from the date of introduction of the ordinance, and the Secretary of the Board shall publish notice of the public hearing in the same manner as for a public hearing on the adoption of a rule of the District, except that such notice shall include the text of the proposed ordinance, unless at the time of introduction, the Board shall determine that a summary of the proposed ordinance may be published. If such determination is made, the full text of the proposed ordinance shall be posted in the District office and shall be available for inspection during normal working hours.

E. Within 15 days after its passage, the Secretary of the Board shall cause each ordinance to be published at least once in a newspaper of general circulation published and circulated in the District.

F. The ordinance establishing water rates shall take effect 30 days after its final passage, and shall set rates for the calendar year in which it is passed, in accordance with the Act.

G. The ordinance setting water rates shall be subject to referendum, provided, however, that no referendum shall modify or affect the terms of any bond resolution issuing bonds approved by the voters.

H. If a petition, signed by a number of voters residing within the District which is equal to or greater in number than 10 percent of the entire vote cast within the District for all candidates for Governor at the last gubernatorial election, protesting the adoption of the ordinance setting water rates, is presented to the Board of Directors prior to the effective date of the ordinance, the ordinance shall be suspended and the Board of Directors shall reconsider the ordinance. If the Board of Directors does not entirely repeal the ordinance, the Board of Directors shall submit the ordinance to the voters of the District either at a regular election or a special election called for the purpose. The ordinance shall not become effective unless and until a majority of the voters vote in favor of it.

I. If the ordinance is repealed by the Board of Directors, or is not approved by the voters, the water rates for the previous year shall be in effect.

J. The petition shall be preserved until eight months after the certification of the result of the election for which the petition qualified or attempted to qualify for placement on the ballot. Public access to any such petition shall be restricted in accordance with the provisions of Section 6253.5 of the Government Code. At the end of the eight-month period, the petition shall be destroyed as soon as practicable unless it is in evidence in some action or proceeding then pending, or unless the Secretary of the Board of Directors of the District has received a written request from the Attorney General, the Secretary of State, the Fair Political Practices Commission, a district attorney, a grand jury, the Board of Supervisors of San Joaquin County, or the Board of Directors, that the petition be preserved for use in a pending or ongoing investigation into election irregularities, or in a pending or ongoing investigation into a violation of the Political Reform Act of 1974 as set forth in Title 9 (commencing with Section 81000) of the Government Code.

K. All elections shall be conducted in accordance with the California Elections Code.

*Adopted 11/10 1990*

RULE NO. 130

STOCKTON-EAST WATER DISTRICT  
POLICY FOR THE PURCHASE OF SERVICES,  
SUPPLIES AND EQUIPMENT; AND FOR THE  
SURPLUSING OF SUPPLIES AND EQUIPMENT

WHEREAS, Stockton-East Water District has no formal policy for the purchase of services, supplies, and equipment; or for the surplusing of supplies and equipment; and

WHEREAS, Sections 54201 through 54204 of the Government Code of the State of California requires a purchasing policy.

NOW, THEREFORE, the Board of Directors of the Stockton-East Water District, acting in compliance with Sections 54201 through 54204 of the Government Code of the State of California enacts and establishes the following rule;

1. The following procedures shall be followed for purchases made within the approved annual Fiscal Year Budget:
  - A. Contracts for purchase of professional services in excess of \$7,500 shall be awarded by the Board of Directors. Competitive bids shall be solicited when appropriate;
  - B. Purchase of supplies and equipment in excess of \$7,500 per item shall be awarded by the Board of Directors after solicitation of competitive bids; and
  - C. Major chemical purchases shall be solicited by the competitive bid process and shall be awarded annually by the Board of Directors.
2. Except for emergency and urgent necessity, all purchases outside the approved annual Fiscal Year Budget shall be approved by the Board of Directors. Emergency and urgent necessity mean interruptions in the service or operations of the District which require immediate action before Board approval can be obtained.

3. The following procedures shall be followed for surplusizing supplies and equipment:

- A. An item shall be declared surplus by the General Manager when the District has no present or future use for such item;
- B. A surplus value shall be established as an appropriate percentage of new replacement cost, scrap value, public bid or auction where appropriate, or other generally accepted methods for establishing surplus value; and
- C. The General Manager shall use methods and procedures for disposing of surplus items which in his judgment will return the greatest value to the District.

RULE REGULATING WASTE OF SURFACE WATER

The Board of Directors of the Stockton East Water District finds and determines that:

1. The Act authorizes the Board to make such rules and regulations as it deems necessary and proper for carrying out the provisions of that Act.

2. The District finds and determines that proper notice of the need for, and regulation of, provision of surface water provided to agricultural irrigators is a means of conserving water, and therefore of benefit to all water users within the District.

3. The District therefore establishes the following procedures:

(a) Any person desiring to use surface water provided by the District shall first inform the District by telephone of the desired place, time, and amount of use.

(b) The information must be received at least 24 hours before the intended use.

(c) Any person desiring to cease use of such surface water shall inform the District of the time of intended cessation of use.

(d) The information must be received at least 24 hours before the intended cessation.

(e) The District will receive such calls 7 days a week at the following numbers: Monday through Friday (8:00 a.m. to 5:00 p.m.) 948-0333; all other times, 948-0337.

4. Failure to follow the above procedure is, and will be conclusively presumed to cause a waste of water, which will cause loss of a valuable resource in limited supply, affecting the District and all other water users in the District, in an amount which cannot be accurately determined but shall be conclusively presumed to cause the loss of \$500.00 worth of water.

5. For the first such failure by any person, such person will be charged for \$100 worth of water, and such amount will be added to such person's account with the District.

6. For the second such failure by any person, that person will be charged for \$200 worth of water, and such amount will be added to such person's account with the District.

7. For the third and any subsequent such failure by any person, that person will be charged for the full \$500 worth of water, conclusively presumed to be wasted, and such amount will be added to such person's account with the District.

8. Upon the determination of any failure, the District shall notify the person who failed to follow this rule of the failure.

9. The amount added to such person's account shall be collected as part of such person's account in the manner provided in the Act.

10. Notwithstanding the above, the minimum time required for notice to the District when the surface water taken or used is used for frost protection purposes shall be upon the commencement of such use, or as soon thereafter as possible, rather than 24 hours ahead of time.

11. In the event any person who has been deemed to have wasted water under this rule shall request water, and it shall not be provided, that person shall inform the District of the facts and circumstances, and all such facts and circumstances shall be reviewed, with the possible application of a credit to such person's account at the end of the irrigation season.

12. Any person charged under this rule may appeal to the District's Agricultural Committee which committee may waive any charge imposed by this rule which would be inequitable under the circumstances the committee determines.

RULE 103. FLASH BOARD DAMS.

WHEREAS, the Act authorizes the Board to make such rules and regulations as it deems necessary and proper for carrying out the provisions of that Act;

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE STOCKTON-EAST WATER DISTRICT HEREBY ENACTS AND ESTABLISHES THE FOLLOWING RULE:

A. Operating Levels. The Secretary-Manager shall determine the safe operating water level at each of the flash board dams under the District's jurisdiction. The selected safe operating water levels shall be at levels which will reduce any danger of property damage to a reasonable minimum and to allow the efficient operation of the District's distribution system with a maximum conservation of water. As circumstances require in the opinion of the Secretary-Manager, the safe operating water levels so established may be changed from time to time without notice.

B. Gravity Diversions Permitted if Within Safe Operating Levels. The taking of irrigation water by means of gravity diversion shall be permitted only if such diversion can be accomplished within the limits of such safe operating water levels established pursuant to this rule.

C. Intake Levels of Pumps. The intake level of all pumping units within the District shall be approved by the Secretary-Manager.

**RULE NO. 120**  
**ADOPTED: 02/15/1977**  
**REVISED: 06/24/2014**

**MANDATORY REQUIRED NOTICE TO DISTRICT BY OWNER OF  
DIVERSION OF STREAM DELIVERED WATER**

Whereas, the Board of Directors hereby finds the necessity to revise Rule No. 120 by incorporating Rule No. 132 (Stream Diversion Call-In Rule; adopted 04/07/1986) and Rule No. 139 (Regulating Waste of Surface Water; adopted 04/21/1992) for the purpose of correcting contact information and outlining consequences for failure to follow mandatory notification procedures for the diversion of stream delivered water; and

Whereas, the Act authorizes the Board to make such Rules and Regulations as it deems necessary and proper for carrying out the provisions of the Act; and

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE STOCKTON EAST WATER DISTRICT HEREBY REVISES RULE NO. 120 AS FOLLOWS:

- A. Mandatory Notification Required. Any person desiring to divert surface water provided by the District shall first inform the District at its office (6767 East Main Street, Stockton, California), at least forty-eight (48) hours prior to the start of such diversion. The District will receive such notice 7 days a week at the following numbers: Monday through Friday (8:00 a.m. to 5:00 p.m.) 209-948-0333; all other times, 209-469-3335 or online at [www.sewd.net](http://www.sewd.net). The following information must be provided: name, phone number, pump ID number, diversion rate, beginning date/time, end date/time and run time.
- B. The objective of Paragraph A is to avoid waste of water, which will cause loss of a valuable resource in limited supply, affecting the District and all other agricultural irrigators in the District, in an amount which cannot be accurately determined but shall be conclusively presumed to cause loss of \$500 worth of water.
- C. For the first such notification failure by any person, such person will be charged for \$100 worth of water, and such amount will be added to such person's account with the District.
- D. For the second such notification failure by any person, that person will be charged for \$200 worth of water, and such amount will be added to such person's account with the District.

- E. For the third and any subsequent such notification failure by any person, that person will be charged for the full \$500 worth of water, conclusively presumed to be wasted, and such amount will be added to such person's account with the District.
- F. Upon determination of any notification failure, the District shall notify the person who failed to follow this Rule.
- G. The amount added to such person's account shall be collected as part of such person's account in the manner provided in the Act.
- H. Any person charged under this Rule may appeal to the District's Board of Directors which may waive any charge imposed by this Rule, which would be inequitable under the circumstances the Board of Directors determines.
- I. Diverters upon request of District shall provide District with a monthly irrigation plan to permit District to forecast irrigation demand. Diverters shall follow the plan as closely as possible.
- J. Rule Nos. 102, 132 and 139 of this District are hereby repealed.

RULE 113. MAINTENANCE OF LIVE STREAM.

WHEREAS, the Act authorizes the Board to make such rules and regulations as it deems necessary and proper for carrying out the provisions of the Act;

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE STOCKTON-EAST WATER DISTRICT ENACTS AND ESTABLISHES THE FOLLOWING RULE:

In its operation of the Calaveras River and its distributaries, to the extent of its jurisdiction and control, the District shall observe the following policies:

A. No water shall be diverted to storage in New Hogan Reservoir at any time when a live stream does not exist in Mormon Slough from Bellota to the Stockton Diverting Canal.

B. Diversions of water into the Old Calaveras River Channel at Bellota shall be limited to times when a live stream exists in Mormon Slough from Bellota to the Stockton Diverting Canal.

C. The application of Paragraphs A and B above shall be subject to modification when necessary for purposes of repairs, maintenance, and construction.

RULE NO. 140

ADOPTED 4/21/92

ALLOCATION OF NEW HOGAN WATER -.1992

WHEREAS, the District Act authorizes the Board to adopt rules and regulations as it deems necessary and proper for carrying out the provisions of the Act; and

WHEREAS, the current six-year drought has caused groundwater levels to fall, and has decreased the amount of New Hogan Reservoir water available for treatment plant and irrigation purposes; and

WHEREAS, approximately 25,240 acre feet (AF) of New Hogan water (17,000 acre feet net after percolation losses) are available for irrigation use, and 22,700 AF will be required for the treatment plant; and

WHEREAS, delivery of these amounts of water can be made efficiently with minimum conveyance losses if irrigation releases are made during ten-day periods each month during the months of May through August, and if treatment plant releases are made continuously during the months of May through October; and

WHEREAS, controls are necessary, to assure no irrigation use of water released for the treatment plant;

NOW, THEREFORE, THE BOARD OF DIRECTORS OF STOCKTON EAST WATER DISTRICT HEREBY ENACTS AND ESTABLISHES THE FOLLOWING RULES TO ASSURE NO IRRIGATION USE OF WATER RELEASED FROM NEW HOGAN RESERVOIR FOR THE TREATMENT PLANT DURING THE PERIOD OF MAY 1, 1992 - OCTOBER 31, 1992:

1. Diversion of water from the Calaveras River above Bellota for agricultural irrigation shall be prohibited except during ten-day periods designated by the District each month, during the months of May through August.
2. The District, through it's Board of Directors, General Manager and General Counsel, may take such legal actions as may be necessary to enjoin the taking of water contrary to this rule.

RULE 104. THE MEASUREMENT OF WATER PRODUCED FROM BOTH GROUND AND SURFACE SOURCES AND USED ON ONE PARCEL OF LAND.

WHEREAS, the Act authorizes the Board to make such rules and regulations as it deems necessary and proper for carrying out the provisions of that Act;

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE STOCKTON-EAST WATER DISTRICT HEREBY ENACTS AND ESTABLISHES THE FOLLOWING RULE:

A. Volumetric Water Meter. In any case in which a diverter diverts surface water from the Calaveras River or one of its distributaries and also diverts ground water for use on a single parcel, the Collector may require that there be installed upon the water producing facility or facilities diverting surface water a volumetric water meter.

B. When Required. The Collector shall only require the installation provided for in Paragraph A in cases in which in his judgment it is impossible to determine the quantities of surface water diverted without the installation of such a volumetric water meter.

C. Ownership and Maintenance. All volumetric water meters required by this rule shall be purchased, installed, and owned by the District. The District shall maintain such meters and may read them from time to time.

D. Action if Meter Refused. In any case in which a diverter refuses to allow the installation of a volumetric water

meter as provided in this rule, and after the Collector has given thirty (30) days written notice to such diverter of the provisions of this rule, the Collector may compute the charge for all water used thereafter on such a parcel entirely at the surface water rate.

E. Parcel. As used in this rule, "parcel" means any San Joaquin County assessor's parcel or any two or more San Joaquin County assessor's parcels which are contiguous and in identical ownership.

RULE 107. THE MEASUREMENT OF WATER PRODUCED BY WATER PRODUCING FACILITIES WITHOUT APPROVED WATER MEASURING DEVICES.

WHEREAS, the Act authorizes the Board to make such rules and regulations as it deems necessary and proper for carrying out the provisions of the Act;

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE STOCKTON-EAST WATER DISTRICT HEREBY ENACTS AND ESTABLISHES THE FOLLOWING RULE:

The calculation of the amount of water produced from a water producing facility, other than a domestic water producing facility, which is not measured by a water measuring device approved by the Collector, shall be based upon the following factors:

A. Actual Efficiency of Water Producing Facility. The actual efficiency of the water producing facility as determined by the Collector.

B. Energy Consumed. The total energy consumed in pumping based upon meter kilowatt energy consumed in pumping as measured by meter, or if another source of energy is utilized, based upon metered or volumetric fuel consumption records maintained in a manner approved by the Board of Directors.

C. Acres Irrigated and Crops Produced. The actual number of acres irrigated and the crops produced.

D. Elapsed Time Meter. Information furnished by an elapsed time meter installed and maintained by the District and metering the Collector's current requirements for such meters.

RULE 110. ALTERNATE PROCEDURES, WATER PRODUCING FACILITIES  
EQUIPPED WITH WATER MEASURING DEVICES.

WHEREAS, subdivision (c) of Section 11 of the Act authorizes the Board, by rule, to establish alternate procedures for the computation and payment of progress bills in the case of water producing facilities within the District, the water production of which is measured by a water measuring device approved by the Collector;

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE STOCKTON-EAST WATER DISTRICT ENACTS AND ESTABLISHES THE FOLLOWING RULE:

A. Approved Water Measuring Devices to be Read by Owner.

All owners of water producing facilities within the District, the water production of which is measured by a water <sup>meas.</sup> producing device approved by the Collector, and who elect to report their water production based on the record maintained by such water measuring device shall on June 30 and December 31 of each calendar year, record the then current reading of such approved measuring device.

B. Readings to be Reported to Collector. The readings taken pursuant to the provisions of Paragraph A above shall be reported under penalty of perjury by the owner of the water producing facility, and shall be transmitted by the owner to the Collector within one month following the taking of such readings.

C. Progress Billing. At the time next designated for the mailing of progress bills in the Act, the Collector shall mail to the owner of a facility equipped with an approved water

measuring device, a bill stating the exact amount owed by the owner based upon the current reported reading of his measurement device.

D. Payment of Progress Bill. The owner must pay the amount indicated on this bill within the same time period applicable to the payment of progress bills for non-volumetric water producing facilities under the provisions of Section 11 of the Act, and a failure to do so will subject him to penalties identical to those enumerated in said Section 11 of the Act.

E. Annual Bill. Submission and payment of the annual bill in the case of water producing facilities equipped with a water measuring device approved by the Collector shall be as provided in Section 13 of the Act.

F. Water Measuring Devices to be Read by District. The District may read all water measuring devices from time to time whether such water measuring devices were originally installed by the District or by the owner of a water producing facility.

G. Maintenance and Inspection. No water measuring device shall be deemed to be a "water <sup>MCA</sup> producing device approved by the Collector" unless the owner of the water producing facility on which such water measuring device is installed permits periodic inspection and maintenance of such water measuring device by the District.

RULE 123. METERS.

WHEREAS, the Act authorizes the Board to make such rules and regulations as it deems necessary and proper for carrying out the provisions of the Act; and

WHEREAS, Section 5 of the Act allows the Board to require such measuring devices as may be necessary;

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE STOCKTON-EAST WATER DISTRICT HEREBY ENACTS AND ESTABLISHES THE FOLLOWING RULE:

A. The staff of Stockton-East Water District shall recommend to the Board installation of a meter or water-measuring device on any agricultural water-producing facility, except as noted in Paragraph G herein, where such meter or device is necessary to carry out the purposes of the Act, in the discretion of the District. This recommendation shall be accompanied by a plan for physically installing the meter and necessary engineering drawings for such installation. Prior to making such recommendations to the Board the staff shall notify the owner of the water-producing facility of the proposed recommendations so that the owner may appear and comment at the meeting in which the Board will hear that recommendation.

B. The Board shall consider the recommendations of the staff, the comments of the owner of the agricultural

water-producing facility, and shall by resolution direct the staff to proceed with installation of its meter or water-measuring device, if in the judgment of the Board such installation is necessary to carry out the purposes of the Act.

C. Such installation, if directed by the Board, shall take place in two steps:

1. The District shall provide to the owner of the agricultural water-producing facility a meter containment tube which shall be complete with a pre-cut hole for installation of the meter or water-measuring device and shall have straightening vanes installed. Within thirty (30) days after provision of such meter containment tube (unless such time is extended by the Board) the owner shall install it in accordance with the engineering drawing and plan submitted by the staff.

2. As soon as possible thereafter the staff of the District shall install the meter or water-measuring device.

D. In the event such a meter or water-measuring device is placed on any agricultural water-producing facility, an annual charge for the installation, so long as such meter or water-measuring device is in place and operable, shall be charged to the owner as a separate charge on his annual water bill. Said charges shall be in accordance with the

following schedule. For meters or water-measuring devices which are of sizes different from those shown on the schedule, the staff shall recommend an annual charge consistent with the schedule:

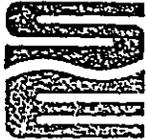
<u>Size of Meter</u>	<u>Annual Charge</u>
4" Meter	\$37.00
6" Meter	\$38.00
8" Meter	\$40.00
10" Meter	\$43.00
12" Meter	\$45.00
14" Meter	\$47.00
16" Meter	\$51.00
18" Meter	\$63.00
20" Meter	\$67.00
22" Meter	\$70.00
24" Meter	\$73.00
30" Meter	\$80.00

E. The meter shall remain the property of the District and shall be maintained and inspected by the District thereafter. Any person who injures, alters, removes, resets, adjusts, manipulates, obstructs or in any manner interferes or tampers with or procures, or causes or directs any person to injure, alter, remove, reset, adjust, manipulate, obstruct or in any manner interfere or tamper with any meter or water-measuring device, so as to cause such meter or water-measuring device to improperly or inaccurately measure and record water production, shall be subject to the penalties set forth in the Act.

F. If the Board determines that it is necessary in order to secure compliance with this rule by any owner,

the Board shall then direct the Secretary-Manager of the District to seek appropriate remedies with the assistance of the attorneys for the District so as to obtain full enforcement of this rule. In accordance with Section 22 of the Act, it is hereby provided that the District shall not deliver or make available water to any owner who shall fail to install the meter containment tube in accordance with the engineering drawing within thirty (30) days of the time of provision of such meter containment tube to the owner (unless such time is extended by the Board), or who shall interfere with the subsequent installation of the meter or water-measuring device.

G. Paragraphs A and B of this rule shall not apply to agricultural surface water-producing facilities installed after May 1, 1979, and the installation of meters or water-measuring devices on such facilities shall be deemed to have been judged necessary, and installation of meters or water-measuring devices on such facilities shall take place in accordance with Paragraphs C, D, E and F of this Rule.



# STOCKTON EAST WATER DISTRICT

6767 EAST MAIN STREET

P.O. BOX 5157

STOCKTON, CA 95205-0157

209/948-0333

VIC SOLARI, JR.  
JOSEPH L. DONDERO  
JACK H. TONE  
JACK LAVEN  
RICHARD L. BOZZANO  
BETTY L. MacNEAF  
ROGER M. HUCKINS

EDWARD M. STEFFANI  
GENERAL MANAGER

JOHN W. STOVALL  
GENERAL COUNSEL

## AUTHORIZATION TO INSTALL AND MAINTAIN A VOLUMETRIC WATER METER ON RIVER PUMP

Date \_\_\_\_\_

District Account No. \_\_\_\_\_

River Pump No. \_\_\_\_\_

Name \_\_\_\_\_

I hereby authorize Stockton East Water District to install and maintain a volumetric water meter on my river pump in accordance with District Rule 123, adopted May 1, 1979. This Rule provides for an annual charge consistent with the following schedule:

<u>Meter Size</u>	<u>Annual Charge</u>
4 inch	\$37
6 inch	\$38
8 inch	\$40
10 inch	\$43
12 inch	\$45
14 inch	\$47
16 inch	\$51
18 inch	\$63
20 inch	\$67
22 inch	\$70
24 inch	\$73
30 inch	\$80

Signature \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

ADOPTED 6/17/92

REVISED RULE FOR METERS

WHEREAS, the District Act authorizes the Board to make such rules and regulations as it deems necessary and proper for carrying out the provisions of the Act; and

WHEREAS, Section 5 of the Act allows the Board to require such measuring devices as may be necessary:

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE STOCKTON EAST WATER DISTRICT HEREBY ENACTS AND ESTABLISHES THE FOLLOWING RULE:

- A. The staff of Stockton East Water District shall recommend to the Board installation of a meter or water-measuring device on any agricultural water-producing facility, except as noted in Paragraph G herein, where such meter or device is necessary to carry out the purposes of the Act, in the discretion of the District. This recommendation shall be accompanied by a plan for physically installing the meter and necessary engineering drawings for such installation. Prior to making such recommendations to the Board, the staff shall notify the owner of the water-producing facility of the proposed recommendations so that the owner may appear and comment at the meeting in which the Board will hear that recommendation.
- B. The Board shall consider the recommendations of the staff, the comments of the owner of the agricultural water-producing facility, and shall by resolution direct the staff to proceed with installation of its meter or water-measuring device, if in the judgment of the Board such installation is necessary to carry out the purposes of the Act.
- C. Such installation, if directed by the Board, shall take place in two steps:
  1. The District shall provide to the owner of the agricultural water-producing facility, a meter containment tube which shall be complete with a pre-cut hole for installation of the meter or water-measuring device and shall have straightening vanes installed. Within thirty (30) days after provision of such meter containment tube (unless such time is extended by the Board) the owner shall install it in accordance with the engineering drawing and plan submitted by the staff.

2. As soon as possible thereafter, the staff of the District shall install the meter or water-measuring device.

D. In the event such a meter or water-measuring device is placed on any agricultural water-producing facility, the meter or device shall remain on the facility as long as the water-producing facility is in place. An annual charge for the installation, so long as such meter or water-measuring device is in place, is operable and is used, shall be charged to the owner as a separate charge on his annual water bill. Said charges shall be in accordance with the following schedule. For meters of water-measuring devices which are of sizes different from those shown on the schedule, the staff shall recommend an annual charge consistent with the schedule:

<u>Size of Meter</u>	<u>Annual Charge</u>
4" Meter	\$37.00
6" Meter	\$38.00
8" Meter	\$40.00
10" Meter	\$43.00
12" Meter	\$45.00
14" Meter	\$47.00
16" Meter	\$51.00
18" Meter	\$63.00
20" Meter	\$67.00
22" Meter	\$70.00
24" Meter	\$73.00
30" Meter	\$80.00

E. The meter shall remain the property of the District and shall be maintained and inspected by the District thereafter. Any person who injures, alters, removes, resets, adjusts, manipulates, obstructs or in any manner interferes or tampers with or procures, or causes or directs any person to injure, alter, remove, reset, adjust, manipulate, obstruct or in any manner interfere or tamper with any meter or water-measuring device, so as to cause such meter or water-measuring device to improperly or inaccurately measure and record water production, shall be subject to the penalties set forth in the Act.

F. If the Board determines that it is necessary in order to secure compliance with this rule by any owner, the Board shall then direct the Secretary-Manager of the District to seek appropriate remedies with the assistance of the attorneys for the District so as to obtain full enforcement of this rule. In accordance with Section 22 of the Act, it is hereby provided that the District shall not deliver or make available water to any owner who shall fail to install the meter containment tube in accordance with the engineering

drawing within thirty (30) days of the time of provision of such meter containment tube to the owner (unless such time is extended by the Board), or who shall interfere with the subsequent installation of the meter or water-measuring device.

- G. Paragraphs A and B of this rule shall not apply to agricultural surface water-producing facilities installed after May 1, 1979, and the installation of meters or water-measuring devices on such facilities shall be deemed to have been judged necessary, and installation of meters or water-measuring devices on such facilities shall take place in accordance with paragraphs C, D, E and F of this Rule.

RULE 111. REFUNDS OF OVERPAYMENTS.

WHEREAS, Section 19 of the Act requires that the Board establish rules providing for the making of refunds in the event of the overpayment of any ground water assessment or stream delivered water charges;

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE STOCKTON-EAST WATER DISTRICT ENACTS AND ESTABLISHES THE FOLLOWING RULE:

A. Application for Refund. The owner of any water producing facility within the District who believes he has overpaid any ground water assessment or stream delivered water charge may apply to the Secretary-Manager of the District on forms prescribed by the Secretary-Manager of the District for a refund of the amount of such overpayment. Such application must be filed within three (3) years of the making of the overpayment in question.

B. Review by Secretary-Manager. Upon receipt of an application for refund, the Secretary-Manager shall review the same and then place the matter on the agenda of the Board and shall submit to the Board the application for refund and the recommendation of the Secretary-Manager.

C. Notice of Consideration. A notice of time at which the Board will consider an application for refund shall be mailed to the person making such application at least ten (10) days before

the date of the time of such consideration. After the Board has acted upon the application the Secretary-Manager shall mail a notice of the action to the person filing such application.

ORDINANCE NO. 16

ADOPTED 3/16/93

AN ORDINANCE ESTABLISHING MUNICIPAL GROUNDWATER ASSESSMENTS, AGRICULTURAL GROUNDWATER ASSESSMENTS, DOMESTIC GROUNDWATER ASSESSMENTS, AND CHARGES FOR STREAM-DELIVERED WATER, FOR CALENDAR YEAR 1993

The Board of Directors of Stockton East Water District does ordain as follows:

Section 1: The Municipal Groundwater Assessment for calendar year 1993 shall be Fifty-eight Dollars and Fourteen Cents (\$58.14) per acre foot of water.

Section 2: The Agricultural Groundwater Assessment for calendar year 1993 shall be Two Dollars and Thirty-Nine Cents (\$2.39) per acre foot of water.

Section 3: The Domestic Groundwater Assessment for calendar year 1993 shall be Twelve Dollars (\$12.00) per Domestic use unit.

Section 4: The rate for sales of stream-delivered water for calendar year 1993 shall be Fifteen Dollars (\$15.00) per acre foot of water.

Section 5: This ordinance shall take effect thirty (30) days after its final passage, and shall be published at least once in a newspaper of general circulation within fifteen (15) days after its final passage, with the names of the members of the Board of Directors voting for and against the same.

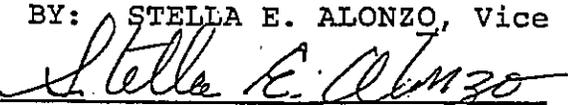
AYES: Directors Giannecchini, Dondero, Tone, Laven, MacNear, Alonzo

NOES: None

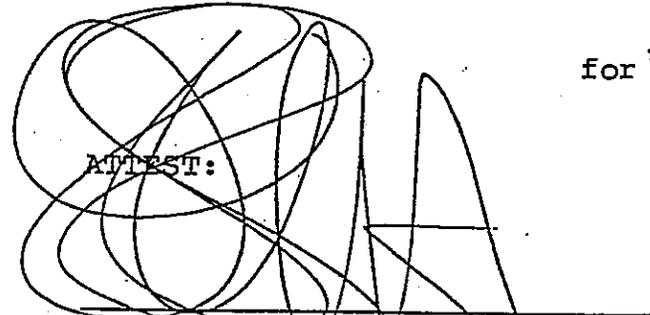
ABSTENTIONS: None

ABSENT: Director Clayton

BY: STELLA E. ALONZO, Vice President

  
for JACK E. CLAYTON, President  
Board of Directors  
Stockton East Water District

ATTEST:

  
EDWARD M. STEFFANI, Secretary  
Board of Directors  
Stockton East Water District

RULE NO. 128

RATES FOR USE OF AGRICULTURAL WATER PRODUCED BY DISTRICT OPERATED  
DEEP WELL PUMPING PLANTS

---

THE BOARD OF DIRECTORS OF THE STOCKTON-EAST WATER  
DISTRICT FINDS AND DETERMINES THAT:

1. The Act authorizes the Board to make such rules and regulations as it deems necessary and proper for carrying out the provisions of that Act; and

2. Rule No. 119, establishing rates for charging agricultural well water produced from District operated well pumping plants is no longer equitable, since it has failed to offset District paid energy costs for said water produced as follows:

	<u>1977</u>	<u>1978</u>	<u>1979</u>	( 8 mo.) <u>1980</u>
Revenue	\$2,974	\$2,234	\$1,519	\$1,154
Energy Cost	<u>\$4,624</u>	<u>\$4,014</u>	<u>\$2,533</u>	<u>\$2,599</u>
Difference	(\$1,650)	(\$1,780)	(\$1,114)	(\$1,445)

3. The lease agreements with owner provide for a modification of rates, from time to time, by the Board of Directors; and

4. The owners have been notified by mail of the change in rates established by this Rule in accordance with the leases.

NOW, THEREFORE, the Board of Directors of the Stockton-East Water District repeals Rule No. 119 and enacts and establishes the following rule:

(cont.)

RULE NO. 128

A. District Well Water. As used in this Rule No. 128, "District Well Water" means water produced from wells leased by the District which wells are equipped with District owned and operated pumps and motors.

B. User. As used in this Rule No. 128, "User" means the owner of a parcel of land on which District well water is being applied under the terms of a District well lease.

C. Charges. For District well water, user shall pay the following charges:

1. All P.G. & E., energy charges incurred by the District on account for water produced for owners use, plus a charge of \$0.002 per K.W.H., of energy used for production of water for owners use to cover maintenance.

2. The current Pump Tax charged for all well water production.

D. Payment.

1. Energy charges incurred by the District shall be billed to the owner on a quarterly basis.

2. Pump Tax charges shall be billed on the regular District billing cycle.

STOCKTON-EAST WATER DISTRICT

Comparative Cost of Water Supply  
(Using P. G. & E. statistics for average pump size, plant efficiency and Rate Schedule PA-1, effective 2/13/80)

GIVEN A 10 H.P. river pump supplying 112 acre feet of water per year by using 57 KWH to pump an acre foot of water. COMPARED TO a 42 H.P. pump supplying 112 acre feet of water per year by using 236 KWH to pump an acre foot of water.

FIND The comparative cost per acre foot to operate the river pump and deep well pump.

	<u>River Pump</u>	<u>Deep Well Pump</u>
Service Charge	\$ .91	\$ 2.97
Energy Charge	2.53	10.46
Total Power Cost	<u>3.44</u>	<u>13.43</u>
Water Charge	<u>7.60</u>	<u>1.16</u>
Total Power & Water Costs per Acre Foot	<u>\$11.04</u>	<u>\$14.59*</u>

\*32% more than River Pump Costs

STOCKTON-EAST WATER DISTRICT  
PROCEDURES AND REGULATIONS FOR ESTABLISHING  
FLAT RATE AND SPECIAL CLASS WATER PRODUCTION

WHEREAS, the Act authorizes the Board to make such rules and regulations as it deems necessary and proper for carrying out the provisions of the Act; and

WHEREAS, Section 9.4 of the Act requires that the Board, at a Regular, Special, or Continued Meeting between March 15 and April 15 of each year, after giving public notice, shall hold a public hearing to consider the necessity, amount, and rates of a municipal ground water assessment, an agricultural ground water assessment, and a domestic ground water assessment, if any, to be levied for the then current calendar year and charges to be made for stream-delivered water to the extent that such charges for stream-delivered water are not controlled by contract or agreement, and that water rates shall be established by Ordinance; and

WHEREAS, Section 9.4(d) of the Act also provides for establishment, by Rule, one or more methods to be used in computing the amount of water production from water-producing facilities which are not measured by a water-measuring device approved by the Collector.

NOW, THEREFORE, the Board of Directors of the Stockton-East Water District hereby enacts and establishes Rule No. 131 which provides procedures and regulations for computing the amount of water production from water-producing facilities which are not measured by a water-measuring device approved by the Collector, and other special classes of water. Rule No. 131 repeals Rule No. 129.

A. Agricultural Classification. "Agricultural classification" means water produced and used for the commercial production of agricultural crops or livestock on parcels of land operated in units of more than two (2) acres, and shall not include water used for agricultural product processing purposes, nor water used for household and landscaping purposes.

B. Domestic Classification. "Domestic classification" means water produced by a water producing facility located upon a parcel and used entirely upon said parcel for household and landscaping purposes.

C. Municipal and Industrial Classification. "Municipal and Industrial classification" means water produced and used for any purpose other than use classified as AGRICULTURAL in paragraph A above and use classified as DOMESTIC in paragraph B above, and includes all water used for agricultural product processing purposes.

D. Rates Established. Effective for each calendar year, all water produced within the District is subject to assessment at the rates adopted by Ordinance for the current calendar year.

SCHEDULE I

SECTION I: AGRICULTURAL CLASSIFICATION - GROUND WATER  
(WELL WATER)

Flat Rates

1. Rice	5.3 acre feet per acre per year
2. Grain	1.0 acre feet per acre per year
3. All other crops	2.8 acre feet per acre per year

SECTION II: AGRICULTURAL CLASSIFICATION - STREAM DELIVERED WATER  
(RIVER WATER)

Flat Rates

1. Rice	5.3 acre feet per acre per year
2. Grain	1.0 acre feet per acre per year
3. All other crops	2.8 acre feet per acre per year

SECTION III: AGRICULTURAL CLASSIFICATION - STREAM DELIVERED WATER  
(RIVER WATER) SPECIAL CLASS - POTTER CREEK

Potter Creek channels now carry water during the irrigation season provided by diversion of Calaveras River water. The District heretofore claimed, and does now claim, all water in Potter Creek channels. All water diverted from Potter Creek within the District shall be metered in accordance with Order of the Board of Directors issued March 13, 1979, and District Rule No. 123, adopted May 01, 1979. No allowance or consideration shall be granted for claims of prior diversion of drainage water not originating upon claimants property. The diversion of water into Potter Creek by the District is subject to complete termination or reduction if it becomes necessary to adopt priority schedules for water use in the event demand exceeds available supply or in the event dry year conditions limit District water supply.

SECTION IV: EXEMPTIONS FROM PUMP ASSESSMENTS

In recognition of the fact that full beneficial use of certain wells within certain portions of the District may be adversely affected by ground water conditions not under the control of the well owner or the District, exemptions to the current pump tax assessments which would otherwise be applicable to the use of an individual well may be granted by the District, on a case by case basis, under the provision of this Rule, as follows:

- A. Wells otherwise subject to Municipal or Domestic pump tax assessments which produce water with specific conductivity greater than 600 micromhos per centimeter are exempted from the applicable pump tax assessment.
- B. Wells otherwise subject to Agricultural pump tax assessments which produce water with specific conductivity greater than 1,300 micromhos per centimeter are exempted from the applicable pump tax assessment.
- C. Wells which provide water for both Municipal or Domestic and Agricultural uses are exempted from that portion of the total pump tax assessments that would otherwise be applicable due to its use for Municipal or Domestic purposes if such well produces water with specific conductivity greater than 600 micromhos per centimeter but less than 1,300 micromhos per centimeter.
- D. Determination of the specific conductivity of water produced by a well will be made by the District at no charge to the owner, except as provided in (E)(3), upon receipt from the owner of a written request for such determination, not later than June 20, of the year for which the request is being made, to permit testing during the month of July and August. Wells which supply water to a public water system, as defined in Section 64411, Title 22, California Administrative Code, may be exempted from applicable pump tax assessments based on the results of tests for specific conductivity performed by an approved water laboratory, as defined in the same Section 64411, provided to the District by the owner.
- E. A well that has been tested and has been classified as either exempt or not exempt from the applicable pump tax assessment will normally retain that classification for a period of four (4) years, and not be retested during that period, except that:
  - (1) The District may at its sole expense, test wells more frequently than every four (4) years if more frequent testing is necessary to reflect changing conditions in local ground water quality;

- (2) The District may extend to more than four (4) years the exemption status wells located in areas for which no evidence of sufficient improvement in local ground water quality exists as would indicate a change in classification to be likely;
  - (3) An owner may request, in writing, that water from a well be reanalyzed at an interval of less than four (4) years provided that the owner agrees, prior to the requested analysis being performed, to reimburse the District for its actual expenses for the analysis if no change in the status of the well is appropriate based on the results of the reanalysis.
- F. This rule shall apply only to those wells located in the following areas of the District:
- (1) That portion of the Metropolitan Stockton Area located west of Highway 99;
  - (2) That portion of the District designated as the South Planning Area; and
  - (3) That portion of the District designated as the North Planning Area.

SECTION V: UNIT VALUES FOR FLAT RATE DOMESTIC AND MUNICIPAL GROUND WATER

- A. Single Family Residence; Commercial Building; First Unit of a Multiple Commercial Building, Motels, Trailer Parks, or Multiple Family Residences, including landscaping on sites two (2) acres or less 1 Unit
- B. Each additional housing unit of Motels, Multiple Commercial Buildings, Multiple Family Residences, or Trailers in Trailer Parks 1/3 Unit

0 - 2

RESOLUTION OF THE BOARD OF DIRECTORS  
OF STOCKTON EAST WATER DISTRICT

RESOLUTION NO. 92-93-05

SETTING A BASE MONTHLY PAYMENT  
FOR PERIOD APRIL 1, 1993 TO MARCH 31, 1994,  
PURSUANT TO THE SECOND AMENDED CONTRACT AMONG THIS DISTRICT  
AND THE CALIFORNIA WATER SERVICE CO., THE CITY OF STOCKTON,  
THE LINCOLN VILLAGE MAINTENANCE DISTRICT,  
AND THE COLONIAL HEIGHTS MAINTENANCE DISTRICT,  
PROVIDING FOR THE SALE OF TREATED WATER

---

WHEREAS, on September 25, 1987, the Stockton East Water District entered into a Second Amended Contract among the California Water Service Company, the City of Stockton, the Lincoln Village Maintenance District, and the Colonial Heights Maintenance District, providing for the sale of treated water; and

WHEREAS, the Board of Directors of the Stockton-East Water District has determined that the revised budgeted costs for the Contract period April 1, 1993 to March 31, 1994 should be as follows:

6A(1)	Debt Service	\$3,698,448
	Debt Service Surcharge	341,361
6A(2)	Raw Water	105,871
6A(3)	Operation & Maintenance	1,837,265
6A(4)	Administration	161,048
6A(5)	Insurance	50,000
6A(7)	Reserve Fund Payment Pursuant to Paragraphs 8 & 9 of said Contract	35,000
6A(8)	Payment into the Water Treatment Facilities Reserve Fund	100,000
		<u>\$6,328,993; and</u>

WHEREAS, paragraph 6D(3) of said Second Amended Contract states that Stockton East shall annually levy a municipal groundwater assessment, pursuant to its enabling legislation such that the cost of groundwater use is equivalent to the cost of surface water use; and

WHEREAS, the proposed 1993-94 budget estimates the amount of \$5,505,881 to be paid from municipal groundwater assessments and base monthly payments as follows:

Municipal Groundwater Assessments	\$2,665,250
(35,000 AF X \$76.15)	
Base Monthly Payments	2,840,361
Total	<u>\$5,505,881</u>

NOW, THEREFORE, BE IT RESOLVED, that pursuant to said Second Amended Contract, this Board hereby establishes the Base Monthly Payment to be paid by the Contractors pursuant to said Contract for the period April 1, 1993 to March 31, 1994, at \$2,840,631/12 \$236,719.25, which is the same amount as for the 1992-93 fiscal year.

PASSED AND ADOPTED BY THE BOARD OF DIRECTORS OF THE STOCKTON-EAST WATER DISTRICT ON THE 15TH DAY OF SEPTEMBER, 1993, BY THE FOLLOWING VOTE:

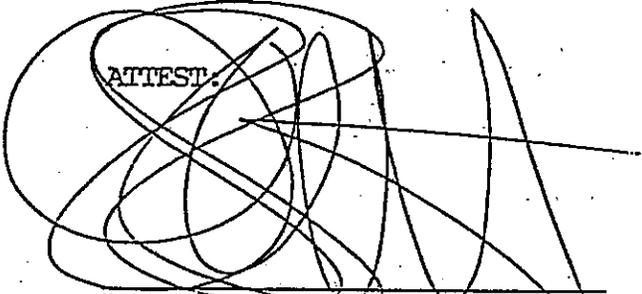
AYES: Directors Dondero, Tone, Laven, Clayton, MacNear, Alonzo

NOES: None

ABSENT: Director George

ABSTENTIONS: None

*Jack Laven*  
\_\_\_\_\_  
JACK LAVEN, President  
Board of Directors  
Stockton-East Water District

ATTEST.  
  
\_\_\_\_\_  
EDWARD M. STEFFANI, Secretary  
Board of Directors  
Stockton-East Water District

RESOLUTION OF THE BOARD OF DIRECTORS  
OF STOCKTON EAST WATER DISTRICT

RESOLUTION NO. 92-93- 20

SETTING A REVISED BASE MONTHLY PAYMENT  
FOR PERIOD APRIL 1, 1993 TO MARCH 31, 1994,  
PURSUANT TO THE SECOND AMENDED CONTRACT AMONG THIS DISTRICT  
AND THE CALIFORNIA WATER SERVICE CO., THE CITY OF STOCKTON,  
THE LINCOLN VILLAGE MAINTENANCE DISTRICT,  
AND THE COLONIAL HEIGHTS MAINTENANCE DISTRICT,  
PROVIDING FOR THE SALE OF TREATED WATER

WHEREAS, on September 25, 1987, the Stockton East Water District entered into a Second Amended Contract among the California Water Service Company, the City of Stockton, the Lincoln Village Maintenance District, and the Colonial Heights Maintenance District, providing for the sale of treated water; and

WHEREAS, the Board of Directors of the Stockton-East Water District has determined that the revised budgeted costs for the Contract period April 1, 1993 to March 31, 1994 should be as follows:

6A(1)	Debt Service	\$3,611,022
	Debt Service Surcharge	310,364
6A(2)	Raw Water	102,301
6A(3)	Operation & Maintenance	2,527,533
6A(4)	Administration	174,115
6A(5)	Insurance	50,000
6A(7)	Reserve Fund Payment Pursuant to Paragraphs 8 & 9 of said Contract	35,000
6A(8)	Payment into the Water Treatment Facilities Reserve Fund	100,000
		<u>\$6,910,335; and</u>

WHEREAS, paragraph 6D(3) of said Second Amended Contract states that Stockton East shall annually levy a municipal groundwater assessment, pursuant to its enabling legislation such that the cost of groundwater use is equivalent to the cost of surface water use; and

WHEREAS, the revised 1993-94 budget estimates the amount of \$6,149,471 to be paid from municipal groundwater assessments and base monthly payments as follows:

Municipal Groundwater Assessments (15,000 AF X \$54.54)	\$ 818,100
Base Monthly Payments	5,331,371
Total	<u>\$6,149,471</u>

NOW, THEREFORE, BE IT RESOLVED, that pursuant to said Second Amended Contract, this Board hereby establishes the Revised Base Monthly Payment to be paid by the Contractors pursuant to said Contract for the period April 1, 1993 to March 31, 1994, at \$5,331,371/12 = \$444,280.92.

RULE NO. 143

ADOPTED 4/6/93

RULE FOR RATE EQUALIZATION - CALENDAR YEAR 1993

WHEREAS, the District Act authorizes the Board to adopt rules and regulations as it deems necessary and proper for carrying out the provisions of the Act; and

WHEREAS, paragraph 6D (3) of the Second Amended Contract among SEWD, City of Stockton, County of San Joaquin and California Water Service Company states that "Stockton East shall annually levy a municipal groundwater assessment, pursuant to its enabling legislation such that the cost of groundwater use is equivalent to the cost of surface water use"; and

WHEREAS, SEWD has conducted a survey with the municipal groundwater users to determine the cost of groundwater production;

NOW, THEREFORE, THE BOARD OF DIRECTORS OF STOCKTON EAST WATER DISTRICT HEREBY ENACTS AND ESTABLISHES THE FOLLOWING RULES TO LEVY A GROUND WATER ASSESSMENT TO EQUALIZE THE COST OF GROUNDWATER AND SURFACE WATER FOR 1993:

1. POWER COST - Use actual power costs submitted by owner to accomodate for differences in water depth, pumping efficiency, system pressure, etc. In the absence of actual power costs, the cost of \$50 per acre foot will be assumed.
2. OPERATION AND MAINTENANCE COST - Includes labor, repairs, chemicals, treatment costs and the current \$3.60 assessment. The cost of \$30 per acre foot will be assumed.
3. AMORTIZATION AND DEPRECIATION COST - Includes well and equipment replacement. The cost of \$10 per acre foot will be assumed.
4. FORMULA FOR RATE EQUALIZATION - Surface water costs plus Groundwater costs divided by total M & I water production equals cost per acre foot. The assumed costs and water production for 1993 are as follows:

Ground water	15,000 af X \$90.00 =	\$1,350,000
Surface water	<u>40,000</u> af X \$165.00 =	<u>\$6,599,971</u>
Totals	55,000 af	\$7,949,971

The total cost of \$7,949,971 divided by total use of 55,000 af equals \$144.54 per acre foot. The assumed 1993 additional groundwater assessment is \$144.54 less \$90, or \$54.54.

5. Any municipal groundwater user has the right to appeal the amount of this additional \$54.54 per acre foot rate equalization assessment if it can be demonstrated that actual groundwater production costs are higher than the assumed \$90 per acre foot. The appeal process will begin with the Water Policy Committee of the District Board and if necessary can be appealed to the full Board.
6. Any appeal which is granted shall entitle the appellant to a refund of the amount demonstrated to have been overcollected, less the actual cost to the District of processing the appeal and refund, provided that no overpayment shall be refunded unless the request for appeal has been filed with the Secretary of the District within three years of such overpayment

RESOLUTION 90-91-02

RESOLUTION FINDING NO GROUNDWATER BENEFIT  
AND ASSESSING NO GROUNDWATER ASSESSMENT

WHEREAS, the Stockton East Water District ("District") is engaged in a project to convey water from New Melones Dam and Reservoir, via the Goodwin Dam, to the geographical area of the District in San Joaquin County, for the benefit of the inhabitants of the District, through relief of the critically overdrafted groundwater basin, of the inhabitants of San Joaquin County ("Project"); and

WHEREAS, in pursuit of the common benefit of their inhabitants, District and the County of San Joaquin, a political subdivision of the State of California, have entered into a joint exercise of powers agreement pursuant to California Government Code Section 6500 et seq., and have created the Goodwin Tunnel Financing Authority ("Authority"); and

WHEREAS, the Authority and District are purchasing real property in Stanislaus, Calaveras and San Joaquin County which is required for construction of the Project ("Property"); and

WHEREAS, the Owners of the Property wish to annex to the District in order to obtain water service; and

WHEREAS, the District is required by Section 9.4 of Chapter 819 of the Statutes of 1971, as amended, to annually determine groundwater assessments within the District; and

WHEREAS, the District's special consultant, Woodward-Clyde engineers, has completed seepage estimates for the groundwater basin along the canals and creeks (12/19/89 Study for the Upper Farmington Canal, and 1/30/90 Study for the Lower Canal and Creeks which studies are available for review at the District office and which are incorporated herein by reference) and has concluded that, ". . . the amount of seepage recovered by any pumping well will be small and will be on the order of about 5 gpm"; and

WHEREAS, since agricultural wells within the present boundaries of the District produce approximately 1000 gpm, it is reasonable to find that the owners of the potential 5 gpm wells should not be assessed,

NOW, THEREFORE, be it resolved and it is resolved by the Board of Directors of the District as follows:

1. Based upon the groundwater seepage estimates calculated by Woodward-Clyde, the New Melones/Goodwin Canal and Tunnel Project will not significantly improve groundwater conditions under property in the vicinity of the Upper and Lower Canals, and those portions of Shirley, Hoods, and Rock Creeks to be used to convey Project water.

2. No groundwater assessments will be levied on property within five miles of the Project, including such canals and creeks which may be part of the Project, and which may be annexed to the District.

3. The groundwater assessment will be reevaluated by the District in five (5) years to determine whether or not the Project has provided any actual benefits to the Property.

Adopted this 1st day of May, 1990, by the Board of Directors of the Stockton East Water District at a regular meeting thereof.

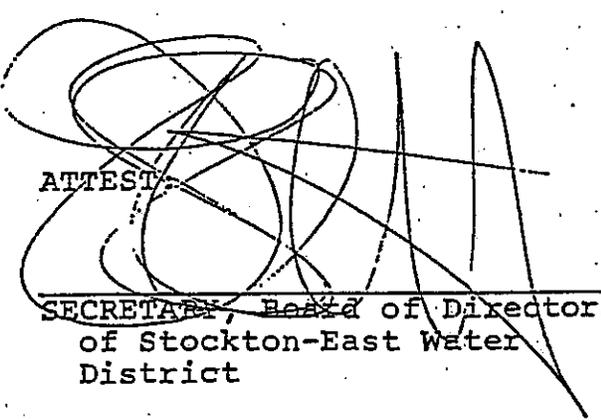
AYES: Dondero, Laven, Bozzano, MacNear, Huckins

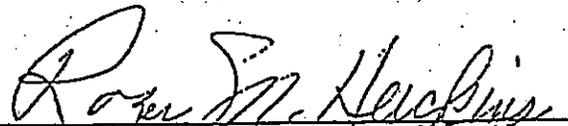
NOES: George, Tone

ABSENT: None

ABSTENTIONS: None

ATTEST:

  
 SECRETARY, Board of Directors  
 of Stockton-East Water  
 District

  
 PRESIDENT, Board of Directors  
 of Stockton-East Water  
 District

RULE 109. WATER RIGHTS CLAIMS.

WHEREAS, the Act authorizes the Board to make such rules and regulations as it deems necessary and proper for carrying out the provisions of the Act; and

WHEREAS, various diverters of surface water from the Calaveras River and its distributaries claim that a portion of the water that is so diverted by them represents natural flow water and is diverted by them under a claim of right; and

WHEREAS, the Board of Directors of this District has recognized that in some instances such claims may have validity when made by surface water diverters from the Calaveras River upstream from the divergence of the Calaveras River and the Mormon Slough, and from the Mormon Slough downstream from said point, to the beginning of the Stockton Diverting Canal; and

WHEREAS, the Board of Directors of this District has had prepared by Murray, Burns & Kienlen, Consulting Civil Engineers, a study of water use and water rights on the Calaveras River which is dated February 7, 1969, which study is hereinafter referred to as "Water Rights Study"; and

WHEREAS, that study sets forth for each surface diverter as of the date of the report a percentage of that diverter's water demand that can be considered to be taken from the natural flow of the river under a valid claim of right;

that such computations are based on the findings of the report that based on the use of water during the year 1965, riparian lands are entitled to 30% of the surface water used on them under a claim of right, "use" (as defined on page 14 of said study) lands are entitled to 16% of the surface water used on them under a claim of right and appropriators are entitled to the percentage of water used on them as set out for each individual appropriator on page 31, Water Rights Study; that the irrigation of riparian land that is not now irrigated will lower the percentages of water that can be used by all classes of land under a valid claim of right and that these decreases in percentages can be calculated from the data contained in the Water Rights Study; and that if there is in the future surface irrigation of land not included in said study the percentage of water that can be used by such land under a valid claim of right, if any, can be calculated from data contained in said study which was adopted by Resolution 68-69-19 of the Board of Directors of this District on February 18, 1969; and

WHEREAS, subsequent to the completion and adoption of the aforementioned Water Rights Study, additional evidence was presented to the Board, at its invitation, showing that in that part of the Calaveras River east of Bellota and west of the San Joaquin-Stanislaus county line, that the riparian entitlement may be somewhat greater than set forth in said Water Rights Study, and that accordingly some landowners in that reach may have a claim to additional rights; and

WHEREAS, this Board considered said evidence and concluded that the riparian entitlement of those landowners east of Bellota and west of the San Joaquin-Stanislaus county line was greater than that contained in the said Study and therefore modified the riparian allowance provided to such landowners under the Study;

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE STOCKTON-EAST WATER DISTRICT HEREBY ENACTS AND ESTABLISHES THE FOLLOWING RULE:

A. (1) All assessments and charges levied for the period subsequent to January 1, 1972 shall contain allowances for the water rights of each surface water diverter from the Calaveras River as shown by the findings of the Water Rights Study, modified as follows:

(a) The entitlement of riparian diverters between the east line of the Escalon-Bellota Road Bridge and the west line of Section 4, Township 2 North, Range 9 East, M.D.B. & M. is 35%;

(b) The entitlement of riparian diverters between the west line of Section 4, Township 2 North, Range 9 East, M.D.B. & M. and the west line of Section 35, Township 3 North, Range 9 East, M.D.B. & M. is 40%;

(c) The entitlement of riparian diverters between the west line of Section 35, Township 3 North, Range 9 East, M.D.B. & M. to the San Joaquin-Stanislaus county line is 45%;

(d) The entitlement of a diverter in the areas described in subparagraphs A(1) (a), (b), and (c), may be increased by resolution of the Board of Directors on a finding based on reasonable evidence in the judgment of the Board of Directors that such diverter is entitled to additional rights, whether prescriptive, riparian, appropriative, or "use", not taken into account in the Water Rights Study.

Any reference hereinafter to said Water Rights Study is to said Water Rights Study as adjudged in the manner set forth in this subparagraph (1) of Paragraph A as to said three areas east of Bellota. Payment made to this District in conformity with these assessments shall be considered payment in full to this District.

(2) Since the percentage allowance assigned to each surface water diverter in the Water Rights Study, Table 7, is based upon water use at the time of said Study, and is subject to correction if there is additional surface water irrigation of riparian land, and since there is land which is potentially surface irrigated that may have valid water rights, that is not included in the Water Rights Study, the Secretary-Manager of this District is authorized and directed to recalculate the percentage of allowance due to each individual surface diverter based on the date contained in the Water Rights Study and changes in the use of surface water along the Calaveras River System and to calculate the percentage of allowance due to diverters of water for use on lands not covered by the Water Rights Study, which such calculations become,

necessary, in the opinion of the Secretary-Manager or when directed to do so by this Board. In the event of such calculation the Secretary-Manager shall recognize the ratios established by the adjustments made in the allowances granted to riparian diverters in the three areas above Bellota.

(3) Any water right allowance granted to a diverter pursuant to this Rule and pursuant to the provisions of earlier Rules adopted by this District may be modified or abolished by a Rule adopted by this District and is granted solely for the purpose of levying a charge for surface water use and is not a determination binding either upon the District or the diverter for any other purpose.

B. Any landowner who has a water rights allowance recognized by this District may take water after October 30th and prior to the following April 1st of any consecutive years without payment and without having such taking applied in satisfaction of such a landowners water right allowance recognized by the District, provided that any such landowner shall provide such report necessary to substantiate the actual time of water use as are satisfactory to the Collector.

C. This rule succeeds former Rules 10, 15, 21, 23, and 26 of this District, and any question or dispute between an owner and the District over charges or assessments made prior to the effective date of this Rule shall be governed by the appropriate former Rule to the extent that it would have applied prior to the adoption of this Rule.

CHAPTER 819

*An act to repeal Chapter 1775 of the Statutes of 1963, to change the name of the Stockton and East San Joaquin Water Conservation District to the Stockton-East Water District, and to grant certain powers to such district, relating to water conservation and water supply, and declaring the urgency thereof, to take effect immediately.*

[Approved by Governor September 29, 1971. Filed with Secretary of State September 29, 1971.]

CHAPTER 553

An act to amend Section 4 of, and to add Section 21.5 to, Chapter 819 of the Statutes of 1971, relating to the Stockton-East Water District.

[Approved by Governor September 5, 1975. Filed with Secretary of State September 6, 1975.]

CHAPTER 1126

(Senate Bill No. 1120)

An act to repeal and add Sections 4 and 9 of, and to add Sections 9.2, 9.3 and 9.4 to, Chapter 819 of the Statutes of 1971, relating to the Stockton-East Water District, and declaring the urgency thereof, to take effect immediately.

[Approved by Governor September 27, 1979. Filed with Secretary of State September 28, 1979.]

CHAPTER 1287

SENATE BILL NO. 1440

An act to amend Sections 4247, 4402, 5019, 5020, and 5021 of the Education Code, to amend Sections 75, 318, 512, 1007, 1017, 1340, 1508.5, 1515, 3520, 3521, 4011, 4055, 5353, 6460, 10211, 14213, and 35006 of, to repeal Section 6509 of, and to repeal and add Section 14000 of, the Elections Code, to amend Sections 24001 and 31105.2 of the Government Code, and to amend Section 34 of Chapter 819 of the Statutes of 1971, relating to elections, and declaring the urgency thereof, to take effect immediately.

*The people of the State of California do enact as follows:*

SECTION 1. Chapter 1775 of the Statutes of 1953 is repealed.

SEC. 2. (a) The name of the Stockton and East San Joaquin Water Conservation District is changed to the Stockton-East Water District.

(b) In all respects not inconsistent with this act, the Stockton-East Water District shall continue to be organized under, and governed by, the Water Conservation District Law of 1931, Division 21 (commencing with Section 74000) of the Water Code as the same now exists and as it may be amended hereafter. The provisions of Division 21 (commencing with Section 74000) of the Water Code and all other acts of the Legislature applicable to the district and not inconsistent with the provisions of this act shall remain in full force and effect and shall be fully applicable to the district.

(c) In all cases in which it may be otherwise required that the district be described as a "water conservation district" it shall be sufficient to describe the district as a "water district."

SEC. 3. (a) The Legislature finds and declares that the problems of providing for the management of the underground water basin and the provision of supplemental water supplies, in the area of the Stockton-East Water District are peculiar to that district and that area and for that reason it is necessary to deal specially with such area and to provide special provisions for the government and operation of that district.

(b) The Legislature further finds and declares that this act is necessary to the solution of a problem arising out of the following unique and special circumstances: The water supplies in the underground basin in the area of the Stockton-East Water District are insufficient to meet the water demands of the area, and, because of the geologic conditions peculiar to the area and because excessive

pumping has seriously depleted the underground water storage, there has been an intrusion of saline waters into the underground water basin causing serious water quality deterioration and the destruction of the usefulness of a portion of the underground water basin. Further excessive pumping, without proper management of the underground water basin and the provision of supplemental water supplies, is certain to destroy the usefulness of a major portion of the underground water basin and endanger the health and welfare of the district:

(c) The Legislature further finds and declares that the district includes within its territory a large urban area, a large agricultural area, and territory formerly within an irrigation district, and that for these reasons it is necessary in order to accommodate the various interests within the district to provide special procedures to be observed by the district in its government and operation.

(d) The Legislature further finds and declares that only a portion of the City of Stockton and only a portion of the Metropolitan Stockton Planning Area as defined by the City of Stockton and the County of San Joaquin are within the district, and that unless all of such city and all of the Metropolitan Stockton Planning Area are within the district there will be uneconomic duplications and inefficiencies and it will be both more costly and more difficult to solve the grave and urgent water problems of the Stockton Metropolitan Area and the existing Stockton-East Water District. The Legislature further finds and declares that the territory that is outside the district but within the Metropolitan Stockton Planning Area includes territory that is within the City of Stockton, within county maintenance districts, within other water conservation districts, and within an irrigation district. The Legislature further finds and declares that the special problems of including all of the City of Stockton and the Metropolitan Stockton Planning Area within the Stockton-East Water District are peculiar to that district and that area, and for that reason it is necessary to deal specially with such inclusion and to provide special provisions and procedures for such inclusion and the necessary adjustment of district boundaries.

- Sec. 4. (a) The definition of a word applies to any of its variants.
- (b) The following words and phrases shall have the following meanings:
- (1) "Accumulated overdraft" means the aggregate amount by which the quantity of ground water removed from the ground water supplies within the district during all preceding water years shall have exceeded the quantity of water replaced therein by the replenishment of the ground water supplies in such water years by any natural or artificial means, based upon reports, records, and other data or evidence appropriate for the purpose of making such determination.
  - (2) "Administration division" means the budgeting and accounting division established by Section 9 which is primarily concerned with administration of the district and with obtaining and making available to the other divisions a supply of water.
  - (3) "Advisory commission" means the California District Securities Advisory Commission.
  - (4) "Agricultural division" means the budgeting and accounting division established by Section 9 which is primarily concerned with the supply of water for agricultural purposes.
  - (5) "Agricultural water" and "water used for agricultural purposes" shall mean water used primarily in the commercial production of agricultural crops or livestock on parcels of land of more than two acres and shall not include water used for agricultural product-processing purposes.
  - (6) "Annual overdraft" means the amount by which the production of water from the ground water supplies within the district during the water year exceeds the natural replenishment of such ground water supplies in such year.
  - (7) "Assessor" means the assessor of the county.
  - (8) "Auditor" means the auditor of the county.
  - (9) "Benefit review procedure" means the procedure set forth in subdivisions (g) through (i) of Section 28.
  - (10) "Board" means the board of directors of the Stockton-East Water District.
  - (11) "Board of supervisors" means the board of supervisors of the county.
  - (12) "Collector" means the person appointed by the board to determine and collect the accounts due the district prior to their transfer to the auditor, as set forth in this act. The collector shall be appointed by the board and hold office at the pleasure of the board. The collector may hold other offices, including, but not limited to, the office of secretary, or may perform other duties for the district but shall not be a member of the board.
  - (13) "Committee" means a group of directors of the district consisting of three directors, one of whom shall be appointed chairperson by the president of the board, together with an alternate member, which shall study particular areas and recommend policy to the full board. The members and alternate member shall be appointed by the president of the board. There shall be the Agricultural Operations Committee and the Municipal Operations Committee, and there may be such other committees as may be established by the board.
  - (14) "County" means the County of San Joaquin.
  - (15) "Delinquent account" means any sum or sums due the district from an owner as disclosed by an annual bill presented by the collector pursuant to Section 13 which is not paid within the times set forth in Section 15, together with all penalties applicable to such sum or sums pursuant to this act.
  - (16) "Delinquent landowner" means the owner or owners of a parcel of land upon which one or more delinquent water-producing facilities are located as such ownership is disclosed by the last equalized assessment roll of the county.

- (17) "Delinquent parcel" means a parcel of land upon which one or more delinquent water-producing facilities are located.
- (18) "Delinquent water-producing facility" means a water-producing facility for which payment is required by this act and for which payment in full has not been received by the district within the times set forth in Section 15.
- (19) "Director" means a member of the board.
- (20) "District" means the Stockton-East Water District.
- (21) "Division" means a division of the district established pursuant to the Water Conservation District Law of 1931, Division 21 (commencing with Section 74000) of the Water Code.
- (22) "Domestic ground water" means water produced from the underground on any parcel of two acres or less where the water is used and disposed of on that parcel, and also means water produced from the underground and used for residential or commercial purposes on agricultural parcels larger than two acres.
- (23) "Dry year" means any year in which the board determines that there may be insufficient quantities of surface water to meet the needs of users who are dependent upon surface water sources.
- (24) "Full tax area" means any area within a planning area which has been excluded from the partial tax area in the manner provided in subdivision (b) of Section 27.
- (25) "Ground water" means potable water beneath the surface of the ground suitable for municipal, domestic and irrigation use.
- (26) "Municipal division" means the budgeting and accounting division established by Section 9 which is primarily concerned with the supply of water for municipal and industrial purposes.
- (27) "Municipal ground water" means water produced from the underground other than domestic ground water or agricultural ground water.
- (28) "Owner" means the person or persons owning any water-producing facility or any interest therein other than a lien to secure the payment of a debt or other obligation. Unless there is filed with the district by an owner, information to the contrary, the district may presume that the owner of the parcel of land on which a water-producing facility is located is the owner of the water-producing facility.
- (29) "Partial tax area" means all areas of the district which pursuant to the terms of subdivision (a) of Section 27 are not required to pay the taxes, assessments, and charges specified in subdivision (a) of Section 27.
- (30) "Person" means any public agency or public corporation, whether federal, state, or local, or any private corporation, firm, partnership, individual, or group of individuals.
- (31) "Planning area" means any one of the planning areas mentioned in subdivision (a) of Section 24 or in Section 35.
- (32) "Prior act" means Chapter 1775 of the Statutes of 1963, as amended.
- (33) "Production" or "producing" means the diversion or taking of stream-delivered water or the extraction or extracting of ground water, by any means, for domestic, municipal, irrigation, industrial, or other beneficial use.
- (34) "Revenue sources" means those sources of expected revenue which shall be used to establish a budget, respectively, for each of the administration, agricultural, and municipal divisions. These revenue sources for each division are as follows:
- (i) Administration division: General property taxes, other general revenue sources which may be provided by state law, payments from other divisions, or other sources of revenue which may be established in the future by law or by rule of the board.
  - (ii) Agricultural division: Stream-delivered water charges, domestic ground water

assessments, agricultural ground water assessments, penalties collected on such charges and assessments, and other sources of revenue which may be established in the future by law or by rule of the board.

(iii) Municipal division: Contract sales of treated surface water, contract sales of ground water, municipal ground water assessments, penalties collected on such sales and assessments, and other sources of revenue which may be established in the future by law or by rule of the board.

(35) "Stream-delivered water" means surface water used for agricultural purposes and taken by an owner's water-producing facility directly from the Stockton Diverting Canal, the Calaveras River, the Old Calaveras River, Mosher Creek, Mormon Slough, Potter Creek, or any other watercourse within the district except those portions of any of the foregoing watercourses which are located within the boundaries of the Sacramento-San Joaquin Delta, as such boundaries are presently defined by Section 12220 of the California Water Code.

(36) "Tax collector" means the tax collector of the county.

(37) "Treasurer" means the treasurer of the county.

(38) "Water-producing facility" means any device or method, mechanical or otherwise, for the production of ground water from the ground water supplies within the district, or for the diversion of stream-delivered water.

SEC. 5. In addition and supplemental to the powers conferred upon the district by the Water Conservation District Law of 1931, Division 21 (commencing with Section 74000) of the Water Code, and by all other laws applicable to the district, the district shall have power:

(a) To acquire, control, distribute, store, spread, sink, treat, purify, reclaim, recapture, process, and salvage any water, including sewage and storm waters for the beneficial use or uses of the district, its inhabitants, or the owners of the rights to water in the district.

(b) To sell treated and untreated water under its control to any municipal corporation, political subdivision of the State of California, public utility, or other person at such charges and rates as shall be set by the board by contract, agreement, rule, or otherwise, for use within the district.

(c) Subject to the requirements of Section 6, to sell treated and untreated water under its control to any municipal corporation, political subdivision of the State of California, public utility, or other person for use outside the district.

(d) Within or outside the district to construct, purchase, lease, or otherwise acquire, and to operate and maintain, waterworks, water treatment plants, spreading grounds, pipelines, conduits, canals and other facilities for the distribution of water, pumps and other facilities for the production of water, dams, weirs, reservoirs, and other facilities, installations, works, equipment, and machinery useful or necessary to replenish the underground water basin within the district, to manage, for the purpose of repelling saline intrusion, the underground water basin within the district for the common benefit of the district, to augment the common water supplies of the district, or to otherwise provide water for the beneficial use or uses of the district, its inhabitants, or the owners of rights to water in the district.

(e) For the common benefit of the district to store water in underground water basins or surface reservoirs within or outside the district, to appropriate and acquire water or water rights within or outside the district, to purchase or import water into the district, and to conserve water within or outside the district.

(f) Subject to the provisions of Sections 9 to 19, inclusive, to levy and collect a ground water assessment for the production of water from the ground water supplies within the district, and to fix and collect charges for stream-delivered water and to require such measuring devices as may be necessary for the purposes of this act and to inspect and test any such measuring devices whether installed by the district or by others.

(g) To maintain reserve funds in amounts deemed advisable by the board for the purpose of water for

replenishment purposes, the stream delivery of agricultural surface water, or for other district purposes.

(h) To acquire real and personal property and interests therein, but the district shall not exercise the power of eminent domain for any purpose of this act or in carrying out any power granted by this act outside the boundaries of the district unless the board of supervisors of the county in which the property to be acquired is located has consented to such acquisition.

SEC. 6. (a) The district may sell treated and untreated water under its control for use outside of the district only pursuant to a written agreement made as provided in this section.

(b) The district may make an agreement to sell water for use outside the district for periods not in excess of one year where the board prior to the district's agreement to sell such water has found and declared by resolution that such water is not required for use within the district during the period, not to exceed one year, for which the agreement is to be made. The board's resolution shall be adopted no earlier than three months preceding the commencement of the period for which the agreement is to be made. The price charged for water sold pursuant to an agreement made pursuant to this subdivision shall be sufficient to at least cover the costs of the district, as determined by the board, in furnishing and delivering the subject water to its point of delivery.

(c) The district may make agreements to sell water for use outside the district for periods in excess of one year if the board prior to the district's agreement to sell water has by resolution found and declared that the subject water will not be required for use within the district for the period for which the agreement is made and declares that the sale of the water and its use in the manner provided in the applicable agreement is for the direct and substantial furtherance of the purposes of the district. The charge for water sold pursuant to an agreement made pursuant to this subdivision shall at least be sufficient to cover the costs of the district, as determined by the board, in furnishing and delivering such water to its point of delivery, plus the equivalent of all applicable ad valorem property taxes that would be assessed by district on the property upon which such water is to be used, or in the case of a sale to a political subdivision, municipal corporation, public utility, or other operator of a common water distribution system on all of the property served by such common water distribution system, if the subject property were included within the district during the period covered by the agreement.

(d) The district may make agreements to sell water that would not be otherwise owned or possessed by the district

that comes into the district's possession due to provisions of a contract with another political subdivision that operate when such other political-subdivision fails to pay for such water or the costs related to such water, on any basis the board determines if the board makes the determination that such water is not needed for sale within the district for the period of the agreement.

SEC. 7. -The board shall, from time to time, order an investigation and report to be made by an engineer or engineers employed by the district for the purpose of investigating and reporting upon the ground water conditions of the district and making recommendations as to water management practices to be followed by the district. The report shall include an estimate as to the accumulated overdraft, if any, as of the date of the report, estimates of the ground water production anticipated by years for the period covered by the report, and an estimate of the average annual overdraft, if any, for the period covered by the report. The report shall also include recommendations as to necessary and desirable surface and underground water management practices to be followed during the period covered by the report.

SEC. 8. The engineering investigation and report shall be delivered to the secretary in writing. The secretary shall publish pursuant to Section 6061 of the Government Code a notice of the receipt of such report and fixing a date for a public hearing to be held by the board, the publication to be in a newspaper of general circulation, printed and published within the district, at least 10 days prior to the date at which the public hearing is to be held. The notice, among other information which the district may include, shall contain an invitation to all owners of water-producing facilities within the district and all other interested parties to call at the office of the district to examine the engineering investigation and report.

Sec. 9. (a) There are hereby established within the district, budgeting and accounting divisions as follows: administration, agricultural, and municipal. Each such budgeting and accounting division shall have established a separate budget, and separate accounts shall be kept of the revenues and expenditures for each division.

(b) Notwithstanding the establishment of such divisions, the board shall have authority to approve temporary transfers between divisions on such terms, and with such repayment provisions, as may be approved by the board.

Sec. 9.2. (a) The board at a regular, special, or continued meeting between November 1st and December 15th of each year shall hold a public hearing to consider the budget for each of the administration, agricultural and municipal divisions, and an overall budget for the district, for the next calendar year.

(b) Notice of the hearing shall be published pursuant to Section 6061 of the Government Code at least 10 days prior to the date of the hearing. Any person interested in the district may, in person or by representative, appear and submit evidence concerning the water conditions of the district, the financial needs of the district, proposals for rates, and other relevant matters.

(c) The board shall at the hearing receive recommendations from the Agricultural Operations Committee as to the budget to be established for the agricultural division, and from the Municipal Operations Committee as to the budget to be established for the municipal division. Each of such committees shall also make recommendations to the board as to the budget of the administration division.

(d) Following the budget hearing by the full board, the board shall adopt by resolution prior to December 15 of each year, a budget for the administration division, for the agricultural division, for the municipal division and for the district overall.

Sec. 9.3. The rates to be established pursuant to Section 9.4 shall equitably divide the cost of meeting a balanced agricultural division budget among the sources of revenue for the agricultural division, but in a manner which will encourage the use of surface water available for agricultural use within the district.

Sec. 9.4. (a) The board at a regular, special, or continued meeting between March 15 and April 15 of each year shall hold a public hearing to consider the necessity, amount, and rates of a municipal ground water assessment, an agricultural ground water assessment, and a domestic ground water assessment, if any, to be levied for the then current calendar year and charges to be made for stream-delivered water to the extent that such charges for stream-delivered water are not controlled by contract or agreement.

(b) Notice of the hearing shall be published pursuant to Section 6061 of the Government Code at least 10 days prior to the date of the hearing. Any person interested in the district may, in person or by representative, appear and submit evidence concerning the water conditions of the district, the financial needs of the district, proposals for rates, and other relevant matters.

(c) Following the hearing, and prior to April 15 of that year, the board may, by adoption of an ordinance, determine, levy, and assess a municipal ground water assessment against all owners of water-producing facilities within the district which produce municipal ground water during the current year and an agricultural ground water assessment against all owners of water-producing facilities within the district which produce water from the ground during the current year for agricultural purposes and a domestic ground water assessment against all owners of water-producing facilities within the district which produce domestic ground water and shall determine and fix charges for stream-delivered water for the current year to the extent that such charges for stream-delivered water are not governed by contract or agreement.

(d) The method of computing ground water assessments and charges for stream-delivered water may be uniform for all water-producing facilities or may be uniform for each of several classes of water-producing facilities. The board shall, by rule, establish one or more methods to be used in computing the amount of water production from a water-producing facility which is not measured by a water-measuring device approved by the collector. Such methods shall be established by rule adopted by the board and may be based on any criteria which may be used to determine or estimate with reasonable accuracy the amount of water production.

(e) The board, by rule, may waive any assessment upon any class or classes of water-producing facilities which it determines because of the small amount of water produced by such facilities, would yield to the district a sum less than the estimated cost of making and collecting the assessment.

(f) Any ground water assessment or charges for stream-delivered water levied or made pursuant to this section shall be in addition to any general assessment levied by the district.

(g) Clerical errors in the name of any owner or in other recorded information, or in the making or extension of any assessment upon the records which do not affect the substantial rights of the subject owner or owners shall not invalidate the assessment.

(h) The procedure established by Sections 9 to 9.4, inclusive, shall not be applicable for calendar year 1979. The rates for calendar year 1979 only are established as follows:

(1) The domestic ground water assessment shall be ten dollars (\$10) per domestic use unit, as such unit is established by the board.

(2) The rate for sales of stream-delivered water shall be seven dollars and sixty cents (\$7.60) per acre-foot of water.

(3) The agricultural ground water assessment rate shall be one dollar and sixteen cents (\$1.16) per acre-foot of water.

(4) The municipal ground water assessment rate shall be set at three dollars (\$3) per acre-foot of water.

It is not the intent of the Legislature that the rates set for 1979 shall serve as precedent for future rates.

(i) For calendar year 1980 and thereafter, water rates shall be established in accordance with Sections 9 to 9.4 except that no rate may be established in any calendar year which exceeds the individual rates set in paragraph (1), (2), or (3) of subdivision (h) by 20 percent plus a factor to reflect the percentage increase in the federal consumer price index with calendar year 1979 as a base; provided, however, that this subdivision (i) shall not be effective from and after the date of any election in which a majority of those electors voting approve a contract by the district for new supplemental water or approve bonds for financing a distribution system for new supplemental water.

(j) During calendar year 1980 and thereafter, water rates shall be established by ordinance following public notice. Such ordinances shall be subject to referendum; provided, however, that no referendum shall modify or affect the terms of any bond resolution issuing bonds approved by the voters.

SEC. 10. All assessments and charges due for water produced within the district during the 1971 calendar year and for water produced within the district prior to 1971 shall be assessed, charged, calculated, determined, billed, and collected pursuant to the prior act and all applicable rules duly adopted by the board, and for those purposes the prior act shall remain in effect until such sums have been collected in full or otherwise discharged in the manner provided by the prior act and the applicable rules duly adopted by the board.

SEC. 11. (a) Commencing with 1972, not later than the first day of October of each year the collector shall mail progress bills to each owner of one or more water-producing facilities within the district. The progress bills shall state an amount due which shall be computed by multiplying one-half of each owner's water production for the preceding calendar year in acre-feet by the respective ground water assessment rates and the stream-delivered water charges applicable for the current year.

(b) Any progress bill may be reduced in amount or canceled by the collector, if upon good cause shown, the collector determines that the production of water from the water-producing facility or facilities of the owner during the current year, to the date of the collector's determination, is such that a progress payment based on one-half of the preceding year's water production will be substantially in excess of one-half of such owner's next succeeding annual bill as the same will ultimately be determined pursuant to Sections 12, 13, and 14.

(c) The board may, by rule, establish alternate procedures for the computation and payment of progress bills in the case of water-producing facilities within the district, the water production of which is measured by a water-measuring device approved by the collector.

(d) Should any owner of a water-producing facility fail to pay on or before the 31st day of October, or any alternate date specified in a rule adopted pursuant to subdivision (c) of this section, the amount disclosed by a progress bill the district shall impose a penalty against such owner in an amount of 5 percent of the total sum due the district for the current calendar year as such sum is finally determined in accordance with Sections 12, 13, and 14. The 5-percent penalty shall be added to the annual bill and shall be due and payable at the same time as the other amounts included in the annual bill.

(e) The board may, by rule, waive the requirement of making a progress payment as required by this section as to any one or more classes of water-producing facilities.

SEC. 12. (a) Commencing with 1973, each owner of one or more water-producing facilities within the district shall,

after January 1st and not later than January 15th, file with the collector on a form acceptable to the collector a water use statement showing the amount of water produced by the water-producing facility or facilities of such owner in the case of facilities the water production of which is measured by a water-measuring device approved by the collector and as to all other facilities the information the collector determines to be reasonably necessary to permit the determination, or estimation with reasonable accuracy, of the amount of water produced during the preceding calendar year by the subject water-producing facility or facilities. The collector may require that all statements of fact in the water use statement be verified by a written declaration that they are made under the penalties of perjury.

(b) The board, by rule, may waive the filing of water use statements as to any one or more classes of water-producing facilities.

SEC. 13. (a) Commencing with 1973, not later than the last day of February, the collector shall mail an annual bill for the preceding calendar year to each owner of one or more water-producing facilities within the district.

(b) The collector in preparing the annual bill for submission to each owner of water-producing facilities shall consider the information disclosed by the annual water use statement if one has been filed, the information disclosed by existing district records, district inspections, if any, of the water-producing facilities or the area served by such water-producing facilities, and any other information, of which the collector is aware and which is relevant to the amount of water production by each of the owner's water-producing facilities and shall determine the amount of each owner's water production.

(c) In all cases where an annual water use statement has been filed and where a water-measuring device approved by the collector is permanently attached to a water-producing facility and the water production has been reported on the basis of the approved water-measuring device, the record of water production as disclosed by such water-measuring device shall be presumed to be accurate and the burden is upon the collector to establish to the contrary.

(d) The amount of the annual bill shall be computed by multiplying the production in acre feet of water as determined by the collector by the respective ground water assessment rates and stream-delivered water charges. After determining the amount due the collector shall add the penalty provided in Section 11, if applicable, and shall also add a penalty of 5 percent of the total sum due the district for water produced during the preceding year by any water-producing facility for which an annual water use

statement was required and not filed within the time specified in Section 12.

(e) Upon the discovery by the collector of any water-producing facility within the district:

(1) For which no water use statement has been filed for any year in which the same was required by virtue of Section 12 and any applicable rules of the district and for which no annual bill was submitted pursuant to this section; or

(2) For which a water use statement was filed as required but for which the collector has good cause to believe that the production of water from such water-producing facility was in excess of that disclosed by a filed water use statement; or

(3) For which no water use statement was required to be filed by virtue of Section 12 and the applicable rules of the district but for which no annual bill has been submitted by the collector pursuant to this section;

the collector shall immediately investigate and estimate the amount of unreported or unbilled water production by such water-producing facility. In making such estimate, as to cases arising under subparagraph (3) above, the estimate of prior water production shall not include water production for more than three (3) preceding calendar years.

(f) After making an estimate of water production pursuant to subdivision (e) of this section, the collector shall calculate the amount due for ground water assessments and stream-delivered water charges during the subject years at the rates applicable during those years, and add the amount so calculated as a separate item to the next annual bill submitted to the owner of such water-producing facility together with the penalties, if any, applicable pursuant to subdivision (d) of Section 11 and subdivision (d) of this section.

(g) After computing the amount of the annual bill the collector shall allow as a credit against the amount due, and show such allowance on the annual bill, the sums paid for the subject water-producing facilities as a result of the applicable progress bill or bills for the subject year.

SEC. 14. (a) An annual bill shall be conclusive on all persons having an interest in the subject water-producing facilities unless the owner files with the secretary on or before March 15th a written objection on forms made available by the district setting forth the owner's ground or grounds for objecting to the amount of current or prior, if any, production and the assessments, charges, and penalties so fixed.

(b) Upon the filing of an objection the secretary shall schedule a hearing on the objection before the board at which time the total amount of the water production and the ground

water assessment and stream-delivered water charges thereon shall be determined together with any applicable penalties, which determinations by the board shall be conclusive if based upon substantial evidence.

(c) A notice of such hearing before the board shall be mailed to the objector at least 10 days before the date fixed for the hearing unless the form furnished by the district for the filing of the objection specifies the date, time, and place for the hearing.

(d) Notice of the final determination by the board as to his objection shall be mailed to each objector by the secretary.

SEC. 15. (a) All annual bills presented by the collector pursuant to Section 13 shall be due when mailed by the collector and shall be delinquent after April 30th with the exception of any bill as to which an objection has been filed pursuant to Section 14.

(b) Annual bills, as to which an objection is filed, shall become delinquent not later than April 30th, or 20 days from the date of mailing by the secretary to the owner a notice of the final determination by the board as to his objection, whichever is later.

SEC. 16. Any annual bill not paid when delinquent shall be subject, on the date of its delinquency, to a further penalty of 5 percent of the amount of the ground water assessment and stream-delivered water charges set forth in the annual bill.

SEC. 17. (a) Upon the delinquency of all or any portion of an annual bill the collector shall transmit to the secretary the amount of the delinquent account, together with the name of the delinquent landowner and the current description of the delinquent parcel as such is then disclosed by the applicable records of the assessor. The description provided for in this section shall be the description or other designation currently used by the assessor and shall include the tax account number and the code area of the delinquent parcel.

(b) The secretary shall maintain a list of delinquent accounts as furnished to him by the collector. If prior to the transmission of the list of delinquent accounts to the auditor pursuant to subdivision (d) of this section, all or any portion of a delinquent account is collected by the collector, the collector shall report such payment to the secretary and the secretary shall reflect such payment in his list of delinquent accounts.

(c) Annually as of August 1st the secretary shall add to each delinquent account then on the list of delinquent accounts a penalty of 5 percent of the sum of the ground water assessments and stream-delivered water charges included in each delinquent account.

(d) Annually after August 1st and on or before August 10th

the secretary shall transmit a certified copy of his current list of delinquent accounts to the auditor. The list of delinquent accounts may combine all assessments, charges, and penalties into a single sum due for each delinquent account.

(e) Upon receipt of the certified copy of the list of delinquent accounts, the auditor shall enter the amount of each delinquent account against the delinquent parcel designated in the list of delinquent accounts as such parcel appears on the then current assessment roll.

(f) The tax collector shall then include the amount of each delinquent account on bills for county taxes levied against the delinquent parcel.

(g) Thereafter the amount of each delinquent account shall be collected at the same time and in the same manner as county taxes are collected, and are subject to the same penalties and the same procedure and sale in case of delinquency, as provided for ordinary county taxes.

(h) Upon collection of delinquent accounts, within a reasonable time the auditor shall deposit the sums so collected to the account of the district, but the auditor may deduct, from time to time, an amount not to exceed one-quarter of 1 percent of the sums collected pursuant to this section to defray the costs of the county in processing such accounts.

(i) All laws applicable to the levy, collection, and enforcement of county taxes are applicable to such delinquent accounts so transmitted to the auditor pursuant to this section.

(j) All or any portion of any such delinquent accounts shall on order of the board of supervisors be canceled by the auditor if uncollected, or except in the case provided for in paragraph (5) of this subdivision, refunded by the treasurer out of district funds, if collected, if it or they were entered, charged, or paid:

- (1) More than once;
- (2) Through clerical error;
- (3) Through the error or mistake of the collector, secretary, or board in respect to any material fact, in the course of establishing the amount of the assessments, charges, and penalties due upon said delinquent account under this act;
- (4) Illegally; or
- (5) On property acquired after the lien date by the State of California or by any county, city, school district, or other political subdivision of the State of California and because of such public ownership not subject to sale for delinquent taxes.

(k) No order for a refund under the subdivision (j) shall be made except on a claim:

- (1) Verified by the person who paid said delinquent account and penalties or his guardian, conservator,

executor, or administrator; and

(2) Filed within three years after making the payment sought to be refunded.

The provisions of this subdivision do not apply to cancellation.

(1) The provisions of this Section 17 shall not be applicable to a delinquent parcel owned by the State of California or by any county, city, school district or other political subdivision of the State of California.

SEC. 18. The owner of any parcel of land within the district, two acres or more in size, on which no water is produced during any calendar year shall file an annual report stating that no water was produced on the property during the subject calendar year. The annual report shall be filed annually on or before January 15th of each year for the immediately preceding calendar year.

SEC. 19. The board shall establish rules providing for the making of refunds in the event of the overpayment of any ground water assessment or stream-delivered water charges. Such rules shall provide that no overpayment shall be refunded unless a request for refund is filed with the secretary within three years of such overpayment. Such rules may provide for the payment of a fee to cover all or a portion of the district's costs in processing a request for refund.

SEC. 20. The district may bring a suit in any court of competent jurisdiction against any person or persons indebted to the district for the collection of any delinquent sums due the district for any ground water assessment, stream-delivered water charge, penalties, or charges due for any sale or use of water by contract, or otherwise. Should the district, as a provisional remedy in bringing suit, seek an attachment against any property of any named defendant therein, the district shall not be required to provide a bond or undertaking as is otherwise provided in Chapter 4 (commencing with Section 537) of Title 7 of Part 2 of the Code of Civil Procedure. All procedures and remedies applicable to the processing, collection, and enforcement of delinquent accounts and penalties granted to the district by this act or otherwise are alternative and the utilization of one such procedure shall not bar the use of another.

SEC. 21. Any person who injures, alters, removes, resets, adjusts, manipulates, obstructs or in any manner interferes or tampers with or procures or causes or directs any person to injure, alter, remove, reset, adjust, manipulate, obstruct or in any manner interfere or tamper with any water-measuring device affixed to any water producing facility as required by this act, so as to cause such water-measuring device to improperly or inaccurately measure and record such water production, is guilty of a misdemeanor and is punishable by a fine not to exceed five hundred dollars (\$500) or imprisonment in the county jail not to exceed six months, or by both such fine and imprisonment.

Sec. 21.5. The board is authorized to establish a reserve fund financed by the transfer of up to ten cents (\$0.10) for each acre-foot of water to which the ground water assessment rate or the stream-delivered surface water charges levied pursuant to subdivision (a) of Section 9, in addition to ten cents (\$0.10) for each acre-foot of treated water sold by the district under either an existing or future water service contract executed pursuant to Section 6. Such amounts transferred into a reserve fund created pursuant to this section shall be a part of, and not in addition to, the above-referenced ground water assessment rates, stream-delivered surface water charges, and contract prices. The reserve fund established under the authority of this section shall be a limited-purpose reserve fund. Expenditures out of such fund shall only be made for the purpose of constructing, leasing or purchasing, maintaining, and operating ground water pumping facilities capable of delivering ground water into then existing district watercourses, water supply, or distribution facilities for the purpose of insuring the availability, to the extent possible, of a full supply of water to all users during dry years.

SEC. 22. The board is authorized to adopt the rules it deems necessary and proper for carrying out the provisions of this act, including but not limited to, rules providing that the district shall not deliver or make available water to water users who fail to pay for water when required by statute, contract, or rule.

SEC. 23. No rules shall be adopted by the board without first reviewing such at a public hearing held by the board. Notice of the public hearing shall be published pursuant to Section 6061 of the Government Code at least 10 days prior to the date of such a hearing and the notice shall contain a brief description of any rule to be considered at the hearing.

SEC. 24. (a) There is hereby included within the Stockton-East Water District the following territories:

(1) The North Stockton Planning Area which shall include the following territory:

Beginning at a point on the Stockton and East San Joaquin Water Conservation District boundary, said point being on the intersection of the north line of Township Two (2) North and the centerline of State Highway 99, said Stockton and East San Joaquin Water Conservation District boundary being described in notice of election for the organization of the Stockton and East San Joaquin Water Conservation District, said election being held on June 1, 1948; thence southerly 3.5 miles, more or less, along said District boundary and along said centerline of State Highway 99 to intersection with the centerline of the Calaveras River; thence westerly six (6) miles, more or less, along said District boundary and said centerline of the Calaveras River downstream to intersection with the centerline of the Stockton Deep Water Channel; thence leaving said District boundary northwesterly one (1) mile, more or less, along said centerline of the Stockton Deep Water Channel to centerline Station 286+00, said Station 286+00 bearing southwesterly 375 feet at right angles to said centerline from U.S.E.D., B.M. 4008; thence northeasterly at right angle to said centerline 300 feet, more or less, to a point on the southerly boundary of the Elmwood Tract; thence easterly and northerly along the southerly and easterly boundary of said Elmwood Tract 1.9 miles, more or less, to the point of intersection of said easterly boundary with the southerly levee of Fourteen Mile Slough (formerly called Twelve Mile Slough); thence North 500 feet, more or less, to the Stockton City Limits Line, said City Limits Line being along the centerline of said Fourteen Mile Slough; thence westerly, northwesterly, and northeasterly 0.6 mile, more or less, along said City Limits Line and said centerline of Fourteen Mile Slough to a point on the west line of Section

19, Township 2 North, Range 6 East, Mount Diablo Base and Meridian; thence northerly 0.5 mile, more or less, along said west line of Section 19 and said City Limits Line to the southeasterly corner of Mitchell Slough-Wright Tract Annexation—A-7-67; thence along the City Limits Lines established by Annexation—A-7-67 and by Wright Tract Annexation—A-1-62 the following eight (8) courses, (1) South  $57^{\circ} 47' 30''$  West 150 feet, more or less, to a point, said point being on the water toe of levee of said Fourteen Mile Slough, (2) South  $57^{\circ} 47' 30''$  West 949.75 feet, (3) South  $58^{\circ} 35' 30''$  West 1011.25 feet to a point on the centerline of an existing drainage ditch, (4) Northerly along said drainage ditch centerline to intersection with centerline of a 75 foot wide Pacific Gas & Electric Company easement, as described in deed recorded in Book of Official Records, Volume 2076, Page 470, San Joaquin County Records, (5) continuing Northerly along said drainage ditch centerline to a point on the water toe of the south levee of said Fourteen Mile Slough, (6) meandering easterly along said water toe of the south levee to intersection with centerline of said 75 foot wide Pacific Gas & Electric Company easement, (7) continue meandering easterly along said water toe of said south levee to a point bearing South  $45^{\circ} 00'$  West from the northwest corner of said Section 19, and (8) North  $45^{\circ} 00'$  East to said northwest corner of Section 19; thence easterly 1900 feet, more or less, along the north line of said Section 19 and along Stockton City Limits Line to the southeast corner of the Shima Tract; thence leaving said City Limits Line Northerly 6600 feet, more or less, along the easterly boundary of said Shima Tract to a corner thereof; thence westerly 1500 feet, more or less, along the northerly boundary of said Shima Tract to the southeast corner of the Atlas Tract; thence northerly 3800 feet, more or less, along the easterly boundary of said Atlas Tract to the southwest corner of Section 6, Township 2 North, Range 6 East, Mount Diablo Base and Meridian; thence northerly one (1) mile, more or less, along the west line of said Section 6 to the northwest corner thereof; thence easterly six (6) miles, more or less, along said north line of Township 2 North to the point of beginning, containing 20,200 acres, more or less.

(2) The Central Stockton Planning Area which shall include the following territory:

Beginning at the point of intersection of the centerline of the Calaveras River with the centerline of the Stockton Deep Water Channel; thence southerly and easterly along the southerly and westerly line of the Stockton and East San Joaquin Water Conservation District Boundary to the point of intersection of the north line of Section 23, C. M. Weber Grant with the easterly line of McKinley Avenue, said Stockton and

East San Joaquin Water Conservation District Boundary being described in Notice of Election for the organization of the Stockton and East San Joaquin Water Conservation District, said election being held on June 1, 1948; thence southerly 0.5 mile, more or less, along the easterly line of McKinley Avenue to intersection with the centerline of Duck Creek; thence westerly 1.5 miles, more or less, along the centerline of said Duck Creek and along the centerline of Walker Slough and the southwesterly projection of said centerline of Walker Slough to a point on the southerly bank of French Camp Slough, said point being on the boundary of Reclamation District No. 17; thence westerly one (1) mile, more or less, along said boundary of Reclamation District No. 17 to the right or easterly bank of the San Joaquin River; thence northwesterly 1.0 mile, more or less, downstream along the said right or easterly bank of the San Joaquin River to a point bearing East 500 feet, more or less, from the southeast corner of the 3.55 acre parcel of Oxidation Pond Annexation No. 3—A-1-68; thence West 500 feet, more or less, to said southeast corner; thence westerly 1.6 miles, more or less, along the Stockton City Limits Line to the easterly line of Dagget Road; thence Northerly one (1) mile, more or less, along said easterly line of Dagget Road and along the Stockton City Limits Line to a point on the centerline of Burns Cutoff; thence in a general westerly, northerly, and northeasterly direction 3.09 miles, more or less, along said centerline of Burns Cutoff to intersection with said centerline of the Stockton Deep Water Channel; thence southeasterly 0.1 mile, more or less, along said centerline of the Stockton Deep Water Channel to the point of beginning, containing 4,900 acres, more or less.

(3) The South Stockton Planning Area which shall include the following territory:

Beginning at the northeast corner of Section 58, C. M. Weber Grant, said corner being a point on the boundary of the Central San Joaquin Water Conservation District; thence along said Central San Joaquin Water Conservation District boundary the following four (4) courses, (1) Southerly along the west line of Sections 68, 69, and 70 of said C. M. Weber Grant to the southerly line of said Grant being also the north line of Section 28, Township 1 North, Range 7 East, Mount Diablo Base and Meridian; (2) Westerly along said Weber Grant line and along said north line of Section 28 to the northwest corner of said Section 28; (3) Southerly along the west line of said Section 28 to intersection with the south line of Section 59, C. M. Weber Grant; and (4) Westerly along the said south line of Section 59 to a point on the easterly right-of-way line of Highway 99; thence southerly 3.4 miles, more or less, along said easterly right-of-way line of Highway

99 to the intersection of said easterly right-of-way with the southwesterly boundary of French Camp Road, also known as French Camp Toll Road or Turnpike; thence northwesterly 3 miles, more or less, along said southwesterly boundary of French Camp Road to the westerly right-of-way line of the Western Pacific Railroad Company property; thence southerly 1.8 miles, more or less, along said westerly right-of-way to a point on the southerly line of Section P of C. M. Weber Grant; thence westerly 1.2 miles, more or less, along the south line of said C. M. Weber Grant to the northeast corner of the northwest  $\frac{1}{4}$  of the northwest  $\frac{1}{4}$  of Section 14, Township 1 South, Range 6 East, Mount Diablo Base and Meridian, said corner being a point in the boundary of Reclamation District No. 17; thence westerly 0.75 mile, more or less, along the boundary of said Reclamation District No. 17 to the southeast corner of fractional Section 10 of said Township and Range and being the southwest corner of the C. M. Weber Grant; thence along the boundary of said Reclamation District No. 17 and the boundary of said C. M. Weber Grant the following four (4) courses, (1) Northerly 232.41 chains, more or less, along the easterly boundary of fractional Sections 10 and 3 of said Township and Range and along the easterly boundary of fractional Section 34, Township 1 North, Range 6 East, Mount Diablo Base and Meridian to the northeast corner of said fractional Section 34, (2) East 20 chains, (3) North 40 chains, and (4) East 1076 feet; thence leaving said C. M. Weber Grant boundary and continuing along the boundary of said Reclamation District No. 17 the following five (5) courses, (1) North 255.64 feet, (2) North  $89^{\circ} 15'$  East 364.98 feet, (3) North  $66^{\circ} 30'$  East 1246.34 feet to a point on the west line of said French Camp Road, (4) Northerly 1850 feet, more or less, along said west line of French Camp Road to the south bank of French Camp Slough, and (5) Westerly 0.75 mile, more or less, downstream along the southerly bank of French Camp Slough to the intersection of said Reclamation District No. 17 boundary with the southwesterly projection of the centerline of Walker Slough; thence Easterly 1.5 miles, more or less, along said centerline of Walker Slough and the centerline of Duck Creek to the Easterly line of McKinley Avenue; thence Northerly 0.5 mile, more or less, along said easterly line of McKinley Avenue to a point of intersection with the north line of Section 23, C. M. Weber Grant, said point being on the southerly boundary of the Stockton and East San Joaquin Water Conservation District; thence Easterly 3.6 miles, more or less, along said southerly boundary of said Stockton and East San Joaquin Water Conservation District to the point of beginning, containing 12,800 acres, more or less.

(b) The inclusion of each of such three planning areas (the

North Stockton Planning Area, the Central Stockton Planning Area, and the South Stockton Planning Area) shall occur and be complete for all purposes, subject to Section 26, unless on or before the 60th day after the effective date of this act there is filed with the secretary of the district, at the district's office, a petition requesting an election signed by at least 25 percent of the registered voters in such planning area.

(c) A petition may consist of any number of separate instruments, which identify the planning area to which it is applicable and shall contain a request that an election shall be held to determine whether such planning area shall be included within the district.

(d) Within 20 days of the date of the filing of such a petition the secretary of the district shall examine the same and ascertain whether or not such petition is signed by the requisite number of voters.

(e) When the secretary of the district has completed his examination of the petition he shall attach to the same his certificate properly dated showing the result of such examination, and if from such examination he finds that such petition is signed by the requisite number of voters or is not so signed, he shall certify that the same is sufficient or insufficient, as the case may be.

(f) If such petition is sufficient the proposition of whether or not the subject planning area shall be included within the district shall be submitted to the vote of the voters in the subject planning area at an election called by the board and held within 70 days after the filing of a sufficient petition requesting an election.

(g) The manner of holding and conducting the election, the selection of officers to conduct it, the designation of precincts and polling places, the preparation, receipt, counting, and returning of ballots, and the canvassing and determining results of the election shall be as provided in Chapter 3 (commencing with Section 74790) of Part 6 of Division 21 of the Water Code, and in particulars not so provided shall be in accordance with the general laws of the state relative to elections at which propositions are submitted and voted upon.

(h) Upon the canvassing of the votes cast in the election if it appears that a majority of all votes cast are in favor of the inclusion of the subject planning area, then the inclusion of the subject planning area shall occur and be considered completed at the conclusion of the canvass, subject to the provisions of Section 26. Upon the canvassing of the votes cast in the election if it appears that a majority of all votes cast are against the inclusion of the subject planning area within the district, the inclusion shall be of no force and effect.

(i) If on or before the 60th day after the effective date of

this act sufficient petitions have been filed with the secretary of the district requesting elections in more than one planning area, then the question of such inclusion shall be submitted to the vote of the voters in each of the subject planning areas at an election called and held on the same day.

(j) The secretary of the district may contract with the County Clerk of San Joaquin County to perform any of the duties imposed upon the secretary by this section. In such cases the costs of the county clerk in connection with such duties shall be paid by the district.

SEC. 25. (a) There is hereby excluded from the Central San Joaquin Water Conservation District the following territory:

Beginning at the intersection of the North line of Section 24, C. M. Weber Grant, with the easterly line of the Tidewater and Southern Railroad, and being a point on the Central San Joaquin Water Conservation District Boundary; thence along said Central San Joaquin Water Conservation District Boundary the following five (5) courses, (1) Southeasterly along the Easterly boundary of said railroad to its intersection with the North line of Section 39, C. M. Weber Grant, (2) Northeasterly along the northerly line of said Section 39 and its extension to a point on the west line of fractional Section 5, Township 1 South, Range 7 East, Mount Diablo Base and Meridian, (3) southerly along said westerly line of fractional Section 5 and the easterly line of C. M. Weber Grant to the North line of the property conveyed to Joe Marchesotti, a married man, by Deed recorded January 8, 1957 in Book of Official Records, Volume 1933, Page 221, San Joaquin County Records, (4) easterly along the North line of said Marchesotti property to the easterly line of Highway 99, and (5) Northerly along said easterly line of Highway 99 to the intersection of the north line of Section 4, Township 1 North, Range 7 East, Mount Diablo Base and Meridian; thence leaving said Central San Joaquin Water Conservation District Boundary northerly along said easterly line of Highway 99 to its intersection with the southerly line of Section 59, C. M. Weber Grant and being a point on the northerly boundary of said Central San Joaquin Water Conservation District; thence along said Central San Joaquin Water Conservation District Boundary the following six (6) courses, (1) westerly along the southerly lines of Sections 59 and 48 of C. M. Weber Grant to the southwest corner of said Section 48, (2) Northerly along the west line of said Section 48 and Section 47 of said C. M. Weber Grant to the northeast corner of land described in Deed to John S. Ladd, Jr. recorded September 17, 1947 in Book of Official Records, Volume 1082, Page 344, San Joaquin County Records, (3) South  $72^{\circ} 35'$  West along the North line of said Ladd land 35 chains, (4) South  $73^{\circ} 10'$  West 34.72 chains

to a point on the West line of Section 35, C. M. Weber Grant,  
(5) Southerly along said West line of Section 35 to the  
northeast corner of said Section 24, C. M. Weber Grant, and  
(6) Westerly along the northerly line of said Section 24 to the  
point of beginning, containing 3150 acres, more or less.

(b) Such exclusion shall take effect at the same time that  
the inclusion of the South Stockton Planning Area takes  
effect, and if the inclusion of the South Stockton Planning  
Area is of no force and effect by virtue of an election held  
pursuant to Section 24, such exclusion from the Central San  
Joaquin Water Conservation District shall similarly be of no  
force and effect.

(c) The inclusion of territory into the district pursuant to  
this act, except as specifically provided in this section, shall  
have no effect upon the continuing inclusion of the subject  
territory in other water conservation districts or in any  
irrigation district or any other special districts.

SEC. 26. (a) After the time for filing petitions pursuant to  
Section 24 has expired or an election has been held pursuant  
to Section 24, as the case may be, the board shall adopt a  
resolution confirming the inclusion of any planning area  
within the district pursuant to Section 24 and the exclusion of  
territory from the Central San Joaquin Water Conservation  
District pursuant to Section 25 if such inclusion and exclusion  
has not been disapproved at an election held pursuant to  
Section 24, and the secretary shall then prepare and execute  
a certificate of completion. Such certificate shall contain the  
following:

(1) The name of each district affected.

(2) A description of any territory included in the district  
and any territory excluded from the Central San Joaquin  
Water Conservation District, which descriptions may be  
made by reference to the boundary shown on a map attached  
to such certificate.

(3) The date of adoption of the resolution confirming the  
inclusion and exclusion.

(4) A statement of the fact that the territory included shall  
be subject to a one-half-mill tax rather than the tax permitted  
by Section 75357 of the Water Code, as provided in Section 27.

(b) The secretary shall file his certificate of completion  
with the Secretary of State. Thereupon the Secretary of State  
shall execute a certificate of filing identifying the certificate  
of completion filed with him and stating the date of such  
filing. The Secretary of State shall transmit to the secretary a  
counterpart original of the certificate of filing.

(c) After receipt of the Secretary of State's certificate of  
filing, the secretary shall file with the County Recorder of the  
County of San Joaquin:

(1) A counterpart original of the secretary's certificate of

completion; and

(2) The original or a counterpart original of the Secretary of State's certificate of filing.

(d) After recordation of the secretary's certificate of completion the Recorder of the County of San Joaquin shall file with the County Surveyor of the County of San Joaquin a copy of each of the boundary descriptions included in the certificate of completion.

(e) Any inclusion or exclusion confirmed by resolution of the board adopted pursuant to this section shall be completed from the date of filing the certificate of completion with the Secretary of State and shall be effective upon the date of the recordation made with the county recorder.

(f) The secretary shall also make such filings as may be provided for by Chapter 8 (commencing at Section 54900) of Part 1 of Division 2 of Title 5 of the Government Code, and for such purpose the inclusion and exclusion shall be deemed to be effective from the date of filing of the certificate of completion with the Secretary of State.

SEC. 27. (a) Upon the effective date of the inclusion of a planning area into the district pursuant to this act, each planning area shall thereafter be treated in all respects as a part of the district, except that the following special provisions shall apply within each planning area included within the district:

(1) The assessment permitted by Section 75357 of the Water Code shall not exceed one-half mill (\$.0005) on each one hundred cents (\$1) of the assessed value of the lands within such planning area according to the last assessment less instead of the maximum two and one-half mills (\$.0025) permitted by Section 75357 of the Water Code.

(2) No ground water assessment or stream-delivered water charge shall be levied.

(b) A parcel of land within a planning area shall cease to be excluded from the full taxes, assessments, and charges, as such exclusions are set forth in subdivision (a) in the event of either of the following:

(1) A parcel within a planning area is within the service area of a publicly or privately owned water utility which distributes domestic and industrial water which is all or in part furnished to such utility as treated surface water by the district; or

(2) The independent benefit commission pursuant to procedures set forth in Section 28 determines that a subject parcel is receiving a substantial benefit from district operations.

(c) In the case of the North Stockton Planning Area, the Central Stockton Planning Area, and the South Stockton Planning Area, no removal from the partial tax area shall take

effect for any purpose prior to July 1, 1974.

(d) As used in this act "substantial benefit" means an actual raising, by prior district operations, of ground water levels under a subject parcel or the actual retarding, by prior district operations, of the lowering of ground water levels under a subject parcel.

(e) Whenever one or more parcels are transferred from a partial tax area to a full tax area, the secretary shall file a statement as to all parcels which are transferred to a full tax area, as required by Chapter 8 (commencing at Section 54900) of Part 1 of Division 2 of Title 5 of the Government Code.

(f) After a parcel has been excluded from a partial tax area such exclusion shall be permanent.

SEC. 28. (a) If any one or more of the planning areas are finally included within the district, then following such final inclusion the board shall give written notice to the California District Securities Advisory Commission, and the advisory commission shall thereupon appoint a three-member commission, one of whom shall be a civil engineer whose practice encompasses irrigation, and one of whom shall be a civil engineer whose practice encompasses municipal water supply. Such independent benefit commission shall serve at the pleasure of the advisory commission. When a vacancy occurs in the membership of the independent benefit commission the secretary shall give notice to the advisory commission, and the advisory commission shall promptly appoint a successor. If the advisory commission fails to appoint a successor or to initially appoint the three members of the independent benefit commission, then after 60 days' notice in writing to the advisory commission by the board, the board may fill such vacancy or make such appointments and the person so appointed by the board shall serve until such time as they are replaced by the advisory commission. The advisory commission may charge the district for the actual cost of performing the services required of the State Treasurer by this section.

(b) It shall be the duty of the independent benefit commission from time to time, in the manner set forth in this section, to determine whether a parcel within a planning area is receiving a substantial benefit from district operations.

(c) No member of the independent benefit commission shall have any interest in any land in the district, either directly or indirectly.

(d) Each member of the independent benefit commission, before entering upon his duties, shall take and subscribe an oath that he is not in any manner interested either directly or indirectly in any land in the district, and that he will perform the duties of commissioner to the best of his ability.

(e) The members of the independent benefit commission shall be paid by the district compensation for the services rendered by them in the amount or amounts fixed by the State Treasurer from time to time.

(f) The members of the independent benefit commission, upon their appointment and thereafter from time to time, shall select one of their members as chairman.

(g) Within 60 days of its appointment, and thereafter as provided in subdivision (j) of this section, the independent benefit commission shall meet at the district office. At the time of such initial meeting and thereafter as requested by the independent benefit commission the board shall furnish or make available to the independent benefit commission all data and information possessed by the district and which in the judgment of the independent benefit commission is relevant to the determinations to be made by it.

(h) After its initial meeting the independent benefit commission within the next succeeding 120 days shall determine which parcels within the partial tax areas are receiving a substantial benefit by the operations of the district and shall prepare a preliminary report of its findings. Upon its completion the preliminary report of the independent benefit commission shall be delivered to the secretary in writing. Such preliminary report shall list and identify each parcel which the independent benefit commission has determined is receiving a substantial benefit from district operations by the current description of such parcel as such description is then disclosed by the applicable current records of the assessor, and accordingly should be transferred from the partial tax area to the full tax area. Upon receipt of such preliminary report of the independent benefit commission the secretary shall publish pursuant to Section 6061 of the Government Code a notice of the receipt of such preliminary report. Such notice shall fix a date for a public hearing to be held on the report. Such publication shall be by a display advertisement in a newspaper of general circulation printed and published within the district, at least 20 days prior to the date at which the public hearing is to be held. The notice, among other information, shall contain an invitation to all interested persons to call at the office of the district and to examine said report of the independent benefit commission. At the time appointed in the notice, the independent benefit commission shall meet in the district office and hold a public hearing on its preliminary report. At the hearing any person interested in the district, including the board and members of the board, may, in person or by representative, appear and submit evidence concerning the matters contained in the preliminary report and the matters pending before the independent benefit commission. Within 30 days of the

conclusion-of its public hearing the independent benefit commission shall deliver its final report to the secretary.

(i) Upon receipt of the final report of the independent benefit commission the secretary shall publish a notice that such final report has been received and that the same is available for inspection by all interested persons at the office of the district. The notice shall be published pursuant to Section 6061 of the Government Code by display advertisement in a newspaper of general circulation printed and published within the district, and shall advise interested persons of their right to request review pursuant to this paragraph. Within 30 days of the publication of the notice required by this paragraph any person interested in a parcel affected by the final report of the independent benefit commission who is dissatisfied with the action of the independent benefit commission in connection with such parcel may file a request for review in writing on forms provided by the secretary requesting review by the board of the action of the independent benefit commission as to the parcel in which such person is interested. Upon the filing of a request for review the secretary shall set the matter for hearing by the board. At least 20 days prior to the hearing the secretary shall mail notice of such hearing to the person or persons requesting review. At the hearing the board shall hear evidence concerning the subject parcel and whether it is receiving a substantial benefit by the operations of the district. At the conclusion of the hearing the board may modify the report of the independent benefit commission by excluding one or more parcels from the list of parcels to be transferred from the partial tax area to the full tax area, but the board shall have no power to include any parcel within the full tax area which was not initially so included by the final report of the independent benefit commission. A final report of the independent benefit commission shall be final and shall take effect for all purposes upon either the expiration of 30 days after the publication of the notice provided for in this subdivision or upon the final action of the board in modifying the final report or determining not to modify the final report following the public hearing of the board in the event of the filing of a request for review pursuant to this subdivision.

(j) After the initial hearing of the independent benefit commission so long as any portion of the district is not within the full tax area the independent benefit commission shall again hold an initial meeting as provided in subdivision (i) of this section during the fifth year next succeeding the year of the final adoption of the last final report of the independent benefit commission or at more frequent intervals upon written request of the board, and after such initial meeting shall proceed to the adoption of a new final report of the

independent benefit commission in the manner set forth in subdivisions (g) to (i), inclusive, of this section.

SEC. 29. Failure of the district at any time to take action to collect any delinquent replenishment assessment or charge shall not be a waiver of the right of the district to collect such account at any time in the future by the utilization of such procedures and remedies as are granted to the district by this act.

SEC. 30. Whenever the district is required to mail any bill or notice to any owner the requirement of mailing shall be satisfied by deposit of such bill or notice in any postal facility regularly maintained by the government of the United States, with postage paid, addressed to the owner at his address as disclosed by the most recent record of the district. If the records of the district do not contain an address for such owner, such mailing shall be to his address as disclosed by the most recent equalized tax roll of the county. Any owner may, from time to time, file notices of change of address with the district.

SEC. 31. Notwithstanding Section 74223 of the Water Code and any other provisions of law in conflict with this section, the board shall hold regular meetings on the third Tuesday of each month. The board may by resolution change the frequency of, and the day for, holding regular meetings. Notice of any such change shall be published once a week for at least two consecutive weeks before the time for a regular meeting on the new meeting date in a newspaper of general circulation circulated in the district.

SEC. 32. Notwithstanding Section 74091 of the Water Code and any other provisions of law in conflict with this section, one director, who shall be an elector of the division in which such director resides, shall be elected for such division, by vote of the electors of the entire district. This section shall be applicable to voting at any district election held after January 1, 1972.

SEC. 33. The boundaries of the divisions of the district are relocated as follows:

Division No. 1

Beginning at a point on the Stockton and East San Joaquin Water Conservation District boundary, said point being the southwest corner of the Northeast  $\frac{1}{4}$  of Section 25, Township 2 North, Range 8 East, Mount Diablo Base and Meridian, said Stockton and East San Joaquin Water Conservation District boundary being described in notice of election for the organization of the Stockton and East San Joaquin Water Conservation District, held June 1, 1948; thence along said Stockton and East San Joaquin Water Conservation District

boundary the following thirty-five (35) courses, (1) East 1.0 mile, more or less, along the south line of the northeast  $\frac{1}{4}$  of said Section 25 and along the south line of the northwest  $\frac{1}{4}$  of Section 30, Township 2 North, Range 9 East to the center of said Section 30, (2) North  $2\frac{1}{2}$  miles, more or less, along the half section line running north and south through Sections 30, 19, and 18, Township 2 North, Range 9 East to the southwest corner of the Southeast  $\frac{1}{4}$  of Section 7, Township 2 North, Range 9 East, (3) East  $\frac{1}{2}$  mile, more or less, along the south line of said Section 7 to the southeast corner thereof, (4) North  $\frac{1}{4}$  mile, more or less, along the east line of said Section 7 to the southwest corner of the northwest  $\frac{1}{4}$  of the Southwest  $\frac{1}{4}$  of Section 8, Township 2 North, Range 9 East, (5) East  $\frac{1}{4}$  mile, more or less, along the south line of said northwest  $\frac{1}{4}$  of the southwest  $\frac{1}{4}$  of said Section 8 to the centerline of the Escalon-Bellota Road, (6) North  $\frac{1}{4}$  mile, more or less, along said centerline of the Escalon-Bellota Road to its intersection with the South line of the North one-half of said Section 8, (7) East  $\frac{3}{4}$  mile, more or less, along the south line of the north  $\frac{1}{2}$  of said Section 8 to the southeast corner of the north  $\frac{1}{2}$  of said Section 8, (8) North  $\frac{1}{4}$  mile, more or less, along the east line of Section 8 to the southwest corner of the northwest  $\frac{1}{4}$  of the northwest  $\frac{1}{4}$  of Section 9, Township 2 North, Range 9 East, (9) East  $\frac{1}{4}$  mile, more or less, along the south line of the northwest  $\frac{1}{4}$  of the northwest  $\frac{1}{4}$  of Section 9 to the southeast corner thereof in the center of the Gilmore Road No. 616, (10) North along the  $\frac{1}{4}$ ,  $\frac{1}{4}$  section line and along the center of said Gilmore Road No. 616 to a point 300.0 feet southerly from the south line of Section 4, Township 2 North, Range 9 East, Mount Diablo Base and Meridian, (11) East 750.0 feet, (12) North 300.0 feet to a point on said south line of Section 4, (13) East along the south line of Section 4 to the southeast corner of the southwest  $\frac{1}{4}$  of said Section 4, (14) North  $\frac{1}{2}$  mile, more or less, along the east line of the southwest  $\frac{1}{4}$  of Section 4 to the center of said Section 4, (15) East  $\frac{1}{2}$  mile, more or less, along the south line of the northeast  $\frac{1}{4}$  Section 4 to the southeast corner of the northeast  $\frac{1}{4}$  of said Section 4, (16) North  $\frac{1}{2}$  mile, more or less, along the east line of said northeast  $\frac{1}{4}$  of Section 4 to the southwest corner of Section 34, Township 3 North, Range 9 East, (17) East 1.0 mile, more or less, along the south line of Section 34 to the southeast corner thereof, (18) South, along the west line of Section 2, Township 2 North, Range 9 East, to the center of the Bellota River Road, (19) Northeasterly along the center of said road to the east line of the Northwest  $\frac{1}{4}$  of said Section 2, (20) North along said east line of the Northwest  $\frac{1}{4}$  of said Section 2 to the Southwest corner of the Southeast  $\frac{1}{4}$  of Section 35, Township 3 North, Range 9 East, (21) East  $\frac{5}{8}$  mile, more or less, along the south line of Section 35 to the center of the

Bellota River Road, (22) Northeasterly  $\frac{3}{4}$  mile, more or less, along the center of said road to a point on the south line of the North  $\frac{1}{2}$  of Section 36, Township 3 North, Range 9 East, Mount Diablo Base and Meridian, (23) East  $\frac{5}{8}$  mile, more or less, along the South line of said North  $\frac{1}{2}$  of Section 36 to the County line between San Joaquin and Stanislaus Counties, (24) North  $\frac{1}{2}$  mile, more or less, along said County line to the corner common to San Joaquin, Stanislaus and Calaveras Counties, (25) Northwesterly  $\frac{1}{2}$  mile, more or less, along County Line between San Joaquin and Calaveras Counties to its intersection with the north line of the south  $\frac{1}{2}$  of Section 25, Township 3 North, Range 9 East, (26) West, along said north line to the northwest corner of the Southwest  $\frac{1}{4}$  of said Section 25, (27) South  $\frac{1}{2}$  mile, more or less, to the Southwest corner of said Section 25, (28) West  $\frac{1}{2}$  mile, more or less, to the Northwest corner of the Northeast  $\frac{1}{4}$  of Section 35 of Township 3 North, Range 9 East, (29) South  $\frac{1}{4}$  mile, more or less, to the Northeast corner of the South  $\frac{1}{2}$  of the Northwest  $\frac{1}{4}$  of said Section 35, (30) West  $\frac{1}{2}$  mile, more or less, to the Northwest corner of said South  $\frac{1}{2}$  of the Northwest  $\frac{1}{4}$  of said Section 35, (31) South  $\frac{1}{4}$  mile, more or less, to the Northeast corner of the South  $\frac{1}{2}$  of Section 34, Township 3 North, Range 9 East, (32) West  $1\frac{1}{2}$  miles, more or less, to a point in the center of the Linden Road at the center of Section 33, (33) Westerly  $\frac{1}{2}$  mile, more or less, along the center of said Linden Road to its intersection with the west line of Section 33, Township 3 North, Range 9 East, (34) South  $\frac{1}{2}$  mile, more or less, along the west line of Section 33 to the northeast corner of Section 5, Township 2 North, Range 9 East, (35) West  $3\frac{1}{4}$  miles, more or less, along the north line of Sections 5 and 6 of Township 2 North, Range 9 East, and the north line of Sections 1 and 2 of Township 2 North, Range 8 East to the southwest corner of the East  $\frac{1}{2}$  of the East  $\frac{1}{2}$  of Section 35, Township 3 North, Range 8 East to a point on the boundary of that certain petition, dated May 14, 1953, for inclusion in the Stockton and East San Joaquin Water Conservation District; thence along the boundary described in said petition, dated May 14, 1953 the following eighteen (18) courses, (1) Northerly  $\frac{3}{4}$  mile, more or less, along the westerly line of said East  $\frac{1}{2}$  of the East  $\frac{1}{2}$  of said Section 35 to the northeast corner of the Southwest  $\frac{1}{4}$  of the Northeast  $\frac{1}{4}$  of said Section 35, (2) Westerly 418.3 feet along the north line of the Southwest  $\frac{1}{4}$  of the Northeast  $\frac{1}{4}$  of said Section 35, (3) Northerly  $\frac{1}{4}$  mile, more or less, along a line parallel with, 418.3 feet westerly of, measured at right angles to the west line of the Northeast  $\frac{1}{4}$  of the Northeast  $\frac{1}{4}$  of said Section 35 to intersection with the north line of said Section 35, (4) Westerly 1072.5 feet, more or less, along the north line of said Section 35 to the northwest corner of the East 5 acres of the Northeast  $\frac{1}{4}$  of the Northwest

$\frac{1}{4}$  of said Section 35, (5) Southerly along the west line of said 5 acre tract to intersection with the north line of the Southeast  $\frac{1}{4}$  of the Northwest  $\frac{1}{4}$  of said Section 35, (6) Westerly along said north line to the Northwest corner of the Southeast  $\frac{1}{4}$  of the Northwest  $\frac{1}{4}$  of said Section 35, (7) Southerly 2645 feet, more or less, along the west line of the East  $\frac{1}{2}$  of the West  $\frac{1}{2}$  of said Section 35 to the Northeast corner of the Southwest  $\frac{1}{4}$  of the Southwest  $\frac{1}{4}$  of said Section 35, (8) Westerly 1324.5 feet, more or less, along the north line of the Southwest  $\frac{1}{4}$  of the Southwest  $\frac{1}{4}$  of said Section 35 to the northwest corner of said Southwest  $\frac{1}{4}$  of the Southwest  $\frac{1}{4}$  of said Section 35, (9) Northerly  $1\frac{1}{4}$  miles, more or less, along the east line of Sections 34 and 27, Township 3 North, Range 8 East, Mount Diablo Base and Meridian, to the northeast corner of the Southeast  $\frac{1}{4}$  of said Section 27, (10) Westerly  $\frac{1}{4}$  mile, more or less, along the north line of said Southeast  $\frac{1}{4}$  to the northwest corner of the Northeast  $\frac{1}{4}$  of said Southeast  $\frac{1}{4}$ , (11) Southerly  $\frac{1}{8}$  mile, more or less, along the west line of the Northeast  $\frac{1}{4}$  of the Southeast  $\frac{1}{4}$  of said Section to the southeast corner of the Northeast  $\frac{1}{4}$  of the Northwest  $\frac{1}{4}$  of the Southeast  $\frac{1}{4}$  of said Section 27, (12) Westerly  $\frac{1}{8}$  mile, more or less, along the south line of the Northeast  $\frac{1}{4}$  of the Northwest  $\frac{1}{4}$  of the Southeast  $\frac{1}{4}$  of said Section to the northwest corner of the East  $\frac{1}{2}$  of the Southwest  $\frac{1}{4}$  of the Northwest  $\frac{1}{4}$  of the Southeast  $\frac{1}{4}$  of said Section 27, (13) Southerly  $\frac{1}{8}$  mile, more or less, along the west line of the East  $\frac{1}{2}$  of the Southeast  $\frac{1}{4}$  of the Northwest  $\frac{1}{4}$  of the Southeast  $\frac{1}{4}$  of said Section to the southwest corner thereof, (14) Westerly  $\frac{1}{8}$  mile, more or less, along the north line of the East  $\frac{1}{2}$  of the Southwest  $\frac{1}{4}$  of the Southeast  $\frac{1}{4}$  of said Section 27 to the northwest corner thereof, (15) Southerly  $\frac{1}{4}$  mile, more or less, along the west line of the East  $\frac{1}{2}$  of the Southwest  $\frac{1}{4}$  of the Southeast  $\frac{1}{4}$  to the southwest corner thereof, (16) Westerly  $\frac{7}{8}$  mile, more or less, along the north line of Sections 34 and 33, Township 3 North, Range 8 East, Mount Diablo Base and Meridian to the northwest corner of the Northeast  $\frac{1}{4}$  of the Northeast  $\frac{1}{4}$  of said Section 33, (17) Southerly  $\frac{1}{4}$  mile, more or less, along the west line of the Northeast  $\frac{1}{4}$  of the Northeast  $\frac{1}{4}$  of said Section to the southwest corner thereof, and (18) Westerly  $\frac{1}{4}$  mile, more or less, along the south line of the northwest  $\frac{1}{4}$  of the Northeast  $\frac{1}{4}$  of said Section to the southwest corner thereof being a point on said Stockton and East San Joaquin Water Conservation District boundary; thence along last said boundary the following four (4) courses; (1) Northerly  $\frac{1}{4}$  mile, more or less, along the east line of the Northwest  $\frac{1}{4}$  of said Section 33 to the Northeast corner of said Northwest  $\frac{1}{4}$ , (2) Westerly  $\frac{1}{2}$  mile, more or less, along the north line of said Northwest  $\frac{1}{4}$  to the northwest corner thereof, (3) Northerly  $\frac{1}{2}$  mile, more or less, along the

east line of the Southeast  $\frac{1}{4}$  of Section 29, Township 3 North, Range 8 East to the northeast corner of said Southeast  $\frac{1}{4}$ , and (4) Westerly  $\frac{1}{2}$  mile, more or less, along the north line of said Southeast  $\frac{1}{4}$  to the northwest corner thereof being a point on the centerline of Tully Road; thence leaving said Stockton and East San Joaquin Water Conservation District boundary the following seven (7) courses, (1) Southerly  $2\frac{1}{2}$  miles, more or less, along said centerline of Tully Road to intersection with the centerline of Comstock Road, said intersection being at the southeast corner of the West  $\frac{1}{2}$  of Section 5, Township 2 North, Range 8 East, Mount Diablo Base and Meridian, (2) Westerly  $\frac{1}{4}$  mile, more or less, along said centerline of Comstock Road to intersection with Tully Road at the northeast corner of the West  $\frac{1}{2}$  of the West  $\frac{1}{2}$  of Section 8, Township 2 North, Range 8 East, Mount Diablo Base and Meridian, (3) Southerly 1.0 mile, more or less, along said centerline of Tully Road to intersection with the centerline of Baker Road at the southeast corner of said West  $\frac{1}{2}$  of the West  $\frac{1}{2}$  of Section 8, (4) Easterly 3.0 miles, more or less, along said centerline of Baker Road and the  $\frac{1}{2}$  mile extension thereof to intersection with the centerline of Wall Road and being at the southeast corner of the West  $\frac{1}{2}$  of the West  $\frac{1}{2}$  of Section 11, Township 2 North, Range 8 East, Mount Diablo Base and Meridian, (5) Southerly  $\frac{1}{2}$  mile, more or less, along said centerline of Wall Road to intersection with the centerline of Linden Road, (6) Northeasterly 1.3 miles, more or less, along said centerline of Linden Road to intersection with the centerline of Fine Road, and (7) Southerly  $2\frac{1}{2}$  miles, more or less, along said centerline of Fine Road to the point of beginning.

#### Division No. 2

Beginning at a point on the Stockton and East San Joaquin Water Conservation District boundary, said point being the southwest corner of fractional Section 1, Township 1 North, Range 7 East, Mount Diablo Base and Meridian, and being a point on the easterly boundary of C. M. Weber Grant, said Stockton and East San Joaquin Water Conservation District boundary being described in notice of election for the organization of the Stockton and East San Joaquin Water Conservation District, held June 1, 1948; thence along said Stockton and East San Joaquin Water Conservation District boundary the following seven (7) courses, (1) Easterly  $\frac{1}{2}$  mile, more or less, along the southerly line of said fractional Section 1 to the southeast corner thereof, said corner being on the centerline of Jack Tone Road, (2) Easterly 4.0 miles, more or less, along the south lines of Sections 6, 5, 4, and 3, Township 1 North, Range 8 East, to the southeast corner of said Section

3, (3) Northerly 1.0 mile, more or less, along the east line of said Section 3 to the southwest corner of Section 35, Township 2 North, Range 8 East, being a point on the centerline of Copperopolis Road, (4) Easterly 1.0 mile, more or less, along the south line of said Section 35 and being along said centerline of Copperopolis Road to the southeast corner of said Section 35, (5) Northerly  $\frac{1}{2}$  mile, more or less, along the east line of said Section 35 to the southwest corner of the Northwest  $\frac{1}{4}$  of Section 36, Township 2 North, Range 8 East, (6) Easterly  $\frac{1}{2}$  mile, more or less, along the south line of said Northwest  $\frac{1}{4}$  to the center of said Section 36 and being a point on the centerline of Fine Road, and (7) Northerly 1.0 mile, more or less, along the  $\frac{1}{4}$  section line of Sections 36 and 25, Township 2 North, Range 8 East and along said centerline of Fine Road to the center of Section 25, Township 2 North, Range 8 East; thence leaving said Stockton and East San Joaquin Water Conservation District boundary the following nine (9) courses, (1) Northerly  $2\frac{1}{2}$  miles, more or less, along the said centerline of Fine Road to intersection with the centerline of Linden Road, (2) Southwesterly 1.3 miles, more or less, along said centerline of Linden Road to intersection with the centerline of Wall Road, (3) Northerly  $\frac{1}{2}$  mile, more or less, along said centerline of Wall Road to intersection with the easterly projection of the centerline of Baker Road at a point being the northeast corner of the West  $\frac{1}{2}$  of the Northwest  $\frac{1}{4}$  of Section 14, Township 2 North, Range 8 East, (4) Westerly  $3\frac{1}{4}$  miles, more or less, along said easterly projection and said centerline of Baker Road to the northwest corner of Section 17, Township 2 North, Range 8 East, said projection and said centerline of Baker Road being along the north lines of Sections 14, 15, 16, and 17, Township 2 North, Range 8 East, (5) Southerly 1.7 miles, more or less, along the west lines of Sections 17 and 20 to a point on the said centerline of Linden Road, (6) Southwesterly 3.7 miles, more or less, along said centerline of Linden Road to intersection with the centerline of Alpine Road, (7) Southeasterly 0.8 mile, more or less, along said centerline of Alpine Road to intersection with the centerline of the Southern Pacific Railroad Company property, (8) Easterly  $1\frac{3}{4}$  miles, more or less, along said centerline of the Southern Pacific Railroad Company property to a point on the northerly projection of said westerly line of fractional Section 1, Township 1 North, Range 7 East, and (9) Southerly  $1\frac{1}{2}$  miles, more or less, along said northerly projection and said westerly line of fractional Section 1 to the point of beginning.

Division No. 3

Beginning at a point on the Stockton and East San Joaquin

Water Conservation District boundary, said point being the northeast corner of the Southwest  $\frac{1}{4}$  of Section 29, Township 3 North, Range 8 East, Mount Diablo Base and Meridian, said Stockton and East San Joaquin Water Conservation District boundary being described in notice of election for the organization of the Stockton and East San Joaquin Water Conservation District, held June 1, 1948; thence along said Stockton and East San Joaquin Water Conservation District boundary the following four (4) courses, (1) Westerly  $1\frac{1}{2}$  mile, more or less, along the  $\frac{1}{2}$  Section lines of Sections 29 and 30, Township 3 North, Range 8 East to the northeast corner of the Southeast  $\frac{1}{4}$  of Section 25, Township 3 North, Range 7 East, Mount Diablo Base and Meridian, (2) Westerly  $3\frac{1}{2}$  miles, more or less, along the  $\frac{1}{2}$  Section lines of Sections 25, 26, 27, and 28, Township 3 North, Range 7 East to intersection with the centerline of Alpine Road, (3) Southerly  $1\frac{1}{2}$  miles, more or less, along said centerline of Alpine Road to intersection with the north line of Section 4, Township 2 North, Range 7 East, Mount Diablo Base and Meridian, and being on the centerline of Eight Mile Road, (4) Westerly 0.9 mile, more or less, along the north line of Sections 4 and 5, Township 2 North, Range 7 East and being along said centerline of Eight Mile Road to intersection with the centerline of Hildreth Road; thence Southerly  $1\frac{1}{4}$  mile, more or less, along said centerline of Hildreth Road to intersection with centerline of Ashley Road; thence Southeasterly  $1\frac{1}{4}$  mile, more or less, along said centerline of Ashley Road to intersection with centerline of the Calaveras River; thence Northeasterly 1.1 mile, more or less, along said centerline of the Calaveras River to intersection with centerline of Alpine Road; thence Southeasterly 3.7 miles, more or less, along said centerline of Alpine Road to intersection with the centerline of Linden Road; thence Northeasterly 3.7 miles, more or less, along said centerline of Linden Road to intersection with the west line of Section 20, Township 2 North, Range 8 East, Mount Diablo Base and Meridian; thence Northerly 1.7 miles, more or less, along said west line of Section 20 and along the west line of Section 17, Township 2 North, Range 8 East, Mount Diablo Base and Meridian to the northwest corner thereof, being a point on the centerline of Baker Road; thence Easterly  $\frac{1}{4}$  mile, more or less, along the north line of said Section 17 and the centerline of Baker Road to intersection with the centerline of Tully Road at the southeast corner of the West  $\frac{1}{2}$  of the West  $\frac{1}{2}$  of Section 8, Township 2 North, Range 8 East, Mount Diablo Base and Meridian; thence Northerly 1.0 mile, more or less, along said centerline of Tully Road to intersection with the centerline of Cornstock Road at the northeast corner of said West  $\frac{1}{2}$  of West  $\frac{1}{2}$  of Section 8; thence Easterly  $\frac{1}{4}$  mile, more or less, along said centerline of

Comstock Road being along the south line of Section 5, Township 2 North, Range 8 East, Mount Diablo Base and Meridian to intersection with centerline of Tully Road at the southeast corner of the West  $\frac{1}{2}$  of said Section 5; thence Northerly  $2\frac{1}{2}$  miles, more or less, along said centerline of Tully Road and the  $\frac{1}{2}$  Section line of said Section 5 and the  $\frac{1}{2}$  Section lines of Sections 32 and 29, Township 3 North, Range 8 East, Mount Diablo Base and Meridian to the point of beginning.

Division No. 4

Beginning at a point on the Stockton and East San Joaquin Water Conservation District boundary, said point being on the intersection of the centerline of Hildreth Road and the north line of Section 5, Township 2 North, Range 7 East, Mount Diablo Base and Meridian, said Stockton and East San Joaquin Water Conservation District boundary being described in notice of election for the organization of the Stockton and East San Joaquin Water Conservation District, said election being held June 1, 1948; thence leaving said District boundary Southerly  $1\frac{1}{4}$  mile, more or less, along said centerline of Hildreth Road to intersection with the centerline of Ashley Road; thence Southeasterly  $1\frac{1}{4}$  mile, more or less, along said centerline of Ashley Road to intersection with the centerline of the Calaveras River; thence Southwesterly .60 miles, more or less, along said centerline of the Calaveras River to intersection with the centerline of Pacific Avenue; thence Northerly 1.2 mile, more or less, along said centerline of Pacific Avenue to intersection with the centerline of Robinhood Drive; thence Westerly 0.6 mile, more or less, along said centerline of Robinhood Drive to intersection with the centerline of Pershing Avenue; thence Northerly 0.2 mile, more or less, along said centerline of Pershing Avenue to intersection with the south line of Swain Oaks Manor; thence South  $69^{\circ} 40'$  West 1652.20 feet along said south line of Swain Oaks Manor to the southwest corner thereof; thence North  $02^{\circ} 35'$  West 112.62 feet along the west line of said Swain Oaks Manor to the north line of Section 29, Township 2 North, Range 6 East, Mount Diablo Base and Meridian; thence Westerly 1.0 mile, more or less, along said north line of Section 29 to the northwest corner thereof; thence Southerly  $\frac{1}{2}$  mile, more or less, along the west line of said Section 29 to intersection with the centerline of Fourteen Mile Slough (formerly called Twelve Mile Slough); thence Southerly and Westerly  $\frac{1}{2}$  mile, more or less, along said centerline of Fourteen Mile Slough to a point on the City Limits line; thence Westerly, Northwesterly, Northerly and Northeasterly 1.3 miles, more or less, along said centerline of

Fourteen Mile Slough and said City Limits line to intersection with the west line of Section 19, Township 2 North, Range 6 East, Mount Diablo Base and Meridian; thence Northerly 0.5 mile, more or less, along said west line of Section 19 and said City Limits line to the southeasterly corner of Mitchell Slough-Wright Tract Annexation—A-7-67; thence Westerly, Northerly, and Easterly 1.3 miles, more or less, along the City Limits line established by said Annexation—A-7-67 and by the Wright Tract Annexation—A-1-62 to the northwest corner of said Section 19; thence Easterly 1900 feet, more or less, along the north line of said Section 19 and said City Limits line to the southeast corner of the Shima Tract; thence leaving said City Limits line Northerly 6600 feet, more or less, along the easterly boundary of said Shima Tract to a corner thereof; thence Westerly 1500 feet, more or less, along the northerly boundary of said Shima Tract to the southeast corner of the Atlas Tract; thence Northerly 3800 feet, more or less, along the easterly boundary of said Atlas Tract to the southwest corner of Section 6, Township 2 North, Range 6 East, Mount Diablo Base and Meridian; thence Northerly 1.0 mile, more or less, along the west line of said Section 6 to the northwest corner thereof; thence Easterly  $7\frac{1}{2}$  miles, more or less, along the north line of said Township and Range and along the north line of Township 2 North, Range 7 East, Mount Diablo Base and Meridian, to the point of beginning,

Division No. 5

Beginning at a point on the Stockton and East San Joaquin Water Conservation District boundary, said point being the southwest corner of fractional Section 1, Township 1 North, Range 7 East, Mount Diablo Base and Meridian, and being a point on the easterly boundary of C. M. Weber Grant, said Stockton and East San Joaquin Water Conservation District boundary being described in notice of election for the organization of the Stockton and East San Joaquin Water Conservation District, held June 1, 1948; thence Northerly  $1\frac{1}{2}$  mile, more or less, along the westerly line of said fractional Section 1 and the northerly projection thereof to intersection with the centerline of the Southern Pacific Railroad Company property; thence Westerly  $1\frac{1}{4}$  miles, more or less, along said centerline of the Southern Pacific Railroad Company property to intersection with the centerline of Alpine Road; thence Northwesterly  $4\frac{1}{2}$  miles, more or less, along said centerline of Alpine Road to intersection with the centerline of the Calaveras River; thence Westerly 5.1 miles, more or less, along said centerline of the Calaveras River to intersection with the centerline of the Stockton Diverting Canal; thence Southeasterly  $\frac{3}{4}$  mile, more or less, along said

centerline of the Stockton Diverting Canal to intersection with the centerline of North Wilson Way; thence Southerly  $4\frac{1}{2}$  miles, more or less, along the centerline of North Wilson Way and South Wilson Way to intersection with the centerline of Charter Way; thence Easterly  $1\frac{3}{4}$  miles, more or less, along said centerline of Charter Way to intersection with the centerline of State Highway 99; thence Northerly 0.6 mile, more or less, along said centerline to the centerline of Washington Street; thence Easterly 1.4 miles, more or less, along said centerline of Washington Street to intersection with the centerline of the Stockton Diverting Canal; thence Southeasterly 0.8 mile, more or less, along said centerline of the Stockton Diverting Canal to intersection with the centerline of Copperopolis Road; thence Southwesterly 0.1 mile, more or less, along said centerline of Copperopolis Road to intersection with Gillis Road; thence Southerly  $\frac{7}{8}$  mile, more or less, along said centerline of Gillis Road to a point on the boundary of said Stockton and East San Joaquin Water Conservation District, on the south line of State Highway Route 4 (Farmington Road); thence Easterly  $1\frac{1}{4}$  mile, more or less, along said south line to intersection with the north line of fractional Section 11, Township 1 North, Range 7 East, Mount Diablo Base and Meridian and being also the southerly boundary of C. M. Weber Grant; thence Easterly  $1\frac{1}{2}$  mile, more or less, along said southerly boundary of C. M. Weber Grant to a point where the Farmington Road turns southeasterly; thence North 80.0 feet to a point on the northerly line of a private roadway 80.0 feet in width; thence Easterly  $\frac{1}{4}$  mile, more or less, along the northerly line of said roadway to a point on the westerly line of the Northeast  $\frac{1}{4}$  of Section 12, Township 1 North, Range 7 East, Mount Diablo Base and Meridian, said point being on the easterly line of the C. M. Weber Grant and distant 80.0 feet northerly from the center of said Section 12; thence Northerly  $\frac{1}{2}$  mile, more or less, along said easterly boundary of C. M. Weber Grant to the point of beginning,

Division No. 6

Beginning at the northeast corner of Section 58; C. M. Weber Grant, said corner being a point on the boundary of the Central San Joaquin Water Conservation District; thence along said Central San Joaquin Water Conservation District boundary the following four (4) courses, (1) Southerly along the west line of Sections 68, 69, and 70 of said C. M. Weber Grant to the southerly line of said Grant being also the north line of Section 28, Township 1 North, Range 7 East, Mount Diablo Base and Meridian; (2) Westerly along said Weber Grant line and along said north line of Section 28 to the

northwest corner of said Section 28; (3) Southerly along the west line of said Section 28 to intersection with the south line of Section 59, C. M. Weber Grant, and (4) Westerly along the said south line of Section 59 to a point on the easterly right-of-way line of Highway 99; thence Southerly 3.4 miles, more or less, along said easterly right-of-way line of Highway 99 to the intersection of said easterly right-of-way with the southwesterly boundary of French Camp Road, also known as French Camp Toll Road or Turnpike; thence Northwesterly 3 miles, more or less, along said southwesterly boundary of French Camp Road to the westerly right-of-way line of the Western Pacific Railroad Company property; thence Southerly 1.8 miles, more or less, along said westerly right-of-way to a point on the southerly line of Section P of C. M. Weber Grant; thence Westerly 1.2 miles, more or less, along the south line of said C. M. Weber Grant to the northeast corner of the Northwest  $\frac{1}{4}$  of the Northwest  $\frac{1}{4}$  of Section 14, Township 1 South, Range 6 East, Mount Diablo Base and Meridian, said corner being a point in the boundary of Reclamation District No. 17; thence Westerly 0.75 mile, more or less, along the boundary of said Reclamation District No. 17 to the southeast corner of fractional Section 10 of said Township and Range and being the southwest corner of the C. M. Weber Grant; thence along the boundary of said Reclamation District No. 17 and the boundary of said C. M. Weber Grant the following four (4) courses, (1) Northerly 232.41 chains, more or less, along the easterly boundary of fractional Sections 10 and 3 of said Township and Range and along the easterly boundary of fractional Section 34, Township 1 North, Range 6 East, Mount Diablo Base and Meridian to the northeast corner of said fractional Section 34, (2) East 20 chains, (3) North 40 chains, and (4) East 1076 feet; thence leaving said C. M. Weber Grant boundary and continuing along the boundary of said Reclamation District No. 17 the following five (5) courses, (1) North 255.64 feet, (2) North  $89^{\circ} 15'$  East 364.98 feet, (3) North  $66^{\circ} 30'$  East 1246.34 feet to a point on the west line of said French Camp Road, (4) Northerly 1850 feet, more or less, along said west line of French Camp Road to the south bank of French Camp Slough, and (5) Westerly 1.75 mile, more or less, continuing along said boundary of Reclamation District No. 17 to the right or easterly bank of the San Joaquin River; thence Northwesterly 1.1 mile, more or less, downstream along said right or easterly bank of the San Joaquin River to intersection with the centerline of State Highway 4; thence Easterly  $1\frac{3}{4}$  miles, more or less, along said centerline of Highway 4 to intersection with the centerline of Charter Way; thence Easterly  $3\frac{1}{2}$  miles, more or less, along said centerline of Charter Way to intersection with centerline of State Highway

99; thence-Northerly 0.6 mile, more or less, along said centerline of State Highway 99 to intersection with centerline of Washington Street; thence Easterly 1.4 miles, more or less, along said centerline of Washington Street to intersection with the centerline of the Stockton Diverting Canal; thence Southeasterly 0.8 mile, more or less, along said centerline of the Stockton Diverting Canal to intersection with the centerline of Copperopolis Road; thence Southwesterly 0.1 mile, more or less, along said centerline of Copperopolis Road to intersection with Gillis Road; thence Southerly  $\frac{7}{8}$  mile, more or less, along said centerline of Gillis Road to a point on the Stockton and East San Joaquin Water Conservation District boundary on the south line of Farmington Road, said Stockton and East San Joaquin Water Conservation District boundary being described in notice of election for the organization of the Stockton and East San Joaquin Water Conservation District, said election being held on June 1, 1948; thence along said Stockton and East San Joaquin Water Conservation District boundary the following three (3) courses, (1) Westerly  $\frac{1}{4}$  mile, more or less, along said south line of Farmington Road to intersection with the easterly line of Section 67, C. M. Weber Grant, (2) Southerly 0.4 mile, more or less, along said easterly line of Section 67 to the southeast corner thereof, and (3) Westerly 0.9 mile, more or less, along the southerly line of said Section 67 to the point of beginning,

Division No. 7

Beginning at the point of intersection of the centerline of the Calaveras River with the centerline of Pacific Avenue, said point being on the Stockton and East San Joaquin Water Conservation District boundary, said Stockton and East San Joaquin Water Conservation District boundary being described in notice of election for the organization of the Stockton and East San Joaquin Water Conservation District, said election being held June 1, 1948; thence Easterly 2.0 miles, more or less, meandering the centerline of the Calaveras River upstream to intersection with centerline of the Stockton Diverting Canal; thence Southeasterly  $\frac{3}{4}$  mile, more or less, along said centerline of Stockton Diverting Canal to intersection with the centerline of North Wilson Way; thence Southerly  $4\frac{5}{8}$  miles, more or less, along the said centerline of North Wilson Way and the centerline of South Wilson Way to intersection with the centerline of State Highway 4; thence Westerly 3.5 miles, more or less, along said centerline of State Highway 4 to intersection with the right or easterly bank of the San Joaquin River; thence Southerly 0.1 mile, more or less, along said right or easterly bank of the San Joaquin River to a point bearing East 500 feet, more or less,

from the southeast corner of the 3.55 acre parcel of Oxidation Pond Annexation No. 3--A-1-66; thence West 500 feet, more or less, to said southeast corner; thence Westerly 1.6 miles, more or less, along the Stockton City Limits line to the easterly line of Dagget Road; thence Northerly 1.0 mile, more or less, along said easterly line of Dagget Road and along the Stockton City Limits line to a point on the centerline of Burns Cutoff; thence in a general westerly, northerly, and northeasterly direction 3.09 miles, more or less, along said centerline of Burns Cutoff to intersection with the centerline of the Stockton Deep Water Channel; thence Northwesterly 0.9 mile, more or less, along said centerline of the Stockton Deep Water Channel to centerline Station 286+00, said Station 286+00 bearing Southwesterly 375 feet at right angles to said centerline from U.S.E.D., B.M. 4008; thence Northeasterly 300 feet, more or less, at right angles to said centerline to a point on the southerly boundary of the Elmwood Tract; thence Easterly and Northerly 1.9 mile, more or less, along the southerly and easterly boundary of said Elmwood Tract to the point of intersection of said easterly boundary with the southerly levee of Fourteen Mile Slough (formerly called Twelve Mile Slough); thence North 500 feet, more or less, to the Stockton City Limits line, said City Limits line being along the centerline of said Fourteen Mile Slough; thence Easterly 1.2 mile, more or less, along said centerline of Fourteen Mile Slough to intersection with the West line of Section 29, Township 2 North, Range 6 East, Mount Diablo Base and Meridian; thence Northerly  $\frac{1}{8}$  mile, more or less, along said west line to the northwest corner of said Section 29; thence Easterly 1.0 mile, more or less, along the North line of said Section 29 to intersection with the west line of Swain Oaks Manor; thence South  $02^{\circ} 35'$  East 112.62 feet along the west line of said Swain Oaks Manor to the southwest corner thereof; thence North  $69^{\circ} 40'$  East 1652.20 feet along the south line of said Swain Oaks Manor to the centerline of Pershing Avenue; thence Southerly 0.2 mile, more or less, along said centerline of Pershing Avenue to intersection with the centerline of Robinhood Drive; thence Easterly 0.6 mile, more or less, along said centerline of Robinhood Drive to intersection with the centerline of Pacific Avenue; thence Southerly 1.2 miles, more or less, along said centerline of Pacific Avenue to the point of beginning.

After the effective date of this section the division boundaries may be further relocated pursuant to the procedures set forth in Chapter 3 (commencing at Section 74430) of Part 4 of Division 21 of the Water Code, but no such relocation of division boundaries shall occur until four years after the effective date of this section, except that the board shall be authorized pursuant to the provisions of Section 74433

of the Water Code to relocate the boundaries of the divisions established by this section to the extent of any exclusion of land, including, but not limited to, any exclusion as a result of an election held pursuant to Section 24 of this act, and any inclusion of land or annexation of land to the district. This section shall not take effect until the adoption, pursuant to Section 26, of a resolution including one or more planning areas into the district.

Sec. 34.

Notwithstanding the provisions of Sections 74019 and 74202 of the Water Code and Sections 23508 and 23509 of the Elections Code and any other provisions of law in conflict with this section, directors shall be elected as provided in this section. In all other respects the election of directors and the holding of office by directors and the expiration of their terms of office shall be governed by Division 21 (commencing with Section 74000) of the Water Code and the Uniform District Election Law. The general district election shall be held on the date of the general municipal election for the City of Stockton.

SEC. 35. Upon the annexation of any territory to the City of Stockton not within the district, such territory shall automatically be included within the district and such inclusion shall take effect upon the effective date of the annexation of such territory to the City of Stockton. Upon the inclusion of any territory pursuant to this section, such territory shall be an additional planning area and shall be in the partial tax area, subject to the provisions of Section 27 as to inclusion in the full tax area. It shall not be necessary to undertake a benefit review procedure solely for the purpose of reviewing an area included within the district as an additional planning area pursuant to this section, but such additional planning area shall be reviewed at the time of subsequent benefit review procedures.

SEC. 36. Parcels of land within any planning area shall be excluded from paying all ad valorem taxes assessed by the district during any fiscal year (July 1 to June 30) following a preceding period extending from November 1 of any year to the next succeeding October 31 during which there was utilized on such a parcel for irrigated agricultural crops water taken from any watercourse which is located within the boundaries of the Delta Water Agency as the boundaries of the Delta Water Agency are presently defined by Section 10.1 of the Delta Water Agency Act of 1968 (Chapter 419 of the Statutes of 1968, as amended by Chapter 285 of the Statutes of 1969) or from the distribution system of the Woodbridge Irrigation District or from any watercourse entirely outside the boundaries of the district prior to the effective date of this

act; if less than 50 percent of such a parcel's water supply during such a subject period is extracted from the underground. This section shall be implemented by rule adopted by the board and any owner of a parcel desiring to take advantage of this section shall file such reports with the board as the board may require by rule. It shall be the duty of the secretary to annually file a statement as to all parcels to which this section is applicable, as provided by Chapter 8 (commencing at Section 54900) of Part 1 of Division 2 of Title 5 of the Government Code.

SEC. 37. The provisions of this act, insofar as they are substantially the same as existing law, are restatements and continuations of existing law and not new enactments.

SEC. 38. This act is an urgency statute necessary for the immediate preservation of the public peace, health or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting such necessity are:

There is an urgent need to provide treated water within the Stockton-East Water District and facilities for such purpose cannot be adequately planned and initiated until such time as the extent of the jurisdiction of the district is determined. In order, therefore, to permit the provision of urgently needed water within the district at the earliest possible time, it is necessary that this act go into immediate effect.



Attachment E

California Act Establishing the Stockton-East Water District

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CHAPTER 819

*An act to repeal Chapter 1775 of the Statutes of 1963, to change the name of the Stockton and East San Joaquin Water Conservation District to the Stockton-East Water District and to grant certain powers to such district, relating to water conservation and water supply, and declaring the urgency thereof to take effect immediately.*

[Approved by Governor September 29, 1971. Filed with Secretary of State September 29, 1971.]

CHAPTER 553

An act to amend Section 4 of, and to add Section 21.5 to Chapter 819 of the Statutes of 1971, relating to the Stockton-East Water District.

[Approved by Governor September 5, 1975. Filed with Secretary of State September 6, 1975.]

CHAPTER 1126

(Senate Bill No. 1120)

An act to repeal and add Sections 4 and 9 of, and to add Sections 9.2, 9.3 and 9.4 to, Chapter 819 of the Statutes of 1971, relating to the Stockton-East Water District, and declaring the urgency thereof, to take effect immediately.

[Approved by Governor September 27, 1979 Filed with Secretary of State September 25, 1979.]

CHAPTER 1287

(Senate Bill No. 1449)

An act to amend Sections 4247, 4402, 5019, 5020, and 5021 of the Education Code, to amend Sections 75, 318, 512, 1007, 1017, 1340, 1508.5, 1515, 3520, 3521, 4011, 4055, 5353, 6460, 10211, 14213, and 35006 of, to repeal Section 6509 of, and to repeal and add Section 14000 of, the Elections Code, to amend Sections 24001 and 31105.2 of the Government Code, and to amend Section 34 of Chapter 819 of the Statutes of 1971, relating to elections, and declaring the urgency thereof, to take effect immediately.

*The people of the State of California do enact as follows:*

## SECTION 1

Chapter 1775 of the Statutes of 1963 is repealed.

## SECTION 2

(a) The name of the Stockton and East San Joaquin Water Conservation District is changed to the Stockton-East Water District.

(b) In all respects not inconsistent with this act, the Stockton-East Water District shall continue to be organized under; and governed by, the Water Conservation District Law of 1931, Division 21 (commencing with Section 74000) of the Water Code as the same now exists and as it may be amended hereafter. The provisions of Division 21 (commencing with Section 74000) of the Water Code and all other acts of the Legislature applicable to the district and not inconsistent with the provisions of this act shall remain in full force and effect and shall be fully applicable to the district.

(c) In all cases in which it may be otherwise required that the district be described as a “water conservation district” it shall be sufficient to describe the district as a “water district”.

## SECTION 3

(a) The Legislature finds and declares that the problems of providing for the management of the underground water basin and the provision of supplemental water supplies, in the area of the Stockton-East Water District are peculiar to that district and that area and for that reason it is necessary to deal specially with such area and to provide special provisions for the government and operation of that district.

(b) The Legislature further finds and declares that this act is necessary to the solution of a problem arising out of the following unique and special circumstances: The water supplies in the underground basin in the area of the-Stockton-East Water District are insufficient to meet the water demands of the area, and, because of the geologic conditions peculiar to the area and because excessive pumping has seriously depleted the underground water storage, there has been an intrusion of saline waters into the underground water basin causing serious water quality deterioration and the destruction of the usefulness of a portion of the underground water basin. Further excessive pumping, without proper management of the underground water basin and the provision of supplemental water supplies, is certain to destroy the usefulness of a major portion of the underground water basin and endanger the health and welfare of the district.

(c) The Legislature further finds and declares that the district includes within its territory a large urban area, a large agricultural area, and territory formerly within an irrigation district, and that for these reasons it is necessary in order to accommodate the various interests within the district to provide special procedures to be observed by the district in its government and operation.

(d) The Legislature further finds and declares that only a portion of the City of Stockton and only a portion of the Metropolitan Stockton Planning Area as defined by the City of Stockton and the County of San Joaquin are within the district, and that unless all of such city and all of the Metropolitan Stockton Planning Area are within the district there will be uneconomic duplications and inefficiencies and it will be both more costly and more difficult to solve the grave and urgent water problems of the Stockton Metropolitan Area and the existing Stockton-

East Water District. The Legislature further finds and declares that the territory that is outside the district but within the Metropolitan Stockton Planning Area includes territory that is within the City of Stockton, within county maintenance districts, within other water conservation districts, and within an irrigation district. The Legislature further finds and declares that the special problems of including all of the City of Stockton and the Metropolitan Stockton Planning Area within the Stockton-East Water District are peculiar to that district and that area, and for that reason it is necessary to deal specially with such inclusion and to provide special provisions and procedures for such inclusion and the necessary adjustment of district boundaries.

SECTION 4

- (a) The definition of a word applies to any of its variants.
- (b) The following words and phrases shall have the following meanings:
  - (1) “Accumulated overdraft” means the aggregate amount by which the quantity of ground water removed from the ground water supplies within the district during all preceding water years shall have exceeded the quantity of water replaced therein by the replenishment of the, ground water supplies in such water years by any natural or artificial means, based upon reports, records, and other data or evidence appropriate for the purpose of making such determination.
  - (2) “Administration division” means the budgeting and accounting division established by Section 9 which is primarily concerned with administration of the district and with obtaining and making available to the other divisions a supply of water.
  - (3) “Advisory commission” means the California District Securities Advisory Commission.
  - (4) “Agricultural division” means the budgeting and accounting division established by Section 9 which is primarily concerned with the supply of water for agricultural purposes.
  - (5) “Agricultural water” and “water used for agricultural purposes” shall mean water used primarily in the commercial production of agricultural crops or livestock on parcels of land of more than two acres and shall not include water used for agricultural product-processing purposes.
  - (6) “Annual overdraft” means the amount by which the production of water from the ground water supplies within the district during the water year exceeds the natural replenishment of such ground water supplies in such year.
  - (7) “Assessor” means the assessor of the county.
  - (8) “Auditor” means the auditor of the county.
  - (9) “Benefit review procedure” means the procedure set forth in subdivisions (g) through (i) of Section 28.
  - (10) “Board” means the board of directors of the Stockton-East Water District.
  - (11) “Board of Supervisors” means the board of supervisors of the county.
  - (12) “Collector” means the person appointed by the board to determine and collect the accounts due the district prior to their transfer to the auditor, as set forth in this act. The collector shall be appointed by the board and hold office at the pleasure of the board. The collector may hold other offices, including, but not limited to, the office of secretary, or may perform other duties for the district but shall not be a member of the board.
  - (13) “Committee” means a group of directors of the district consisting of three directors, one of whom shall be appointed chairperson by the president of the board, together with

an alternate member, which shall study particular areas and recommend policy to the full board. The members and alternate member shall be appointed by the president of the board. There shall be the Agricultural Operations Committee and the Municipal Operations Committee, and there may be such other committees as may be established by the board.

(14) "County" means the County of San Joaquin.

(15) "Delinquent account" means any sum or sums due the district from an owner as disclosed by an annual bill presented by the collector pursuant to Section 13 which is not paid within the times set forth in Section 15, together with all penalties applicable to such sum or sums pursuant to this act.

(16) "Delinquent landowner" means the owner or owners of a parcel of land upon which one or more delinquent water-producing facilities are located as such ownership is disclosed by the last equalized assessment roll of the county.

(17) "Delinquent parcel" means a parcel of land upon which one or more delinquent water-producing facilities are located.

(18) "Delinquent water-producing facility" means a water-producing facility for which payment is required by this act and for which payment in full, has not been received by the district within the times set forth in Section 15.

(19) "Director" means a member of the board.

(20) "District" means the Stockton-East Water District.

(21) "Division" means a division of the district established pursuant to the Water Conservation District Act of 1931, Division 21 (commencing with Section 74000) of the Water Code.

(22) "Domestic ground water" means water produced from the underground on any parcel of two acres or less where the water is used and disposed of on that parcel, and also means water produced from the underground and used for residential or commercial purposes on agricultural parcels larger than two acres.

(23) "Dry year" means any year in which the board determines that there may be insufficient quantities of surface water to meet the needs of users who are dependent upon surface water sources.

(24) "Full tax area" means any area within a planning area which has been excluded from the partial tax area; in the manner provided in subdivision (b) of Section 27.

(25) "Ground water" means potable water beneath the surface of the ground suitable for municipal, domestic and irrigation use.

(26) "Municipal division" means the budgeting and accounting division established by Section 9 which is primarily concerned with the supply of water for municipal and industrial purposes.

(27) "Municipal ground water" means water produced from the underground other than domestic ground water or agricultural ground water.

(28) "Owner" means the person or persons owning any water-producing facility or any interest therein other than a lien to secure the payment of a debt or other obligation. Unless there is filed with the district by an owner, information to the contrary, the district may presume that the owner of the parcel of land on which a water-producing facility is located is the owner of the water-producing facility.

(29) "Partial tax area" means all areas of the district which pursuant to the terms of subdivision (a) of Section 27 are not required to pay the taxes, assessments, and charges

specified in subdivision (a) of Section 27.

(30) "Person" means any public agency or public corporation, whether federal, state, or local, or any private corporation, firm, partnership, individual, or group of individuals.

(31) "Planning area" means any one of the planning areas mentioned in subdivision (a) of Section 24 or in Section 35.

(32) "Prior act" means Chapter 1775 of the Statutes of 1963, as amended.

(33) "Production" or "producing" means the diversion or taking of stream-delivered water or the extraction or extracting of ground water, by any means, for domestic, municipal, irrigation, industrial, or other beneficial use.

(34) "Revenue sources" means those sources of expected revenue which shall be used to establish a budget, respectively, for each of the administration, agricultural, and municipal divisions. These revenue sources for each division are as follows:

(i) Administration division: General property taxes, other general revenue sources which may be provided by state law, payments from other divisions, or other sources of revenue which may be established in the future by law or by rule of the board.

(ii) Agricultural division: Stream-delivered water charges, domestic ground water assessments, agricultural ground water assessments, penalties collected on such charges and assessments, and other sources of revenue which may be established in the future by law or by rule of the board.

(iii) Municipal division: Contract sales of treated surface water, contract sales of ground water, municipal ground water assessments, penalties collected on such sales and assessments, and other sources of revenue which may be established in the future by law or by rule of the board.

(35) "Stream delivered water" means surface water used for agricultural purposes and taken by an owner's water-producing facility directly from the Stockton Diverting Canal, the Calaveras River, the Old Calaveras River, Mosher Creek, Mormon Slough, Potter Creek, or any other watercourse within the district except those portions of any of the foregoing watercourses which are located within the boundaries of the Sacramento-San Joaquin Delta, as such boundaries are presently defined by Section 12220 of the California Water Code.

(36) "Tax collector" means the tax collector of the county.

(37) "Treasurer" means the treasurer of the county.

(38) "Water-producing facility" means any device or method, mechanical or otherwise, for the production of ground water from the ground water supplies within the district, or for the diversion of stream delivered water.

## SECTION 5

In addition and supplemental to the powers conferred upon the district by the Water Conservation District Law of 1931, Division 21 (commencing with Section 74000) of the Water Code, and by all other laws applicable to the district, the district shall have power:

(a) To acquire, control, distribute, store, spread, sink, treat, purify, reclaim, recapture, process, and salvage any water, including sewage and storm waters for the beneficial use or uses of the district, its inhabitants, or the owners of the rights to water in the district.

(b) To sell treated and untreated water under its control to any municipal corporation, political subdivision of the State of California, public utility, or other person at such charges and rates

as shall be set by the board by contract, agreement, rule, or otherwise, for use within the district.

(c) Subject to the requirements of Section 6, to sell treated and untreated water under its control to any municipal corporation, political subdivision of the State of California, public utility, or other person for use outside the district.

(d) Within or outside the district to construct, purchase, lease, or otherwise acquire, and to operate and maintain, waterworks, water treatment plants, spreading grounds, pipelines, conduits, canals and other facilities for the distribution of water, pumps and other facilities for the production of water, dams, weirs, reservoirs, and other facilities, installations, works, equipment, and machinery useful or necessary to replenish the underground water basin within the district, to manage, for the purpose of repelling saline intrusion, the underground water basin within the district for the common benefit of the district, to augment the common water supplies of the district, or to otherwise provide water for the beneficial use or uses of the district, its inhabitants, or the owners of rights to water in the district.

(e) For the common benefit of the district to store water in underground water basins or surface reservoirs within or outside the district, to appropriate and acquire water or water rights within or outside the district, to purchase or import water into the district, and to conserve water within or outside the district.

(f) Subject to the provisions of Sections 9 to 19, inclusive, to levy and collect a ground water assessment for the production of water from the ground water supplies within the district, and to fix and collect charges for stream-delivered water and to require such measuring devices as may be necessary for the purposes of this act and to inspect and test any such measuring devices whether installed by the district or by others.

(g) To maintain reserve funds in amounts deemed advisable by the board for the purpose of water for replenishment purposes, the stream delivery of agricultural surface water, or for other district purposes.

(h) To acquire real and personal property and interests therein, but the district shall not exercise the power of eminent domain for any purpose of this act or in carrying out any power granted by this act outside the boundaries of the district unless the board of supervisors of the county in which the property to be acquired is located has consented to such acquisition.

## SECTION 6

(a) The district may sell treated and untreated water under its control for use outside of the district only pursuant to a written agreement made as provided in this section.

(b) The district may make an agreement to sell water for use outside the district for periods not in excess of one year where the board prior to the district's agreement to sell such water has found and declared by resolution that such water is not required for use within the district during the period, not to exceed one year, for which the agreement is to be made. The board's resolution shall be adopted no earlier than three months preceding the commencement of the period for which the agreement is to be made. The price charged for water sold pursuant to an agreement made pursuant to this subdivision shall be sufficient to at least cover the costs of the district, as determined by the board, in furnishing and delivering the subject water to its point of delivery.

(c) The district may make agreements to sell water for use outside the district for periods in excess of one year if the board prior to the district's agreement to sell water has by resolution found and declared that the subject water will not be required for use within the district for the

period for which the agreement is made and declares that the sale of the water and its use in the manner provided in the applicable agreement is for the direct and substantial furtherance of the purposes of the district. The charge for water sold pursuant to an agreement made pursuant to this subdivision shall at least be sufficient to cover the costs of the district, as determined by the board, in furnishing and delivering such water to its point of delivery, plus the equivalent of all applicable ad valorem property taxes that would be assessed by district on the property upon which such water is to be used, or in the case of a sale to a political subdivision, municipal corporation, public utility, or other operator of a common water distribution system on all of the property served by such common water distribution system, if the subject property were included within the district during the period covered by the agreement.

(d) The district may make agreements to sell water that would not be otherwise owned or possessed by the district that comes into the district's possession due to provisions of a contract with another political subdivision that operate when such other political subdivision fails to pay for such water or the costs related to such water, on any basis the board determines if the board makes the determination that such water is not needed for sale within the district for the period of the agreement.

#### SECTION 7

The board shall, from time to time, order an investigation and report to be made by an engineer or engineers employed by the district for the purpose of investigating and reporting upon the ground water conditions of the district and making recommendations as to water management practices to be followed by the district. The report shall include an estimate as to the accumulated overdraft, if any, as of the date of the report, estimates of the ground water production anticipated by years for the period covered by the report, and an estimate of the average annual overdraft, if any, for the period covered by the report. The report shall also include recommendations as to necessary and desirable surface and underground water management practices to be followed during the period covered by the report.

#### SECTION 8

The engineering investigation and report shall be delivered to the secretary in writing. The secretary shall publish pursuant to Section 6061 of the Government Code a notice of the receipt of such report and fixing a date for a public hearing to be held by the board, the publication to be in a newspaper of general circulation, printed and published within the district, at least 10 days prior to the date at which the public hearing is to be held. The notice, among other information which the district may include, shall contain an invitation to all owners of water-producing facilities within the district and all other interested parties to call at the office of the district to examine the engineering investigation and report.

#### SECTION 9

(a) There are hereby established within the district, budgeting and accounting divisions as follows: administration, agricultural, and municipal. Each such budgeting and accounting division shall have established a separate budget, and separate accounts shall be kept of the revenues and expenditures for each division.

(b) Notwithstanding the establishment of such divisions, the board shall have authority to approve temporary transfers between divisions on such terms and with such repayment

provisions, as may be approved by the board.

#### SECTION 9.2

(a) The board at a regular, special, or continued meeting between November 1st and December 15th of each year shall hold a public hearing to consider the budget for each of the administration, agricultural and municipal divisions, and an overall budget for the district, for the next calendar year.

(b) Notice of the hearing shall be published pursuant to Section 6061 of the Government Code at least 10 days prior to the date of the hearing. Any person interested in the district may, in person or by representative, appear and submit evidence concerning the water conditions of the district, the financial needs of the district, proposals for rates, and other relevant matters.

(c) The board shall at the hearing receive recommendations from the Agricultural Operations Committee as to the budget to be established for the agricultural division and from the Municipal Operations committee as to the budget to be established for the municipal division. Each of such committees shall also make recommendations to the board as to the budget of the administration division.

(d) Following the budget hearing by the full board, the board shall adopt by resolution prior to December 15 of each year a budget for the administration division, for the agricultural division for the municipal division and for the district overall.

#### SECTION 9.3

The rates to be established pursuant to Section 9.4 shall equitably divide the cost of meeting a balanced agricultural division budget among the sources of revenue for the agricultural division, but in a manner which will encourage the use of surface water available for agricultural use within the district.

#### SECTION 9.4

(a) The board at a regular, special, or continued meeting between March 15 and April 15 of each year shall hold a public hearing to consider the necessity, amount, and rates of a municipal ground water assessment, an agricultural ground water assessment, and a domestic ground water assessment, if any, to be levied for the then current calendar year and charges to be made for stream delivered water to the extent that such charges for stream delivered water are not controlled by contract or agreement.

(b) Notice of the hearing shall be published pursuant to Section 6061 of the Government Code at least 10 days prior to the date of the hearing. Any person interested in the district may, in person or by representative, appear and submit evidence concerning the water conditions of the district, the financial needs of the district, proposals for rates, and other relevant matters.

(c) Following the hearing, and prior to April 15 of that year, the board may, by adoption of an ordinance, determine, levy, and assess a municipal ground water assessment against all owners of water-producing facilities within the district which produce municipal ground water during the current year and an agricultural ground water assessment against all owners of water-producing facilities within the district which produce water from the ground during the current year for agricultural purposes and a domestic ground water assessment against all owners of water-producing facilities within the district which produce domestic ground water and shall determine and fix charges for stream delivered water for the current year to the extent that such charges for stream delivered water are not governed by contract or

agreement.

(d) The method of computing ground water assessments and charges for stream-delivered water may be uniform for all water-producing facilities or may be uniform for each of several classes of water-producing facilities. The board shall, by rule, establish one or more methods to be used in computing the amount of water production from a water-producing facility which is not measured by a water-measuring device approved by the collector. Such methods shall be established by rule adopted by the board and may be based on any criteria which may be used to determine or estimate with reasonable accuracy the amount of water production.

(e) The board, by rule, may waive any assessment upon any class or classes of water-producing facilities which it determines because of the small amount of water produced by such facilities, would yield to the district a sum less than the estimated cost of making and collecting the assessment.

(f) Any ground water assessment or charges for stream-delivered water levied or made pursuant to this section shall be in addition to any general assessment levied by the district.

(g) Clerical errors in the name of any owner or in other recorded information, or in the making or extension of any assessment upon the records which do not affect the substantial rights of the subject owner or owners shall not invalidate the assessment.

(h) The procedures established by Sections 9 to 9.4 inclusive, shall not be applicable for calendar year 1979. The rates for calendar year 1979 only are established as follows:

(1) The domestic ground water assessment shall be ten dollars (\$10) per domestic use unit, as such unit is established by the board.

(2) The rate for sales of stream-delivered water shall be seven dollars and sixty cents (\$7.60) per acre-foot of water.

(3) The agricultural ground water assessment rate shall be one dollar and sixteen cents (\$1.16) per acre-foot of water.

(4) The municipal ground water assessment rate shall be set at three dollars (\$3) per acre-foot of water. It is not the intent of the Legislature that the rates set for 1979 shall serve as precedent for future rates.

(i) For calendar year 1980 and thereafter, water rates shall be established in accordance with Sections 9 to 9.4 except that no rate may be established in any calendar year which exceeds the individual rates set in paragraph (1), (2), or (3) of subdivision (h) by 20 percent plus a factor to reflect the percentage increase in the federal consumer price index with calendar year 1979 as a base; provided, however, that this subdivision (i) shall not be effective from and after the date of any election in which a majority of those electors voting approve a contract by the district for new supplement water or approve bonds for financing a distribution system for new supplemental water.

(j) During calendar year 1980 and thereafter, water rates shall be established by ordinance following public notice. Such ordinances shall be subject to referendum; provided, however, that no referendum shall modify or affect the terms of any bond resolution issuing bonds approved by the voters.

## SECTION 10

All assessments and charges due for water produced within the district during the 1971 calendar year and for water produced within the district prior to 1971 shall be assessed, charged, calculated, determined, billed, and collected pursuant to the prior act and all applicable rules duly adopted by the board, and for those purposes the prior act shall remain

in effect until such sums have been collected in full or otherwise discharged in the manner provided by the prior act and the applicable rules duly adopted by the board.

#### SECTION 11

(a) Commencing with 1972, not later than the first day of October of each year the collector shall mail progress bills to each owner of one or more water-producing facilities within the district. The progress bills shall state an amount due which shall be computed by multiplying one-half of each owner's water production for the preceding calendar year in acre-feet by the respective ground water assessment rates and the stream-delivered water charges applicable for the current year.

(b) Any progress bill may be reduced in amount or canceled by the collector, if upon good cause shown, the collector determines that the production of water from the water-producing facility or facilities of the owner during the current year, to the date of the collector's determination, is such that a progress payment based on one-half of the preceding year's water production will be substantially in excess of one-half of such owner's next succeeding annual bill as the same will ultimately be determined pursuant to Sections 12, 13, and 14.

(c) The board may, by rule, establish alternate procedures for the computation and payment of progress bills in the case of water-producing facilities within the district, the water production of which is measured by a water measuring device approved by the collector.

(d) Should any owner of a water-producing facility fail to pay on or before the 31st day of October, or any alternate date specified in a rule adopted pursuant to subdivision (c) of this section, the amount disclosed by a progress bill the district shall impose a penalty against such owner in an amount of 5 percent of the total sum due the district for the current calendar year as such sum is finally determined in accordance with Sections 12, 13, and 14. The 5-percent penalty shall be added to the annual bill and shall be due and payable at the same time as the other amounts included in the annual bill.

(e) The board may, by rule, waive the requirement of making a progress payment as required by this section as to any one or more classes of water-producing facilities.

#### SECTION 12

(a) Commencing with 1973, each owner of one or more water-producing facilities within the district shall, after January 1st and not later than January 15th, file with the collector on a form acceptable to the collector a water use statement showing the amount of water produced by the water-producing facility or facilities of such owner in the case of facilities the water production of which is measured by a water-measuring device approved by the collector and as to all other facilities the information the collector determines to be reasonably necessary to permit the determination, or estimation with reasonable accuracy, of the amount of water produced during the preceding calendar year by the subject water-producing facility or facilities. The collector may require that all statements of fact in the water use statement be verified by a written declaration that they are made under the penalties of perjury.

(b) The board, by rule, may waive the filing of water use statements as to any one or more classes of water-producing facilities.

#### SECTION 13

(a) Commencing with 1973, not later than the last day of February, the collector shall mail an annual bill for the preceding calendar year to each owner of one or more water-producing

facilities within the district.

(b) The collector in preparing the annual bill for submission to each owner of water-producing facilities shall consider the information disclosed by the annual water use statement if one has been filed, the information disclosed by existing district records, district inspections, if any, of the water-producing facilities or the area served by such water-producing facilities, and any other information, of which the collector is aware and which is relevant to the amount of water production by each of the owner's water-producing facilities and shall determine the amount of each owners water production.

(c) In all cases where an annual water use statement has been filed and where a water-measuring device approved by the collector is permanently attached to a water-producing facility and the water production has been reported on the basis of the approved water-measuring device, the record of water production as disclosed by such water-measuring device shall be presumed to be accurate and the burden is upon the collector to establish to the contrary.

(d) The amount of the annual bill shall be computed by multiplying the production in acre feet of water as determined by the collector by the respective ground water assessment rates and stream-delivered water charges. After determining the amount due the collector shall add the penalty provided in Section 11, if applicable, and shall also add a penalty of 5 percent of the total sum due the district for water produced during the preceding year by any water-producing facility for which an annual water use statement was required and not filed within the time specified in Section 12.

(e) Upon the discovery by the collector of any water-producing facility within the district:

(1) For which no water use statement has been filed for any year in which the same was required by virtue of Section 12 and any applicable rules of the district and for which no annual bill was submitted pursuant to this section; or

(2) For which a water use statement was filed as required but for which the collector has good cause to believe that the production of water from such water-producing facility was in excess of that disclosed by a filed water use statement; or

(3) For which no water use statement was required to be filed by virtue of Section 12 and the applicable rules of the district but for which no annual bill has been submitted by the collector pursuant to this section; the collector shall immediately investigate and estimate the amount of unreported or unbilled water production by such water-producing facility. In making such estimate, as to cases arising under subparagraph (3) above, the estimate of prior water production shall not include water production for more than three (3) preceding calendar years.

(f) After making an estimate of water production pursuant to subdivision (e) of this section, the collector shall calculate the amount due for ground water assessments and stream-delivered water charges during the subject years at the rates applicable during those years, and add the amount so calculated as a separate item to the next annual bill submitted to the owner of such water-producing facility together with the penalties, if any, applicable pursuant to subdivision (d) of Section 11 and subdivision (d) of this section.

(g) After computing the amount of the annual bill the collector shall allow as a credit against the amount due, and show such allowance on the annual bill, the sums paid for the subject water-producing facilities as a result of the applicable progress bill or bills for the subject year.

#### SECTION 14

(a) An annual bill shall be conclusive on all persons having an interest in the subject water-producing facilities unless the owner files with the secretary on or before March 15th a written objection on forms made available by the district setting forth the owner's ground or grounds for objecting to the amount of current or prior, if any, production and the assessments, charges, and penalties so fixed.

(b) Upon the filing of an objection the secretary shall schedule a hearing on the objection before the board at which time the total amount of the water production and the ground water assessment and stream-delivered water charges thereon shall be determined together with any applicable penalties, which determinations by the board shall be conclusive if based upon substantial evidence.

(c) A notice of such hearing before the board shall be mailed to the objector at least 10 days before the date fixed for the hearing unless the form furnished by the district for the filing of the objection specifies the date, time, and place for the hearing.

(d) Notice of the final determination by the board as to his objection shall be mailed to each objector by the secretary.

#### SECTION 15

(a) All annual bills presented by the collector pursuant to Section 13 shall be due when mailed by the collector and shall be delinquent after April 30th with the exception of any bill as to which an objection has been filed pursuant to Section 14.

(b) Annual bills, as to which an objection is filed, shall become delinquent not later than April 30th, or 20 days from the date of mailing by the secretary to the owner a notice of the final determination by the board as to his objection, whichever is later.

#### SECTION 16

Any annual bill not paid when delinquent shall be subject, on the date of its delinquency, to a further penalty of 5 percent of the amount of the ground water assessment and stream-delivered water charges set forth in the annual bill.

#### SECTION 17

(a) Upon the delinquency of all or any portion of an annual bill the collector shall transmit to the secretary the amount of the delinquent account, together with the name of the delinquent landowner and the current description of the delinquent parcel as such is then disclosed by the applicable records of the assessor. The description provided for in this section shall be the description or other designation currently used by the assessor and shall include the tax account number and the code area of the delinquent parcel.

(b) The secretary shall maintain a list of delinquent accounts as furnished to him by the collector. If prior to the transmission of the list of delinquent accounts to the auditor pursuant to subdivision (d) of this section, all or any portion of a delinquent account is collected by the collector, the collector shall report such payment to the secretary and the secretary shall reflect such payment in his list of delinquent accounts.

(c) Annually as of August 1st the secretary shall add to each delinquent account then on the list of delinquent accounts a penalty of 5 percent of the sum of the ground water assessments and stream-delivered water charges included in each delinquent account.

(d) Annually after August 1st and on or before August 10<sup>th</sup> the secretary shall transmit a

certified copy of his current list of delinquent accounts to the auditor. The list of delinquent accounts may combine all assessments, charges, and penalties into a single sum due for each delinquent account.

(e) Upon receipt of the certified copy of the list of delinquent accounts, the auditor shall enter the amount of each delinquent account against the delinquent parcel designated in the list of delinquent accounts as such parcel appears on the then current assessment roll.

(f) The tax collector shall then include the amount of each delinquent account on bills for county taxes levied against the delinquent parcel.

(g) Thereafter the amount of each delinquent account shall be collected at the same time and in the same manner as county taxes are collected, and are subject to the same penalties and the same procedure and sale in case of delinquency, as provided for ordinary county taxes.

(h) Upon collection of delinquent accounts, within a reasonable time the auditor shall deposit the sums so collected to the account of the district, but the auditor may deduct, from time to time, an amount not to exceed one-quarter of 1 percent of the sums collected pursuant to this section to defray the costs of the county in processing such accounts.

(i) All laws applicable to the levy, collection, and enforcement of county taxes are applicable to such delinquent accounts so transmitted to the auditor pursuant to this section.

(j) All or any portion of any such delinquent accounts shall on order of the board of supervisors be canceled by the auditor if uncollected, or except in the case provided for in paragraph (5) of this subdivision, refunded by the treasurer out of district funds, if collected, if it or they were entered, charged, or paid:

(1) More than once;

(2) Through clerical error;

(3) Through the error or mistake of the collector, secretary, or board in respect to any material fact, in the course of establishing the amount of the assessments, charges, and penalties due upon said delinquent account under this act;

(4) Illegally; or

(5) On property acquired after the lien date by the State of California or by any county, city, school district, or other political subdivision of the State of California and because of such public ownership not subject to sale for delinquent taxes.

(k) No order for a refund under the subdivision (j) shall be made except on a claim:

(1) Verified by the person who paid said delinquent account and penalties or his guardian, conservator, executor, or administrator; and

(2) Filed within three years after making the payment sought to be refunded.

(l) The provisions of this subdivision do not apply to cancellation. The provisions of this Section 17 shall not be applicable to a delinquent parcel owned by the State of California or by any county, city, school district or other political subdivision of the State of California.

## SECTION 18

The owner of any parcel of land within the district, two acres or more in size, on which no water is produced during any calendar year, shall file an annual report stating that no water was produced on the property during the subject calendar year. The annual report shall be filed annually on or before January 15th of each year for the immediately preceding calendar year.

## SECTION 19

The board shall establish rules providing for the making of refunds in the event of the overpayment of any ground water assessment or stream-delivered water charges. Such rules shall provide that no overpayment shall be refunded unless a request for refund is filed with the secretary within three years of such overpayment, Such rules may provide for the payment of a fee to cover all or a portion of the district's costs in processing a request for refund.

## SECTION 20

The district may bring a suit in any court of competent jurisdiction against any person or persons indebted to the district for the collection of any delinquent sums due the district for any ground water assessment, stream-delivered water charge, penalties, or charges due for any sale or use of water by contract, or otherwise. Should the district, as a provisional remedy in bringing suit, seek an attachment against any property of any named defendant therein, the district shall not be required to provide a bond or undertaking as is otherwise provided in Chapter 4 (commencing with Section 537) of Title 7 of Part 2 of the Code of Civil Procedure. All procedures and remedies applicable to the processing, collection, and enforcement of delinquent accounts and penalties granted to the district by this act or otherwise are alternative and the utilization of one such procedure shall not bar the use of another.

## SECTION 21

Any person who injures, alters, removes, resets, adjusts, manipulates, obstructs or in any manner interferes or tampers with or procures or causes or directs any person to injure, alter, remove, reset, adjust, manipulate, obstruct or in any manner interfere or tamper with any water-measuring device affixed to any water producing facility as required by this act, so as to cause such water-measuring device to improperly or inaccurately measure and record such water production, is guilty of a misdemeanor and is punishable by a fine not to exceed five hundred dollars (\$500) or imprisonment in the county jail not to exceed six months, or by both such fine and imprisonment.

## SECTION 21.5

The board is authorized to establish a reserve fund financed by the transfer of up to ten cents (\$0.10) for each acre-foot of water to which the ground water assessment rate or the stream-delivered surface water charges levied pursuant to subdivision (a) of Section 9, in addition to ten cents (\$0.10) for each acre-foot of treated water sold by the district under either an existing or future water service contract executed pursuant to Section 6. Such amounts transferred into a reserve fund created pursuant to this section shall be a part of, and not in addition to, the above-referenced ground water assessment rates, stream-delivered surface water charges, and contract prices. The reserve fund established under the authority of this section shall be a limited-purpose reserve fund. Expenditures out of such fund shall only be made for the purpose of constructing, leasing or purchasing, maintaining, and operating ground water pumping facilities capable of delivering ground water into then existing district watercourses, water supply, or distribution facilities for the purpose of insuring the availability, to the extent possible, of a full supply of water to all users during dry years.

## SECTION 22

The board is authorized to adopt the rules it deems necessary and proper for carrying out the provisions of this act, including but not limited to, rules providing that the district shall not deliver or make available water to water users who fail to pay for water when required by statute, contract, or rule.

## SECTION 23

No rules shall be adopted by the board without first reviewing such at a public hearing held by the board. Notice of the public hearing shall be published pursuant to Section 6061 of the Government Code at least 10 days prior to the date of such a hearing and the notice shall contain a brief description of any rule to be considered at the hearing.

## SECTION 24

- (a) There is hereby included within the Stockton-East Water District the following territories:
- (1) The North Stockton Planning Area which shall include the following territory:  
Beginning at a point on the Stockton and East San Joaquin Water Conservation District boundary, said point being on the intersection of the North line of Township Two (2) North and the centerline of State Highway 99, said Stockton and East San Joaquin Water Conservation District boundary being described in notice of election for the organization of the Stockton and East San Joaquin Water Conservation District, said election being held on June 1, 1948; thence Southerly 3.5 miles, more or less, along said District boundary and along said centerline of State Highway 99 to intersection with the centerline of the Calaveras River; thence Westerly six (6) miles, more or less, along said District boundary and said centerline of the Calaveras River downstream to intersection with the centerline of the Stockton Deep Water Channel; thence leaving said District boundary Northwesterly one (1) mile, more or less, along said centerline of the Stockton Deep Water Channel to centerline Station 286+00, said Station 286+00 bearing Southwesterly 375 feet at right angles to said centerline from U.S.E.D., B.M. 4008; thence Northeasterly at right angle to said centerline 300 feet, more or less, to a point on the Southerly boundary of the Elmwood Tract; thence Easterly and Northerly along the Southerly and Easterly boundary of said Elmwood Tract 1.9 miles, more or less, to the point of intersection of said Easterly boundary with the Southerly levee of Fourteen Mile Slough (formerly called Twelve Mile Slough); thence North 500 feet, more or less, to the Stockton City Limits Line, said City Limits Line being along the centerline of said Fourteen Mile Slough; thence Westerly, Northwesterly, and Northeasterly 0.6 mile, more or less, along said City Limits Line and said centerline of Fourteen Mile Slough to a point on the West line of Section 19, Township 2 North, Range 6 East, Mount Diablo Base and Meridian; thence Northerly 0.5 mile, more or less, along said West line of Section 19 and said City Limits Line to the Southeasterly corner of Mitchell Slough-Wright Tract Annexation—A-7-67; thence along the City Limits Lines established by Annexation—A-7-67 and by Wright Tract Annexation—A-1-62 the following eight (8) courses, (1) South 57° 47' 30" West 150 feet, more or less, to a point, said point being on the water toe of levee of said Fourteen Mile Slough, (2) South 57° 47' 30" West 949.75 feet, (3) South 58° 35' 30" West 1011.23 feet to a point on the centerline of an existing drainage ditch, (4) Northerly along said drainage ditch centerline to intersection with centerline of a 75 foot wide Pacific Gas & Electric Company easement, as described in deed recorded in

Book of Official Records, Volume 2076, Page 470, San Joaquin County Records, (5) continuing Northerly along said drainage ditch centerline to a point on the water toe of the South levee of said Fourteen Mile Slough, (6) meandering Easterly along said water toe of the South levee to intersection with centerline of said 75 foot wide Pacific Gas & Electric Company easement, (7) continue meandering Easterly along said water toe of said South levee to a point bearing South 45° 00' West from the Northwest corner of said-Section 19, and (8) North 45° 00' East to said Northwest corner of Section 19; thence Easterly 1900 feet, more or less, along the North line of said Section 19 and along Stockton City Limits Line to the Southeast corner of the Shima Tract thence leaving said City Limits Line Northerly 6600 feet, more or less, along the Easterly boundary of said Shima Tract to a corner thereof; thence Westerly 1500 feet, more or less, along the Northerly boundary of said Shima Tract to the Southeast corner of the Atlas Tract; thence Northerly 3,800 feet, more or less, along the Easterly boundary of said Atlas Tract to the Southwest corner of Section 6, Township 2 North, Range 6 East, Mount Diablo Base and Meridian; thence Northerly one (1) mile, more or less, along the West line of said Section 6 to the Northwest corner thereof; thence Easterly six (6) miles, more or less, along said North line of Township 2 North to the point of beginning, containing 20,200 acres, more or less.

(2) The Central Stockton Planning Area which shall include the following territory: Beginning at the point of intersection of the centerline of the Calaveras River with the centerline of the Stockton Deep Water Channel; thence Southerly and Easterly along the Southerly and Westerly line of the Stockton and East San Joaquin Water Conservation District Boundary to the point of intersection of the North line of Section 23, C. M. Weber Grant with the Easterly line of McKinley Avenue, said Stockton and East an Joaquin Water Conservation District Boundary being described in Notice of Election for the organization of the Stockton and East San Joaquin Water Conservation District, said election being held on June 1, 1948; thence Southerly 0.5 mile, more or less, along the Easterly line of McKinley Avenue to intersection with the centerline of Duck Creek; thence Westerly 1.3 miles, more or less, along the centerline of said Duck Creek and along the centerline of Walker Slough and the Southwesterly projection of said centerline of Walker Slough to a point on the Southerly bank of French Camp Slough, said point being on the boundary of Reclamation District No. 17; thence Westerly one (1) mile, more or less, along said boundary of Reclamation District No. 17 to the right or Easterly bank of the San Joaquin River; thence Northwesterly 1.0 mile, more or less, downstream along the said right or Easterly bank of the San Joaquin River to a point bearing East 500 feet, more or less, from the Southeast corner of the 3.55 acre parcel of Oxidation Pond Annexation No. 3—A-1-66; thence West 500 feet, more or less, to said Southeast corner; thence Westerly 1.6 miles, more or less, along the Stockton City Limits Line to the Easterly line of Dagget Road; thence Northerly one (1) mile, more or less, along said Easterly line of Dagget Road and along the Stockton City Limits Line to a point on the centerline of Burns Cutoff; thence in a general Westerly, Northerly, and Northeasterly direction 3.09 miles, more or less, along said centerline of Burns Cutoff to intersection with said centerline of the Stockton Deep Water Channel; thence Southeasterly 0.1 mile, more or less, along said centerline of the Stockton Deep Water Channel to the point of beginning, containing 4,900 acres, more or less.

(3) The South Stockton Planning Area which shall include the following territory: Beginning at the Northeast corner of Section 58, C. M. Weber Grant, said corner being a point on the boundary of the Central San Joaquin Water Conservation District; thence along said Central San Joaquin Water Conservation District boundary the following four (4) courses, (1) Southerly along the West line of Sections 68, 69, and 70 of said C. M. Weber Grant to the Southerly line of said Grant being also the North line of Section 28, Township 1 North, Range 7 East, Mount Diablo Base and Meridian; (2) Westerly along said Weber Grant line and along said North line of Section 28 to the Northwest corner of said Section 28; (3) Southerly along the West line of said Section 28 to intersection with the South line of Section 59, C. M. Weber Grant; and (4) Westerly along the said South line of Section 59 to a point on the Easterly right-of-way line of Highway 99; thence Southerly 3.4 miles, more or less, along said Easterly right-of-way line of Highway 99 to the intersection of said Easterly right-of-way with the Southwesterly boundary of French Camp Road, also known as French Camp Toll Road or Turnpike; thence Northwesterly 3 miles, more or less, along said Southwesterly boundary of French Camp Road to the Westerly right-of-way line Of the Western Pacific Railroad Company property; thence Southerly 1.8 miles, more or less, along said Westerly right-of-way to a point on the Southerly line of Section P of C. M. Weber Grant; thence Westerly 1.2 miles, more or less, along the South line of said C. M. Weber Grant to the Northeast corner of the Northwest  $\frac{1}{4}$  of the Northwest  $\frac{1}{4}$  of Section 14, Township 1 South, Range 6 East, Mount Diablo Base and Meridian, said corner being a point in the boundary of Reclamation District No. 17; thence Westerly 0.75 mile, more or less, along the boundary of said Reclamation District No. 17 to the Southeast corner of fractional Section 10 of said Township and Range and being the Southwest corner of the C.M. Weber Grant; thence along the boundary of said Reclamation District No. 17 and the boundary of said C. M. Weber Grant the following four (4) courses, (1) Northerly 232.41 chains, more or less, along the Easterly boundary of fractional Sections 10 and 3 of said Township and Range and along the Easterly boundary of fractional Section 34, Township 1 North, Range 6 East, Mount Diablo Base and Meridian to the Northeast corner of said fractional Section 34, (2) East 20 chains, (3) North 40 chains, and (4) East 1076 feet; thence leaving said C. M. Weber Grant boundary and continuing along the boundary of said Reclamation District No. 17 the following five (5) courses, (1) North 255.64 feet, (2) North 89° 15' East 364.98 feet, (3) North 66° 30' East 1246.34 feet to a point on the West line of said French Camp Road, (4) Northerly 1850 feet, more or less, along said West line of French Camp Road to the South bank of French Camp Slough, and (5) Westerly 0.75 mile, more or less, downstream along the Southerly bank of French Camp Slough to the intersection of said Reclamation District No. 17 boundary with the Southwesterly projection of the centerline of Walker Slough; thence Easterly 1.5 miles, more or less, along said centerline of Walker Slough and the centerline of Duck Creek to the Easterly line of McKinley Avenue; thence Northerly 0.3 mile, more or less, along said Easterly line of McKinley Avenue to a point of intersection with the North line of Section 23, C. M. Weber Grant, said point being on the Southerly boundary of the Stockton and East San Joaquin Water Conservation District; thence Easterly 3.6 miles, more or less, along said Southerly boundary of said Stockton and East San Joaquin Water Conservation District to the point of beginning, containing 12,800 acres, more or less.

(b) The inclusion of each of such three planning areas (the North Stockton Planning Area, the Central Stockton Planning Area, and the South Stockton Planning Area) shall occur and be complete for all purposes, subject to Section 26, unless on or before the 60th day after the effective date of this act there is filed with the secretary of the district, at the district's office, a petition requesting an election signed by at least 25 percent of the registered voters in such planning area.

(c) A petition may consist of any number of separate instruments, which identify the planning area to which it is applicable and shall contain a request that an election shall be held to determine whether such planning area shall be included within the district.

(d) Within 20 days of the date of the filing of such a petition the secretary of the district shall examine the same and ascertain whether or not such petition is signed by the requisite number of voters.

(e) When the secretary of the district has completed his examination of the petition he shall attach to the same his certificate properly dated showing the result of such examination, and if from such examination he finds that such petition is signed by the requisite number of voters or is not so signed, he shall certify that the same is sufficient or insufficient, as the case may be.

(f) If such petition is sufficient the proposition of whether or not the subject planning area shall be included within the district shall be submitted to the vote of the voters in the subject planning area at an election called by the board and held within 70 days after the filing of a sufficient petition requesting an election.

(g) The manner of holding and conducting the election, the selection of officers to conduct it, the designation of precincts and polling places, the preparation, receipt, counting, and returning of ballots, and the canvassing and determining results of the election shall be as provided in Chapter 3 (commencing with Section 74790) of Part 6 of Division 21 of the Water Code, and in particulars not so provided shall be in accordance with the general laws of the state relative to elections at which propositions are submitted and voted upon.

(h) Upon the canvassing of the votes cast in the election if it appears that a majority of all votes cast are in favor of the inclusion of the subject planning area, then the inclusion of the subject planning area shall occur and be considered completed at the conclusion of the canvass, subject to the provisions of Section 26. Upon the canvassing of the votes cast in the election if it appears that a majority of all votes cast are against the inclusion of the subject planning area within the district, the inclusion shall be of no force and effect.

(i) If on or before the 60th day after the effective date of this act sufficient petitions have been filed with the secretary of the district requesting elections in more than one planning area, then the question of such inclusion shall be submitted to the vote of the voters in each of the subject planning areas at an election called and held on the same day.

(j) The secretary of the district may contract with the County Clerk of San Joaquin County to perform any of the duties imposed upon the secretary by this section. In such cases the costs of the county clerk in connection with such duties shall be paid by the district.

## SECTION 25

(a) There is hereby excluded from the Central San Joaquin Water Conservation District the following territory:

Beginning at the intersection of the North line of Section 24, C. M. Weber Grant, with the Easterly line of the Tidewater and Southern Railroad, and being a point on the Central San

Joaquin Water Conservation District Boundary; thence along said Central San Joaquin Water Conservation District Boundary the following five (5) courses, (1) Southeasterly along the Easterly boundary of said railroad to its intersection with the North line of Section 39, C. M. Weber Grant, (2) Northeasterly along the Northerly line of said Section 39 and its extension to a point on the West line of fractional Section 5, Township 1 South, Range 7 East, Mount Diablo Base and Meridian, (3) Southerly along said Westerly line of fractional Section 5 and the Easterly line of C. M. Weber Grant to the North line of the property conveyed to Joe Marchesotti, a married man, by Deed recorded January 8, 1957 in Book of Official Records, Volume 1933, Page 221, San Joaquin County Records, (4) Easterly along the North line of said Marchesotti property to the Easterly line of Highway 99, and (5) Northerly along said Easterly line of Highway 99 to the intersection of the North line of Section 4, Township 1 North, Range 7 East, Mount Diablo Base and Meridian; thence leaving said Central San Joaquin Water Conservation District Boundary Northerly along said Easterly line of Highway 99 to its intersection with the Southerly line of Section 59, C. M. Weber Grant and being a point on the Northerly boundary of said Central San Joaquin Water Conservation District; thence along said Central San Joaquin Water Conservation District Boundary the following six (6) courses, (1) Westerly along the Southerly lines of Sections 59 and 48 of C. M. Weber Grant to the Southwest corner of said Section 48, (2) Northerly along the West line of said Section 48 and Section 47 of said C. M. Weber Grant to the Northeast corner of land described in Deed to John S. Ladd, Jr. recorded September 17, 1947 in Book of Official Records, Volume 1082, Page 344, San Joaquin County Records, (3) South 72' 35' West along the North line of said Ladd land 35 chains, (4) South 73° 10' West 34.72 chains to a point on the West line of Section 35, C. M. Weber Grant, (5) Southerly along said West line of Section 35 to the Northeast corner of said Section 24, C. M. Weber Grant, and (6) Westerly along the Northerly line of said Section 24 to the point of beginning, containing 3150 acres, more or less.

(b) Such exclusion shall take effect at the same time that the inclusion of the South Stockton Planning Area takes effect, and if the inclusion of the South Stockton Planning Area is of no force and effect by virtue of an election held pursuant to Section 24, such exclusion from the Central San Joaquin Water Conservation District shall similarly be of no force and effect.

(c) The inclusion of territory into the district pursuant to this act, except as specifically provided in this section, shall have no effect upon the continuing inclusion of the subject territory in other water conservation districts or in any irrigation district or any other special districts.

## SECTION 26

(a) After the time for filing petitions pursuant to Section 24 has expired or an election has been held pursuant to Section 24, as the case may be, the board shall adopt a resolution confirming the inclusion of any planning area within the district pursuant to Section 24 and the exclusion of territory from the Central San Joaquin Water Conservation District pursuant to Section 25 if such inclusion and exclusion has not been disapproved at an election held pursuant to Section 24, and the secretary shall then prepare and execute a certificate of completion. Such certificate shall contain the following:

(1) The name of each district affected.

(2) A description of any territory included in the district and any territory excluded from the Central San Joaquin Water Conservation District, which descriptions may be made by

reference to the boundary shown on a map attached to such certificate.

(3) The date of adoption of the resolution confirming the inclusion and exclusion.

(4) A statement of the fact that the territory included shall be subject to a one-half-mill tax rather than the tax permitted by Section 75357 of the Water Code, as provided in Section 27.

(b) The secretary shall file his certificate of completion with the Secretary of State. Thereupon the Secretary of State shall execute a certificate of filing identifying the certificate of completion filed with him and stating the date of such filing. The Secretary of State shall transmit to the secretary a counterpart original of the certificate of filing.

(c) After receipt of the Secretary of State's certificate of filing, the secretary shall file with the County Recorder of the County of San Joaquin:

(1) A counterpart original of the secretary's certificate of completion; and

(2) The original or a counterpart original of the Secretary of State's certificate of filing.

(d) After recordation of the secretary's certificate of completion the Recorder of the County of San Joaquin shall file with the County Surveyor of the County of San Joaquin a copy of each of the boundary descriptions included in the certificate of completion.

(e) Any inclusion or exclusion confirmed by resolution of the board adopted pursuant to this section shall be completed from the date of filing the certificate of completion with the Secretary of State and shall be effective upon the date of the recordation made with the county recorder.

(f) The secretary shall also make such filings as may be provided for by Chapter 8 (commencing at Section 54900) of Part 1 of Division 2 of Title 5 of the Government Code, and for such purpose the inclusion and exclusion shall be deemed to be effective from the date of filing of the certificate of completion with the Secretary of State.

## SECTION 27

(a) Upon the effective date of the inclusion of a planning area into the district pursuant to this act, each planning area shall thereafter be treated in all respects as a part of the district, except that the following special provisions shall apply within each planning area included within the district:

(1) The assessment permitted by Section 75357 of the Water Code shall not exceed one-half mill (\$0.0005) on each one hundred cents (\$1) of the assessed value of the lands within such planning area according to the last assessment rolls instead of the maximum two and one-half mills (\$0.0025) permitted by Section 75357 of the Water Code.

(2) No ground water assessment or stream-delivered water charge shall be levied.

(b) A parcel of land within a planning area shall cease to be excluded from the full taxes, assessments, and charges as such exclusions are set forth in subdivision (a) in the event of either of the following:

(1) A parcel within a planning area is within the service area of a publicly or privately owned water utility which distributes domestic and industrial water which is all or in part furnished to such utility as treated surface water by the district; or

(2) The independent benefit commission pursuant to procedures set forth in Section 28 determines that a subject parcel is receiving a substantial benefit from district operations.

(c) In the case of the North Stockton Planning Area, the Central Stockton Planning Area, and the South Stockton Planning Area, no removal from the partial tax area shall take effect for any purpose prior to July 1, 1974.

- (d) As used in this act “substantial benefit”, means an actual raising by prior district operations, of ground water levels under a subject parcel or the actual retarding, by prior district operations, of the lowering of ground water levels under a subject parcel.
- (e) Whenever one or more parcels are transferred from a partial tax area to a full tax area, the secretary shall file a statement as to all parcels which are transferred to a full tax area, as required by Chapter 8 (commencing at Section 54900) of Part 1 of Division 2 of Title 5 of the Government Code.
- (f) After a parcel has been excluded from a partial tax area such exclusion shall be permanent.

## SECTION 28

- (a) If any one or more of the planning areas are finally included within the district, then following such final inclusion the board shall give written notice to the California District Securities Advisory Commission, and the advisory commission shall thereupon appoint a three-member commission, one of whom shall be a civil engineer whose practice encompasses irrigation, and one of whom shall be a civil engineer whose practice encompasses municipal water supply. Such independent benefit commission shall serve at the pleasure of the advisory commission. When a vacancy occurs in the membership of the independent benefit commission the secretary shall give notice to the advisory commission, and the advisory commission shall promptly appoint a successor. If the advisory commission fails to appoint a successor or to initially appoint the three members of the independent benefit commission, then after 60 days notice in writing to the advisory commission by the board, the board may fill such vacancy or make such appointments and the person so appointed by the board shall serve until such time as they are replaced by the advisory commission. The advisory commission may charge the district for the actual cost of performing the services required of the State Treasurer by this section.
- (b) It shall be the duty of the independent benefit commission from time to time, in the manner set forth in this section, to determine whether a parcel within a planning area is receiving a substantial benefit from district operations.
- (c) No member of the independent benefit commission shall have any interest in any land in the district, either directly or indirectly.
- (d) Each member of the independent benefit commission, before entering upon his duties, shall take and subscribe an oath that he is not in any manner interested either directly or indirectly in any land in the district, and that he will perform the duties of commissioner to the best of his ability.
- (e) The members of the independent benefit commission shall be paid by the district compensation for the services rendered by them in the amount or amounts fixed by the State Treasurer from time to time.
- (f) The members of the independent benefit commission, upon their appointment and thereafter from time to time, shall select one of their members as chairman.
- (g) Within 60 days of its appointment, and thereafter as provided in subdivision (j) of this section, the independent benefit commission shall meet at the district office. At the time of such initial meeting and thereafter as requested by the independent benefit commission the board shall furnish or make available to the independent benefit commission all data and information possessed by the district and which in the judgment of the independent benefit commission is relevant to the determinations to be made by it.
- (h) After its initial meeting the independent benefit commission within the next succeeding

120 days shall determine which parcels within the partial tax areas are receiving a substantial benefit by the operations of the district and shall prepare a preliminary report of its findings. Upon its completion the preliminary report of the independent benefit commission shall be delivered to the secretary in writing. Such preliminary report shall list and identify each parcel which the independent benefit commission has determined is receiving a substantial benefit from district operations by the current description of such parcel as such description is then disclosed by the applicable current records of the assessor, and accordingly should be transferred from the partial tax area to the full tax area, Upon receipt of such preliminary report of the independent benefit commission the secretary shall publish pursuant to Section 6061 of the Government Code a notice of the receipt of such preliminary report. Such notice shall fix a date for a public hearing to be held on the report. Such publication shall be by a display advertisement in a newspaper of general circulation printed and published within the district, at least 20 days prior to the date at which the public hearing is to be held. The notice, among other information, shall contain an invitation to all interested persons to call at the office of the district and to examine said report of the independent benefit commission. At the time appointed in the notice, the independent benefit commission shall meet in the district office and hold a public hearing on its preliminary report. At the hearing any person interested in the district, including the board and members of the board, may, in person or by representative, appear and submit evidence concerning the matters contained in the preliminary report and the matters pending before the independent benefit commission. Within 30 days of the conclusion of its public hearing the independent benefit commission shall deliver its final report to the secretary.

(i) Upon receipt of the final report of the independent benefit commission the secretary shall publish a notice that such final report has been received and that the same is available for inspection by all interested persons at the office of the district. The notice shall be published pursuant to Section 6061 of the Government Code by display advertisement in a newspaper of general circulation printed and published within the district, and shall advise interested persons of their right to request review pursuant to this paragraph. Within 30 days of the publication of the notice required by this paragraph any person interested in a parcel affected by the final report of the independent benefit commission who is dissatisfied with the action of the independent benefit commission in connection with such parcel may file a request for review in writing on forms provided by the secretary requesting review by the board of the action of the independent benefit commission as to the parcel in which such person is interested. Upon the filing of a request for review the secretary shall set the matter for hearing by the board. At least 20 days prior to the hearing the secretary shall mail notice of such hearing to the person or persons requesting review. At the hearing the board shall hear evidence concerning the subject parcel and whether it is receiving a substantial benefit by the operations of the district. At the conclusion of the hearing the board may modify the report of the independent benefit commission by excluding one or more parcels from the list of parcels to be transferred from the partial tax area to the full tax area, but the board shall have no power to include any parcel within the full tax area which was not initially so included by the final report of the independent benefit commission. A final report of the independent benefit commission shall be final and shall take effect for all purposes upon either the expiration of 30 days after the publication of the notice provided for in this subdivision or upon the final action of the board in modifying the final report or determining not to modify the final report following the public hearing of the board in the event of the filing of a request for review

pursuant to this subdivision.

(j) After the initial hearing of the independent benefit commission so long as any portion of the district is not within the full tax area the independent benefit commission shall again hold an initial meeting as provided in subdivision (i) of this section during the fifth year next succeeding the year of the final adoption of the last final report of the independent benefit commission or at more frequent intervals upon written request of the board, and after such initial meeting shall proceed to the adoption of a new final report of the independent benefit commission in the manner set forth in subdivisions (g) to (i), inclusive, of this section.

#### SECTION 29

Failure of the district at any time to take action to collect any delinquent replenishment assessment or charge shall not be a waiver of the right of the district to collect such account at any time in the future by the utilization of such procedures and remedies as are granted to the district by this act.

#### SECTION 30

Whenever the district is required to mail any bill or notice to any owner the requirement of mailing shall be satisfied by deposit of such bill or notice in any postal facility regularly maintained by the government of the United States, with postage paid, addressed to the owner at his address as disclosed by the most recent record of the district. If the records of the district do not contain an address for such owner, such mailing shall be to his address as disclosed by the most recent equalized tax roll of the county. Any owner may, from time to time, file notices of change of address with the district.

#### SECTION 31

Notwithstanding Section 74223 of the Water Code and any other provisions of law in conflict with this section, the board shall hold regular meetings on the third Tuesday of each month. The board may by resolution change the frequency of, and the day for, holding regular meetings. Notice of any such change shall be published once a week for at least two consecutive weeks before the time for a regular meeting on the new meeting date in a newspaper of general circulation circulated in the district.

#### SECTION 32

Notwithstanding Section 74091 of the Water Code and any other provisions of law in conflict with this section, one director, who shall be an elector of the division in which such director resides, shall be elected for such division, by vote of the electors of the entire district, This section shall be applicable to voting at any district election held after January 1, 1972.

#### SECTION 33

The boundaries of the divisions of the district are relocated as follows:

##### Division No. 1

Beginning at a point on the Stockton and East San Joaquin Water Conservation District boundary, said point being the Southwest corner of the Northeast  $\frac{1}{4}$  of Section 25, Township 2 North, Range 8 East, Mount Diablo Base and Meridian, said Stockton and East San Joaquin

Water Conservation District boundary being described in notice of election for the organization of the Stockton and East San Joaquin Water Conservation District, held June 1, 1948; thence along said Stockton and East San Joaquin Water Conservation District boundary the following thirty-five (35) courses, (1) East 1.0 mile, more or less, along the South line of the Northeast  $\frac{1}{4}$  of said Section 25 and along the South line of the Northwest  $\frac{1}{4}$  of Section 30, Township 2 North, Range 9 East to the center of said Section 30, (2) North  $2\frac{1}{2}$  miles, more or less, along the half section line running North and South through Sections 30, 19, and 18, Township 2 North, Range 9 East to the Southwest corner of the Southeast  $\frac{1}{4}$  of Section 7, Township 2 North, Range 9 East, (3) East  $\frac{1}{2}$  mile, more or less, along the South line, of said Section 7 to the Southeast corner thereof, (4) North  $\frac{1}{4}$  mile, more or less, along the East line of said Section 7 to the Southwest corner of the Northwest  $\frac{1}{4}$  of the Southwest  $\frac{1}{4}$  of Section 8, Township 2 North, Range 9 East, (5) East  $\frac{1}{4}$  mile, more or less, along the South line of said Northwest  $\frac{1}{4}$  of the Southwest  $\frac{1}{4}$  of said Section 8 to the centerline of the Escalon-Bellota Road, (6) North  $\frac{1}{4}$  mile, more or less, along said centerline of the Escalon-Bellota Road to its intersection with the South line of the North one-half of said Section 8, (7) East  $\frac{3}{4}$  mile, more or less, along the South line of the North  $\frac{1}{2}$  of said Section 8 to the Southeast corner of the North  $\frac{1}{2}$  of said Section 8, (8) North  $\frac{1}{4}$  mile, more or less, along the East line of Section 8 to the Southwest corner of the Northwest  $\frac{1}{4}$  of the Northwest  $\frac{1}{4}$  of Section 9, Township 2 North, Range 9 East, (9) East  $\frac{1}{4}$  mile, more or less, along the South line of the Northwest  $\frac{1}{4}$  of the Northwest  $\frac{1}{4}$  of Section 9 to the Southeast corner thereof in the center of the Gilmore Road No.616, (10) North along the  $\frac{1}{4}$ ,  $\frac{1}{4}$  section line and along the center of said Gilmore Road No. 616 to a point 300.0 feet Southerly from the South line of Section 4, Township 2 North, Range 9 East, Mount Diablo Base and Meridian, (11) East 750.0 feet, (12) North 300.0 feet to a point on said South line of Section 4, (13) East along the South line of Section 4 to the Southeast corner of the Southwest  $\frac{1}{4}$  of said Section 4, (14) North  $\frac{1}{2}$  mile, more or less, along the East line of the Southwest  $\frac{1}{4}$  of Section 4 to the center of said Section 4, (15) East  $\frac{1}{2}$  mile, more or less, along the South line of the Northeast  $\frac{1}{4}$  Section 4 to the Southeast corner of the Northeast  $\frac{1}{4}$  of said Section 4, (16) North  $\frac{1}{2}$  mile, more or less, along the East line of said Northeast  $\frac{1}{4}$  of Section 4 to the Southwest corner of Section 34, Township 3 North, Range 9 East, (17) East 1.0 mile, more or less, along the South line of Section 34 to the Southeast corner thereof, (18) South, along the West line of Section 2, Township 2 North, Range 9 East, to the center of the Bellota River Road, (19) Northeasterly along the center of said road to the East line of the Northwest  $\frac{1}{4}$  of said Section 2, (20) North along said East line of the Northwest  $\frac{1}{4}$  of said Section 2 to the Southwest corner of the Southeast  $\frac{1}{4}$  of Section 35, Township 3 North, Range 9 East, (21) East  $\frac{5}{16}$  mile, more or less, along the South line of Section 35 to the center of the Bellota River Road, (22) Northeasterly  $\frac{3}{4}$  mile, more or less, along the center of said road to a point on the South line of the North  $\frac{1}{2}$  of Section 36, Township 3 North, Range 9 East, Mount Diablo Base and Meridian, (23) East  $\frac{5}{8}$  mile, more or less, along the South line of said North  $\frac{1}{2}$  of Section 36 to the County line between San Joaquin and Stanislaus Counties, (24) North  $\frac{1}{2}$  mile, more or less, along said County line to the corner common to San Joaquin, Stanislaus and Calaveras Counties, (25) Northwesterly  $\frac{1}{2}$  mile, more or less, along County Line between San Joaquin and Calaveras Counties to its intersection with the North line of the South  $\frac{1}{2}$  of Section 25, Township 3 North, Range 9 East, (26) West, along said North line to the Northwest corner of the Southwest  $\frac{1}{4}$  of said Section 25, (27) South  $\frac{1}{2}$  mile, more or less, to the Southwest corner of said Section 25, (28) West  $\frac{1}{2}$  mile, more or less, to the Northwest corner of the Northeast,

¼ of Section 35 of Township 3 North, Range 9 East, (29) South ¼ mile, more or less, to the Northeast corner of the South ½ of the Northwest ¼ of said Section 35, (30) West ½ mile, more or less, to the Northwest corner of said South ½ of the Northwest ¼ of said Section 35, (31) South ¼ mile, more or less, to the Northeast corner of the South ½ of Section 34, Township 3 North, Range 9 East, (32) West 1½ miles, more or less, to a point in the center of the Linden Road at the center of Section 33, (33) Westerly ½ mile, more or less, along the center of said Linden Road to its intersection with the West line of Section 33, Township 3 North, Range 9 East, (34) South ½ mile, more or less, along the West line of Section 33 to the Northeast corner of Section 5, Township 2 North, Range 9 East, (35) West ¾ miles, more or less, along the North line of Sections 5 and 6 of Township 2 North, Range 9 East, and the North line of Sections 1 and 2 of Township 2 North, Range 8 East to the Southwest corner of the East ½ of the East ½ of Section 35, Township 3 North, Range 8 East to a point on the boundary of that certain petition dated May 14, 1953, for inclusion in the Stockton and East San Joaquin Water Conservation District; thence along the boundary described in said petition, dated May 14, 1953 the following eighteen (18) courses, (1) Northerly ¾ mile, more or less, along the Westerly line of said East ½ of the East ½ of said Section 35 to the Northeast corner of the Southwest ¼ of the Northeast ¼ of said Section 35, (2) Westerly 418.3 feet along the North line of the Southwest ¼ of the Northeast ¼ of said Section 35, (3) Northerly ¼ mile, more or less, along a line parallel with, 418.3 feet Westerly of, measured at right angles to the West line of the Northeast ¼ of the Northeast ¼ of said Section 35 to intersection with the North line of said Section 35, (4) Westerly 1072.5 feet, more or less, along the North line of said Section 35 to the Northwest corner of the East 5 acres of the Northeast ¼ of the Northwest ¼ of said Section 35, (5) Southerly along the West line of said 5 acre tract to intersection with the North line of the Southeast ¼ of the Northwest ¼ of said Section 35, (6) Westerly along said North line to the Northwest corner of the Southeast ¼ of the Northwest ¼ of said Section 35, (7) Southerly 2645 feet, more or less, along the West line of the East ½ of the West ½ of said Section 35 to the Northeast corner of the Southwest ¼ of the Southwest ¼ of said Section 35, (8) Westerly 1324.5 feet, more or less, along the North line of the Southwest ¼ of the Southwest ¼ of said Section 35 to the Northwest corner of said Southwest ¼ of the Southwest ¼ of said Section 35, (9) Northerly 1 ¼ miles, more or less, along the East line of Sections 34 and 27, Township 3 North, Range 8 East, Mount Diablo Base and Meridian, to the Northeast corner of the Southeast ¼ of said Section 27, (10) Westerly ¼ mile, more or less along the North line of said Southeast ¼ to the Northwest corner of the Northeast ¼ of said Southeast ¼, (11) Southerly ⅛ mile, more or less, along the West line of the Northeast ¼ of the Southeast ¼ of said Section to the Southeast corner of the Northeast ¼ of the Northwest ¼ of the Southeast ¼ of said Section 27, (12) Westerly 1/16 mile, more or less, along the South line of the Northeast ¼ of the Northwest ¼ of the Southeast ¼ of said Section to the Northwest corner of the East ½ of the Southwest ¼, of the Northwest ¼ of the Southeast ¼ of said Section 27, (13) Southerly ⅓ mile, more or less, along the West line of the East ½ of the Southeast ¼ of the Northwest ¼ of the Southeast ¼ of said Section to the Southwest corner thereof, (14) Westerly 1/16 mile, more or less, along the North line of the East ½ of the Southwest ¼ of the Southeast ¼ of said Section 27 to the Northwest corner thereof, (15) Southerly ¼ mile, more or less, along the West line of the East ½ of the Southwest ¼ of the Southeast ¼ to the Southwest corner thereof, (16) Westerly 7/8 mile, more or less, along the North line of Sections 34 and 33, Township 3 North, Range 8 East, Mount Diablo Base and Meridian to the Northwest corner of the Northeast ¼ of the

Northeast  $\frac{1}{4}$  of said Section 33, (17) Southerly  $\frac{1}{4}$  mile, more or less, along the West line of the Northeast  $\frac{1}{4}$  of the Northeast  $\frac{1}{4}$  of said Section to the Southwest corner thereof, and (18) Westerly  $\frac{1}{4}$  mile, more or less, along the South line of the Northwest  $\frac{1}{4}$  of the Northeast  $\frac{1}{4}$  of said Section to the Southwest corner thereof being a point on said Stockton and East San Joaquin Water Conservation District boundary; thence along last said boundary the following four (4) courses; (1) Northerly  $\frac{1}{4}$  mile, more or less, along the East line of the Northwest  $\frac{1}{4}$  of said Section 33 to the Northeast corner of said Northwest  $\frac{1}{4}$ , (2) Westerly  $\frac{1}{2}$  mile, more or less, along the North line of said Northwest  $\frac{1}{4}$  to the Northwest corner thereof, (3) Northerly  $\frac{1}{2}$  mile, more or less, along the East line of the Southeast  $\frac{1}{4}$  of Section 29, Township 3 North, Range 8 East to the Northeast corner of said Southeast  $\frac{1}{4}$ , and (4) Westerly  $\frac{1}{2}$  mile, more or less, along the North line of said Southeast  $\frac{1}{4}$  to the Northwest corner thereof being a point on the centerline of Tully Road; thence leaving said Stockton and East San Joaquin Water Conservation District boundary the following seven (7) courses, (1) Southerly  $2\frac{1}{2}$  miles, more or less, along said centerline of Tully Road to intersection with the centerline of Comstock Road, said intersection being at the Southeast corner of the West  $\frac{1}{2}$  of Section 5, Township 2 North, Range 8 East, Mount Diablo Base and Meridian, (2) Westerly  $\frac{1}{4}$  mile, more or less, along said centerline of Comstock Road to intersection with Tully Road at the Northeast corner of the West  $\frac{1}{2}$  of the West  $\frac{1}{2}$  of Section 8, Township 2 North, Range 8 East, Mount Diablo Base and Meridian, (3) Southerly 1.0 mile, more or less, along said centerline of Tully Road to intersection with the centerline of Baker Road at the Southeast corner of said West  $\frac{1}{2}$  of the West  $\frac{1}{2}$  of Section 8, (4) Easterly 3.0 miles, more or less, along said centerline of Baker Road and the  $\frac{1}{2}$  mile extension thereof to intersection with the centerline of Wall Road and being at the Southeast corner of the West  $\frac{1}{2}$  of the West  $\frac{1}{2}$  of Section 11, Township 2 North, Range 8 East, Mount Diablo Base and Meridian, (5) Southerly  $\frac{1}{2}$  mile, more or less, along said centerline of Wall Road to intersection with the centerline of Linden Road, (6) Northeasterly 1.3 miles, more or less, along said centerline of Linden Road to intersection with the centerline of Fine Road and (7) Southerly  $2\frac{1}{2}$  miles, more or less, along said centerline of Fine Road to the point of beginning.

#### Division No. 2

Beginning at a point on the Stockton and East San Joaquin Water Conservation District boundary, said point being the Southwest corner of fractional Section 1, Township 1 North, Range 7 East, Mount Diablo Base and Meridian, and being a point on the Easterly boundary of C. M. Weber Grant, said Stockton and East San Joaquin Water Conservation District boundary being described in notice of election for the organization of the Stockton and East San Joaquin Water Conservation District, held June 1, 1948; thence along said Stockton and East San Joaquin Water Conservation District boundary the following seven (7) courses, (1) Easterly  $\frac{1}{2}$  mile, more or less, along the Southerly line of said fractional Section 1 to the Southeast corner thereof, said corner being on the centerline of Jack Tone Road, (2) Easterly 4.0 miles, more or less, along the South lines of Sections 6, 5, 4, and 3, Township 1 North, Range 8 East, to the Southeast corner of said Section 3, (3) Northerly 1.0 mile, more or less, along the East line of said Section 3 to the Southwest corner of Section 35, Township 2 North, Range 8 East, being a point on the centerline of Copperopolis Road, (4) Easterly 1.0 mile, more or less, along the South line of said Section 35 and being along said centerline of Copperopolis Road to the Southeast corner of said Section 35 (5) Northerly  $\frac{1}{2}$  mile, more or

less, along the East line of said Section 35 to the Southwest corner of the Northwest  $\frac{1}{4}$  of Section 36, Township 2 North, Range 8 East, (6) Easterly  $\frac{1}{2}$  mile, more or less, along the South line of said Northwest  $\frac{1}{4}$  to the center of said Section 36 and being a point on the centerline of Fine Road, and (7) Northerly 1.0 mile, more or less, along the  $\frac{1}{4}$  section line of Sections 36 and 25, Township 2 North, Range 8 East and along said centerline of Fine Road to the center of Section 25, Township 2 North, Range 8 East; thence leaving said Stockton and East San Joaquin Water Conservation District boundary the following nine (9) courses, (1) Northerly  $2\frac{1}{2}$  miles, more or less, along the said centerline of Fine Road to intersection with the centerline of Linden Road, (2) Southwesterly 1.3 miles, more or less, along said centerline of Linden Road to intersection with the centerline of Wall Road, (3) Northerly  $\frac{1}{2}$  mile, more or less, along said centerline of Wall Road to intersection with the Easterly projection of the centerline of Baker Road at a point being the Northeast corner of the West  $\frac{1}{2}$  of the Northwest  $\frac{1}{4}$  of Section 14, Township 2 North, Range 8 East, (4) Westerly  $3\frac{1}{4}$  miles, more or less, along said Easterly projection and said centerline of Baker Road to the Northwest corner of Section 17, Township 2 North, Range 8 East, said projection and said centerline of Baker Road being along the North lines of Sections 14, 15, 16, and 17, Township 2 North, Range 8 East, (5) Southerly 1.7 miles, more or less, along the West lines of Sections 17 and 20 to a point on the said centerline of Linden Road, (6) Southwesterly 3.7 miles, more or less, along said centerline of Linden Road to intersection with the centerline of Alpine Road, (7) Southeasterly 0.8 mile, more or less, along said centerline, of Alpine Road to intersection with the centerline of the Southern Pacific Railroad Company property, (8) Easterly  $1\frac{3}{4}$  miles, more or less, along said centerline of the Southern Pacific Railroad Company property to a point on the Northerly projection of said Westerly line of fractional Section 1, Township 1 North, Range 7 East, and (9) Southerly  $1\frac{1}{2}$  miles, more or less, along said Northerly projection and said Easterly line of fractional Section 1 to the point of beginning.

### Division No. 3

Beginning at a point on the Stockton and East San Joaquin Water Conservation District boundary, said point being the Northeast corner of the Southwest  $\frac{1}{4}$  of Section 29, Township 3 North, Range 8 East, Mount Diablo Base and Meridian, said Stockton and East San Joaquin Water Conservation District boundary being described in notice of election for the organization of the Stockton and East San Joaquin Water Conservation District, held June 1, 1948; thence along said Stockton and East San Joaquin Water Conservation District boundary the following four (4) courses, (1) Westerly  $1\frac{1}{2}$  mile, more or less, along the  $\frac{1}{2}$  Section lines of Sections 29 and 30, Township 3 North, Range 8 East to the Northeast corner of the Southeast  $\frac{1}{4}$  of Section 25, Township 3 North, Range 7 East, Mount Diablo Base and Meridian, (2) Westerly  $3\frac{1}{2}$  miles, more or less, along the  $\frac{1}{2}$  Section lines of Sections 25, 26, 27, and 28, Township 3 North, Range 7 East to intersection with the centerline of Alpine Road, (3) Southerly  $1\frac{1}{2}$  miles, more or less, along said centerline of Alpine Road to intersection with the North line of Section 4, Township 2 North, Range 7 East, Mount Diablo Base and Meridian, and being on the centerline of Eight Mile Road, (4) Westerly 0.9 mile, more or less, along the North line of Sections 4 and 5, Township 2 North, Range 7 East and being along said centerline of Eight Mile Road to intersection with the centerline of Hildreth Road; thence Southerly  $1\frac{1}{4}$  mile, more or less, along said centerline of Hildreth Road to

intersection with centerline of Ashley Road; thence Southeasterly  $1\frac{1}{4}$  mile, more or less, along said centerline of Ashley Road to intersection with centerline of the Calaveras River; thence Northeasterly 1.1 mile, more or less, along said centerline of the Calaveras River to intersection with centerline of Alpine Road; thence Southeasterly 3.7 miles, more or less, along said centerline of Alpine Road to intersection with the centerline of Linden Road; thence Northeasterly 3.7 miles, more or less, along said centerline of Linden Road to intersection with the West line of Section 20, Township 2 North, Range 8 East, Mount Diablo Base and Meridian; thence Northerly 1.7 miles, more or less, along said West line of Section 20 and along the West line of Section 17, Township 2 North, Range 8 East, Mount Diablo Base and Meridian to the Northwest corner thereof, being a point on the centerline of Baker Road; thence Easterly  $\frac{1}{4}$  mile, more or less, along the North line of said Section 17 and the centerline of Baker Road to intersection with the centerline of Tully Road at the Southeast corner of the West  $\frac{1}{2}$  of the West  $\frac{1}{2}$  of Section 8, Township 2 North, Range 8 East, Mount Diablo Base and Meridian; thence Northerly 1.0 mile, more or less, along said centerline of Tully Road to intersection with the centerline of Comstock Road at the Northeast corner of said West  $\frac{1}{2}$  of West  $\frac{1}{2}$  of Section 8; thence Easterly  $\frac{1}{4}$  mile, more or less, along said centerline of Comstock Road being along the South line of Section 5, Township 2 North, Range 8 East, Mount Diablo Base and Meridian to intersection with centerline of Tully Road at the Southeast corner of the West  $\frac{1}{2}$  of said Section 5; thence Northerly  $2\frac{1}{2}$  miles, more or less, along said centerline of Tully Road and the  $\frac{1}{2}$  Section line of said Section 5 and the  $\frac{1}{2}$  Section lines of Sections 32 and 29, Township 3 North, Range 8 East, Mount Diablo Base and Meridian to the point of beginning.

#### Division No. 4

Beginning at a point on the Stockton and East San Joaquin Water Conservation District boundary, said point being on the intersection of the centerline of Hildreth Road and the North line of Section 5, Township 2 North, Range 7 East, Mount Diablo Base and Meridian, said Stockton and East San Joaquin Water Conservation District boundary being described in notice of election for the organization of the Stockton and East San Joaquin Water Conservation District, said election being held June 1, 1948; thence leaving said District boundary Southerly  $1\frac{1}{4}$  mile, more or less, along said centerline of Hildreth Road to intersection with the centerline of Ashley Road; thence Southeasterly  $1\frac{1}{4}$  mile, more or less, along said centerline of Ashley Road to intersection with the centerline of the Calaveras River; thence Southwesterly 6.0 miles, more or less, along said centerline of the Calaveras River to intersection with the centerline of Pacific Avenue; thence Northerly 1.2 mile, more or less, along said centerline of Pacific Avenue to intersection with the centerline of Robinhood Drive; thence Westerly 0.6 mile, more or less, along said centerline of Robinhood Drive to intersection with the centerline of Pershing Avenue; thence Northerly 0.2 mile, more or less, along said centerline of Pershing Avenue to intersection with the South line of Swain Oaks Manor; thence South  $69^{\circ} 40'$  West 1652.20 feet along said South line of Swain Oaks Manor to the Southwest corner thereof; thence North  $02^{\circ} 35'$  West 112.62 feet along the West line of said Swain Oaks Manor to the North line of Section 29, Township 2 North, Range 6 East, Mount Diablo Base and Meridian; thence Westerly 1.0 mile, more or less, along said North line of Section 29 to the Northwest corner thereof; thence Southerly  $\frac{1}{8}$  mile, more or less, along the West line of said Section 29 to intersection with the centerline of Fourteen Mile

Slough (formerly called Twelve Mile Slough); thence Southerly and Westerly  $\frac{1}{2}$  mile, more or less, along said centerline of Fourteen Mile Slough to a point on the City Limits line; thence Westerly, Northwesterly, Northerly and Northeasterly 1.3 miles, more or less, along said centerline of Fourteen Mile Slough and said City Limits line to intersection with the West line of Section 19, Township 2 North, Range 6 East, Mount Diablo Base and Meridian; thence Northerly 0.5 mile, more or less, along said West line of Section 19 and said City Limits line to the Southeasterly corner of Mitchell Slough-Wright Tract Annexation—A-7-67; thence Westerly, Northerly, and Easterly 1.3 miles, more or less, along the City Limits line established by said Annexation—A-7-67 and by the Wright Tract Annexation—A-1-62 to the Northwest corner of said Section 19; thence Easterly 1900 feet, more or less, along the North line of said Section 19 and said City Limits line to the Southeast corner of the Shima Tract; thence leaving said City Limits line Northerly 6600 feet, more or less, along the Easterly boundary of said Shima Tract to a corner thereof; thence Westerly 1500 feet, more or less, along the Northerly boundary of said Shima Tract to the Southeast corner of the Atlas Tract; thence Northerly 3800 feet, more or less, along the Easterly boundary of said Atlas Tract to the Southwest corner of Section 6, Township 2 North, Range 6 East, Mount Diablo Base and Meridian; thence Northerly 1.0 mile, more or less, along the West line of said Section 6 to the Northwest corner thereof; thence Easterly  $7\frac{7}{8}$  miles, more or less, along the North line of said Township and Range and along the North line of Township 2 North, Range 7 East, Mount Diablo Base and Meridian, to the point of beginning.

#### Division No. 5

Beginning at a point on the Stockton and East San Joaquin Water Conservation District boundary, said point being the Southwest corner of fractional Section 1, Township 1 North, Range 7 East, Mount Diablo Base and Meridian, and being a point on the Easterly boundary of C. M. Weber Grant, said Stockton and East San Joaquin Water Conservation District boundary being described in notice of election for the organization of the Stockton and East San Joaquin Water Conservation District, held June 1, 1948; thence Northerly  $1\frac{1}{2}$  mile, more or less, along the Westerly line of said fractional Section 1 and the Northerly projection thereof to intersection with the centerline of the Southern Pacific Railroad Company property; thence Westerly  $1\frac{3}{4}$  miles, more or less, along said centerline of the Southern Pacific Railroad Company property to intersection with the centerline of Alpine Road; thence Northwesterly  $4\frac{1}{2}$  miles, more or less, along said centerline of Alpine Road to intersection with the centerline of the Calaveras River; thence Westerly 5.1 miles, more or less, along said centerline of the Calaveras River to intersection with the centerline of the Stockton Diverting Canal; thence Southeasterly  $\frac{3}{4}$  mile, more or less, along said centerline of the Stockton Diverting Canal to intersection with the centerline of North Wilson Way; thence Southerly  $4\frac{5}{8}$  miles, more or less, along the centerline of North Wilson Way and South Wilson Way to intersection with the centerline of Charter Way; thence Easterly  $1\frac{3}{4}$  miles, more or less, along said centerline of Charter Way to intersection with the centerline of State Highway 99; thence Northerly 0.6 mile, more or less, along said centerline to the centerline of Washington Street; thence Easterly 1.4 miles, more or less, along said centerline of Washington Street to intersection with the centerline of the Stockton Diverting Canal; thence Southeasterly 0.8 mile, more or less, along said centerline of the Stockton Diverting Canal to intersection with the centerline of Copperopolis Road; thence Southwesterly 0.1 mile, more or less, along said

centerline of Copperopolis Road to intersection with Gillis Road; thence Southerly  $\frac{7}{8}$  mile, more or less, along said centerline of Gillis Road to a point on the boundary of said Stockton and East San Joaquin Water Conservation District, on the South line of State Highway Route 4 (Farmington Road); thence Easterly  $\frac{1}{4}$  mile, more or less, along said South line to intersection with the North line of fractional Section 11, Township 1 North, Range 7 East, Mount Diablo Base and Meridian and being also the Southerly boundary of C. M. Weber Grant; thence Easterly  $\frac{1}{4}$  mile, more or less, along said Southerly boundary of C. M. Weber Grant to a point where the Farmington Road turns Southeasterly; thence North 80.0 feet to a point on the Northerly line of a private roadway 80.0 feet in width; thence Easterly  $\frac{1}{4}$  mile, more or less, along the Northerly line of said roadway to a point on the Westerly line of the Northeast  $\frac{1}{4}$  of Section 12, Township 1 North, Range 7 East, Mount Diablo Base and Meridian, said point being on the Easterly line of the C. M. Weber Grant and distant 80.0 feet Northerly from the center of said Section 12; thence Northerly  $\frac{1}{2}$  mile, more or less, along said Easterly boundary of C. M. Weber Grant to the point of beginning.

#### Division No. 6

Beginning at the Northeast corner of Section 58, C. M. Weber Grant, said corner being a point on the boundary of the Central San Joaquin Water Conservation District; thence along said Central San Joaquin Water Conservation District boundary the following four (4) courses, (1) Southerly along the West line of Sections 68, 69, and 70 of said C. M. Weber Grant to the Southerly line of said Grant being also the North line of Section 28, Township 1 North, Range 7 East, Mount Diablo Base and Meridian; (2) Westerly along said Weber Grant line and along said North line of Section 28 to the Northwest corner of said Section 28; (3) Southerly along the West line of said Section 28 to intersection with the South line of Section 59, C. M. Weber Grant, and (4) Westerly along the said South line of Section 59 to a point on the Easterly right-of-way line of Highway 99; thence Southerly 3.4 miles, more or less, along said Easterly right-of-way line of Highway 99 to the intersection of said Easterly right-of-way with the Southwesterly boundary of French Camp Road, also known as French Camp Toll Road or Turnpike; thence Northwesterly 3 miles, more or less, along said Southwesterly boundary of French Camp Road to the Westerly right-of-way line of the Western Pacific Railroad Company property; thence Southerly 1.8 miles, more or less, along said Westerly right-of-way to a point on the Southerly line of Section P of C. M. Weber Grant; thence Westerly 1.2 miles, more or less, along the South line, of said C. M. Weber Grant to the Northeast corner of the Northwest  $\frac{1}{4}$  of the Northwest  $\frac{1}{4}$  of Section 14, Township 1 South, Range 6 East, Mount Diablo Base and Meridian, said corner being a point in the boundary of Reclamation District No. 17; thence Westerly 0.75 mile, more or less, along the boundary of said Reclamation District No. 17 to the Southeast corner of fractional Section 10 of said Township and Range and being the Southwest corner of the C. M. Weber Grant; thence along the boundary of said Reclamation District No. 17 and the boundary of said C. M. Weber Grant the following, four (4) courses, (1) Northerly 232.41 chains, more or less, along the Easterly boundary of fractional Sections 10 and 3 of said Township and Range and along the Easterly boundary of fractional Section 34, Township 1 North, Range 6 East, Mount Diablo Base and Meridian to the Northeast corner of said fractional Section 34, (2) East 20 chains, (3) North 40 chains, and (4) East 1076 feet; thence leaving said C. M. Weber Grant boundary and continuing along the boundary of said Reclamation District No. 17 the following five (5)

courses, (1) North 255.64 feet, (2) North 89° 15' East 364.98 feet, (3) North 66° 30' East 1246.34 feet to a point on the West line of said French Camp Road, (4) Northerly 1850 feet, more or less, along said West line of French Camp Road to the South bank of French Camp Slough, and (5) Westerly 1.75 mile, more or less, continuing along said boundary of Reclamation District No. 17 to the right or Easterly bank of the San Joaquin River; thence Northwesterly 1.1 mile, more or less, downstream along said right or Easterly bank of the San Joaquin River to intersection with the centerline of State Highway 4; thence Easterly 1¾ miles, more or less, along said centerline of Highway 4 to intersection with the centerline of Charter Way; thence Easterly 3½ miles, more or less, along said centerline of Charter Way to intersection with centerline of State Highway 99; thence Northerly 0.6 mile, more or less, along said centerline of State Highway 99 to intersection with centerline of Washington Street; thence Easterly 1.4 miles, more or less, along said, centerline of Washington Street to intersection with the centerline of the Stockton Diverting Canal; thence Southeasterly 0.8 mile, more or less, along said centerline of the Stockton Diverting Canal to intersection with the centerline of Copperopolis Road; thence Southwesterly 0.1 mile, more or less, along said centerline of Copperopolis Road to intersection with Gillis Road; thence Southerly ⅞ mile, more or less, along said centerline of Gillis Road to a point on the Stockton and East San Joaquin Water Conservation District boundary on the South line of Farmington Road, said Stockton and East San Joaquin Water Conservation District boundary being described in notice of election for the organization of the Stockton and East San Joaquin Water Conservation District, said election being held on June 1, 1948; thence along said Stockton and East San Joaquin Water Conservation District boundary the following three (3) courses, (1) Westerly ¼ mile, more or less, along said South line of Farmington Road to intersection with the Easterly line of Section 67, C. M. Weber Grant, (2) Southerly 0.4 mile, more or less, along said Easterly line of Section 67 to the Southeast corner thereof, and (3) Westerly 0.9 mile, more or less, along the Southerly line of said Section 67 to the point of beginning.

#### Division No. 7

Beginning at the point of intersection of the centerline of the Calaveras River with the centerline of Pacific Avenue, said point being on the Stockton and East San Joaquin Water Conservation District boundary, said Stockton and East San Joaquin Water Conservation District boundary being described in notice of election for the organization of the Stockton and East San Joaquin Water Conservation District, said election being held June 1, 1948; thence Easterly 2.0 miles, more or less, meandering the centerline of the Calaveras River upstream to intersection with centerline of the Stockton Diverting Canal; thence Southeasterly ¾ mile, more or less, along said centerline of Stockton Diverting Canal to intersection with the centerline of North Wilson Way; thence Southerly 4⅝ miles, more or less, along the said centerline of North Wilson Way and the centerline of South Wilson Way to intersection with the centerline of State Highway 4; thence Westerly 3.5 miles, more or less, along said centerline of State Highway 4 to the intersection with the right or Easterly bank of the San Joaquin River; thence Southerly 0.1 mile, more or less, along said right or Easterly bank of the San Joaquin River to a point bearing East 500 feet, more or less, from the Southeast corner of the 3.55 acre parcel of Oxidation Pond Annexation No. 3—A-1-66; thence West 500 feet, more or less, to said Southeast corner; thence Westerly 1.6 miles, more or less, along the Stockton City Limits line to the Easterly line of Dagget Road; thence Northerly 1.0 mile,

more or less, along said Easterly line of Dagget Road and along the Stockton City Limits line to a point on the centerline of Burns Cutoff; thence in a general Westerly, Northerly, and Northeasterly direction 3.09 miles, more or less, along said centerline of Burns Cutoff to intersection with the centerline of the Stockton Deep Water Channel; thence Northwesterly 0.9 mile, more or less, along said centerline of the Stockton Deep Water Channel to centerline Station 286+00, said Station 286+00 bearing Southwesterly 375 feet at right angles to said centerline from U.S.E.D., B.M. 4008; thence Northeasterly 300 feet, more or less, at right angles to said centerline to a point on the Southerly boundary of the Elmwood Tract; thence Easterly and Northerly 1.9 mile, more or less, along the Southerly and Easterly boundary of said Elmwood Tract to the point of intersection of said Easterly boundary with the Southerly levee of Fourteen Mile Slough (formerly called Twelve Mile Slough); thence North 500 feet, more or less, to the Stockton City Limits line, said City Limits line being along the centerline of said Fourteen Mile Slough; thence Easterly 1.2 mile, more or less, along said centerline of Fourteen Mile Slough to intersection with the West line of Section 29, Township 2 North, Range 6 East, Mount Diablo Base and Meridian; thence Northerly  $\frac{1}{8}$  mile, more or less, along said West line to the Northwest corner of said Section 29; thence Easterly 1.0 mile, more or less, along the North line of said Section 29 to intersection with the West line of Swain Oaks Manor; thence South  $02^{\circ} 35'$  East 112.62 feet along the West line of said Swain Oaks Manor to the Southwest corner thereof; thence North,  $69^{\circ} 40'$  East 1652.20 feet along the South line of said Swain Oaks Manor to the centerline of Pershing Avenue; thence Southerly 0.2 mile, more or less, along said centerline of Pershing Avenue to intersection with the centerline of Robinhood Drive; thence Easterly 0.6 mile, more or less, along said centerline of Robinhood Drive to intersection with the centerline of Pacific Avenue; thence Southerly 1.2 miles, more or less, along said centerline of Pacific Avenue to the point of beginning.

After the effective date of this section the division boundaries may be further relocated pursuant to the procedures set forth in Chapter 3 (commencing at Section 74430) of Part 4 of Division 21 of the Water Code, but no such relocation of division boundaries shall occur until four years after the effective date of this section, except that the board shall be authorized pursuant to the provisions of Section 74433 of the Water Code to relocate the boundaries of the division's established by this section to the extent of any exclusion of land, including, but not limited to, any exclusion as a result of an election held pursuant to Section 24 of this act, and any inclusion of land or annexation of land to the district. This section shall not take effect until the adoption, pursuant to Section 26, of a resolution including one or more planning areas into the district.

#### SECTION 34

Notwithstanding the provisions of Sections 74019 and 74202 of the Water Code and Sections 23506 and 23509 of the Elections Code and any other provisions of law in conflict with this section, directors shall be elected as provided in this section. In all other respects the election of directors and the holding of office by directors and the expiration of their terms of office shall be governed by Division 21 (commencing at Section 74000) of the Water Code and the Uniform District Election Law. The general district election shall be held on the date of the general municipal election for the City of Stockton.

#### SECTION 35

Upon the annexation of any territory to the City of Stockton not within the district, such

territory shall automatically be included within the district and such inclusion shall take effect upon the effective date of the annexation of such territory to the City of Stockton. Upon the inclusion of any territory pursuant to this section, such territory shall be an additional planning area and shall be in the partial tax area, subject to the provisions of Section 27 as to inclusion in the full tax area. It shall not be necessary to undertake a benefit review procedure solely for the purpose of reviewing an area included within the district as an additional planning area pursuant to this section, but such additional planning area shall be reviewed at the time of subsequent benefit review procedures.

#### SECTION 36

Parcels of land within any planning area shall be excluded from paying all ad valorem taxes assessed by the district during any fiscal year (July 1 to June 30) following a preceding period extending from November 1 of any year to the next succeeding October 31 during which there was utilized on such a parcel for irrigated agricultural crops water taken from any watercourse which is located within the boundaries of the Delta Water Agency as the boundaries of the Delta Water Agency are presently defined by Section 10.1 of the Delta Water Agency Act of 1968 (Chapter 419 of the Statutes of 1968, as amended by Chapter 285 of the Statutes of 1969) or from the distribution system of the Woodbridge Irrigation District or from any watercourse entirely outside the boundaries of the district prior to the effective date of this act, if less than 50 percent of such a parcels water supply during such a subject period is extracted from the underground. This section shall be implemented by rule adopted by the board and any owner of a parcel desiring to take advantage of this section shall file such reports with the board as the board may require by rule. It shall be the duty of the secretary to annually file a statement as to all parcels to which this section is applicable, as provided by Chapter 8 (commencing at Section 54900) of Part 1 of Division 2 of Title 5 of the Government Code.

#### SECTION 37

The provisions of this act, insofar as they are substantially the same as existing law, are restatements and continuations of existing law and not new enactments.

#### SECTION 38

This act is an urgency statute necessary for the immediate preservation of the public peace, health or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting such necessity are:

There is an urgent need to provide treated water within the Stockton-East Water District and facilities for such purpose cannot be adequately planned and initiated until such time as the extent of the jurisdiction of the district is determined, in order, therefore, to permit the provision of urgently needed water within the district at the earliest possible time, it is necessary that this act go into immediate effect.

## Attachment F

### EWMP Cost and Benefit Analysis of Spill Recovery

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## Efficient Water Management Practices (EWMPs) Report

As part of the preparation of the USBR Water Management Plan and the DWR Agricultural Water Management Plan, SEWD has improved two significant water management practices. In 2012, SEWD investigated seven customer delivery points that had previously been determined to be unmeasurable due to physical limitations of the turnouts. This recent field investigation determined that all of these delivery points can be metered, and two meters have already been installed. It was also determined that the PG&E hour meters used for 18 customers have an accuracy above +/- 6 percent. SEWD has begun replacing these meters, and plans to replace all of them by 2015. See Table E-1 in DWR Attachment E for the implementation schedule for meter installation, replacement, and testing.

Table 1 below lists the non-implemented EWMP, Supplier Spill and Tailwater Systems. This EWMP is not locally cost effective, as documented in the cost-benefit analysis provided in Table 2. The assumptions used in the cost-benefit analysis are provided in Table 3.

**Table 1. (DWR Table VII.B) Non-Implemented EWMP Documentation**

EWMP #	Description	Technically Infeasible	Non Locally Cost-Effective	Justification/Documentation
7	Supplier Spill and Tailwater Systems		X	See Table 2

**Table 2. Economic Analysis Worksheet  
Stockton East Water District  
EWMP 7: Supplier Spill and Tailwater Systems**

Calendar Year	Annual Water Savings (ac-ft/yr)	Avoided Costs	Total Undiscounted Benefits	Total Discounted Benefits	Costs (\$)				Net Present Value (\$)
					Capital Costs	Operating Expenses	Total Undiscounted Costs	Total Discounted Costs	
2011	3000	1,200,000	1,200,000	1,153,846	26,030,308	749,375	26,779,684	25,749,696	-24,595,850
2012	3000	1,200,000	1,200,000	1,109,467		749,375	749,375	692,840	416,628
2013	3000	1,200,000	1,200,000	1,066,796		749,375	749,375	666,192	400,604
2014	3000	1,200,000	1,200,000	1,025,765		749,375	749,375	640,569	385,196
2015	3000	1,200,000	1,200,000	986,313		749,375	749,375	615,932	370,381
2016	3000	1,200,000	1,200,000	948,377		749,375	749,375	592,242	356,135
2017	3000	1,200,000	1,200,000	911,901		749,375	749,375	569,464	342,438
2018	3000	1,200,000	1,200,000	876,828		749,375	749,375	547,561	329,267
2019	3000	1,200,000	1,200,000	843,104		749,375	749,375	526,501	316,603
2020	3000	1,200,000	1,200,000	810,677		749,375	749,375	506,251	304,426
2021	3000	1,200,000	1,200,000	779,497		749,375	749,375	486,780	292,717
2022	3000	1,200,000	1,200,000	749,516		749,375	749,375	468,058	281,459
2023	3000	1,200,000	1,200,000	720,689		749,375	749,375	450,055	270,633
2024	3000	1,200,000	1,200,000	692,970		749,375	749,375	432,746	260,224
2025	3000	1,200,000	1,200,000	666,317		749,375	749,375	416,102	250,216
2026	3000	1,200,000	1,200,000	640,690		749,375	749,375	400,098	240,592
2027	3000	1,200,000	1,200,000	616,048		749,375	749,375	384,709	231,339
2028	3000	1,200,000	1,200,000	592,354		749,375	749,375	369,913	222,441
2029	3000	1,200,000	1,200,000	569,571		749,375	749,375	355,685	213,886
2030	3000	1,200,000	1,200,000	547,664		749,375	749,375	342,005	205,659
<b>Totals:</b>	<b>60000</b>	<b>24,000,000</b>	<b>24,000,000</b>	<b>16,308,392</b>	<b>26,030,308</b>	<b>14,987,509</b>	<b>41,017,817</b>	<b>35,213,399</b>	<b>-18,905,008</b>
<b>Assumptions</b>									
Value of conserved water (\$/AF) =			400					<b>Cost Effectiveness Summary</b>	
Discount rate (real) =			4.00%					<b>Total Costs</b>	\$35,213,399
								<b>Total Benefits</b>	\$16,308,392
								<b>B/C ratio</b>	0.5
								<b>Cost of Saved Water (\$ per AF)</b>	\$684
								<b>Water Savings (AFY)</b>	3,000

**Table 3. Economic Analysis Assumptions  
Stockton East Water District  
EWMP 7: Spill Supplier Spill and Tailwater Systems**

**Assumptions**

Annual volume of pump back	3,000	ac-ft
Pumping duration	6	months
Change in elevation (pump station to head of system)	135	feet
Pipeline length (pump station to head of system)	137,280	feet
Pumping efficiency	70	%
Electricity Cost	0.20	\$/kWh
New pipeline cost	10	\$/in-dia/ft
New pump station cost	350	\$/gpm
O&M labor rate	80	\$/hour
Annual interest rate	4	%
System life	20	years

**Conversions**

Average flow rate	3,771	gpm	(3,000 ac-ft pumped over 6 months)
Annual operation time	4,320	hours	

**Calculations**

Pipeline size	18	inches	4-feet headloss/1000-feet of pipeline
Pipeline headloss	496	feet	Hazen-williams (C=140)
Total dynamic head (TDH)	631	feet	Headloss + elevation change
Required pump Hp	858	hp	$(\text{gpm} \times \text{TDH}) / (3960 \times \text{efficiency})$
Annual Energy usage	3,708,477	kWh	$(746 \text{ W/Hp} \times \text{hours of operation})$

**Capital Costs**

Pipeline	\$24,710,400
Pump station	\$1,319,908
<b>Total</b>	<b>\$26,030,308</b>

**O&M Costs**

Electricity	\$741,695	
Labor	\$7,680	16 hours/month for 6-months
<b>Total</b>	<b>\$749,375</b>	

Attachment G

Drought Management Plan

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Supplemental Information for  
CA DWR Agricultural Water Management Plan

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Drought Management Plan

Additional Documentation as Required by  
California Department of Water Resources and Executive  
Order B-29-15.



July 2017

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Attachment

Attachment A: District Rules and Regulations (See Attachment F 2014 Reclamation Water Management Plan pdf page 215) and Revised Rule 120)

## **1 Introduction**

### **1.1 Purpose of Drought Management Plan**

On April 1, 2015 Governor Brown signed Executive Order B-29-15, directing agricultural water suppliers to prepare an *Agricultural Water Management Plan* which consists of two parts: 1) a *Drought Management Plan*, and 2) a *Quantification of Water Demands*. The purpose of the drought management plan is to detail how water suppliers prepare for droughts and manage water supplies and allocations during drought conditions. This document is intended to serve as the additional documentation that Stockton East Water District (SEWD) must include with the United States Bureau of Reclamation (USBR) water management plan and submit to the California Department of Water Resources (DWR) to document compliance with specified requirements of the Executive Order.

As a Central Valley Project contractor, the District is required by USBR to prepare a water management plan in accordance with USBR criteria. SEWD's current USBR-approved plan was prepared under USBR's 2011 Standard Criteria. The District also prepares annual updates each year in compliance with the USBR criteria.

Senate Bill X7-7 (SBx7-7), the Water Conservation Act of 2009, mandated water conservation and measurement and reporting activities for certain agricultural water suppliers, including the preparation of water management plans. The provisions of SBx7-7 were incorporated in California Water Code §10828, which now allows agricultural water suppliers subject to the USBR water management plan process to submit their current accepted plan along with additional documentation to DWR to meet SBx7-7 requirements. SEWD prepared and submitted this additional documentation to DWR under Attachment R of the 2014 USBR Plan. Subject to Executive Order B-29-15, a Drought Management Plan must also accompany the USBR water management plan when submitted to the DWR as part of the Agricultural Water Management Plan. In addition, Executive Order B-29-15 requires the submission of water supply and demand data for 2013-2015.

### **1.2 District Background**

Stockton East Water District, as currently structured, was formed in 1948 under the 1931 Water Conservation Act of the State of California. As such, SEWD is responsible for acquiring a supplemental water supply and developing water use practices that would secure a balance between the District's surface water and its customer's groundwater supplies.

From 1948 to 1963, the District focused its efforts on water resource planning by evaluating groundwater conditions and determining requirements for supplemental water. These intensive efforts by the District and other local agencies resulted in the construction of New Hogan Dam in 1964. The reservoir is owned and operated by the United States Army Corps of Engineers (USACE). The District's first supply of supplemental surface water was obtained through a contract with Reclamation, and a final agreement in 1970, which guaranteed 56.5% of New Hogan Reservoir's yield to the District, was put in place between SEWD and the Calaveras County Water District. SEWD is also the reservoir water master.

In 1971 by Special Act of the Legislature, District boundaries were expanded to include the entire Stockton urban area, and plans were initiated for a 30 million gallon per day drinking water treatment plant. In 1975, a District-wide election resulted in the approval of a \$25 million bond to fund the new plant. The Dr. Joe Waidhofer Water Treatment Plant (DJW WTP) was constructed in 1977 and began operation in 1978. In 1979, the Independent Benefit Commission concluded

that the new drinking water treatment plant was a benefit to Stockton's planning areas. In 2005, annexed an additional 27,000 acres into the district. Today, SEWD's area encompasses approximately 143,300 acres.

From its formation until 1962, the District's basic financial structure was dependent upon property taxes. In 1963, the Governor of California signed a bill establishing the District's right to levy groundwater use fees and surface water charges. The District used the additional revenue to contract for New Hogan water. About this time, SEWD began registering wells within the district, while check dams were built on the Calaveras River and Mormon, and Mosher Sloughs to control surface irrigation water and promote groundwater recharge. The District also became actively involved in the pursuit of projects to mitigate significant groundwater issues, which included declining aquifer levels, pumping depressions under urban Stockton, and the continuing threat of saline intrusion in wells near the Delta.

Since its inception, SEWD has actively sought supplemental surface water from the American River via the Folsom South Canal. Reclamation directed the District to the Stanislaus River when they were applying for the water permits for New Melones Reservoir. Since the mid-1990's, SEWD has been receiving surface water supplies from the Stanislaus River to supplement its Calaveras River supply. SEWD is currently attempting to secure the right to divert a portion of the flood flows from the Calaveras River, and from Littlejohn, Shirley, Hood, and Rock Creek that can utilize the existing New Melones conveyance facilities.. The goal of this pursuit is to provide the sources of water needed to fully address the overdraft condition of the Eastern San Joaquin County Groundwater Basin.

Recently, East Bay Municipal Utility District built a costly alternative to their right to American River water diverted into the Folsom South Canal. This Freeport Regional Water Project was completed in 2010. San Joaquin County continues to pursue a permit for a portion of the American River flows. Conveying these flows into San Joaquin County could occur by wheeling through the Freeport Project or by completion of the Folsom South Canal.

In 1983, SEWD and Central San Joaquin Water Conservation District (CSJWCD) contracted with Reclamation for allocation of 75,000 and 80,000 acre-feet, respectively, from the New Melones Reservoir. This is known as the District's Central Valley Project contract. That same year, SEWD expanded its surface water distribution system for irrigation water by constructing a 16,000 gallon-per-minute diversion from Calaveras River and Mormon Slough to Potter Creek Under current Reclamation operation of New Melones, SEWD and CSJWCD are provided up to 155,000 acre-feet of water from New Melones annually.

In 1997, SEWD entered into a water transfer agreement with Oakdale Irrigation District (OID) and South San Joaquin Irrigation District (SSJID). This agreement allocates 8,000 to 30,000 acre-feet annually, based on New Melones storage and inflow as of April 1 of each year. The OID & SSJID contract period for the allocation of New Melones water to SEWD ended in 2009. This Agreement and shared ownership of Goodwin Dam have led to many opportunities for cooperative efforts to protect water rights and contracts of the Stanislaus River.

In 2001, SEWD completed the Farmington Groundwater Recharge and Seasonal Habitat Study in conjunction with the United States Army Corps of Engineers and other local agencies. The Farmington Study identified areas suitable for recharge and seasonal habitat development, evaluated recharge techniques, conducted pilot recharge tests, developed a final report and recharge guide, and recommended an implementation strategy for the phased Farmington Program.

In 2003, the District completed the Pilot Phase of the Farmington Program, which consists of 60 acres of recharge ponds and fields adjacent to the Dr. Joe Waidhofer Drinking Water Treatment Plant. The Demonstration Phase, which began in 2003, will investigate and construct up to 1,200 acres of recharge ponds and fields. To date, over 13 sites have been investigated and two sites are moving forward to a demonstration study. In 2006, construction began on another 30-acre recharge site at the drinking water treatment plant.

## **2 Water Shortage Allocation Practices and Policies**

### **2.1 Current Practices and Policies**

SEWD maintains Board adopted rules, ordinances, and regulations that govern water diversions, measurements, rates and rights. Full text on this information is explained in detail in Appendix F of the approved Reclamation Water Management Plan.

Riparian right users have first call on up to 13,000 acre-feet of water from New Hogan Reservoir. Through contract, the urban area is guaranteed 20,000 ac-ft of water, if supplies are available. Water is then allocated to all other surface water users. The agricultural water shortage plan for dry year or drought conditions is described below.

As Water Master of New Hogan Reservoir, SEWD assesses the water supply by April of each year. A sufficient volume to supply enough water for a full irrigation season is 152,000 to 161,000 acre-feet based on an irrigation demand of 3 feet per acre and the number of acres under cultivation. SEWD generally has sufficient water to withstand two to three dry years. If a water year has been identified as a dry year, SEWD asks its customers for voluntary reductions in use. If a second subsequent year is identified as a dry year, SEWD still requests voluntary reductions, but identifies these reductions as critical. A third subsequent dry year may result in continued voluntary reductions, or may require mandatory reductions—SEWD makes this determination at the beginning of the water year. The district informs its customers of the available water supply, and any need for reductions, through its newsletter, as well as postcard reminders and the SEWD website. A final option is to allow diversions only by riparian users and the water treatment plant.

In all water years, SEWD requests that its customers call the district in advance of diverting water, so that SEWD can adjust releases at the dam. Customers are asked to provide the following information 24 hours in advance of the diversion: location of diversion, name of owner or operator, beginning diversion time, pumping rate, and ending diversion time. In non-dry years, this request is voluntary. In dry years, the advance notice is mandatory, and the district may enforce penalties on customers who do not advise the district prior to their water use.

### **3 Drought Management Plan**

#### **3.1 Hydraulic Levels or Conditions**

Urban and agricultural water users in the SEWD rely on a combination of surface water and groundwater to meet their water demands. As such, SEWD manages the surface water and groundwater supplies in its service area conjunctively. Since its inception, SEWD has aggressively sought to acquire supplemental surface water supplies for its customers and has been proactive in developing programs to augment and protect its service area groundwater.

SEWD obtains its annual surface water supply from two different sources (contractual agreements): New Hogan Reservoir and New Melones Reservoir. Water obtained from New Hogan Reservoir is distributed within SEWD by its New Hogan Water Conveyance System. Similarly, water obtained from New Melones Reservoir is distributed within SEWD by its New Melones Water Conveyance System. In general, most of the surface water used for agricultural irrigation in SEWD originates from New Hogan Reservoir. The balance of the agricultural water demands not met by available surface water each year is satisfied with pumped groundwater. The following sections provide a brief description of SEWD's conjunctive management of its surface water and groundwater supplies with respect to dry water years and long-term drought conditions.

##### **New Hogan Reservoir Surface Water Supply**

The New Hogan Reservoir has a capacity of 317,100 acre-feet (AF) and a 10-year average storage of 152,662 AF. Riparian water rights holders on the Calaveras River below New Hogan Dam have first priority for taking and using water from the Calaveras River. Annual riparian water use is estimated to be about 13,000 AF. The City of Stockton has a firm supply of 20,000 AF from the New Hogan Reservoir. The estimated total annual irrigation volume required to meet the agricultural water demands in SEWD range from 152,000 AF – 161,000 AF. The total annual supply available to SEWD and Calaveras County Water District during normal water years is about 84,100 AF. The annual use by Calaveras County Water District is typically between 3,500 to 3,700 AF. Therefore, in normal water years SEWD can rely on an annual supply of about 80,000 AF which is equivalent to the reservoir's operational safe yield. As the Water Master, SEWD assesses the water supply in New Hogan Reservoir by April of each year and determines how much water from the reservoir is available for sale to farmers in its service area.

##### **New Melones Reservoir Surface Water Supply**

As mentioned previously, SEWD contracted with USBR in 1983 for an annual allocation of 75,000 AF from the New Melones Reservoir. Annual water allocation amounts to SEWD are determined by USBR and are based on its March-September water forecast inflow and the February end-of-month storage in New Melones Reservoir each year and the terms of SEWD's long-term contract with USBR. Due to environmental flow requirements on New Melones Reservoir, annual allocations to SEWD from New Melones Reservoir have fluctuated from year-to-year from full allocation to zero allocation.

##### **Groundwater Supply**

The boundaries of SEWD are located within the Eastern San Joaquin Groundwater Basin (Basin), a subbasin of the greater San Joaquin Valley Groundwater Basin. During the 2010 water year,

agricultural groundwater pumping accounted for more than 90 percent of the irrigation requirement to satisfy crop water demands in SEWD. Long-term dependence of farmers on groundwater as the primary source of irrigation water has led to significant overdraft conditions in eastern San Joaquin County and a large groundwater depression east of Stockton.

To address the overdraft conditions and to improve water supply reliability in the region, the Eastern San Joaquin County Groundwater Basin Authority (GBA) was formed in 2001 as a joint powers authority comprised of the agencies (including SEWD) overlying the Basin. In 2005, SEWD adopted the Eastern San Joaquin Groundwater Basin Groundwater Management Plan prepared by the North-eastern San Joaquin County Groundwater Banking Authority. The plan objectives are to review existing groundwater management policies and programs in eastern San Joaquin County, and develop new policies and programs to ensure the long-term sustainability of groundwater resources in this area.

In 2014, the DWR California Statewide Groundwater Elevation Monitoring (CASGEM) Program identified the Eastern San Joaquin Subbasin as a high priority basin in need of a groundwater elevation monitoring program to track seasonal and long-term trends in groundwater elevations in the Basin. Early in the development of the CASGEM Program, the San Joaquin County Flood Control and Water Conservation District (SJFCWCD) was designated as the entity to oversee groundwater elevation monitoring and reporting on behalf of the GBA. Currently, SJFCWCD monitors groundwater elevations in 128 wells located throughout the Basin.

Also in 2014, the California Legislature passed the landmark Sustainable Groundwater Management Act (SGMA). Under SGMA, all basins designated as high or medium priority and critically overdrafted shall be managed under a groundwater sustainability plan enforced by a Groundwater Sustainability Agency (GSA). In 2016, SEWD adopted a resolution to become the GSA under the SGMA requirements for the area of the Basin for which its service area overlies. In 2017, SEWD entered into a Joint Powers Agreement (JPA) forming the Eastern San Joaquin Groundwater Authority to work to prepare the Groundwater Sustainability Plan for the basin. The ultimate objective of the SGMA process and the utility of monitoring data generated by the CASGEM Program is for SEWD as the GSA to sustainably manage its groundwater resources; while protecting existing surface water and groundwater rights within its boundaries. The structured approach required by the SGMA process will provide SEWD with the authority it needs to continue improving its conjunctive management of surface water, and groundwater in its service area under increasing uncertainty of future hydrologic conditions in the state (e.g., long-term droughts, climate change impacts).

### **3.2 Stages of Actions**

Riparian right users have first call on up to 13,000 acre-feet of water from New Hogan Reservoir. Through contract, the urban area is guaranteed 20,000 acre-feet, if supplies are available. Water is then allocated to all other surface water users. The agricultural water shortage plan for dry year or drought conditions is described below.

As Water Master of New Hogan Reservoir, SEWD assesses the water supply by April of each year. A sufficient volume to supply enough water for a full irrigation season is 152,000 – 161,000 acre-feet. SEWD generally has sufficient water to withstand two to three dry years. If a water year has been identified as a dry year, SEWD asks its customers for voluntary reductions in use. If a second subsequent year is identified as a dry year, SEWD still requests voluntary reductions, but identifies these reductions as critical. A third subsequent dry year may result in continued voluntary reductions, or may require mandatory reductions—SEWD makes this determination at

the beginning of the water year. The District informs its customers of the available water supply, and any need for reductions, through its newsletter, as well as postcard reminders and the SEWD website. A final option is to allow diversions only by riparian users and the water treatment plant.

In all water years, SEWD requests that its customers call the District in advance of diverting water, so that SEWD can adjust releases at the dam. Customers are asked to provide the following information 24 hours in advance of the diversion: location of diversion, name of owner or operator, beginning diversion time, pumping rate, and ending diversion time. In non-dry years, this request is voluntary. In dry years, the advance notice is mandatory, and the district may enforce penalties on customers who do not advise the district prior to their water use. The postcard reminds customers of this penalty.

### **3.3 Operational Adjustments**

The mission of SEWD is the management and protection of the groundwater supplies, and to provide a reliable supply of surface water to its urban and agricultural customers. SEWD attempts to achieve those goals by managing the surface water and groundwater supplies in its service area conjunctively.

During water years when surface water supplies from the New Hogan and New Melones reservoirs are ample, SEWD encourages its agricultural customers to purchase surface water to meet their irrigation demands in lieu of pumping groundwater (in-lieu recharge). SEWD has also promoted the use of surface water by expanding its conveyance system into areas of its service area where farmers traditionally pump groundwater. By using available surface water instead of pumping, farmers conserve the groundwater in storage that will then be available for use in years of limited surface water supply. In addition to in-lieu recharge, groundwater recharge also occurs passively as seepage losses in unlined rivers and canals of the SEWD conveyance system and as intentional recharge in percolation basins located on SEWD property. Operationally, conjunctive use management takes advantage of abundant surface water supplies during wet water years to decrease groundwater use and increase groundwater recharge, so that increased groundwater reserves can be more heavily relied on in dry years, or during long-term drought when surface water supplies are chronically limited.

SEWD operates two intentional recharge projects in particular: the North Site Groundwater Recharge Basins Program and the Farmington Groundwater Recharge Program. The North Site Program consists of a 60-acre recharge site located adjacent to the Dr. Joe Waidhofer Water Treatment Plant (DJW WTP). The recharge site of the Farmington Program is located below the Farmington Dam and is also 60-acres in size. Between 2003 and 2015, SEWD has recharged 54,889 AF of surface water through these two programs. SEWD is currently planning to expand the North Site Program by the addition of a recently purchased 230-acre parcel located adjacent to DJ WTP. In addition, SEWD continues to seek willing landowners to volunteer the use of their land to expand the recharge activities of the Farmington Program.

In 2003, SEWD received a Proposition 13 Groundwater Recharge Storage Construction Grant for the Peters Pipeline portion of the Farmington Groundwater Recharge Program. The Peters Pipeline receives surface water from the Lower Farmington Canal (i.e., part of New Melones Water Conveyance System) and conveys it to the recharge site at DJW WTP. In dry years when surface water supplies are limited, the recharged groundwater can be pumped from the site and treated for use in the Stockton urban area. Also, to improve distribution efficiency, SEWD has installed a Supervisory Control and Data Acquisition system on its agricultural surface water

conveyance system for the purpose of monitoring, and ultimately minimizing any spills or system end losses that could occur during any water year type.

Overall, the recharge programs (in-lieu, conveyance seepage losses, intentional recharge) and improvements in conveyance system distribution efficiency (spill reductions, Peters Pipeline) all contribute to improving the conjunctive management of surface water and groundwater supplies by SEWD.

### **3.4 Demand Management**

SEWD makes available several programs to farmers that promote on-farm water conservation and water use efficiency. First, using grant funding from USBR, SEWD has provided on-farm irrigation and drainage system evaluations free to its customers, since 1999. The irrigation and drainage system evaluation program is voluntary, but is encouraged and supported by SEWD. Second, SEWD makes available real-time and normal irrigation scheduling and crop evapotranspiration (ET) information. A list of crops and crop evapotranspiration (ETc) values was compiled specifically for SEWD to provide growers with a resource for irrigation management. Third, SEWD currently offers a Surface Water Incentive Program. This program utilizes water pricing to encourage farmers to switch from pumping groundwater to meet their crop water demands to purchasing surface water from SEWD. While not directly lowering on-farm water use, farmers using surface water when available rather than pumping groundwater supports SEWD's overall mission of protecting basin groundwater resources through conjunctive use management.

### **3.5 Alternative Water Supplies**

The District provides surface water for both agricultural and urban uses, and encourages the continued expansion of surface water diversions instead of pumping groundwater for the benefit of the groundwater basin. By providing surface water for agricultural irrigation, the District supports a reliable water supply for a San Joaquin County's agricultural industry.

From 1948 to 1963, SEWD focused its efforts on water resource planning by evaluating groundwater conditions and determining requirements for supplemental water. These intensive efforts on the part of SEWD and other local agencies resulted in the construction of New Hogan Dam in 1964. SEWD signed a contract for supplemental surface water with the United States Bureau of Reclamation in 1970. Also in 1970, SEWD and Calaveras County Water District signed a contract, which assigned SEWD 56.5 percent of the yield from New Hogan Reservoir.

In 1983, SEWD and the Central San Joaquin Water Conservation District contracted with USBR for annual allocations of 75,000 and 80,000 acre-feet (ac-ft), respectively, from New Melones Reservoir. Also in 1983, SEWD expanded its surface water irrigation capabilities by constructing the 12,000 gallons per minute Potter Creek Pump Facility to facilitate diversions from New Melones Reservoir. Construction of the New Melones Conveyance System, in anticipation of a new water supply from the New Melones Reservoir, was completed in 1994.

The New Melones Conveyance System, which supplies water to the Dr. Joe Waidhofer WTP, consists, sequentially, of a diversion structure at Goodwin Dam, the Goodwin Tunnel, the Upper Farmington Canal, Shirley Creek, Hoods Creek, Rock Creek, the Lower Farmington Canal, and Peters Pipeline to the existing 54-inch-diameter Bellota Pipeline, or to the 6-mile Peters Pipeline extension. A 78-inch-diameter section of Peters Pipeline extends 3 miles from the terminus of the Lower Farmington Canal to the existing 54-inch-diameter pipeline from Bellota to the WTP.

Under this Groundwater Recharge Storage Project, SEWD built a six-mile, 60-inch diameter extension to the Peters Pipeline. Construction on the Peters Pipeline Project was completed in 2006.

This extension provides water for agricultural irrigation, groundwater recharge, and drinking water treatment. In dry years, well water resulting from wet year recharge is pumped into the pipeline for use in the Stockton urban area. The availability of both the Bellota Pipeline and the Peters Pipeline extension gives SEWD redundancy and flexibility in supplying water to the Dr. Joe Waidhofer WTP. This conjunctive use project enables the treatment of a greater percentage of available surface water, and benefits the groundwater basin by banking water in-lieu of pumping it by the construction of the 6-mile extension to the Peters Pipeline.

Another project, The Farmington Groundwater Recharge Program is led by SEWD, in partnership with the Sacramento division of the US Army Corps of Engineers. SEWD created the Farmington Groundwater Recharge Program with the intent of replenishing the aquifer to help ensure future groundwater supply and protect against further saltwater intrusion. The program primarily benefits the regional aquifer, or groundwater basin. As the program is implemented, local groundwater availability and quality will also improve as aquifer levels stabilize. Water quality and abundance will also improve in the Calaveras River with the recharging of the groundwater aquifer.

The goal of the program is to recharge an average of 35,000 acre-feet of water annually into the Eastern San Joaquin Basin by (1) directly recharging surface water to the groundwater aquifer on 800 to 1,200 acres of land and, (2) increasing surface water deliveries in-lieu of groundwater pumping to reduce overdraft and establish a barrier to saline water intrusion. Spreading water on agricultural fields and other recharge basins provides seasonal migratory waterfowl habitat.

A network of agricultural wells is needed to pump stored surface water from recharge efforts and assure reliability of water supply in years when ample surface water is not available. Based on the hydrologic history of the region, more average to wet years occur than below average to critically dry years. Therefore, over the long-term, if the aquifer is recharged during all average to wet years, and groundwater pumping reliance is limited to below average to critically dry years, aquifer levels are expected to rise and stabilize.

The Farmington Groundwater Recharge Program identifies areas suitable for recharge and seasonal habitat development, evaluates recharge techniques, and conducts pilot recharge tests. SEWD is continuing to identify and develop new recharge sites for this phased program. Available surplus water from SEWD's conveyance systems is diverted into recharge cells at the project site. Stored surface water would be pumped from the aquifer for agricultural, municipal, and industrial use.

### **3.6 Coordination and Collaboration**

Through a web presence and several scheduled publications. SEWD coordinates and collaborates with its customers, and surrounding agencies. SEWD's website contains contact information regarding District staff and programs along with links to support programs for agricultural water users. Specific publications that SEWD publishes include Water Supply Conditions, Dam Removal Schedule, Ag Report, Water Rates, High and Dry Book, useful links, and a newsletter.

The Water Supply conditions provides timely information regarding reservoir conditions at both New Hogan and New Melones. Information includes status of storage and projected storage as

information becomes available. Irrigators in turn use this information to manage their use of water.

### **3.7 Revenue and Expenditures**

Stockton East Water District charges on a per acre foot basis. As part of its rate structure, the District charges a higher rate for surface water than for ground water. Furthermore, the District has access for two surface water sources, which are New Melones and New Hogan Dam. During 2013 and 2014, the District's surface water supply was fairly constant despite the drought and thus revenues were also fairly constant.

However, in 2015, SEWD received zero allocation from New Melones Reservoir.. As a result, surface water deliveries were significantly reduced and consequently total revenues were adversely affected by as-much-as 23%.

The District's operational expenses have remained relatively constant, and ongoing maintenance is performed throughout the year for both surface water conveyance systems. From 2013 thru 2015, revenues have sufficiently covered operational expenses.

On an annual basis, the District evaluates the sufficiency of rates as-well-as possible increases under its enabling legislation and as otherwise required by California law. Therefore, the District will continue to monitor financial results to anticipate future necessary changes to its rate structure.

#### 4 2013-2015 Water Supply and Demand Data

As required under Executive Order B-29-15

The following tables provide water supply and use information for SEWD for the period of 2013-2015. Table 1 is a rollup of supporting tables based on DWR’s 2015 AWMP Guidebook.

Following Table 1 the supporting tables are listed in numeric order used by DWR.

Table 1. Water budget summary for 2013-2015.

Water Budget Summary (AF)			
Water Accounting	2013	2014	2015
1 Water Supplies (refer to Worksheet 47)	227,507	281,631	227,353
2 Water Uses/Demand (refer to Worksheet 44)	205,202	199,908	190,979

Worksheet 21. Agricultural Crop Data For 2013		
Crop	Total Acreage	Total Crop Water Needs (AF)
Walnut	25,169	70,472
Cherries	11,033	30,893
Vineyard	4,819	13,492
Tomatoes	1,168	3,271
Pasture	1,804	5,052
Apples	1,037	2,904
Corn	1,686	4,721
Other	8,139	21,155
<b>TOTAL</b>	<b>54,855</b>	<b>151,960</b>

Worksheet 21. Agricultural Crop Data For 2014		
Crop	Total Acreage	Total Crop Water Needs (AF)
Walnut	26,708	74,782
Cherries	11,021	30,858
Vineyard	5,174	14,486
Tomatoes	1,209	3,384
Pasture	1,760	4,928
Apples	1,013	2,837
Corn	1,487	4,164
Other	8,466	21,536
<b>TOTAL</b>	<b>56,837</b>	<b>156,975</b>

Worksheet 21. Agricultural Crop Data For 2015		
Crop	Total Acreage	Total Crop Water Needs (AF)
Walnut	28,142	78,797
Cherries	11,108	31,103
Vineyard	5,517	15,447
Tomatoes	1,415	3,962
Pasture	1,345	3,766
Apples	1,008	2,821
Corn	782	2,190
Other	8,796	22,822
<b>TOTAL</b>	<b>58,113</b>	<b>160,909</b>

Worksheet 24. Environmental Water Uses. not shown – no uses.  
 Worksheet 25. Recreational Water Uses. not shown – no uses.

Worksheet 26. Municipal/Industrial Water Uses (AF)				
Municipal/Industrial Entity	Representative Year	Planning Cycle		
		2013	2014	2015
Municipal Entity		46,087	37,600	2,513
		3,051	1,781	25,428
Industrial Entity				
TOTAL		49,138	39,381	27,941

Worksheet 27. Groundwater Recharge Water Uses (AF)				
Location/ Groundwater Basin	Method of Recharge	Planning Cycle		
		2013	2014	2015
Commitments/Dedicated	Percolation	4,104	3,552	2,129
TOTAL		4,104	3,552	2,129

Worksheet 28. Transfers and Exchanges Water Uses. not shown – no uses.

Worksheet 29. Other Water Uses. not shown – no uses.

Worksheet 40. Surface Water Supplies (AF)			
Source	2013	2014	2015
CVP Class 1 Contracts	8,037	8,235	143
Pre-1914 Rights			
SWP			
Local Surface Water	70,781	62,085	17,189
Upslope Drain Water			
Transfers & Exchanges			
Recycled Water			
Other [Identify]			
Total	78,818	70,320	17,332

Worksheet 41. Groundwater Supplies Summary For 2013-2015 (AF)						
Month	2013		2014		2015	
	Supplier	Customers	Supplier	Customers	Supplier	Customers
January					0	
February					0	
March					0	
April					0	
May					184	
June					206	
July					848	
August					949	
September					967	
October					1015	
November					972	
December					841	
sub-total		122,999		126,481	5982	140,357
Total		122,999		126,481		146,340

Worksheet 42. Effective Precipitation Summary (AF)			
Month	Planning Cycle		
	2013	2014	2015
TOTAL	25,691	84,829	63,682

Worksheet 44. Quantify Water Use (AF)			
Water Use	2013	2014	2015
Crop Water Use (Worksheet 21)			
1 Crop Evapotranspiration	151,960	156,975	160,909
Conveyance & Storage System			
2 Leaching			
3 Cultural Practices			
4 Conveyance seepage			
5 Conveyance evaporation			
6 Conveyance operational spills			
7 Reservoir evaporation			
8 Reservoir seepage			
Environmental Use (Consumptive)			
9 Environmental use – wetlands (Worksheet 24)			
10 Environmental use – Other (Worksheet 24)			
11 Riparian vegetation (Worksheet 24)			
12 Recreational use (Worksheet 25)			
Municipal and Industrial			
13 Municipal (Worksheet 26)	49,138	39,381	27,941
14 Industrial (Worksheet 26)			
Outside the District			
15 Transfers or Exchanges out of the service area (Worksheet 28)			
Conjunctive Use			
16 Groundwater recharge (Worksheet 27)	4,104	3,552	2,129
Other (Worksheet 29)			
Subtotal	205,202	199,908	190,979

Worksheet 47. Quantify Water Supplies (AF)			
Water Supplies	Planning Cycle		
	2013	2014	2015
1 Surface Water (Worksheet 40)	78,818	70,320	17,332
2 Groundwater (Worksheet 41)	122,999	126,481	146,340
3 Annual Effective Precipitation (Worksheet 42)	25,691	84,829	63,682
4 Water purchases			
Subtotal	227,507	281,631	227,353

Attachment A

District Rules and Regulations

(see Attachment F from the 2014 USBR Plan; note Rule 139 repealed)

and

Revision of Rule 120

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**RULE NO. 120**  
**ADOPTED: 02/15/1977**  
**REVISED: 06/24/2014**

**MANDATORY REQUIRED NOTICE TO DISTRICT BY OWNER OF  
DIVERSION OF STREAM DELIVERED WATER**

Whereas, the Board of Directors hereby finds the necessity to revise Rule No. 120 by incorporating Rule No. 132 (Stream Diversion Call-In Rule; adopted 04/07/1986) and Rule No. 139 (Regulating Waste of Surface Water; adopted 04/21/1992) for the purpose of correcting contact information and outlining consequences for failure to follow mandatory notification procedures for the diversion of stream delivered water; and

Whereas, the Act authorizes the Board to make such Rules and Regulations as it deems necessary and proper for carrying out the provisions of the Act; and

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE STOCKTON EAST WATER DISTRICT HEREBY REVISES RULE NO. 120 AS FOLLOWS:

- A. Mandatory Notification Required. Any person desiring to divert surface water provided by the District shall first inform the District at its office (6767 East Main Street, Stockton, California), at least forty-eight (48) hours prior to the start of such diversion. The District will receive such notice 7 days a week at the following numbers: Monday through Friday (8:00 a.m. to 5:00 p.m.) 209-948-0333; all other times, 209-469-3335 or online at [www.sewd.net](http://www.sewd.net). The following information must be provided: name, phone number, pump ID number, diversion rate, beginning date/time, end date/time and run time.
- B. The objective of Paragraph A is to avoid waste of water, which will cause loss of a valuable resource in limited supply, affecting the District and all other agricultural irrigators in the District, in an amount which cannot be accurately determined but shall be conclusively presumed to cause loss of \$500 worth of water.
- C. For the first such notification failure by any person, such person will be charged for \$100 worth of water, and such amount will be added to such person's account with the District.
- D. For the second such notification failure by any person, that person will be charged for \$200 worth of water, and such amount will be added to such person's account with the District.

- E. For the third and any subsequent such notification failure by any person, that person will be charged for the full \$500 worth of water, conclusively presumed to be wasted, and such amount will be added to such person's account with the District.
- F. Upon determination of any notification failure, the District shall notify the person who failed to follow this Rule.
- G. The amount added to such person's account shall be collected as part of such person's account in the manner provided in the Act.
- H. Any person charged under this Rule may appeal to the District's Board of Directors which may waive any charge imposed by this Rule, which would be inequitable under the circumstances the Board of Directors determines.
- I. Diverters upon request of District shall provide District with a monthly irrigation plan to permit District to forecast irrigation demand. Diverters shall follow the plan as closely as possible.
- J. Rule Nos. 102, 132 and 139 of this District are hereby repealed.

Attachment H

Reclamation BMP Reporting 2013-2015

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<b>Current Date:</b>	02/03/2017
<b>District Name:</b>	Stockton East Water District
<b>Company Name:</b>	Stockton East Water District
<b>Start Date:</b>	01/01/2013
<b>End Date:</b>	12/31/2013
<b>Current Status:</b>	Approved
<b>Annual Update Year:</b>	2013

## A1: Measurement

### Summary of Actions 2013

Total number of customers\* 200

Total number of customers with measured deliveries\* 190

Number of measurement devices installed this year\* 15

Number of measurement devices upgraded\* 0

Comments\* The District installed two new water meters to two old pumps without water meters. We installed six new water meters to six new pump stations and we replace seven old bad water meters with new meters, total of 15. The difference in the number of customers and meter customers between the years is due to customers canceling their pump surface water pump station. There is a total of 10 customers without a water meters. These pump stations are old with difficult plumbing setups with no room for a water meter. We continued to look in to alternatives to change the status quo. Expenditures include staff hours at no cost.

### Calculated Actual Benefits Year 2013

Revenue increased after improved measurement\* No

Water savings from improve measurement\* No

Est. Ac. Ft. Saved\* 0

2013 Expenditures\* 9400

2013 Staff Hours\* 12

### Summary of Year 2014 Projected Actions

Number of measurement devices planned to install next year\* 3

Number of measurement devices planned to be upgraded next year\* 2

Comments\* None. Expenditures include staff hours at no cost.

### Anticipated Year 2014 Budget

2014 Projected Expenditures\* 8800

2014 Projected Staff Hours\* 16

## A2: Conservation Coordinator

### Summary of Actions Year 2013

Name of Coordinator\* Andres Lozano  
 E-Mail\* alozano@sewd.net  
 Title\* Water Supply Manager  
 Address\* 6767 East Main Street Stockton CA 95215  
 Phone\* 209 948 0537  
 Fax\*     
 Cell Phone\*     
 2013 Expenditures\* 3500  
 2013 Staff Hours\* 40

### Summary of Year 2014 Projected Actions

2014 Projected Expenditures\* 4000  
 2014 Projected Staff Hours\* 40

## A3A: Water Management Service: On-Farm Evaluations

### Summary of Actions Year 2013

Number of acres surveyed\* 0  
 Comments\* The District uses our AG newsletter to advertise for this free service to our customers. Even though the District has not been successful we continue to highlight to our customers the importance and the benefits of using this free service to make their farming operation more efficient. Expenditures include staff hours at no cost.

### Actual Benefits Year 2013

Identified efficiency losses\* No  
 Reduced tailwater\* No  
 Number of acre-feet reduced by\* 0  
 Other\* none. Reasons as per note provided above  
 2013 Expenditures\* 0  
 2013 Staff Hours\* 4

### Summary of Year 2014 Projected Actions

Number of acres to be surveyed\* 200  
 Comments\* none

### Anticipated Year 2014 Benefits

Identify efficiency improvements\* Yes  
 Reduced tailwater\* Yes  
 Number of acre-feet reduced by\* 40  
 2014 Projected Expenditures\* 5800  
 2014 Projected Staff Hours\* 8

## A3B: Water Management Services: Real-Time ET Information

### Actual Benefits Year 2013

Number of customers provided information\* 5000  
 Method of data distribution:

Newspaper\* NoBills\* YesNewsletter\* YesInternet\* YesOther\* Signage in District administration office lobby. CIMIS information is mailed to over 5000 District customers on the fall newsletter. Cal Poly ITRC has developed real-time ET information that will be on the District's website. Expenditures include staff hours at not cost.2013 Expenditures\* 602013 Staff Hours\* 4

### Summary of Year 2014 Projected Actions

List any projected changes\* The District is continuing to work with the Irrigation Training and Research Center, Cal Poly State University, SLO in developing a CIMIS link on Districts' website. Expenditures include staff hours at not cost.2014 Projected Expenditures\* 02014 Projected Staff Hours\* 8

### A3C: Water Management Services: Water Quality Data

#### Summary of Actions Year 2013

Water quality issue\* NoGround water analyzed\* NoSurface water analyzed\* YesComments\* Stockton East Water District does not provide ground water for irrigation.

#### Actual Benefits Year 2013

List any decisions based on analysis of water\* none. Expenditures include staff hours at no cost.2013 Expenditures\* 10002013 Staff Hours\* 8

#### Summary of Year 2014 Projected Actions

List any changes planned concerning water analysis\* none. Expenditures include staff hours at no cost.2014 Projected Expenditures\* 10002014 Projected Staff Hours\* 8

### A3D: Water Management: Educational Programs

#### Summary of Actions Year 2013

List educational programs the district supported or participated in\* The SAWS Water Program: Water conservation and awareness presentations(in class and events)- 384 presentation in 74 Stockton area schools for 26,320 students. Zun Zun Environmental Education Assemblies -15 in 10 schools for 5,934 students.2013 Expenditures\* 320002013 Staff Hours\* 2810

#### Summary of Year 2014 Projected Actions

List educational programs the district plans to support or participate in\* Same as above.2014 Projected Expenditures\* 320002014 Projected Staff Hours\* 2850

## A4: Pricing Structure

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### Summary of Actions Year 2013

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One of the two selections below is required  District currently prices water at least partly by volume.

Steps taken to prepare for conversion  none

Comments  none

2013 Expenditures  0

2013 Staff Hours  0

### Summary of Year 2014 Projected Actions

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If not already billing in part by volume, enter the year the district plans to convert to billing by volume  0

Comments  none

2014 Projected Expenditures  0

2014 Projected Staff Hours  0

## A5: Policy Evaluation

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### Summary of Actions Year 2013

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List any policy changes or suggestions concerning water conservation/management (internal or external) recommended during the year:

none. •

### Actual Benefits Year 2013

---

List any benefits received as a result of policy changes. Quantify the benefits if possible in terms of volume of water saved or affected, or dollars:

none. •

2013 Expenditures  0

2013 Staff Hours  0

### Summary of Year 2014 Projected Actions

---

List any policies identified for review  none

2014 Projected Expenditures  0

2014 Projected Staff Hours  0

## A6: Contractor Pump Efficiency

---

### Summary of Actions Year 2013

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Number of contractor pumps tested for efficiency during the year  0

Quantify the benefits, if possible, in terms of volume of water saved or affected, or dollars in energy savings  The district pumps are installed as needed for each irrigation season. When needed they get tested after installation

Comments  None

2013 Expenditures  0

2013 Staff Hours  0

### Summary of Year 2014 Projected Actions

---

Number of pumps expected to be tested\* 2

Comments\* Same as above. Expenditures include staff hours at no cost.

2014 Projected Expenditures\* 500

2014 Projected Staff Hours\* 5

## B1: Facilitate Alternative Land Use

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### Summary of Actions Year 2013

---

One of the two selections below is required\* District has no land identified for alternative land use (dryland conversions, retirement from agriculture, or conversion to wildlife/non-irrigated or other).

The district in cooperation with the land owners have converted the following number of acres this year\* 0

The district in cooperation with landowners have converted the following number of acres total this year and all past years\* 0

Comments\* none

2013 Expenditures\* 0

2013 Staff Hours\* 0

### Summary of Year 2014 Projected Actions

---

Areas expected to be converted\* 0

Comments\* none

2014 Projected Expenditures\* 0

2014 Projected Staff Hours\* 0

## B2: Use of Recycled Water

---

### Summary of Actions Year 2013

---

One of the four selections below is required\* District has no recycled water opportunities (no water treatment facilities in surrounding area).

Number of acre-feet of recycled water received (put 0 if not applicable)\* 0

Number of years until projected project start\* 0

Comments\* none

### Actual Benefits Year 2013

---

Quantify the benefits, if possible, in terms of volume of water saved or affected, or dollars\* none

2013 Expenditures\* 0

2013 Staff Hours\* 0

### Summary of Year 2014 Projected Actions

---

One of the two selections below is required\* District will investigate recycled water opportunities.

Estimated acre feet of water that may be available for recycling in the future\* 0

Comments\* none

2014 Projected Expenditures\* 0

2014 Projected Staff Hours\* 0

## B3: Capital Improvements of On-Farm Irrigation

---

## Summary of Actions Year 2013

---

One of the two selections below is required  District has a loan or funding program.

Listing of programs offered  Surface Water incentive Program: The landowner initially installs the improvement at his or her cost. As surface water is used on the property, the landowner pays only the groundwater rate for water (currently at \$4.90 per acre foot) rather than the current applicable surface water rate (currently \$23.00 per acre foot), the difference is credited against the cost of the installation until the landowner recovers the entire cost of the improvements.

Comments  none. Expenditures include staff hours at no cost.

## Actual Benefits Year 2013

---

Estimate the dollar value of on farm improvements facilitated by the district  0

2013 expenditures on facilitation of farm improvements  0

2013 staff hours on facilitation of farm improvements  0

## Summary of Year 2014 Projected Actions

---

District is expecting to facilitate a funding program  Accepted

List program(s) expected to be available  same as above

2014 Projected Expenditures  0

2014 Projected Staff Hours  0

## B4: Incentive Pricing

---

### Summary of Actions Year 2013

---

District has an incentive price program  No

District is developing an incentive priced program  No

Water savings from incentive priced program  No

Comments  The District Act (enabling legislation) limits its pricing program.

### Actual Benefits Year 2013

---

Describe the objectives/benefits of the incentive pricing program. Quantify where possible the effect of the incentive pricing program in terms of water dollars:

none

2013 Expenditures  0

2013 Staff Hours  0

### Summary of Year 2014 Projected Actions

---

List any changes expected in the incentive pricing program  none

Number of years until district will have an incentive pricing program, if none exists currently (put "unknown" if applicable)  0

2014 Projected Expenditures  0

2014 Projected Staff Hours  0

## B5A: Line or Pipe Ditches and Canals

---

### Summary of Actions Year 2013

---

District has all ditches lined or piped  No

District is investigating in lining or piping canals  No

Miles of pipeline installed this year\* 0

Miles of canal lined this year\* 0

Comments\* Funding prohibits any plans for lining projects

### Calculated Actual Benefits Year 2013:

Acre-feet, estimated water saved from lining or piping canals\* 0

2013 Expenditures\* 0

2013 Staff Hours\* 0

### Summary of Year 2014 Projected Actions

Proposed miles of canal to be piped or lined\* 0

Comments\* Same as above

### Anticipated Year 2014 Benefits:

Acre-feet of water savings from proposed projects\* 0

2014 Projected Expenditures\* 0

2014 Projected Staff Hours\* 0

## B5B: Regulatory Reservoirs

### Summary of Actions Year 2013

District has regulatory reservoirs\* Yes

District is investigating regulatory reservoirs\* Yes

District plans to add regulatory reservoirs\* Yes

District regulatory reservoirs constructed\* No

Comments\* none

### Calculated Actual Benefits Year 2013:

Current total capacity of regulatory reservoirs (acre-feet)\* 500

Estimated water savings from spills or operational improvements related to regulatory reservoirs (acre-feet)\* 500

Improved water management with regulatory reservoirs\* Yes

Comments\* none.Expenditures include staff hours at no cost.

2013 Expenditures\* 600

2013 Staff Hours\* 100

### Summary of Year 2014 Projected Actions

District will install or investigate development of regulatory reservoirs\* Yes

Comments\* A feasibility study is still being conducted. The \$11,000,000.00 cost of the project includes the study, design and construction of the new reservoirs. The district continues with this feasibility study and expects to be completed the fall 2016. Expenditures include staff hours at no cost.

### Anticipated Year 2014 Benefits:

Estimate additional capacity to be added in 2014 (acre-feet)\* 0

Estimate additional capacity needed for optimum operation (acre-feet)\* 0

2014 Projected Expenditures\* 0

2014 Projected Staff Hours\* 100

## B6: Flexible Water Ordering

---

### Summary of Actions Year 2013

---

District has an on-demand delivery system\* Yes

District has reached the maximum flexibility currently feasible without major physical improvements to the delivery system\* Yes

District is investigating improving delivery flexibility\* Yes

Describe any improvements in delivery flexibility completed or under investigation\* District is investigating other options to improved SCADA and water controlling. Expenditures include staff hours at no cost.

### Actual Benefits Year 2013

---

Estimate the number of acres benefited by increased flexibility (acres)\* 0

2013 Expenditures\* 400

2013 Staff Hours\* 80

### Summary of Year 2014 Projected Actions

---

One of the three selections below is required\* District will investigate improvements to delivery flexibility.

Comments\* Same as above. Expenditures include staff hours at no cost.

### Anticipated Year 2014 Benefits:

---

Improved service to customers\* Yes

2014 Projected Expenditures\* 400

2014 Projected Staff Hours\* 100

## B7: Spill and Tailwater Recovery

---

### Summary of Actions Year 2013

---

District has spills or tailwater leaving the district\* No

District is investigating development of a spill/tailwater recovery system\* No

District implemented a spill/tailwater recovery program\* No

Comments\* none

### Calculated Actual Benefits Year 2013:

---

Acre-feet, estimated water conserved by implementing a spill/tailwater recovery program\* 0

2013 Expenditures\* 0

2013 Staff Hours\* 0

### Summary of Year 2014 Projected Actions

---

District will investigate implementation of a spill/tailwater recovery program\* No

District will implement or continue a spill/tailwater recovery system\* No

Comments\* none

### Anticipated Year 2014 Benefits:

---

Acre-feet, estimated water conserved from the proposed or continued project\* 0

2014 Projected Expenditures\* 0

2014 Projected Staff Hours\* 0

## B8: Plan to measure outflow

---

Total # of outflow (surface) locations/points 3

Total # of outflow (subsurface) locations/points 3

Total # of outflow points 3

Percentage of total outflow (volume) measured during report year 90

Identify locations, prioritize, determine best measurement method/cost, submit funding proposal

Estimated cost in \$1000's

**Location & Priority**      **2013** **2014** **2015** **2016** **2017**

Mormon Slough/SCADA 0      0

Mosher Slough/SCADA 1      1

Calveras River/SCADA 0      3

## B9: Conjunctive Use

---

### Summary of Actions Year 2013

---

District has conjunctive use options Yes

District is investigating a conjunctive use program Yes

District implemented a conjunctive use program Yes

Comments none. Expenditures include staff hours at no cost.

### Calculated Actual Benefits Year 2013:

---

Acre-feet, water charged to ground water or otherwise stored 4104

Acre-feet of water pumped from wells or otherwise retrieved 0

2013 Expenditures 0

2013 Staff Hours 20

### Summary of Year 2014 Projected Actions

---

District will investigate a conjunctive use program Yes

District will implement a conjunctive use program Yes

Comments none. Expenditures include staff hours at no cost.

### Anticipated Year 2014 Benefits:

---

Acre-feet, water expected to be charged to ground water or otherwise stored 5000

Acre-feet of water expected to be pumped from wells or otherwise retrieved 0

2014 Projected Expenditures 0

2014 Projected Staff Hours 20

## B10: Automate Canal Structures

---

### Summary of Actions Year 2013

---

District's distribution system is completely automated No

District is investigating system automation Yes

District implemented an automation project No

Comments none. Expenditures include staff hours at no cost.

## Calculated Actual Benefits Year 2013:

---

Implementation of project reduced spills or increased flexibility\* Yes  
 Acre-feet, estimated amount of water that would have spilled without the project\* 0  
 Implementation of project improved service to customers\* Yes  
 Acres, estimated acres provided with improved service\* 0  
 2013 Expenditures\* 400  
 2013 Staff Hours\* 20

## Summary of Year 2014 Projected Actions

---

District will investigate automation for distribution system\* Yes  
 District will implement an automation project\* Yes  
 Comments\* SCADA is currently under integration study. Expenditures include staff hours at no cost.

## Anticipated Year 2014 Benefits:

---

Acre-feet, estimate of water spill which could be eliminated by proposed automation project\* 0  
 Acres, estimate of acres provided with improved service by proposed automation project\* 0  
 2014 Projected Expenditures\* 2500  
 2014 Projected Staff Hours\* 80

## B11: Water User Pumping

---

### Summary of Actions Year 2013

---

District promotes a local utility companies pump testing program\* No  
 List method(s) of promotion\* not applicable  
 District promotes its own pump testing program for its customers\* Yes  
 List method(s) of promotion\* Newsletter  
 Number of customer pumps tested\* 0  
 2013 Expenditures\* 0  
 2013 Staff Hours\* 0

### Summary of Year 2014 Projected Actions

---

District will promote pump testing program\* Yes  
 Estimated number of customer pumps to be tested\* 4  
 Comments\* none. Expenditures include staff hours at no cost.  
 2014 Projected Expenditures\* 1200  
 2014 Projected Staff Hours\* 2

## Facilitate or promote water customer pump testing and evaluation.

---

File Attachment\* No Answer

## B12: GIS Mapping

---

Has the District implemented this BMP\* Yes  
 Estimate Cost in \$1000's  
**Planning Stages 2013 2014 2015 2016**  
**Mapping Processes 2013 2014 2015 2016**



<b>Current Date:</b>	02/03/2017
<b>District Name:</b>	Stockton East Water District
<b>Company Name:</b>	Stockton East Water District
<b>Start Date:</b>	01/01/2014
<b>End Date:</b>	12/31/2014
<b>Current Status:</b>	Approved
<b>Annual Update Year:</b>	2014

## A1: Measurement

### Summary of Actions 2014

Total number of customers\* 201

Total number of customers with measured deliveries\* 193

Number of measurement devices installed this year\* 3

Number of measurement devices upgraded\* 2

Comments\* The District has installed two new water meter to two old pumps without water meters. We installed one new water meters to one new pump stations, total of 3. The difference in the number of customers and meter customers between the years is due to customers canceling their surface water pump station. There is a total of 8 customers without a water meter. This pump stations are old and have difficult plumbing setups with no room for a water meter. We continue to look for alternatives to change the status quo. Expenditures include staff hours at no cost

### Calculated Actual Benefits Year 2014

Revenue increased after improved measurement\* No

Water savings from improve measurement\* No

Est. Ac. Ft. Saved\* 0

2014 Expenditures\* 10000

2014 Staff Hours\* 10

### Summary of Year 2015 Projected Actions

Number of measurement devices planned to install next year\* 2

Number of measurement devices planned to be upgraded next year\* 2

Comments\* none. Expenditures include staff hours at no cost.

### Anticipated Year 2015 Budget

2015 Projected Expenditures\* 2800

2015 Projected Staff Hours\* 8

## A2: Conservation Coordinator

### Summary of Actions Year 2014

Name of Coordinator\* Andres Lozano  
 E-Mail\* alozano@sewd.net  
 Title\* Water Supply Manager  
 Address\* 6767 East Main Street Stockton CA 95215  
 Phone\* 209-948-0537  
 Fax\*     
 Cell Phone\*     
 2014 Expenditures\* 2500  
 2014 Staff Hours\* 40

### Summary of Year 2015 Projected Actions

2015 Projected Expenditures\* 2600  
 2015 Projected Staff Hours\* 40

## A3A: Water Management Service: On-Farm Evaluations

### Summary of Actions Year 2014

Number of acres surveyed\* 0

Comments\* The District uses our AG newsletter to advertise for this free service to our customers. Even though the District has not been successful we continue to highlight to our customers the importance and the benefits of using this free service to make their farming operation more efficient. Expenditures include staff hours at no cost.

### Actual Benefits Year 2014

Identified efficiency losses\* No  
 Reduced tailwater\* No  
 Number of acre-feet reduced by\* 0  
 Other\* none.  
 2014 Expenditures\* 0  
 2014 Staff Hours\* 0

### Summary of Year 2015 Projected Actions

Number of acres to be surveyed\* 200  
 Comments\* none. Expenditures include staff hours at no cost.

### Anticipated Year 2015 Benefits

Identify efficiency improvements\* Yes  
 Reduced tailwater\* No  
 Number of acre-feet reduced by\* 0  
 2015 Projected Expenditures\* 4000  
 2015 Projected Staff Hours\* 4

## A3B: Water Management Services: Real-Time ET Information

### Actual Benefits Year 2014

Number of customers provided information\* 6000  
 Method of data distribution:

Newspaper\* NoBills\* NoNewsletter\* YesInternet\* Yes

Other\* Signage in the District administration office. CIMIS information is mailed to over 6000 District customers on spring and fall newsletter. Cal Poly ITRC has developed real-time ET information that is now available in the District's website. Expenditures include staff hours at no cost.

2014 Expenditures\* 602014 Staff Hours\* 4

## Summary of Year 2015 Projected Actions

List any projected changes\* The district CIMIS information program was completed in 2013 and is currently available to our customers in our district website. Expenditures include staff hours at no cost.

2015 Projected Expenditures\* 02015 Projected Staff Hours\* 8

## A3C: Water Management Services: Water Quality Data

### Summary of Actions Year 2014

Water quality issue\* NoGround water analyzed\* NoSurface water analyzed\* YesComments\* Stockton East water District does not provide ground water for irrigation

### Actual Benefits Year 2014

List any decisions based on analysis of water\* none. Expenditures include staff hours at no cost.

2014 Expenditures\* 10002014 Staff Hours\* 8

### Summary of Year 2015 Projected Actions

List any changes planned concerning water analysis\* none. Expenditures include staff hours at no cost.

2015 Projected Expenditures\* 10002015 Projected Staff Hours\* 8

## A3D: Water Management: Educational Programs

### Summary of Actions Year 2014

List educational programs the district supported or participated in\* The SAWS Water Program: Water conservation and awareness presentations(in class and events)- 391 presentation in 74 Stockton area schools for 24,348 students. Zun Zun Environmental Education Assemblies -15 in 10 schools for 5,934 students.

2014 Expenditures\* 39,0002014 Staff Hours\* 2800

### Summary of Year 2015 Projected Actions

List educational programs the district plans to support or participate in\* Same as above.

2015 Projected Expenditures\* 39,0002015 Projected Staff Hours\* 2800

## A4: Pricing Structure

---

### Summary of Actions Year 2014

---

One of the two selections below is required  District currently prices water at least partly by volume.

Steps taken to prepare for conversion  none

Comments  none

2014 Expenditures  0

2014 Staff Hours  0

### Summary of Year 2015 Projected Actions

---

If not already billing in part by volume, enter the year the district plans to convert to billing by volume  0

Comments  none

2015 Projected Expenditures  0

2015 Projected Staff Hours  0

## A5: Policy Evaluation

---

### Summary of Actions Year 2014

---

List any policy changes or suggestions concerning water conservation/management (internal or external) recommended during the year:

The district implemented a mandatory call in program for water ordering. •

### Actual Benefits Year 2014

---

List any benefits received as a result of policy changes. Quantify the benefits if possible in terms of volume of water saved or affected, or dollars:

no comments. Expenditures include staff hours at no cost. •

2014 Expenditures  0

2014 Staff Hours  4

### Summary of Year 2015 Projected Actions

---

List any policies identified for review  If the drought persist the district will continue its mandatory call in program. Expenditures include staff hours at no cost.

2015 Projected Expenditures  0

2015 Projected Staff Hours  4

## A6: Contractor Pump Efficiency

---

### Summary of Actions Year 2014

---

Number of contractor pumps tested for efficiency during the year  0

Quantify the benefits, if possible, in terms of volume of water saved or affected, or dollars in energy savings  none

Comments  The District's own pumps are install to supply water to Potter Creek on a needed bases and is only then that the pumps will be tested. This year there was no need for these pumps.

2014 Expenditures  0

2014 Staff Hours  0

### Summary of Year 2015 Projected Actions

Number of pumps expected to be tested\* 0

Comments\* Do to the present drought that persist in our region it is unlikely that the district pumps will be install. However the district will continue to implement its farmer pump efficiency test program.

2015 Projected Expenditures\* 0

2015 Projected Staff Hours\* 0

## B1: Facilitate Alternative Land Use

### Summary of Actions Year 2014

One of the two selections below is required\* District has no land identified for alternative land use (dryland conversions, retirement from agriculture, or conversion to wildlife/non-irrigated or other).

The district in cooperation with the land owners have converted the following number of acres this year\* 0

The district in cooperation with landowers have converted the following number of acres total this year and all past years\* 0

Comments\* none

2014 Expenditures\* 0

2014 Staff Hours\* 0

### Summary of Year 2015 Projected Actions

Areas expected to be converted\* 0

Comments\* none

2015 Projected Expenditures\* 0

2015 Projected Staff Hours\* 0

## B2: Use of Recycled Water

### Summary of Actions Year 2014

One of the four selections below is required\* District has no recycled water opportunities (no water treatment facilities in surrounding area).

Number of acre-feet of recycled water received (put 0 if not applicable)\* 0

Number of years until projected project start\* 0

Comments\* none

### Actual Benefits Year 2014

Quantify the benefits, if possible, in terms of volume of water saved or affected, or dollars\* none

2014 Expenditures\* 0

2014 Staff Hours\* 0

### Summary of Year 2015 Projected Actions

One of the two selections below is required\* District will investigate recycled water opportunities.

Estimated acre feet of water that may be available for recycling in the future\* 0

Comments\* none

2015 Projected Expenditures\* 0

2015 Projected Staff Hours\* 0

## B3: Capital Improvements of On-Farm Irrigation

---

## Summary of Actions Year 2014

---

One of the two selections below is required  District has a loan or funding program.

Listing of programs offered  Surface Water incentive Program: The landowner initially installs the improvement at his or her cost. As surface water is used on the property, the landowner pays only the groundwater rate for water (currently at \$4.90 per acre foot) rather than the current applicable surface water rate (currently \$23.00 per acre foot), the difference is credited against the cost of the installation until the landowner recovers the entire cost of the improvements.

Comments  none. Expenditures include staff hours at no cost.

## Actual Benefits Year 2014

---

Estimate the dollar value of on farm improvements facilitated by the district  0

2014 expenditures on facilitation of farm improvements  0

2014 staff hours on facilitation of farm improvements  5

## Summary of Year 2015 Projected Actions

---

District is expecting to facilitate a funding program  Accepted

List program(s) expected to be available  Same programs as last year. Expenditures include staff hours at no cost.

2015 Projected Expenditures  0

2015 Projected Staff Hours  5

## B4: Incentive Pricing

---

### Summary of Actions Year 2014

---

District has an incentive price program  No

District is developing an incentive priced program  No

Water savings from incentive priced program  No

Comments  The District Act (enabling legislation) limits its pricing program.

### Actual Benefits Year 2014

---

Describe the objectives/benefits of the incentive pricing program. Quantify where possible the effect of the incentive pricing program in terms of water dollars:

see comments above

2014 Expenditures  0

2014 Staff Hours  0

### Summary of Year 2015 Projected Actions

---

List any changes expected in the incentive pricing program  same as above

Number of years until district will have an incentive pricing program, if none exists currently (put "unknown" if applicable)  see above

2015 Projected Expenditures  0

2015 Projected Staff Hours  0

## B5A: Line or Pipe Ditches and Canals

---

### Summary of Actions Year 2014

---

District has all ditches lined or piped  No

District is investigating in lining or piping canals  No

Miles of pipeline installed this year\* 0

Miles of canal lined this year\* 0

Comments\* Funding prohibits any plans for funding projects.

### Calculated Actual Benefits Year 2014:

---

Acre-feet, estimated water saved from lining or piping canals\* 0

2014 Expenditures\* 0

2014 Staff Hours\* 0

### Summary of Year 2015 Projected Actions

---

Proposed miles of canal to be piped or lined\* 0

Comments\* same as above.

### Anticipated Year 2015 Benefits:

---

Acre-feet of water savings from proposed projects\* 0

2015 Projected Expenditures\* 0

2015 Projected Staff Hours\* 0

## B5B: Regulatory Reservoirs

---

### Summary of Actions Year 2014

---

District has regulatory reservoirs\* Yes

District is investigating regulatory reservoirs\* Yes

District plans to add regulatory reservoirs\* Yes

District regulatory reservoirs constructed\* No

Comments\* The propose new regulatory ponds continues to be under feasibility studies.

### Calculated Actual Benefits Year 2014:

---

Current total capacity of regulatory reservoirs (acre-feet)\* 500

Estimated water savings from spills or operational improvements related to regulatory reservoirs (acre-feet)\* 500

Improved water management with regulatory reservoirs\* Yes

Comments\* The above information reflects on the existing District regulatory reservoirs only. Expenditures include staff hours at no cost.

2014 Expenditures\* 0

2014 Staff Hours\* 400

### Summary of Year 2015 Projected Actions

---

District will install or investigate development of regulatory reservoirs\* Yes

Comments\* A feasibility study is still being conducted. The \$11,000,000.00 cost of the project includes the study, design and construction of the new reservoirs. The district continues with this feasibility study. No completion date has been set. Expenditures include staff hours at no cost.

### Anticipated Year 2015 Benefits:

---

Estimate additional capacity to be added in 2015 (acre-feet)\* 0

Estimate additional capacity needed for optimum operation (acre-feet)\* 0

2015 Projected Expenditures\* 0

2015 Projected Staff Hours\* 200

## B6: Flexible Water Ordering

---

### Summary of Actions Year 2014

---

District has an on-demand delivery system\* Yes

District has reached the maximum flexibility currently feasible without major physical improvements to the delivery system\* Yes

District is investigating improving delivery flexibility\* Yes

Describe any improvements in delivery flexibility completed or under investigation\* None done this year. Expenditures include staff hours at no cost.

### Actual Benefits Year 2014

---

Estimate the number of acres benefited by increased flexibility (acres)\* 0

2014 Expenditures\* 1000

2014 Staff Hours\* 60

### Summary of Year 2015 Projected Actions

---

One of the three selections below is required\* District will investigate improvements to delivery flexibility.

Comments\* SCADA software still remains a challenge and the District is investigating the many options available. Expenditures include staff hours at no cost.

### Anticipated Year 2015 Benefits:

---

Improved service to customers\* Yes

2015 Projected Expenditures\* 12,000

2015 Projected Staff Hours\* 60

## B7: Spill and Tailwater Recovery

---

### Summary of Actions Year 2014

---

District has spills or tailwater leaving the district\* No

District is investigating development of a spill/tailwater recovery system\* No

District implemented a spill/tailwater recovery program\* No

Comments\* The Voluntary call in system the District uses has kept any tail water to an unmeasurable amount.

### Calculated Actual Benefits Year 2014:

---

Acre-feet, estimated water conserved by implementing a spill/tailwater recovery program\* 0

2014 Expenditures\* 0

2014 Staff Hours\* 0

### Summary of Year 2015 Projected Actions

---

District will investigate implementation of a spill/tailwater recovery program\* No

District will implement or continue a spill/tailwater recovery system\* No

Comments\* none.

### Anticipated Year 2015 Benefits:

---

Acre-feet, estimated water conserved from the proposed or continued project\* 0

2015 Projected Expenditures\* 0

2015 Projected Staff Hours\* 0

## B8: Plan to measure outflow

Total # of outflow (surface) locations/points 3

Total # of outflow (subsurface) locations/points 0

Total # of outflow points 3

Percentage of total outflow (volume) measured during report year 90

Identify locations, prioritize, determine best measurement method/cost, submit funding proposal

Estimated cost in \$1000's

Location & Priority	2014	2015	2016	2017	2018
Mormon Slough SCADA	3	3			
Mosher Slough SCADA	3	3			
Calaveras River SCADA	3	3			

## B9: Conjunctive Use

### Summary of Actions Year 2014

District has conjunctive use options Yes

District is investigating a conjunctive use program Yes

District implemented a conjunctive use program Yes

Comments The district is conducting a rehabilitation program to four existing wells for M&I use as an alternative to the drought year situation. These wells are expected to be in service by the year 2015. Expenditures include staff hours at no cost.

### Calculated Actual Benefits Year 2014:

Acre-feet, water charged to ground water or otherwise stored 3528

Acre-feet of water pumped from wells or otherwise retrieved 0

2014 Expenditures 50,000

2014 Staff Hours 30

### Summary of Year 2015 Projected Actions

District will investigate a conjunctive use program Yes

District will implement a conjunctive use program Yes

Comments Same as above. Expenditures include staff hours at no cost.

### Anticipated Year 2015 Benefits:

Acre-feet, water expected to be charged to ground water or otherwise stored 1000

Acre-feet of water expected to be pumped from wells or otherwise retrieved 5000

2015 Projected Expenditures 400,000

2015 Projected Staff Hours 400

## B10: Automate Canal Structures

### Summary of Actions Year 2014

District's distribution system is completely automated\* No  
 District is investigating system automation\* Yes  
 District implemented an automation project\* No  
 Comments\* None. Expenditures include staff hours at no cost.

### Calculated Actual Benefits Year 2014:

Implementation of project reduced spills or increased flexibility\* Yes  
 Acre-feet, estimated amount of water that would have spilled without the project\* 0  
 Implementation of project improved service to customers\* Yes  
 Acres, estimated acres provided with improved service\* 0  
 2014 Expenditures\* 1000  
 2014 Staff Hours\* 60

### Summary of Year 2015 Projected Actions

District will investigate automation for distribution system\* Yes  
 District will implement an automation project\* Yes  
 Comments\* The District is planning to add more SCADA RTU sites along its conveyance systems. Expenditures include staff hours at no cost.

### Anticipated Year 2015 Benefits:

Acre-feet, estimate of water spill which could be eliminated by proposed automation project\* 0  
 Acres, estimate of acres provided with improved service by proposed automation project\* 0  
 2015 Projected Expenditures\* 12,000  
 2015 Projected Staff Hours\* 120

## B11: Water User Pumping

### Summary of Actions Year 2014

District promotes a local utility companies pump testing program\* No  
 List method(s) of promotion\* Not Applicable.  
 District promotes its own pump testing program for its customers\* Yes  
 List method(s) of promotion\* Newsletter.  
 Number of customer pumps tested\* 4  
 2014 Expenditures\* 1200  
 2014 Staff Hours\* 2

### Summary of Year 2015 Projected Actions

District will promote pump testing program\* Yes  
 Estimated number of customer pumps to be tested\* 10  
 Comments\* none. Expenditures include staff hours at no cost.  
 2015 Projected Expenditures\* 3000  
 2015 Projected Staff Hours\* 4

### Facilitate or promote water customer pump testing and evaluation.

File Attachment\* No Answer

## B12: GIS Mapping

---

Has the District implemented this BMP? Yes

Estimate Cost in \$1000's

**Planning Stages 2014 2015 2016 2017**

500 500 500 500

**Mapping Processes 2014 2015 2016 2017**

Agricultural Water Management Council>Loading

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<b>Current Date:</b>	02/03/2017
<b>District Name:</b>	Stockton East Water District
<b>Company Name:</b>	Stockton East Water District
<b>Start Date:</b>	01/01/2015
<b>End Date:</b>	12/31/2015
<b>Current Status:</b>	Approved
<b>Annual Update Year:</b>	2015

## A1: Measurement

### Summary of Actions 2015

Total number of customers\* 201

Total number of customers with measured deliveries\* 193

Number of measurement devices installed this year\* 2

Number of measurement devices upgraded\* 0

Comments\* The District replace two old water meters. with new meters. The difference in number of customers and meter customers between the years is due to surface water pump customers canceling their service. We continue to have a total of 8 customers without water meters. These pump stations are old with difficult plumbing setups and insufficient room for a water meter. The District has continue to look for alternatives to change the status quo. District expenditures include staff hours at no cost

### Calculated Actual Benefits Year 2015

Revenue increased after improved measurement\* No

Water savings from improve measurement\* No

Est. Ac. Ft. Saved\* 0

2015 Expenditures\* 6000

2015 Staff Hours\* 8

### Summary of Year 2016 Projected Actions

Number of measurement devices planned to install next year\* 2

Number of measurement devices planned to be upgraded next year\* 2

Comments\* The district continues to improve water measurement by replacing water meters that are not meeting the correct measurement standard values. The district will continue its efforts to make sure all District water meter devises meet the proper water metering standards values. Expenditures include staff hours.

### Anticipated Year 2016 Budget

2016 Projected Expenditures\* 10000

2016 Projected Staff Hours\* 16

## A2: Conservation Coordinator

## Summary of Actions Year 2015

---

Name of Coordinator\* Andres Lozano  
 E-Mail\* alozano@sewd.net  
 Title\* Water Supply Manager  
 Address\* 6767 East main Street Stockton CA. 95215  
 Phone\* 209-444-3124  
 Fax\*     
 Cell Phone\* 209-969-7394  
 2015 Expenditures\* 2800  
 2015 Staff Hours\* 40

## Summary of Year 2016 Projected Actions

---

2016 Projected Expenditures\* 2600  
 2016 Projected Staff Hours\* 40

### A3A: Water Management Service: On-Farm Evaluations

---

## Summary of Actions Year 2015

---

Number of acres surveyed\* 200  
 Comments\* The District uses our AG newsletter to advertise this free service to our customers. This year we had one customer who requested this service. The District will continue to highlight to our customers the benefits of using this free service that helps farming operation be more efficient. Expenditures include staff hours at no cost.

## Actual Benefits Year 2015

---

Identified efficiency losses\* No  
 Reduced tailwater\* No  
 Number of acre-feet reduced by\*     
 Other\* The farmer is evaluating its Farm Evaluation survey results. The farmer is planning to follow up on these efficient irrigation recommendations changes that will improve his overall irrigation operations to save water and cost.  
 2015 Expenditures\* 1550  
 2015 Staff Hours\* 1

## Summary of Year 2016 Projected Actions

---

Number of acres to be surveyed\* 200  
 Comments\* None. Expenditures include staff hours at no cost.

## Anticipated Year 2016 Benefits

---

Identify efficiency improvements\* Yes  
 Reduced tailwater\* No  
 Number of acre-feet reduced by\* 0  
 2016 Projected Expenditures\* 4000  
 2016 Projected Staff Hours\* 2

### A3B: Water Management Services: Real-Time ET Information

---

## Actual Benefits Year 2015

Number of customers provided information\* 6000

Method of data distribution:

Newspaper\* No

Bills\* Yes

Newsletter\* Yes

Internet\* Yes

Other\* Signage in the District administration office. CIMIS information is mailed to over 6000 District customers on spring and fall newsletter. Cal Poly ITRC has developed real-time ET information that is now available in the District's website. Expenditures include staff hours at no cost.

2015 Expenditures\* 60

2015 Staff Hours\* 4

## Summary of Year 2016 Projected Actions

List any projected changes\* The district CIMIS information program was completed in 2013 and is currently available to our customers in our district website. Expenditures include staff hours at no cost.

2016 Projected Expenditures\* 0

2016 Projected Staff Hours\* 8

## A3C: Water Management Services: Water Quality Data

### Summary of Actions Year 2015

Water quality issue\* No

Ground water analyzed\* No

Surface water analyzed\* Yes

Comments\* Stockton East Water District does not provide ground water information

### Actual Benefits Year 2015

List any decisions based on analysis of water\* None. Expenditures include staff hours at no cost.

2015 Expenditures\* 1000

2015 Staff Hours\* 8

### Summary of Year 2016 Projected Actions

List any changes planned concerning water analysis\* None. Expenditures include staff hours at no cost.

2016 Projected Expenditures\* 1000

2016 Projected Staff Hours\* 8

## A3D: Water Management: Educational Programs

### Summary of Actions Year 2015

List educational programs the district supported or participated in\* The SAWS Water Program: Water conservation and awareness presentations(in class and events)- 404 presentation in 74 Stockton area schools for 23,538 students. Zun Zun Environmental Education Assemblies -14 in 10 schools for 4,730 students

2015 Expenditures\* 39000

2015 Staff Hours\* 2800

### Summary of Year 2016 Projected Actions

List educational programs the district plans to support or participate in\* Same as per note above

2016 Projected Expenditures\* 39000

2016 Projected Staff Hours\* 2800

#### A4: Pricing Structure

---

##### Summary of Actions Year 2015

---

One of the two selections below is required\* District currently prices water at least partly by volume.

Steps taken to prepare for conversion\* none

Comments\* none

2015 Expenditures\* 0

2015 Staff Hours\* 0

##### Summary of Year 2016 Projected Actions

---

If not already billing in part by volume, enter the year the district plans to convert to billing by volume\* 0

Comments\* none

2016 Projected Expenditures\* 0

2016 Projected Staff Hours\* 0

#### A5: Policy Evaluation

---

##### Summary of Actions Year 2015

---

List any policy changes or suggestions concerning water conservation/management (internal or external) recommended during the year:

As a result of the persistent drought, this year we cut our water deliveries by 66% due to insufficient Hogan storage water. Our AG water deliveries were schedule to five 10-days irrigation deliveries from May to September. In efforts to preserved water, the District implemented a mandatory water ordering calling program.

##### Actual Benefits Year 2015

---

List any benefits received as a result of policy changes. Quantify the benefits if possible in terms of volume of water saved or affected, or dollars:

The District surface water delivery policies force the farmers to preserve surface water as well as ground water. In addition to and adding to the water conservation measures, several of the seasonal farm lands were declared fallow grounds this year.

2015 Expenditures\* 0

2015 Staff Hours\* 20

##### Summary of Year 2016 Projected Actions

---

List any policies identified for review\* If the drought persist the district will continue its mandatory call in program. Expenditures include staff hours at no cost.

2016 Projected Expenditures\* 0

2016 Projected Staff Hours\* 8

#### A6: Contractor Pump Efficiency

---

##### Summary of Actions Year 2015

---

Number of contractor pumps tested for efficiency during the year\* 2

Quantify the benefits, if possible, in terms of volume of water saved or affected, or dollars in energy savings\* The two District pumps that supply water to the Potter Creek were install and tested for pumping efficiency.

Comments\* The District pumps were found to have room for efficiency improvement. The District is now looking into cost benefits of pump efficiency.

2015 Expenditures\* 500

2015 Staff Hours\* 1

## Summary of Year 2016 Projected Actions

Number of pumps expected to be tested\* 0

Comments\* If the present drought condition persist in our region it is unlikely that the District pumps will be install. However the district will continue to implement its farmer pump efficiency test program.

2016 Projected Expenditures\* 0

2016 Projected Staff Hours\* 0

## B1: Facilitate Alternative Land Use

### Summary of Actions Year 2015

One of the two selections below is required\* District has no land identified for alternative land use (dryland conversions, retirement from agriculture, or conversion to wildlife/non-irrigated or other).

The district in cooperation with the land owners have converted the following number of acres this year\* 0

The district in cooperation with landowers have converted the following number of acres total this year and all past years\* 0

Comments\* none

2015 Expenditures\* 0

2015 Staff Hours\* 0

### Summary of Year 2016 Projected Actions

Areas expected to be converted\* 0

Comments\* none

2016 Projected Expenditures\* 0

2016 Projected Staff Hours\* 0

## B2: Use of Recycled Water

### Summary of Actions Year 2015

One of the four selections below is required\* District has no recycled water opportunities (no water treatment facilities in surrounding area).

Number of acre-feet of recycled water received (put 0 if not applicable)\* 0

Number of years until projected project start\* 0

Comments\* none

### Actual Benefits Year 2015

Quantify the benefits, if possible, in terms of volume of water saved or affected, or dollars\* none

2015 Expenditures\* 0

2015 Staff Hours\* 0

### Summary of Year 2016 Projected Actions

One of the two selections below is required\* District will investigate recycled water opportunities.

Estimated acre feet of water that may be available for recycling in the future\* 0

Comments\* none

2016 Projected Expenditures\* 0

2016 Projected Staff Hours\* 0

### B3: Capital Improvements of On-Farm Irrigation

---

#### Summary of Actions Year 2015

---

One of the two selections below is required\* District has a loan or funding program.

Listing of programs offered\* Surface Water Incentive Program: The landowner initially installs the improvement at his/her cost. As surface water is used on the property, the landowner pays only the groundwater rate for water (currently at \$5.05 per acre foot) rather than the current applicable surface water rate (currently \$23.00 per acre foot), the difference is credited against the cost of the installation until the landowner recovers the entire cost of the improvements.

Comments\* none. Expenditures include staff hours at no cost.

#### Actual Benefits Year 2015

---

Estimate the dollar value of on farm improvements facilitated by the district\* 0

2015 expenditures on facilitation of farm improvements\* 0

2015 staff hours on facilitation of farm improvements\* 5

#### Summary of Year 2016 Projected Actions

---

District is expecting to facilitate a funding program\* Accepted

List program(s) expected to be available\* Same programs as last year. Expenditures include staff hours at no cost.

2016 Projected Expenditures\* 0

2016 Projected Staff Hours\* 5

### B4: Incentive Pricing

---

#### Summary of Actions Year 2015

---

District has an incentive price program\* No

District is developing an incentive priced program\* No

Water savings from incentive priced program\* No

Comments\* The District Act (enabling legislation) limits its pricing program.

#### Actual Benefits Year 2015

---

Describe the objectives/benefits of the incentive pricing program. Quantify where possible the effect of the incentive pricing program in terms of water dollars:

Same comments as above

2015 Expenditures\* 0

2015 Staff Hours\* 0

#### Summary of Year 2016 Projected Actions

---

List any changes expected in the incentive pricing program\* Same comments above.

Number of years until district will have an incentive pricing program, if none exists currently (put "unknown" if applicable)\* see above

2016 Projected Expenditures\* 0

2016 Projected Staff Hours\* 0

## B5A: Line or Pipe Ditches and Canals

---

### Summary of Actions Year 2015

---

District has all ditches lined or piped\* No  
 District is investigating in lining or piping canals\* No  
 Miles of pipeline installed this year\* 0  
 Miles of canal lined this year\* 0  
 Comments\* Funding prohibits any project for funding projects.

### Calculated Actual Benefits Year 2015:

---

Acre-feet, estimated water saved from lining or piping canals\* 0  
 2015 Expenditures\* 0  
 2015 Staff Hours\* 0

### Summary of Year 2016 Projected Actions

---

Proposed miles of canal to be piped or lined\* 0  
 Comments\* same as above.

### Anticipated Year 2016 Benefits:

---

Acre-feet of water savings from proposed projects\* 0  
 2016 Projected Expenditures\* 0  
 2016 Projected Staff Hours\* 0

## B5B: Regulatory Reservoirs

---

### Summary of Actions Year 2015

---

District has regulatory reservoirs\* Yes  
 District is investigating regulatory reservoirs\* Yes  
 District plans to add regulatory reservoirs\* Yes  
 District regulatory reservoirs constructed\* No  
 Comments\* The proposed new regulatory ponds continues to be under feasibility studies.

### Calculated Actual Benefits Year 2015:

---

Current total capacity of regulatory reservoirs (acre-feet)\* 500  
 Estimated water savings from spills or operational improvements related to regulatory reservoirs (acre-feet)\* 500  
 Improved water management with regulatory reservoirs\* Yes  
 Comments\* The above information reflects on the existing regulatory reservoirs only. Expenditures include staff hours at no cost.  
 2015 Expenditures\* 0  
 2015 Staff Hours\* 80

### Summary of Year 2016 Projected Actions

---

District will install or investigate development of regulatory reservoirs\* Yes  
 Comments\* A feasibility study is still being conducted. The \$11,000,000.00 estimated cost of the project includes the study, design and construction of the new reservoirs. The District continues with this feasibility study. No completion date has been set. Expenditures include staff hours at no cost.

## Anticipated Year 2016 Benefits:

---

Estimate additional capacity to be added in 2016 (acre-feet)\* 0  
 Estimate additional capacity needed for optimum operation (acre-feet)\* 0  
 2016 Projected Expenditures\* 0  
 2016 Projected Staff Hours\* 160

## B6: Flexible Water Ordering

---

### Summary of Actions Year 2015

---

District has an on-demand delivery system\* Yes  
 District has reached the maximum flexibility currently feasible without major physical improvements to the delivery system\* Yes  
 District is investigating improving delivery flexibility\* Yes  
 Describe any improvements in delivery flexibility completed or under investigation\* None done this year. Expenditures include staff hours at no cost.

### Actual Benefits Year 2015

---

Estimate the number of acres benefited by increased flexibility (acres)\* 0  
 2015 Expenditures\* 1200  
 2015 Staff Hours\* 60

### Summary of Year 2016 Projected Actions

---

One of the three selections below is required\* District will investigate improvements to delivery flexibility.  
 Comments\* SCADA software/hardware remains a challenge. The District is investigating the options available to improve its used on water management. Expenditures include staff hours at no cost.

## Anticipated Year 2016 Benefits:

---

Improved service to customers\* Yes  
 2016 Projected Expenditures\* 12500  
 2016 Projected Staff Hours\* 60

## B7: Spill and Tailwater Recovery

---

### Summary of Actions Year 2015

---

District has spills or tailwater leaving the district\* No  
 District is investigating development of a spill/tailwater recovery system\* No  
 District implemented a spill/tailwater recovery program\* No  
 Comments\* The voluntary call in system the District uses has kept any tail water to an unmeasurable amount.

### Calculated Actual Benefits Year 2015:

---

Acre-feet, estimated water conserved by implementing a spill/tailwater recovery program\* 0  
 2015 Expenditures\* 0  
 2015 Staff Hours\* 0

### Summary of Year 2016 Projected Actions

---

District will investigate implementation of a spill/tailwater recovery program\* No

District will implement or continue a spill/tailwater recovery system\* No

Comments\* None

### Anticipated Year 2016 Benefits:

Acre-feet, estimated water conserved from the proposed or continued project\* 0

2016 Projected Expenditures\* 0

2016 Projected Staff Hours\* 0

### B8: Plan to measure outflow

Total # of outflow (surface) locations/points\* 3

Total # of outflow (subsurface) locations/points\* 0

Total # of outflow points\* 3

Percentage of total outflow (volume) measured during report year\* 90

Identify locations, prioritize, determine best measurement method/cost, submit funding proposal

Estimated cost in \$1000's

Location & Priority	2015	2016	2017	2018	2019
Mormon Slough SCADA	3	3			
Mosher Slough SCADA	3	3			
Calaveras River SCADA	3	3			

### B9: Conjunctive Use

#### Summary of Actions Year 2015

District has conjunctive use options\* Yes

District is investigating a conjunctive use program\* Yes

District implemented a conjunctive use program\* Yes

Comments\* As a measurement to the drought situation, the District rehabilitated four wells and constructed one new well for supplemental water used to M&I. Expenditures included labor and materials.

#### Calculated Actual Benefits Year 2015:

Acre-feet, water charged to ground water or otherwise stored\* 1755

Acre-feet of water pumped from wells or otherwise retrieved\* 5982

2015 Expenditures\* 964000

2015 Staff Hours\* 1000

#### Summary of Year 2016 Projected Actions

District will investigate a conjunctive use program\* Yes

District will implement a conjunctive use program\* Yes

Comments\* Expenditures include staff hours at no cost.

### Anticipated Year 2016 Benefits:

Acre-feet, water expected to be charged to ground water or otherwise stored\* 1800  
 Acre-feet of water expected to be pumped from wells or otherwise retrieved\* 8000  
 2016 Projected Expenditures\* 13000  
 2016 Projected Staff Hours\* 120

## B10: Automate Canal Structures

---

### Summary of Actions Year 2015

---

District's distribution system is completely automated\* No  
 District is investigating system automation\* Yes  
 District implemented an automation project\* No  
 Comments\* Expenditures include staff hours at no cost.

### Calculated Actual Benefits Year 2015:

---

Implementation of project reduced spills or increased flexibility\* Yes  
 Acre-feet, estimated amount of water that would have spilled without the project\* 0  
 Implementation of project improved service to customers\* Yes  
 Acres, estimated acres provided with improved service\* 0  
 2015 Expenditures\* 1200  
 2015 Staff Hours\* 60

### Summary of Year 2016 Projected Actions

---

District will investigate automation for distribution system\* Yes  
 District will implement an automation project\* Yes  
 Comments\* The District is planning to add more SCADA RTU sites along its conveyance systems. Expenditures include staff hours at no cost

### Anticipated Year 2016 Benefits:

---

Acre-feet, estimate of water spill which could be eliminated by proposed automation project\* 0  
 Acres, estimate of acres provided with improved service by proposed automation project\* 0  
 2016 Projected Expenditures\* 12000  
 2016 Projected Staff Hours\* 120

## B11: Water User Pumping

---

### Summary of Actions Year 2015

---

District promotes a local utility companies pump testing program\* No  
 List method(s) of promotion\* Not applicable  
 District promotes its own pump testing program for its customers\* Yes  
 List method(s) of promotion\* District news letter  
 Number of customer pumps tested\* 13  
 2015 Expenditures\* 3275  
 2015 Staff Hours\* 7

### Summary of Year 2016 Projected Actions

---

District will promote pump testing program\* Yes

Estimated number of customer pumps to be tested 6

Comments None. Expenditures include staff hours at no cost

2016 Projected Expenditures 1500

2016 Projected Staff Hours 3

**Facilitate or promote water customer pump testing and evaluation.**

---

File Attachment No Answer

**B12: GIS Mapping**

---

Has the District implemented this BMP? Yes

Estimate Cost in \$1000's

**Planning Stages 2015 2016 2017 2018**

**Mapping Processes 2015 2016 2017 2018**

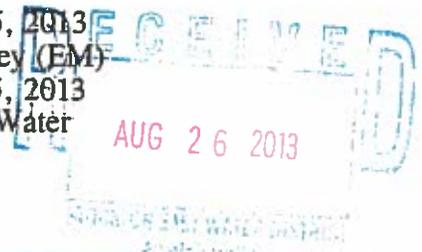
Attachment I

Surface Water Quality Monitoring 2013-2015

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August 23, 2013  
 Stockton East Water Dist.  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1337827-001  
 Customer ID : 3-8528  
 Sampled On : August 5, 2013  
 Sampled By : Ed Morley (EM)  
 Received On : August 5, 2013  
 Matrix : Surface Water



Description : PC-1  
 Project : Surface Water Monitoring

**General Irrigation Suitability Analysis**

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	19	0.95	52	52	**				
Magnesium	7	0.58	31	19	**				
Potassium	2	0.051	3	5	**				
Sodium	6	0.26	14	16	█				
<b>Anions</b>									
Carbonate	< 10	0	0	0	█				
Bicarbonate	100	1.6	85	270	**				
Sulfate	9	0.19	10	24	**				
Chloride	4	0.11	6	11	█				
Nitrate	< 0.4	0	0	0	█				
Fluoride	< 0.1	0	0	0	█				
<b>Minor Elements</b>									
Boron	0.10			0.27	█				
Copper	< 0.01			0.00	█				
Iron	0.22			0.60	█				
Manganese	0.010			0.027	█				
Zinc	0.050			0.14	█				
TDS by Summation	147			400	█				
<b>Other</b>									
pH	8.0			units	█				
E. C.	0.180			dS/m	█				
SAR	0.3				█				
<b>Crop Suitability</b>									
No Amendments	Fairly		Poor		█				
With Amendments	Good				█				
<b>Amendments</b>									
Gypsum Requirement	0.05			Tons/AF					
Sulfuric Acid (98%)	5.6			oz/1000Gal	Or 14 oz/1000Gal of urea Sulfuric Acid (15/49).				
Leaching Requirement	1.3			%					

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 23, 2013  
 Stockton East Water Dist.

Lab ID : STK1337827-001  
 Customer ID : 3-8528  
 Description : PC-1

**Micro Irrigation System Plugging Hazard**

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	0.01	mg/L			
Iron	0.22	mg/L			
TDS by Summation	147	mg/L			
<b>No Amendments</b>					
pH	8.0	units			
Alkalinity (As CaCO3)	80	mg/L			
Total Hardness	76.2	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	16	mg/L			
Total Hardness	16	mg/L			
pH	5.4 - 6.7	units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

**Water Amendments Application Notes:**

The Amendments recommended on the previous pages include:

**Gypsum:**

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

**Sulfuric Acid:**

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

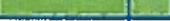
SB1:KDM

August 23, 2013  
 Stockton East Water Dist.  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1337827-002  
 Customer ID : 3-8528  
 Sampled On : August 5, 2013  
 Sampled By : Ed Morley (EM)  
 Received On : August 5, 2013  
 Matrix : Surface Water

Description : CR-1  
 Project : Surface Water Monitoring

### General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	20	1	53	54	**				
Magnesium	7	0.58	31	19	**				
Potassium	2	0.051	3	5	**				
Sodium	6	0.26	14	16					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	100	1.6	84	270	**				
Sulfate	9	0.19	10	24	**				
Chloride	4	0.11	6	11					
Nitrate	1.1	0.018	1	3					
Fluoride	< 0.1	0	0	0					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.060			0.16					
Manganese	0.11			0.30					
Zinc	0.040			0.11					
TDS by Summation	149			410					
<b>Other</b>									
pH	7.6			units					
E. C.	0.179			dS/m					
SAR	0.3								
<b>Crop Suitability</b>									
No Amendments	Fairly		Good						
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.04			Tons/AF					
Sulfuric Acid (98%)	5.6			oz/1000Gal	Or 14 oz/1000Gal of urea Sulfuric Acid (15/49).				
Leaching Requirement	1.3			%					

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 23, 2013  
 Stockton East Water Dist.

Lab ID : STK1337827-002  
 Customer ID : 3-8528  
 Description : CR-1

**Micro Irrigation System Plugging Hazard**

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	0.11	mg/L			
Iron	0.06	mg/L			
TDS by Summation	149	mg/L			
<b>No Amendments</b>					
pH	7.6	units			
Alkalinity (As CaCO3)	80	mg/L			
Total Hardness	78.7	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	16	mg/L			
Total Hardness	16	mg/L			
pH	5.4 - 6.7	units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

**Water Amendments Application Notes:**

The Amendments recommended on the previous pages include:

**Gypsum:**

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

**Sulfuric Acid:**

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SB1:KDM

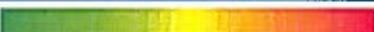
August 23, 2013  
 Stockton East Water Dist.  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1337827-003  
 Customer ID : 3-8528  
 Sampled On : August 5, 2013  
 Sampled By : Ed Morley (EM)  
 Received On : August 5, 2013  
 Matrix : Surface Water

Description : CR-5  
 Project : Surface Water Monitoring

### General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	18	0.9	52	49	**				
Magnesium	7	0.58	34	19	**				
Potassium	1	0.026	1	3	**				
Sodium	5	0.22	13	14					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	90	1.5	83	240	**				
Sulfate	9	0.19	11	24	**				
Chloride	4	0.11	6	11					
Nitrate	0.5	0.0081	0	1					
Fluoride	< 0.1	0	0	0					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.060			0.16					
Manganese	0.010			0.027					
Zinc	< 0.02			0.00					
TDS by Summation	134			360					
<b>Other</b>									
pH	8.2			units					
E. C.	0.178			dS/m					
SAR	0.3								
<b>Crop Suitability</b>									
No Amendments	Fairly		Poor						
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.03			Tons/AF	Or 12 oz/1000Gal of urea Sulfuric Acid (15/49).				
Sulfuric Acid (98%)	4.9			oz/1000Gal					
Leaching Requirement	1.3			%					

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 23, 2013

Stockton East Water Dist.

Lab ID : STK1337827-003

Customer ID : 3-8528

Description : CR-5

### Micro Irrigation System Plugging Hazard

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	0.01	mg/L			
Iron	0.06	mg/L			
TDS by Summation	134	mg/L			
<b>No Amendments</b>					
pH	8.2	units			
Alkalinity (As CaCO3)	70	mg/L			
Total Hardness	73.7	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	14	mg/L			
Total Hardness	14	mg/L			
pH	5.4 - 6.7	units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

#### Water Amendments Application Notes:

The Amendments recommended on the previous pages include:

#### Gypsum:

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

#### Sulfuric Acid:

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SB1:KDM

August 23, 2013  
 Stockton East Water Dist.  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1337827-004  
 Customer ID : 3-8528  
 Sampled On : August 5, 2013  
 Sampled By : Ed Morley (EM)  
 Received On : August 5, 2013  
 Matrix : Surface Water

Description : MS-1  
 Project : Surface Water Monitoring

### General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	18	0.9	51	49	**				
Magnesium	7	0.58	33	19	**				
Potassium	1	0.026	1	3	**				
Sodium	6	0.26	15	16					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	90	1.5	83	240	**				
Sulfate	9	0.19	11	24	**				
Chloride	4	0.11	6	11					
Nitrate	0.4	0.0065	0	1					
Fluoride	< 0.1	0	0	0					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.070			0.19					
Manganese	< 0.01			0.00					
Zinc	< 0.02			0.00					
TDS by Summation	135			370					
<b>Other</b>									
pH	8.1			units					
E. C.	0.178			dS/m					
SAR	0.3								
<b>Crop Suitability</b>									
No Amendments	Fairly		Poor						
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.03			Tons/AF	Or 12 oz/1000Gal of urea Sulfuric Acid (15/49).				
Sulfuric Acid (98%)	4.9			oz/1000Gal					
Leaching Requirement	1.3			%					

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 23, 2013

Stockton East Water Dist.

Lab ID : STK1337827-004

Customer ID : 3-8528

Description : MS-1

**Micro Irrigation System Plugging Hazard**

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	< 0.01	mg/L			
Iron	0.07	mg/L			
TDS by Summation	135	mg/L			
<b>No Amendments</b>					
pH	8.1	units			
Alkalinity (As CaCO3)	70	mg/L			
Total Hardness	73.7	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	14	mg/L			
Total Hardness	14	mg/L			
pH	5.4 - 6.7	units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

**Water Amendments Application Notes:**

The Amendments recommended on the previous pages include:

**Gypsum:**

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

**Sulfuric Acid:**

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SBI:KDM

August 23, 2013  
 Stockton East Water Dist.  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1337827-005  
 Customer ID : 3-8528  
 Sampled On : August 5, 2013  
 Sampled By : Ed Morley (EM)  
 Received On : August 5, 2013  
 Matrix : Surface Water

Description : MS-2  
 Project : Surface Water Monitoring

**General Irrigation Suitability Analysis**

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	19	0.95	52	52	**				
Magnesium	7	0.58	31	19	**				
Potassium	2	0.051	3	5	**				
Sodium	6	0.26	14	16					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	90	1.5	83	240	**				
Sulfate	9	0.19	11	24	**				
Chloride	4	0.11	6	11					
Nitrate	< 0.4	0	0	0					
Fluoride	< 0.1	0	0	0					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.35			0.95					
Manganese	0.010			0.027					
Zinc	0.040			0.11					
TDS by Summation	137			370					
<b>Other</b>									
pH	7.9			units					
E. C.	0.180			dS/m					
SAR	0.3								
<b>Crop Suitability</b>									
No Amendments	Fair								
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.03			Tons/AF					
Sulfuric Acid (98%)	4.9			oz/1000Gal	Or 12 oz/1000Gal of urea Sulfuric Acid (15/49).				
Leaching Requirement	1.3			%					

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 23, 2013

Stockton East Water Dist.

Lab ID : STK1337827-005

Customer ID : 3-8528

Description : MS-2

**Micro Irrigation System Plugging Hazard**

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	0.01	mg/L			
Iron	0.35	mg/L			
TDS by Summation	137	mg/L			
<b>No Amendments</b>					
pH	7.9	units			
Alkalinity (As CaCO3)	70	mg/L			
Total Hardness	76.2	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	14	mg/L			
Total Hardness	14	mg/L			
pH	5.4 - 6.7	units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

**Water Amendments Application Notes:**

The Amendments recommended on the previous pages include:

**Gypsum:**

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

**Sulfuric Acid:**

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SB1:KDM



August 23, 2013  
Stockton East Water Dist.  
P.O. Box 5157  
Stockton, CA 95205

Lab ID : STK1337827-006  
Customer ID : 3-8528  
Sampled On : August 5, 2013  
Sampled By : Ed Morley (EM)  
Received On : August 5, 2013  
Matrix : Surface Water

Description : CR-6  
Project : Surface Water Monitoring

**General Irrigation Suitability Analysis**

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	20	1	50	54	**				
Magnesium	8	0.66	33	22	**				
Potassium	2	0.051	3	5	**				
Sodium	7	0.3	15	19					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	90	1.5	83	240	**				
Sulfate	9	0.19	11	24	**				
Chloride	4	0.11	6	11					
Nitrate	< 0.4	0	0	0					
Fluoride	< 0.1	0	0	0					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.11			0.30					
Manganese	< 0.01			0.00					
Zinc	0.040			0.11					
TDS by Summation	140			380					
<b>Other</b>									
pH	8.0			units					
E. C.	0.177			dS/m					
SAR	0.3								
<b>Crop Suitability</b>									
No Amendments	Fairly		Poor						
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.02			Tons/AF					
Sulfuric Acid (98%)	4.9			oz/1000Gal	Or 12 oz/1000Gal of urea Sulfuric Acid (15/49).				
Leaching Requirement	1.3			%					

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 23, 2013

Stockton East Water Dist.

Lab ID : STK1337827-006

Customer ID : 3-8528

Description : CR-6

**Micro Irrigation System Plugging Hazard**

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	< 0.01	mg/L			
Iron	0.11	mg/L			
TDS by Summation	140	mg/L			
<b>No Amendments</b>					
pH	8.0	units			
Alkalinity (As CaCO3)	70	mg/L			
Total Hardness	82.8	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	14	mg/L			
Total Hardness	14	mg/L			
pH	5.4 - 6.7	units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

**Water Amendments Application Notes:**

The Amendments recommended on the previous pages include:

**Gypsum:**

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

**Sulfuric Acid:**

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SB1:KDM



August 23, 2013  
 Stockton East Water Dist.  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1337827-007  
 Customer ID : 3-8528  
 Sampled On : August 5, 2013  
 Sampled By : Ed Morley (EM)  
 Received On : August 5, 2013  
 Matrix : Surface Water

Description : M-1  
 Project : Surface Water Monitoring

General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	17	0.85	48	46	**				
Magnesium	7	0.58	32	19	**				
Potassium	2	0.051	3	5	**				
Sodium	7	0.3	17	19					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	90	1.5	81	240	**				
Sulfate	10	0.21	11	27	**				
Chloride	5	0.14	8	14					
Nitrate	< 0.4	0	0	0					
Fluoride	< 0.1	0	0	0					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.25			0.68					
Manganese	0.010			0.027					
Zinc	0.030			0.082					
TDS by Summation	138			380					
<b>Other</b>									
pH	8.8			units					
E. C.	0.174			dS/m					
SAR	0.4								
<b>Crop Suitability</b>									
No Amendments	Poor								
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.05			Tons/AF	Or 12 oz/1000Gal of urea Sulfuric Acid (15/49).				
Sulfuric Acid (98%)	4.9			oz/1000Gal					
Leaching Requirement	1.3			%					

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 23, 2013

Stockton East Water Dist.

Lab ID : STK1337827-007

Customer ID : 3-8528

Description : M-1

**Micro Irrigation System Plugging Hazard**

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	0.01	mg/L			
Iron	0.25	mg/L			
TDS by Summation	138	mg/L			
<b>No Amendments</b>					
pH	8.8	units			
Alkalinity (As CaCO3)	70	mg/L			
Total Hardness	71.2	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	14	mg/L			
Total Hardness	14	mg/L			
pH	5.4 - 6.7	units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

**Water Amendments Application Notes:**

The Amendments recommended on the previous pages include:

**Gypsum:**

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

**Sulfuric Acid:**

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

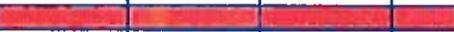
SB1:KDM

August 23, 2013  
 Stockton East Water Dist.  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1337827-008  
 Customer ID : 3-8528  
 Sampled On : August 5, 2013  
 Sampled By : Ed Morley (EM)  
 Received On : August 5, 2013  
 Matrix : Surface Water

Description : PP-1  
 Project : Surface Water Monitoring

### General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	5	0.25	50	14	**				
Magnesium	2	0.16	33	5	**				
Potassium	< 1	0	0	0	**				
Sodium	2	0.087	17	5					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	40	0.66	100	110	**				
Sulfate	< 2	0	0	0	**				
Chloride	< 1	0	0	0					
Nitrate	< 0.4	0	0	0					
Fluoride	< 0.1	0	0	0					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.19			0.52					
Manganese	< 0.01			0.00					
Zinc	< 0.02			0.00					
TDS by Summation	49			130					
<b>Other</b>									
pH	8.4			units					
E. C.	0.0540			dS/m					
SAR	0.2								
<b>Crop Suitability</b>									
No Amendments	Fairly		Poor						
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.04			Tons/AF	Or 5.1 oz/1000Gal of urea Sulfuric Acid (15/49).				
Sulfuric Acid (98%)	2.1			oz/1000Gal					
Leaching Requirement	0.39			%					

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 23, 2013

Stockton East Water Dist.

Lab ID : STK1337827-008

Customer ID : 3-8528

Description : PP-1

**Micro Irrigation System Plugging Hazard**

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	< 0.01	mg/L			
Iron	0.19	mg/L			
TDS by Summation	49	mg/L			
<b>No Amendments</b>					
pH	8.4	units			
Alkalinity (As CaCO3)	30	mg/L			
Total Hardness	20.7	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	10	mg/L			
Total Hardness	6	mg/L			
pH	5.4 - 6.7	units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

**Water Amendments Application Notes:**

The Amendments recommended on the previous pages include:

**Gypsum:**

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

**Sulfuric Acid:**

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SB1:KDM

August 19, 2014  
 Stockton East Water Dist.  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1437971-001  
 Customer ID : 3-8528  
 Sampled On : August 7, 2014  
 Sampled By : Ed Morley  
 Received On : August 7, 2014  
 Matrix : Surface Water

Description : PC-1  
 Project : Surface Water Monitoring

### General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	21	1	48	57	**				
Magnesium	9	0.74	34	24	**				
Potassium	2	0.051	2	5	**				
Sodium	8	0.35	16	22					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	100	1.6	84	270	**				
Sulfate	8.4	0.17	9	23	**				
Chloride	5	0.14	7	14					
Nitrate	< 0.4	0	0	0					
Fluoride	< 0.1	0	0	0					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.21			0.57					
Manganese	0.020			0.054					
Zinc	< 0.02			0.00					
TDS by Summation	153			420					
<b>Other</b>									
pH	7.6			units					
E. C.	0.201			dS/m					
SAR	0.4								
<b>Crop Suitability</b>									
No Amendments	Fairly		Good						
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.03			Tons/AF					
Sulfuric Acid (98%)	5.6			oz/1000Gal	Or 14 oz/1000Gal of urea Sulfuric Acid (15/49).				
Leaching Requirement	1.5			%					

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 19, 2014

Stockton East Water Dist.

Lab ID : STK1437971-001

Customer ID : 3-8528

Description : PC-1

### Micro Irrigation System Plugging Hazard

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	0.02	mg/L			
Iron	0.21	mg/L			
TDS by Summation	153	mg/L			
<b>No Amendments</b>					
pH	7.6	units			
Alkalinity (As CaCO3)	80	mg/L			
Total Hardness	89.4	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	16	mg/L			
Total Hardness	16	mg/L			
pH	5.4 - 6.7	units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

#### Water Amendments Application Notes:

The Amendments recommended on the previous pages include:

#### Gypsum:

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

#### Sulfuric Acid:

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SB1:KDM

August 19, 2014  
**Stockton East Water Dist.**  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1437971-002  
 Customer ID : 3-8528  
 Sampled On : August 7, 2014  
 Sampled By : Ed Morley  
 Received On : August 7, 2014  
 Matrix : Surface Water

Description : CR-1  
 Project : Surface Water Monitoring

**General Irrigation Suitability Analysis**

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	22	1.1	52	60	**				
Magnesium	8	0.66	31	22	**				
Potassium	2	0.051	2	5	**				
Sodium	7	0.3	14	19					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	100	1.6	83	270	**				
Sulfate	9.4	0.2	10	26	**				
Chloride	5	0.14	7	14					
Nitrate	< 0.4	0	0	0					
Fluoride	< 0.1	0	0	0					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.37			1.0					
Manganese	0.62			1.7					
Zinc	< 0.02			0.00					
TDS by Summation	153			420					
<b>Other</b>									
pH	7.2			units					
E. C.	0.201			dS/m					
SAR	0.3								
<b>Crop Suitability</b>									
No Amendments	Good								
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.03			Tons/AF					
Sulfuric Acid (98%)	5.6			oz/1000Gal	Or 14 oz/1000Gal of urea Sulfuric Acid (15/49).				
Leaching Requirement	1.5			%					

Good  Problem  
 Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 19, 2014

Stockton East Water Dist.

Lab ID : STK1437971-002

Customer ID : 3-8528

Description : CR-1

**Micro Irrigation System Plugging Hazard**

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	0.62	mg/L			
Iron	0.37	mg/L			
TDS by Summation	153	mg/L			
<b>No Amendments</b>					
pH	7.2	units			
Alkalinity (As CaCO3)	80	mg/L			
Total Hardness	87.8	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	16	mg/L			
Total Hardness	16	mg/L			
pH	5.4 - 6.7	units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

**Water Amendments Application Notes:**

The Amendments recommended on the previous pages include:

**Gypsum:**

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

**Sulfuric Acid:**

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SB1:KDM

August 19, 2014  
**Stockton East Water Dist.**  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1437971-003  
 Customer ID : 3-8528  
 Sampled On : August 7, 2014  
 Sampled By : Ed Morley  
 Received On : August 7, 2014  
 Matrix : Surface Water

Description : CR-5  
 Project : Surface Water Monitoring

### General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	21	1	49	57	**				
Magnesium	9	0.74	35	24	**				
Potassium	2	0.051	2	5	**				
Sodium	7	0.3	14	19					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	100	1.6	83	270	**				
Sulfate	9.1	0.19	10	25	**				
Chloride	5	0.14	7	14					
Nitrate	< 0.4	0	0	0					
Fluoride	< 0.1	0	0	0					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.11			0.30					
Manganese	0.010			0.027					
Zinc	< 0.02			0.00					
TDS by Summation	153			420					
<b>Other</b>									
pH	8.1			units					
E. C.	0.195			dS/m					
SAR	0.3								
<b>Crop Suitability</b>									
No Amendments	Fairly		Poor						
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.02			Tons/AF	Or 14 oz/1000Gal of urea Sulfuric Acid (15/49).				
Sulfuric Acid (98%)	5.6			oz/1000Gal					
Leaching Requirement	1.4			%					

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 19, 2014

Stockton East Water Dist.

Lab ID : STK1437971-003

Customer ID : 3-8528

Description : CR-5

### Micro Irrigation System Plugging Hazard

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	0.01	mg/L			
Iron	0.11	mg/L			
TDS by Summation	153	mg/L			
<b>No Amendments</b>					
pH	8.1	units			
Alkalinity (As CaCO3)	80	mg/L			
Total Hardness	89.4	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	16	mg/L			
Total Hardness	16	mg/L			
pH	5.4 - 6.7	units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

#### Water Amendments Application Notes:

The Amendments recommended on the previous pages include:

#### Gypsum:

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

#### Sulfuric Acid:

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SB1:KDM

August 19, 2014  
 Stockton East Water Dist.  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1437971-004  
 Customer ID : 3-8528  
 Sampled On : August 7, 2014  
 Sampled By : Ed Morley  
 Received On : August 7, 2014  
 Matrix : Surface Water

Description : MS-1  
 Project : Surface Water Monitoring

### General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	21	1	51	57	**				
Magnesium	8	0.66	32	22	**				
Potassium	2	0.051	2	5	**				
Sodium	7	0.3	15	19					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	90	1.5	80	240	**				
Sulfate	10.9	0.23	12	30	**				
Chloride	5	0.14	8	14					
Nitrate	< 0.4	0	0	0					
Fluoride	< 0.1	0	0	0					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.18			0.49					
Manganese	0.010			0.027					
Zinc	< 0.02			0.00					
TDS by Summation	144			390					
<b>Other</b>									
pH	7.6			units					
E. C.	0.200			dS/m					
SAR	0.3								
<b>Crop Suitability</b>									
No Amendments	Fairly		Good						
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.01			Tons/AF					
Sulfuric Acid (98%)	5.6			oz/1000Gal	Or 14 oz/1000Gal of urea Sulfuric Acid (15/49).				
Leaching Requirement	1.4			%					

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 19, 2014

Stockton East Water Dist.

Lab ID : STK1437971-004

Customer ID : 3-8528

Description : MS-1

**Micro Irrigation System Plugging Hazard**

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	0.01	mg/L			
Iron	0.18	mg/L			
TDS by Summation	144	mg/L			
<b>No Amendments</b>					
pH	7.6	units			
Alkalinity (As CaCO3)	80	mg/L			
Total Hardness	85.3	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	16	mg/L			
Total Hardness	16	mg/L			
pH	5.4 - 6.7	units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

**Water Amendments Application Notes:**

The Amendments recommended on the previous pages include:

**Gypsum:**

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

**Sulfuric Acid:**

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SB1:KDM

August 19, 2014  
**Stockton East Water Dist.**  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1437971-005  
 Customer ID : 3-8528  
 Sampled On : August 7, 2014  
 Sampled By : Ed Morley  
 Received On : August 7, 2014  
 Matrix : Surface Water

Description : MS-2  
 Project : Surface Water Monitoring

### General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	21	1	49	57	**				
Magnesium	9	0.74	35	24	**				
Potassium	2	0.051	2	5	**				
Sodium	7	0.3	14	19					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	90	1.5	79	240	**				
Sulfate	10.6	0.22	12	29	**				
Chloride	6	0.17	9	16					
Nitrate	< 0.4	0	0	0					
Fluoride	< 0.1	0	0	0					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.50			1.4					
Manganese	0.030			0.082					
Zinc	0.030			0.082					
TDS by Summation	146			400					
<b>Other</b>									
pH	7.8			units					
E. C.	0.203			dS/m					
SAR	0.3								
<b>Crop Suitability</b>									
No Amendments	Fair								
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.005			Tons/AF	Or 14 oz/1000Gal of urea Sulfuric Acid (15/49).				
Sulfuric Acid (98%)	5.6			oz/1000Gal					
Leaching Requirement	1.5			%					

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 19, 2014

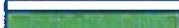
Stockton East Water Dist.

Lab ID : STK1437971-005

Customer ID : 3-8528

Description : MS-2

### Micro Irrigation System Plugging Hazard

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	0.03	mg/L			
Iron	0.5	mg/L			
TDS by Summation	146	mg/L			
<b>No Amendments</b>					
pH	7.8	units			
Alkalinity (As CaCO3)	80	mg/L			
Total Hardness	89.4	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	16	mg/L			
Total Hardness	16	mg/L			
pH	5.4 - 6.7	units			

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

#### Water Amendments Application Notes:

The Amendments recommended on the previous pages include:

#### Gypsum:

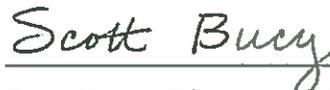
This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

#### Sulfuric Acid:

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.



Scott Bucy, Director of Ag. Services

SB1:KDM

August 19, 2014  
 Stockton East Water Dist.  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1437971-006  
 Customer ID : 3-8528  
 Sampled On : August 7, 2014  
 Sampled By : Ed Morley  
 Received On : August 7, 2014  
 Matrix : Surface Water

Description : CR-6  
 Project : Surface Water Monitoring

### General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	21	1	50	57	**				
Magnesium	8	0.66	32	22	**				
Potassium	3	0.077	4	8	**				
Sodium	7	0.3	15	19					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	90	1.5	77	240	**				
Sulfate	12.0	0.25	13	33	**				
Chloride	7	0.2	10	19					
Nitrate	< 0.4	0	0	0					
Fluoride	< 0.1	0	0	0					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.15			0.41					
Manganese	< 0.01			0.00					
Zinc	0.030			0.082					
TDS by Summation	148			400					
<b>Other</b>									
pH	8.8			units					
E. C.	0.203			dS/m					
SAR	0.3								
<b>Crop Suitability</b>									
No Amendments	Poor								
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.02			Tons/AF	Or 12 oz/1000Gal of urea Sulfuric Acid (15/49).				
Sulfuric Acid (98%)	4.9			oz/1000Gal					
Leaching Requirement	1.5			%					

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 19, 2014

Stockton East Water Dist.

Lab ID : STK1437971-006

Customer ID : 3-8528

Description : CR-6

### Micro Irrigation System Plugging Hazard

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	< 0.01	mg/L			
Iron	0.15	mg/L			
TDS by Summation	148	mg/L			
<b>No Amendments</b>					
pH	8.8	units			
Alkalinity (As CaCO3)	70	mg/L			
Total Hardness	85.3	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	14	mg/L			
Total Hardness	14	mg/L			
pH	5.4 - 6.7	units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

#### Water Amendments Application Notes:

The Amendments recommended on the previous pages include:

#### Gypsum:

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

#### Sulfuric Acid:

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SB1:KDM



August 19, 2014  
 Stockton East Water Dist.  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1437971-007  
 Customer ID : 3-8528  
 Sampled On : August 7, 2014  
 Sampled By : Ed Morley  
 Received On : August 7, 2014  
 Matrix : Surface Water

Description : M-1  
 Project : Surface Water Monitoring

General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	22	1.1	49	60	**				
Magnesium	9	0.74	33	24	**				
Potassium	2	0.051	2	5	**				
Sodium	8	0.35	16	22					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	100	1.6	81	270	**				
Sulfate	10.6	0.22	11	29	**				
Chloride	6	0.17	8	16					
Nitrate	< 0.4	0	0	0					
Fluoride	< 0.1	0	0	0					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.090			0.24					
Manganese	0.030			0.082					
Zinc	< 0.02			0.00					
TDS by Summation	158			430					
<b>Other</b>									
pH	7.8			units					
E. C.	0.214			dS/m					
SAR	0.4								
<b>Crop Suitability</b>									
No Amendments	Fair								
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.02			Tons/AF					
Sulfuric Acid (98%)	5.6			oz/1000Gal					Or 14 oz/1000Gal of urea Sulfuric Acid (15/49).
Leaching Requirement	1.6			%					

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 19, 2014

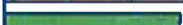
Stockton East Water Dist.

Lab ID : STK1437971-007

Customer ID : 3-8528

Description : M-1

**Micro Irrigation System Plugging Hazard**

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	0.03	mg/L			
Iron	0.09	mg/L			
TDS by Summation	158	mg/L			
<b>No Amendments</b>					
pH	7.8	units			
Alkalinity (As CaCO3)	80	mg/L			
Total Hardness	91.9	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	16	mg/L			
Total Hardness	16	mg/L			
pH	5.4 - 6.7	units			

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

**Water Amendments Application Notes:**

The Amendments recommended on the previous pages include:

**Gypsum:**

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

**Sulfuric Acid:**

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SB1:KDM



August 19, 2014  
**Stockton East Water Dist.**  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1437971-008  
 Customer ID : 3-8528  
 Sampled On : August 7, 2014  
 Sampled By : Ed Morley  
 Received On : August 7, 2014  
 Matrix : Surface Water

Description : PP-1  
 Project : Surface Water Monitoring

**General Irrigation Suitability Analysis**

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	8	0.4	58	22	**				
Magnesium	2	0.16	24	5	**				
Potassium	< 1	0	0	0	**				
Sodium	3	0.13	19	8					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	20	0.33	90	54	**				
Sulfate	1.8	0.037	10	5	**				
Chloride	< 1	0	0	0					
Nitrate	< 0.4	0	0	0					
Fluoride	< 0.1	0	0	0					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.38			1.0					
Manganese	0.030			0.082					
Zinc	< 0.02			0.00					
TDS by Summation	35			95					
<b>Other</b>									
pH	7.5			units					
E. C.	0.0580			dS/m					
SAR	0.2								
<b>Crop Suitability</b>									
No Amendments	Fairly		Good						
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.0			Tons/AF					
Sulfuric Acid (98%)	0.7			oz/1000Gal	Or 1.7 oz/1000Gal of urea Sulfuric Acid (15/49).				
Leaching Requirement	0.42			%					

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 19, 2014

Stockton East Water Dist.

Lab ID : STK1437971-008

Customer ID : 3-8528

Description : PP-1

**Micro Irrigation System Plugging Hazard**

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	0.03	mg/L			
Iron	0.38	mg/L			
TDS by Summation	35	mg/L			
<b>No Amendments</b>					
pH	7.5	units			
Alkalinity (As CaCO3)	10	mg/L			
Total Hardness	28.2	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	10	mg/L			
Total Hardness	2	mg/L			
pH	5.4 - 6.7	units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

**Water Amendments Application Notes:**

The Amendments recommended on the previous pages include:

**Sulfuric Acid:**

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SBI:KDM

## IRRIGATION WATER ANALYSIS TERMS

**Cations** are positively charged ions and make up nearly 50% of the salts found in waters.

**Anions** are negatively charged ions and make up about 50% of the salts found in waters.

The sum of cations and anions in meq/l must be within  $\pm 10\%$  for an analysis to be considered valid.

**Nitrate** To convert Nitrate to Nitrogen (N)  $\div 4.43$   
 To convert Mg/l to Lbs/AF N  $\times 2.72$

### Minor Elements

These elements are usually present in very small quantities in ground waters, but may be higher in surface waters and recycled waters.

### Other

**pH** pH is an indication of the degree of acidity or alkalinity of a water. A pH of 6.5 to 8.4 is normal for most waters. A pH level of 7.0 is neutral while below 7.0 is acidic and above 7.0 is basic or alkaline.

**E.C.** Electrical Conductivity is a measure of a water's capacity to conduct an electrical current. The E.C. provides an approximation of a water's mineral content.

**SAR** Sodium Absorption Ratio. This is a calculation to determine the degree to which a water may adversely affect soil structure and drainage.

### Crop Suitability

The crop suitability evaluation is derived from information taken from a variety of research publications and assumes the use of good irrigation management practices.

### Amendments

#### **Leaching Requirement**

This is a calculation to determine the relative amount of extra water that must be applied to prevent excess salts from accumulating in the root zone of an irrigated crop.

#### **Gypsum Requirement**

This is a calculation to determine the amount of pure gypsum (or the equivalent) needed to prevent a water from adversely affecting soil structure and drainage.

The chemical reaction when gypsum is added to soil is as follows:



Exch.	Soluble	Water	Leachable	Water	Exch.
Sodium	Calcium		Sodium		Calcium
	Sulfate		Sulfate		

$\times$  = Soil Exchange Sites

The addition of gypsum to soil, either directly or via irrigation water, provides a readily available source of soluble Calcium to exchange with the Sodium held on the soil exchange sites. This Sodium will combine with Sulfate to form a soluble Sodium-Sulfate compound which can then be leached from the root zone.



Client: Stockton East Water Dist. 32724:07/07/2014 TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling Information

Address: P.O. Box 5157  
Stockton, CA 95205

Phone: (209)948-0537 Fax: (209)948-4219

Contact Person: Ed Morley

Project Name: Surface Water Monitoring

Purchase Order Number:

Quote Number:

Sampler(s) **EW**

Sampling Fee: \_\_\_\_\_ Pickup Fee: \_\_\_\_\_

Compositor Setup Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_/\_\_\_\_/\_\_\_\_

Lab Number: **STK 1437971** 3-8528

Samp Num	Location Description	Date Sampled	Time Sampled	Method of Sampling:	Type of Sample	Potable(P) Non-Potable(NP) Ag Water(AgW)	Bacti Type: Other(O) System(SYS) Source(SR) Waste(W)	Bacti Reason: Routine(ROUT) Repeat(RPT) Replace(RPL) Other(O) Special(SPL)	Irrigation Suit 32oz(P)	Field Test-Field pH !!pH = 15 MINUTE HOLD TIME!!	Field - pH Date	Field - pH Time
1	PC-1	8/7/14	0930	Composite(C) Grab(G)	**SEE REVERSE SIDE**				1	7.6	8/7	0950 19
2	CR-1		1050						1	7.2		050 12
3	CR-5		025						1	8.1		1025 18
4	MS-1		0915						1	7.6		0915 17
5	MS-2		0650						1	7.8		050 19
6	CR-6		0830						1	8.8		030 21
7	M-1		0815						1	7.8		0815 20
8	PP-1		1010						1	7.5		1010 16

Remarks:

Relinquished	Date: 8/7/14 1240	Received By: Ed Morley	Relinquished	Date: 8/7/14 1700	Received By: [Signature]	Relinquished	Date: 8/8 1145
Received By: [Signature]	Date: 8/7/14 1240	Received By: [Signature]	Received By: [Signature]	Date: 8/7/14 1700	Received By: [Signature]	Received By: [Signature]	Date: 8/8 1145

**Corporate Offices & Laboratory**  
853 Corporation Street  
Santa Paula, CA 93060  
Phone: (805) 392-2000  
Env Fax: (805) 525-4172 / Ag Fax: (805) 392-2063

**Office & Laboratory**  
2500 Stagecoach Road  
Stockton, CA 95215  
Phone: (209) 942-0182  
Fax: (209) 942-0423

**Office & Laboratory**  
563 E. Lindo  
Chico, CA 95926  
Phone: (530) 343-5818  
Fax: (530) 343-3807

**Office & Laboratory**  
3442 Empressa Drive, Suite D  
San Luis Obispo, CA 93401  
Phone: (805) 783-2940  
Fax: (805) 783-2912

**Office & Laboratory**  
9415 W. Goshen Avenue  
Visalia, CA 93291  
Phone: (559) 734-9473  
Fax: (559) 734-8435

Inter-Laboratory Condition Upon Receipt (Attach to COC) **1437971**

Sample Receipt at: **STK** CC CH VI

1. Number of ice chests/packages received: 1 Shipping tracking # \_\_\_\_\_

2. Were samples received in a chilled condition? Temps: 20° / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
Surface water SWTR bact samples: A sample that has a temperature upon receipt of >10° C, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.

- 3. Do the number of bottles received agree with the COC?  Yes No N/A
- 4. Were samples received intact? (i.e. no broken bottles, leaks etc.)  Yes No
- 5. VOAs checked for Headspace? Yes No  N/A
- 6. Were sample custody seals intact? Yes No  N/A
- 7. If required, was sample split for pH analysis? Yes No  N/A
- 8. Were all analyses within holding times at time of receipt?  Yes No
- 9. Verify sample date, time sampler  Yes No

Sign and date the COC, place in a ziplock and put in the same ice chest as the samples.

Sample Receipt Review completed by (initials): [Signature]

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 6° / 6° / 6° / \_\_\_\_\_  
Acceptable is above freezing to 6° C. If many packages are received at one time check for tests/H.T.'s/rushes/

2. Shipping tracking numbers: 010010701999003  
00574  
11  
197107

- 3. Do the number of bottles received agree with the COC?  Yes No N/A
- 4. Were samples received intact? (i.e. no broken bottles, leaks etc.)  Yes No
- 5. Were sample custody seals intact? Yes No  N/A

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

- 1. Were all requested analyses understood and acceptable?  Yes No
- 2. Did bottle labels correspond with the client's ID's?  Yes No
- 3. Were all bottles requiring sample preservation properly preserved? Yes No  N/A FGL
- 4. VOAs checked for Headspace? Yes No  N/A
- 5. Have rush or project due dates been checked and accepted? Yes No  N/A

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): [Signature]

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted: \_\_\_\_\_ Phone Number: \_\_\_\_\_  
Initiated By: \_\_\_\_\_ Date: \_\_\_\_\_  
Problem: \_\_\_\_\_  
Resolution: \_\_\_\_\_

2. Person Contacted: \_\_\_\_\_ Phone Number: \_\_\_\_\_  
Initiated By: \_\_\_\_\_ Date: \_\_\_\_\_  
Problem: \_\_\_\_\_  
Resolution: \_\_\_\_\_

(3-8528)  
Stockton East Water Dist.

STK1437971

(Please use the back of this sheet for additional comments contacts)

## IRRIGATION WATER ANALYSIS TERMS

**Cations** are positively charged ions and make up nearly 50% of the salts found in waters.

**Anions** are negatively charged ions and make up about 50% of the salts found in waters.

The sum of cations and anions in meq/l must be within  $\pm 10\%$  for an analysis to be considered valid.

**Nitrate** To convert Nitrate to Nitrogen (N)  $\div 4.43$   
 To convert Mg/l to Lbs/AF N  $\times 2.72$

### Minor Elements

These elements are usually present in very small quantities in ground waters, but may be higher in surface waters and recycled waters.

### Other

**pH** pH is an indication of the degree of acidity or alkalinity of a water. A pH of 6.5 to 8.4 is normal for most waters. A pH level of 7.0 is neutral while below 7.0 is acidic and above 7.0 is basic or alkaline.

**E.C.** Electrical Conductivity is a measure of a water's capacity to conduct an electrical current. The E.C. provides an approximation of a water's mineral content.

**SAR** Sodium Absorption Ratio. This is a calculation to determine the degree to which a water may adversely affect soil structure and drainage.

### Crop Suitability

The crop suitability evaluation is derived from information taken from a variety of research publications and assumes the use of good irrigation management practices.

### Amendments

#### **Leaching Requirement**

This is a calculation to determine the relative amount of extra water that must be applied to prevent excess salts from accumulating in the root zone of an irrigated crop.

#### **Gypsum Requirement**

This is a calculation to determine the amount of pure gypsum (or the equivalent) needed to prevent a water from adversely affecting soil structure and drainage.

The chemical reaction when gypsum is added to soil is as follows:



Exch.	Soluble	Water	Leachable	Water	Exch.
Sodium	Calcium		Sodium		Calcium
	Sulfate		Sulfate		

$\times$  = Soil Exchange Sites

The addition of gypsum to soil, either directly or via irrigation water, provides a readily available source of soluble Calcium to exchange with the Sodium held on the soil exchange sites. This Sodium will combine with Sulfate to form a soluble Sodium-Sulfate compound which can then be leached from the root zone.



August 28, 2015  
**Stockton East Water Dist.**  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1538837-001  
 Customer ID : 3-8528  
 Sampled On : August 10, 2015  
 Sampled By : CD  
 Received On : August 10, 2015  
 Matrix : Surface Water

Description : PC-1  
 Project : Surface Water Monitoring

### General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	23	1.1	45	63	**				
Magnesium	10	0.82	32	27	**				
Potassium	4	0.1	4	11	**				
Sodium	11	0.48	19	30					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	100	1.6	75	270	**				
Sulfate	15	0.31	14	41	**				
Chloride	8	0.23	10	22					
Nitrate	< 0.5	0	0	0					
Fluoride	0.1	0.0053	0	0.3					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.12			0.33					
Manganese	0.020			0.054					
Zinc	< 0.02			0.00					
TDS by Summation	171			470					
<b>Other</b>									
pH	7.0			units					
E. C.	0.239			dS/m					
SAR	0.5								
<b>Crop Suitability</b>									
No Amendments	Good								
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.03			Tons/AF					
Sulfuric Acid (98%)	5.6			oz/1000Gal					Or 14 oz/1000Gal of urea Sulfuric Acid (15/49).
Leaching Requirement	1.7			%					

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 28, 2015

Stockton East Water Dist.

Lab ID : STK1538837-001

Customer ID : 3-8528

Description : PC-1

### Micro Irrigation System Plugging Hazard

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	0.02	mg/L			
Iron	0.12	mg/L			
TDS by Summation	171	mg/L			
<b>No Amendments</b>					
pH	7.0	units			
Alkalinity (As CaCO3)	80	mg/L			
Total Hardness	98.5	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	16	mg/L			
Total Hardness	16	mg/L			
pH	5.4 - 6.7	units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

#### Water Amendments Application Notes:

The Amendments recommended on the previous pages include:

#### Gypsum:

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

#### Sulfuric Acid:

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SB1:KDM

August 28, 2015  
**Stockton East Water Dist.**  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1538837-002  
 Customer ID : 3-8528  
 Sampled On : August 10, 2015  
 Sampled By : CD  
 Received On : August 10, 2015  
 Matrix : Surface Water

Description : CR-1  
 Project : Surface Water Monitoring

### General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	22	1.1	50	60	**				
Magnesium	9	0.74	34	24	**				
Potassium	2	0.051	2	5	**				
Sodium	7	0.3	14	19					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	90	1.5	75	240	**				
Sulfate	15	0.31	16	41	**				
Chloride	6	0.17	9	16					
Nitrate	< 0.5	0	0	0					
Fluoride	0.1	0.0053	0	0.3					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.92			2.5					
Manganese	0.92			2.5					
Zinc	< 0.02			0.00					
TDS by Summation	151			410					
<b>Other</b>									
pH	7.0			units					
E. C.	0.214			dS/m					
SAR	0.3								
<b>Crop Suitability</b>									
No Amendments	Good								
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.0			Tons/AF					
Sulfuric Acid (98%)	4.9			oz/1000Gal					Or 12 oz/1000Gal of urea Sulfuric Acid (15/49).
Leaching Requirement	1.6			%					

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 28, 2015

Stockton East Water Dist.

Lab ID : STK1538837-002

Customer ID : 3-8528

Description : CR-1

**Micro Irrigation System Plugging Hazard**

Test Description	Result	Graphical Results Presentation		
		Slight	Moderate	Severe
<b>Chemical</b>				
Manganese	0.92 mg/L			
Iron	0.92 mg/L			
TDS by Summation	151 mg/L			
<b>No Amendments</b>				
pH	7.0 units			
Alkalinity (As CaCO3)	70 mg/L			
Total Hardness	91.9 mg/L			
<b>With Amendments</b>				
Alkalinity (As CaCO3)	14 mg/L			
Total Hardness	14 mg/L			
pH	5.4 - 6.7 units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

**Water Amendments Application Notes:**

The Amendments recommended on the previous pages include:

**Sulfuric Acid:**

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SB1:KDM

August 28, 2015  
**Stockton East Water Dist.**  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1538837-003  
 Customer ID : 3-8528  
 Sampled On : August 10, 2015  
 Sampled By : CD  
 Received On : August 10, 2015  
 Matrix : Surface Water

Description : CR-5  
 Project : Surface Water Monitoring

### General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	22	1.1	50	60	**				
Magnesium	9	0.74	34	24	**				
Potassium	2	0.051	2	5	**				
Sodium	7	0.3	14	19					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	90	1.5	74	240	**				
Sulfate	16	0.33	17	44	**				
Chloride	6	0.17	9	16					
Nitrate	< 0.5	0	0	0					
Fluoride	0.1	0.0053	0	0.3					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.27			0.73					
Manganese	0.060			0.16					
Zinc	0.020			0.054					
TDS by Summation	152			410					
<b>Other</b>									
pH	7.3			units					
E. C.	0.215			dS/m					
SAR	0.3								
<b>Crop Suitability</b>									
No Amendments	Good								
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.0			Tons/AF					
Sulfuric Acid (98%)	4.9			oz/1000Gal					Or 12 oz/1000Gal of urea Sulfuric Acid (15/49).
Leaching Requirement	1.6			%					

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 28, 2015

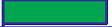
Stockton East Water Dist.

Lab ID : STK1538837-003

Customer ID : 3-8528

Description : CR-5

**Micro Irrigation System Plugging Hazard**

Test Description	Result	Graphical Results Presentation		
		Slight	Moderate	Severe
<b>Chemical</b>				
Manganese	0.06 mg/L			
Iron	0.27 mg/L			
TDS by Summation	152 mg/L			
<b>No Amendments</b>				
pH	7.3 units			
Alkalinity (As CaCO3)	70 mg/L			
Total Hardness	91.9 mg/L			
<b>With Amendments</b>				
Alkalinity (As CaCO3)	14 mg/L			
Total Hardness	14 mg/L			
pH	5.4 - 6.7 units			

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

**Water Amendments Application Notes:**

The Amendments recommended on the previous pages include:

**Sulfuric Acid:**

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SB1:KDM

August 28, 2015  
**Stockton East Water Dist.**  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1538837-004  
 Customer ID : 3-8528  
 Sampled On : August 10, 2015  
 Sampled By : CD  
 Received On : August 10, 2015  
 Matrix : Surface Water

Description : MS-1  
 Project : Surface Water Monitoring

### General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	23	1.1	51	63	**				
Magnesium	9	0.74	33	24	**				
Potassium	2	0.051	2	5	**				
Sodium	7	0.3	14	19					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	90	1.5	75	240	**				
Sulfate	15	0.31	16	41	**				
Chloride	6	0.17	9	16					
Nitrate	< 0.5	0	0	0					
Fluoride	0.1	0.0053	0	0.3					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.13			0.35					
Manganese	< 0.01			0.00					
Zinc	0.020			0.054					
TDS by Summation	152			410					
<b>Other</b>									
pH	7.3			units					
E. C.	0.219			dS/m					
SAR	0.3								
<b>Crop Suitability</b>									
No Amendments	Good								
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.0			Tons/AF					
Sulfuric Acid (98%)	5.6			oz/1000Gal					Or 14 oz/1000Gal of urea Sulfuric Acid (15/49).
Leaching Requirement	1.6			%					

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 28, 2015

Stockton East Water Dist.

Lab ID : STK1538837-004

Customer ID : 3-8528

Description : MS-1

**Micro Irrigation System Plugging Hazard**

Test Description	Result	Graphical Results Presentation		
		Slight	Moderate	Severe
<b>Chemical</b>				
Manganese	< 0.01 mg/L			
Iron	0.13 mg/L			
TDS by Summation	152 mg/L			
<b>No Amendments</b>				
pH	7.3 units			
Alkalinity (As CaCO3)	80 mg/L			
Total Hardness	94.4 mg/L			
<b>With Amendments</b>				
Alkalinity (As CaCO3)	16 mg/L			
Total Hardness	16 mg/L			
pH	5.4 - 6.7 units			

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

**Water Amendments Application Notes:**

The Amendments recommended on the previous pages include:

**Sulfuric Acid:**

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SB1:KDM

August 28, 2015  
**Stockton East Water Dist.**  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1538837-005  
 Customer ID : 3-8528  
 Sampled On : August 10, 2015  
 Sampled By : CD  
 Received On : August 10, 2015  
 Matrix : Surface Water

Description : MS-2  
 Project : Surface Water Monitoring

### General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	24	1.2	48	65	**				
Magnesium	10	0.82	33	27	**				
Potassium	3	0.077	3	8	**				
Sodium	9	0.39	16	24					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	100	1.6	76	270	**				
Sulfate	16	0.33	16	44	**				
Chloride	6	0.17	8	16					
Nitrate	< 0.5	0	0	0					
Fluoride	0.1	0.0053	0	0.3					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.15			0.41					
Manganese	0.040			0.11					
Zinc	0.020			0.054					
TDS by Summation	168			460					
<b>Other</b>									
pH	7.1			units					
E. C.	0.240			dS/m					
SAR	0.4								
<b>Crop Suitability</b>									
No Amendments	Good								
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.01			Tons/AF					
Sulfuric Acid (98%)	5.6			oz/1000Gal					Or 14 oz/1000Gal of urea Sulfuric Acid (15/49).
Leaching Requirement	1.7			%					

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 28, 2015

Stockton East Water Dist.

Lab ID : STK1538837-005

Customer ID : 3-8528

Description : MS-2

### Micro Irrigation System Plugging Hazard

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	0.04	mg/L			
Iron	0.15	mg/L			
TDS by Summation	168	mg/L			
<b>No Amendments</b>					
pH	7.1	units			
Alkalinity (As CaCO3)	80	mg/L			
Total Hardness	101	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	16	mg/L			
Total Hardness	16	mg/L			
pH	5.4 - 6.7	units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

#### Water Amendments Application Notes:

The Amendments recommended on the previous pages include:

#### Gypsum:

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

#### Sulfuric Acid:

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SB1:KDM

August 28, 2015  
**Stockton East Water Dist.**  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1538837-006  
 Customer ID : 3-8528  
 Sampled On : August 10, 2015  
 Sampled By : CD  
 Received On : August 10, 2015  
 Matrix : Surface Water

Description : CR-6  
 Project : Surface Water Monitoring

### General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	23	1.1	51	63	**				
Magnesium	9	0.74	33	24	**				
Potassium	3	0.077	3	8	**				
Sodium	7	0.3	13	19					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	70	1.1	68	190	**				
Sulfate	17	0.35	21	46	**				
Chloride	6	0.17	10	16					
Nitrate	< 0.5	0	0	0					
Fluoride	0.1	0.0053	0	0.3					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.060			0.16					
Manganese	< 0.01			0.00					
Zinc	< 0.02			0.00					
TDS by Summation	135			370					
<b>Other</b>									
pH	7.0			units					
E. C.	0.226			dS/m					
SAR	0.3								
<b>Crop Suitability</b>									
No Amendments	Good								
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.0			Tons/AF					
Sulfuric Acid (98%)	4.2			oz/1000Gal					Or 10 oz/1000Gal of urea Sulfuric Acid (15/49).
Leaching Requirement	1.6			%					

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 28, 2015

Stockton East Water Dist.

Lab ID : STK1538837-006

Customer ID : 3-8528

Description : CR-6

**Micro Irrigation System Plugging Hazard**

Test Description	Result	Graphical Results Presentation		
		Slight	Moderate	Severe
<b>Chemical</b>				
Manganese	< 0.01 mg/L			
Iron	0.06 mg/L			
TDS by Summation	135 mg/L			
<b>No Amendments</b>				
pH	7.0 units			
Alkalinity (As CaCO3)	60 mg/L			
Total Hardness	94.4 mg/L			
<b>With Amendments</b>				
Alkalinity (As CaCO3)	12 mg/L			
Total Hardness	12 mg/L			
pH	5.4 - 6.7 units			

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

**Water Amendments Application Notes:**

The Amendments recommended on the previous pages include:

**Sulfuric Acid:**

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SB1:KDM

August 28, 2015  
**Stockton East Water Dist.**  
 P.O. Box 5157  
 Stockton, CA 95205

Lab ID : STK1538837-007  
 Customer ID : 3-8528  
 Sampled On : August 10, 2015  
 Sampled By : CD  
 Received On : August 10, 2015  
 Matrix : Surface Water

Description : M-1  
 Project : Surface Water Monitoring

### General Irrigation Suitability Analysis

Test Description	Result				Graphical Results Presentation				
	mg/L	Meq/L	% Meq	Lbs/AF	Good	Possible Problem	Moderate Problem	Increasing Problem	Severe Problem
<b>Cations</b>									
Calcium	24	1.2	46	65	**				
Magnesium	11	0.91	35	30	**				
Potassium	4	0.1	4	11	**				
Sodium	9	0.39	15	24					
<b>Anions</b>									
Carbonate	< 10	0	0	0					
Bicarbonate	120	2	76	330	**				
Sulfate	19	0.4	15	52	**				
Chloride	8	0.23	9	22					
Nitrate	< 0.5	0	0	0					
Fluoride	0.1	0.0053	0	0.3					
<b>Minor Elements</b>									
Boron	< 0.1			0.00					
Copper	< 0.01			0.00					
Iron	0.070			0.19					
Manganese	0.060			0.16					
Zinc	< 0.02			0.00					
TDS by Summation	195			530					
<b>Other</b>									
pH	6.9			units					
E. C.	0.256			dS/m					
SAR	0.4								
<b>Crop Suitability</b>									
No Amendments	Good								
With Amendments	Good								
<b>Amendments</b>									
Gypsum Requirement	0.04			Tons/AF					
Sulfuric Acid (98%)	7			oz/1000Gal					Or 17 oz/1000Gal of urea Sulfuric Acid (15/49).
Leaching Requirement	1.9			%					

Good  Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

\*\* Used in various calculations; mg/L = Milligrams Per Liter (ppm) meq/L = Milliequivalents Per Liter



August 28, 2015

Stockton East Water Dist.

Lab ID : STK1538837-007

Customer ID : 3-8528

Description : M-1

### Micro Irrigation System Plugging Hazard

Test Description	Result		Graphical Results Presentation		
			Slight	Moderate	Severe
<b>Chemical</b>					
Manganese	0.06	mg/L			
Iron	0.07	mg/L			
TDS by Summation	195	mg/L			
<b>No Amendments</b>					
pH	6.9	units			
Alkalinity (As CaCO3)	100	mg/L			
Total Hardness	105	mg/L			
<b>With Amendments</b>					
Alkalinity (As CaCO3)	20	mg/L			
Total Hardness	20	mg/L			
pH	5.4 - 6.7	units			

Good Problem

Note: Color coded bar graphs have been used to provide you with 'AT-A-GLANCE' interpretations.

#### Water Amendments Application Notes:

The Amendments recommended on the previous pages include:

#### Gypsum:

This should be applied at least once a year to the irrigated soil surface area. Gypsum can also be applied in smaller quantities in the irrigation water. Apply the smaller (bracketed) amount of gypsum when also applying the recommended amount of Sulfuric Acid and the larger amount when applying only Gypsum.

#### Sulfuric Acid:

These products should be applied as needed to prevent emitter plugging in micro irrigation systems and/or as a soil amendment to adjust soil pH to improve nutrient availability and to facilitate leaching of salts. Please exercise caution when using this material as excesses may be harmful to the system and/or the plants being irrigated. The reported Acid requirement is intended to remove approximately 80 % of the alkalinity. The final pH should range from 5.4 to 6.7. We recommend a field pH determination to confirm that the pH you designate is being achieved. This application is based upon the use of a 98% Sulfuric Acid product. The application of Urea Sulfuric Acid is based upon the use of a product that contains 15% Urea (1.89 lbs Nitrogen), 49% Sulfuric Acid and has a specific gravity of 1.52 at 68 °F.

Guidelines for the above interpretations are sourced from USDA & U.C. Cooperative Extension Service publications. Please contact us if you have any questions.

FRUIT GROWERS LABORATORY, INC.

*Scott Bucy*

Scott Bucy, Director of Ag. Services

SB1:KDM

32724:07/06/2015				TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling information																															
Client: Stockton East Water Dist. Address: P.O. Box 5157 Stockton, CA 95205  Phone: (209)948-0537 Fax: (209)948-4219 Contact Person: Ed Morley Project Name: <b>Surface Water Monitoring</b> Purchase Order Number: Quote Number:  Sampler(s) <b>CD</b>  Sampling Fee: _____ Pickup Fee: _____ Compositor Setup Date: ___/___/___ Time: ___/___/___  Lab Number: <b>STK 1538837</b> 3-8528				Method of Sampling: Composite(C) Grab(G)	Type of Sample **SEE REVERSE SIDE**	Potable(P) Non-Potable(NP) Ag Water(AgW)	Bacti Type: Other(O) System(SYS) Source(SR) Waste(W)	Bacti Reason: Routine(ROUT) Repeat(RPT) Replace(RPL) Other(O) Special(SPL)	Irrigation Suit 32oz(P)	Field Test-Field pH !pH = 15 MINUTE HOLD TIME!!	Field - pH Date	Field - pH Time																							
													Samp Num	Location Description	Date Sampled	Time Sampled																			
													1	PC-1	8/10/15	0735	G	SW			1	7.4	8/10	0735											
													2	CR-1		0947	G	SW			1	7.3		0950											
3	CR-5		1010	G	SW			1	8.2		1010																								
4	MS-1		1030	G	SW			1	7.3		1030																								
5	MS-2		1049	G	SW			1	7.5		1050																								
6	CR-6		1100	G	SW			1	7.1		1100																								
7	M-1		722	G	SW			1	7.6		725																								
8	<del>PP-1</del>			G	SW			1																											
Remarks:				Relinquished				Date:				Time:				Relinquished				Date:				Time:											
				Ed Morley				8/10/15				1330				JR				8/10/15				1700											
				Received By:				Date:				Time:				Received By:				Date:				Time:											
				JR				8/10/15				1330				On Jac				8/10/15				1700				JR				8/11/15			

**Corporate Offices & Laboratory**  
853 Corporation Street  
Santa Paula, CA 93060  
Phone: (805) 392-2000  
Env Fax: (805) 525-4172 / Ag Fax: (805) 392-2063

**Office & Laboratory**  
2500 Stagecoach Road  
Stockton, CA 95215  
Phone: (209) 942-0182  
Fax: (209) 942-0423

**Office & Laboratory**  
563 E. Lindo  
Chico, CA 95926  
Phone: (530) 343-5818  
Fax: (530) 343-3807

**Office & Laboratory**  
3442 Empresa Drive, Suite D  
San Luis Obispo, CA 93401  
Phone: (805) 783-2940  
Fax: (805) 783-2912

**Office & Laboratory**  
9415 W. Goshen Avenue  
Visalia, CA 93291  
Phone: (559) 734-9473  
Fax: (559) 734-8435

## Attachment J

### Unmetered Surface Water Pumps

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# UNMETERED SURFACE WATER PUMPS

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March 2017

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CR-21C ..... 9

CR-21D ..... 10

M-55A ..... 11

PC-11 ..... 11

PC-8C ..... 13

**CR-13**

Gravity fed pipe, runs under road all the way down to the property.

**CR-21**

Gate opened and closed by irrigator whenever he needs water, gravity fed to a pond where CR-21B, CR-21C, and CR-21D pump to their respective properties. Meters can be installed on these gates.







**CR-21B**

Meter can be installed (unsure if this is CR-21B). No pump-gravity to pond on 091-240-12







**CR-21C**

Cannot put in meter unless owner uses a straight rigid pipe. (Unsure if this is CR-21C). No pump-gravity to pond on 091-240-12.





**CR-21D**

Meter can be installed (unsure if this is CR-21D) No pump-gravity to pond on 091-240-12.



3.75



## **M-55A**

Portable pump, no photo available because it has been removed. Meter can be installed by replacing the existing flex hose with a straight ridged pipe.

## **PC-11**

Pump currently has a meter but it is not readable. Meter gets clogged by walnuts and owner will not put a screen. Problem can be solved by using a Mag meter or placing a screen. We have extra screen and material at the plant.





## PC-8C

Portable pump, Meter can be installed by moving the pump further back and attaching a straight rigid pipe to the existing flex hose. Need to contact the owner; he thinks he might redo the installation all together.



Attachment K

Sample Factory Calibration Certification

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C-18A



# CERTIFIED TEST REPORT

CUSTOMER: KIRKPATRICK ASSOCIATES  
MODEL NO: M0308  
METER SERIAL NO: 15-07325

## CONFIGURATION

METER INSIDE DIAMETER: 8.125  
METER OUTSIDE DIAMETER: 8.625  
TEST DATE: 4/30/2015  
TEST FACILITY: Volumetric  
IDEAL TEST CONSTANT: 3746

## CALIBRATION DATA

	Tested TC	GPM	Accuracy
1	3754	1544	100.2

CERTIFIED BY: Paul Hobbs DATE: 5/4/2015

This calibration was performed on a gravimetric or volumetric test facility, traceable to the National Institute of Standards and Technology, USA. The estimated flow measurement uncertainty of the calibration facilities are:  
Gravimetric +/- 0.15% Volumetric +/- 0.5%



3255 WEST STETSON AVENUE  
HEMET, CA 92545 USA  
PHONE (951) 652-6811 / FAX (951) 652-3078  
WEB SITE: <http://www.mccrometer.com> E-MAIL: [info@mccrometer.com](mailto:info@mccrometer.com)



15-07325

Attachment L

Sample Pictures of Hour Meters and Delivery Plumbing

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Canal intake and groundwater well plumping configuration at CR-8.



Hour meter at base of CR-8

**Attachment M**

**Public Participation**

- Notification via e-mail to the County of San Joaquin and City of Stockton, of SEWD's intent to prepare an Agricultural Management Plan on July 6, 2017
- Notification of SEWD's intent to prepare an Agricultural Management Plan
- SEWD Board of Directors Agenda July 11, 2017
- Stockton Record Notice of Publication, July 12 and 17, 2017
- SEWD Board of Directors Agenda July 25, 2017
- Resolution of Adoption, July 25, 2017

2015 Agricultural Water Management Plan  
*Stockton East Water District*

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- Notification via e-mail to the County of San Joaquin and City of Stockton, of SEWD's intent to prepare an Agricultural Management Plan on July 6, 2017

**From:** [Christina Soto](#)  
**To:** [Juan Ochoa](#)  
**Subject:** FW: 07/11/17 SEWD Board Meeting  
**Date:** Thursday, July 27, 2017 9:38:29 AM

---

Here you go!

Christina Soto, Administrative Clerk  
Stockton East Water District  
(209) 948-0333 – Phone  
(209) 948-0423 – Fax  
[csoto@sewd.net](mailto:csoto@sewd.net)

---

**From:** Christina Soto  
**Sent:** Thursday, July 06, 2017 4:34 PM  
**To:** Aaron Riojas <ARiojas@sewd.net>; Alan Driscoll (ADriscoll@Forsgren.com) <ADriscoll@Forsgren.com>; Analise Feliciano <AFeliciano@sewd.net>; Anders 'Andy' Christensen (widirrigation@gmail.com) <widirrigation@gmail.com>; Andrea Cahoon <ACahoon@sewd.net>; Angelo Imbrunetti <Almbrunetti@sewd.net>; antoinette.celle@gmail.com; Barbara Zumwalt (metroeds@recordnet.com) <metroeds@recordnet.com>; Cathy Lee <CLee@sewd.net>; Chris Donis <CDonis@sewd.net>; Christian Maldonado <CMaldonado@sewd.net>; Christina Soto <CSoto@sewd.net>; Clerk (clerk@tridamproject.com) <clerk@tridamproject.com>; Craig Anderson (cawriter.craig@gmail.com) <cawriter.craig@gmail.com>; Ed Morley <EMorley@sewd.net>; Jason Mathews <JMathews@sewd.net>; Jeff Shields (jshields@ssjid.com) <jshields@ssjid.com>; Jesse Stephens <JStephens@sewd.net>; Jim Wunderlich <JWunderlich@sewd.net>; John Freeman (Jfreeman@calwater.com) <Jfreeman@calwater.com>; John Vernier <JVernier@sewd.net>; Jon Crawford (Jon.Crawford@stocktonca.gov) <Jon.Crawford@stocktonca.gov>; Juan Ochoa <JOchoa@sewd.net>; Juan Vega <JVega@sewd.net>; Julianne Phillips (jphillips@sjfb.org) <jphillips@sjfb.org>; Ken Elledge <KElledge@sewd.net>; Khurram Shahzad <KShahzad@sewd.net>; Kristin Carido <KCarido@sewd.net>; Linden Herald (Lindenherald@gmail.com) <Lindenherald@gmail.com>; Lou Mendez <LMendez@sewd.net>; Malcolm Hearon <MHearon@sewd.net>; Manuel Verduzco <MVerduzco@sewd.net>; Mark Wellsfry <MWellsfry@sewd.net>; Meg Duran <MDuran@sewd.net>; Mel Lytle, Ph.D. <mel.lytle@stocktongov.com>; Michael Johnson <MJohnson@sewd.net>; Mike Sutton <MSutton@sewd.net>; Mona Walker <monaw@ccwd.org>; Phil Magana <PMagana@sewd.net>; Priya Ram <PRam@sewd.net>; Ralph Cruz <RCruz@sewd.net>; Randy Sims <RSims@sewd.net>; Reginald Gold <RGold@sewd.net>; Reid Roberts (reidwroberts@gmail.com) <reidwroberts@gmail.com>; Reyes Avalos <RAvalos@sewd.net>; Rhonda Luke-Olvera <rlolvera@sewd.net>; Rick Dodge <rdodge@tridamproject.com>; Robert Heald <RHeald@sewd.net>; Ron Berry <rberry@tridamproject.com>; Ryan Welch <RWelch@sewd.net>; Scot A. Moody <SMoody@sewd.net>; Sheryl Morris <SMorris@sewd.net>; Steve Knell (srkneil@oakdaleirrigation.com) <srkneil@oakdaleirrigation.com>; Taylor Curtis <TCurtis@sewd.net>  
**Subject:** 07/11/17 SEWD Board Meeting

Good Afternoon:

Please see the link below for the Stockton East Water District's 07/11/17 Board Meeting.

Link to the full agenda packet: [July 11, 2017](#)

Thank you,

Christina Soto, Administrative Clerk  
Stockton East Water District  
(209) 948-0333 – Phone  
(209) 948-0423 – Fax  
[csoto@sewd.net](mailto:csoto@sewd.net)

- Notification of SEWD's intent to prepare an Agricultural Management Plan



**STOCKTON  
EAST WATER  
DISTRICT**  
PROVIDING SERVICE SINCE 1948  
[www.sewd.net](http://www.sewd.net)

**DIRECTORS**

Richard Atkins  
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Andrew Watkins  
Division 2

Alvin Cortopassi  
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Melvin Panizza  
Vice President  
Division 4

Paul Sanguinetti  
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Loralee McGaughey  
Division 6

Thomas McGurk  
President  
Division 7

**STAFF**

Scot A. Moody  
General Manager

Michael D. Johnson  
Assistant General Manager

**LEGAL COUNSEL**

Jeanne M. Zolezzi  
General Counsel

Phone 209-948-0333  
Fax 209-948-0423

E-mail [sewd@sewd.net](mailto:sewd@sewd.net)

6767 East Main Street  
Stockton, CA 95215

Post Office Box 5157  
Stockton, CA 95205

## Notification of Preparation Agriculture Water Management Plan

The Agricultural Water Management Planning Act requires that the Stockton East Water District (District) prepare and adopt an Agricultural Water Management Plan (AWMP). The draft AWMP is available for public review and the District will hold a public hearing for public review and comment. The public review will begin Tuesday, July 11, 2017. The public hearing to receive comments on the AWMP will be proposed to for July 25, 2017 as part of the regular District Board meeting held at Noon, at the District office located at 6767 East Main Street, Stockton, CA 95215.

The draft AWMP is available on SEWD's website (i.e. [www.sewd.net](http://www.sewd.net)) or at the District Administrative Building for public viewing.

If you are unable to attend the public hearing, but would like to provide comments, you may send in your written comments via mail, or by e-mail prior to the public hearing to:

Juan Ochoa  
Stockton East Water District  
P.O. Box 5157  
Stockton, CA 95215  
[jochoa@sewd.net](mailto:jochoa@sewd.net)

Should you have any questions, please call me at 209.948.0333. Thank you.



Scot A. Moody  
General Manager

- SEWD Board of Directors Agenda July 11, 2017



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**MEETING NOTICE**

THE REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE  
 STOCKTON EAST WATER DISTRICT WILL BE HELD  
 AT NOON, TUESDAY, JULY 25, 2017 AT THE  
 DISTRICT OFFICE, 6767 EAST MAIN STREET  
 STOCKTON, CALIFORNIA 95215

**Assistance for the Disabled:** If you are disabled in any way and need accommodation to participate in the meeting, please contact Kristin Carido, Administrative Services Manager (209) 948-0333 at least 48-hours in advance for assistance so the necessary arrangements can be made.

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1. Closed Session - Potential Litigation  
Government Code 54956.9 (c) – two cases
- K. Adjournment**

**Certification of Posting**

I hereby certify that on July 20, 2017 I posted a copy of the foregoing agenda in the outside display case at the District Office, 6767 East Main Street, Stockton, California, said time being at least 72 hours in advance of the meeting of the Board of Directors of the Stockton East Water District (Government Code Section 54954.2).  
Executed at Stockton, California on July 20, 2017.



Kristin Carido, Administrative Services Manager  
Stockton East Water District

Any materials related to items on this agenda distributed to the Board of Directors of Stockton East Water District less than 72 hours before the public meeting are available for public inspection at the District's office located at the following address: 6767 East Main Street, Stockton, CA 95215. Upon request, these materials may be available in an alternative format to persons with disabilities.

2015 Agricultural Water Management Plan  
Stockton East Water District

- Stockton Record Notice of Publication, July 12 and 17, 2017

Stockton Record - 07/12/2017

**31**

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Legal Notices	9310
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<b>Legal Notices</b>	
<b>FICTITIOUS BUSINESS NAME STATEMENT DOC. NO. 2017-071916</b>	
<p>The following person(s) is/are doing business as: <b>El Gusto Jugos Y Antojitos</b>, 10 Martin Luther King Jr Blvd Suite #10, Stockton, CA 95206 Norma Leticia Jimenez 2270 Portola Ave Stockton, CA 95209</p> <p>The business is conducted by: An Individual The registrant(s) commenced to transact business under the fictitious business name or names listed above on: 03-05-2017 NORMA L JIMENEZ</p> <p>Filed: June 23, 2017 Steve J. Bestolarides County of San Joaquin Recorder-County Clerk</p>	
<b>#1098529</b>	

Stockton Record - 07/17/2017

**Shop Before You Buy at**

Legal Notices	9310
<b>FICTITIOUS BUSINESS NAME STATEMENT DOC. NO. 2017-074054</b>	
The following person(s) is/are doing business as: <b>K &amp; L Engraving</b> , 1140 Douglas Road, Stockton, CA 95207 Susie Mary Nunez Jaime Nunez 1140 Douglas Road Stockton, CA 95207 The business is conducted by: A Married Couple The registrant(s) commenced to transact business under the fictitious business name or names listed above on: 7/26/04 Filed: June 29, 2017 SUSIE MARY NUNEZ Steve J. Bestolarides County of San Joaquin Recorder-County Clerk	
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NOTICE OF TRUSTEE'S SALE, TS No. CA-17-762468-RY Order No.: 170048725-	

- SEWD Board of Directors Agenda July 25, 2017



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Stockton East Water District

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- Resolution of Adoption, July 25, 2017

**RESOLUTION NO. 17-18-08**  
**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE**  
**STOCKTON EAST WATER DISTRICT**  
**2015 AGRICULTURAL WATER MANAGEMENT PLAN**

The Board of Directors of Stockton East Water District does hereby resolve as follows:

WHEREAS, the Agricultural Water Management Planning Act (Act), codified in Section 10800 et seq., of the water code (CWC) requires all agricultural water suppliers to prepare and adopt an agricultural water management; and

WHEREAS, the Stockton East Water District is an agricultural water supplier providing water to 10,000 or more irrigated acres and is required to adopt an Agricultural Water Management Plan and submit the plan to DWR for compliance with Governor Brown's Executive Order B-29-15, signed April 1, 2015; and

WHEREAS, Stockton East Water District has therefore, prepared and circulated for public review a draft 2015 Agricultural Water Management Plan and properly noticed the public hearing regarding said Plan on July 12, 2017 and July 17, 2017; and

WHEREAS, Stockton East Water District held a Public Hearing on Tuesday, July 25, 2017 to receive comments and accept the District's Agricultural Water Management Plan; and

NOW, THEREFORE, BE IT RESOLVED by Stockton East Water District as follows:

1. The 2015 Agricultural Water Management Plan is hereby adopted;
2. The General Manager is hereby authorized and directed to file the 2015 Agricultural Water Management Plan with the California Department of Water Resources within 30 days after this date;
3. The General Manager is hereby authorized and directed to take appropriate action to implement the 2015 Agricultural Water Management Plan in accordance with the Agricultural Water Management Plan Act, codified in Section 10800 et seq., of the California Water Code and California Department of Water Resources regulations, as such may be modified from time to time.

PASSED AND ADOPTED at the regular meeting of the Board of Directors of Stockton East Water District on July 25, 2017 by the following vote:

Ayes: Atkins, Cortopassi, McGaughey, McGurk, Panizza, Sanguinetti and Watkins  
Noes: None  
Absent: None  
Abstain: None

*Thomas McGurk*

Thomas McGurk, President  
Board of Directors

ATTEST:

*St. A. Moody*

Scot A. Moody  
Secretary of the Board

