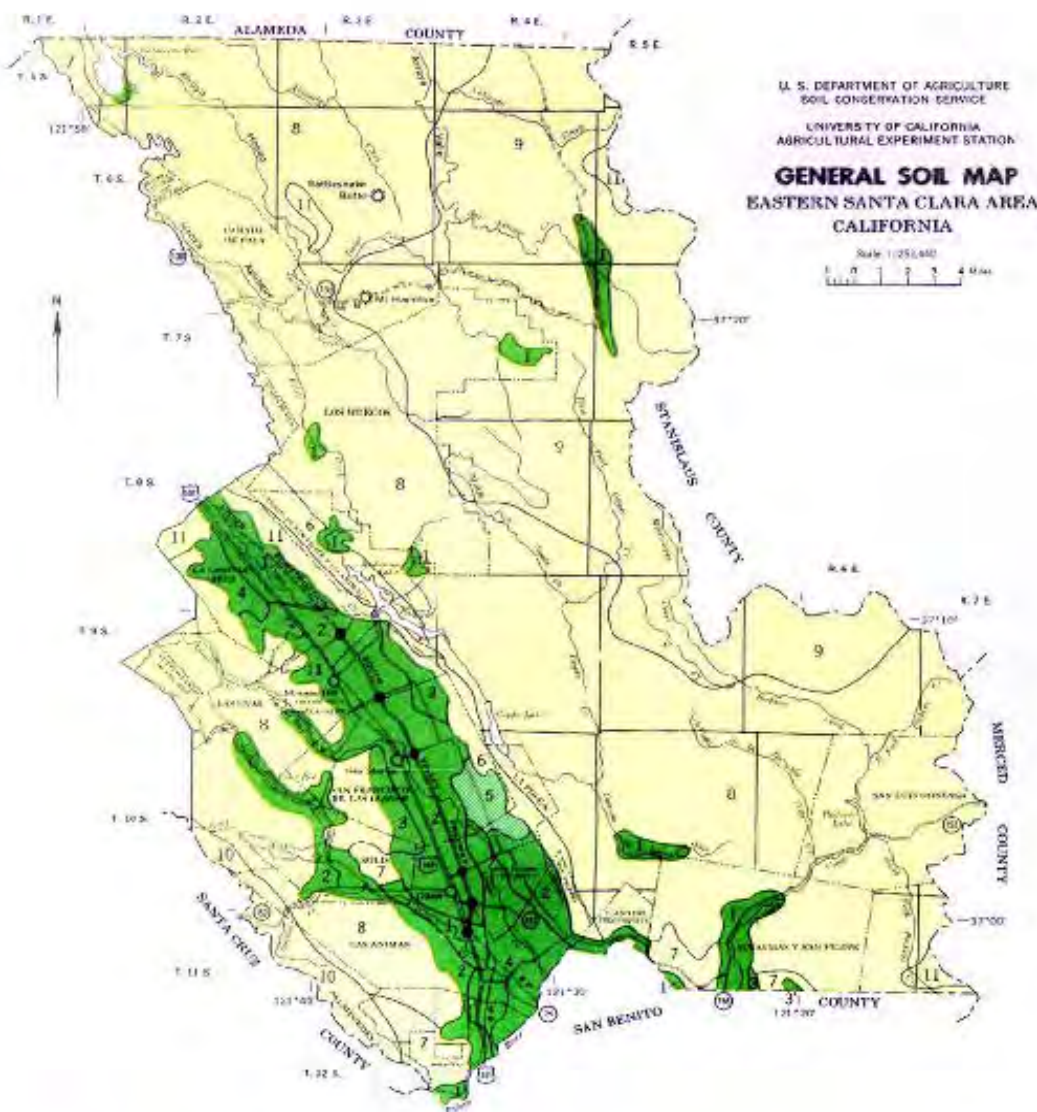


Attachment A
District Maps



SOIL ASSOCIATIONS*

AREAS DOMINATED BY VERY DEEP, WELL DRAINED TO POORLY DRAINED SOILS ON ALLUVIAL PLAINS, FANS, AND STREAM BENCHES

- 1 Yolo association: Nearly level to sloping, well-drained loam and silty clay loams on alluvial plains and fans
- 2 Arvin-San Joaquin association: Nearly level to strongly sloping, well-drained gravelly loam and loam on older alluvial fans
- 3 Grapeland association: Nearly level to sloping, well-drained clay and clay loam on alluvial fans
- 4 Clear Lake-Pacheco-San Joaquin association: Nearly level, poorly drained clay to clay loam in low positions on alluvial plains and fans

AREAS DOMINATED BY SHALLOW TO MODERATELY DEEP, WELL DRAINED TO MODERATELY WELL DRAINED SOILS ON OLD FANS AND TERRACES

- 5 Hilltop-San Ysidro association: Nearly level to steep, well-drained to moderate well-drained silt loam and loam having a clay and clay loam subsoil

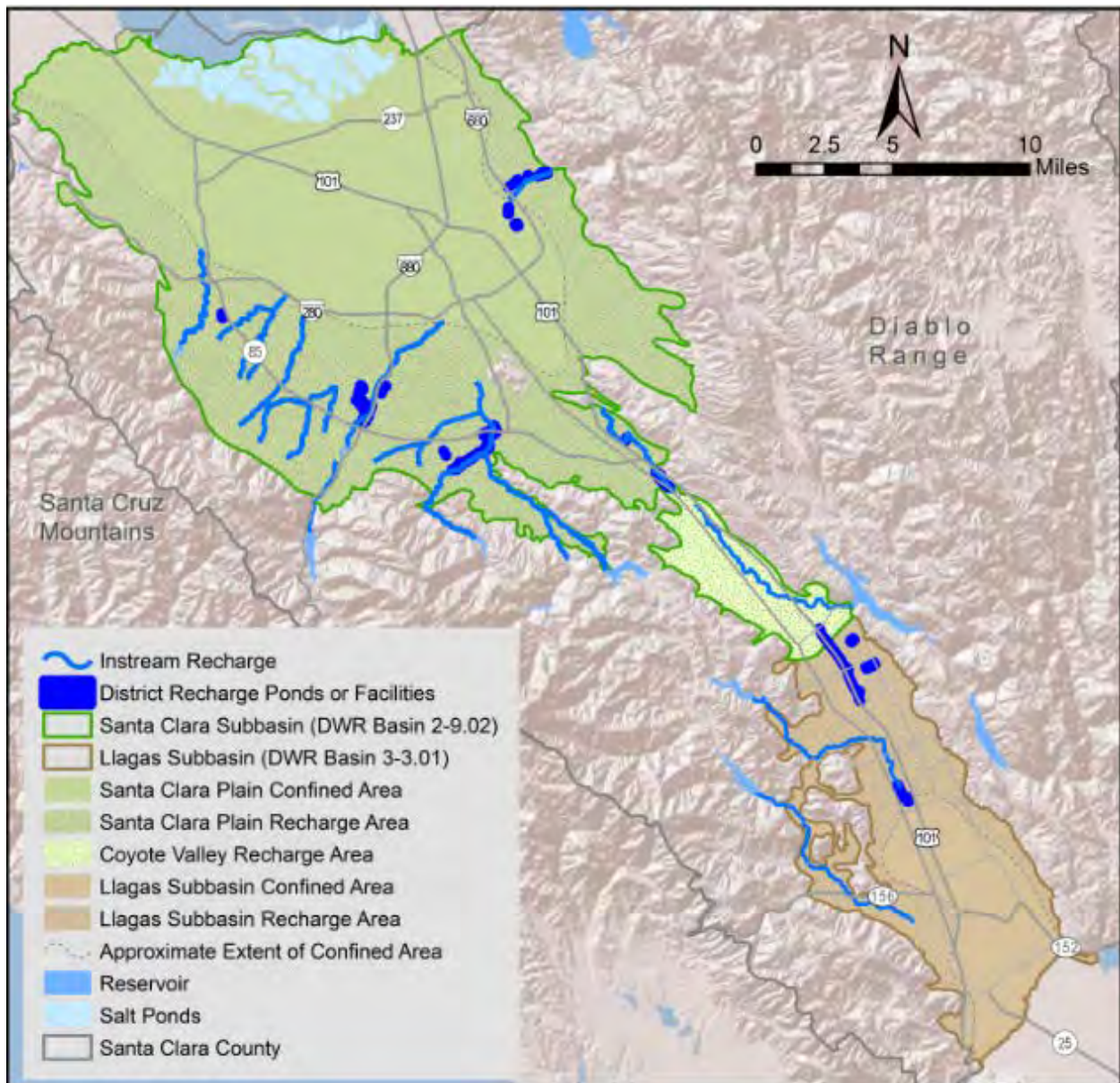
AREAS DOMINATED BY SHALLOW TO DEEP, WELL DRAINED TO SOMEWHAT EXCESSIVELY DRAINED SOILS ON UPLANDS

- 6 Arvin-Altamira association: Strongly sloping to very steep, well-drained, moderately deep and deep clay and clay loam
- 7 Los Gatos-San Benito association: Moderately steep to very steep, well-drained, moderately deep and deep clay loam
- 8 Los Gatos-San Benito Valley association: Gently sloping to very steep, well-drained and somewhat excessively drained, shallow to deep gravelly loam and loam
- 9 Delving association: Deep to very steep, shallow, somewhat excessively drained, eroded gravelly loam
- 10 Felton-Marysville association: Moderately steep to very steep, well-drained and somewhat excessively drained, deep to shallow silt loam and fine sandy loam
- 11 Bonner-Clear Lake association: Moderately steep to very steep, somewhat excessively drained, shallow clay loam and gravelly clay loam

* Texture in descriptive name refers to that of surface layer unless otherwise stated.

Each area outlined on this map consists of more than one kind of soil. The map is thus meant for general planning rather than a basis for decisions on the use of specific tracts.

Compiled 1972



District map Water Supply Distribution



Attachment B
District Rules and Regulations

DISTRICT ACT

**Chapter 1405 of the Statutes
of 1951, Section 26**

**EXCERPT OF SECTIONS RELATIVE
TO GROUNDWATER CHARGE**

REVISED 7/1/96



● **26. Groundwater charge; power to levy and collect**

Sec. 26. The board shall have the power, in addition to the powers enumerated elsewhere in this act, to levy and collect a groundwater charge for the production of water from the groundwater supplies within a zone or zones of the district which will benefit from the recharge of underground water supplies of the distribution of imported water in such zone or zones.

● **26.1. Definitions relative to groundwater charge**

Sec. 26.1. As used in connection with the groundwater charge, the following words shall mean:

“Person,” “owner,” or “operator” means public agencies, federal, state, and local, private corporations, firms, partnerships, limited liability companies, individuals or groups of individuals, whether legally organized or not; “owner” or “operator” also means the person to whom a water-producing facility is assessed by the county assessor, or, if not separately assessed, the person who owns the land upon which a water-producing facility is located.

“Groundwater” means nonsaline water beneath the natural surface of the ground, whether or not flowing through known and definite channels; “nonsaline water” means water which has less than 1,000 parts of chlorides to 1,000,000 parts of water, both quantities measured by weight.

“Production” or “producing” means the extraction or extracting of groundwater, by pumping or any other method, from shafts, tunnels, wells (including, but not limited to, abandoned oil wells), excavations or other sources of groundwater, for domestic, municipal, irrigation, industrial, or other beneficial use, except that the terms do not mean or include the extraction of groundwater produced in the construction or reconstruction of a well, or water incidentally produced with oil or gas in the production thereof, or water incidentally produced in a bona fide mining or excavating operation or water incidentally produced in the bona fide construction of a tunnel, unless the groundwater so extracted shall be used or sold by the producer for domestic, municipal, irrigation, industrial, or other beneficial purpose.

“Water-producing facility” means any device or method, mechanical or otherwise, for the production of water from the groundwater supplies within the district or a zone thereof.

“Water production statement” means the certified statement filed by the owner or operator of a water-producing facility with the district of the production of groundwater of the facility in a specified period.

“Water year” means July 1st of one calendar year to June 30th of the following calendar year.

“Agricultural water” means water primarily used in the commercial production of agricultural crops or livestock.

● **26.2. Groundwater charge zones; establishment; amendment**

Sec. 26.2. Prior to the establishment of any groundwater charge, the board shall establish a zone or zones within the district within which the groundwater charge will be effective. Said zone or zones shall be established and may be amended to the extent and in the manner prescribed in Section 3 of this act.

● **26.3. Purpose of groundwater charges; use of revenues**

Sec. 26.3. Groundwater charges levied pursuant to this act are declared to be in furtherance of district activities in the protection and augmentation of the water supplies for users within a zone or zones of the district which are necessary for the public health, welfare and safety of the people of this State. The groundwater charges are authorized to be levied upon the production of groundwater from all water-producing facilities, whether public or private, within said zone or zones of the district for the benefit of all who rely directly or indirectly upon the groundwater supplies of such zone or zones and water imported into such zone or zones.

The proceeds of groundwater charges levied and collected upon the production of water from groundwater supplies within such zone or zones of the district are authorized and shall be used exclusively by the board for the following purposes:

1. To pay the costs of constructing, maintaining and operating facilities which will import water into the district which will benefit such zone or zones, including payments made under any contract between the district and the State of California, the United States of America, or any public, private or municipal utility.

2. To pay the costs of purchasing water for importation into such zone or zones, including payments made under contract to the State of California, the United States of America, or any public, private or municipal utility.

3. To pay the costs of constructing, maintaining and operating facilities which will conserve or distribute water within such zone or zones, including facilities for groundwater recharge, surface distribution, and the purification and treatment of such water.

4. To pay the principal or interest of any bonded indebtedness or other obligations incurred by the district on behalf of such zone or zones for any of the purposes set forth in paragraphs 1, 2, and 3 of this section.

The district may apply to any one or more of the purposes set forth in paragraphs 1, 2, 3, and 4 of this section any or all revenues received by the district from water sale contracts executed by the district pursuant to this act.

● **26.4. Registration of water-producing facilities; violation; penalty**

Sec. 26.4. Within six months after the date of establishing any such zone or zones, all water-producing facilities located within the boundaries of such zone or zones shall be registered with the district and, if required by the board, measured with a water-measuring device satisfactory to the district installed by the district or at the district's option by the operator thereof. Any new water-producing facility, constructed or reestablished, or any abandoned water-producing facility which is reactivated, after such date, shall be registered with the district and, if required by the board, measured with a water-measuring device satisfactory to the district within 30 days after the completion or reestablishment, or reactivation thereof.

Failure to register any water-producing facility, as required by this act, is a misdemeanor punishable by a fine of not to exceed five hundred dollars (\$500), or imprisonment in the county jail for not to exceed six months, or by both such fine and imprisonment.

In addition to other information which the district may determine is necessary and may require in the registration form provided, there shall also be given information as to the owner or owners of the land upon which each water-producing facility is located, a general description and location of each water-producing facility, the name and address of the person charged with the operation of each water-producing facility, and the name or names and addresses of all persons owning or claiming to own an interest in the water-producing facility.

• 26.5. Annual report on district's activities; contents

Sec. 26.5. (a) The district shall annually prepare a written report upon the district's activities in the protection and augmentation of the water supplies of the district. The report shall include, among other information the board may order, a financial analysis of the district's water utility system; information as to the present and future water requirements of the district, the water supply available to the district, and future capital improvement and maintenance and operating requirements; a method of financing those requirements; a recommendation as to whether or not a groundwater charge should be levied in any zone or zones of the district during the ensuing water year and, if any groundwater charge is recommended, a proposal of a rate or rates per acre-foot for agricultural water and a rate or rates per acre-foot for all water other than agricultural water for the zone or zones, which rate or rates, as applied to operators who produce groundwater above a specified annual amount, may be subject to prescribed, fixed, and uniform increases in proportion to increases by that operator in groundwater production over the production of that operator for a prior base period to be specified by the board.

(b) The report shall not contain a recommendation of any increases in proportion to increased production in a zone unless based upon an analysis showing the cause of the reduction in the groundwater levels of the zone requiring the increases, with attention given to the effect of extractions of pumpers outside of, as well as within the zone, and with an evaluation of alternative measures which may feasibly be taken within the entire affected groundwater basin and of any alternative supplies of water available for that zone, including the availability of treated water supplied by the district or treated groundwaters or groundwaters extracted in a cleanup operation and available to the district for reuse. The report shall be consistent with any conservation and reuse plan approved by the State Water Resources Control Board. The report shall also include all of the following:

- (1) The amount of groundwater produced in the proposed zone and alternative water sources.
- (2) The estimated costs of recharging each zone or zones.
- (3) The estimated costs of mitigating any effects of pumping.
- (4) Information specifying the benefits that have been received and will be received within the zone or zones where a groundwater charge has been levied and collected, or is recommended to be levied and collected.

• 26.6. Hearing on report; notice

Sec. 26.6. On or before the first Tuesday in April of each year the report shall be delivered to the clerk of the district board in writing. The clerk shall publish, pursuant to Section 6061 of the Government Code, a notice of the receipt of the report and of the public hearing to be held on or before the fourth Tuesday in April 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 regarding the report shall be held. The notice, among other information which the district may provide, shall contain an invitation to all operators of water-producing facilities within the district and to any person interested in the district's activities in the protection and augmentation of the water supplies of the district to call at the offices of the district to examine the report. There shall be held on or before the fourth Tuesday of April of each year, in the chambers of the board, a public hearing at which time any operator of a water-producing facility within the district, or any person interested in the district's activities in the protection and augmentation of the water supplies of the district, may in person, or by representative, appear and submit evidence concerning the subject of the written report.

• 26.7. Levy and collection of groundwater charges; rates; new or adjusted charges; reports; notice; hearing; errors

Sec. 26.7. (a) (1) Prior to the end of the water year in which the hearing is held, and based upon the findings and determinations from the hearing, the board shall determine whether or not a groundwater charge should be levied in any zone or zones.

(2) If the board determines that a groundwater charge should be levied, it shall levy, assess, and affix the charge or charges against all persons operating groundwater-producing facilities within the zone or zones during the ensuing water year.

(3) (A) The charge shall be computed at a fixed and uniform rate or rates per acre-foot for agricultural water, and at a fixed and uniform rate or rates per acre-foot for all water other than agricultural water.

(B) Different rates may be established in different zones, except that in each zone the rate or rates for agricultural water shall be fixed and uniform, and the rate or rates for water other than agricultural water shall be fixed and uniform.

(C) The rate or rates, as applied to operators who produce groundwater above a specified annual amount, may, except in the case of any person extracting groundwater in compliance with a government-ordered program of cleanup of hazardous waste contamination, be subject to prescribed, fixed, and uniform increases in proportion to increases by that operator in groundwater production over the production of that operator for a prior base period to be specified by the board, upon a finding by the board that conditions of drought and water shortage require the increases. The increases shall be related directly to the reduction in the affected zone groundwater levels in the same base period.

(D) The rates shall be established each year in accordance with a budget for that year submitted by the district to the Board of Supervisors of Santa Clara County pursuant to this act, or amendments or adjustments to that budget, and shall be fixed and uniform rates for agricultural water and for all water other than agricultural water, respectively, except that each such rate for agricultural water shall not exceed one-fourth of the rate for all water other than agricultural water.

(b) (1) The board may also impose or adjust any groundwater charge, and the rate of any charge, on or before January 1 of each water year or at any time during the 1992-93 water year whenever the board determines that the imposition or adjustment of the charge is necessary.

(2) The board shall prepare a supplemental report to the annual report prepared pursuant to Section 26.5, explaining the reasons for the imposition or adjustment of the charge. The board shall file the supplemental report with the clerk of the board at least 45 days before the date the new or adjusted charge is proposed to take effect.

(3) (A) The clerk shall publish in a newspaper of general circulation published within the district, pursuant to Section 6061 of the Government Code, a notice of the receipt of the supplemental report and a hearing to be held on the proposed imposition or adjustment of the groundwater charge at least 31 days before the date on which the new or adjusted charge is proposed to take effect and at least 10 days before the date of the hearing.

(B) The notice shall invite any operator of a water-producing facility within the district and other interested parties to examine the supplemental report prepared pursuant to paragraph (2) at the district office.

(4) (A) A public hearing shall be held at least 21 days before the date on which the new or adjusted groundwater charge is proposed to take effect in the chambers of the board.

(B) Any operator of a water-producing facility within the district may, in person or by means of a representative, present evidence at the hearing concerning the imposition or adjustment of the groundwater charge.

(c) Any groundwater charge levied pursuant to this section shall be in addition to any general tax or assessment levied within the district or any zone or zones thereof.

(d) Clerical errors occurring or appearing in the name of any person or in the description of the water-producing facility where the production of water therefrom is otherwise properly charged, or in the making or extension of any charge upon the records which do not affect the substantial rights of the assessee or assesses, shall not invalidate the groundwater charge.

• 26.8. Notice to owners or operators

Sec. 26.8. The district, after the levying of the groundwater charge, shall give notice thereof to each owner or operator of each water-producing facility in the zone or zones as disclosed by the records of said district, which notice shall state the rate for each class of water of the groundwater charge for each acre-foot of water to be produced during the ensuing water year. Said notice may be sent by postal card or by other first-class mail and with postage prepaid by the district.

• 26.9. Water production statement; computation of charges; interest and penalties

Sec. 26.9. (a) After the establishment of a zone in which a groundwater charge may be levied, each owner or operator of a water-producing facility within the zone, until the time that the water-producing facility has been permanently abandoned, shall file with the district, on or before the 30th day following the end of collection periods established by the board, a water production statement setting forth the total production in acre-feet of water for the preceding collection period, a general description or number locating each water-producing facility, the method or basis of the computation of the water production, and the amount of the groundwater charge based on the computation. The collection periods may be established at intervals of not more than one year or less than one month. If no water has been produced from the water-producing facility during a preceding collection period, this statement shall be filed as provided for in this section, setting forth that no water has been produced during the applicable period. The statement shall be verified by a written declaration under penalty of perjury.

(b) The groundwater charge is payable to the district on or before the last date upon which the water production statements shall be filed, and is computed by multiplying the production in acre-feet of water for each classification as disclosed in the statement by the groundwater charge for each classification of water. The owner or operator of a water-producing facility which is being permanently abandoned shall give written notice of the abandonment to the district. If any owner or operator of a water-producing facility fails to pay the groundwater charge when due, the district shall charge interest at the rate of 1 percent each month on the delinquent amount of the groundwater charge.

(c) If any owner or operator of a water-producing facility fails to register each water-producing facility, or fails to file the water production statements as required by this act, the district shall, in addition to charging interest, assess a penalty charge against the owner or operator in an amount of 10 percent of the amount found by said district to be due. The board may adopt regulations to provide that in excusable or justifiable circumstances the penalty may be reduced or waived.

(d) If any owner or operator of a water-producing facility fails to file a water production statement as required by this act, the district shall, in addition to charging interest and assessing a penalty charge, assess an administrative charge to recover the costs of collection. The board may adopt regulations to provide that in excusable or justifiable circumstances the administrative charge may be reduced or waived.

(e) If a water-measuring device is permanently attached to a water-producing facility, the record of production as disclosed by the water-measuring device shall be presumed to be accurate and shall be used as the basis for computing the water production of the water-producing facility in completing the water production statement, unless it can be shown that the water-measuring device is not measuring accurately.

(f) If a water-measuring device is not permanently attached to a water-producing facility, the board may establish a method or methods to be used in computing the amount of water produced from the water-producing facilities. The methods may be based upon any or all of the following criteria: the minimum charge sufficient to cover administrative costs of collection, size of water-producing facility discharge opening, area served by the water-producing facility, number of persons served by the water-producing facility, use of land served by the water-producing facility, crops grown on land served by the water-producing facility, or any other criteria or criteria which may be used to determine with reasonable accuracy the amount of water produced from that water-producing facility. The district may levy an annual charge upon a water-producing facility for which no production has been recorded but which has not been permanently abandoned if that charge does not exceed the annual cost to the district of maintaining and administering the registration of that facility.

• 26.10. Amendment of statement; correction of records

Sec. 26.10. Upon good cause shown, an amended statement of water production may be filed or a correction of the records may be made at any time within six months of filing the water production statement; provided that if pursuant to Section 26.13, the owner or operator has been notified of a determination by the district that the production of water from the water-producing facility is in excess of that disclosed by the sworn statement covering such water-producing facility, and such owner or operator fails to protest such determination in the manner and in the time set forth in Section 26.13, the owner or operator shall be precluded from later filing an amended water production statement for that period for such water-producing facility.

• 26.11. Record of water production and groundwater charges

Sec. 26.11. The district shall prepare each year a record called "The Record of Water Production and Groundwater Charges" in which shall be entered a general description of the property upon which each water-producing facility is located, an identifying number or code which is assigned to such facility, the annual water production for each class of water produced from each water-producing facility, and the groundwater charge for each class of water.

• 26.12. Injunctive relief; grounds; process; procedure

Sec. 26.12. The superior court of the county in which the district lies may issue a temporary restraining order upon the filing by the district with said court of a petition or complaint setting forth that the person named therein as defendant is the operator of a water-producing facility which has not been registered with the district, or that such defendant is delinquent in the payment of a groundwater charge. Such temporary restraining order shall be returnable to said court on or before 10 days after its issuance.

The court may issue and grant an injunction restraining and prohibiting the named defendant from the operation of any water-producing facility when it is established at the hearing that the defendant has failed to register such water-producing facility with the district, or that the defendant is delinquent in payment of groundwater charges thereon. Such court may provide that the injunction so made and issued shall be stayed for a period not to exceed 10 days to permit the defendant to register the water-producing facility or to pay the delinquent groundwater charge.

Service of process is completed by posting a copy of the summons and complaint upon the water-producing facility or the parcel of land upon which it is located and by personal service upon the named defendant.

The right to proceed for injunctive relief granted herein is an additional right to those which may be provided elsewhere in this act or otherwise allowed by law. The procedure provided in Chapter 3 (commencing with Section 525), Title 7, Part 2, of the code of Civil Procedure, regarding injunctions shall be followed except insofar as it may herein be otherwise provided. The district shall not be required to provide an undertaking or bond as a condition to granting injunctive relief.

• 26.13. Excess water production; investigation and report; fixing amount of production; protest

Sec. 26.13. If the district has probable cause to believe that the production of water from any water-producing facility is in excess of that disclosed by the sworn statements covering such water-producing facility, or if no statements are filed covering any water-producing facility, the district may cause an investigation and report to be made concerning the production of water from each such water-producing facility. The district may fix the amount of water production from any such water-producing facility at an amount not to exceed the maximum production capacity of such water-producing facility; provided, however, where a water-measuring device is permanently attached thereto, the record of production, as disclosed by such water-measuring device, shall be presumed to be accurate.

After such determination has been made by the district, a written notice thereof shall be mailed to the person operating such water-producing facilities at the address shown by the district's records. Any such determination made by the district shall be conclusive on all persons having an interest in such water-producing facility, and the groundwater charge, interest and penalties thereon, shall be paid forthwith, unless such person files with the board within 15 days after the mailing of such notice, a written protest setting forth the ground or grounds for protesting the amount of production so fixed. Upon the filing of such protest, the board thereafter shall hold a hearing at which time the total amount of the water production and the groundwater charge thereon shall be determined, which shall be conclusive if based upon substantial evidence. If the water production statement was filed and the amount disclosed thereon was paid within the time required by this act, and the board finds that the failure to report the amount of water actually produced resulted from excusable or justifiable circumstances, the board may waive the charge of interest on the amount found to be due. A notice of such hearing shall be mailed to the protestant at least 10 days before the date fixed for the hearing. Notice of the determination by the board shall be mailed to each protestant, who shall have 20 days from the date of mailing to pay the groundwater charge, interest or penalties provided by the provisions of this act.

Notice as required in this section shall be given by deposit thereof in any postal facility regularly maintained by the government of the United States in a sealed envelope with postage paid, addressed to the person on whom it is served at the name and address disclosed by the records of the district. The service is complete at the time of deposit.

• 26.14. Collection of delinquent charges; interest and penalties; attachment

Sec. 26.14. The district may bring a suit in the court having jurisdiction against any operator of a water-producing facility within the district for the collection of any delinquent groundwater charge. The court having jurisdiction of said suit may, in addition to allowing recovery of costs to said district as allowed by law, fix and allow as part of the judgment interest and penalties as provided in Section 26.9. Should the district, as a provisional remedy in bringing such suit, seek an attachment against the property of any named defendant therein, the district shall not be required to provide a bond or undertaking as is otherwise provided for in the Code of Civil procedure of the State of California in Chapter 4 (commencing with Section 537), Title 7, Part 2, thereof.

• 26.15. Production from unregistered facilities; violations; penalties

Sec. 26.15. It shall be unlawful to produce water from any water-producing facility required to be registered pursuant to the terms of this act unless such water-producing facility has been registered with the district within the time required by the provisions of this act and, if required by the board, has a water-measuring device affixed thereto capable of registering the accumulated amount of water produced therefrom.

Violation of this provision shall be punishable by a fine not to exceed five hundred dollars (\$500), or imprisonment in the county jail for not to exceed six months, or by both such fine and imprisonment. Each day of operation in violation hereof shall constitute a separate offense.

• 26.16. Interfering or tampering with measuring device; filing fraudulent statements

Sec. 26.16. 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 said water-measuring device to improperly or inaccurately measure and record said water production, or any person who willfully does not file with the district a water production statement as prescribed and within the time required by this act, or any person who willfully removes or breaks a seal attached to an abandoned water-producing facility, or any person who with intent to evade any provision or requirement of this act files with the district any false or fraudulent water production statement 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.

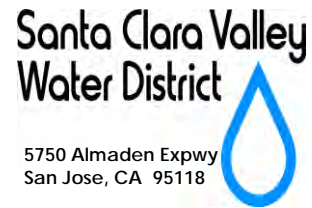
• 26.17. Enforcement powers

Sec. 26.17. In implementing the enforcement of the provisions of this act relating to groundwater charges, the district shall have the power, in addition to the powers enumerated elsewhere in this act:

1. To install and maintain water-measuring devices, and other devices which will aid in determining accurate water production, on water-producing facilities not owned by the district.

2. To affix seals to water-producing facilities which the owner or operator thereof has declared to be abandoned, or are in fact permanently abandoned.

3. To enter on to any land for the purposes enumerated in this section and for the purpose of making investigations relating to water production.



Ordinance No. 70-1

ENACTING RULES AND REGULATIONS

GOVERNING THE RECORDING OF GROUND

WATER PRODUCTION WITHIN A ZONE OF

SANTA CLARA VALLEY WATER DISTRICT IN

WHICH A GROUND WATER EXTRACTION

CHARGE IS LEVIED. AS AMENDED 6/2/87

**Rules and Regulations
Governing the Recording of
Ground Water Production**

REVISED 7/1/87

The Board of Directors of Santa Clara Valley Water District do hereby enact as follows:

ARTICLE I

Ordinance W-2.2.1 of the District is hereby repealed.

ARTICLE II

The following Rules and Regulations Governing the Recording of Ground Water Production are hereby adopted and shall apply in any zone of Santa Clara Valley Water District in which a ground water extraction charge is levied.

Opening Statement

Under the provisions of the Santa Clara Valley Water District Act of the State of California, if this District elects to impose a ground water charge, it must base that charge upon the production of ground water in acre feet. The responsibility of the owner or operator of a pump or other ground water producing facility is to keep a record and to file a report of his production. The following rules and regulations are established to ensure that the ground water charge is equitably laid; that **ALL** production is reported with a maximum of accuracy and that consequently no one is unfairly burdened.

Sec. 1. RECORDS OF GROUND WATER PRODUCTION

Each owner or operator of a ground water producing facility shall keep a record of water produced from each such facility, and in preparing his semi-annual water production statement as required by Section 26.9 of said Act shall follow the instructions and worksheets to be supplied by the District in form as officially adopted from time to time by resolution of the Board.

Sec. 2. DETERMINATION OF UNMETERED GROUND WATER

In the case of a ground water producing facility to which no meter is attached, the record of production shall be determined by a method reasonably available to the owner or operator and most likely to be accurate. The acceptable methods of determining such production graded as to accuracy from highest to lowest are as follows:

- (a) By use of an efficiency or flow test determining the rate of production of the facility together with a device which accurately records the duration of operation of the facility within the reporting period.
- (b) By use of an efficiency or flow test determining the kilowatt hours of electrical power necessary to produce an acre foot or other quantity of water together with a device that accurately records the consumption of kilowatt hours within the reporting period.
- (c) By reference to a record of total kilowatt hours consumed by the facility and/or booster pump for the reporting period together with total head (defined as including depth to water, a determination of the drawdown, sprinkler operating pressure and line loss or lift), by use of the following alternative formulae:

Where pump efficiency is known the formula shall be:

$$\frac{\text{head in feet} \times .00314}{\text{pump efficiency} \times \text{motor efficiency}} = \frac{\text{kilowatt hours per}}{1,000 \text{ gallons produced}}$$

Where pump efficiency is unknown a total efficiency of pump and motor of 40 percent is assumed and the formula shall be:

$$\frac{\text{Kilowatt hours} \times .391}{\text{total head}} = \frac{\text{total acre-feet of}}{\text{water produced}}$$

- (d) By reference to a crop factor, being the average of normal irrigation requirements per acre of the crop or crops irrigated by the facility in question, as shown in the current "Table of Water Factors" as adopted by resolution of the Board. In the case of a ground water producing facility producing water devoted in whole or in part to a domestic use, the domestic use portion of such production shall be determined by reference to a "Table of Average Uses" as adopted by resolution of the Board.

Sec. 3. ACQUISITION, INSTALLATION AND MAINTENANCE OF METERS BY OWNER OR OPERATOR

Each owner or operator of a ground water producing facility primarily producing (a) agricultural water or (b) water other than agricultural water in not less than amounts to be set for each said category by the Board of Directors for each fiscal year in which a ground water extraction charge is levied, shall acquire and install on each such facility a meter. The meter and its installation shall be satisfactory to the District. To be satisfactory such a meter shall be capable of recording to within approximately two percent of 100 percent accuracy. Where measurement of production cannot reasonably be determined without a meter the acquisition and installation of a satisfactory water meter or other appropriate device may be ordered in particular cases by the General Manager of the District without regard to the estimate of production hereinabove specified. Ground water producing facilities installed hereafter shall be installed equipped with meters if subject to this section; installation of meters upon existing facilities where required by this section shall be completed within thirty days of the effective date of this Ordinance or of receipt of a written direction by the General Manager so to do, subject, nevertheless to the provisions of Sec. 6 hereof. All meters or other devices used to base sworn statements of the production of a ground water producing facility shall be systematically and properly maintained by the owner or operator for accurate operation, failing which the record of production so disclosed shall have no presumption of accuracy and the District may cause an investigation and report to be made concerning such water producing facility as provided by law, a copy of test records supplied with new meters and at times of overhaul and retest shall be supplied by the owner or operator to the District.

Sec. 4. ACQUISITION, INSTALLATION AND MAINTENANCE OF METERS BY DISTRICT

Notwithstanding the foregoing any owner or operator who is required to acquire, install and maintain a meter pursuant to this Ordinance by reason of installation of a ground water producing facility or a reactivation or a change of use of such a facility, may request the District to acquire, install and maintain such meter and to relocate piping or do other associated

connection work. The request will be denied if the District determines that:

- (a) The request was not made at a time long enough prior to installation or reactivation of a ground water producing facility to permit the acquisition of a meter and the installation thereof as part of the installation or reactivation of such facility, 30 days being deemed, in the absence of special circumstances, the minimum such period; or
- (b) The provision of a meter is not economically justifiable and other acceptable means of measuring production exist or the facility is to be deactivated in the reasonably near future.

Where the District has determined that the request was not timely the District may, nevertheless, acquire and deliver and maintain a meter at its cost but may install the same (including any necessary additional piping) at the expense of the owner or operator. In such a case the owner or operator may accomplish the installation if the work is done under District supervision and to District approval.

Sec. 5. DISTRICT METER ON ABANDONED FACILITY

If the meter on any abandoned water-producing facility is owned by the District, the owner or operator of the water-producing facility shall, within 10 calendar days after said abandonment of such water-producing facility, notify the District in writing of the abandonment, and shall be responsible for and shall preserve such meter in a safe condition for 10 calendar days after written notice has been given to the District.

Sec. 6. APPLICATION FOR EXCEPTIONS

Upon the application of any owner or operator of a water-producing facility, stating fully the grounds of the application and all facts relied upon by the applicant, the Board of Directors of this District may authorize exceptions from the provisions of this Ordinance. In order for the application to come within this section it will be necessary for the applicant to show:

- (a) That the determinations of the District which are the subject of the application are not reasonably accurate, or
- (b) That there are special circumstances which make the application of this Ordinance unreasonable or unnecessary in relation to a particular water-producing facility or group of facilities; that the granting of the exception will not be detrimental to the orderly and economic collections of ground water charges; and that the granting of the exception will not be inconsistent with the intent of this Ordinance.
- (c) That any application relating to metering of water-producing facilities primarily producing agricultural water has first been presented to and considered by the Agricultural Water Advisory Committee of this District, and that said Committee has made its recommendation thereon.

The Board of Directors of this District in granting any exception may attach conditions

thereto, including, but not limited to, requirements that the owner or operator of any unmetered water-producing facility keep and supply the District with regularly kept records and logs of information regarding the facility, including depth of water, electrical power consumption, the result of any efficiency tests made, measurements of pump output, hours of operation, time of operation and other data pertinent to determination of production, in addition to the requirements of Sec. 1 hereof.

Sec. 7. VIOLATIONS A MISDEMEANOR

Any owner or operator violating any of the provisions of Sections 3 or 5 of this Ordinance shall be guilty of a misdemeanor and is punishable by a fine not exceeding \$500 or by imprisonment in the County jail for a period of not to exceed 6 months or by both such fine and imprisonment.

Sec. 8. SEVERABILITY

Should any section or provision of this Ordinance be decided by a court of competent jurisdiction to be unconstitutional or invalid, such decision shall not affect the validity of the Ordinance as a whole or any part thereof other than the part decided to be unconstitutional or invalid.

PASSED AND ADOPTED by the Board of Directors of Santa Clara County Flood Control and Water District [now SANTA CLARA VALLEY WATER DISTRICT] this 13th day of January, 1970, by the following vote:

AYES: Directors J. Chiri, V. F. Corsiglia, M. E. Dullea, J. J. Lenihan, R. T. Sapp, R. J. Sturla, F. A. Wilcox

NOES: Directors NONE

ABSENT: Directors NONE

James Lenihan
Chairman of the Board of Directors

ATTEST: Violet V. Enander
Clerk of said Board of Directors

AS AMENDED 6/2/87
EFFECTIVE 7/4/87

RULES AND REGULATIONS
FOR THE SERVICE OF SURFACE WATER
July 1, 1974

SECTION 1

DEFINITIONS

- BOARD:** Means the Board of Directors of Santa Clara Valley Water District
- CONDUITS:** Includes canals, laterals, ditches, flumes, pipes and their appurtenances, and natural stream channels where used as conduits by the District.
- DISTRICT:** Means the Santa Clara Valley Water District
- DISTRICT WATER:** Refers to waters which are owned or controlled by the District and includes waters which have been stored and waters which have been imported.
- DIVERSION:** Means the act of transferring water from a District conduit to a private conduit or property.
- HOLDER OF TITLE:** Includes a holder of evidence of title and, also, a holder of land under a possessory right acquired by entry or purchase from the United States or the State of California.
- GENERAL MANAGER:** Means the General Manager of Santa Clara Valley Water District
- OPERATE:** Includes use, maintain and repair.
- QUALIFIED USER:** Means any holder of title to a parcel of land who has complied with all the requirements of these Rules and Regulations and obtained a permit to divert District water.
- WATER YEAR:** Means the period from July 1st of one year to June 30 of the following year, both inclusive.
- NOTE:** The words “he”, “him” and “his” as used herein include “she”, “her” and “hers” and “it” and “its”.

SECTION 2

PURPOSE OF DISTRICT

- 2.1 It is one of the primary purposes of the District to make available an adequate supply of water for within the boundaries of the District. It is considered that any appropriate means by which the pumping draft is reduced operates to this end. Therefore, in order to conserve the underground supply for the benefit of all, the District will permit the diversion and use of the imported water and/or water released from storage for use within the District, pursuant to these Rules and Regulations.

SECTION 3

CONTROL OF SYSTEM

- 3.1 The operation of the works of the District shall be under the management and control of the General Manager, appointed by the Board and no other person except his employees and assistants shall have any right to interfere with said works in any manner except by order of the Board.

SECTION 4

DIVERSION OF DISTRICT WATER

- 4.1 Qualified users will be allowed to pump or otherwise divert District water from any District conduit in which the District can release District water; provided, however, that no diversion will be allowed if the same unreasonably interferes with the operation of a District conduit or results in the waste of water.

SECTION 5

DISTRICT PERSONNEL

- 5.1 The District staff will distribute the water available in a fair and impartial manner to all persons qualified to receive such water, and will apply these Rules and Regulations without fear or favor, and will promptly report any infraction thereof.
- 5.2 Any complaint regarding releases or apportionment should be referred to the Water Resources Technician and, if it is not satisfactorily settled by him, it may then be taken up with the Water Operations Supervisor. If not satisfactorily settled by him, it may be appealed to the Board.

SECTION 6

DISTRIBUTION OF WATER

- 6.1 Whenever, through lack of capacity in a District conduit, or for any other reason, it is impossible to distribute the amount of water desired by qualified users in any or all portions of the District, such supply as can be delivered will be equitably prorated among qualified users until such time as delivery of a full supply is possible.

SECTION 7

CONTINUITY OF USE

- 7.1 Qualified users shall be required to use water on a continuous basis, that is, 24 hours per day during all days including Sundays and holidays. Where a qualified user is located on a distribution facility subject to schedule of use and fails to take water when available at the time scheduled for him, he shall be placed at the end of the schedule and shall forfeit his right to water until all other qualified users on the distribution facility have been served.
- 7.2 Where a qualified user is located on a stream or canal and has ordered District water for a specified period, and has caused waste of water (a) by failing to take it when agreed, (b) by failing to take it continuously, or (c) by failing to notify the District at least 24 hours in advance of termination of his irrigation if terminated sooner than originally agreed, he shall be charged for the period or periods during which water went to waste as if he had taken water continuously during the agreed period.
- 7.3 Qualified users expecting to divert water on a basis other than 24 hours a day shall make arrangements for adequate storage to hold the requested flow without causing waste. If waste of water occurs as a result of a user's failure to comply, the user will be billed for the total requested and delivered flow regardless of amount diverted. If it can be demonstrated that no waste of water will occur, special written permission may be given to use water non-continuously.

SECTION 8

PERMITTED DIVERSIONS INCLUDE STORAGE

- 8.1 Diversion of District water may include both direct use and the temporary storage of such water for subsequent use.

SECTION 9

INTERRUPTIONS OR IRREGULARITIES IN SCHEDULES

- 9.1 A diligent effort will be made by the District to maintain a reasonably uniform flow in accordance with the schedules set up on the District conduit under its control. Whenever an interruption of service occurs, the District will, with reasonable diligence

SECTION 10

APPLICATION FOR PERMIT

- 10.1 Applicants for permits to divert District water from a natural water course that claim riparian rights to the use of water from such natural water course, shall sign and return to the District an agreement on forms to be supplied by the District. If irrigation is intended the applicant shall indicate thereon among other things the number of acres of each type of crop to be irrigated, the number of such acres for which he claims riparian rights, and the intended rate of diversion.

- 10.2 Applications must be signed by the holder of title to the land on which water is to be used. Applications shall be filed with the District. Applications will be received at any time, but any period used for allowance of a riparian entitlement credit as specified in Section 11 herein shall begin on the first day of the month next following the date of the application.
- 10.3 With the exception of a minimum user as hereinafter defined, an applicant to divert water may sign an application and agreement to divert District water for a period of indefinite term extending beyond the ensuing diversion season and terminable (a) by proper and lawful action of the District or (b) by a notice of termination given the District by the landowner or (c) automatically upon a transfer of title to the subject property; provided, that upon such termination all charges due to the District shall be immediately payable and shall be and remain the obligation of said applicant unless, with the consent of the District, such charges are assumed by the new owner.
- 10.4 An applicant to divert water who is a minimum user as hereinafter defined shall file his application annually.
- 10.5 Where two or more persons divert water from a common pump or diversion works, each must file a separate application for his own land.
- 10.6 Applications requiring application fees must be accompanied by such fees as specified in Section 11.
- 10.7 Applicants shall agree to abide by the decision of the District whenever allocation of water is necessary.
- 10.8 On April 1st or as soon thereafter as reasonably possible, the District will apportion among the qualified applicants the available supply on each District conduit. Delivery schedules will be prepared, based on requested delivery dates and quantities insofar as possible. Where it is impracticable to correlate all requests, rotation schedules will be set up as outlined in Section 9.

SECTION 11

FEES AND CHARGES

- 11.1 An applicant who is a minimum user as hereafter defined shall pay a minimum charge to the District at the time of filing his annual application as aforesaid. The charge shall be established by the District in each year for the ensuing water year.
- 11.2 Other applicants will pay a charge based on the applicant's diversion of District water at a rate per acre-foot which shall be established by the Board in each year for the ensuing water year. The charge so made shall be computed and paid as follows:
- (a) On or after January 1st in each water year, the District will determine the amount of water applicant has diverted hereunder between July 1st and December 31st and on or after July 1st in each water year, the District will determine the amount of water applicant has diverted hereunder between January 1st and June 30. If on

December 31st it is determined that the amount of water applicant has used during the first period falls within the definition of “minimum use” as hereinafter defined, an invoice will not be issued until the end of the second period (June 30th). When economically practical, the District will meter diverted surface water. The determination of unmetered surface water will be consistent wherever practicable with methods used to determine unmetered groundwater. In the case of a surface water diversion facility to which no meter is attached, the production will be determined by a method reasonably available to the District and most likely to be accurate. The acceptable methods of determining such production graded as to preference from highest to lowest are as follows:

1. By use of an efficiency or flow test determining the rate of diversion of the facility together with a device which accurately records the duration of operation of the facility within the reporting period.
2. By use of an efficiency or flow test determining the kilowatt hours of electrical power necessary to produce an acre-foot or other quantity of water together with a device that accurately records the consumption of kilowatt hours within the reporting period.
3. By use of standard methods of measuring irrigation water together with total hours of diversion to determine total consumption for the reporting period.
4. By reference to a crop factor, being the average or normal irrigation requirements per acre of the crop or crops irrigated by the facility in question, as shown in the current “Table of Water Factors” as adopted by Resolution of the Board.
5. By special agreement between the applicant and the District.

The number of acre-feet so found will be multiplied by the established rate. The applicant will be billed for the amount due less any credit due applicant on account of his diversion of water from a natural water course to which he has an entitlement, as hereinafter described. The user will pay that charge for water which is either calculated upon his diversion or is the minimum charge, whichever is greater. If the amount due is not paid within thirty (30) days of billing, no further water delivery shall be made until the same is paid. Withholding of water will be in addition to any other lawful right of collection by the District of the same due, or assessment of interest and penalties thereon.

- (b) If any user shall fail to pay the amount found due within thirty (30) days of billing, the District shall make a late charge at the rate of one percent (1%) each month on the delinquent amount.
- (c) Should any person divert District water contrary to this Resolution, the District shall, in addition to making the late charge provided herein, assess a penalty charge against such person in an amount of Fifty Dollars (\$50.00) or ten percent (10%) of the amount found by the District to be due, whichever shall be greater.

- (d) Applicants for permits to divert District water from a natural water course that claim prior rights to the use of water from such natural water course shall be permitted an entitlement as found by the District. Such an entitlement is the amount of water an applicant may divert without charge from the natural flow of a stream, defined as the flow which would have occurred therein as to both time and quantity in the absence of storage or importation. The amount is the portion of the natural flow the applicant could divert to beneficial use without waste and subject to the prior or correlative rights of all others.
- (e) In the case of claimed riparian rights for other than an irrigation use, the District will determine and compute applicant's riparian entitlement upon the basis of availability of natural flow therefore. In the case of claimed riparian rights for irrigation, the District will determine and compute applicant's riparian entitlement in terms of a percentage of the natural flow by dividing the total riparian irrigated acreage on the stream into applicant's riparian irrigated acreage. This is expressed in the following:

$$Er = Aa/At \times 100$$

Er = riparian entitlement, or percentage of natural flow to which applicant is entitled,

Aa = applicant's irrigated riparian acreage

At = total irrigated riparian acreage on stream for application period.

- (f) Anything herein to the contrary notwithstanding, the District can give no credit for an entitlement if in fact and without the fault of the District natural flow of the stream did not reach the applicant's point of diversion.
 - (g) To obtain a riparian entitlement credit, a qualified user shall maintain an accurate log of diversion periods which shall be available to the District upon request.
- 11.3 Where a pumping plant or plants have been constructed by either the District or a group of users and are operated by said District or a group of users and are operated by said District, each applicant shall assume his share of the pumping costs, as determined by the District, when the plant is used for pumping water for applicant's use.
- 11.4 Annually the Board shall set a minimum fee, payable in advance for the water year, or any part thereof, for any active facility diverting District water by a minimum user. A minimum user is defined as a user who diverts District water for use,
- (a) which does not exceed one-half (1/2) acre of irrigated land, or
 - (b) whose diversion in each water year does not exceed three-quarters of one acre-foot.
- The District shall have the option to require such user to pay at the regular established rate, if, upon investigation, it is determined that the water user would produce a greater amount of revenue than the minimum fee.
- 11.5 Maintaining adequate flows to qualified users may cause some waste of water attributable

to the surface water program as a whole. When such waste can be determined, the cost thereof will be apportioned among qualified users, excluding minimum users, in the proportion to their diversion. This apportionment will be charged at the appropriate unit cost for water and will be included in the billing for the six-month period.

- 11.6 Any protest regarding quantities of water diverted and charges made shall be made within fifteen (15) days following mailing of the invoice in question. Such protest, unless resolved by the Operations Branch, shall be made to the Board of Directors who shall, upon notice to the protester, hear and determine the same.

SECTION 12

REFUNDS

- 12.1 No refund or any other monetary adjustment will be made in the event of shortage in delivery.

SECTION 13

DISTRICT CONTROL OF DIVERSION AND ACCESS TO LAND AND DITCHES

- 13.1 An applicant proposing to divert water by pumping shall provide a means of locking pump, which means is acceptable to the District. The lock to be used shall be a District lock.
- 13.2 An applicant proposing to divert without pumping shall install a suitable headgate or other device acceptable to the District which can be locked by a District lock.
- 13.3 Employees and agents of the District shall have access at all times to all lands irrigated with District water, and to all lands irrigated with District water, and to all diversion devices or structures, and to all streams, creeks, or conduits for the purpose of inspection, examination, measurement, survey or other necessary purposes of the District. The District shall have the right to install, maintain and examine a measuring device upon an applicant's line used for diversion of District water.

SECTION 14

MAINTENANCE AND OPERATION OF DISTRICT CONDUITS

- 14.1 The maintenance and operation of all conduits belonging to the District shall be exclusively the responsibility of the District. No person shall be allowed to make any changes whatever in the flow of water in these conduits except when specifically authorized to do so by an employee or an authorized agent of the District.
- 14.2 No person shall be allowed to make any opening in, cut, plow down or otherwise interfere with or weaken any canal or ditch bank, or cut, tap or in any way interfere with any pipeline or another conduit of the District, unless specific authority has been granted

in writing by the District.

- 14.3 The maintenance and operation of all conduits, pumping plants or other diversion facilities belonging to private parties shall be the exclusive responsibility of the owner. The District will not maintain or operate any such diversion facility where such facility is used for private purposes.
- 14.4 Private diversion facilities shall be so maintained that they do not unnecessarily waste water. The District shall be permitted to inspect and examine such facilities and if, upon examination, it is found that they will unnecessarily waste water, the District may refuse to permit the diversion of District water until the required repairs are made.
- 14.5 No structures of any kind shall be placed in, on, across or over any conduit of the District by any landowner or water user except those facilities approved in writing both as to location and character of construction, by the District.

SECTION 15

RIGHTS OF WAY

- 15.1 No buildings, corrals or other structures will be permitted on any District right of way without written permission of the District. Use of such rights of way for pasturing, grazing, or other agricultural purposes by adjoining property owners shall be subject to District's superior right to use this land for the purpose or purposes for which such right of way was acquired.

SECTION 16

WATER RIGHTS

- 16.1 The District, in the administration of these Rules and Regulations, shall not interfere with any established water rights. The District does, however, exercise complete control over waters delivered into District conduits or which have been stored in District reservoirs and subsequently released and the District expressly asserts the right to recapture and release and/or reuse all waters which pass from the premises in which it was alleged they were to be used.
- 16.2 No user who diverts water from the District acquires any proprietary right therein by reason of such diversion or use, nor does such user acquire any right to sell such water, nor to divert it for use on premises other than those indicated on his application.

SECTION 17

ABATEMENT OF NUISANCE

- 17.1 No material or substance that will become offensive to the senses or injurious to health or injuriously affect the quality of the water, or obstruct the flow of water, or result in the scattering of seeds of noxious weeds, plants, or grasses, shall be placed or dumped in or along any conduit or reservoir, or be placed or left so it could by any means be deposited

in any conduit or reservoir. Any violation of this Section will subject the offender to prosecution. All employees of the District will promptly report any violation of this Section. The property owners within the District are especially urged to cooperate in its enforcement.

SECTION 18

NON-LIABILITY OF DISTRICT

- 18.1 The District will not be liable for any damage of any kind or nature resulting directly or indirectly from the use of any privately-owned conduit or diversion facility, or the water flowing therein, or by reason of lack of capacity therein or for negligent, wasteful or other use or handling of water by the users hereof.
- 18.2 All water furnished by the District flows through many miles of open creek channels, canals, ditches or pipelines and is therefore subject to pollution, shortage, fluctuation in flow, and interruption in service. District employees are forbidden to make any agreements binding the District to serve an uninterrupted, constant flow of water. All water furnished by the District will be for a use or uses specified in the application and every user putting the water to other uses does so at his own risk and by doing so assumes all liability for, and agrees to hold the District and its officers and employees free and harmless from liability and damages that may occur as a result of defective water quality, shortages, fluctuation in flow, and interruptions in service.
- 18.3 The District will not be liable for the quality of water, shortage of water either temporary or permanent, or for failure to delivery such water.
- 18.4 Diverting by users of District water is done at the user's risk and the District assumes no liability for damages to pumping equipment or other damages as a result of turbulent water or shortage or excess of water, or other causes.
- 18.5 The District assumes no liability for damages to persons or property occasioned through defective conduits or other works.

SECTION 19

UNAUTHORIZED TAKING OF WATER OR INTERFERENCE WITH REGULATION OF WATER

- 19.1 It is contrary to these Rules and Regulations for any qualified user to divert more water than he has applied for by making an opening in any District conduit, or by tampering with any control gate, box valve, measuring device or structure diverting water from any District stream, creek, or conduit, or by inserting any pipe, hose, pump or other diverting device into any District conduit or any stream or creek in which District water is flowing, or causing the same to be done without consent of the District.
- 19.2 It is also contrary to these Rules and Regulations for anyone who has not fulfilled the prescribed requirement for a qualified user to divert District water by any means from a stream, creek or conduit.

- 19.3 It is also contrary to these Rules and Regulations for anyone to divert water which he has received for lands within the District to any lands outside the District's boundaries.
- 19.4 Anyone found violating the terms of this Section or of Sections 14.1 or 14.2 hereof shall be liable to criminal prosecution and, upon order of the General Manager, shall forfeit his right to take District water for the balance of that water year, or to take District water for the balance of that water year, or both such forfeitures. Upon any such order imposing forfeiture of right to divert District water, the recipient may appeal the same to the Board which shall hear the appeal at its next regular meeting. At such hearing or at any time to which such hearing shall be regularly continued, the Board shall grant or deny the appeal and shall impose such forfeiture, if any, as it shall decide upon; provided, however, that any forfeiture so imposed shall not exceed suspension of the right to divert District water for a period beyond the next succeeding water year.
- 19.5 Anyone not a qualified user who has violated the terms of this Section and who thereafter seeks to become a qualified user shall not be deemed an eligible applicant therefore unless he shall first have paid to the District all such fees, together with such interest and penalties, as he would have paid had he been a qualified user hereunder at the time of such violation.

SECTION 20

WASTE OF WATER

- 20.1 A qualified user who wastes water, either willfully, carelessly, or due to defective or inadequate, privately owned conduits, pumps, or other facilities and/or structures, or due to inadequate preparation of the land for irrigation, may be refused permission to divert District water until the conditions are remedied. The provisions of Section 7.1 will then apply to determine when water can be delivered.

SECTION 21

REPEAL OF CONFLICTING RESOLUTIONS

- 21.1 All resolutions or parts of resolutions inconsistent with the provisions thereof are hereby repealed.

SECTION 22

VALIDITY

- 22.1 If any provision of this Resolution or the application thereof to any person or circumstance is held invalid, the remainder of the Resolution and the application of such provision to other persons or circumstances shall not be affected thereby.

SOURCE: Resolution No. 74-28 heretofore adopted by the Board of Directors of Santa Clara Valley Water District on April 2, 1974. (Effective July 1, 1974)

- | | |
|--------------------|---|
| Policy EL-5 | With respect to purchasing and contracts activities, use a fair, open and expeditious process and stay within the Board's authorized expenditures.
Further a BAO shall: |
| 5.1 | Not make a single purchase, contract, 3 rd party claim settlement of liability, or any other financial commitment in amounts greater than the following, unless authorized by the Board. |
| 5.1.6 | For Imported Water Management Contracts – No limit; the CEO will inform the Board on a timely basis of Imported Water Management Contracts executed |

Resolutions

BOARD OF DIRECTORS SANTA CLARA VALLEY WATER DISTRICT

RESOLUTION NO. 14- 52

DETERMINING RAW AND TREATED SURFACE WATER CHARGES FOR WATER YEAR 2014-2015

WHEREAS, the Board of Directors of the Santa Clara Valley Water District does find and declare as follows:

1. That pursuant to Section 26.5 of the Santa Clara Valley Water District Act ("District Act"), a written report detailing the District's activities in the protection and augmentation of the water supplies of the District, including a recommendation as to charges for surface water that should be imposed in any zones W-2 and W-5 of the District during the ensuing fiscal year;
2. That on February 21, 2014, written notice was mailed to all owners and operators of water-producing facilities within the District's boundaries, advising of the proposed raw surface water charge rates to be levied, and of the opportunities to be heard concerning such charges, including the right to file a written protest objecting to any applicable proposed increase;
3. That pursuant to Section 26.6 of the District Act, on the 10th day of April 2014, at 7 p.m. in the Gilroy City Council Chamber located at 7351 Rosanna Street, Gilroy, a public hearing upon said report was duly commenced and was continued for further hearing to the evening of April 22, 2014 (in San Jose), whereupon the hearing was closed;
4. That during said public hearing, additional information and evidence was provided that was considered by the Board in making this decision;
5. That the charges established by this resolution are for the purpose of paying the cost of constructing, maintaining and operating facilities to import water into the District, paying the cost of purchasing imported water, paying the cost of constructing, maintaining and operating facilities for groundwater recharge, surface distribution, and the purification and treatment of water, and paying the principal and interest of any bonded indebtedness or other financial obligations of the District incurred for those purposes;
6. The record owners of water producing facilities were given the opportunity to file a written protest objecting to the proposed raw surface water charge increase;
7. That this Board considered all protests objecting to the proposed raw surface water charge increases for Zones W-2 and W-5, respectively, and after the close of the hearing determined that written protests were not received from more than 50 percent of the record owners of surface water facilities in either Zone W2 or Zone W5; and
8. That CEQA does not apply to approval of these charges pursuant to statutory exemption California Code of Regulations Title 14, Chapter 3, Section 15273 because, as identified in the District's annual report on the protection and augmentation of the water supplies of the District, the charges are expressly made for the purpose of:

Resolutions

Determining Raw and Treated Surface Water Charges for Water Year 2014-2015

Resolution No. 14-52

- a. Meeting operating expenses, including employee wage rates and fringe benefits,
- b. Purchasing or leasing supplies, equipment or materials,
- c. Meeting financial reserve needs, and
- d. Obtaining funds for capital projects necessary to maintain service within existing service areas.

NOW THEREFORE, BE IT RESOLVED by the Board of Directors of Santa Clara Valley Water District that, subject to the provisions of a minimum charge as set forth in Item 5 below, the charges to be applied in water year 2014-2015 (July 1, 2014–June 30, 2015) for surface-delivered water of the District, for District watermaster service and, where applicable for capital cost repayment, and the area within which such charges shall be applied will be as follows:

1. The Basic User Charge per acre-foot for raw surface-delivered water in Zone W-2 is:

Water Other Than Agricultural	Agricultural Water
\$747.00	\$19.14

2. The Basic User Charge per acre-foot for raw surface-delivered water in Zone W-5 is:

Water Other Than Agricultural	Agricultural Water
\$319.00	\$19.14

3. The charge for watermaster service throughout the District whether such service is for agricultural water or for water other than agricultural water shall be \$18.60 per acre-foot.
4. The minimum charge for water other than agricultural water in Zone W-2 shall be \$560.25 per water year or part thereof, and in Zone W-5 shall be \$239.25 per water year or part thereof; and
5. The minimum charge for agricultural water in Zone W-2 shall be \$14.35 per water year or part thereof, and in Zone W-5 shall be \$14.35 per water year or part thereof; and
6. Charges (including minimum charges) per acre-foot for surface water delivered to users in the District outside of either Zone W-2 or Zone W-5 shall be the same as those imposed within the zone to which the user's turnout is most nearly located.

Attachment C
Measurement Device Documentation
Not Applicable

Attachment D
District Sample Bills

Santa Clara Valley Water District SM

Remit Address:
PO BOX 20130
San Jose, CA 95160-0130
(408) 630-2770



WATER PRODUCTION STATEMENT

Account #: 195
APN: 77907037

Office Address:
5750 Almaden Expy
San Jose, CA 95118-3606
Phone #: (408) 630-2770
Fax #: (408) 979-5620
Email: waterrevenue@valleywater.org

Page 1 of 7

DO NOT WRITE IN THIS SPACE



DO NOT
WRITE IN THIS
SPACE

STATEMENT PERIOD

01/01/2017 - 06/30/2017

STATEMENT NO.

GS102448

DUE DATE

07/31/2017

SAMPLE

LINE	WELL ID#	DISTRICT WELL NUMBER	METER NUMBER	WATER METER READING		UOM	MULTIPLIER	METERED WATER PRODUCTION (AF)
				BEGIN	END			
1		10S03E02N008					0	

Total 0.000

STATEMENT TOTAL (If filed and/or paid after due date, complete lines 7 and 8)

1. Total Metered:	AF	6. Total Water Usage Cost:	
2. Total Unmetered:	AF	* 7. Penalty 10% of Line 6:	
3. TOTAL Production:	AF	* 8. Interest 1% of Line 6:	
4. Non-Agricultural:	AF x \$393.00 =	9. TOTAL AMOUNT DUE:	
5. Agricultural:	AF x \$23.59 =		

PLEASE ATTACH A SEPARATE WORKSHEET SHOWING CALCULATIONS FOR UNMETERED WATER.

FOR OFFICE USE ONLY

I declare under penalty of perjury that the statements made and figures shown on this water production statement and on any accompanying worksheets or statements to this water production statement have been examined by me and to the best of my knowledge and belief are true and correct.

AMOUNT PAID \$	CASHIER	POSTED
AMOUNT PAID \$	CASHIER	POSTED

SIGNATURE AND TITLE

DATE

INVOICE NUMBER

X

A-35

GS102448

AGRICULTURAL USE ONLY

WORKSHEET A

WORKSHEET A INSTRUCTIONS

TABLE OF APPLIED WATER FACTORS – USE ONLY FOR CROP FACTOR METHOD

If you report groundwater production using the Table of Applied Water Factors, the amount you owe is fixed for the calendar year on a per crop basis. You must report and pay the Semi-Annual Crop Factor in both the first and second reporting periods when you irrigate in the spring or if you irrigate both in the spring and the fall. If you only irrigate in the fall, and you do not report in semi-annual installments, then you owe 2 times the Semi-Annual Crop Factor for the second reporting period, for a crop brought to harvest within that calendar year.

If you determine production using a water meter or Worksheet A, and the water used was 100% agricultural, complete the "CROP TYPE" and "ACRES CULTIVATED" sections. Otherwise, complete all sections of this worksheet to calculate acre-feet.

LINE 1 To determine the total amount of agricultural water used, include any and all water used by the well owner or operator plus any water sold to others during the reporting period. The table must be used to calculate all crop production.

LINE 2 Livestock Water Use: Enter the appropriate number of units and multiply by the Water Use Factor to determine Number of Gallons. Divide the Number of Gallons by 325,850 to determine Acre Feet.

LINE 3 Add all totals of Acre Feet and enter here.

CROP TYPE	SEMI-ANNUAL CROP FACTOR	CROP TYPE	SEMI-ANNUAL CROP FACTOR
Alfalfa	1.25	Mushrooms	1.50
Apples	1.46	Nectarines	1.53
Apricots	1.53	Onions, Dry	0.49
Artichokes, Globe	0.94	Onions, Green	0.49
Asian Vegetables *	0.50	Orchard (Mixed)	1.46
Asparagus	0.94	Ornamental Plants	0.65
Barley	0.34	Pasture (Hay)	1.48
Beans (Bush)	0.95	Peaches	1.53
Beans (Fresh)	0.94	Pears	1.46
Berries (Bushberries)	1.00	Pears (Prickly)	1.46
Broccoli	0.94	Peas	0.94
Brussel Sprouts	0.94	Peppers	1.27
Cabbage	1.08	Persimmons	0.85
Carrots	0.94	Plums	1.46
Cauliflower	0.94	Potatoes	1.13
Celery	0.88	Prunes	1.46
Cherries	1.46	Pumpkins	0.94
Christmas Trees	0.60	Rose Bushes	2.75
Corn (Silage)	0.84	Row Crop, Mixed	0.94
Corn (Sweet)	0.84	Safflower	1.05
Cucumbers	0.94	Sod	0.75
Eucalyptus	0.47	Spinach & Salad Greens **	0.46
Flowers (Cut)	0.88	Squash	0.94
Flowers (Seed)	1.00	Strawberries	1.00
Garlic	0.49	Sugar Beets	1.44
Grain	0.34	Sunflower	1.08
Herbs (Indoor)	1.85	Tomatoes (Bush)	0.89
Herbs (Outdoor)	1.20	Tomatoes (Pole)	0.66
Jobba	0.47	Vineyards (Grapes)	0.50
Kiwi	0.47	Walnuts	1.49
Lettuce	1.08	Wheat	0.34
Melons	0.94		

Table of Average Uses was approved by the Santa Clara Valley Water District Board of Directors on 09/22/2015.

*Asian vegetables include nappa cabbage, bok choy, gai choy, gai lon, kohlrabi.

**Salad greens include arugula, mustard, radicchio and swiss chard.

1. AGRICULTURAL WATER USE	CROP TYPE				NO. OF ACRES	SEMI-ANNUAL CROP FACTOR (Above)	ACRE FEET
						x	=
						x	=
						x	=
						x	=
						x	=
						x	=
						x	=
2. LIVESTOCK WATER USE	TYPE OF USE	UNIT	NO. OF	WATER USE FACTOR	NO. OF GALLONS	CONVERSION FACTOR	ACRE FEET
	Chicken Ranches (100/Unit)		x	883.20 =	/	325,850 =	
	Livestock Drinking Water		x	2,760.00 =	/	325,850 =	
	Dairy Farm		x	850.00 =	/	325,850 =	
3. TOTAL AGRICULTURAL ACRE FEET							

THIS WORKSHEET MUST BE COMPLETED AND RETURNED IF YOU CLAIM THE AGRICULTURAL RATE

NON-AGRICULTURAL USE
DOMESTIC USE ONLY

Table of Average
Water Use Method

WORKSHEET B

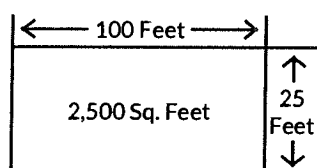
WORKSHEET B INSTRUCTIONS

LINE 1 **Table of Average Water Use:** Water usage is divided into four categories: inside use, watered land, livestock, and farm workers.

INSIDE WATER USE – Water used for household purposes. Usage (AF) is determined by multiplying the number of persons by the factor.

WATERED LAND – Water used for irrigation of lawn, flowers, shrubs, trees, family gardens and pasture for domestic livestock. Usage (AF) is determined by multiplying the number of Land Units by the factor. A Land Unit is 100 square feet, one acre is 435.6 Land Units.

EXAMPLE: Determine Land Units by multiplying the length of the irrigated land (in feet) by the width (in feet) and then divide by 100.



A) $100 \text{ Feet} \times 25 \text{ Feet} = 2,500 \text{ Square Feet}$

B) $\frac{2,500 \text{ Square Feet}}{100} = 25 \text{ Land Units}$

LIVESTOCK—Water used for domestic animals such as horses, cattle, sheep or goats, raised for home use. Usage (AF) is determined by multiplying the number of livestock by the factor.

FARM WORKERS—Water used for farm workers. Usage (AF) is determined by multiplying the number of farm workers by the factor.

LINE 2 **Total AF (acre feet):** Total each column of AF.

LINE 3 **Add all totals of AF from Line 2 and enter here.**

1.	INSIDE WATER USE			WATERED LAND			LIVESTOCK			FARM WORKERS		
	NO. OF PERSONS	FACTOR	AF	NO. OF LAND UNITS	FACTOR	AF	NO. OF LIVESTOCK	FACTOR	AF	NO. OF WORKERS	FACTOR	AF
RESIDENCE 1	x	.04	=	x	.004	=	x	.01	=	x	.02	=
RESIDENCE 2	x	.04	=	x	.004	=	x	.01	=	x	.02	=
RESIDENCE 3	x	.04	=	x	.004	=	x	.01	=	x	.02	=
RESIDENCE 4	x	.04	=	x	.004	=	x	.01	=	x	.02	=
RESIDENCE 5	x	.04	=	x	.004	=	x	.01	=	x	.02	=
2. Total AF	TOTAL			TOTAL			TOTAL			TOTAL		
3. TOTAL DOMESTIC ACRE FEET												

THIS WORKSHEET MUST BE COMPLETED AND RETURNED IF IT IS USED TO DETERMINE PRODUCTION

UNIT CONSUMPTION METHOD

MUNICIPAL AND INDUSTRIAL
USE ONLY

WORKSHEET C
WORKSHEET C INSTRUCTIONS

LINE 1 Calculate inside water use, if any, by filling in the table for your type of business activities that are listed here.

LINE 2 Add all gallon totals and enter into box on Line 2.

LINE 3 Convert gallons to acre feet by dividing Line 2 total by 325,850 and enter into box on Line 3.

LINE 4 Calculate outside water use, if any, by filling in the table for your type of business activities that are listed here.

LINE 5 Add all acre feet totals and enter into box on Line 5.

LINE 6 Add Line 3 and Line 5 and enter into box on Line 6.

1. Calculate inside water use by completing the following table.

TYPE OF BUSINESS ACTIVITY	UNIT	NO. OF UNITS	NO. OF DAYS	WATER USE FACTOR	GALLONS
Livestock Drinking Water	Head		N/A	x	2,760 =
Kennel	Gallon		N/A	x	=
Church/Meeting Hall	Person	x		x	20 =
Laundromat	Washing Machine		N/A	x	23,000 =
Motel/Hotel	Room		N/A	x	16,000 =
Office Building	Office		N/A	x	9,650 =
Manufacturing Plant	Employee	x		x	50 =
Restaurant	Seat		N/A	x	2,850 =
Service Station	Service Station		N/A	x	87,500 =
Store	Square Foot		N/A	x	13 =
Mobile Home Park	Resident		N/A	x	9,200 =
Elementary School	Student	x		x	20 =
Junior/Senior High School	Student	x		x	40 =
Other		x		x	=

2. Enter total number of gallons here. GA

3. Convert gallons to acre feet by dividing total number of gallons by 325,850. AF

4. Calculate total water use for each applicable business activity by completing the following table.

TYPE OF BUSINESS ACTIVITY	UNIT	NO. OF UNITS	WATER USE FACTOR	ACRE-FEET
Parks and Golf Courses—Gross Acreage	Acre		x	1.25 =
Parks and Golf Courses—Net Watered Area	Acre		x	1.75 =
Watered Land—Non-Agricultural	Acre		x	1.25 =
Watered Land—Non-Agricultural	(capacity in acre feet)			

5. Enter total number of acre-feet here.

6. TOTAL MUNICIPAL AND INDUSTRIAL ACRE FEET (ADD LINES 3 AND 5)

THIS WORKSHEET MUST BE COMPLETED AND RETURNED IF IT IS USED TO DETERMINE PRODUCTION

SEMI-ANNUAL WATER PRODUCTION STATEMENT INSTRUCTIONS

WORKSHEETS AND APPLIED WATER FACTORS

Page 5 of 7

The owner of the parcel of land upon which a water-producing facility is located is responsible for filing the water production statement and paying the resultant charges. If no water was produced, the statement must be filed stating "NO PRODUCTION" until such time as the water-producing facility is permanently abandoned.

REQUIREMENTS OF STATE LAW

- A. If any owner or operator of a water producing facility fails to file the water production statement by the due date, the District shall assess a penalty charge against the owner or operator in the amount of ten percent (10%) of the amount found due by the District. In addition to assessing a penalty charge, the District shall assess an administrative charge to recover the costs of collection.

An owner or operator who is assessed penalty and administrative charges may petition the District in writing for reduction or waiver thereof, specifying the excusable or justifiable circumstances grounding the petition. The written petition must be received by the District within 15 days of the receipt by the owner or operator of the notice of assessment.

- B. If any owner or operator of a water-producing facility fails to pay the groundwater charge by the due date, the District shall charge interest at the rate of one percent (1%) each month the payment is past due. There is no provision under state law whereby the interest charge can be waived.
- C. If the District has probable cause to believe that the production of water from any water-producing facility is in excess of the amount disclosed on the sworn statements

filed, or if no statements are filed for such facility, the District may fix the amount of water production at an amount not to exceed the maximum production for such facility.

DEFINITIONS

- A. COMPLETED STATEMENT — A statement filed with the District that:
1. Was calculated using the correct reporting method.
 2. Was signed under penalty of perjury by the owner or an authorized representative.
 3. Was accompanied by all necessary worksheets relating to the method of calculation and agricultural rate.
- B. FINAL FILING DATE (imprinted on statement) — The date statement must be filed with the District or postmarked on or before midnight.
- C. AGRICULTURAL WATER — Water primarily used in the commercial production of agricultural crops or livestock.
- D. NON-AGRICULTURAL WATER — All water that does not qualify as agricultural water.
- E. AGRICULTURAL RATE — To qualify for the agricultural rate, the production must fulfill all the requirements of the agricultural water definition and be supported by a completed Worksheet A.
- F. PERMANENT ABANDONMENT — A permanently abandoned well is a well that has been properly sealed in accordance with District Ordinance 90-1.

REPORTING METHODS

WATER METER

If there's a water meter installed, the recorded production must be used as the basis for computing water production. If all or part of the metered water was used for agricultural purposes, you must complete Worksheet A.

Do not attempt any maintenance, lubrication, repair or adjustment of the water meter.

If your meter does not register, has any broken seals, is leaking or does not appear to be operating properly, immediately report the condition to the Revenue Management Unit by calling (408) 630-2770. Notify the District if it becomes necessary to move the meter to change your pump or piping arrangement.

A lock and key is furnished for each meter. Please keep the cover plate locked to avoid damage to the register head. If your key should become lost, record the well number and lock number and request a replacement key from the District.

HOOR METER

A correlation based on a recording device used to record the actual accrued time the pump was in operation and a valid output flow check. Use page 1 to calculate water production.

EFFICIENCY TEST

A correlation based on kilowatt hours required to pump an acre foot of water based upon a pump test. Use page 1 to calculate water production.

POWER METER

A correlation based on power consumption divided by total head (drawdown in feet to the standing depth to water in the well plus the calculated change from pressure head to feet). Use page 1 to calculate water production.

TABLES OF AVERAGE USES

Production of each type of usage must be determined from tables. Use Worksheets A, B, and/or C to calculate production.

All worksheets used in the determination of production must be filed with the water production statement. Ending water, hour, and power meter readings may be obtained by calling the Revenue Management Unit at (408) 630-2770.

If your usage is determined by a meter, please verify the pre-printed reads. If you agree, please calculate the cost.

If you prefer to use your own reads, update page 1.

- Enter your current meter reading in the **END WATER METER READING** exactly as the meter reads, being certain to place the decimal point correctly. If not already pre-printed for you, enter the ending water meter reading from your last water meter production statement in the column **BEGIN WATER METER READING**.
- Subtract the **BEGIN** reading from the **END** reading to arrive at the remainder.
- If your meter reads in acre feet, the remainder is the metered production.
- If your meter reads in gallons, multiply the remainder by the multiplier shown and divide the results by 325,850 to determine acre feet.
- If your meter reads in cubic feet, multiply the remainder by the multiplier shown and divide the results by 43,560 to determine acre feet.
- Production from any meter which may have been removed from this well during the reporting period and/or correlated production for any unmetered production will appear with the pre-calculated acre-feet (AF).
- If you have additional production from a removed meter, Add Acre Feet from Total Metered/Correlated Production.

On bottom portion of the water production statement where it reads (STATEMENT TOTAL) enter the Metered Water Production (AF) on

Line 1 Total Metered (Please round the total Water Production (AF) to the second decimal place before multiplying by the appropriate rate).

If applicable, please refer to the section below to determine how to divide metered production between non-agricultural and agricultural usage.

Line 4 Non-Agricultural Enter non-agricultural water use, multiply by the rate and enter the result on that line.

Line 5 Agricultural Enter agricultural water use, multiply by the rate and enter the result on that line.

Line 6 Add the WATER USAGE COST for lines 4 and 5, then enter the result on the TOTAL WATER USAGE COST line.

IF STATEMENT IS FILED AND/OR PAID AFTER THE DUE DATE, COMPLETE LINES 7 AND 8.

Line 7 Multiply Total Water Usage Cost by .10 (10%).

Line 8 Multiply Total Water Usage Cost by .01 (1%) for each month or portion of a month payment is past due.

Line 9 Add Lines 6, 7, and 8 to determine Total Amount Due. **Sign, date and return with payment and completed worksheets.**

NOTE: In addition to late charges, a \$30.00 administrative fee will be assessed if statement is not filed.

INSTRUCTIONS FOR DIVIDING AGRICULTURAL AND NON-AGRICULTURAL USAGE WHEN PRODUCTION IS DETERMINED BY WATER METER READING

A. If the water production metered or calculated used 100% for AGRICULTURAL:

- Complete the "CROP TYPE" and "NO. OF ACRES" sections of Worksheet A.
- Enter the total acre feet from Line 3, Worksheet A on Statement Line 5 of the first page Statement.

B. If the water production metered or calculated using Worksheet A was used 100% for NON-AGRICULTURAL:

- Enter the total acre feet on Statement Line 4.

C. If the total metered water produced was used in a combination of ways and the least amount of water used was:

- Agricultural then complete Worksheet A.
- Domestic then complete Worksheet B.
- Municipal and Industrial then complete Worksheet C.

D. Enter total metered water here

AF

E. Enter the least amount of your water production from the worksheet(s) used on Line C above

AF

If the water use shown by the amount on Line E is:

- Agricultural — Enter this amount on the Water Production Statement on Line 5.
- Non-Agricultural — Enter this amount on the Water Production Statement on Line 4.

F. Subtract the amount on Line E above from the amount on Line D above and enter here

AF

- If the amount on Line F is agricultural water, enter this amount on the Water Production Statement on Line 5.
- If the amount on Line F is non-agricultural water, enter this amount on the Water Production Statement on Line 4.

INCORRECT FACTORS PRINTED ON THE DOMESTIC WORKSHEET.

PLEASE COMPLETE THIS CARD AND REPLACE YOUR WORKSHEET B WITH IT.

THANK YOU.

1.	INSIDE WATER USE			WATERED LAND			LIVESTOCK			FARM WORKERS		
	NO. OF PERSONS	FACTOR	AF	NO. OF LAND UNITS	FACTOR	AF	NO. OF LIVESTOCK	FACTOR	AF	NO. OF WORKERS	FACTOR	AF
RESIDENCE 1	x	.08	=	x	.008	=	x	.01	=	x	.04	=
RESIDENCE 2	x	.08	=	x	.008	=	x	.01	=	x	.04	=
RESIDENCE 3	x	.08	=	x	.008	=	x	.01	=	x	.04	=
RESIDENCE 4	x	.08	=	x	.008	=	x	.01	=	x	.04	=
RESIDENCE 5	x	.08	=	x	.008	=	x	.01	=	x	.04	=
2. Total AF	TOTAL			TOTAL			TOTAL			TOTAL		
3. TOTAL DOMESTIC ACRE FEET												

Santa Clara Valley Water District

Remit Address:
PO BOX 20130
San Jose, CA 95160-0130
(408) 630-2770




WATER PRODUCTION STATEMENT

Account #: 4236
APN: 82512037

Office Address:
5750 Almaden Expy
San Jose, CA 95118-3606
Phone #: (408) 630-2770
Fax #: (408) 979-5620
Email: waterrevenue@valleywater.org

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DO NOT WRITE IN THIS SPACE	
	
DO NOT WRITE IN THIS SPACE	
STATEMENT PERIOD 01/01/2017 - 06/30/2017	
STATEMENT NO. GS102822	DUE DATE 07/31/2017

LINE	WELL ID#	DISTRICT WELL NUMBER	METER NUMBER	WATER METER READING		UOM	MULTIPLIER	METERED WATER PRODUCTION (AF)
				BEGIN	END			
1		10S03E12J005					0	
Total								0.000

STATEMENT TOTAL (If filed and/or paid after due date, complete lines 7 and 8)			
1. Total Metered:	<u> </u> AF	6. Total Water Usage Cost:	<u>88.70</u>
2. Total Unmetered:	<u> </u> AF	* 7. Penalty 10% of Line 6:	<u>0</u>
3. TOTAL Production:	<u> </u> AF	* 8. Interest 1% of Line 6:	<u>0</u>
4. Non-Agricultural:	<u>.22</u> AF x \$393.00 = <u>86.46</u>	9. TOTAL AMOUNT DUE:	<u>88.70</u>
5. Agricultural:	<u>.195</u> AF x \$23.59 = <u>4.58</u>		

PLEASE ATTACH A SEPARATE WORKSHEET SHOWING CALCULATIONS FOR UNMETERED WATER.		FOR OFFICE USE ONLY	
I declare under penalty of perjury that the statements made and figures shown on this water production statement and on any accompanying worksheets or statements to this water production statement have been examined by me and to the best of my knowledge and belief are true and correct.		AMOUNT PAID \$ <u>88.70</u>	CASHIER POSTED <u>Re</u> <u>7.11.17</u>
		AMOUNT PAID \$	CASHIER POSTED

WORKSHEET B

WORKSHEET B INSTRUCTIONS

NON-AGRICULTURAL USE
DOMESTIC USE ONLY

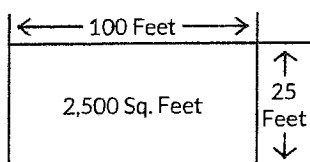
Table of Average Water Use Method

LINE 1 **Table of Average Water Use:** Water usage is divided into four categories: inside use, watered land, livestock, and farm workers.

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EXAMPLE: Determine Land Units by multiplying the length of the irrigated land (in feet) by the width (in feet) and then divide by 100.



A) $100 \text{ Feet} \times 25 \text{ Feet} = 2,500 \text{ Square Feet}$

B) $\frac{2,500 \text{ Square Feet}}{100} = 25 \text{ Land Units}$

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FARM WORKERS—Water used for farm workers. Usage (AF) is determined by multiplying the number of farm workers by the factor.

LINE 2 Total AF (acre feet): Total each column of AF.

LINE 3 Add all totals of AF from Line 2 and enter here.

1.	INSIDE WATER USE			WATERED LAND			LIVESTOCK			FARM WORKERS		
	NO. OF PERSONS	FACTOR	AF	NO. OF LAND UNITS	FACTOR	AF	NO. OF LIVESTOCK	FACTOR	AF	NO. OF WORKERS	FACTOR	AF
RESIDENCE 1	1	x .04 =	.04	45	x .004 =	.18		x .01 =			x .02 =	
RESIDENCE 2		x .04 =			x .004 =			x .01 =			x .02 =	
RESIDENCE 3		x .04 =			x .004 =			x .01 =			x .02 =	
RESIDENCE 4		x .04 =			x .004 =			x .01 =			x .02 =	
RESIDENCE 5		x .04 =			x .004 =			x .01 =			x .02 =	
2. Total AF	TOTAL		.04	TOTAL		.18	TOTAL		0	TOTAL		0
3. TOTAL DOMESTIC ACRE FEET											.22	



AGRICULTURAL USE ONLY

WORKSHEET A

WORKSHEET A INSTRUCTIONS

TABLE OF APPLIED WATER FACTORS — USE ONLY FOR CROP FACTOR METHOD

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Cabbage	1.08	Persimmons	0.85
Carrots	0.94	Plums	1.46
Cauliflower	0.94	Potatoes	1.13
Celery	0.88	Prunes	1.46
Cherries	1.46	Pumpkins	0.94
Christmas Trees	0.60	Rose Bushes	2.75
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Cucumbers	0.94	Sod	0.75
Eucalyptus	0.47	Spinach & Salad Greens **	0.46
Flowers (Cut)	0.88	Squash	0.94
Flowers (Seed)	1.00	Strawberries	1.00
Garlic	0.49	Sugar Beets	1.44
Grain	0.34	Sunflower	1.08
Herbs (Indoor)	1.85	Tomatoes (Bush)	0.89
Herbs (Outdoor)	1.20	Tomatoes (Pole)	0.66
Jujuba	0.47	Vineyards (Grapes)	0.50
Kiwi	0.47	Walnuts	1.49
Lettuce	1.08	Wheat	0.34
Melons	0.94		

Table of Average Uses was approved by the Santa Clara Valley Water District Board of Directors on 09/22/2015.

*Asian vegetables include nappa cabbage, bok choy, gai choy, gai lon, kohlrabi.

**Salad greens include arugula, mustard, radicchio and swiss chard.

1. AGRICULTURAL WATER USE	CROP TYPE		NO. OF ACRES	SEMI-ANNUAL CROP FACTOR (Above)	ACRE FEET		
	ORCHARD MIXED (DRIP)		.07	x 1.46	= .10		
	VINEYARDS (DRIP)		.19	x .5	= .095		
				x	=		
				x	=		
				x	=		
				x	=		
2. LIVESTOCK WATER USE	TYPE OF USE	UNIT	NO. OF	WATER USE FACTOR	NO. OF GALLONS	CONVERSION FACTOR	ACRE FEET
	Chicken Ranches (100/Unit)	0	x	883.20 =	/	325,850 =	0
	Livestock Drinking Water	0	x	2,760.00 =	/	325,850 =	0
	Dairy Farm	0	x	850.00 =	/	325,850 =	0
3. TOTAL AGRICULTURAL ACRE FEET			A-44		.195		

Santa Clara Valley Water District

Remit Address:
PO BOX 20130
San Jose, CA 95160-0130
(408) 630-2770



WATER PRODUCTION STATEMENT

Account #: 18792
APN: 81721025

Office Address:
5750 Almaden Expy
San Jose, CA 95118-3606
Phone #: (408) 630-2770
Fax #: (408) 979-5620
Email: waterrevenue@valleywater.org

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STATEMENT PERIOD
06/30/2016 - 06/29/2017

STATEMENT NO. DUE DATE
GA105129 07/30/2017

ANNUAL

LINE	WELL ID#	DISTRICT WELL NUMBER	METER NUMBER	WATER METER READING		UOM	MULTIPLIER	METERED WATER PRODUCTION (AF)
				BEGIN	END			
1	1	09S03E26H003					0	
Total								0.000

STATEMENT TOTAL (If filed and/or paid after due date, complete lines 7 and 8)

1. Total Metered:	AF	6. Total Water Usage Cost:	\$ 135.98
2. Total Unmetered:	0.346 AF	* 7. Penalty 10% of Line 6:	
3. TOTAL Production:	0.346 AF	* 8. Interest 1% of Line 6:	
4. Non-Agricultural:	0.346 AF x \$393.00 =	9. TOTAL AMOUNT DUE:	\$ 135.98
5. Agricultural:	AF x \$23.59 =		

PLEASE ATTACH A SEPARATE WORKSHEET SHOWING CALCULATIONS FOR UNMETERED WATER.

FOR OFFICE USE ONLY

I declare under penalty of perjury that the statements made and figures shown on this water production statement and on any accompanying worksheets or statements to this water

AMOUNT PAID \$	CASHIER	POSTED
135.98	HA	JUL 10 2017

Santa Clara Valley Water District

Water Revenue Division
5750 Almaden Expressway
San Jose, CA 95118
(408) 265-2600 or (408) 847-6484

**RECYCLED WATER
INVOICE**

TIME STAMP

NOT
DATE IN THIS
PAGE

AMOUNT PAID \$ 759.36	CASHIER 812	POSTED 10/17/2016
AMOUNT PAID \$	CASHIER	POSTED

INVOICE NUMBER RI000315	DATE 09/29/2016	DUE DATE 10/17/2016
DIVERSION NUMBER GR000268	BILLING PERIOD 01/01/2016 - 06/30/2016	

DESCRIPTION	ACRE FEET	RATE	AMOUNT
Non Ag Water	2.26	\$ 373.00	\$ 759.36
Total Amount Due			\$ 759.36
Less Amount Paid			\$ 0.00
PAY THIS AMOUNT →			\$ 759.36

In accordance with Section 11.6 of the Rules and Regulations for the Service of Surface Water, the amount shown due is final unless a written protest accompanied by evidence indicating that this invoice is in error is received within fifteen (15) days following the mailing date of this invoice.

In accordance with Section 11.2(b) of the Rules and Regulations for the Service of Surface Water, if any user shall fail to pay the amount found due within thirty (30) days of billing, the District shall make a late charge at the rate of one percent (1%) each month on the delinquent amount and no further water delivery shall be made until the same is paid.

PLEASE RETURN ONE COPY OF THIS INVOICE WITH YOUR REMITTANCE.

Santa Clara Valley
Water District



Revenue Management Unit
5750 Almaden Expressway
San Jose, CA 95118
(408) 630-2770

FC 1239 (01-29-14)

SURFACE WATER INVOICE

RSE

TIME STAMP

DO NOT
WRITE IN THIS
SPACE

AMOUNT PAID \$ 39,525.59	CASHIER R	POSTED 07/2017
AMOUNT PAID \$	CASHIER	POSTED

INVOICE NUMBER
SI004559

DATE
03/23/2017

DUE DATE
04/24/2017

DIVERSION NUMBER
G0000036

BILLING PERIOD
07/01/2016 - 12/31/2016

DESCRIPTION	GROSS ACRE FEET	ENTITLEMENT	NET ACRE FEET	RATE	AMOUNT
Non Ag Water	35.95	0.00	35.95	1,072.00	\$ 38,538.40
Water Master Chg	35.95	0.00	35.95	27.46	\$ 987.19
Total Amount Due					\$ 39,525.59
Less Amount Paid					\$ 0.00
PAY THIS AMOUNT ➡					\$ 39,525.59

In accordance with Section 11.6 of the Rules and Regulations for the Service of Surface Water, the amount shown due is final unless a written protest accompanied by evidence indicating that this invoice is in error is received within fifteen (15) days following the mailing date of this invoice.

In accordance with Section 11.2(b) of the Rules and Regulations for the Service of Surface Water, if any user shall fail to pay the

Santa Clara Valley
Water District



Revenue Management Unit
5750 Almaden Expressway
San Jose, CA 95118
(408) 630-2770

FC 1240 (01-29-14)

San Jose Water Dept

TREATED WATER INVOICE

TIME STAMP

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SPACE

INVOICE NUMBER

DATE 07/06/2017

DUE DATE 07/26/2017

BILLING PERIOD 06/01/2017 - 06/30/2017

Amount Paid \$	Cashier	Posted
Amount Paid \$	Cashier	Posted

Plant Name	Description	Rate	Net Acre Feet	Amount
Rinconada	Below Alt Contract	1,172.00	843.37	\$ 988,429.64

Adjustment	Adjustment Amount
Credit for Take or Pay	\$ -1,521.78
RWTP annual rate adjustment	\$ 9,127.00
Take or Pay Adjustment	\$ 1,521.78

Pay this amount	\$ 997,556.64
-----------------	---------------

BREAKDOWN OF DELIVERIES TO TURNOUT

Turnout Name	AF Billed Flow
Barranca	93.12
Sunnyvale	750.25

Any system outages that result in reduced deliveries will be adjusted at the end of the year when contract adjustments are made

In accordance with Article B, Section 6, and Article C, Section 8, if payment is not made within twenty (20) days after billing, 1/2 of 1% interest per month shall accrue on the delinquent amount.

PLEASE RETURN ONE COPY OF THIS INVOICE WITH YOUR REMITTANCE

Attachment E
District Water Shortage Plan –
Included in body of report

Attachment F
Groundwater Management Plan

<http://www.valleywater.org/Services/Groundwater.aspx>

2016



Groundwater Management Plan

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Santa Clara Valley Water District

2016 Groundwater Management Plan Santa Clara and Llagas Subbasins

Prepared by:

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Deputy Operating Officer

Water Supply Division

James Fiedler, P.E.

Chief Operating Officer

Water Utility Enterprise

November 2016



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BOARD OF DIRECTORS

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Gary Kremen
District 7

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Attachment G
Groundwater Banking Plan

SCVWD AGMT. NO. A2062

1997
AGREEMENT BETWEEN
SANTA CLARA VALLEY WATER DISTRICT
AND SEMITROPIC WATER
STORAGE DISTRICT AND ITS IMPROVEMENT DISTRICTS
FOR A SANTA CLARA-SEMITROPIC
WATER BANKING AND EXCHANGE PROGRAM

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1
2
3 1997
4 AGREEMENT BETWEEN
5 SANTA CLARA VALLEY WATER DISTRICT
6 AND SEMITROPIC WATER STORAGE DISTRICT
7 AND ITS IMPROVEMENT DISTRICTS FOR A
8 SANTA CLARA VALLEY-SEMITROPIC WATER
9 BANKING AND EXCHANGE PROGRAM
10

11 THIS AGREEMENT (this "Agreement"), effective as of June 1, 1997, is entered into
12 by and between SANTA CLARA VALLEY WATER DISTRICT ("Santa Clara"), and the
13 SEMITROPIC WATER STORAGE DISTRICT and SEMITROPIC IMPROVEMENT
14 DISTRICT, BUTTONWILLOW IMPROVEMENT DISTRICT and POND-POSO
15 IMPROVEMENT DISTRICT of the SEMITROPIC WATER STORAGE DISTRICT
16 (collectively called "Semitropic"). Santa Clara and Semitropic may be referred to
17 individually as Party or collectively as Parties.

18 RECITALS

19 A. Santa Clara and Semitropic entered into "1996 AGREEMENT BETWEEN
20 SANTA CLARA VALLEY WATER DISTRICT AND SEMITROPIC WATER STORAGE
21 DISTRICT AND ITS IMPROVEMENT DISTRICTS FOR A SANTA CLARA-SEMITROPIC
22 WATER BANKING AND EXCHANGE PROGRAM," dated June 4, 1996 ("1996
23 Agreement") an agreement for Water Banking and Exchange providing for delivery of up
24 to 45,000 acre-feet in 1996 which resulted in a Permanent Storage Allocation of 40,500
25 acre-feet. This Agreement replaces the 1996 Agreement and provides for increasing the
26 Permanent Storage Allocation to 350,000 acre-feet. The 1996 Agreement is terminated as
27 of the effective date of this Agreement.

1 B. Santa Clara obtains water from the State Water Project ("SWP") through its
2 contract with the California Department of Water Resources ("DWR"), executed on
3 November 20, 1961, and presently providing for a total contract entitlement of 100,000 acre-
4 feet per year. In addition, Santa Clara obtains water from the San Luis Unit of the federal
5 Central Valley Project ("CVP") under an agreement dated June 7, 1977. The San Luis Unit
6 is partially a shared facility with the State Water Project. From time-to-time, Santa Clara will
7 have water available from the two projects that it desires to deliver to Semitropic for storage
8 and eventual return or other disposition pursuant to this Agreement.

9 C. Semitropic obtains water from the SWP through its contracts with the Kern
10 County Water Agency ("Agency") under the Agency's master contract with DWR, executed
11 on November 15, 1963, and presently providing for a total contract entitlement of
12 1,112,730 acre-feet per year. This amount may be further reduced by up to 130,000 acre-
13 feet by contract amendments required to implement the transfer provision of the Monterey
14 Agreement. Semitropic's contracts with the Agency were originally executed
15 December 9, 1976 (Buttonwillow Improvement District), December 9, 1976 (Pond-Poso
16 Improvement District), and January 9, 1969 (Semitropic Water Storage District) and provided
17 for a combined contract entitlement of 158,000 acre-feet per year. This later amount was
18 reduced to 155,000 acre-feet by the contract amendments required to implement the Kern
19 Water Bank exchange under the Monterey Agreement. Semitropic Improvement District was
20 formed in 1991, its boundaries are coterminous with the boundaries of Buttonwillow
21 Improvement District and Pond Poso Improvement District and, among other things, it serves
22 as agent for Buttonwillow Improvement District and Pond-Poso Improvement District. A total
23 of approximately 136,370 acres of land within Semitropic is irrigated with a total annual
24 demand of approximately 477,000 acre-feet based on current cropping patterns and
25 irrigation practices. Semitropic has entered into contracts with individual landowners
26 comprising 42,328 acres of land which is designated as the Surface Water Service Area
27 ("SWSA"). Semitropic has commitments to deliver 145,240 acre-feet per year to the SWSA.
28 Additional lands outside the SWSA, in the amount of approximately 24,500 acres, have also
29 been connected to Semitropic's distribution system so such lands may receive surface water
30 when available. These additional lands are designated as the Temporary Water Service

Area ("TWSA"), and may sometimes be referred to as the Non-Contract Service Area. Total landowner demand within the SWSA and TWSA for surface water supplies is greater than water available under Semitropic's entitlement for Agency SWP water and other surface water supplies. The construction of additional distribution facilities by Semitropic, as contemplated by this Agreement, will allow Semitropic to take delivery of additional imported water delivered to Semitropic by Santa Clara pursuant to this Agreement.

D. Semitropic has constructed a seventy-eight inch (78") pumpback pipeline that is capable of conveying water withdrawn from the groundwater basin underlying the area within Semitropic's boundaries (the "Semitropic Basin") directly to the California Aqueduct at a maximum rate of 300 cubic feet per second ("CFS"). Pumpback operations to return stored water will take place primarily during the "off-peak" irrigation season, (i.e., generally between September 1 of any year and March 1 of the following year) when groundwater pumping and conveyance capacity are more likely available. Semitropic has also constructed an energy project, including, but not limited to, a hydroelectric generator, gas generators, and a 12 kilovolt transmission system, to provide a portion of the electric power required for Semitropic's pumping operations.

E. Santa Clara and Semitropic find that it will be mutually advantageous to enter into a groundwater banking and exchange program whereby Semitropic will hold in trust for Santa Clara the water deposited by Santa Clara hereunder (or its equivalent), together with (i) an easement and right to withdraw from lands owned or controlled by Semitropic an amount of water equal to Santa Clara's Stored Water on deposit with Semitropic, and (ii) an easement and right to transport such water from the Semitropic Basin to the California Aqueduct for delivery to Santa Clara, all in accordance with the terms of this Agreement. This Agreement will provide additional groundwater storage for Santa Clara, resulting in better utilization of its SWP and CVP supplies, and will provide improved reliability of supplies and overall higher groundwater levels for Semitropic.

1 F. This Agreement is consistent with the goal of making optimum use of water
2 and facilities and is consistent with conservation objectives of Santa Clara, Semitropic,
3 Agency and DWR.

4 G. Consistent with the California Environmental Quality Act ("CEQA"), Semitropic,
5 acting as lead agency has completed an environmental impact report concerning the
6 proposed water banking and exchange program (the "EIR"). Semitropic's Board of Directors,
7 on July 13, 1994, certified the EIR as being in compliance with CEQA (The EIR was
8 prepared for the full program of 1,000,000 acre-feet). Semitropic is also responsible for
9 implementing and monitoring the mitigation measures defined in "Findings and Mitigation
10 Monitoring Plan" dated July 1994, adopted as part of the Final EIR. In addition, Semitropic
11 has completed a Negative Declaration which was certified by its Board of Directors on May
12 30, 1997 addressing any environmental impacts relating to this program which were not
13 previously addressed in the Final EIR. On June 17, 1997, Santa Clara's Board of Directors,
as responsible agency, also reviewed and considered the Negative Declaration.

15 H. Semitropic has also entered into a Memorandum of Understanding ("MOU")
16 with neighboring districts, dated September 14, 1994, to implement in part said monitoring
17 and mitigation measures, which this Agreement is subject to. The MOU is on file with both
18 Santa Clara and Semitropic.

19 I. The Semitropic Water Banking and Exchange Program authorized in the
20 above-referenced EIR (the "Program") has a defined total storage capacity of 1,000,000
21 acre-feet. The estimated absorptive capacity, based on the approximately 23,000 acres of
22 In-Lieu Service Area (as defined in Article 1 below) and the current cropping patterns and
23 irrigation efficiencies, is 80,500 acre-feet per year. An estimated additional 10,000 acre-feet
24 per year of absorptive capacity is anticipated as a result of Semitropic improving the delivery
25 capability of the distribution system to the existing SWSA and TWSA, as contemplated by
the Program. The estimated withdrawal capacity is 90,000 acre-feet per year, at a maximum
27 flow rate of 300 CFS, through the pumpback facility. In addition, Stored Water (as defined
28 in Article 1) may be returned from any Semitropic SWP Entitlement Water allocation in

1 excess of 22,000 acre-feet, as described in Exhibit A hereto. Facilities necessary to
2 accomplish the foregoing will increase the absorptive and withdrawal capabilities of
3 Semitropic over and above the pre-Program conditions. Santa Clara's participation may not
4 fully utilize these capacities. Therefore, Semitropic has developed and has offered and will
5 continue to offer other potential Banking Partners (as defined in Article 1) the opportunity to
6 participate in the Program on substantially the same terms and conditions as Santa Clara.
7 Currently there are two other banking partners; The Metropolitan Water District of Southern
8 California (Metropolitan) with the right of up to thirty-five percent (35%) of the program and
9 the Alameda County Water District (Alameda) with the right of about one percent (1%) of the
10 program. An additional four percent (4%) of the Program has been reserved for Alameda
11 and about four percent (4%) of the Program has been reserved for Zone 7 Water Agency
12 (Zone 7). Santa Clara has reviewed the terms and conditions of that certain document
13 entitled "Semitropic Groundwater Banking Program Payment and Banking Capacity Rights
14 Options" dated August 1, 1994, setting forth the terms on which other parties may participate
15 in the Program as Banking Partners (the "**Program Options**"). A copy of that document is
16 on file with both Semitropic and Santa Clara. Santa Clara has agreed that anyone who is
17 a party to an agreement with Semitropic which includes one or more of options 1 through 4
18 of the Program Options and which does not violate any of the requirements of this
19 Agreement will be a Banking Partner. Santa Clara's participation under this 1997 Agreement
20 is under Option 2; Alameda's current participation is under Option 1; and Metropolitan's
21 current participation is under Option 2.

22 J. As a part of this Agreement, Semitropic, as trustee, will hold in trust for Santa
23 Clara, in accordance with the terms of this Agreement, the water deposited by Santa Clara
24 (or its equivalent), together with the right to withdraw it and to deliver it to the California
25 Aqueduct. The parties create this trust relationship for the purpose of protecting Santa
26 Clara's ability to recover Stored Water, and Semitropic's fiduciary duty is limited to
27 Semitropic's responsibilities as set forth in this Agreement. In addition, Semitropic, in a non-
28 fiduciary capacity, will provide such water resource management services as are necessary
29 to implement and operate the Program. Semitropic's non-fiduciary obligations include taking
30 such actions, including the construction of facilities, securing agreements and entering into

operational arrangements, as are necessary to receive from Santa Clara water delivered by Santa Clara for storage hereunder and to return equivalent water to Santa Clara in accordance with the terms of the Agreement. The Program, as implemented with respect to Santa Clara by this Agreement, when combined with other necessary actions undertaken by Santa Clara, will thus allow the delivery of Stored Water to Santa Clara. These actions will include obtaining any necessary agreements between agencies responsible for transferring water to and from Program Storage (Delivery Agreement as provided in Article 8). When such services are provided by Semitropic, Santa Clara will make payments to Semitropic, as provided for in this Agreement, to compensate Semitropic for its services and expenses. These include: payments when water is stored, as provided in Section 6.2; payments under certain conditions when water is left in storage for more than five years, as provided in Section 6.4; payments when water is returned from storage, as provided in Section 6.3; payments with respect to energy used to recover water from the groundwater basin and to deliver that water to the California Aqueduct, as provided in Section 6.3.3; and payments for operation and maintenance expenses under certain circumstances, as provided in Section 6.7.

Although Santa Clara does not guarantee its level of participation in the Program, it is anticipated that Santa Clara will acquire at least 35 percent of the Program's capabilities, rights and capacities described in Recital I and elsewhere in this Agreement. Until that has occurred (that is, until such time as Santa Clara's Permanent Storage Allocation is Fully Vested (as those terms are defined in Section 1.7)), under Option number two of the Program Options, Santa Clara will pay \$90 per acre-foot to store water as provided for in Section 6.2.1, and such payments shall continue to the extent that Santa Clara has elected to acquire Permanent Storage Allocation in excess of 350,000 acre-feet as provided in Section 6.6. Santa Clara will be credited for 40,500 acre-feet of Permanent Storage Allocation acquired under the 1996 Agreement and for payments of \$109.56 per acre-foot under Section 6.2 of the 1996 Agreement. The difference of \$19.89 per acre-foot between the higher rate of \$109.56 per acre foot under Option 1 of the 1996 Agreement and \$89.67 per acre-foot had it been under Option 2, will vest Santa Clara with 4,825 acre-feet of additional Permanent Storage Allocation, for a total of 45,325 acre-feet upon implementation

1 of this agreement. Vesting will continue to occur as Santa Clara delivers water for permanent
2 storage. After Santa Clara's Permanent Storage Allocation is Fully Vested and has elected
3 not to acquire additional Permanent Storage Allocation under Section 6.6, Santa Clara will
4 pay \$50 per acre-foot to store water. Until Santa Clara has paid its share of Total Program
5 Capital Costs under Section 1.6, Santa Clara will pay \$40 per acre-foot plus power costs for
6 water recovered. After Santa Clara has paid its share of Total Program Capital Costs, Santa
7 Clara will pay \$50 per acre-foot plus power costs for water recovered. In addition, until
8 Santa Clara's Permanent Storage Allocation is Fully Vested, Santa Clara will pay \$20 per
9 acre-foot for water left in storage for more than five years after December 31, 1996, and
10 such payments shall continue to the extent that Santa Clara has elected to acquire additional
11 Permanent Storage Allocation as provided in Section 6.6. Thereafter, Santa Clara will no
12 longer pay this cost for water left in storage. If, after January 1 2006, Santa Clara's
13 Permanent Storage Allocation has not become Fully Vested, and Semitropic elects to no
14 longer provide interim Program capabilities, capacities and rights as described below, Santa
15 Clara will pay \$50 per acre-foot for any additional water stored by Santa Clara and thereafter.
16 Santa Clara will not pay the \$20.00 fee provided for in Section 6.4.

17 Santa Clara will acquire a proportionate share of total Program capabilities,
18 capacities and rights for the term of this Agreement as Santa Clara's Permanent Storage
19 Allocation "vests," as provided in Section 1.7 (the amounts credited for purposes of
20 determining Santa Clara's Permanent Storage Allocation including: (i) all payments for the
21 storage of water made pursuant to Section 6.2.1 (the "\$90 Per Acre-Foot Storage
22 Payments"), (ii) all payments made pursuant to Section 6.4 with respect to certain water
23 stored for more than five years (the "\$20 Per Acre-Foot Long-Term Storage Payments"),
24 and (iii) an amount (the "Withdrawal Credit") equal to the amount that has been paid and
25 will be due pursuant to Section 6.3.1 when Stored Water for which \$90 Per Acre-Foot
26 Storage Payments was made is returned. After Santa Clara's Permanent Storage Allocation
27 is Fully Vested, as provided in Section 1.7, Santa Clara may increase its vested Permanent
28 Storage Allocation by continuing to pay for the storage and return of water at the rates set
29 forth in the immediately preceding sentence, as provided for in Section 6.6 if Permanent
30 Storage Allocation is available.

Under the terms of this Agreement, those amounts which result in the acquisition by Santa Clara of Permanent Storage Allocation (that is, the \$90 Per Acre-Foot Storage Payments, the \$20 Per Acre-Foot Long-Term Storage Payments and the Withdrawal Credits for amounts payable pursuant to Section 6.3.1 upon the return of Stored Water) are to be adjusted using the Engineering News Record Index, and all other amounts which are to be adjusted will be adjusted using the Consumer Price Index, as hereinafter provided.

K. The trust relationship between Santa Clara, as settlor and beneficiary, and Semitropic, as trustee, created by this Agreement and described in these Recitals, is entered into by the Parties solely for the purpose of protecting Santa Clara's interest in water delivered by Santa Clara to Semitropic hereunder for storage, and the right of Santa Clara, also held in trust by Semitropic for Santa Clara to recover from the Semitropic Basin, water in a quantity sufficient to return to Santa Clara, a quantity equal to Santa Clara's Storage Account Balance, such right to be exercised by Semitropic, as trustee, through the lands, facilities, rights and interests of Semitropic, or by its successor in interest in and to the trust property, all in accordance with the terms of this Agreement. Semitropic acknowledges and agrees that all water delivered to it by Santa Clara hereunder will be received, held, exchanged, accounted for, and returned or otherwise disposed of by Semitropic in its capacity as trustee for Santa Clara with respect to such water and the easements and rights relating thereto provided for herein. Santa Clara has herein authorized Semitropic, as trustee, to commingle, exchange or otherwise dispose of the water delivered by Santa Clara hereunder. In exchange for those rights and for water delivered hereunder, Semitropic has granted, and does hereby grant, to Santa Clara the right to an equal quantity of water from the lands, facilities, rights and interests of Semitropic (subject, however, to the loss provisions of Article 4), together with such easements and other rights as are necessary to transport the recovered water to the California Aqueduct for delivery to Santa Clara as specified in the Delivery Agreement therein, all upon, and subject to the provisions of, this Agreement (all which rights and easements may be referred to herein, collectively, as the "Trust Property"). Santa Clara has granted, and does hereby grant, to Semitropic said Trust Property, in trust, for the use and benefit of Santa Clara. The trust relationship created

by this Agreement is not otherwise intended to apply to or effect the obligations of Semitropic or Santa Clara hereunder, or the remedies in the event of default; it being expressly understood and agreed that Semitropic's obligations hereunder to, among other things, construct facilities and enter into agreements with others in furtherance of the Program shall not be fiduciary in nature. Notwithstanding creation of a trust under this Agreement, Semitropic may benefit from the Program set forth in this Agreement.

L. Santa Clara has previously delivered 45,000 acre-feet of water to Semitropic resulting in Storage Account Balance of 40,500 acre-feet pursuant to the 1996 Agreement. Santa Clara and Semitropic desire that such water hereafter be held and disposed of by Semitropic for the benefit of Santa Clara under this Agreement, as hereinafter provided. In addition, Santa Clara has been credited with an additional 4,825 acre-feet of Permanent Storage Allocation as per Recital J for a total of 45,325 acre-feet.

DECLARATION OF TRUST

Santa Clara hereby appoints Semitropic to hold, and Semitropic hereby accepts such appointment and agrees to hold, in trust, for the use and benefit of Santa Clara, as beneficiary, Santa Clara's Stored Water (as hereinafter defined), together with all of the other Trust Property (as defined in Recitals K and L above), upon the terms set forth in this Agreement. The trust created under this paragraph exists only for the purposes described in Recitals J, K and L above, relating to protection of Santa Clara's ability to recover its Stored Water if Semitropic fails or refuses to do so when required to do so by this Agreement, and only with respect to the Stored Water and the other Trust Property. The creation of a trust under this paragraph does not otherwise enlarge or reduce the rights or obligations of the Parties. If and to the extent Semitropic performs its obligations as provided in this Agreement, Semitropic will not be deemed or construed to have breached any fiduciary duty to Santa Clara arising out of the trust provided for in this Agreement.

ARTICLE 1. DEFINITIONS

As used in this Agreement, each of the following terms shall have the respective meaning given to it in this Article 1 unless expressly stated to the contrary where such term is used. Further, each provision in this Article or in the Recitals which is stated in declarative form (for example, "will be adjusted") or is otherwise stated as an agreement between the Parties, rather than as a statement of their intent or purpose, shall be construed to be an operative part of this Agreement and shall be enforceable.

1.1 **"Agreement"** means, as of any particular time, this 1997 Agreement for a Santa Clara-Semitropic Water Banking and Exchange Program, as amended or supplemented by the Parties through that time.

1.2 **"Banking Partner"** means, as of any particular time, Santa Clara and any other entity which is then a party to a water banking and exchange agreement with Semitropic which includes one or more of options 1 through 4 of the Program Options and which does not violate the requirements of this Agreement. The term "Banking Partner" does not include a Lower Priority Banking Partner.

1.3 **"In-Lieu Service Area"** means lands which have at least a five year history of cultivation using groundwater, the owners of which have executed surface water service contracts with Semitropic acknowledging and agreeing to cooperate with Semitropic in fulfilling its obligation to carry out the Program, that provide for the reasonable and beneficial use of water made available to Semitropic for banking and other purposes on that land in lieu of pumping groundwater, and whose on-farm systems have been connected to Semitropic's surface water distribution system to receive water delivered to Semitropic for storage purposes. It is estimated that, upon completion of all Program facilities, the In-Lieu Service Area will be 23,000 acres.

1.4 **"Interim Storage Allocation"** means, as of any particular time, and with respect to any particular Banking Partner, that portion of the total 1,000,000 acre-foot

1 Program storage capacity then allocated to that Banking Partner which has not yet become
2 Permanent Storage Allocation of a Banking Partner. As Permanent Storage Allocation is
3 acquired by a Banking Partner, as provided in Section 1.7, the Interim Storage Allocation of
4 that Banking Partner is reduced by an identical amount.

5 1.5 "Lower Priority Banking Partner" means an entity which enters into an
6 agreement with Semitropic to utilize all or part of Program Delivery Capability, Unused
7 Semitropic Delivery Capability, Program Pumpback Capacity, or Program Entitlement
8 Exchange Rights during such time period when not required to be available for use by
9 Semitropic or Banking Partners.

10 1.6 "Santa Clara's Share of Total Program Capital Cost" means, as of
11 December 31, 1995, \$46,900,000.00 (which is thirty-five percent (35%) of the Total Program
12 Capital Cost). As of January 1, 1996, and annually thereafter, until the time when the sum
13 of all payments made by Santa Clara under Sections 6.2.1, 6.3.1 and 6.4 and any payments
14 creditable for this purpose under Section 5.10 (collectively, the "Prior Payments") equals
15 Santa Clara's Share of Total Program Capital Costs (as redetermined pursuant to this
16 Section through that time), Santa Clara's Share of Total Program Capital Cost shall be
17 redetermined for, respectively, calendar year 1997, and for each such subsequent calendar
18 year, by adding the Unpaid Portion (defined and adjusted as provided below) of Santa
19 Clara's Share of Total Program Capital Costs as of the beginning of that calendar year to the
20 sum of Santa Clara's Prior Payments with respect to the period from the date of this
21 Agreement through the end of the prior calendar year, using the following formula (such
22 redetermination to be made in each calendar year when Santa Clara has paid all amounts
23 due under Sections 5.10, 6.2.1, 6.3.1 and 6.4 through the end of the prior calendar year):

$$SC_{cy} = \left\{ \sum_{n=94}^{cy-1} P_n \right\} + UP_{cy}$$

24 where:

"cy" refers to the calendar year with respect to which the redetermination is being made;

"cy-1" refers to the calendar year prior to the calendar year with respect to which the redetermination is being made (that is, 1995 with respect to the redetermination for use in 1996; 1996 for 1997; and so on);

"SC_{cy}" means Santa Clara's Share of Total Program Capital Cost for the calendar year with respect to which the redetermination is being made (the first such calendar year being 1996; the second 1997; and so on), such redetermination being made by using the formula set forth above;

$\sum_{n=94}^{cy-1} P_n$ means the sum of all payments (P as defined below) from the calendar year 1994 through the calendar year immediately preceding the calendar year with respect to which the redetermination is being made.

"P_n" (or Payments by Santa Clara to Semitropic with respect to a particular year) means the sum of the following amounts paid by Santa Clara with respect to that year, whether paid during or after that year:

- a) All amounts paid with respect to that calendar year pursuant to Section 6.2.1 for Stored Water delivered by Santa Clara to Semitropic; plus
- b) All amounts paid with respect to that calendar year pursuant to Section 6.3.1 for Stored Water theretofore delivered to Santa Clara; plus
- c) All amounts paid with respect to that calendar year pursuant to Section 6.4; plus

d) All amounts paid with respect to that calendar year pursuant to Section 5.10 that are creditable against Santa Clara's Share of Total Program Capital Cost under Section 5.10.

UP_{cy} (or Santa Clara's Adjusted Unpaid Share of Total Program Capital Cost as of the beginning of the calendar year with respect to which the redetermination is being made) means: (i) with respect to the redetermination of Santa Clara's Share of Total Program Capital Cost for calendar year 1996, \$46,900,000 minus the sum of P_n (as defined above) determined for 1996 ("P₉₆") plus P_n determined for 1997 ("P₉₇"); and (ii) for each subsequent year, the amount determined for such year using the following formula:

$$UP_{cy} = AI_{cy} \times \{ UP_{cy-1} - P_{cy-1} \}$$

where in addition to the above definition:

"AI_{cy}" (the "Adjustment Index" for the calendar year with respect to which the redetermination is being made) means a fraction, the numerator of which is the Construction Costs Index for Los Angeles published by the Engineering News Record (the "Construction Costs Index") for December of the calendar year immediately preceding the calendar year with respect to which the determination is being made (that is, for December 1995 with respect to the determination of Santa Clara's Share of Total Program Capital Cost for 1996; December 1996 for 1997; and so on), and the denominator of which is the Construction Costs Index for December of the calendar year which is two years prior to the calendar year with respect to which the determination is being made (provided, however, that for the determination of Santa Clara's Share of Total Program Capital Cost for 1996, the denominator shall be the Construction Costs Index for June 1994, which the parties agree is 6,550.36 based on a 1913 value of 100) (that is, the denominator shall be the Construction Costs Index for December 1995 with respect to the determination of Santa Clara's Share of Total Project Capital Cost for 1997; December 1996 for 1998; and so on). If Construction Costs Index ceases to be published or if the base year for the Construction Costs Index or the methodology by which the Construction Costs Index is determined is modified, then the

Construction Costs Index to be used in the calculations required by this Section 1.6 shall be modified as provided for in Section 6.2.3.

"UP_{cy-1}" means UP_{cy} as determined for the immediately preceding calendar year (that is, in determining UP_{cy} for 1996 ("UP₉₆"), UP_{cy-1} for that redetermination means the UP_{cy} determined for 1995 ("UP₉₅"); in determining UP_{cy} for 1997 ("UP₉₇"), UP_{cy-1} for that redetermination means the UP_{cy} determined for 1996 ("UP₉₆"); and so on);

"P_{cy-1}" means P_n (as previously defined) with respect to the calendar year immediately preceding the calendar year with respect to which the redetermination is being made (that is, in determining UP₉₆, P_{cy-1} for that redetermination means the P_n determined for 1995 ("P₉₅")) in determining UP₉₇, P_{cy-1} for that redetermination means the P_n determined for 1996 ("P₉₆"); and so on).

If pursuant to Section 2.5, Metropolitan's Interim Storage Allocation is eliminated, Metropolitan's Share of Total Program Capital Cost thereafter shall mean an amount equal to the sum of payments made pursuant to Sections 6.2.1 and 6.4 and payments made and payments which, upon the return of water, would be pursuant to Section 6.3.1.

1.7 "Permanent Storage Allocation" means, with respect to any particular Banking Partner and as of any particular time ("t"), the portion of the total 1,000,000 acre-foot Program storage capacity which is allocated to that Banking Partner as of that time. Until the earlier of the time when Santa Clara's Permanent Storage Allocation equals 350,000 acre-feet, Santa Clara's Permanent Storage Allocation as of any particular time shall be determined using the following formula:

$$SCSA_t = \left\{ \frac{P_p + P_t}{TPCC_{cy}} + \sum_{n=94}^{cy-1} \frac{P_n}{TPCC_n} \right\} \times 1,000,000 \text{ acre-feet}$$

where:

1 **"SCSA_t"** means Santa Clara's Permanent Storage Allocation as of the particular time
2 with respect to which it is being determined, measured in acre feet;

3 **"P_p"** means all amounts that would be due to Semitropic pursuant to Section 6.3.1 if
4 all of the water in Santa Clara's Storage Account at that time was delivered to Santa Clara
5 at that time;

6 **"P_t"** means all amounts paid, and all amounts then payable unless delinquent, by
7 Santa Clara under Sections 6.2.1, 6.3.1 and 6.4 with respect to the period from the
8 beginning of the calendar year during which that particular time (t) occurs and that particular
9 time, plus any payments creditable and all amounts which, when paid, will be creditable
10 under Section 5.10 for purposes of determining Santa Clara's Permanent Storage Allocation
11 for the period from the beginning of the calendar year during which that particular time (t)
12 occurs and that particular time;

13 **"TPCC_{cy}"** means Total Program Capital Cost, as defined in Section 1.15, for the
14 calendar year during which that particular time occurs (that is, if SCSA is being determined
15 as of April 1, 1999, TPCC_{cy} means TPCC₉₉);

16 **"P_n"** has the meaning given to that term in Section 1.6;

17 $\sum_{N=94}^{cy-1} \frac{P_n}{TPCC_n}$ means the sum of the percentages which result from dividing the
18 payments P_n for a given year by the TPCC for that same year, from
19 calendar year 1994 through the calendar immediately preceding the calendar year in which
20 SCSA_t is being determined; and

21 **"TPCC_n"** means Total Program Capital Cost, as defined in Section 1.15, for the same
22 calendar year as P_n (that is, when P_n is P₉₉, TPCC_n means TPCC₉₉).

23 At the earlier of the time (which time may be referred to herein as the "Time of Full
24 Vesting") when: (i) SCSA equals 350,000 acre-feet, or (ii) any remaining portion of Santa

1 Clara's Interim Storage Allocation is eliminated by Semitropic pursuant to Section 2.5, Santa
2 Clara's Permanent Storage Allocation shall be deemed to be **"Fully Vested"** and, thereafter,
3 Santa Clara's Permanent Storage Allocation shall be equal to Santa Clara's Permanent
4 Storage Allocation at the Time of Full Vesting, subject, however to the provisions of Sections
5 2.6, 6.5 and 6.6 (which permit Santa Clara to acquire additional Permanent Storage
6 Allocation as therein provided). An example showing the acquisition of Permanent Storage
7 Allocation by Santa Clara is attached as Exhibit B.

8 1.8 **"Program"** means those facilities, agreements and operational activities,
9 described in Recital I and elsewhere, necessary for Semitropic to provide the water storage,
10 management, pumpback and exchange services specified in this Agreement and in other
11 water banking and storage agreements contemplated by this Agreement.

12 1.9 **"Program Delivery Capability"** means the capability to deliver water for
13 storage made available as a result of the construction of Program facilities, agreements and
14 operational activities. The absorptive capability of the proposed 23,000 acre In-Lieu Service
15 Area plus improvements in the delivery capability to the existing SWSA and TWSA are
16 currently estimated to be 90,500 acre-feet per year, based on current cropping patterns and
17 irrigation efficiencies. Program Delivery Capability for this Agreement is as shown on
18 Exhibit C.

19 1.10 **"Program Entitlement Exchange Rights"** means the rights of Banking
20 Partners to exchange an amount of Stored Water through entitlement exchange for an equal
21 amount of Semitropic's allocation of Agency's SWP Entitlement Water from the California
22 Aqueduct pursuant to this Agreement or other similar agreements between Semitropic and
23 other Banking Partners. Upon completion of such an exchange by Santa Clara, Santa
24 Clara's beneficial interest in the Stored Water that was the subject of the exchange shall vest
25 in Semitropic and the quantity so exchanged shall be deducted from Santa Clara's Storage
26 Account Balance. Upon completion of necessary Program facilities, the total amount of
27 Program Entitlement Exchange Rights available to Banking Partners will be equal to
28 Semitropic's SWP Entitlement allocation less the first 22,000 acre-feet (was 25,000 acre-feet

prior to the implementation of Monterey Amendments). If the nature or description of Semitropic's allocation of the Agency's SWP Entitlement Water is modified, such alternative supply from the SWP shall to such extent be substituted for Semitropic's allocation of Agency's SWP Entitlement Water. Alternative supplies shall include water purchases by the SWP or from sources generally available to State-water contractors, as well as water from facilities in which participation is generally made available to State water contractors. Nothing in the preceding sentence shall obligate Semitropic to participate in such programs. When all necessary Program facilities are constructed, the maximum Program Entitlement Exchange Rights of the Banking Partners at any time will be 133,000 acre-feet (derived from 158,000 acre-feet minus 25,000 acre-feet or after implementation of the Monterey Amendments derived from 155,000 acre-feet minus 22,000 acre-feet) times the sum of all Banking Partners Interim and Permanent Storage Allocation divided by 1,000,000 acre-feet. Exhibit A specifies the maximum Program Entitlement Exchange Rights as Banking Partners' Permanent Storage Allocation is accumulated.

1.10.1 "Unused Program Entitlement Exchange Rights" means those exchange rights established under paragraph 1.10 and Exhibit A of this 1997 Agreement that are not used by the Banking Partners that established those rights.

1.11 "Program Pumpback Capacity" means the capacity, measured in acre-feet per year and CFS, to return Stored Water to the California Aqueduct. Upon completion of all necessary Program facilities, the minimum annual Program Pumpback Capacity shall be 90,000 acre-feet per year at a maximum instantaneous flow rate of 300 CFS. Exhibit A establishes the minimum Program Pumpback Capacity available as the Banking Partners' accumulate Permanent Storage Allocation.

1.11.1 "Unused Program Pumpback Capacity" refers to that minimum pumpback capacity established under Section 1.11 and Exhibit A of this Agreement that is not used by Semitropic or by the Banking Partners that established the Program Pumpback Capacity.

1.12 **"SWP Entitlement Water"** means entitlement water as provided for in the state water contracts, as well as the alternative supplies provided for in the definition of Program Entitlement Exchange Rights.

1.13 **"Storage Account Balance"** means, with respect to a particular Banking Partner, that Banking Partner's accumulated total Stored Water less the accumulated withdrawals of Stored Water by that Banking Partner. Records of these accounts shall be maintained by Semitropic and they shall be subject to audit, review and approval by the Banking Partners, at the expense of the auditing or reviewing Banking Partner, on an annual basis.

1.14 **"Stored Water"** means, with respect to any particular Banking Partner, water delivered for storage by that Banking Partner as measured at Semitropic's turnout in Reach 10A of the California Aqueduct, less losses deducted in accordance with Article 4, which losses shall be accounted for concurrently with the delivery of water to Semitropic for storage. Semitropic acknowledges that the 40,500 acre-feet of water described in Recital L above will be included in Santa Clara's Stored Water as provided in Section 5.10. Santa Clara acknowledges that Santa Clara's Stored Water may be commingled with other water. At all times during the term of this Agreement, an amount of water available to Semitropic in the Semitropic Basin equal to the amount of the Santa Clara Storage Account Balance shall be deemed to be Santa Clara's Stored Water. So long as water in the amount of Santa Clara's Storage Account Balance remains in the Semitropic Basin, Semitropic, as trustee, shall be deemed to remove Santa Clara's Stored Water from storage only as and when requested by Santa Clara pursuant to the terms of this Agreement and any other removal of water by Semitropic from the Semitropic Basin shall be deemed to be the removal of water that is not Santa Clara's Stored Water. If at any time the amount of water in the Semitropic Basin is less than the sum of the Storage Account Balances of the Banking Partners (an event which the parties believe is extremely unlikely), any additional water subsequently available to Semitropic from the Semitropic Basin without interfering with the rights of landowners or other public agencies, shall be shared by the Banking Partners in proportion to their respective Storage Account Balances, until such time as the amount of water so

1 available to Semitropic from the Semitropic Basin equals or exceeds the total of the Storage
2 Account Balances of the Banking Partners.

3 1.15 "Total Program Capital Cost" means \$134,000,000.00 in 1994 dollars, which
4 amount shall be adjusted annually, as of the first day of each calendar year for such
5 calendar year, beginning January 1, 1996, said \$134,000,000.00 shall be adjusted on the
6 same basis as in Section 6.2.1.

7 1.16 "Unused Semitropic Delivery Capability" means that portion of Semitropic's
8 pre-Program Delivery Capability (i.e., approximately 220,000 acre-feet per year plus
9 approximately 10,000 acre-feet per year of direct percolation capability) which is not used
10 for delivery of Semitropic's SWP Entitlement Water, Agency Pool Water, Shafter-Wasco
11 Irrigation District deliveries pursuant to Section 5.9 or other water available to be used by
12 Semitropic for non-banking purposes.

13 ARTICLE 2.

14 ALLOCATION AMONG BANKING PARTNERS

15 2.1 Banking Partners shall have the first priority to utilize their shares of Program
16 Delivery Capability, Program Pumpback Capacity and Program Entitlement Exchange Rights
17 as described in this Agreement. Banking Partners in all cases shall have the first priority to
18 use any Program Delivery Capability, Unused Semitropic Delivery Capability, Program
19 Pumpback Capacity or Program Entitlement Exchange Rights during such time periods
20 when not required for use by other Banking Partners. Semitropic shall notify each Banking
21 Partner not using its respective share of said Program capability, capacity or right, when
22 other entities including Banking Partners desire to utilize it and of any use made of it.

23 2.2 Semitropic shall not enter into any other water banking programs or other
24 agreements which would interfere with the Program benefits and rights of the Banking
25 Partners.

2.3 Then existing Banking Partners will be given an opportunity to review the terms and conditions of proposed agreements with potential Banking Partners and Lower Priority Banking Partners and to review Semitropic's records regarding administration of the Program. Such Lower Priority Banking Partners' agreements and activities shall not adversely impact Banking Partners' ability to utilize any benefits under this Agreement. If Semitropic or one or more then existing Banking Partners believe that other potential Banking Partners' proposed agreements or potential Lower Priority Banking Partners' proposed agreements violate any of the provisions of this Agreement or other such Agreement, any Party may seek dispute resolution pursuant to Article 9 concerning such matter. In this event, Semitropic shall only enter into agreements in conformity with the result of the dispute resolution.

2.4 At no time under this Program shall the sum of all Banking Partners' Interim and Permanent Storage Allocations exceed 1,000,000 acre-feet.

2.5 For a period of ten (10) years, commencing with January 1, 1996, the maximum sum of Santa Clara's Interim Storage Allocation and Permanent Storage Allocation shall be 350,000 acre-feet, subject to the provisions of Sections 2.6, 6.5 and 6.6. In order to convert all of such Interim Storage Allocation to an equivalent Permanent Storage Allocation, the total of Payments, actual and prospective (as defined in Section 1.7), by Santa Clara to Semitropic within said 10 years must equal or exceed Santa Clara's Share of Total Program Capital Costs. Effective on or after the termination of this ten-year period, Semitropic may eliminate any remaining Interim Storage Allocation which has not been converted to Permanent Storage Allocation by Santa Clara as provided in Section 1.7.

2.6 With the exception of agreements which Semitropic enters into with agencies or districts within Kern County, Semitropic shall first offer to Metropolitan; then on an equal priority basis, in proportion to their respective Permanent Storage Allocation, to Santa Clara, Alameda, and Zone 7; and then to all other Banking Partners a right of first refusal for any agreement which Semitropic proposes to enter into with a Lower Priority Banking Partner. Further, after December 12, 1999, if Semitropic negotiates an agreement with another

1 potential Banking Partner, Semitropic shall first offer to Metropolitan; then on an equal
2 priority basis, in proportion to their respective Permanent Storage Allocation, to Santa Clara,
3 Alameda, and Zone 7; and then to all other Banking Partners a right of first refusal for the
4 Interim and Permanent Storage Allocation provided for in such agreement on the same
5 terms and conditions, ~~irrespective of the maximum amount specified in Section 2.5.~~ Banking
6 Partners must notify Semitropic in writing of the intent to exercise such options within forty-
7 five (45) days ~~of receiving written notice from Semitropic~~ transmitting the proposed
8 agreement.

9 ARTICLE 3.

10 DELIVERY OF WATER BY BANKING PARTNERS 11 TO SEMITROPIC

12 3.1 Under the terms of the Delivery Agreements, Santa Clara, at its sole cost and
13 expense, may deliver a portion of its SWP or CVP Entitlement Water to Semitropic at the
14 location in the California Aqueduct specified in the Delivery Agreements. Santa Clara shall
15 notify Semitropic of its intent as early in the year as possible, preferably no later than April
16 15. Such water will be scheduled and delivered to Semitropic at times and rates of delivery
17 acceptable to Semitropic, the Agency and Santa Clara, and shall not exceed the Program
18 Delivery Capability and Unused Semitropic Delivery Capability nor shall it exceed the
19 available capacity of Semitropic's distribution system.

20 3.2 Semitropic will take control and possession of water delivered to Semitropic
21 by any Banking Partner for storage, at the locations specified in their respective Delivery
22 Agreements and will credit the Storage Account Balance of that Banking Partner with Stored
23 ~~Water in an amount equal to the water so delivered less the deduction for losses provided~~
24 for in Article 4 with respect to such water (the "Stored Water"). At the time Semitropic takes
25 control and possession of water delivered by Santa Clara, legal title to Santa Clara's water,
26 together with the right to withdraw from the Semitropic Basin an amount sufficient to return
27 to Santa Clara the Stored Water, shall vest in Semitropic, as trustee for Santa Clara. Upon
28 taking control and possession of water delivered hereunder for storage by Santa Clara,
29 Semitropic, at its sole cost and expense, will do either of the following: (i) transport and store

1 such water by direct percolation; or (ii) exchange that water for an interest in and right to
2 withdraw from the Semitropic Basin an amount of water sufficient to return to Santa Clara
3 the Stored Water (which interest and right shall thereafter be Trust Property). In either case,
4 Semitropic shall thereafter hold and return or otherwise dispose of the Trust Property as
5 provided for in this Agreement. Upon crediting Santa Clara's Storage Account Balance for
6 the amount of any water exchanged as described in clause (ii) above, Semitropic may
7 deliver the exchanged water to water users for surface water service in lieu of pumping
8 groundwater. Semitropic shall retain the right to use its facilities to deliver water supplies
9 made available to it by Banking Partners and acquired by Semitropic by exchange pursuant
10 to clause (ii) above as it deems appropriate.

11 3.3 Program Delivery Capability shall be allocated among Banking Partners in
12 accordance with the ratio of the Banking Partner's portion of Permanent Storage Allocation
13 to the sum of all Banking Partners' Permanent Storage Allocations.

14 3.4 If, due to hydrologic conditions, changes in cropping patterns or other reasons,
15 Program Delivery Capability is reduced, the Banking Partners may request, and Semitropic
16 shall provide, information accounting for such reduction. If such reduction is not due to
17 temporary conditions, Semitropic shall take all actions necessary to comply with Exhibit C.

18 3.5 Unused Semitropic Delivery Capability shall be allocated among the Banking
19 Partners requesting the use of such Unused Semitropic Delivery Capability according to the
20 ratio of the sum of such Banking Partner's Interim and Permanent Storage Allocation, to the
21 sum of all such Banking Partners' Interim and Permanent Storage Allocations.

22 3.6 If, after reasonable efforts by Semitropic to accommodate the Banking
23 Partners' storage scheduling requests, such requests nevertheless exceed the
24 instantaneously available Program Delivery Capability and Unused Semitropic Delivery
25 Capability, Semitropic shall allocate available capacities in proportion to the total of each
26 Banking Partners' Interim and Permanent Storage Allocations.

1 **ARTICLE 4. LOSSES AND STORED WATER**

2 Semitropic's distribution system, evaporative and aquifer losses, for purposes of this
3 Agreement and similar agreements between Semitropic and other Banking Partners, are
4 collectively assumed to be ten percent (10%) of the amount of water furnished by Banking
5 Partners for storage as measured at Semitropic's turnout in Reach 10A of the California
6 Aqueduct. This amount and the Storage Account Balance shall be modified in the future,
7 if the results of studies to be conducted jointly by Santa Clara, other Banking Partners and
8 Semitropic under a mutually agreeable procedure establish the actual loss to be different
9 than the assumed ten percent (10%) losses. The Storage Account Balance shall be
10 adjusted accordingly and resulting adjustments in compensation payments shall be in
11 accordance with Section 6.10.

12 **ARTICLE 5.**

13 **RETURN OF WATER BY SEMITROPIC TO SANTA CLARA**

14
15 5.1 In any year, upon request by Santa Clara, Semitropic shall return Stored Water
16 to Santa Clara by the method set forth in Section 5.1.1 or the method set forth in Section
17 5.1.2 or both.

18 5.1.1 Semitropic may exchange an amount of Santa Clara's Stored Water for
19 an equal amount of Semitropic's SWP Entitlement Water. Santa Clara hereby consents to
20 such an exchange and Semitropic will be deemed to have effected such an exchange by
21 delivering a portion of its SWP Entitlement Water to Santa Clara in compliance with the
22 Delivery Agreement. Upon completion of such an exchange, Santa Clara's beneficial
23 ~~interest in the Stored Water that was the subject of the exchange and the right to withdraw~~
24 such water shall be vested in Semitropic in its individual capacity, and Semitropic may
25 thereafter deliver such water to its water users who would otherwise have received the
26 portion of Semitropic's SWP Entitlement Water that was delivered to Santa Clara as a result
27 of the exchange.

5.1.2 Semitropic may return Santa Clara's Stored Water to Santa Clara by pumping water from the groundwater basin back to the Aqueduct for delivery to Santa Clara as specified in the applicable Delivery Agreement.

5.2 The return of Stored Water by Semitropic to Santa Clara shall be subject to the following terms and conditions:

5.2.1 Subject to the provisions of this Agreement, for each acre-foot of Stored Water held by Semitropic for Santa Clara, Semitropic shall ultimately return one acre-foot of water to Santa Clara.

5.2.2 Subject to the provisions of this Agreement, when Santa Clara requests the return of Stored Water, Semitropic shall return at a minimum the quantities of water calculated in accordance with the following, using its reasonable efforts to accommodate Santa Clara's delivery schedule:

5.2.2.1 Program Pumpback Capacity shall be allocated among Banking Partners according to the ratio of each Banking Partner's combined Interim and Permanent Storage Allocations divided by 1,000,000 acre-feet. However, for the first ten (10) years of their respective agreements, Metropolitan and Santa Clara each shall receive a minimum guarantee of 31,500 acre-feet of Program Pumpback Capacity. Each Banking Partner shall have a right to any then existing Program Pumpback Capacity not used by other Banking Partners, subject to mitigation of impacts to other Banking Partners pursuant to Section 5.6. If requests by Banking Partners for unused Program Pumpback Capacity exceed such capacity, then the unused Program Pumpback Capacity shall be allocated to each Banking Partner according to the ratio of its combined Interim and Permanent Storage Allocations, divided by the sum of the combined Interim and Permanent Storage Allocations of all Banking Partners wishing to use the unused capacity times the amount of unused Program Pumpback Capacity.

1 5.2.2.2 Program Entitlement Exchange Rights shall be allocated
2 to each Banking Partner according to the ratio of its combined Interim and Permanent
3 Storage Allocations divided by 1,000,000 acre-feet times the Program Entitlement Exchange
4 Rights to be allocated. Each Banking Partner shall have a right to any Program Entitlement
5 Exchange Rights not required for use by other Banking Partners, subject to mitigation of
6 impacts to other Banking Partners pursuant to Section 5.6. If requests by Banking Partners
7 for unused Program Entitlement Exchange Rights exceed such rights, then the unused
8 Program Entitlement Exchange Rights shall be allocated to each Banking Partner according
9 to the ratio of its combined Interim and Permanent Storage Allocations, divided by the sum
10 of the combined Interim and Permanent Storage Allocations of all Banking Partners wishing
11 to use the unused Program Entitlement Exchange Rights times unused Program Entitlement
12 Exchange Rights.

13 5.2.3 In the event it is determined in the future under full Program development that
14 the minimum annual Program Pumpback Capacity is less than 90,000 acre-feet per year but
15 greater than 31,500 acre-feet per year and/or the maximum Program Entitlement Exchange
16 Rights are less than 133,000 acre-feet per year but greater than 46,550 acre-feet per year
17 on a permanent basis, and since Metropolitan was the first banking partner, and if
18 Metropolitan's Permanent Storage Allocation is Fully Vested, and, during the first ten (10)
19 years of the "AGREEMENT BETWEEN THE METROPOLITAN WATER DISTRICT OF
20 SOUTHERN CALIFORNIA AND SEMITROPIC WATER STORAGE DISTRICT AND ITS
21 IMPROVEMENT DISTRICTS FOR A METROPOLITAN - SEMITROPIC WATER BANKING
22 AND EXCHANGE PROGRAM"(Metropolitan's Agreement), dated December 12, 1994,
23 whether or not Metropolitan's Permanent Storage Allocation is fully vested, Metropolitan's
24 minimum guarantee of 31,500 acre-feet per year of Program Pumpback Capacity acquired
25 under the December 12, 1994 Agreement and its maximum of 46,550 acre-feet per year
26 (133,000 acre-feet per year times 35 percent) of Program Entitlement Exchange Rights shall
27 not be reduced and shall not be used in any proration of capacity rights between Banking
28 Partners. In the event said capacity and rights are less than Metropolitan's minimum
29 guarantee of 31,500 acre-feet per year and less than 46,550 acre-feet per year of Program
30 Entitlement Exchange Rights, and if Metropolitan's Permanent Storage Allocation is Fully

Vested, and, during the first ten (10) years of Metropolitan's Agreement, whether or not Metropolitan's Permanent Storage Allocation is fully vested, Metropolitan shall be allocated all of said capacity and rights. If, however, Metropolitan's Permanent Storage Allocation is reduced, below 350,000 acre-feet, such Program Pumpback Capacity and Program Entitlement Exchange Right shall be reduced to its vested rights. Temporary reductions in said capacity and rights are subject to Sections 5.2.2.1., 5.2.2.2 and 5.5. Except for Metropolitan's rights set forth in this Section 5.2.3, all Banking Partners established under this Program shall have equal priority within their allocated capacity and unused capacity.

5.3 Santa Clara shall notify Semitropic of its intent to take delivery of Stored Water as early in the year as possible, but no later than May 1 of the same year. If such notification is provided after May 1, Semitropic, at its sole discretion, may make reasonable efforts to comply with Santa Clara's request. In the event of an emergency need for water by Santa Clara, Semitropic shall endeavor to return Stored Water to Santa Clara to the maximum extent feasible considering the capacity rights of other Banking Partners.

5.4 Semitropic has obtained approval from DWR to deliver Stored Water by pumpback to the California Aqueduct. In addition it shall be Semitropic's responsibility to notify the Agency, each Banking Partner, and DWR, as to the amount of Program Entitlement Exchange Rights and Program Pumpback Capacity for that year. When Stored Water is returned by pumpback, it shall be returned during Semitropic's off-peak irrigation season and other periods which Semitropic determines to be operationally feasible, on a schedule acceptable to the respective Banking Partner, Agency and DWR and at varying rates of delivery. Banking Partner shall be responsible for all necessary approvals and costs once the Stored Water is returned to Santa Clara by either Program Pumpback or Program Entitlement Exchange.

5.5 Notwithstanding any other provision of this Agreement, Semitropic will temporarily reduce or terminate groundwater pumping for the purpose of returning Stored Water to Banking Partners to the extent required pursuant to the MOU referenced above in Recital H. However, to the extent possible, Semitropic shall change the timing and location

1 of pumping to avoid reduction or termination in the return of Stored Water pursuant to the
2 MOU. Semitropic shall construct adequate facilities and/or secure agreements and/or
3 operational arrangements to obtain the long term levels of service provided for in Exhibit A.
4 Such long term levels of service may only be reduced to the extent required by the MOU
5 referenced above in Recital H.

6 5.6 If the use by other Banking Partners, Lower-Priority Banking Partners or
7 Semitropic of unused Program Pumpback Capacity or unused Program Entitlement
8 Exchange Rights referenced in Sections 5.2.2.1 and 5.2.2.2 interferes with the recovery of
9 Santa Clara's or any other Banking Partner's Stored Water by causing a reduction or
10 termination of pumping pursuant to the MOU, the Party or Parties responsible for the
11 action(s) which impacts Santa Clara or any other Banking Partner shall reduce its withdrawal
12 of Stored Water to make up Santa Clara's or other Banking Partner's loss and, to the extent
13 reductions in the withdrawal of Stored Water are insufficient, shall provide, at the election
14 of the impacted Banking Partner, an equivalent water supply in that year or cash in the
15 amount of the replacement cost of such water, such water or cash to be for the benefit of
16 and to be immediately distributed to the impacted Banking Partners. Semitropic shall adjust
17 the Banking Partners' accounts to reflect any such water exchange.

18 5.7 Wells within Semitropic can currently produce water that will meet DWR's water
19 quality standards to return water to the California Aqueduct. Semitropic shall take no direct
20 action which would knowingly cause the quality of recovered groundwater to not meet such
21 water quality standards in effect. The preceding sentence shall not apply to delivery of water
22 under non-banking programs or otherwise operating under this Program. In the event that
23 ~~future water quality standards change, or the quality of groundwater from Semitropic wells~~
24 is such that Semitropic cannot meet acceptable DWR water quality requirements for
25 pumping into the California Aqueduct, Stored Water shall be returned to Banking Partners
26 by Program Entitlement Exchange or alternative methods satisfactory to the affected
27 Banking Partners. Such alternative methods may include, but are not necessarily limited to:
28 purchases, exchanges with others, and/or by improving Stored Water quality to acceptable
29 standards for direct pumpback, with the additional costs of any such methods being paid by

1 Banking Partners accepting such alternative methods. Semitropic's operations and financial
2 situation shall not be adversely impacted as a result of these alternative methods.

3 5.8 This Agreement shall be subject to the "Agreement Between the Department
4 of Water Resources of the State of California, Kern County Water Agency and Semitropic
5 Water Storage District for 1990 Demonstration Semitropic Local Element," dated May 1,
6 1990, which provides for Semitropic to return all banked water to DWR solely by entitlement
7 exchange. Said agreement expires when all banked water is withdrawn, or on December
8 31, 2010, whichever first occurs. Until such expiration, DWR has priority over Banking
9 Partners in any year water is to be returned by entitlement exchange. The amount owed to
10 DWR is 50,164 acre-feet as of January 1, 1997 with a maximum withdrawal rate of 10,033
11 acre-feet per year. Any amendment to such agreement shall be subject to this Agreement
12 and the review of the Banking Partners.

13 5.9 Santa Clara also recognizes that Semitropic has entered into an "Agreement
14 Between Shafter-Wasco Irrigation District and Semitropic Improvement District of Semitropic
15 Water Storage District Providing for Construction and Operation of an Intertie Pipeline,"
16 dated December 6, 1993, which implements a water banking and exchange program.
17 Semitropic has committed to return water to Shafter-Wasco by delivery of either surface
18 water in excess of its needs from any available source or by pumping groundwater. The
19 agreement with Shafter-Wasco is based on the use of existing Semitropic facilities for the
20 delivery of water to storage and for the withdrawal or return of water. Shafter-Wasco,
21 therefore, has priority over Banking Partners in the use of existing facilities. Semitropic's
22 obligation under said agreement does not require commitment of SWP entitlement nor the
23 use of pumpback facilities required for the return of Banking Partners' Stored Water.

24 5.10 When the conditions set forth in clause (a) through (c) of Article 8 (the "**Article**
25 **8 Conditions**") have been satisfied and provided that this Agreement has not previously
26 been terminated: (i) the 40,500 acre-feet of water currently in the Santa Clara Storage
27 Account Balance under the 1996 Agreement, or so much thereof as has not been withdrawn,
28 shall be transferred to Santa Clara's Storage Account Balance under this Agreement, and

(ii) the provisions of this Agreement shall supersede said 1996 Agreement and 40,500 acre-feet shall be considered the initial Stored Water Balance under this Agreement, except that no additional payment pursuant to Section 6.2.1 is required. Such water will be subject to charges pursuant to Sections 6.3.1, 6.3.3, 6.4 and 6.7, as applicable. As provided in Recital J, payments made pursuant to Sections 6.3.1 and 6.4 shall be credited to Santa Clara's Share of Total Program Capital Costs. If, prior to satisfaction of the Article 8 Conditions, Santa Clara has withdrawn water stored under the 1996 Agreement and has paid (or has been or will be billed) for the return of such water at the rates provided in the 1996 Agreement, then Santa Clara may pay to Semitropic the difference between the sum of all payments made by Santa Clara with respect to withdrawal of such water under Article 4.2 of the 1996 Agreement other than the power component and the amount which would have been due pursuant to Section 6.3.1 if the water had been withdrawn under this Agreement, and the total amount paid with respect to withdrawal of such water under both the 1996 Agreement and this Agreement shall be credited pursuant to Section 1.6 and 1.7, as applicable, in determining Santa Clara's Share of Total Capital Costs and Santa Clara's Permanent Storage Allocation.

ARTICLE 6. COMPENSATION

Santa Clara shall make the payments set forth below to compensate Semitropic for (i) its services as trustee under this Agreement, (ii) costs and expenses incurred by Semitropic in connection with its obligations under this Agreement.

6.1 Semitropic commits to utilize Santa Clara's payments and other Semitropic funds, and to maintain such adequate financial flexibility, as it reasonably determines to be necessary to construct facilities needed to provide Santa Clara with Program Pumpback Capacity and Program Entitlement Exchange Rights in a timely manner as described in Exhibit A hereto and, as payments of Santa Clara's Share of Total Program Capital Cost are made, provide increases in Program Delivery Capability to Santa Clara's share of Program Delivery Capability as described in Exhibit C, all in accordance with this Agreement.

Santa Clara shall pay the following for services provided by Semitropic for storage and withdrawal of water. Semitropic shall pay all other costs not specified herein, and Semitropic shall not create and impose any other charges or fees upon Santa Clara.

6.2 Storage Payments.

6.2.1 Until Santa Clara's Permanent Storage Allocation is Fully Vested, Santa Clara shall pay to Semitropic Ninety Dollars (\$90.00) per acre-foot for all Stored Water credited to Santa Clara's Storage Account Balance. Subsequent to calendar year 1995, the Ninety Dollars (\$90.00) per acre-foot shall be adjusted at the beginning of each year as provided in this Section 6.2.1, and the adjusted amount shall apply to all Stored Water credited to Santa Clara's Storage Account Balance for that year. The adjusted amount for any particular calendar year after 1995 shall be the amount equal to Ninety Dollars (\$90.00) multiplied by a fraction, the numerator of which is the Construction Costs Index (as defined in Section 1.6) for December of the calendar year immediately preceding the calendar year with respect to which the adjusted amount is being determined (that is, for December 1995 with respect to the adjusted amount for 1996; December 1996 for 1997; and so on), and the denominator of which shall be the Construction Costs Index for June 1994, which the parties agree is 6,550.36 (based on 1913 value of 100).

6.2.2 After Santa Clara's Permanent Storage Allocation is Fully Vested, Santa Clara shall pay Fifty Dollars (\$50.00) per acre-foot for any additional Stored Water credited to Santa Clara's Storage Account Balance, adjusted at the beginning of each year as provided in this Section 6.2.2, and the adjusted amount shall apply to all Stored Water credited to Santa Clara's Storage Account Balance for that year and to which this Section 6.2.2 is applicable. The adjusted amount under this Section 6.2.2 for any particular calendar year shall be the amount equal to Fifty Dollars (\$50.00) multiplied by a fraction, the numerator of which is the Consumer Price Index, All Urban Consumers, All Items Index, Western Cities with populations of 50,000 to 330,000 (the "CPI") for December of the calendar year immediately preceding the calendar year with respect to which the adjusted amount is being determined (that is, for December 2000 with respect to the adjusted amount

1 for 2001; December 2001 for 2002; and so on), and the denominator of which shall be the
2 CPI for June 1994 (which, the Parties agree, is 148.6 (based on 1982-84 index).

3 6.2.3 If publication of either of the indexes referred to in Section 6.2.1 or 6.2.2
4 ceases or if the basis for such indexes is substantially modified, the Parties shall negotiate
5 and mutually agree on an alternative but equivalent index or, in the absence of agreement,
6 the matter shall be resolved pursuant to Article 9.

7 6.3 Withdrawal Payments.

8 6.3.1 Santa Clara shall pay to Semitropic Forty Dollars (\$40.00) per acre-foot,
9 for each acre-foot of water with respect to which storage payments have been made
10 pursuant to Section 6.2.1 when such water is returned to Santa Clara, or until Santa Clara
11 has paid its share of Total Program Capital Costs under Section 1.6, whichever occurs first.
12 Said charge shall be adjusted on the same basis as in Section 6.2.1.

13 6.3.2 Santa Clara shall pay to Semitropic Fifty Dollars (\$50.00) per acre-foot
14 for each acre-foot of water stored under provisions of Section 6.2.2 when such water is
15 returned to Santa Clara. Said charge shall be adjusted on the same basis as in Section
16 6.2.2.

17 6.3.3 In addition to payment under Sections 6.3.1 and 6.3.2, when water is
18 returned, Santa Clara shall pay the average unit power costs then actually incurred by
19 Semitropic to pump such water from the groundwater basin for either direct delivery to the
20 California Aqueduct or for entitlement exchange. In the case of direct delivery to the
21 California Aqueduct, Santa Clara also shall pay the average unit power cost then actually
22 incurred by Semitropic to convey the returned water through the distribution system and to
23 pump such water into the California Aqueduct at the Semitropic turnout in Reach 10A. Said
24 power costs shall be computed based on the amount of energy consumed to withdraw and
25 when applicable to convey to the California Aqueduct Santa Clara's Stored Water in a given
26 month times Semitropic's average actual unit power cost for the same pumping period. For

ease in billing, Semitropic shall establish an estimated power rate for each calendar year with respect to which Santa Clara requests such information and shall provide Santa Clara with such estimate, including back-up documentation to justify the rate, within fourteen (14) days of the request. Such estimated rate shall be used for billing purposes for the following year and then the billing will be adjusted to actual by March 1 of the year following the estimated rate year, or as soon as possible thereafter. Once the variance amount has been agreed to by the Parties, any amount due by either Party shall be billed immediately and paid in accordance with Section 6.8. Semitropic has its own power production and distribution facilities and the unit cost of power shall be based upon the cost of Semitropic's energy project including, but not limited to, debt service for the energy project, fuel, operation and maintenance for the energy project, replacements, reserve deposit for the energy project, utility billings, and the cost of production and distribution of such power. The Parties agree that the initial calculation shall be consistent with the calculation in Exhibit D. For all Stored Water returned by Semitropic's exercise of Program Entitlement Exchange Rights, Semitropic shall pay all applicable SWP costs thru the Harvey O. Banks Pumping Plant to the turnout of the South Bay Aqueduct.

6.3.4 Exhibit D may be revised from time to time by written consent of the Parties, which consent shall not be unreasonably withheld. The intent of Exhibit D is to provide Semitropic with sufficient revenue to recover the power costs incurred by Semitropic for Santa Clara's withdrawal of Stored Water and to allow Semitropic flexibility to change the calculation based on experience and the changing electric utility industry.

6.4 During the period in which Santa Clara has Interim Storage Allocation, if Santa Clara has not paid Santa Clara's Share of Total Program Capital Cost, Santa Clara shall pay Semitropic \$20.00 per acre-foot for any water remaining in Santa Clara's Storage Account Balance for more than five years (which will also be determined with respect to water stored under the 1996 Agreement), which payment shall be due each year. Withdrawal of water under the Agreement shall be accounted for on a first-in-first-out basis. Water in storage will be based on end of year storage amounts. The above fee shall be adjusted based on the index referenced in Section 6.2.1 above.

1 6.5 If Santa Clara has not stored and withdrawn 350,000 acre-feet and if payments
2 made pursuant to Sections 6.2.1, 6.3.1 and 6.4 result in Santa Clara paying to Semitropic
3 an amount in excess of Santa Clara's Share of Total Program Capital Cost and the sum of
4 all Banking Partners Permanent Storage Allocation is less than 1,000,000 acre-feet, then
5 the amount of such excess shall increase Santa Clara's Permanent Storage Allocation and
6 related rights under the Program. The amount of such increase shall be determined
7 monthly, once Santa Clara has paid an excess amount, by dividing the sum theretofore paid
8 in excess of Santa Clara's Share of Total Program Capital Cost as of the last day of the prior
9 calendar month by Total Program Capital Cost as of that same date and multiplying that
10 quotient by 1,000,000 acre-feet.

11 6.6 When Santa Clara's Permanent Storage Allocation is Fully Vested, at Santa
12 Clara's election and Semitropic's concurrence, Santa Clara may continue to deliver water
13 for storage and make payments under Sections 6.2.1, 6.3.1 and 6.4, and such election and
14 payments will result in an increase in Santa Clara's Permanent Storage Allocation to the
15 extent the sum of all Banking Partners' Permanent and Interim Storage Allocation does not
16 exceed 1,000,000 acre-feet. The additional payments shall be escalated in accordance with
17 Sections 6.2.1 and 6.3.1. The amount of such increase shall be determined pursuant to
18 Section 1.7.

19 6.7 Except as otherwise provided at Sections 6.7.1 or 6.7.2, Santa Clara shall be
20 allocated an annual operations and maintenance fee (the "O&M Fee") of \$3.98 (the "Base
21 Amount") per acre-foot of Permanent Storage Allocation held by Santa Clara. The Base
22 Amount shall be adjusted in the same manner described and using the same index
23 referenced in Section 6.2.2. The annual O&M Fee started on January 1, 1997, for water
24 stored in 1996.

25 6.7.1 In any year, Santa Clara shall pay in total, an amount equal to the
26 greater of the sum of payments required under Sections 6.2.2 and 6.3.2 or the annual O&M
27 Fee otherwise required under Section 6.7. The annual O&M Fee shall be billed on January
28 1 of each year. Any amounts due during that year under Section 6.2.2 and Section 6.3.2

shall be compared with the O&M fee. No payments due under Sections 6.2.2 and 6.3.2 shall be payable until the amount owed under Sections 6.2.2 and 6.3.2 is greater than the O&M fee. Thereafter, only the amount payable under Sections 6.2.2 and 6.3.2 that is greater than the O&M fee paid that year is then due and payable to Semitropic.

6.7.2 If Semitropic or other Banking Partners use Program Deliver Capability, Program Pumpback Capacity or Program Entitlement Exchange Rights allocated to Santa Clara, such entity using said capacity shall pay a portion of Santa Clara's O&M Fee under Section 6.7. The portion to be paid shall be the then current O&M Fee of \$3.98 per acre-foot (Base Amount) prorated 20 percent to Program Delivery Capacity, 50 percent to Program Pumpback Capacity and 30 percent to Program Entitlement Exchange Rights. This payment shall be based on that portion of the capacity or exchange rights shown on Exhibits A and C during the months they were actually used. The payment made for the use of Santa Clara's unused capacity rights shall be deducted from the next payment due from Santa Clara under this Agreement. This Section 6.7.2 shall not apply when Semitropic uses unused program capacity rights for its own groundwater recharge or other District purposes.

6.7.3 If Santa Clara uses another Banking Partner's unused Program Delivery Capability, Program Pumpback Capacity or Program Entitlement Exchange Rights, Santa Clara shall pay the share of the other Banking Partner's O&M Fee under this Section 6.7 that is represented by its use and determined in the same manner set forth in Section 6.7.2.

6.8 Semitropic may bill Santa Clara no more than monthly for payments under Sections 6.2.1 or 6.2.2, 6.3.1 or 6.3.2, 6.3.3, 6.7.1 and 6.7.3 hereof and annually for payments under Section 6.4, which payments shall be due Semitropic and shall become delinquent forty-five (45) days after Santa Clara receives the invoice under the terms of this Agreement. In addition to other remedies available, delinquent payments shall bear interest at the rate of one percent (1%) per month. Data supporting the amounts invoiced shall be provided upon the reasonable request of Santa Clara. Semitropic shall correct any erroneous billing promptly upon discovery of the error. If Santa Clara has been underbilled, payment of the underbilled amount shall be due and become delinquent forty-five (45) days

1 after Santa Clara receives the corrective invoice and data justifying the change.
2 Overpayments by Santa Clara shall be refunded to Santa Clara within forty-five days of
3 discovery, together with interest thereon at the average investment yield of Santa Clara's
4 investments as reported monthly by Santa Clara's Treasury Officer.

5 6.9 Santa Clara will pay to Semitropic which in turn it will pay to Metropolitan an
6 amount to reimburse Metropolitan for a portion of its expenses in developing the Program.
7 Santa Clara's reimbursement for Metropolitan shall be equal to Santa Clara's Interim and
8 Permanent Storage Allocation multiplied by thirty cents (\$0.30 per acre-foot) per acre-foot
9 adjusted in the same manner as in Section 6.2.2. Santa Clara will be credited for payments
10 made in 1996 under Section 6.6 of the 1996 Agreement.

11 6.10 In the event there is an adjustment in Santa Clara's Storage Account Balance
12 as provided at Section 4, applying the first-in-first-out method of accounting for water in the
13 Storage Account Balance, previous payments shall be adjusted based on the payment
14 charged in the year the quantity of water to be adjusted was delivered with no further
15 adjustments using the applicable indexes cited in Section 6.2.1 or Section 6.2.2. In addition
16 no interest shall be payable on the amount of money required for said adjustment. Financial
17 obligations shall occur as follows:

18 6.10.1 To the extent the Storage Account Balance is reduced (i.e.,
19 losses are determined to exceed ten percent (10%)), Semitropic shall reimburse Santa Clara
20 for the charges paid under Sections 6.2.1, 6.2.2 and 6.4 within one year of such
21 determination.

22 6.10.2 To the extent the Storage Account Balance is increased (i.e.,
23 losses are determined to be less than ten percent (10%)), Santa Clara shall pay Semitropic
24 for charges that would have been paid under Sections 6.2.1, 6.2.2 and 6.4 for such
25 additional water determined to be in the Santa Clara Storage Account Balance within one
26 year of such determination.

6.11 It is recognized that changes in Semitropic's actual costs of operating the Program may occur on or after the date this Agreement is executed as a result of enactments, amendments, changes in implementation or interpretation, or repeal of any federal or state law, rule, regulation or ordinance (each, a **"Regulatory Change"**). If either Party determines that a Regulatory Change has occurred that would result in a material change (upward or downward) in Semitropic's costs for storing, recovering or transporting water pursuant to the terms of this Agreement, which change in Semitropic's costs is not reflected in the adjustments in the payments due from Santa Clara to Semitropic pursuant to Article 6 or other provision of this Agreement (including, but not limited to, this Section 6.11), such Party shall promptly inform the other Party of the nature and extent of such alleged Regulatory Change and of the reason why that party believes an adjustment pursuant to this Section 6.11 is warranted in the payments due from Santa Clara to Semitropic. Promptly thereafter, Semitropic shall provide Santa Clara with its calculation of the costs or cost savings associated with such Regulatory Change and the facts and assumptions underlying that calculation. Upon agreement by the parties hereto (i) that a charge or credit affecting any payment due from Santa Clara to Semitropic should be made as a result of a Regulatory Change, (ii) of the amount of such charge or credit, (iii) as to whether such charge or credit is to affect the basic payment amount or is to be separately accounted for (and, if so, in what manner), and (iv) as to the period during which such charge or credit is to apply, such charge or credit shall be incorporated into an amendment to this Agreement setting forth the foregoing and other particulars necessary to implement that adjustment. If such agreement cannot be reached within forty-five (45) days after Semitropic has provided the required notice and information to Santa Clara, the matter shall be resolved pursuant to Article 9, the qualified third party or arbitration panel being charged with determining (x) whether a Regulatory Change has occurred (if that is in dispute), (y) the amount of change, if any, in Semitropic's costs resulting from the Regulatory Change, and (z) the manner in which the payments due from Santa Clara to Semitropic are to be adjusted to fairly and equitably reflect that change in Semitropic's costs (it being the intent of the parties that no windfall or unwarranted compensation or benefit should result to any party as a result of any adjustment made pursuant to this Section 6.11). Any adjustment to the payments due from Santa Clara to Semitropic made pursuant to this Section 6.11 shall be

1 effective as of the first day such Regulatory Change affects Semitropic's operations
2 hereunder unless the parties otherwise agree and may be reconsidered thereafter at any
3 time, at the request of any party, if the adjustment is unjustly undercompensating or
4 overcompensating any party.

5 ARTICLE 7. DIVISION OF RISK RESPONSIBILITIES

6 Semitropic and Santa Clara agree to cooperate, and Semitropic shall require other
7 Banking Partners to cooperate, in reducing, to the greatest extent practicable, the risk from
8 claims arising against any of the Parties from implementation of this Agreement. In the
9 event of claims by third parties relating to this Agreement, the responsibilities of Semitropic,
10 whether acting in its individual and/or trustee capacity, Santa Clara and the other Banking
11 Partners shall be divided as follows:

12 7.1 Semitropic shall defend, indemnify and hold harmless Santa Clara and the
13 other Banking Partners, and their respective directors, officers, agents and employees
14 against any and all losses, claims, demands and causes of action (herein collectively
15 referred to as "claims") and shall assume responsibility for payment of any settlements,
16 judgements, costs and attorneys' fees arising from claims concerning the following:

17 (a) Control, carriage, handling, use, disposal, or distribution of water in
18 Semitropic's facilities;

19 (b) Any contest or dispute by any landowner or water user within the
20 service area of, or otherwise served by, Semitropic concerning the
21 allocation of benefits among or the assessment of charges to
22 Semitropic landowners or water users;

23 (c) Construction, repair, modification, or replacement of any Semitropic
24 facilities;

2 (d) Semitropic's operation of the Program or Semitropic facilities or the
actions of its officers, employees or agents; and

3 (e) Any other activities under Semitropic's exclusive control.

4 If Santa Clara is named in any such action, it may submit its defense to Semitropic,
5 which shall bear the full cost of defense, except to the extent that Santa Clara utilizes its own
6 counsel for such defense. Notwithstanding the foregoing, the responsibility for any claims
7 challenging the validity, underlying authority or enforceability of the Program under this
8 Agreement shall be as provided at Section 7.3.

9 7.2 Each Banking Partner (including Santa Clara) shall defend, indemnify and hold
10 harmless Semitropic and the other Banking Partners, and their respective directors, officers,
11 agents and employees, against any and all claims and shall assume responsibility for
12 payment of any settlements, judgements, costs or attorneys' fees arising from claims
13 concerning the following:

14 (a) Control, carriage, handling, use, disposal or distribution of Stored Water
15 in facilities of that Banking Partner or in SWP facilities, to the extent that
16 the claim relates to use of SWP facilities to implement this Agreement
17 with respect to that Banking Partner;

18 (b) Any claim by a landowner, resident, public agency or other entity within
19 the service area of, or otherwise served by, that Banking Partner
20 challenging the appropriateness of that Banking Partner entering into
21 this Agreement;

22 (c) Construction, repair, modification or replacement of any of the facilities
23 of that Banking Partner;

(d) Operation of the facilities of or the actions of the officers, employees or agents (other than Semitropic) of that Banking Partner; and

(e) Any other activities under the exclusive control of that Banking Partner.

If Semitropic is named in any such action, it may submit its defense to the Banking Partner involved, which Banking Partner shall bear the full cost of defense, except to the extent Semitropic utilizes its own counsel for such defense. Notwithstanding the foregoing, the responsibility for any claims challenging the validity, underlying authority or enforceability of the Program under this Agreement shall be as provided at Section 7.3. Semitropic shall not be entitled to any indemnification from Santa Clara except as set forth in this Section 7.

7.3 As for any claims by a third party with respect to the Program which are not otherwise provided for at Sections 7.1 or 7.2, including any claims challenging the underlying authority for or the validity or enforceability of the Program under this Agreement, each Banking Partner shall be responsible for payment of its allocable share of any settlements or judgments to which it is a party with respect to such claims. If Semitropic is named in any action with respect to such a claim, it may submit its defense to the Banking Partners which are parties to that action with respect to that claim and those Banking Partners shall bear the full cost of defense, except to the extent Semitropic utilizes its own counsel for such defense.

7.4 At the request of Santa Clara and/or other Banking Partners, Semitropic shall join in the defense of any claim which is not adverse to Semitropic's water supply or financial interests in which case the requesting Party shall reimburse Semitropic for all of its costs of defense. However, with respect to claims in which one or more of the plaintiffs resides or does business in Kern County challenging the recovery of groundwater under this Agreement, and with respect to any third party claim challenging this Agreement or the right of Santa Clara to the return of its Stored Water in accordance with the terms of this Agreement, Santa Clara may demand that Semitropic join in the defense of claims. In such case, Semitropic must comply with any such demand, the Parties shall jointly manage the

1 litigation, and Santa Clara and other Banking Partners who are parties to such litigation shall
2 pay one-half of Semitropic's defense costs, if one or more of the plaintiff resides or does
3 business in Kern County; and in other such cases, shall reimburse Semitropic for all of its
4 costs of defense.

5 7.5 In all other water banking and exchange agreements involving Semitropic and
6 any Banking Partner, the division of risk and indemnification responsibilities between and
7 among Semitropic and the Banking Partner(s) shall be identical to the responsibilities
8 provided in Sections 7.1, 7.2, 7.3, 7.4 and 7.6. In particular:

9 7.5.1 Each Banking Partner shall be required to assume the duty to defend,
10 indemnify and hold harmless Semitropic and the other Banking Partners from claims arising
11 from or otherwise concerning the activities described in Section 7.2 of that Banking Partner.

12 7.5.2 Each Banking Partner shall be required to assume the duty to pay its
13 allocable share of any claims of the type described in Section 7.3. Unless otherwise
14 provided in the settlement or judgment, each Banking Partner's share of such settlements,
15 judgments, or attorney fees as provided at Section 7.3 shall be determined according to the
16 ratio of that Banking Partner's combined Interim and Permanent Storage Allocation divided
17 by the sum of all involved Banking Partners' combined Interim and Permanent Storage
18 Allocations.

19 ~~7.6~~ In the event that payments are made in settlement of a claim, in satisfaction
20 of a judgment or for defense costs where the claim arises from issues applying to both
21 Semitropic and one or more Banking Partners, payments shall be divided in proportion to
22 the relative liability of each arising from the common claim. If the Parties cannot agree on
23 the proportion, then the share to be paid by each of Semitropic and the Banking Partners
24 shall be submitted to arbitration as provided at Article 9 hereof.

25 ARTICLE 8. REQUIRED FOR IMPLEMENTATION

26 Implementation of this Agreement is contingent upon the following:

1 (a) An agreement among DWR, Agency and Santa Clara for a Santa Clara
2 Point of Delivery Agreement .

3 (b) Compliance with the California Environmental Quality Act (CEQA) and
4 the time has expired in which any party could challenge CEQA
5 documentations.

6 (c) No entity within Kern County exercising its right of first refusal under the
7 same terms and conditions provided to Santa Clara in this Agreement
8 within forty-five (45) days after notification of this Agreement to Kern
9 County Water Agency member agencies.

10 Semitropic will promptly notify Santa Clara when condition (c) has been met and the
11 Parties will keep each other informed concerning the satisfaction of the other Article 8
12 Conditions.

13 If and to the extent Santa Clara elects to store CVP water in Semitropic pursuant to
14 this Agreement, it shall first provide written confirmation from appropriate agencies that such
15 storage has been approved pursuant to the Central Valley Project Improvement Act (if
16 applicable), State Water Resources Control Board (if applicable) and any other necessary
17 approvals, and that such storage will not subject landholders within Semitropic to the
18 acreage and pricing limitations of Federal Reclamation Law.

19 ARTICLE 9. DISPUTE RESOLUTION

20 ~~9.1 In the event of dispute regarding interpretation or implementation of this~~
21 Agreement, or if the parties are unable to agree upon a matter as to which their agreement
22 is provided for hereunder, the Parties will endeavor to resolve the dispute by using the
23 service of a mutually acceptable consultant. The fees and expenses of the consultant shall
24 be shared equally by the Parties.

1 9.2 If a consultant cannot be agreed upon, or if the consultant's recommendations
2 are not acceptable to the Parties, and unless the Parties otherwise agree, the matter shall
3 be resolved by arbitration as provided in this Article 9 and in the California Arbitration Act
4 (Part 3 [commencing with § 1280], Tit. 9, Calif. Code Civ. Proc.), including Section 1283.05.
5 The Parties agree to be bound by the majority decision of a three-member arbitration panel
6 to be selected as follows:

7 (a) One member shall be selected by Santa Clara (or if the dispute is
8 between various Banking Partners and Semitropic, the Banking
9 Partners involved shall collectively agree on the member).

10 (b) One member shall be selected by Semitropic; and

11 (c) The third member shall be selected by the other two (2) members.

12 If the two (2) members selected by the Banking Partner(s) and Semitropic are unable
13 to agree on the selection of a third member or if Banking Partners are unable to agree on
14 a member among themselves either Party may petition a court to appoint such member
15 pursuant to Code of Civil Procedure Section 1281.6. The fees and expenses of the panel
16 members shall be paid as follows: Semitropic pays for its member, Santa Clara pays for its
17 member (or if the dispute involves more than one Banking Partner, the participating Banking
18 Partners share the fees and expenses of the member according to the ratio of each
19 participating Banking Partner's Permanent Storage Allocation divided by the sum of all
20 participating Banking Partner's Permanent Storage Allocations), and the fees and expenses
21 of the third member of the panel shall be shared fifty percent (50%) by Semitropic with the
22 remainder to be shared among the Banking Partners participating in the dispute resolution
23 process according to the ratio of each participating Banking Partner's Permanent Storage
24 Allocation divided by the sum of all participating Banking Partner's Permanent Storage
25 Allocations. Alternatively, if the dispute is between Banking Partners and Semitropic has
26 no direct interest in the outcome, the total costs of arbitration shall be paid by the Banking
27 Partners according to the ratio of each participating Banking Partner's Permanent Storage

1 Allocation divided by the sum of all participating Banking Partner's Permanent Storage
2 Allocations.

3 If a Party asserts that another Party has breached obligations under this Agreement,
4 it may request that the arbitration panel order the other Party to comply with this Agreement.
5 Upon the panel finding that a Party has in fact breached this Agreement, the panel shall
6 order compliance. The panel may order any other equitable relief permitted by California
7 law, including declaratory or injunctive relief, applicable to the matter before the panel for
8 resolution. If termination is sought by a party pursuant to the terms hereof, the panel may
9 determine the issues of whether a default has occurred or other condition precedent to the
10 termination alleged has been satisfied and, if so, may issue orders implementing that
11 termination. The orders of the panel shall be judicially enforceable. The panel may order
12 that the effective date of its order be the date of the breach, if appropriate. If Santa Clara
13 has suspended payments under Section 11.1.2, it shall reimburse Semitropic for any monies
14 withheld and then due to Semitropic as soon as Semitropic again fully complies with this
15 Agreement. The panel may not order any damages (including consequential or punitive
16 damages) beyond those provided for or permitted under this Agreement.

17 9.3 All future new, renewed, or amended water banking agreements between
18 Semitropic and Banking Partners or potential Banking Partners that are considered part of
19 the Program shall contain language consistent with this Section 9.1 and 9.2. Until such time
20 as the agreement between Semitropic and Metropolitan is amended, Sections 9.1 and 9.2
21 of that agreement shall control disputes involving Metropolitan.

22 ARTICLE 10. TERM OF AGREEMENT

23 Unless this Agreement is earlier terminated pursuant to this Article 10 or pursuant to
24 Sections 11.1.3, 11.2, 11.3, 12.2 or 12.3, this Agreement shall terminate on
25 December 31, 2035, the date of termination of the Agency's Long-Term Water Supply
26 Contract, *provided, however*, that, if Santa Clara has timely requested return of Stored Water
27 pursuant to Article 5 at such a time and in such a manner that Santa Clara's Stored Water

could have been returned prior to December 31, 2035 but, because of conditions beyond the control of Santa Clara, all of Santa Clara's Stored Water has not been returned by that date, the provisions of Articles 1, 5, 6, 7, 9, 11, 12 and 13 of this Agreement shall continue in full force and effect for such additional period of time as is necessary for Santa Clara to receive its Stored Water as requested; and *provided, further*, that if a claim arising under or with respect to the terms of this Agreement has not been resolved when this Agreement terminates, or if such a claim is brought after this Agreement has terminated but within the period of time for bringing such a claim under California law (such a claim being referred to herein as a "Late Arising Claim"), the provisions of Articles 1, 7, 9 and 13 of this Agreement shall continue in full force and effect for such additional period of time as is necessary to resolve such claim and to satisfy the rights and obligations of the Parties hereto with respect to it pursuant to such Articles. This Agreement may be renewed by mutual agreement of the parties, which renewal shall unless otherwise agreed effect a continuation of Semitropic's duties under this Agreement. Santa Clara may elect to terminate this Agreement at any time by giving written notice to Semitropic of Santa Clara's intent to terminate not less than one year in advance of the termination date selected by Santa Clara and specified in the notice and by conveying its beneficial interest in the amount of Santa Clara's Stored Water in Santa Clara's Storage Account Balance on that termination date to Semitropic. Upon Santa Clara's conveyance of such beneficial interest, this Agreement shall be fully terminated except as provided in this Article 10 with respect to Late Arising Claims.

ARTICLE 11. REMEDIES

11.1 Remedies in Event of Semitropic's Voluntary Failure to Perform.

11.1.1 If Santa Clara alleges that Semitropic has not substantially performed according to the terms of this Agreement (including, but not limited to, by failing to construct adequate Program facilities and/or securing agreements or operational arrangements, all as necessary to provide those levels of capabilities, capacities and rights described in Exhibits A and C, or by causing (or, if within Semitropic's jurisdiction, permitting) other entities or persons to interfere with Program operation, or by attempting to resign its obligations as trustee under this Agreement or by failing to accept or return water as and

1 when required by this Agreement), or if Semitropic has otherwise breached its obligations
2 under this Agreement, which failure to perform or breach is not subject to Section 12.3, and
3 notice has been provided to Semitropic pursuant to Section 13.4 and Semitropic has failed
4 to cure the alleged breach within the time provided in Section 13.4, Santa Clara may, at any
5 time thereafter while the default is continuing, advise Semitropic of the remedy or remedies
6 provided in Article 9 (Dispute Resolution), and Sections 11.1.2 and 11.1.3 below which
7 Santa Clara intends to pursue with respect to such default. Semitropic may challenge at any
8 time, through Article 9, whether in fact there has been a breach of or default under this
9 Agreement by Semitropic.

10 11.1.2 In the event of an alleged breach as to which Santa Clara has
11 given notice to Semitropic pursuant to Section 11.1.1, Santa Clara may elect to suspend any
12 payment obligations it may have under Article 6 of this Agreement until Semitropic complies
13 with the terms of this Agreement and cures such breach or default or is determined, pursuant
14 to Article 9, not to have violated the Agreement. Notwithstanding such suspension of Santa
15 Clara's payment obligations, this Agreement shall remain in effect unless and until Santa
16 Clara elects to terminate the Agreement under Section 11.1.3 or Article 10, in which case
17 termination shall occur in accordance with and as provided in such provision.
18 Notwithstanding an election by Santa Clara under this Section 11.1.2 to suspend payment
19 obligations, Santa Clara or Semitropic may thereafter also seek relief under Article 9.

20 11.1.3 If, pursuant to Section 11.1.1, Santa Clara elects to terminate this
21 Agreement, Semitropic will purchase the amount of Santa Clara's Stored Water in its
22 Storage Account Balance for an amount equal to Santa Clara's previous payments with
23 respect to such Stored Water plus any unrefunded portion of monies described in Section
24 6.9, all adjusted based on the index referenced at Section 6.2.2, plus twenty percent (20%)
25 of said payments, all payable within one (1) year of said election by Santa Clara to terminate.
26 Once such payment has been fully made, this Agreement shall be fully terminated except
27 for Articles 1 (Definitions); 7 (Division of Risk Responsibilities); 9 (Dispute Resolution); and
28 Article 13 (Miscellaneous Provisions). Upon payment in full by Semitropic as provided
29 above, Santa Clara's beneficial interest in the amount of Santa Clara's Stored Water in

1 Santa Clara's Storage Account Balance shall vest in Semitropic and Semitropic shall be
2 entitled to produce and use such water for its own account.

3 **11.2 Remedies in the Event of Santa Clara's Voluntary Failure to Perform.**

4 If Santa Clara has not substantially performed according to the terms of this
5 Agreement, and notice has been provided to Santa Clara pursuant to Section 13.4 and
6 Santa Clara has failed to cure the alleged breach within the time provided in Section 13.4,
7 Semitropic may at its election, at any time thereafter while the default is continuing, either
8 (1) suspend further performance (except that Semitropic shall continue to hold the trust
9 property in trust) and thereafter seek relief under Article 9, and shall recommence
10 performance once Santa Clara complies with the Agreement, or (2) terminate this
11 Agreement, except that Articles 1, 7, 9 and 13 shall remain in effect. If Semitropic elects to
12 terminate this Agreement, Semitropic will either purchase the amount of Santa Clara's
13 Stored Water in Santa Clara's Storage Account Balance in the manner and for the price
14 provided in Section 12.3 or will deliver to Santa Clara that amount of water in the manner
15 provided in Section 12.2. Santa Clara may challenge at any time, through Article 9, whether
16 in fact there has been a breach of this Agreement by Santa Clara.

17 **11.3 Remedies in Event of Failure of Certain Other Remedies.**

18 If: (i) Semitropic has breached or defaulted in the performance of its obligations
19 under this Agreement, and (ii) Santa Clara has given notice of the breach or default pursuant
20 to Section 11.1.1, and (iii) Semitropic has failed to cure that breach or default within thirty
21 (30) days as required by Section 13.4, and (iv) Santa Clara has elected a remedy for that
22 breach or default pursuant to Section 11.1.1, and (v) Semitropic has agreed to such remedy
23 or, if Semitropic has not so agreed, Santa Clara has obtained a judgment or court order
24 against Semitropic (whether based on an order of an arbitration panel under Article 9 or
25 otherwise) which judgment or court order Semitropic has failed or refused to perform, *then*
26 Santa Clara may notify Semitropic that Santa Clara is entitled to and intends to exercise its
27 right to appointment of a successor trustee in place of Semitropic and, thereafter, Santa

1 Clara may apply to a court of competent jurisdiction for such appointment of a successor
2 trustee who shall be charged with performing the duties of the trustee pursuant to the terms
3 of this Agreement. The successor trustee, when appointed, shall be entitled to exercise only
4 and all rights theretofore held by Semitropic as trustee for Santa Clara, including, without
5 limitation, those under or relating to the Trust Property (excepting, however, the right to
6 receive additional water for storage hereunder), until such time as the successor trustee has
7 collected and recovered water from the property of Semitropic in an amount sufficient to
8 return water in an amount equal to the amount of Santa Clara's Stored Water in Santa
9 Clara's Storage Account Balance and has transported that water to the California Aqueduct
10 at Reach 10A for exchange to Santa Clara. Upon the receipt by Santa Clara of water in an
11 amount equal to Santa Clara's Storage Account Balance pursuant to the exercise by such
12 successor trustee of its rights in the Trust Property, this Agreement shall be fully terminated
13 except for Articles 1 (Definitions); 7 (Division of Risk Responsibilities); 9 (Dispute
14 Resolution); and 13 (Miscellaneous Provisions), all in accordance with the terms of this
15 Agreement.

16 ARTICLE 12. EARLY TERMINATION

17 12.1 **Resignation of Semitropic.** Because Semitropic is uniquely situated for
18 performing its duties as trustee, Semitropic may not resign its duties and obligations under
19 this Agreement for the term of this Agreement except as permitted by Sections 11.2, 12.2
20 and 12.3, and any other attempt by Semitropic to resign shall be deemed to be a breach of
21 its obligations hereunder.

22 12.2 **Voluntary Termination.** If at the ten (10)-year anniversary of the execution
23 of the Agreement, Santa Clara's Program activities have ceased to provide benefits to
24 Semitropic because Santa Clara has not made payments under Section 6.4 or has not
25 vested at least 100,000 acre-feet of Permanent Storage Allocation, Semitropic may elect to
26 terminate Articles 3, 5 and 6 of this Agreement. Upon such election, Semitropic must either
27 (i) purchase the amount of Santa Clara's Stored Water in Santa Clara's Storage Account
28 Balance for an amount equal to Santa Clara's previous payments for any water remaining
29 in the Santa Clara Storage Account plus twenty percent (20%) of said payments, all payable

1 within one year of such termination, or (ii) exchange Santa Clara's Stored Water for an
2 amount of water equal to the remaining water in Santa Clara's Storage Account Balance,
3 such water to be delivered to Santa Clara, at the Semitropic Turnout in the California
4 Aqueduct or another location acceptable to the Parties, within five (5) years of such
5 termination upon a schedule mutually acceptable to the Parties (or, if the Parties fail to agree
6 upon such schedule, the matter shall be resolved pursuant to Article 9). If payment is made
7 or exchange water is provided by Semitropic as provided above, Santa Clara's beneficial
8 interest in Santa Clara's Stored Water shall vest in Semitropic as and to the extent such
9 payment or delivery is made. Once either the payment referred to above has been fully
10 made or the water in Santa Clara's Storage Account Balance has been returned to Santa
11 Clara in full, this Agreement shall be fully terminated except for Articles 1 (Definitions); 7
12 (Division of Risk Responsibilities); 9 (Dispute Resolution); this Section 12.1 and Article 13
13 (Miscellaneous Provisions). Upon the termination of this Agreement pursuant to this Section
14 12.2, Semitropic shall retain the right to offer the benefits of this Program to other entities
without interference from Santa Clara.

16 **12.3 Involuntary Termination.** Notwithstanding Article 11, in the event that
17 Semitropic is unable to perform its obligations under this Agreement for reasons beyond its
18 control, and that inability to perform includes the inability of Semitropic to return Stored
19 Water which remains in the Santa Clara Storage Account Balance, Semitropic will purchase
20 the Stored Water which Semitropic is unable to return for an amount equal to the costs which
21 Semitropic would have incurred to purchase such water as entitlement water under its
22 Member Unit contracts with the Agency referenced at Recital B (including all fixed and
23 variable costs for delivery of such entitlement water to the Semitropic Turnout in Reach 10A)
24 in the year Santa Clara delivered such Stored Water to Semitropic. "Reasons beyond its
25 control" as used in the aforesaid sentence shall not include any reasons caused by
26 Semitropic's breach of its obligations under this Agreement or other failure to comply with
27 any of its legal obligations. Such payment by Semitropic to Santa Clara upon involuntary
28 termination under this Section 12.3 shall be financed over time upon terms mutually
29 agreeable to Santa Clara and Semitropic. If Santa Clara and Semitropic are unable to agree
30 on such terms in a reasonable period of time, they shall resolve their disagreement pursuant

1 to Article 9. Once such payments have been fully made, this Agreement shall be fully
2 terminated except for Articles 1 (Definitions); 7 (Division of Risk Responsibilities); 9 (Dispute
3 Resolution); this Section 12.3 and Article 13 (Miscellaneous Provisions). If payment is made
4 as provided above, the beneficial interest in the amount of Santa Clara's Stored Water in
5 Santa Clara's Storage Account Balance which Semitropic is unable to return shall vest in
6 Semitropic.

7 In addition to such payment, if, subsequent to such involuntary termination,
8 Semitropic is able to negotiate another arrangement or program with another entity which
9 utilizes Program Delivery Capacity which was developed as a result of payments by Santa
10 Clara pursuant to this Agreement, and which capacity would have been available to Santa
11 Clara absent such involuntary termination, the Parties shall negotiate a payment schedule
12 to reimburse Santa Clara for the undepreciated balance of capital costs which Santa Clara
13 has paid, deducting payments made or to be made by Semitropic as provided above, and
14 which does not render such new program infeasible. Attached as Exhibit E are the
15 assumptions to be used in such calculation. If Santa Clara and Semitropic are unable to
16 agree on the terms of a payment schedule in a reasonable period of time, they shall resolve
17 their disagreement pursuant to Article 9.

18 ARTICLE 13. MISCELLANEOUS PROVISIONS

19 13.1 **Successors and Assigns.** This Agreement shall bind and inure to the benefit
20 of the successors and assigns of the Parties; provided, however, neither Party shall assign
21 any of their rights or obligations under this Agreement without the prior written consent of the
22 other. Any successor to Semitropic shall be a successor Trustee hereunder. Nothing in this
23 Agreement is intended to confer any right or remedy under this Agreement on any person
24 other than the parties to this Agreement and their respective successors and permitted
25 assigns, or to relieve or discharge any obligation or liability of any person to any party to this
26 Agreement, or to give any person any right of subrogation or action over or against any party
27 to this Agreement.

1 **13.2 Allocation Among Semitropic Improvement Districts.** Semitropic shall
2 allocate the rights and obligations under this Agreement between the water users and
3 landowners of Semitropic Water Storage District, Semitropic Improvement District,
4 Buttonwillow Improvement District and Pond-Poso Improvement District as it deems
5 appropriate, so long as Santa Clara's and the other Banking Partners right to obtain the
6 return of Stored Water is not adversely impacted. Regardless of such allocations,
7 Semitropic shall remain the trustee under this Agreement.

8 **13.3 No Modification of Existing Contracts.** This Agreement shall not be
9 interpreted to modify the terms or conditions of either the water supply contracts between
10 the DWR and the Agency or Santa Clara or the water supply agreements between the
11 Agency and Semitropic.

12 **13.4 Waiver/Cure of Defaults.** The failure of any Party to enforce against the other
13 a provision of this Agreement shall not constitute a waiver of that Party's right to enforce
14 such a provision at a later time. No Party shall be deemed to be in default of any provision
15 of this Agreement unless the other Party has given written notice specifically stating the
16 alleged default and the Party in default fails to cure the default within thirty (30) days of
17 receipt of such written notice.

18 **13.5 Construction of Agreement.** The language in all parts of this Agreement
19 shall be in all cases construed simply according to its fair meaning and not strictly for or
20 against any of the parties hereto and Section 1654 of the Civil Code has no application to
21 interpretation of this Agreement. Headings at the beginning of Sections, paragraphs and
22 subparagraphs of this Agreement are solely for the convenience of the parties, are not a part
23 of this Agreement and shall not be used in construing it. The preamble, recitals and all
24 exhibits and schedules to this Agreement are part of this Agreement and are incorporated
25 herein by this reference. When required by the context: whenever the singular number is
26 used in this Agreement, the same shall include the plural, and the plural shall include the
27 singular, and the masculine gender shall include the feminine and neuter genders and vice
28 versa. Unless otherwise required by the context (or otherwise provided herein): the words

1 "herein," "hereof" and "hereunder" and similar words shall refer to the Agreement generally
2 and not merely to the provision in which such term is used; the word "person" shall include
3 individual, partnership, corporation, limited liability company, business trust, joint stock
4 company, trust, unincorporated association, joint venture, governmental authority and other
5 entity of whatever nature; each of the words "Santa Clara" and "Semitropic" shall include
6 the respective representatives, successors and permitted assigns, if any, of such person;
7 the words "including," "include" or "includes" shall be interpreted in a non-exclusive
8 manner as though the words "but [is] not limited to" or "but without limiting the generality of
9 the foregoing" immediately followed the same; the word "month" shall mean calendar
10 month; and the term "business day" shall mean any day other than a Saturday, Sunday or
11 legal holiday. If the day on which performance of any act or the occurrence of any event
12 hereunder is due is not a business day, the time when such performance or occurrence shall
13 be due shall be the first business day occurring after the day on which performance or
14 occurrence would otherwise be due hereunder. All times provided in this Agreement for the
15 performance of any act will be strictly construed, time being of the essence of this
16 Agreement.

17 13.6 **Entire Agreement.** This Agreement and other documents expressly
18 referenced herein constitute the entire agreement between the Parties pertaining to the
19 matters provided for herein and, except as herein provided, supersedes all prior and/or
20 contemporaneous agreements and understanding, whether written or oral pertaining
21 between the Parties relating to the matters provided for herein (it being expressly understood
22 and agreed, however, that the 1996 Agreement shall continue in full force and effect until
23 the earliest of the following to occur: (i) satisfaction of the Article 8 Conditions, or (ii)
24 withdrawal by Santa Clara of all of the water stored pursuant to the 1996 Agreement, or (iii)
25 December 31, 2035.

26 13.7 **Severability.** In the event that a court of competent jurisdiction or a arbitration
27 panel as provided at Article 9 determines that a provision included in this Agreement is
28 legally invalid or unenforceable and such decision becomes final, the Parties to this
29 Agreement shall use their best efforts to (i) within thirty (30) days of the date of such final

1 decision identify by mutual agreement the provisions of this Agreement which must be
2 revised, and (ii) within three (3) months thereafter promptly agree on the appropriate
3 revision(s). The time periods specified above may be extended by mutual agreement of the
4 Parties. Pending the completion of the actions designated above, to the extent it is
5 reasonably practical and can be done without violating any applicable provisions of law, the
6 provisions of this Agreement which were not found to be legally invalid or unenforceable in
7 the final decision shall continue in effect. If the Parties cannot agree on appropriate
8 revisions, this Agreement shall be involuntarily terminated in accordance with Section 12.3.

9 **13.8 Force Majeure.** All obligations of the Parties other than monetary or payment
10 obligations shall be suspended for so long as and to the extent the performance thereof is
11 prevented, directly or indirectly, not to exceed one year, by earthquakes, fires, tornadoes,
12 facility failures, floods, drownings, strikes, other casualties, acts of God, orders of court or
13 governmental agencies having competent jurisdiction, or other events or causes beyond the
14 control of the Parties. In no event shall any liability accrue against a Party, to its officers,
15 agents or employees, for any damage arising out of or connected with a suspension of
16 performance pursuant to this Section 13.8. In event of such an occurrence of duration in
17 excess of one year, Section 12.3 shall control, unless the Parties otherwise agree.

18 **13.9 Notices.** All notices, requests and demands hereunder ("Notices") shall be
19 in writing and shall be deemed to have been duly given when delivered (or, if mailed,
20 postage prepaid, on the third business day after mailing, if that date is earlier than actual
21 delivery). Notices shall be sent to a Party at the address of that Party set forth below or, if
22 such Party has furnished notice of a change of that address as herein provided, to the
23 address of that Party most recently so furnished. Notices for Semitropic shall be sent to the
24 General Manager of Semitropic at Post Office Box Z, Wasco, California 93280, if mailed, and
25 otherwise to the General Manager at 1017 Central Avenue, Wasco, California 93280.
26 Notices for Santa Clara shall be sent to the General Manager at 5750 Almaden Expressway,
27 San Jose, CA 95118-3686. Each Party hereto (a "Recipient") who receives from another
28 Party hereto (a "Sender") by electronic facsimile transmission (telecopier) any writing which
29 appears to be signed by that Sender is authorized to rely and act upon that writing in the

1 same manner as if the original signed writing was in the possession of the Recipient upon
2 oral confirmation of that Sender to the Recipient that the writing was signed by that Sender
3 and is intended by that Sender to be relied upon by the Recipient. Each Party transmitting
4 any writing to any other Party by electronic facsimile transmission agrees to forward
5 immediately to that Recipient, by expedited means (for next day delivery, if possible), or by
6 first class mail if the Recipient so agrees, the signed hard copy of that writing, unless the
7 Recipient expressly agrees to some other disposition of the original by the Sender.

8 **13.10 Further Assurances.** Each party hereto, upon the request of the other,
9 agrees to perform such further acts and to execute and deliver such other documents as are
10 reasonably necessary to carry out the provisions of this instrument.

11 **13.11 Counterparts.** This Agreement, and any document or instrument entered into,
12 given or made pursuant to this Agreement or authorized hereby, and any amendment or
13 supplement thereto may be executed in two or more counterparts, and by each party on a
14 separate counterpart, each of which, when executed and delivered, shall be an original and
15 all of which together shall constitute one instrument, with the same force and effect as
16 though all signatures appeared on a single document. Any signature page of this
17 Agreement or of such an amendment, supplement, document or instrument may be
18 detached from any counterpart without impairing the legal effect of any signatures thereon,
19 and may be attached to another counterpart identical in form thereto but having attached to
20 it one or more additional signature pages. In proving this Agreement or any such
21 amendment, supplement, document or instrument, it shall not be necessary to produce or
22 account for more than one counterpart thereof signed by the party against whom
23 enforcement is sought.

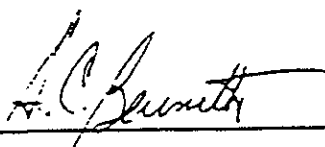
24 **13.12 Recording of Memorandum.** A memorandum of this Agreement in the form
25 attached hereto as Exhibit F shall be recorded in the Office of the County Recorder, County
26 of Kern.

Effective the day and year first hereinabove written.

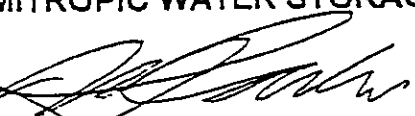
2 **SANTA CLARA VALLEY WATER DISTRICT**

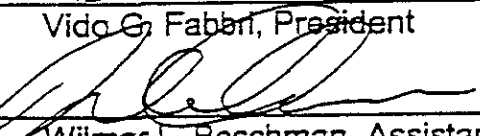
3
4
5
6
7 By: 
8
9 General Manager

10
11
12 **APPROVED AS TO FORM:**

13
14
15
16
17 By: 
18
19 General Counsel
20

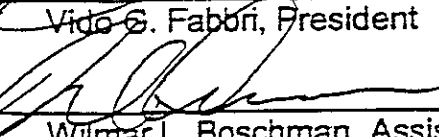
21
22
23 **SEMITROPIC WATER STORAGE DISTRICT**

24
25
26 By: 
27 Vido G. Fabbrì, President

28
29 By: 
30 Wilmar L. Boschman, Assistant Secretary
31


32
33 **SEMITROPIC IMPROVEMENT DISTRICT**
34 **OF SEMITROPIC WATER STORAGE DISTRICT**

35
36
37 By: 
38 Vido G. Fabbrì, President

39
40 By: 
41 Wilmar L. Boschman, Assistant Secretary
42

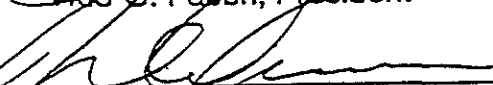
1 **BUTTONWILLOW IMPROVEMENT DISTRICT**
2 **OF SEMITROPIC WATER STORAGE DISTRICT**

3
4
5 By: 
6 Vido G. Fabbri, President

7
8 By: 
9 Wilmar L. Boschman, Assistant Secretary

10
11
12
13 **POND-POSO IMPROVEMENT DISTRICT**
14 **OF SEMITROPIC WATER STORAGE DISTRICT**

15
16
17 By: 
18 Vido G. Fabbri, President

19
20 By: 
21 Wilmar L. Boschman, Assistant Secretary

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**BUILDUP SCHEDULE
FOR
PROGRAM ENTITLEMENT EXCHANGE RIGHTS
AND
PROGRAM PUMPBACK CAPACITY**

Sum of All Banking Partners' Deliveries or Funds Paid to Establish "Program Pumpback" Permanent Storage Allocation (acre-feet)	¹ Maximum "Program Entitlement Exchange Rights" at Full Entitlement Allocation (acre-feet per year)	¹ Minimum Program Pumpback Capacity (acre-feet per year)
100,000	40,000	31,500
150,000	45,000	90,000 ²
200,000	50,000	90,000
300,000	60,000	90,000
400,000	70,000	90,000
500,000	80,000	90,000
600,000	90,000	90,000
700,000	100,000	90,000
800,000	110,000	90,000
900,000	120,000	90,000
1,000,000	133,000	90,000

¹ Applies in the year after the Permanent Storage Allocation reaches the indicated amount, subject to the provisions of this Agreement.

The Maximum Entitlement Exchange Rights in any year is the lesser of the indicated amount in the table above or Semitropic's maximum available entitlement in that year shown in the table on the right.

² Maximum instantaneous flowrate at this level is 300 cfs.

SWP Water Supply
Allocation (%)

Semitropic's Maximum
Available Entitlement (Ac. Ft.)

14.2	- 0 -
20.0	9,000
30.0	24,500
40.0	40,000
50.0	55,500
60.0	71,000
70.0	86,500
80.0	102,000
90.0	117,500
100.0	133,000

Semitropic Water Storage District - - - Water Banking And Exchange Program

Santa Clara Valley Water District

Financing option 2

350,000 Acre-feet

Project Storage Allocation of 35%

out of 1,000,000

acre-foot total program storage

Year	INDEXES		WATER ACTIVITIES					SANTA CLARA'S PAYMENTS TO SEMITROPIC FOR STORED AND RETURNED WATER															
								PAYMENTS WHICH CONTRIBUTE TO SANTA CLARA ACQUIRING A PERMANENT STORAGE ALLOCATION										NON-CONTRIBUTING PAYMENTS					
	Payments for Storing Water (\$30 Payment Under Section 6.2.1)					Payments for Return of Water (\$40 Payment Under Section 6.3.1)					Payments for Water Stored More than Five Years (\$20 Payment Under Section 6.4)			Total Annual Payments Contributing to Santa Clara's Acquiring Permanent Storage Allocation	Payments for Storing Water (\$50 Payment Under Section 6.2.2)		Payments for Return of Water (\$50 Payment Under Section 6.3.2)						
	Santa Clara's Annual Water Stored Under Art. 6.2.1	\$30/AF Adjusted per ENR Index	Payments for Storing Water	Santa Clara's Annual Water Returned Under Art. 6.3.1	\$40/AF Adjusted per ENR Index	Payments for Return of Water	Water Stored over 5 yrs	\$20/AF Adjusted per ENR Index	Payment for Water in Storage More than 5 yrs.	Water Stored	\$50/AF Adjusted per CPI Index	Payments for Storing Water	Returned Water		\$50/AF Adjusted per CPI Index	Payments for Return of Water							
ENR Index	CPI Index	AF	AF	AF	AF	AF	AF	\$/AF	\$	AF	\$/AF	\$	AF	\$/AF	\$	\$	AF	\$/AF	\$	AF	\$/AF	\$	
1993																							
1994																							
1995	8,550.36	148.6	Jun 94						90.00				40.00			20.00		0.00		50.00			50.00
1996	8,526.22	150.6	Dec 95	45,000	(4,500)	40,500	0	40,500	89.89	805,545.00				0	19.89		0.00	805,545.00		0	53.36		0.00
1997	8,558.44	163.9	Dec 96	35,000	(3,500)	31,500	0	31,500	90.11	2,838,485.00			0	40.05		0	20.02	2,838,485.00		0	55.15		0.00
1998	8,624.02	168.8		66,000	(6,600)	59,400	0	59,400	91.01	5,405,994.00			0	40.45		0	20.22	5,405,994.00		0	56.80		0.00
1999	8,690.26	173.9		66,000	(6,600)	59,400	0	59,400	91.92	5,460,048.00			0	40.85		0	20.43	5,460,048.00		0	51.07		0.00
2000	8,757.17	179.1		66,000	(6,600)	59,400	0	59,400	92.84	5,514,696.00			0	41.26		0	20.63	5,514,696.00		0	51.58		0.00
2001	8,824.74	184.5		50,000	(5,000)	45,000	0	45,000	93.77	4,219,650.00			0	41.68		0	20.84	4,219,650.00		0	52.09		0.00
2002	8,892.99	190.0		0	0	0	58,000	237,200	94.71	0.00	58,000	42.09	\$2,441,220	0	21.05	0.00	2,441,220.00		0	52.62		0.00	
2003	8,961.92	195.7		0	0	0	58,000	179,200	95.65	0.00	58,000	42.51	\$2,465,580	0	21.26	0.00	2,465,580.00		0	53.14		0.00	
2004	7,091.54	201.6		0	0	0	0	179,200	96.61	0.00	0	42.94	\$0	15,400	21.47	330,638.00	330,638.00		0	53.67		0.00	
2005	7,101.85	207.6		66,000	(6,600)	59,400	0	238,600	97.56	5,560,206.98			0	43.37		74,800	21.68	1,621,664.00	7,101,869.98	2,419	54.21		0.00
2006	7,172.87	213.9		50,000	(5,000)	45,000	0	283,600	98.55	0.00	0	43.80	\$0	134,200	21.90	0.00	0.00	45,000	54.75	2,463,750.00		0.00	
2007	7,244.60	220.3		35,000	(3,500)	31,500	0	315,100	99.54	0.00	0	44.24	\$0	179,200	22.12	0.00	0.00	31,500	55.30	1,741,950.00		0.00	
2008	7,317.04	228.9		0	0	0	58,000	257,100	100.53	0.00	58,000	44.68	\$2,591,440	121,200	22.34	0.00	2,591,440.00		0	55.85		0.00	
2009	7,390.21	233.7		0	0	0	58,000	199,100	101.54	0.00	58,000	45.13	\$2,617,540	83,200	22.58	0.00	2,617,540.00		0	56.41		0.00	
2010	7,464.12	240.7		0	0	0	32,000	167,100	102.55	0.00	32,000	45.58	\$1,458,560	31,200	22.79	0.00	1,458,560.00		0	56.97		0.00	
2011	7,538.76	247.9		0	0	0	50,000	117,100	103.58	0.00	50,000	46.04	\$2,302,000	38,181	23.02	0.00	2,302,000.00		0	57.54		0.00	
2012	7,614.19	255.4		0	0	0	40,000	77,100	104.62	0.00	793	46.50	\$36,675	37,388	23.25	0.00	36,674.50		0	58.12	39,207	58.12	
2013	7,690.29	263.0		0	0	0	35,000	42,100	105.68	0.00	0	46.96	\$0	37,388	23.48	0.00	0.00		0	58.70	35,000	58.70	
2014	7,767.19	270.9		0	0	0	25,000	17,100	106.72	0.00	0	47.43	\$0	37,388	23.72	0.00	0.00		0	59.29	25,000	59.29	
2015	7,844.86	279.0		0	0	0	17,000	100	107.79	0.00	0	47.90	\$0	37,388	23.95	0.00	0.00		0	59.88	17,000	59.88	
2016	7,923.31	287.4		0	0	0	0	100	108.88	0.00	0	48.38	\$0	37,388	24.19	0.00	0.00		0	60.48	0	60.48	
2017	8,002.54	296.0		0	0	0	0	100	109.95	0.00	0	48.67	\$0	37,388	24.43	0.00	0.00		0	61.06	0	61.06	
2018	8,082.57	304.9		0	0	0	0	100	111.05	0.00	0	49.36	\$0	37,388	24.68	0.00	0.00		0	61.70	0	61.70	
2019	8,163.39	314.0		0	0	0	0	100	112.16	0.00	0	49.85	\$0	37,388	24.93	0.00	0.00		0	62.31	0	62.31	
2020	8,245.00	323.5		0	0	0	0	100	113.28	0.00	0	50.35	\$0	37,388	25.17	0.00	0.00		0	62.94	0	62.94	
2021	8,327.48	333.2		0	0	0	0	100	114.42	0.00	0	50.85	\$0	37,388	25.43	0.00	0.00		0	63.57	0	63.57	
2022	8,410.75	343.2		0	0	0	0	100	115.56	0.00	0	51.36	\$0	37,388	25.68	0.00	0.00		0	64.20	0	64.20	
TOTAL			479,000	(47,900)	431,100	431,000		352,161		\$13,430,738.98	314,793		\$13,913,214.50			\$1,952,102.00	\$49,101,755.46	78,919		\$4,208,700.00	116,207		\$4,333,210.84

Page 1 of 2

Last revised by PO 8/25/97

Notes:

Exhibit does not show energy payments required to return water under Article 6.3.3 or operation and maintenance fee under Section 6.7.

Assumes Engineering News-Record (ENR) Index increases one percent annually.

Assumes Consumer Price Index increases three percent annually.

Share means Santa Clara's share of Total Program Capital Costs. (as defined in Article 1.6)

Adjustments are not applied retroactively to water previously delivered, returned and/or remaining in storage more than five years.

Values for 1996 are actual, values for 1997 are estimated, all later values are illustrative only.

Semitropic Water Storage District - - - Water Banking And Exchange Program

Santa Clara Valley Water District

Financing option 2

350,000 Acre-feet

Project Storage Allocation of 35%

out of 1,000,000 acre-foot total program storage

Year	SANTA CLARA'S SHARE OF TOTAL PROGRAM CAPITAL COST					SANTA CLARA'S STORAGE ALLOCATION							SANTA CLARA'S ANNUAL O & M FEES			
	35% of Program Capital Cost (Adjusted)	Santa Clara's Annual Contributing Payments	Sum of all Contributing Payments (Adjusted) \$ Paid Portion	Prospective Payments Pursuant under Section 6.3.1	Uncommitted Portion of Program Capital Cost (Adjusted)	Total Program Capital Cost (Adjusted)	Annual Contributing Payments Divided by Total Program Capital Cost	Cumulative % Paid by Santa Clara	% Prospective Payments Pursuant under Section 6.3.1	Total % Paid (Actual and Prospective)	END OF YEAR			Beginning of year Permanent Storage Allocation	\$3.98/AF Adjusted per CPI Index	Annual O & M Fees
											Permanent Storage Allocation	Interim Storage Allocation Initially 350,000	Total Permanent and Interim Storage Allocation			
\$	\$	\$	\$	\$	\$	%					AF	AF	AF	AF	\$/AF	\$
1993																
1994																
1995	46,900,000.00		0.00	0.00	46,900,000.00	\$134,000,000.00				0.0000%	0	350,000	350,000		3.98	
1996	46,727,159.73	805,545.00	805,545.00	0.00	45,921,614.73	133,506,170.65	0.6034%	0.6034%	1.2089%	0.6034%	6,034	343,966	350,000		4.25	0
1997	46,957,852.09	2,838,485.00	7,297,551.39	2,883,600.00	36,776,700.70	134,165,291.68	2.1156%	5.4392%	2.1493%	7.5885%	75,885	274,115	350,000	40,500	4.39	177,795
1998	47,427,430.81	5,405,994.00	12,776,520.91	5,316,130.00	29,335,779.70	135,506,844.80	3.9895%	9.4287%	3.9224%	13.3511%	133,511	216,489	350,000	75,885	4.52	343,000
1999	47,901,704.81	5,460,048.00	18,364,334.12	7,794,180.00	21,743,190.79	136,862,014.04	3.9895%	13.4182%	5.6949%	19.1131%	191,131	158,869	350,000	133,511	4.07	543,390
2000	48,380,721.96	5,514,696.00	24,062,673.46	10,323,252.00	13,994,796.50	138,230,834.18	3.9895%	17.4077%	7.4681%	24.8758%	248,758	101,242	350,000	191,131	4.11	785,548
2001	48,864,529.18	4,219,650.00	28,522,950.19	12,303,938.00	8,037,642.89	139,812,940.52	3.0224%	20.4301%	8.8129%	29.2430%	292,430	57,570	350,000	248,758	4.15	1,032,346
2002	49,353,174.48	2,441,220.00	31,249,389.69	9,983,748.00	8,120,026.79	141,009,069.93	1.7313%	22.1814%	7.0802%	29.2416%	292,416	57,584	350,000	292,430	4.19	1,225,282
2003	49,846,706.22	2,485,680.00	34,027,473.89	7,617,792.00	8,201,440.53	142,419,180.83	1.7312%	23.8926%	5.3489%	29.2415%	292,415	57,585	350,000	292,416	4.23	1,236,920
2004	50,345,173.26	330,638.00	34,698,386.43	7,694,848.00	7,951,938.85	143,843,352.23	0.2289%	24.1225%	5.3495%	29.4720%	294,720	65,260	350,000	292,415	4.27	1,248,612
2005	50,848,625.01	7,181,669.98	42,227,240.27	8,621,384.74	0.00	145,281,785.76	4.9434%	29.0859%	5.9341%	35.0000%	350,000	0	350,000	294,720	4.32	1,273,190
2006	51,357,111.27	0.00	42,649,512.67	8,707,598.80	0.00	146,734,603.81	0.0000%	29.0859%	5.9341%	35.0000%	350,000	0	350,000	350,000	4.36	0
2007	51,870,682.38	0.00	43,078,007.80	8,794,674.58	0.00	148,201,949.85	0.0000%	29.0659%	5.9341%	35.0000%	350,000	0	350,000	350,000	4.40	0
2008	52,389,389.20	2,591,440.00	46,098,207.88	6,281,181.32	0.00	149,683,969.15	1.7313%	30.7972%	4.2028%	35.0000%	350,000	(0)	350,000	350,000	4.45	1,557,500
2009	52,913,263.09	2,617,540.00	49,176,728.06	3,738,553.13	0.00	151,180,808.84	1.7314%	32.5286%	2.4714%	35.0000%	350,000	(0)	350,000	350,000	4.49	1,571,500
2010	53,442,415.92	1,458,580.00	61,127,057.26	2,315,358.68	0.00	152,692,616.93	0.9552%	33.4838%	1.5162%	35.0000%	350,000	(0)	350,000	350,000	4.54	1,589,000
2011	53,976,640.08	2,302,000.00	53,940,327.83	38,512.25	0.00	154,219,543.10	1.4927%	34.9765%	0.0235%	35.0000%	350,000	0	350,000	350,000	4.58	1,603,000
2012	54,516,608.46	39,874.50	54,516,605.81	2.87	0.00	155,761,738.53	0.0237%	35.0002%	-0.0002%	35.0000%	350,000	0	350,000	350,000	4.63	0
2013	55,061,774.57	0.00	55,061,771.66	2.91	0.00	157,319,355.91	0.0000%	35.0002%	-0.0002%	35.0000%	350,000	0	350,000	350,000	4.67	0
2014	55,612,392.32	0.00	55,612,389.38	2.94	0.00	158,892,549.47	0.0000%	35.0002%	-0.0002%	35.0000%	350,000	0	350,000	350,000	4.72	1,652,000
2015	56,168,518.24	0.00	56,168,513.27	2.97	0.00	160,481,474.97	0.0000%	35.0002%	-0.0002%	35.0000%	350,000	0	350,000	350,000	4.77	1,669,500
2016	56,730,201.40	0.00	56,730,198.41	2.99	0.00	162,086,289.72	0.0000%	35.0002%	-0.0002%	35.0000%	350,000	0	350,000	350,000	4.81	1,683,500
2017	57,297,503.41	0.00	57,297,500.39	3.02	0.00	163,707,152.61	0.0000%	35.0002%	-0.0002%	35.0000%	350,000	0	350,000	350,000	4.86	1,701,000
2018	57,870,478.45	0.00	57,870,475.40	3.05	0.00	165,344,224.14	0.0000%	35.0002%	-0.0002%	35.0000%	350,000	0	350,000	350,000	4.91	1,718,500
2019	58,449,183.23	0.00	58,449,180.15	3.08	0.00	166,997,606.38	0.0000%	35.0002%	-0.0002%	35.0000%	350,000	0	350,000	350,000	4.96	1,736,000
2020	59,033,676.07	0.00	59,033,671.05	3.12	0.00	168,667,643.04	0.0000%	35.0002%	-0.0002%	35.0000%	350,000	0	350,000	350,000	5.01	1,753,500
2021	59,624,011.82	0.00	59,624,008.67	3.15	0.00	170,354,319.47	0.0000%	35.0002%	-0.0002%	35.0000%	350,000	0	350,000	350,000	5.06	1,771,000
2022	60,220,251.93	0.00	60,220,248.76	3.17	0.00	172,057,862.67	0.0000%	35.0002%	-0.0002%	35.0000%	350,000	0	350,000	350,000	5.11	1,788,500
		\$49,301,755.46					35.0002%									29,660,583

Note: Actual 1997 O & M Fee of 40,500 acre-feet based on Option 1

2 of 2

Last revised by PO 6/25/97

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06/25/

PROGRAM DELIVERY CAPABILITY

INTRODUCTION:

The In-Lieu Service Area authorized in the EIR consists of 23,000 acres of actively farmed land. Semitropic's commitment to the Banking Partners is that at full development there will be 23,000 acres of In-Lieu Service Area. In the event cropping patterns or irrigation practices change the assumed average annual quantity of water each acre of land requires for irrigation, Semitropic shall not be obligated to increase its commitment to develop 23,000 acres of in-lieu land at full program development.

I. Maximum Annual Estimated Program Delivery Capability:

1.	In-Lieu Service Area: 23,000 acres x 3.5 AF/acre	=	80,500 AF/Yr
2.	Reduce existing delivery system constraints to lands already served by Semitropic's distribution system:		<u>10,000 AF/Yr</u>
	Total		90,500 AF/Yr

II. Santa Clara's share of Maximum Estimated Program Delivery Capability:

1.	By Establishing an In-Lieu Service Area 23,000 acres x 0.35 = 8,050 acres 8,050 acres x 3.5 AF/acre	=	28,175 AF/Yr
2.	By Increasing System Capacity 10,000 AFY x 0.35	=	<u>3,500 AF/Yr</u>

Total Santa Clara Share of Maximum Estimated Program Delivery Capability	31,675 AF/Yr
---	--------------

Semitropic shall not be obligated to change its commitment to have developed 8,050 acres of in-lieu land by the time Santa Clara has paid Santa Clara's share of Total Project Capital Cost.

Expected Monthly Distribution of Santa Clara's Share of Maximum Estimated Program Delivery Capability:

	Historical Deliveries on 66,800 Acres+ Average of '84, '89 and '93		Estimated Monthly Distribution of Santa Clara's share of "Program Delivery Capability" Acre-Feet Per Month
	Acre-Feet	Percent	
JANUARY	* 2,444	1.0	317
FEBRUARY	* 22,185	9.8	3,104
MARCH	21,185	9.6	3,041
APRIL	17,984	7.9	2,502
MAY	24,373	10.6	3,358
JUNE	36,138	15.9	5,036
JULY	41,123	18.1	5,733
AUGUST	34,084	15.1	4,783
SEPTEMBER	12,310	5.4	1,710
OCTOBER	6,373	2.8	887
NOVEMBER	4,015	1.9	602
DECEMBER	4,206	1.9	602
TOTAL	226,420 AF	100.0	31,675 AF

* Average of 1984 and 1989 only

SEMITROPIC WATER STORAGE DISTRICT
CALCULATION OF POWER PAYMENTS UNDER SECTION 6.3.3
Agreement for the Semitropic Water Banking and Exchange Program

BASIC FORMULA

(ENERGY CONSUMED to WITHDRAW WATER from STORAGE) \times (TOTAL SEMITROPIC ENERGY COSTS) = (WITHDRAWAL PAYMENTS)
(TOTAL ENERGY CONSUMED BY SEMITROPIC)

Summary of components

ENERGY CONSUMED to WITHDRAW WATER from STORAGE (Water Banking activity to return stored water)

1. Energy used to extract ground water for Banking Partners, including:
 - a) Actual electric meter readings from Semitropic operated wells
 - b) Actual PG&E meter readings from bills submitted for payment under pumping agreements for operation of Semitropic landowner wells
 - c) Energy use under pumping agreements with Semitropic landowners for operation of wells where the actual KWH is unavailable
(as in engine driven wells) use the formula:
 $KWH = 1.707 \times (\text{PUMPING LIFT in feet}) \times (\text{ACRE-FEET EXTRACTED})$
Where 1.707 is the conversion factor assuming 60% wire to water efficiency
Where the PUMPING LIFT is determined from the previous year's "Lines of Equal Pumping Lifts" by Bookman-Edmonston Engineering, Inc.
Where the ACRE-FEET EXTRACTED is from actual Semitropic water meter readings
 - d) Estimated use for released Contract Water (on-farm ground water pumping) use the same formula as above
2. Energy used to reverse the flow of Semitropic canals
 - a) From the actual electric meter readings at reverse flow pumping structures
The use shall be proportional to the water pumped for WITHDRAWAL for Banking Partners to the total water pumped by Semitropic
3. Energy used at the Semitropic's Pump-Back Pumping Plant to return water to the California Aqueduct
 - a) From the actual electric meter readings at the Pump-Back Pumping Plant
The use shall be proportional to the water pumped for WITHDRAWAL for Banking Partners to the total water pumped by Semitropic
4. Estimated energy use for other facilities as may be required by Semitropic

TOTAL ENERGY COSTS (Costs to secure energy required for all Semitropic activities)

5. Costs to feed energy into the Semitropic Grid
 - a) PG&E billing at Semitropic Substation (single point of service with Semitropic power grid)
 - b) All costs for other electrical feeds into Semitropic Grid (i.e. external cogeneration facilities)
 - c) All costs for power generated by Semitropic's Energy Project including:
(currently 4 MW of natural gas engine generation and 850 KW of hydroelectric generation)
Fuel
Operation & Maintenance
Replacement Reserve deposits
Debt Service
6. Costs for energy not fed into Semitropic Grid
 - a) All PG&E billings for Semitropic facilities not on Semitropic Grid
 - b) Engine/generator rental and diesel to operate temporary Semitropic facilities
 - c) All payments to Semitropic landowners under ground water pumping agreements for operation of Semitropic landowner wells
 - d) All payments to Contract Water Users for release of Contract Water (on-farm ground water pumping) for energy use identified in 1.d) above
 - e) Costs of other facilities as may be required by Semitropic

TOTAL ENERGY CONSUMED (Energy required for all Semitropic activities)

7. Energy fed into the Semitropic Grid
 - a) PG&E meter readings at Semitropic Substation (single point of service with Semitropic power grid)
 - b) Any other electrical service metered into Semitropic Grid (i.e. external cogeneration facilities)
 - c) Energy metered at each Semitropic operated natural gas engine-generator
 - d) Energy metered at each Semitropic operated hydroelectric generator
8. Energy not fed into the Semitropic Grid
 - a) All PG&E meter readings for Semitropic facilities not on Semitropic Grid
 - b) Actual PG&E meter readings from bills submitted for payment under pumping agreements for operation of Semitropic landowner wells
 - c) Energy use under pumping agreements with Semitropic landowners for operation of wells where the actual KWH is unavailable
(as in engine driven wells) use the formula:
 $KWH = 1.707 \times (\text{PUMPING LIFT in feet}) \times (\text{ACRE-FEET EXTRACTED})$
Where 1.707 is the conversion factor assuming 60% wire to water efficiency
Where the PUMPING LIFT is determined from the previous year's "Lines of Equal Pumping Lifts" by Bookman-Edmonston Engineering, Inc.
Where the ACRE-FEET EXTRACTED is from actual Semitropic water meter readings
 - d) Estimated use for released Contract Water (on-farm ground water pumping) use the same formula as above
 - e) Estimated energy use for other facilities as may be required by Semitropic

DEPRECIATION ASSUMPTIONS
TO BE USED
FOR SECTION 12.3 OF THIS
AGREEMENT

- I. Depreciation is to be calculated on a straight line basis.
- II. The average useful lives of facilities is as follows:

<u>Facility</u>	<u>Average Useful Life (years)</u>
Canals	50
Structures	50
Pipelines and Appurtenances	50
Pumps and Motors	25
Wells	25

EXHIBIT E

Recording Requested By
And When Recorded Return to:

Semitropic Water Storage District
P. O. Box Z
Wasco, CA 93280

PART OF SCVWD AGMT. NO. A2062

**MEMORANDUM OF AGREEMENT
FOR A SANTA CLARA-SEMITROPIC
WATER BANKING AND EXCHANGE PROGRAM
(Ref. Section 13.12)**

THIS MEMORANDUM OF AGREEMENT (this "Memorandum of AGREEMENT"), dated as of June 17, 1997, is entered into by and between THE SANTA CLARA VALLEY WATER DISTRICT ("Santa Clara") and the SEMITROPIC WATER STORAGE DISTRICT and SEMITROPIC IMPROVEMENT DISTRICT, BUTTONWILLOW IMPROVEMENT DISTRICT and POND-POSO IMPROVEMENT DISTRICT of the SEMITROPIC WATER STORAGE DISTRICT (collectively called "Semitropic"), with respect to that certain AGREEMENT for a Santa Clara-Semitropic Water Banking and Exchange Program, dated of even date herewith, by and among Santa Clara and Semitropic (which Agreement, as of any particular time, as amended through that time, may be referred to herein as the "Agreement"). Santa Clara and Semitropic may be referred to individually as "Party" or, collectively, as "Parties".

RECITALS

A. Santa Clara obtains water from the State Water Project ("SWP") through its contract with the California Department of Water Resources ("DWR"). From time to time Santa Clara may have water available that it desires to deliver to Semitropic for storage and eventual return or other disposition pursuant to the Agreement.

B. Semitropic obtains water from the SWP through its contracts with the Kern County Water Agency ("Agency") under the Agency's master contract with DWR. A total of approximately 136,370 acres of land within Semitropic is irrigated. Semitropic has entered into contracts with individual landowners covering 42,328 acres of land which is designated as the Surface Water Service Area ("SWSA"). Additional lands outside the SWSA, in the amount of approximately 24,500 acres, have also been connected to Semitropic's distribution system so such lands may receive surface water when available. These additional lands are designated as the Temporary Water Service Area ("TWSA"), and may sometimes be referred to as the "Non-Contract Service Area". Total landowner demand within the SWSA and TWSA for surface

water supplies is greater than water available under Semitropic's entitlement for Agency SWP water and other surface water supplies. The construction of additional distribution facilities by Semitropic, as contemplated by the Agreement, will allow Semitropic to absorb additional imported water delivered to Semitropic by Santa Clara for storage pursuant to the Agreement.

C. Semitropic has constructed a seventy-eight inch (78") pumpback pipeline that is capable of conveying water withdrawn from the ground water basin underlying the area within Semitropic's boundaries (the "**Semitropic Basin**") directly to the California Aqueduct. Semitropic's boundaries, various well sites owned and controlled by Semitropic, said pumpback pipeline and certain other facilities of Semitropic which are to be used in connection with the Program (as hereinafter defined) are shown on Exhibit 1 to the Memorandum of Agreement (which Exhibit is incorporated herein by this reference). In addition Semitropic will construct other facilities in the area shown on Exhibit 1 as provided in the Agreement. Semitropic's pumpback operations to return stored water to Santa Clara at the California Aqueduct, as provided for in the Agreement, will take place primarily during the "off-peak" irrigation season, when ground water pumping and conveyance capacity are available.

D. Santa Clara and Semitropic find that it will be mutually advantageous to enter into a ground water banking and exchange program whereby Semitropic will hold in trust for Santa Clara the water deposited by Santa Clara hereunder (or its equivalent), together with (i) an easement and right to withdraw from lands owned or controlled by Semitropic an amount of water equal to Santa Clara's Stored Water on deposit with Semitropic, and (ii) an easement and right to transport such water from the Semitropic Basin to the California Aqueduct for delivery, by exchange, to Santa Clara, all in accordance with the terms of the Agreement. The Agreement will provide additional ground water storage for Santa Clara, resulting in better utilization of its SWP and/or CVP supplies, and will provide improved reliability of supplies and overall higher ground water levels for Semitropic.

E. The Agreement is consistent with the goal of making optimum use of water and facilities and is consistent with conservation objectives of Santa Clara, Semitropic, Agency and DWR.

F. Consistent with the California Environmental Quality Act ("CEQA"), Semitropic, acting as lead agency, and The Metropolitan Water District of Southern California, ("Metropolitan"), acting as a responsible agency, have jointly completed an environmental impact report concerning the proposed water banking and exchange program (the "EIR"). Semitropic's Board of Directors, on July 13, 1994, certified the EIR as being in compliance with CEQA, and Metropolitan's Board of Directors on August 19, 1994, reviewed and considered the EIR. Semitropic will also be responsible for implementing and monitoring the mitigation measures defined in "Findings and Mitigation Monitoring Plan" dated July 1994, adopted as part of the Final EIR. In addition, a Negative Declaration addressing the affects of a long-term Banking and Exchange Agreement was certified by Semitropic as lead agency on May 30, 1997.

G. Semitropic has also entered into a Memorandum of Understanding ("MOU") with neighboring districts, dated September 14, 1994, to implement in part said monitoring and mitigation measures, which the Agreement is subject to. The MOU is on file with both Santa Clara and Semitropic.

H. The Semitropic Water Banking and Exchange Program authorized in the above-referenced EIR (the "Program") has a defined total storage capacity of 1,000,000 acre-feet. The estimated absorptive capacity, based on the approximately 23,000 acres of In-Lieu Service Area (as defined in Article 1 of the Agreement) and the current cropping patterns and irrigation efficiencies, is 80,500 acre-feet per year. An estimated additional 10,000 acre-feet per year of absorptive capacity is anticipated as a result of Semitropic improving the delivery capability of the distribution system to the existing SWSA and TWSA, as contemplated by the Program. The estimated withdrawal capacity is 90,000 acre-feet per year, at a maximum flow rate of 300 CFS, through the pumpback facility. In addition, Stored Water (as defined in said Article 1) may be returned from any Semitropic SWP Entitlement Water (as defined in said Article 1) allocation in excess of 22,000 acre-feet, as described in the Agreement. Facilities necessary to accomplish the foregoing will increase the absorptive and withdrawal capabilities of Semitropic over and above the pre-Program conditions. Semitropic has entered into an agreement with Metropolitan and Alameda County Water District which collectively reserve about forty percent (40%) of Program capacities for Metropolitan and Alameda. Santa Clara's participation will not fully utilize unreserved capacities. Therefore, Semitropic has developed and will be offering other potential Banking Partners (as defined in said Article 1) the opportunity to participate in the Program on substantially the same terms and conditions as Metropolitan, Alameda and Santa Clara.

Santa Clara has reviewed the terms and conditions of that certain document entitled "Semitropic Ground Water Banking Program Payment and Banking Capacity Rights Options" dated August 1, 1994, setting forth the terms on which third parties may participate in the Program as Banking Partners (the "Program Options"). A copy of that document is on file with both Semitropic and Santa Clara. Santa Clara has agreed that anyone who is a party to an agreement with Semitropic which includes one or more of options 1 through 4 of the Program Options and which does not violate any of the requirements of the Agreement will be a Banking Partner.

I. As a part of the Agreement, Semitropic, as trustee, will hold in trust for Santa Clara, in accordance with the terms of the Agreement, the water deposited by Santa Clara (or its equivalent), together with the right to withdraw it and to deliver it to the California Aqueduct. The parties create this trust relationship for the purpose of protecting Santa Clara's ability to recover Stored Water, and Semitropic's fiduciary duty is limited to Semitropic's responsibilities as set forth in the Agreement. In addition, Semitropic, in a non-fiduciary capacity, will provide such water resource management services as are necessary to implement and operate the Program. Semitropic's non-fiduciary obligations include taking such actions, including the construction of facilities, securing Agreements and entering into operational arrangements, as are necessary to

receive from Santa Clara water delivered by Santa Clara for storage hereunder and to return equivalent water to Santa Clara in accordance with the terms of the Agreement. The Program, as implemented with respect to Santa Clara by the Agreement, when combined with other necessary actions undertaken by Santa Clara, will thus allow the delivery of Stored Water to Santa Clara during Santa Clara's peak demand periods. When such services are provided by Semitropic, Santa Clara will make payments to Semitropic, as provided for in the Agreement, to compensate Semitropic for its services and expenses. Although Santa Clara does not guarantee its level of participation in the Program, it is anticipated that Santa Clara will acquire about thirty-five percent (35%) of the Program's capabilities, rights and capacities described in Recital I and elsewhere in the Agreement.

Santa Clara will acquire a proportionate share of total Program capabilities, capacities and rights for the term of this Memorandum of Agreement as Santa Clara's Permanent Storage Allocation (as defined in Section 1.7 of the Agreement) "vests", as provided in said Section 1.7. After Santa Clara Permanent Storage Allocation is Fully Vested, as provided in said Section 1.7, Santa Clara may increase its vested Permanent Storage Allocation as provided for in Sections 6.5 and 6.6 of the Agreement.

Until January 1, 2006, Semitropic will allocate interim Program capabilities, capacities and rights to Santa Clara sufficient to make available to Santa Clara at least: (i) 35 percent of Semitropic's then existing capability to store water using then existing facilities, (ii) 35 percent of Semitropic's then existing ability to return water through State Water Project entitlement exchange available, and (iii) a minimum capacity of 31,500 acre-feet per year to return withdrawn water directly to the California Aqueduct from the Semitropic's facilities.

J. The trust relationship between Santa Clara, as settlor and beneficiary, and Semitropic, as trustee, created by the Agreement and described in these Recitals, is entered into by the Parties solely for the purpose of protecting Santa Clara's interest in water delivered by Santa Clara to Semitropic hereunder for storage, and the right of Santa Clara, also held in trust by Semitropic for Santa Clara, to recover from the Semitropic Basin water in a quantity equal to Santa Clara's Storage Account Balance (as defined in Article 1 of the Agreement), such right to be exercised by Semitropic, as trustee, through the lands, facilities, rights and interests of Semitropic, or by its successor in interest in and to the trust property, all in accordance with the terms of the Agreement. Semitropic acknowledges and agrees that all water delivered to it by Santa Clara under the Agreement will be received, held, exchanged, accounted for, and returned or otherwise disposed of by Semitropic in its capacity as trustee for Santa Clara with respect to such water and the easements and rights relating thereto provided for herein and in the AGREEMENT. Santa Clara has authorized Semitropic, as trustee, to commingle, exchange or otherwise dispose of the water delivered by Santa Clara under the Agreement. In exchange for those rights and for water delivered under the Agreement, Semitropic has granted, and does hereby grant, to Santa Clara the right to an equal quantity of water from the lands, facilities, rights and interests of Semitropic (subject, however, to the loss provisions of Article 4 of the Agreement), together with such easements and other rights as are necessary to transport the

recovered water to the California Aqueduct for delivery to Santa Clara by exchange, therein, all upon, and subject to the provisions of, the Agreement (all which rights and easements may be referred to herein and in the Agreement, collectively, as the "Trust Property"). Santa Clara has granted, and does hereby grant, to Semitropic said Trust Property, in trust, for the use and benefit of Santa Clara. The trust relationship created by the Agreement is not otherwise intended to apply to or effect the obligations of Semitropic or Santa Clara under the Agreement, or the remedies in the event of default; it being expressly understood and agreed that Semitropic's obligations under the Agreement to, among other things, construct facilities and enter into Agreements with others in furtherance of the Program shall not be fiduciary in nature. Notwithstanding creation of a trust under the Agreement, Semitropic may benefit from the Agreement.

K. Santa Clara has previously delivered 45,000 acre-feet for a storage account balance of 40,500 acre-feet of water to Semitropic pursuant to the June 4, 1996 "1996 Agreement for a Santa Clara-Semitropic Water Banking and Exchange Program." Santa Clara And Semitropic desire that such water hereafter be held and disposed of by Semitropic for the benefit of Santa Clara under the Agreement as provided therein.

NOW, THEREFORE, in consideration of the foregoing recitals (which are, by this reference incorporated herein and made a part hereof for all purposes) and for other valuable consideration, the receipt and adequacy of which are hereby acknowledged, Santa Clara and Semitropic do further agree as follows:

1. The Agreement is incorporated herein by this reference, as if set out in full herein.
2. In the event of any conflict between the provisions of this Memorandum of Agreement and the Agreement, the provisions of the Agreement shall control.
3. Neither the Agreement nor this Memorandum of Agreement shall be interpreted to modify the terms or conditions of either the water supply contracts between the DWR and the Agency or Santa Clara or the water supply Agreements between the Agency and Semitropic.
4. Unless the Agreement is earlier terminated pursuant to Section 10 thereof or pursuant to Sections 11.1.3, 11.2, 11.3, 12.2 or 12.3 thereof, the Agreement and this Memorandum of Agreement shall terminate on December 31, 2035, the date of termination of Santa Clara's Long-Term Water Supply Contract; *provided, however, that, if Santa Clara has timely requested return of Stored Water pursuant to Article 5 of the Agreement at such a time and in such a manner that Santa Clara's Stored Water could have been returned prior to December 31, 2035 but, because of conditions beyond the control of Santa Clara, all of Santa Clara's Stored Water has not been returned by that date, the provisions of Articles 1, 5, 6, 7, 9, 11, 12 and 13 of the Agreement shall continue in full force and effect for*

such additional period of time as is necessary for Santa Clara to receive its Stored Water as requested; and *provided, further*, that if a claim arising under or with respect to the terms of the Agreement has not been resolved when the Agreement terminates, or if such a claim is brought after the Agreement has terminated but within the period of time for bringing such a claim under California law (such a claim being referred to herein as a "Late Arising Claim"), the provisions of Articles 1, 7, 9 and 13 of the Agreement shall continue in full force and effect for such additional period of time as is necessary to resolve such claim and to satisfy the rights and obligations of the Parties hereto with respect to it pursuant to such Articles. The Agreement may be renewed by mutual agreement of the parties, which renewal shall, unless otherwise agreed, effect a continuation of Semitropic's duties under the Agreement and an amendment of this Memorandum of Agreement, whether or not such amendment is recorded. Santa Clara may elect to terminate the Agreement at any time by giving written notice to Semitropic of Santa Clara's intent to terminate not less than one year in advance of the termination date selected by Santa Clara and specified in the notice and by conveying its beneficial interest in the amount of Santa Clara's Stored Water in Santa Clara's Storage Account Balance on that termination date to Semitropic. Upon Santa Clara's conveyance of such beneficial interest, the Agreement shall be fully terminated except as provided in Article 10 of the Agreement with respect to Late Arising Claims.

IN WITNESS WHEREOF, the Parties have caused this Memorandum of Agreement to be duly executed and delivered by their respective authorized officers as of the date first set forth above.

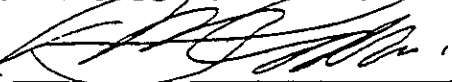
SANTA CLARA VALLEY WATER DISTRICT

By: 
General Manager


APPROVED AS TO FORM:

By: 
General Counsel

SEMITROPIC WATER STORAGE DISTRICT


By: 
Vido G. Fabbri, President

By:

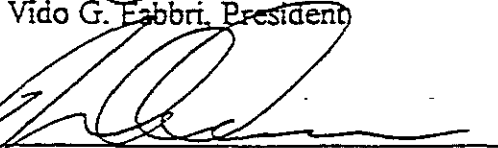

Wilmar L. Boschman, Asst. Secretary

SEMITROPIC IMPROVEMENT DISTRICT
OF SEMITROPIC WATER STORAGE DISTRICT

By:


Vido G. Fabbri, President

By:

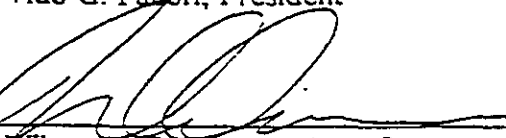

Wilmar L. Boschman, Asst. Secretary

BUTTONWILLOW IMPROVEMENT DISTRICT
OF SEMITROPIC WATER STORAGE DISTRICT

By:

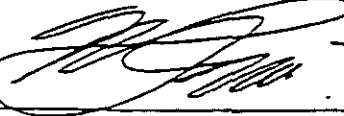

Vido G. Fabbri, President

By:

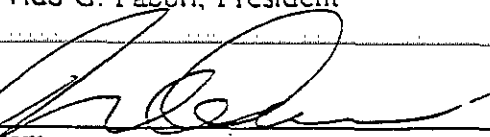

Wilmar L. Boschman, Asst. Secretary

POND-POSO IMPROVEMENT DISTRICT
OF SEMITROPIC WATER STORAGE DISTRICT

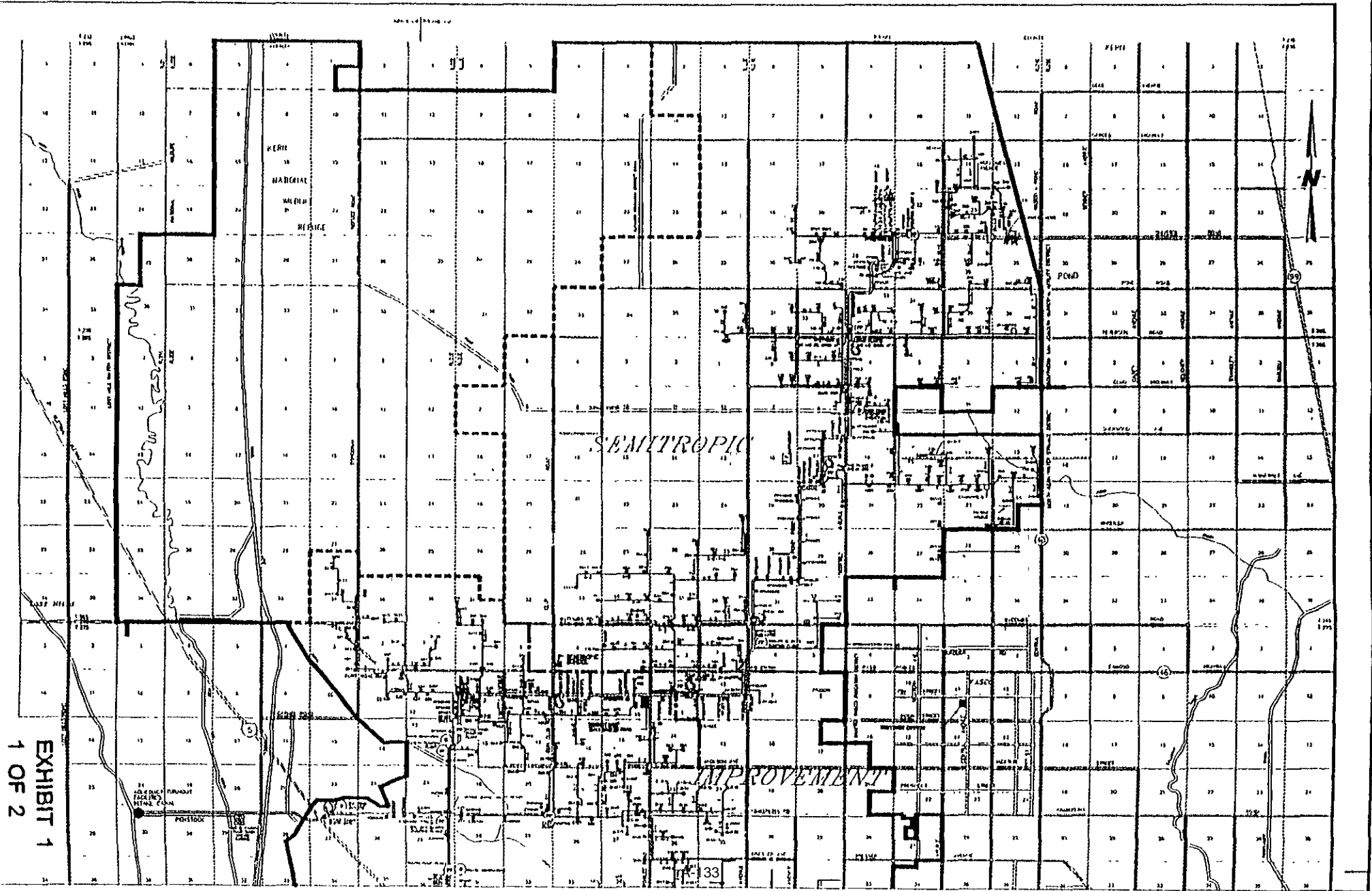
By:


Vido G. Fabbri, President

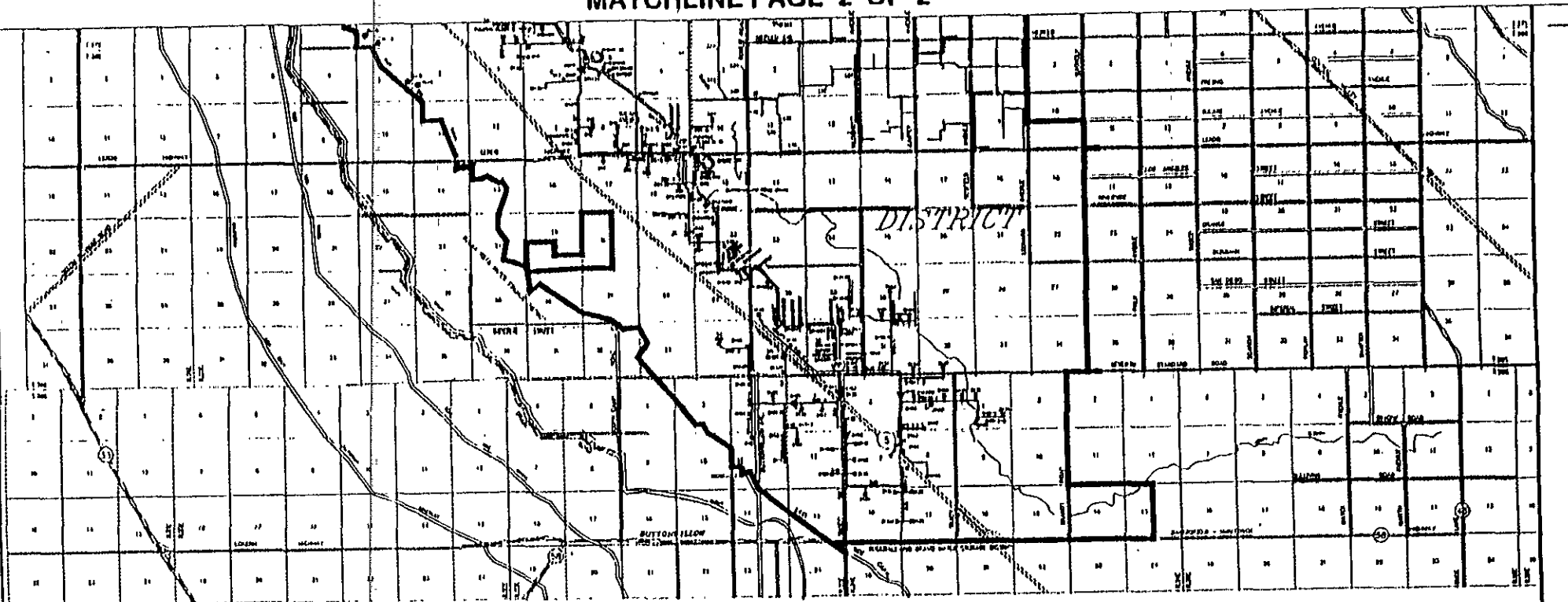
By:


Wilmar L. Boschman, Asst. Secretary

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MATCHLINE PAGE 2 OF 2



LEGEND

	CONTRACT SURFACE WATER SERVICE AREA	42,328 ACRES
	IN-LEU SERVICE AREA UNDER CONTRACT GROUND WATER BANKING PROJECT	9,334.31 ACRES
	OPERATIONAL IN-LEU SERVICE AREA	2,200 ACRES
	CONJUNCTION SURFACE WATER/ GROUND WATER SERVICE AREA	24,600 ACRES
	GROUND WATER SERVICE AREA	60,418 ACRES
	FUTURE IN-LEU SERVICE AREA	13,900 ACRES
	TOTAL PROJECTED ACREAGE	138,346 ACRES

	SEMITROPIC WATER STORAGE DISTRICT BOUNDARY
	IMPROVEMENT DISTRICT BOUNDARY
	BUTTEMILION AND POND POSO IMPROVEMENT DISTRICT BOUNDARY
	CANN SYSTEM
	PIPELINE LATERAL DISTRIBUTION SYSTEM
	FARM RIGIDITY
	GROUND WATER WELLS
	REVERSE FLOW PLAP STATION
	PUMPING PLANT
	DIVERSION STRUCTURE
	ELECTRICAL SUBSTATION
	CHECK GATE
	PUMP BACK HYDRO TURBINE
	WELL LOCATION
	BOILER PLANT SITE
	PROPOSED IN-LEU SERVICE AREA PIPELINE
	SEMITROPIC WATER STORAGE DISTRICT

SEMITROPIC WATER STORAGE DISTRICT

MARCH 1997

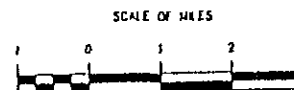


EXHIBIT 1
2 OF 2

**FIRST AMENDMENT TO AGREEMENT BETWEEN
SANTA CLARA VALLEY WATER DISTRICT AND
SEMITROPIC WATER STORAGE DISTRICT AND ITS
IMPROVEMENT DISTRICTS FOR A SANTA CLARA-SEMITROPIC
WATER BANKING AND EXCHANGE PROGRAM**

THIS FIRST AMENDMENT TO THAT CERTAIN AGREEMENT ("Agreement") dated as of June 1, 1997, by and between **SANTA CLARA VALLEY WATER DISTRICT ("Santa Clara")**, and the **SEMITROPIC WATER STORAGE DISTRICT** and **SEMITROPIC IMPROVEMENT DISTRICT, BUTTONWILLOW IMPROVEMENT DISTRICT** and **POND-POSO IMPROVEMENT DISTRICT** of the **SEMITROPIC WATER STORAGE DISTRICT** (collectively called "**Semitropic**") is entered into as of this 24th day of April, 2003.

RECITALS

A. Santa Clara and other parties have previously entered into agreements with Semitropic pursuant to which they participate in a water banking and exchange program developed by Semitropic in Kern County and have prior rights to the one million acre feet of storage originally developed therein ("Original Banking Program").

B. On July 24, 2002, Semitropic entered into an agreement with Layne Water Development and Storage, LLC ("LWDS"), pursuant to which LWDS is to participate in a Stored Water Recovery Unit ("SWRU") which is to develop an additional 650,000 acre feet of storage together with other capabilities and facilities in the same general area as the Original Banking Program.

C. Santa Clara and certain other Original Banking Partners objected to Semitropic's agreement with LWDS asserting that it violated their prior rights to store and recover water in the

Original Banking Program, including but not limited to their rights under Section 2.2 and Section 5.7 of their Original Banking Program Agreements.

D. The purpose of this First Amendment is to confirm and clarify the rights of Santa Clara and other Original Banking Partners in light of the SWRU and the July 24, 2002 Agreement between Semitropic and LWDS.

SANTA CLARA AND SEMITROPIC AGREE AS FOLLOWS

Section 1. Article 1 ("Definitions") of the Agreement is amended by adding the following definitions:

- 1.17 "Original Banking Partners" means the parties to the Original Banking Program which are Alameda County Water District (ACWD), Metropolitan Water District of Southern California (MWD), Newhall Land and Farming (Newhall), Santa Clara Valley Water District (SCVWD), Vidler Water Company (Vidler) and Zone 7 Water Agency (Zone 7), and which may change from time to time in event of assignments in accordance with Section 13.1 (Successors and Assigns).
- 1.18 "Original Banking Program" means the original one million acre-feet (MAF) banking program developed by Semitropic within the Semitropic Bank, referred to as "Program" in Section 1.8 of the Original Banking Program Agreements, as described in Exhibit G-1 and shown on Exhibit G-2 (dated 2/19/03) (herein collectively referred to as Exhibit G).
- 1.19 "Original Banking Program Agreements" means the agreement (or agreements) that each Original Banking Partner has entered into with Semitropic containing rights and obligations related to the Original Banking Program.
- 1.20 "Original Banking Program Facilities" means the water facilities, consisting of canals, pipelines, associated pumping plants and recovery wells required

to recharge a minimum of 90,500 acre feet per year and to recover a minimum of 90,000 acre feet per year at a maximum instantaneous flow rate of 300 cfs (Program Pumpback Capacity), the locations and description of which are shown on Exhibit G within Area A.

- 1.21 "Semitropic Bank" means the entire groundwater-banking program developed, operated, and maintained by Semitropic. The Semitropic Bank is to be expanded to a 1.65 million acre-feet (MAF) banking program, consisting of the existing one MAF Original Banking Program and the additional 650,000 AF Stored Water Recovery Unit.
- 1.22 "Stored Water Recovery Unit" (SWRU) means the program within the Semitropic Bank, developed by Semitropic in part in cooperation with Layne Water Development and Storage, LLC (LWDS) to create, in addition to the Original Banking Program, an additional 650,000 acre-feet of storage (up to 450,000 acre-feet of which have been allocated to LWDS), approximately 50,000 acre-feet per year of recharge and approximately 200,000 acre-feet per year recovery capacity, of which 50,000 acre-feet per year of recovery capacity may be acquired by the Original Banking Partners, as provided in the Stored Water Recovery Unit Agreement, and the new facilities built specifically to accommodate said program.
- 1.23 "Stored Water Recovery Unit Agreement" means the July 24, 2002 Agreement between Semitropic and LWDS related to the Stored Water Recovery Unit (SWRU).
- 1.24 "Stored Water Recovery Unit Facilities" means the proposed facilities shown and described on Exhibit G within Area B and recovery facilities for up to 50,000 acre-feet per year within Area A.

1.25 "Technical Advisory Committee" means the Committee established pursuant to Section 14.4 hereof.

Section 2. Add Article 14 to read as follows:

"ARTICLE 14. STORED WATER RECOVERY UNIT (SWRU)"

14.1 General Provisions

14.1.1 Semitropic shall use, on a first priority basis, Original Banking Program Facilities and any additional capacity available in those facilities annually, to meet its obligations under this Agreement and the other Original Banking Program Agreements to convey water to storage and to recover stored water on behalf of the Original Banking Partners.

14.1.2 The Stored Water Recovery Unit Facilities are planned to recharge up to 50,000 acre-feet per year and to recover, and convey to the California Aqueduct, up to 150,000 acre-feet per year of LWDS Stored Water from Area B as shown in Exhibit G. In addition, the SWRU may recover up to 50,000 acre-feet per year of LWDS Stored Water from Area A as shown in Exhibit G and convey it to the California Aqueduct for the benefit of the SWRU on a second priority basis (i.e., as a Lower Priority Banking Partner). Whenever pumpback capacity is available from the Original Banking Program Facilities during Semitropic's off-peak irrigation season and other times Semitropic determines to be operationally feasible (as provided at Section 5.4), it shall be offered to the Original Banking Partners (on a first priority basis) and the SWRU (on a second priority basis).

14.1.3 The Original Banking Partners shall have second priority use of SWRU facilities, provided that (i) the rights of LWDS and other SWRU participants to use unused capacities within the SWRU have been met and (ii) such Original Banking Partner's use shall not reduce the SWRU's expected returns or cause water quality to be unacceptable for return to the California Aqueduct.

14.1.4 Subject to Section 5.6, the SWRU will have second priority use of Original Banking Program facilities provided that: (i) all rights of the Original Banking Partners to use unused capacity have been met, and (ii) such SWRU use shall not reduce the Original Banking Partners' expected returns or cause water quality to be unacceptable for return to the California Aqueduct.

14.1.5 If Semitropic utilizes the SWRU facilities in accordance with Section 14.1.3, on behalf of and with the consent of, an Original Banking Partner, then the Original Banking Partner shall pay an Operations and Maintenance fee to Semitropic for such use, equal to the lowest rate that Semitropic would charge LWDS or another SWRU participant at that time for such use. If LWDS or another SWRU participant utilizes Original Banking Program Facilities, the Operations and Maintenance fee shall be paid in accordance with Section 6.7.2. If Semitropic utilizes, or permits utilization of, Original Banking Program Facilities by other than an Original Banking Partner, Semitropic shall pay the Operations and Maintenance fee specified in Section 6.7.2, or ensure that it is paid to the respective Original Banking Partner(s). The Original Banking Partners shall not be obligated to pay any fees for usage of the SWRU, nor shall LWDS or other SWRU participants be obligated to pay any fees for usage of Original Program Banking Facilities, other than as detailed in this section.

14.1.6 Neither party's second priority rights specified in Sections 14.1.2 through 14.1.5 shall apply to water treatment facilities which may be constructed.

14.1.7 There shall be no increase in costs to the Original Banking Partners for modeling, monitoring, and any other activities resulting from the SWRU or any future expansion of the Semitropic Bank.

14.1.8 Nothing in this Agreement affects, acknowledges or establishes (i) rights as to use of any facilities other than the Original Banking Program Facilities and the Stored Water Recovery Unit Facilities, or (ii) rights as to the manner in which Stored Water, once

recovered, is to be utilized; provided, however, that such use is consistent with the terms and conditions of this Agreement and the other Original Banking Program Agreements.

14.2 Water Quality

14.2.1 In addition to complying with its obligations under Section 5.7, Semitropic shall not operate, or permit operation of, the SWRU to cause Stored Water recovered for the benefit of the Original Banking Partners, which would otherwise meet applicable water quality standards for delivery into the California Aqueduct, to exceed such standards.

Semitropic shall design and construct all groundwater recovery components of the SWRU to allow the SWRU and the groundwater recovery facilities and operations of the Original Banking Program to be operated in complete physical isolation from each other. Semitropic shall operate the recovery components of the SWRU in isolation from the Original Banking Program except as provided in Section 14.2.2.

14.2.2 If Semitropic desires to co-mingle recovered SWRU Stored Water from the North-West well field in Area B, as shown on Exhibit G, with recovered Stored Water from the Original Banking Program for delivery into the California Aqueduct through the existing pumpback pipeline, it shall provide written notice to each of the Original Banking Partners, in the manner provided for in Section 13.9 at least 30 days in advance of the date on which such co-mingling would begin. The notice shall describe the reasons that co-mingling is desired, the amount of Stored Water proposed to be co-mingled, the period of time during which co-mingling is proposed to occur and any other information that Semitropic considers relevant, including expected water quality at the point of entry into the California Aqueduct.

Semitropic shall furnish any other information requested by any Original Banking Partner and shall send a copy of such information to all Original Banking Partners.

If an Original Banking Partner does not respond in writing to Semitropic within 30 days after its receipt of the original notice, it shall be deemed to have agreed to the

proposed co-mingling. If any Original Banking Partner objects in writing (stating the basis of such objection) to the proposed co-mingling within such 30 day period, Semitropic shall not co-mingle SWRU Stored Water.

14.2.3 Semitropic shall operate the SWRU in a manner designed so that its operation does not cause the Original Banking Program to be impaired in its ability to meet DWR water quality standards for return of Stored Water to the California Aqueduct. Nothing in this Section modifies the rights and duties of the parties under Section 5.7.

14.2.4 If operation of the SWRU causes Stored Water recovered for the benefit of Santa Clara and the other Original Banking Partners to violate applicable water quality standards, such that such Stored Water cannot be returned to the California Aqueduct, then Semitropic shall pay the cost of additional treatment or alternative methods as necessary to correct the water quality impairment caused by the SWRU resulting in exceeding the applicable quality standard. Further, inasmuch as the SWRU will also rely on Unused Program Entitlement Exchange Rights, in the event of such degraded water quality caused by the SWRU, the Original Banking Partners shall have a first priority to (i) exchange up to 133,000 acre-feet per year of Semitropic's Table A entitlement allocations from DWR (i.e., to exercise the Program Entitlement Exchange Rights), and (ii) to exercise other options that may be available as provided in Section 5.7. Such options may include, but are not necessarily limited to, blending or substituting water that Semitropic purchases, exchanges with others, and/or by treating and improving Stored Water quality to acceptable standards for direct pumpback.

14.2.5 In the event the SWRU causes applicable water quality standards to be violated, such that Stored Water cannot be returned to the California Aqueduct and, if resolution of impacts is delayed, Semitropic shall provide mitigation as described in Section 14.3.2.

14.2.6 Semitropic shall provide DWR and downstream users of the California

Aqueduct which are Original Banking Partners water quality information applicable to each Semitropic SWP turn-in facility, including but not limited to turn-in facilities utilized by the SWRU and Original Banking Program. Additionally, Semitropic shall provide the Technical Advisory Committee ("TAC") information regarding the quantity and quality of water measured at locations sufficient to determine the water quality within each major Semitropic system.

14.2.7 The Original Banking Partners shall have no responsibility and/or obligation to compensate or otherwise provide mitigation to Semitropic or SWRU participants as a result of any adverse impacts of the Original Banking Program on water quality that affects the SWRU.

14.3 15-Foot/3 Year Rule

14.3.1 The Original Banking Partners shall have no responsibility and/or obligation to compensate or otherwise provide mitigation to Semitropic or SWRU participants as a result of any adverse impacts of the Original Banking Program on the SWRU, including but not limited to the "15 Foot/3 Year Rule" contained in the September 14, 1994 Memorandum of Understanding ("MOU") referred to in Section 5.5. The Original Banking Partners and Semitropic agree that the reference in the MOU to Exhibit E is erroneous since Exhibit E does not exist. Original Banking Program Facilities shall otherwise remain subject to the MOU.

14.3.2 Semitropic shall endeavor to operate the SWRU to ensure that it has no adverse impacts to the Original Banking Program including, but not limited to, capability of the Original Banking Program to avoid reduction in or termination of groundwater pumping, in current and future years. If SWRU pumping directly or indirectly causes such an adverse impact, Semitropic shall assume all obligations to provide mitigation to the impacted Original Banking Partner(s), consisting of a like amount of water to be provided by

Semitropic, which is of quality acceptable for delivery into the California Aqueduct, on a schedule acceptable to the affected Original Banking Partner(s) and in Reach 10 of the California Aqueduct, all as would have been available to the Original Banking Partner(s) absent the SWRU operations. In the event the SWRU causes a violation of the 15-foot/3-year rule, such that Stored Water cannot be returned to the California Aqueduct and, if resolution of impacts is delayed, Semitropic shall provide mitigation. If resolution of impacts caused by SWRU operations is untimely, then mitigation shall be as selected by each affected Original Banking Partner, from the following:

- (a) Semitropic shall, if directed by an Original Banking Partner, and at such Partner's sole discretion, by whatever means and facilities are available at that time, credit an equivalent amount of water to the Original Banking Partner's Storage Account and shall not charge the Original Banking Partner the storage payment provided for by Section 6.2 (Storage Payments), with the result that the Original Banking Partner's Storage Account is credited with the amount of the "put"; without being debited the ten percent (10%) loss in Article IV; or
- (b) Semitropic shall reimburse the affected Original Banking Partner(s) for all costs associated with acquiring an equivalent amount of water; or
- (c) Other remedy mutually agreeable to the affected Banking Partner and Semitropic.

14.3.3 For purposes of determining whether reduction or termination of groundwater pumping is required, SWRU groundwater level impacts, both for current conditions and forecasted conditions, shall be determined by Semitropic through groundwater modeling using the following methodology:

- (a) Groundwater levels shall be estimated based on no Semitropic banking operations occurring (i.e. without Original Banking Program or SWRU);
- (b) Groundwater levels shall be estimated based on only the Original

Banking Program operations and without the SWRU operations; and

(c) Groundwater levels shall be estimated based on combined operations of the Original Banking Program and SWRU operations (i.e., actual conditions).

The groundwater level impacts due to the Original Banking Program at any given location as prescribed by the September 14, 1994 MOU shall be the difference between groundwater levels in Paragraphs (a) and (b) above. The groundwater level impacts due to the SWRU at any given location as prescribed by the MOU shall be the difference between groundwater levels in Paragraphs (b) and (c) above. Groundwater level impacts due to the difference between groundwater levels in Paragraphs (a) and (c) shall be determined consistent with the process prescribed by the MOU.

Semitropic shall periodically provide the Technical Advisory Committee information regarding the change in groundwater elevation measured at locations needed to identify any impacts of the SWRU on the 15-foot/3 year rule.

14.4 Technical Advisory Committee

A Technical Advisory Committee ("TAC") shall monitor implementation of Original Banking Program Agreements, as amended and, the Stored Water Recovery Agreement. The Committee shall consist of one representative from each of the Original Banking Partners identified in Section 1.17 so long as each is a participant in the Program, one representative from the SWRU and one representative from Semitropic. Semitropic shall chair such Committee and provide for periodic communication with Committee members. The TAC shall meet at least annually to discuss implementation and operation of the SWRU and any future programs. Any two members of the TAC may call a meeting of the TAC. Meetings of the TAC shall be held at the District's headquarters, unless its members agree otherwise.

14.5 Responsibility for Implementation.

Semitropic may wish to require LWDS or others to perform certain of its responsibilities under this Article 14 to Original Banking Partners. Arrangements of this kind will not relieve Semitropic of its responsibilities to the Original Banking Partners under Article 14. Nothing in this section modifies Section 13.1 (Successors and Assigns), which also applies to Article 14."

Section 3. Except as expressly provided in Sections 1 and 2 of this Amendment, the rights and obligations of Semitropic and Santa Clara with respect to the Original Banking Program shall continue to be as provided in the Agreement.

Section 4. Recording of Memorandum. A memorandum of this Amendment in the form attached hereto as Exhibit 1 shall be recorded in the Office of the County Recorder, County of Kern.

Executed the day and year first hereinabove written.

SANTA CLARA VALLEY WATER DISTRICT

By: 
Stanley M. Williams, Chief Executive Officer

SEMITROPIC WATER STORAGE DISTRICT

By: 
Fredrick A. Wegis, President

By: 
Wilmar L. Boschman, Assistant Secretary

**SEMITROPIC IMPROVEMENT DISTRICT OF
SEMITROPIC WATER STORAGE DISTRICT**

By: _____

Fredrick A. Wegls
Fredrick A. Wegls, President

By: _____

Wilmar L. Boschman
Wilmar L. Boschman, Assist. Secretary

**BUTTONWILLOW IMPROVEMENT DISTRICT OF
SEMITROPIC WATER STORAGE DISTRICT**

By: _____

Fredrick A. Wegls
Fredrick A. Wegls, President

By: _____

Wilmar L. Boschman
Wilmar L. Boschman, Assist. Secretary

**POND-POSO IMPROVEMENT DISTRICT OF
SEMITROPIC WATER STORAGE DISTRICT**

By: _____

Fredrick A. Wegls
Fredrick A. Wegls, President

By: _____

Wilmar L. Boschman
Wilmar L. Boschman, Assist. Secretary

Acknowledgement and Agreement by LWDS

Layne Water Development and Storage, LLC (LWDS) has read the foregoing Amendment, has no objection to it, and agrees that its rights under the Stored Water Recovery Unit Agreement shall be consistent with this Amendment. LWDS also agrees that under the Stored Water Recovery Unit Agreement, LWDS is not, and its assignees will not be, an Original Banking Partner as defined in this Amendment, nor a "Banking Partner" for purposes of the amended Agreement, but may be considered a "Lower Priority Banking Partner" for purposes of the amended Agreement to the extent permitted by the foregoing Amendment. LWDS agrees that the Original Banking Partners, referred to as "Existing Banking Partners" in the Stored Water Recovery Unit Agreement dated July 24, 2002, may elect to participate in the SWRU as provided in Section 2.4 of the Stored Water Recovery Unit Agreement.

LWDS shall include a reference to the Original Banking Program Agreements and this Amendment in all of its contracts with third parties which will participate in the SWRU and an acknowledgement by such parties that they have been made aware of the Original Banking Partners' rights.

**LAYNE WATER DEVELOPMENT &
STORAGE, LLC.**

By:  _____

EXHIBIT G-1

- I. The Original Banking Program Facilities in existence as of the date of the First Amendment of the Agreement referred to in Sections 1.8 and 1.20 and shown in Area A on Exhibit G-2 (dated 2/19/03) include, but are not limited to the following:**

(1) Main conveyance facilities used for both recharge and recovery of Stored Water are:

- (a) Intake Canal which includes the Main, North, South and East Reach, extending from the Semitropic turnout at Reach 10A of the California Aqueduct to the North Pumping Plant, East Pumping plant and South Pumping plant.**
- (b) Buttonwillow Ridge Canal including the South pumping plant and Pumps at Check Structures extending from the "South" pumping plant to the "Wegis" Pumping plant.**
- (c) Pond-Poso Canal including the Pond Poso Pumping Plant and Pumps at Check Structures extending from the "North" Pumping plant to the "Delta" Pumping plant.**
- (d) Vido G. Fabbri Hydro Turbine Pumpback Pumping Plant and 78-inch Pumpback Pipeline and Penstock to California Aqueduct.**

(2) Buried Pipeline Distribution Systems

- (a) Reversible or Two-Way Systems including landowner wells that are made available to the District under long-term agreements.**

- B-230 System (i.e. Mainline and Sub-laterals) With Turnouts and Recovery Wells Numbered L 2 thru L 198.**
- P-384 System (i.e. Mainline and Sub-laterals) With Turnouts and Recovery Wells Numbered P 2 thru P 152.**
- Interconnection Pipeline with Shafter-Wasco Irrigation District and Sub-laterals With Turnouts and Recovery Wells Numbered K 8 thru K 18.**
- P-923 System (i.e. Mainline and Sub-laterals) With Turnouts and Recovery Wells Numbered H 1 thru H 133.**
- P-667 System (i.e. Mainline and Sub-laterals) With Turnouts and Recovery Wells Numbered J 29 thru J 99.**

(b) Primarily Recharge Systems

- East System (i.e. Mainline and Sub-laterals) With Turnouts S 67 thru S 131T.**

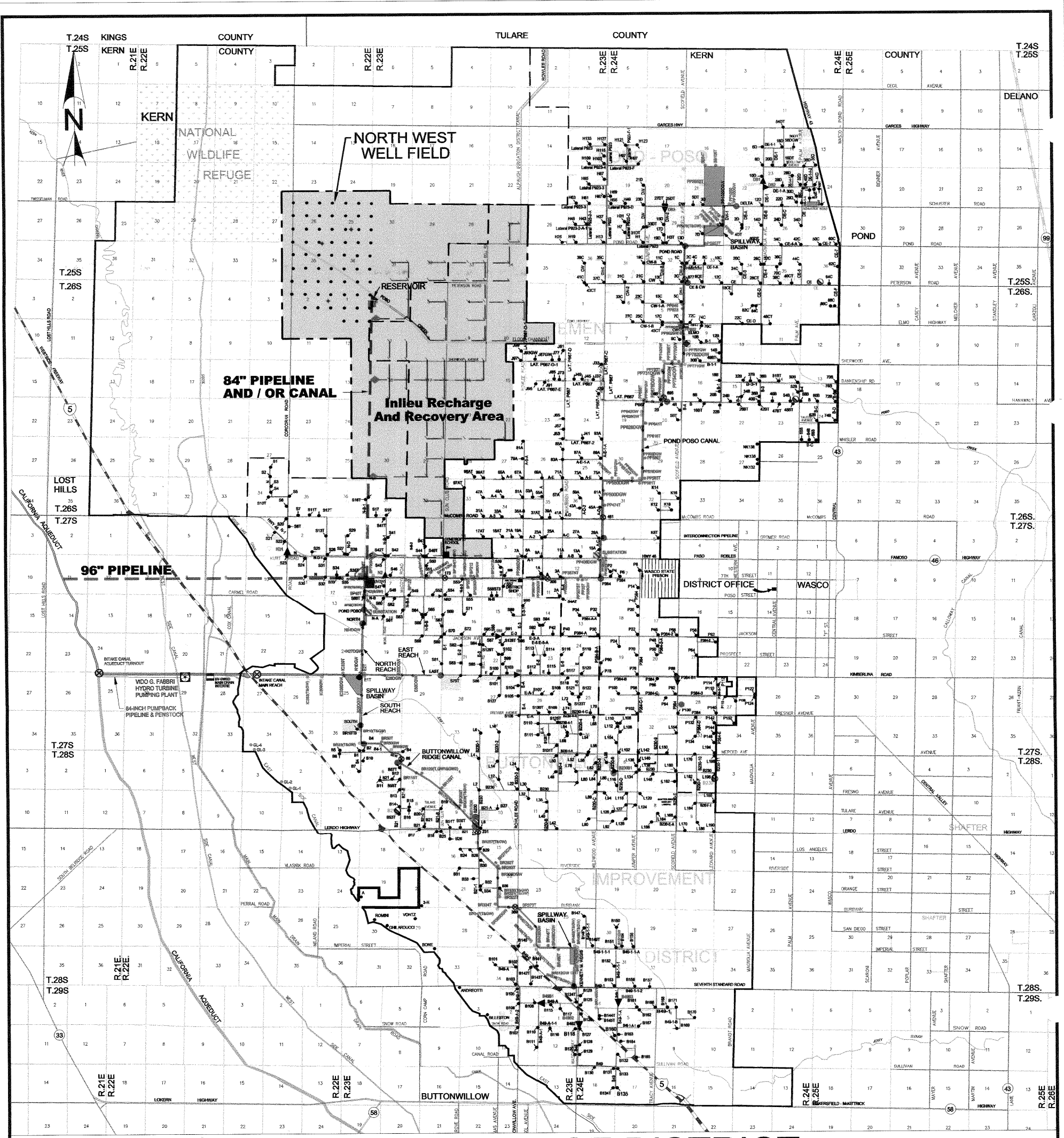
- North System (i.e. Mainline and Sub-laterals) With Turnouts S 1 thru S 73.
 - A System (i.e. Mainline and Sub-laterals) With Turnouts 1 A thru 99 AT.
 - B System (i.e. Mainline and Sub-laterals) With Turnouts 2 B thru 51 BT.
 - C System(s) (i.e. Mainline and Sub-laterals) With Turnouts 1 C thru 88 C.
 - D System (i.e. Mainline and Sub-laterals) With Turnouts 1D thru 66 DT.
 - B 4 System (i.e. Mainline and Sub-laterals) With Turnouts B 1 thru B 10 .
 - B 21 System (i.e. Mainline and Sub-laterals) With Turnouts B 11 thru B 59T.
 - B 49 System (i.e. Mainline and Sub-laterals) With Turnouts B 101 thru B 145T.
- (3) 28 District owned recovery wells having a "DGW" designation on Exhibit G-2 (for example IC336DGW & PP1029DGW)
- (4) Landowner Wells (Approximately 60) Under "short term" Interruptible Agreements with the District for Recovery Purposes shown with an "X" within a circle and designated "GW Meter" on Exhibit G-2.
- (5) Direct Recharge Areas
- Buttonwillow Ridge Canal "Spillway Basin"
 - Intake Canal "Spillway Basin"
 - Pond-Poso Canal "Spillway Basin"
 - 320 Acres in E ½ of Sec. 21, T 25S, R 24E
 - Gravel Pit on north side of Schuster Road in Sec. 24, T 25S, R 24E
 - Poso Creek Flood Channel from the center of Sec. 11T26S,R24E to Corcoran Rd.

The locations of right-of-way for facilities enumerated above are specifically described and are available from Semitropic files and/or are a matter of record through recorded documents grading easements or fee title to various parcels to Semitropic.

II. Proposed Stored Water Recovery Unit Facilities referred to in Section 1.24 and shown in Area B on Exhibit G-2 are generally described as follows:

- (1) Main conveyance facilities used for both recharge and recovery of Stored Water are:
- (a) 96-inch Pipeline including the Junction Reservoir and Pumping Plant. Some of the pipeline and all of the reservoir and pumping plants are located within Area A.

- (b) 84-inch Pipeline and/or Canal extending north from the Junction Pumping Plant to a future reservoir to be located near the Poso Creek Flood Channel in the vicinity of the North West Well Field.
- (2) Recharge Facilities
 - (a) Unnamed Reversible or Two-way Recharge and Recovery Buried Pipeline Distribution System(s) designated as "In Lieu Recharge and Recovery Area" in Area B serving approximately 12,000 acres and second priority In lieu recharge capacity within Area A for up to a total capacity of 50,000 AF/Yr. of In-Lieu Recharge.
- (3) Recovery Facilities
 - (a) Long-term Agreements for use of landowner wells in the above-mentioned In-Lieu recharge area within Area B.
 - (b) Approximately 65 wells designated as "Northwest Well Field" on Exhibit G-2
 - (c) Second priority use of Long-Term and Short-Term (or Interruptible) Agreements for use of landowner wells and District Wells that are part of the original Banking Program Facilities for recovery of up to 50,000 AF/Yr from within Area A shown on Exhibit G-2. As stated in Section 1.22, this recovery capacity will first be offered for the benefit of Original Banking Partners.



SEMITROPIC WATER STORAGE DISTRICT

"SEMITROPIC BANK" FACILITIES

- LEGEND**
- SEMITROPIC WATER STORAGE DISTRICT BOUNDARY
 - IMPROVEMENT DISTRICT BOUNDARY
 - CANAL AND RECHARGE FACILITIES
 - = AREA "A"
 - = AREA "B"
 - DISTRICT SUBSTATION
 - TURNOUT NOTE: TURNOUTS IDENTIFIED BY J.L.P.K. AND H ARE ALSO RECOVERY WELLS
 - GW METER & CANAL PUMPS
 - DISTRICT RECOVERY WELL LOCATION (28)
 - BOOSTER PLANT
 - IN-CANAL PUMP
 - PIPELINE LATERAL
 - PROPOSED SWRU WELL
 - EXISTING SWRU MONITOR WELL
 - SWRU FUTURE PIPELINE LATERAL
 - SWRU BOOSTER PLANT
 - SWRU FUTURE PUMPING PLANT
 - PUMPING PLANT
 - REMOTE STAND PIPE
 - JUNCTION RESERVOIR
 - VIDO G. FABBRI HYDRO TURBINE PUMP BACK PUMPING PLANT
 - CHECK STRUCTURE RADIAL GATE WITH REVERSE FLOW PUMPS
 - WATER LEVEL CONTROL STRUCTURE
 - SLIDE GATE DIVERSION
 - WATER LEVEL CONTROL STRUCTURE
 - STOP LOG WEIR

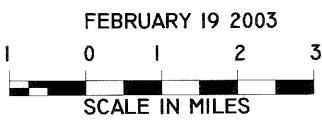


EXHIBIT "G-2"



**SECOND AMENDMENT TO THE 1997 AGREEMENT BETWEEN SANTA CLARA VALLEY
WATER DISTRICT AND SEMITROPIC WATER STORAGE DISTRICT AND ITS
IMPROVEMENT DISTRICTS FOR A SANTA CLARA VALLEY-SEMITROPIC WATER
BANKING AND EXCHANGE PROGRAM**

This **SECOND AMENDMENT** to the **June 1, 1997** Agreement between **SANTA CLARA VALLEY WATER DISTRICT ("Santa Clara")**, and the **SEMITROPIC WATER STORAGE DISTRICT** and **SEMITROPIC IMPROVEMENT DISTRICT**, **BUTTONWILLOW IMPROVEMENT DISTRICT** and **POND-POSO IMPROVEMENT DISTRICT** of the **SEMITROPIC WATER STORAGE DISTRICT** (collectively called "**Semitropic**"), hereinafter "1997 Agreement" is entered into as of this 22 day of Dec, 2005.

WHEREAS, the 1997 Agreement provides for Santa Clara to Fully Vest its Permanent Storage Allocation by paying applicable put, take and cycling fees and accounting for future take fees for water in storage;

WHEREAS, the Parties want to formalize the terms by which Santa Clara can exercise an option to Fully Vest its allocation, up to the full 350,000 acre feet, by paying its remaining share of capital expenses in a lump sum payment;

NOW THEREFORE;

1. Section 1.6 is modified to change the definition of **UP_{cy}** as follows:

" **UP_{cy}** (or Santa Clara's Adjusted Unpaid Share of Total Program Capital Cost as of the beginning of the calendar year with respect to which the redetermination is being made) means the amount determined using the following formula:"

2. A new Section 6.12 is added to read as follows:

6.12 "Prepaid Water"

6.12.1 "Prepaid Water" is defined as water that has yet to be stored for which the storage and withdrawal fees otherwise required pursuant to Sections 6.2.1 and 6.3.1 have instead been prepaid through capital payments ("Prepayment(s)"), including payments provided pursuant to Section 6.4. Semitropic shall establish and manage an account of such Prepaid Water.


6.12.2 Santa Clara may, at its discretion, provide Prepayment to Semitropic by January 1, 2006, to increase Santa Clara's Permanent Storage Allocation up to 350,000 acre-feet. In the event that Santa Clara exercises this option, Semitropic will credit Santa Clara's account of Prepaid Water with 1 acre foot for every \$162.59 paid pursuant to this section. The price per acre foot equals the sum of the storage and withdrawal fees which would be payable pursuant to Sections 6.2.1 and 6.3.1 if the water were actually being stored. Upon withdrawal of all water stored by Santa Clara prior to January 1, 2006, and provision of applicable payments pursuant to 6.3.1, Santa Clara will be deemed to have paid its share of Total Program Capital Costs under Section 1.6.

- 6.12.3 Past capital payments pursuant to Section 6.4, as well as an excess capital payment of \$807,570 provided by Santa Clara to Semitropic in 1996 for storage of 40,500 acre-feet of water, constitute Prepayments for a total of 37,981 acre-feet of Prepaid Water. With a Storage Account Balance of 223,227 acre-feet as of the date of this amendment, additional Prepaid Water payments for 69,568 acre-feet would be required in order for Santa Clara to Fully Vest 350,000 acre feet of Permanent Storage Allocation.
- 6.12.4 In the event that Santa Clara's Permanent Storage Allocation is not deemed "Fully Vested" by January 1, 2006, any capital payments (excluding payments pursuant to Sections 6.2.1 and 6.3.1) made after January 1, 2006, including those pursuant to Section 6.4, shall constitute Prepayments, and the associated quantities of Prepaid Water (determined as the quantity of water that would need to be banked in the year Prepayment is made such that the sum of the storage and withdrawal fees otherwise required pursuant to Sections 6.2.1 and 6.3.1 is equal to the Prepayment amount) shall be credited to Santa Clara's account of Prepaid Water. After January 1, 2006, should Semitropic eliminate the remaining portion of Santa Clara's Interim Storage Allocation pursuant to Section 2.5, Santa Clara's Permanent Storage Allocation shall be deemed "Fully Vested", and no further Prepayments pursuant to this section shall be made.
- 6.12.5 In the year or years in which Prepaid Water is physically stored or withdrawn, Santa Clara shall not be required to pay any fees pursuant to Section 6.2.1 or 6.3.1. Santa Clara shall be required to pay fees pursuant to Section 6.3.1 for withdrawals of water in storage prior to the time at which Santa Clara is deemed "Fully Vested". Following the first in first out principle, water in storage as of the time at which Santa Clara is deemed "Fully Vested" shall be withdrawn prior to withdrawal of Prepaid Water. No Prepaid Water will be physically stored until Santa Clara is deemed "Fully Vested" (i.e. until the Interim Storage Allocation is reduced to zero by; (i) Future Storage and prospective Withdrawal Payments pursuant to Section 6.2.1 or 6.3.1 for additional water; (ii) Prepayment of the same; or (iii) elimination of the Interim Storage Allocation by Semitropic).

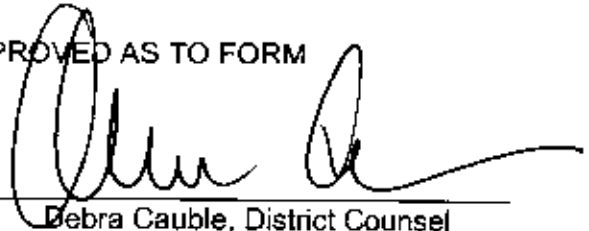
3. All other terms and conditions remain as before.

IN WITNESS WHEREOF, the Parties have caused this **SECOND AMENDMENT** to the June 1, 1997 Agreement to be duly executed and delivered by their respective authorized officers as of the date first set forth above.

SANTA CLARA VALLEY WATER DISTRICT

By: 
Stanley M. Williams, Chief Executive Officer

APPROVED AS TO FORM

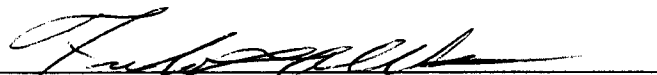
By: 
Debra Cauble, District Counsel

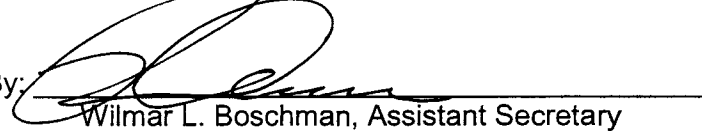
SEMITROPIC WATER STORAGE DISTRICT

By: 
Fredrick A. Wegis, President


By: 
Wilmar L. Boschman, Assistant Secretary

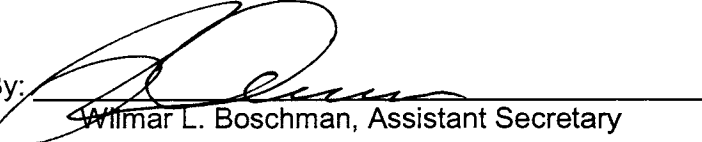
SEMITROPIC IMPROVEMENT DISTRICT OF
SEMITROPIC WATER STORAGE DISTRICT

By: 
Fredrick A. Wegis, President

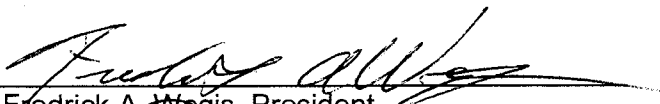
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Wilmar L. Boschman, Assistant Secretary

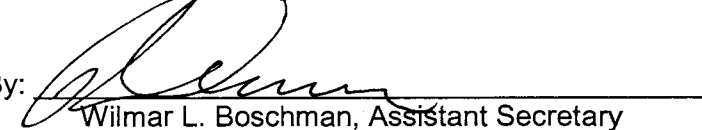
BUTTONWILLOW IMPROVEMENT DISTRICT OF
SEMITROPIC WATER STORAGE DISTRICT

By: 
Fredrick A. Wegis, President

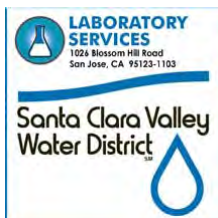
By: 
Wilmar L. Boschman, Assistant Secretary

POND-POSO IMPROVEMENT DISTRICT OF
SEMITROPIC WATER STORAGE DISTRICT

By: 
Fredrick A. Wegis, President

By: 
Wilmar L. Boschman, Assistant Secretary

Attachment H
Annual Potable Water Quality Report – Urban



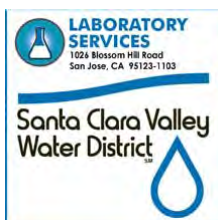
Annual Water Quality Summary Min/Max/Avg¹

Water Treatment Plant Operational and Compliance Data

Start: 1/1/2015 End: 12/31/2015

PWTP Effluent (Treated Water)

Test Parameter	Units	MCL	DLR ²	MIN	MAX	AVG
1,1,1,2-Tetrachloroethane	ug/L	NS	0.5	ND	ND	ND
1,1,1-Trichloroethane	ug/L	200	0.5	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/L	1	0.5	ND	ND	ND
1,1,2-Trichloroethane	ug/L	5	0.5	ND	ND	ND
1,1-Dichloroethane	ug/L	5	0.5	ND	ND	ND
1,1-Dichloroethylene	ug/L	6	0.5	ND	ND	ND
1,1-Dichloropropene	ug/L	NS	0.5	ND	ND	ND
1,2,3-Trichlorobenzene	ug/L	NS	0.5	ND	ND	ND
1,2,4-Trichlorobenzene	ug/L	5	0.5	ND	ND	ND
1,2,4-Trimethylbenzene	ug/L	NS	0.5	ND	ND	ND
1,2-Dichlorobenzene	ug/L	600	0.5	ND	ND	ND
1,2-Dichloroethane	ug/L	0.5	0.5	ND	ND	ND
1,2-Dichloropropane	ug/L	5	0.5	ND	ND	ND
1,3,5-Trimethylbenzene	ug/L	NS	0.5	ND	ND	ND
1,3-Dichlorobenzene	ug/L	NS	0.5	ND	ND	ND
1,3-Dichloropropane	ug/L	NS	0.5	ND	ND	ND
1,3-Dichloropropene (Total)	ug/L	0.5	0.5	ND	ND	ND
1,4-Dichlorobenzene	ug/L	5	0.5	ND	ND	ND
2,2-Dichloropropane	ug/L	NS	0.5	ND	ND	ND
2,4,5-TP (SILVEX)	ug/L	50	1	ND	ND	ND
2,4,6-Trichloroanisole	ng/L	NS	NS	<1	<1	<1
2,4-D	ug/L	70	10	ND	ND	ND
2-Chlorotoluene	ug/L	NS	0.5	ND	ND	ND
3-Hydroxycarbofuran	ug/L	NS	3	ND	ND	ND
4-Chlorotoluene	ug/L	NS	0.5	ND	ND	ND
Alachlor	ug/L	2	1	ND	ND	ND
Aldicarb (Temik)	ug/L	NS	3	ND	ND	ND
Aldicarb Sulfone	ug/L	NS	4	ND	ND	ND
Aldicarb Sulfoxide	ug/L	NS	3	ND	ND	ND
Aldrin	ug/L	NS	0.075	ND	ND	ND
Aluminum	ug/L	1000	50	ND	68	57
Ammonia, Free	mg/L	NS	NS	<0.05	0.30	0.15
Ammonia, Total	mg/L	NS	NS	0.34	0.57	0.45
Antimony	ug/L	6	6	ND	ND	ND
Apparent Color	Color Units	15	NS	<2.5	4	3
Aroma Profile, Bitter		NS	NS	No Trace	No Trace	No Trace
Aroma Profile, Chlorinous		NS	NS	0	0	0
Aroma Profile, Fishy		NS	NS	No Trace	No Trace	No Trace
Aroma Profile, Grassy, Woody, Vegetable		NS	NS	No Trace	No Trace	No Trace
Aroma Profile, Marshy, Septic, Swampy		NS	NS	No Trace	No Trace	No Trace
Aroma Profile, Medicinal, Chemical, Rubb		NS	NS	0	0	0
Aroma Profile, Musty, Earthy, Moldy		NS	NS	0	0	0
Aroma Profile, Salty		NS	NS	No Trace	No Trace	No Trace
Aroma Profile, Sweet		NS	NS	No Trace	No Trace	No Trace
Arsenic	ug/L	10	2	ND	ND	ND
Atrazine	ug/L	1	0.5	ND	ND	ND
Barium	ug/L	1000	100	ND	ND	ND
Bentazon (BASAGRAN)	ug/L	18	2	ND	ND	ND
Benzene	ug/L	1	0.5	ND	ND	ND
Beryllium	ug/L	4	1	ND	ND	ND



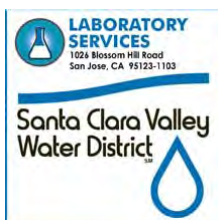
Annual Water Quality Summary Min/Max/Avg¹

Water Treatment Plant Operational and Compliance Data

Start: 1/1/2015 End: 12/31/2015

PWTP Effluent (Treated Water)

Test Parameter	Units	MCL	DLR ²	MIN	MAX	AVG
Bicarbonate Alkalinity (as CaCO ₃)	mg/L	NS	NS	66	105	84
Bicarbonate Alkalinity (as HCO ₃)	mg/L	NS	NS	81	128	103
Boron	ug/L	NS	100	146	243	187
Bromate	ug/L	10	5	1	8	3
Bromide	mg/L	NS	NS	<0.05	0.28	0.15
Bromobenzene	ug/L	NS	0.5	ND	ND	ND
Bromochloromethane	ug/L	NS	0.5	ND	ND	ND
Bromodichloromethane	ug/L	NS	1	5.1	11.7	7.7
Bromoform	ug/L	NS	1	4.1	23.0	12.1
Bromomethane (Methyl Bromide)	ug/L	NS	0.5	ND	ND	ND
Cadmium	ug/L	5	1	ND	ND	ND
Calcium	mg/L	NS	NS	20	27	23
Calcium as CaCO ₃	mg/L	NS	NS	49	68	58
Carbaryl (SEVIN)	ug/L	NS	5	ND	ND	ND
Carbofuran (Furadan)	ug/L	18	5	ND	ND	ND
Carbon Tetrachloride	ug/L	0.5	0.5	ND	ND	ND
Carbonate Alkalinity (as CaCO ₃)	mg/L	NS	NS	<0.5	<0.5	<0.5
Carbonate Alkalinity (as CO ₃)	mg/L	NS	NS	<0.5	<0.5	<0.5
Chlorate	ug/L	NS	20	50	197	121
Chlordane	ug/L	0.1	0.1	ND	ND	ND
Chloride	mg/L	600	NS	58	173	116
Chlorine (Free) by DPD	mg/L	NS	NS	0.0	0.3	0.1
Chlorine (Total) by DPD	mg/L	NS	NS	1.0	3.0	2.1
Chlorine Free	mg/L	NS	NS	<0.02	0.09	0.04
Chloroethane	ug/L	NS	0.5	ND	ND	ND
Chloroform	ug/L	NS	1	2.6	11.9	4.9
Chloromethane (Methyl Chloride)	ug/L	NS	0.5	ND	ND	ND
Chromium, Hexavalent	ug/L	10	1	ND	ND	ND
Chromium, Total	ug/L	50	10	ND	ND	ND
cis-1,2-Dichloroethylene	ug/L	6	0.5	ND	ND	ND
cis-1,3-Dichloropropene	ug/L	0.5	0.5	ND	ND	ND
Cobalt	ug/L	NS	NS	<1	<1	<1
Copper	ug/L	1000	50	ND	ND	ND
Cyanide	ug/L	150	100	ND	ND	ND
Dalapon	ug/L	200	10	ND	ND	ND
Di (2-ethylhexyl) Adipate	ug/L	400	5	ND	ND	ND
Dibromoacetic Acid	ug/L	NS	1	5.0	13.6	7.7
Dibromochloromethane	ug/L	NS	1	11.2	20.7	15.1
Dibromochloropropane	ug/L	0.2	0.01	ND	ND	ND
Dibromomethane	ug/L	NS	0.5	ND	ND	ND
Dicamba (BANVEL)	ug/L	NS	1.5	ND	ND	ND
Dichloramines	mg/L	NS	NS	0.05	0.59	0.10
Dichloroacetic Acid	ug/L	NS	1	2.2	6.6	3.9
Dichlorodifluoromethane (FREON 12)	ug/L	NS	0.5	ND	ND	ND
Dichloromethane (Methylene Chloride)	ug/L	5	0.5	ND	ND	ND
Dieldrin	ug/L	NS	0.02	ND	ND	ND
Diethylhexylphthalate	ug/L	4	3	ND	ND	ND
Diisopropyl Ether (DIPE)	ug/L	NS	3	ND	ND	ND
Dinoseb (DNBP)	ug/L	7	2	ND	ND	ND
Dioxin (2,3,7,8-TCDD)	pg/L	30	5	ND	ND	ND



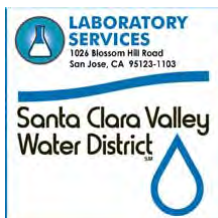
Annual Water Quality Summary Min/Max/Avg¹

Water Treatment Plant Operational and Compliance Data

Start: 1/1/2015 End: 12/31/2015

PWTP Effluent (Treated Water)

Test Parameter	Units	MCL	DLR ²	MIN	MAX	AVG
Diquat	ug/L	20	4	ND	ND	ND
E. Coli	P/A 100ml	NS	NS	Absent	Absent	Absent
Endothall	ug/L	100	45	ND	ND	ND
Endrin	ug/L	2	0.1	ND	ND	ND
Ethyl tert-Butyl Ether (ETBE)	ug/L	NS	3	ND	ND	ND
Ethylbenzene	ug/L	300	0.5	ND	ND	ND
Ethylene Dibromide (EDB)	ug/L	0.05	0.02	ND	ND	ND
Flavor Profile, Astringent, Burn, Bite		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Bitter		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Chlorinous		NS	NS	0	0	0
Flavor Profile, Drying		NS	NS	0	0	0
Flavor Profile, Fishy		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Grassy, Woody, Vegetable		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Marshy, Septic, Swampy		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Medicinal, Chemical, Rubbe		NS	NS	0	0	0
Flavor Profile, Musty, Earthy, Moldy		NS	NS	0	0	0
Flavor Profile, Salty		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Soapy, Slimy		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Sweet		NS	NS	No Trace	No Trace	No Trace
Fluoride	mg/L	2	0.1	ND	0.1	0.1
Foaming Agents (MBAS)	mg/L	0.5	NS	ND	ND	ND
Geosmin	ng/L	NS	NS	1.37	1.37	1.37
Glyphosate	ug/L	700	25	ND	ND	ND
Hardness (as CaCO ₃)	mg/L	NS	NS	104	158	133
Heptachlor	ug/L	0.01	0.01	ND	ND	ND
Heptachlor Epoxide	ug/L	0.01	0.01	ND	ND	ND
Heterotrophic Plate Count	CFU/ml	NS	NS	<1	7	2
Hexachlorobenzene	ug/L	1	0.5	ND	ND	ND
Hexachlorobutadiene	ug/L	NS	0.5	ND	ND	ND
Hexachlorocyclopentadiene	ug/L	50	1	ND	ND	ND
Hydroxide Alkalinity (as CaCO ₃)	mg/L	NS	NS	<0.5	<0.5	<0.5
Hydroxide Alkalinity (as OH)	mg/L	NS	NS	<0.5	<0.5	<0.5
Iron	ug/L	300	100	ND	ND	ND
Isopropylbenzene (Cumene)	ug/L	NS	0.5	ND	ND	ND
Lead	ug/L	15	5	ND	ND	ND
Lindane (Gamma-BHC)	ug/L	0.2	0.2	ND	ND	ND
Lithium	ug/L	NS	NS	<5	<5	<5
Magnesium	mg/L	NS	NS	12	18	16
Manganese	ug/L	50	20	ND	ND	ND
Mercury	ug/L	2	1	ND	ND	ND
Methiocarb	ug/L	NS	NS	<2	<2	<2
Methomyl	ug/L	NS	2	ND	ND	ND
Methoxychlor	ug/L	30	10	ND	ND	ND
Methyl tert-Butyl Ether (MTBE)	ug/L	13	3	ND	ND	ND
Molinate (ORDRAM)	ug/L	20	2	ND	ND	ND
Molybdenum	ug/L	NS	NS	1	3	2
Monobromoacetic Acid	ug/L	NS	1	ND	1.1	1.1
Monochloramines	mg/L	NS	NS	0.97	1.73	1.47
Monochloroacetic Acid	ug/L	NS	2	ND	ND	ND
Monochlorobenzene (Chlorobenzene)	ug/L	70	0.5	ND	ND	ND



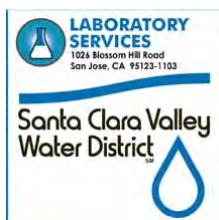
Annual Water Quality Summary Min/Max/Avg¹

Water Treatment Plant Operational and Compliance Data

Start: 1/1/2015 End: 12/31/2015

PWTP Effluent (Treated Water)

Test Parameter	Units	MCL	DLR ²	MIN	MAX	AVG
Naphthalene	ug/L	NS	0.5	ND	ND	ND
n-Butylbenzene	ug/L	NS	0.5	ND	ND	ND
Nickel	ug/L	100	10	ND	ND	ND
Nitrate	mg/L	45	2	ND	7	5
Nitrite (as N)	mg/L	1	0.4	ND	ND	ND
N-Nitrosodiethylamine	ng/L	NS	NS	ND	ND	ND
N-Nitrosodimethylamine	ng/L	NS	NS	ND	ND	ND
N-Nitrosodi-n-propylamine	ng/L	NS	NS	ND	ND	ND
n-propylbenzene	ug/L	NS	0.5	ND	ND	ND
Odor T.O.N.	T.O.N.	3	1	1	1	1
Oxamyl (Vydate)	ug/L	50	20	ND	ND	ND
Paraquat	ug/L	NS	20	ND	ND	ND
Pentachlorophenol	ug/L	1	0.2	ND	ND	ND
Percent Monochloramines	%	NS	NS	58	95	90
Perchlorate	ug/L	6	4	ND	ND	ND
pH	pH units	NS	NS	7.5	8.0	7.8
Phosphate	mg/L	NS	NS	0.82	1.40	0.98
Picloram	ug/L	500	1	ND	ND	ND
p-Isopropyltoluene	ug/L	NS	NS	<0.5	<0.5	<0.5
Potassium	mg/L	NS	NS	2.9	5.0	4.1
Propoxur (Baygon)	ug/L	NS	NS	<2	<2	<2
sec-Butylbenzene	ug/L	NS	0.5	ND	ND	ND
Selenium	ug/L	50	5	ND	ND	ND
Silica	mg/L	NS	NS	5	15	9
Silver	ug/L	100	10	ND	ND	ND
Simazine (PRINCEP)	ug/L	4	1	ND	ND	ND
Sodium	mg/L	NS	NS	43	115	80
Specific Conductance (E.C.)	umhos/cm	2200	NS	420	963	700
Strontium	ug/L	NS	NS	191	273	238
Styrene	ug/L	100	0.5	ND	ND	ND
Sulfate	mg/L	600	0.5	39.6	93.7	65.2
Temperature	Deg. C	NS	NS	10	27	19
tert-Amyl Methyl Ether (TAME)	ug/L	NS	3	ND	ND	ND
tert-Butyl Alcohol (TBA)	ug/L	NS	2	ND	ND	ND
tert-Butylbenzene	ug/L	NS	0.5	ND	ND	ND
Tetrachloroethylene (PCE)	ug/L	5	0.5	ND	ND	ND
Thallium	ug/L	2	1	ND	ND	ND
Thiobencarb (BOLERO)	ug/L	70	1	ND	ND	ND
Toluene	ug/L	150	0.5	ND	ND	ND
Total Alkalinity (as CaCO3)	mg/L	NS	NS	66	105	84
Total Chloramines	mg/L	NS	NS	1.41	1.85	1.64
Total Coliforms	P/A 100ml	NS	NS	Absent	Absent	Absent
Total Dissolved Solids	mg/L	1500	NS	280	518	388
Total Haloacetic Acids (HAA5)	ug/L	60	NS	9	18	12
Total Organic Carbon	mg/L	NS	0.3	2.27	3.97	3.17
Total PCB's (as DCB)	ug/L	0.5	0.5	ND	ND	ND
Total Trihalomethanes (THM)	ug/L	80	NS	28	55	40
Total-Xylene	ug/L	1750	NS	ND	ND	ND
Toxaphene	ug/L	3	1	ND	ND	ND
trans-1,2-Dichloroethylene	ug/L	10	0.5	ND	ND	ND



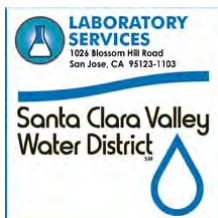
Annual Water Quality Summary Min/Max/Avg¹

Water Treatment Plant Operational and Compliance Data

Start: 1/1/2015 End: 12/31/2015

PWTP Effluent (Treated Water)

Test Parameter	Units	MCL	DLR ²	MIN	MAX	AVG
trans-1,3-Dichloropropene	ug/L	0.5	0.5	ND	ND	ND
Trichloroacetic Acid	ug/L	NS	1	ND	2.2	1.5
Trichloroethylene (TCE)	ug/L	5	0.5	ND	ND	ND
Trichlorofluoromethane (FREON 11)	ug/L	150	5	ND	ND	ND
Trichlorotrifluoroethane (FREON 113)	ug/L	1200	10	ND	ND	ND
True Color	Color Units	NS	NS	<2.5	3	3
Turbidity	NTU	5	NS	0.04	0.20	0.07
Vanadium	ug/L	NS	3	ND	5	4
Vinyl Chloride	ug/L	0.5	0.5	ND	ND	ND
Zinc	ug/L	5000	50	ND	ND	ND



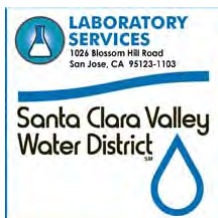
Annual Water Quality Summary Min/Max/Avg¹

Water Treatment Plant Operational and Compliance Data

Start: 1/1/2015 End: 12/31/2015

RWTP Effluent (Treated Water)

Test Parameter	Units	MCL	DLR ²	MIN	MAX	AVG
1,1,1,2-Tetrachloroethane	ug/L	NS	0.5	ND	ND	ND
1,1,1-Trichloroethane	ug/L	200	0.5	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/L	1	0.5	ND	ND	ND
1,1,2-Trichloroethane	ug/L	5	0.5	ND	ND	ND
1,1-Dichloroethane	ug/L	5	0.5	ND	ND	ND
1,1-Dichloroethylene	ug/L	6	0.5	ND	ND	ND
1,1-Dichloropropene	ug/L	NS	0.5	ND	ND	ND
1,2,3-Trichlorobenzene	ug/L	NS	0.5	ND	ND	ND
1,2,4-Trichlorobenzene	ug/L	5	0.5	ND	ND	ND
1,2,4-Trimethylbenzene	ug/L	NS	0.5	ND	ND	ND
1,2-Dichlorobenzene	ug/L	600	0.5	ND	ND	ND
1,2-Dichloroethane	ug/L	0.5	0.5	ND	ND	ND
1,2-Dichloropropane	ug/L	5	0.5	ND	ND	ND
1,3,5-Trimethylbenzene	ug/L	NS	0.5	ND	ND	ND
1,3-Dichlorobenzene	ug/L	NS	0.5	ND	ND	ND
1,3-Dichloropropane	ug/L	NS	0.5	ND	ND	ND
1,3-Dichloropropene (Total)	ug/L	0.5	0.5	ND	ND	ND
1,4-Dichlorobenzene	ug/L	5	0.5	ND	ND	ND
2,2-Dichloropropane	ug/L	NS	0.5	ND	ND	ND
2,4,5-TP (SILVEX)	ug/L	50	1	ND	ND	ND
2,4,6-Trichloroanisole	ng/L	NS	NS	<1	<1	<1
2,4-D	ug/L	70	10	ND	ND	ND
2-Chlorotoluene	ug/L	NS	0.5	ND	ND	ND
3-Hydroxycarbofuran	ug/L	NS	3	ND	ND	ND
4-Chlorotoluene	ug/L	NS	0.5	ND	ND	ND
Alachlor	ug/L	2	1	ND	ND	ND
Aldicarb (Temik)	ug/L	NS	3	ND	ND	ND
Aldicarb Sulfone	ug/L	NS	4	ND	ND	ND
Aldicarb Sulfoxide	ug/L	NS	3	ND	ND	ND
Aldrin	ug/L	NS	0.075	ND	ND	ND
Aluminum	ug/L	1000	50	ND	66	57
Ammonia, Free	mg/L	NS	NS	<0.05	0.13	0.08
Ammonia, Total	mg/L	NS	NS	0.22	0.42	0.29
Antimony	ug/L	6	6	ND	ND	ND
Apparent Color	Color Units	15	NS	<2.5	4	3
Aroma Profile, Bitter		NS	NS	No Trace	No Trace	No Trace
Aroma Profile, Chlorinous		NS	NS	No Trace	No Trace	No Trace
Aroma Profile, Fishy		NS	NS	No Trace	No Trace	No Trace
Aroma Profile, Grassy, Woody, Vegetable		NS	NS	No Trace	No Trace	No Trace
Aroma Profile, Marshy, Septic, Swampy		NS	NS	No Trace	No Trace	No Trace
Aroma Profile, Medicinal, Chemical, Rubb		NS	NS	0	0	0
Aroma Profile, Musty, Earthy, Moldy		NS	NS	No Trace	No Trace	No Trace
Aroma Profile, Salty		NS	NS	No Trace	No Trace	No Trace
Aroma Profile, Sweet		NS	NS	No Trace	No Trace	No Trace
Arsenic	ug/L	10	2	ND	ND	ND
Atrazine	ug/L	1	0.5	ND	ND	ND
Barium	ug/L	1000	100	ND	ND	ND
Bentazon (BASAGRAN)	ug/L	18	2	ND	ND	ND
Benzene	ug/L	1	0.5	ND	ND	ND
Beryllium	ug/L	4	1	ND	ND	ND



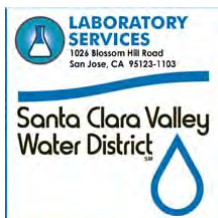
Annual Water Quality Summary Min/Max/Avg¹

Water Treatment Plant Operational and Compliance Data

Start: 1/1/2015 End: 12/31/2015

RWTP Effluent (Treated Water)

Test Parameter	Units	MCL	DLR ²	MIN	MAX	AVG
Bicarbonate Alkalinity (as CaCO ₃)	mg/L	NS	NS	63	124	90
Bicarbonate Alkalinity (as HCO ₃)	mg/L	NS	NS	77	151	109
Boron	ug/L	NS	100	143	234	188
Bromate	ug/L	10	5	ND	ND	ND
Bromide	mg/L	NS	NS	<0.05	0.22	0.13
Bromobenzene	ug/L	NS	0.5	ND	ND	ND
Bromochloromethane	ug/L	NS	0.5	ND	ND	ND
Bromodichloromethane	ug/L	NS	1	6.7	25.5	14.4
Bromoform	ug/L	NS	1	2.4	24.3	11.8
Bromomethane (Methyl Bromide)	ug/L	NS	0.5	ND	ND	ND
Cadmium	ug/L	5	1	ND	ND	ND
Calcium	mg/L	NS	NS	22	32	25
Calcium as CaCO ₃	mg/L	NS	NS	55	80	63
Carbaryl (SEVIN)	ug/L	NS	5	ND	ND	ND
Carbofuran (Furadan)	ug/L	18	5	ND	ND	ND
Carbon Tetrachloride	ug/L	0.5	0.5	ND	ND	ND
Carbonate Alkalinity (as CaCO ₃)	mg/L	NS	NS	<0.5	<0.5	<0.5
Carbonate Alkalinity (as CO ₃)	mg/L	NS	NS	<0.5	<0.5	<0.5
Chlorate	ug/L	NS	20	62	216	138
Chlordane	ug/L	0.1	0.1	ND	ND	ND
Chloride	mg/L	600	NS	61	162	108
Chlorine (Free) by DPD	mg/L	NS	NS	0.0	0.3	0.1
Chlorine (Total) by DPD	mg/L	NS	NS	1.0	2.2	1.5
Chlorine Free	mg/L	NS	NS	0.02	0.07	0.04
Chloroethane	ug/L	NS	0.5	ND	ND	ND
Chloroform	ug/L	NS	1	1.2	19.6	6.3
Chloromethane (Methyl Chloride)	ug/L	NS	0.5	ND	ND	ND
Chromium, Hexavalent	ug/L	10	1	ND	ND	ND
Chromium, Total	ug/L	50	10	ND	ND	ND
cis-1,2-Dichloroethylene	ug/L	6	0.5	ND	ND	ND
cis-1,3-Dichloropropene	ug/L	0.5	0.5	ND	ND	ND
Cobalt	ug/L	NS	NS	<1	<1	<1
Copper	ug/L	1000	50	ND	ND	ND
Cyanide	ug/L	150	100	ND	ND	ND
Dalapon	ug/L	200	10	ND	ND	ND
Di (2-ethylhexyl) Adipate	ug/L	400	5	ND	ND	ND
Dibromoacetic Acid	ug/L	NS	1	5.6	16.5	9.0
Dibromochloromethane	ug/L	NS	1	17.8	33.3	23.1
Dibromochloropropane	ug/L	0.2	0.01	ND	ND	ND
Dibromomethane	ug/L	NS	0.5	ND	ND	ND
Dicamba (BANVEL)	ug/L	NS	1.5	ND	ND	ND
Dichloramines	mg/L	NS	NS	0.03	0.22	0.09
Dichloroacetic Acid	ug/L	NS	1	2.2	12.9	5.9
Dichlorodifluoromethane (FREON 12)	ug/L	NS	0.5	ND	ND	ND
Dichloromethane (Methylene Chloride)	ug/L	5	0.5	ND	ND	ND
Dieldrin	ug/L	NS	0.02	ND	ND	ND
Diethylhexylphthalate	ug/L	4	3	ND	ND	ND
Diisopropyl Ether (DIPE)	ug/L	NS	3	ND	ND	ND
Dinoseb (DNBP)	ug/L	7	2	ND	ND	ND
Dioxin (2,3,7,8-TCDD)	pg/L	30	5	ND	ND	ND



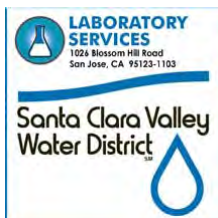
Annual Water Quality Summary Min/Max/Avg¹

Water Treatment Plant Operational and Compliance Data

Start: 1/1/2015 End: 12/31/2015

RWTP Effluent (Treated Water)

Test Parameter	Units	MCL	DLR ²	MIN	MAX	AVG
Diquat	ug/L	20	4	ND	ND	ND
E. Coli	P/A 100ml	NS	NS	Absent	Absent	Absent
Endothall	ug/L	100	45	ND	ND	ND
Endrin	ug/L	2	0.1	ND	ND	ND
Ethyl tert-Butyl Ether (ETBE)	ug/L	NS	3	ND	ND	ND
Ethylbenzene	ug/L	300	0.5	ND	ND	ND
Ethylene Dibromide (EDB)	ug/L	0.05	0.02	ND	ND	ND
Flavor Profile, Astringent, Burn, Bite		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Bitter		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Chlorinous		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Drying		NS	NS	0	0	0
Flavor Profile, Fishy		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Grassy, Woody, Vegetable		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Marshy, Septic, Swampy		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Medicinal, Chemical, Rubbe		NS	NS	0	0	0
Flavor Profile, Musty, Earthy, Moldy		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Salty		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Soapy, Slimy		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Sweet		NS	NS	No Trace	No Trace	No Trace
Fluoride	mg/L	2	0.1	ND	0.1	0.1
Foaming Agents (MBAS)	mg/L	0.5	NS	ND	ND	ND
Geosmin	ng/L	NS	NS	1.33	1.33	1.33
Glyphosate	ug/L	700	25	ND	ND	ND
Hardness (as CaCO ₃)	mg/L	NS	NS	114	166	138
Heptachlor	ug/L	0.01	0.01	ND	ND	ND
Heptachlor Epoxide	ug/L	0.01	0.01	ND	ND	ND
Heterotrophic Plate Count	CFU/ml	NS	NS	<1	870	119
Hexachlorobenzene	ug/L	1	0.5	ND	ND	ND
Hexachlorobutadiene	ug/L	NS	0.5	ND	ND	ND
Hexachlorocyclopentadiene	ug/L	50	1	ND	ND	ND
Hydroxide Alkalinity (as CaCO ₃)	mg/L	NS	NS	<0.5	<0.5	<0.5
Hydroxide Alkalinity (as OH)	mg/L	NS	NS	<0.5	<0.5	<0.5
Iron	ug/L	300	100	ND	ND	ND
Isopropylbenzene (Cumene)	ug/L	NS	0.5	ND	ND	ND
Lead	ug/L	15	5	ND	ND	ND
Lindane (Gamma-BHC)	ug/L	0.2	0.2	ND	ND	ND
Lithium	ug/L	NS	NS	<5	5.47	5.47
Magnesium	mg/L	NS	NS	13	19	16
Manganese	ug/L	50	20	ND	ND	ND
Mercury	ug/L	2	1	ND	ND	ND
Methiocarb	ug/L	NS	NS	<2	<2	<2
Methomyl	ug/L	NS	2	ND	ND	ND
Methoxychlor	ug/L	30	10	ND	ND	ND
Methyl tert-Butyl Ether (MTBE)	ug/L	13	3	ND	ND	ND
Molinate (ORDRAM)	ug/L	20	2	ND	ND	ND
Molybdenum	ug/L	NS	NS	1	2	2
Monobromoacetic Acid	ug/L	NS	1	ND	ND	ND
Monochloramines	mg/L	NS	NS	0.88	1.51	1.18
Monochloroacetic Acid	ug/L	NS	2	ND	ND	ND
Monochlorobenzene (Chlorobenzene)	ug/L	70	0.5	ND	ND	ND



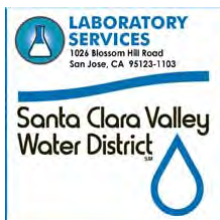
Annual Water Quality Summary Min/Max/Avg¹

Water Treatment Plant Operational and Compliance Data

Start: 1/1/2015 End: 12/31/2015

RWTP Effluent (Treated Water)

Test Parameter	Units	MCL	DLR ²	MIN	MAX	AVG
Naphthalene	ug/L	NS	0.5	ND	ND	ND
n-Butylbenzene	ug/L	NS	0.5	ND	ND	ND
Nickel	ug/L	100	10	ND	ND	ND
Nitrate	mg/L	45	2	ND	7	4
Nitrite (as N)	mg/L	1	0.4	ND	ND	ND
N-Nitrosodiethylamine	ng/L	NS	NS	ND	ND	ND
N-Nitrosodimethylamine	ng/L	NS	NS	ND	ND	ND
N-Nitrosodi-n-propylamine	ng/L	NS	NS	ND	ND	ND
n-propylbenzene	ug/L	NS	0.5	ND	ND	ND
Odor T.O.N.	T.O.N.	3	1	1	1	1
Oxamyl (Vydate)	ug/L	50	20	ND	ND	ND
Paraquat	ug/L	NS	20	ND	ND	ND
Pentachlorophenol	ug/L	1	0.2	ND	ND	ND
Percent Monochloramines	%	NS	NS	74	96	88
Perchlorate	ug/L	6	4	ND	ND	ND
pH	pH units	NS	NS	7.3	8.0	7.7
Phosphate	mg/L	NS	NS	0.78	1.40	1.03
Picloram	ug/L	500	1	ND	ND	ND
p-Isopropyltoluene	ug/L	NS	NS	<0.5	<0.5	<0.5
Potassium	mg/L	NS	NS	2.9	4.7	3.9
Propoxur (Baygon)	ug/L	NS	NS	<2	<2	<2
sec-Butylbenzene	ug/L	NS	0.5	ND	ND	ND
Selenium	ug/L	50	5	ND	ND	ND
Silica	mg/L	NS	NS	5	15	9
Silver	ug/L	100	10	ND	ND	ND
Simazine (PRINCEP)	ug/L	4	1	ND	ND	ND
Sodium	mg/L	NS	NS	51	99	77
Specific Conductance (E.C.)	umhos/cm	2200	NS	496	908	696
Strontium	ug/L	NS	NS	217	356	261
Styrene	ug/L	100	0.5	ND	ND	ND
Sulfate	mg/L	600	0.5	60.6	87.4	73.0
Temperature	Deg. C	NS	NS	10	24	18
tert-Amyl Methyl Ether (TAME)	ug/L	NS	3	ND	ND	ND
tert-Butyl Alcohol (TBA)	ug/L	NS	2	ND	ND	ND
tert-Butylbenzene	ug/L	NS	0.5	ND	ND	ND
Tetrachloroethylene (PCE)	ug/L	5	0.5	ND	ND	ND
Thallium	ug/L	2	1	ND	ND	ND
Thiobencarb (BOLERO)	ug/L	70	1	ND	ND	ND
Toluene	ug/L	150	0.5	ND	ND	ND
Total Alkalinity (as CaCO3)	mg/L	NS	NS	67	124	90
Total Chloramines	mg/L	NS	NS	1.07	1.75	1.34
Total Coliforms	P/A 100ml	NS	NS	Absent	Absent	Absent
Total Dissolved Solids	mg/L	1500	NS	302	454	384
Total Haloacetic Acids (HAA5)	ug/L	60	NS	11	30	18
Total Organic Carbon	mg/L	NS	0.3	1.30	3.42	2.69
Total PCB's (as DCB)	ug/L	0.5	0.5	ND	ND	ND
Total Trihalomethanes (THM)	ug/L	80	NS	42	75	56
Total-Xylene	ug/L	1750	NS	ND	ND	ND
Toxaphene	ug/L	3	1	ND	ND	ND
trans-1,2-Dichloroethylene	ug/L	10	0.5	ND	ND	ND



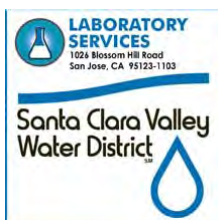
Annual Water Quality Summary Min/Max/Avg¹

Water Treatment Plant Operational and Compliance Data

Start: 1/1/2015 End: 12/31/2015

RWTP Effluent (Treated Water)

Test Parameter	Units	MCL	DLR ²	MIN	MAX	AVG
trans-1,3-Dichloropropene	ug/L	0.5	0.5	ND	ND	ND
Trichloroacetic Acid	ug/L	NS	1	ND	8.9	4.7
Trichloroethylene (TCE)	ug/L	5	0.5	ND	ND	ND
Trichlorofluoromethane (FREON 11)	ug/L	150	5	ND	ND	ND
Trichlorotrifluoroethane (FREON 113)	ug/L	1200	10	ND	ND	ND
True Color	Color Units	NS	NS	<2.5	4	4
Turbidity	NTU	5	NS	0.01	0.15	0.08
Vanadium	ug/L	NS	3	ND	ND	ND
Vinyl Chloride	ug/L	0.5	0.5	ND	ND	ND
Zinc	ug/L	5000	50	ND	ND	ND



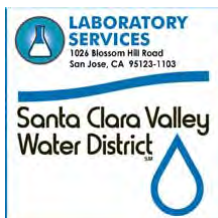
Annual Water Quality Summary Min/Max/Avg¹

Water Treatment Plant Operational and Compliance Data

Start: 1/1/2015 End: 12/31/2015

STWTP Effluent (Treated Water)

Test Parameter	Units	MCL	DLR ²	MIN	MAX	AVG
1,1,1,2-Tetrachloroethane	ug/L	NS	0.5	ND	ND	ND
1,1,1-Trichloroethane	ug/L	200	0.5	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/L	1	0.5	ND	ND	ND
1,1,2-Trichloroethane	ug/L	5	0.5	ND	ND	ND
1,1-Dichloroethane	ug/L	5	0.5	ND	ND	ND
1,1-Dichloroethylene	ug/L	6	0.5	ND	ND	ND
1,1-Dichloropropene	ug/L	NS	0.5	ND	ND	ND
1,2,3-Trichlorobenzene	ug/L	NS	0.5	ND	ND	ND
1,2,4-Trichlorobenzene	ug/L	5	0.5	ND	ND	ND
1,2,4-Trimethylbenzene	ug/L	NS	0.5	ND	ND	ND
1,2-Dichlorobenzene	ug/L	600	0.5	ND	ND	ND
1,2-Dichloroethane	ug/L	0.5	0.5	ND	ND	ND
1,2-Dichloropropane	ug/L	5	0.5	ND	ND	ND
1,3,5-Trimethylbenzene	ug/L	NS	0.5	ND	ND	ND
1,3-Dichlorobenzene	ug/L	NS	0.5	ND	ND	ND
1,3-Dichloropropane	ug/L	NS	0.5	ND	ND	ND
1,3-Dichloropropene (Total)	ug/L	0.5	0.5	ND	ND	ND
1,4-Dichlorobenzene	ug/L	5	0.5	ND	ND	ND
2,2-Dichloropropane	ug/L	NS	0.5	ND	ND	ND
2,4,5-TP (SILVEX)	ug/L	50	1	ND	ND	ND
2,4,6-Trichloroanisole	ng/L	NS	NS	<1	<1	<1
2,4-D	ug/L	70	10	ND	ND	ND
2-Chlorotoluene	ug/L	NS	0.5	ND	ND	ND
3-Hydroxycarbofuran	ug/L	NS	3	ND	ND	ND
4-Chlorotoluene	ug/L	NS	0.5	ND	ND	ND
Alachlor	ug/L	2	1	ND	ND	ND
Aldicarb (Temik)	ug/L	NS	3	ND	ND	ND
Aldicarb Sulfone	ug/L	NS	4	ND	ND	ND
Aldicarb Sulfoxide	ug/L	NS	3	ND	ND	ND
Aldrin	ug/L	NS	0.075	ND	ND	ND
Aluminum	ug/L	1000	50	ND	175	77
Ammonia, Free	mg/L	NS	NS	0.10	0.25	0.15
Ammonia, Total	mg/L	NS	NS	0.32	0.62	0.49
Antimony	ug/L	6	6	ND	ND	ND
Apparent Color	Color Units	15	NS	<2.5	3	3
Aroma Profile, Bitter		NS	NS	No Trace	No Trace	No Trace
Aroma Profile, Chlorinous		NS	NS	0	0	0
Aroma Profile, Fishy		NS	NS	No Trace	No Trace	No Trace
Aroma Profile, Grassy, Woody, Vegetable		NS	NS	0	0	0
Aroma Profile, Marshy, Septic, Swampy		NS	NS	No Trace	No Trace	No Trace
Aroma Profile, Medicinal, Chemical, Rubb		NS	NS	Trace	Trace	Trace
Aroma Profile, Musty, Earthy, Moldy		NS	NS	No Trace	No Trace	No Trace
Aroma Profile, Salty		NS	NS	No Trace	No Trace	No Trace
Aroma Profile, Sweet		NS	NS	No Trace	No Trace	No Trace
Arsenic	ug/L	10	2	ND	ND	ND
Atrazine	ug/L	1	0.5	ND	ND	ND
Barium	ug/L	1000	100	ND	ND	ND
Bentazon (BASAGRAN)	ug/L	18	2	ND	ND	ND
Benzene	ug/L	1	0.5	ND	ND	ND
Beryllium	ug/L	4	1	ND	ND	ND



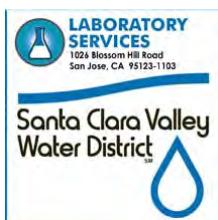
Annual Water Quality Summary Min/Max/Avg¹

Water Treatment Plant Operational and Compliance Data

Start: 1/1/2015 End: 12/31/2015

STWTP Effluent (Treated Water)

Test Parameter	Units	MCL	DLR ²	MIN	MAX	AVG
Bicarbonate Alkalinity (as CaCO ₃)	mg/L	NS	NS	70	139	103
Bicarbonate Alkalinity (as HCO ₃)	mg/L	NS	NS	86	170	126
Boron	ug/L	NS	100	140	207	180
Bromate	ug/L	10	5	1	16	6
Bromide	mg/L	NS	NS	<0.05	0.24	0.13
Bromobenzene	ug/L	NS	0.5	ND	ND	ND
Bromochloromethane	ug/L	NS	0.5	ND	ND	ND
Bromodichloromethane	ug/L	NS	1	6.7	24.3	12.2
Bromoform	ug/L	NS	1	2.9	15.3	9.0
Bromomethane (Methyl Bromide)	ug/L	NS	0.5	ND	ND	ND
Cadmium	ug/L	5	1	ND	ND	ND
Calcium	mg/L	NS	NS	23	36	29
Calcium as CaCO ₃	mg/L	NS	NS	57	90	73
Carbaryl (SEVIN)	ug/L	NS	5	ND	ND	ND
Carbofuran (Furadan)	ug/L	18	5	ND	ND	ND
Carbon Tetrachloride	ug/L	0.5	0.5	ND	ND	ND
Carbonate Alkalinity (as CaCO ₃)	mg/L	NS	NS	<0.5	40	33
Carbonate Alkalinity (as CO ₃)	mg/L	NS	NS	<0.5	24	20
Chlorate	ug/L	NS	20	70	460	223
Chlordane	ug/L	0.1	0.1	ND	ND	ND
Chloride	mg/L	600	NS	7	121	95
Chlorine (Free) by DPD	mg/L	NS	NS	0.0	0.3	0.1
Chlorine (Total) by DPD	mg/L	NS	NS	1.4	3.0	2.3
Chlorine Free	mg/L	NS	NS	0.02	0.09	0.04
Chloroethane	ug/L	NS	0.5	ND	ND	ND
Chloroform	ug/L	NS	1	2.2	19.4	6.3
Chloromethane (Methyl Chloride)	ug/L	NS	0.5	ND	ND	ND
Chromium, Hexavalent	ug/L	10	1	ND	ND	ND
Chromium, Total	ug/L	50	10	ND	ND	ND
cis-1,2-Dichloroethylene	ug/L	6	0.5	ND	ND	ND
cis-1,3-Dichloropropene	ug/L	0.5	0.5	ND	ND	ND
Cobalt	ug/L	NS	NS	<1	<1	<1
Copper	ug/L	1000	50	ND	ND	ND
Cyanide	ug/L	150	100	ND	ND	ND
Dalapon	ug/L	200	10	ND	ND	ND
Di (2-ethylhexyl) Adipate	ug/L	400	5	ND	ND	ND
Dibromoacetic Acid	ug/L	NS	1	1.3	6.6	3.5
Dibromochloromethane	ug/L	NS	1	8.9	21.6	16.5
Dibromochloropropane	ug/L	0.2	0.01	ND	ND	ND
Dibromomethane	ug/L	NS	0.5	ND	ND	ND
Dicamba (BANVEL)	ug/L	NS	1.5	ND	ND	ND
Dichloramines	mg/L	NS	NS	0.08	0.79	0.27
Dichloroacetic Acid	ug/L	NS	1	1.2	4.5	2.6
Dichlorodifluoromethane (FREON 12)	ug/L	NS	0.5	ND	ND	ND
Dichloromethane (Methylene Chloride)	ug/L	5	0.5	ND	ND	ND
Dieldrin	ug/L	NS	0.02	ND	ND	ND
Diethylhexylphthalate	ug/L	4	3	ND	ND	ND
Diisopropyl Ether (DIPE)	ug/L	NS	3	ND	ND	ND
Dinoseb (DNBP)	ug/L	7	2	ND	ND	ND
Dioxin (2,3,7,8-TCDD)	pg/L	30	5	ND	ND	ND



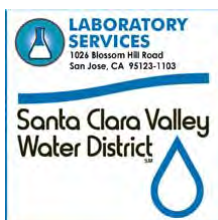
Annual Water Quality Summary Min/Max/Avg¹

Water Treatment Plant Operational and Compliance Data

Start: 1/1/2015 End: 12/31/2015

STWTP Effluent (Treated Water)

Test Parameter	Units	MCL	DLR ²	MIN	MAX	AVG
Diquat	ug/L	20	4	ND	ND	ND
E. Coli	P/A 100ml	NS	NS	Absent	Absent	Absent
Endothall	ug/L	100	45	ND	ND	ND
Endrin	ug/L	2	0.1	ND	ND	ND
Ethyl tert-Butyl Ether (ETBE)	ug/L	NS	3	ND	ND	ND
Ethylbenzene	ug/L	300	0.5	ND	ND	ND
Ethylene Dibromide (EDB)	ug/L	0.05	0.02	ND	ND	ND
Flavor Profile, Astringent, Burn, Bite		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Bitter		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Chlorinous		NS	NS	0	0	0
Flavor Profile, Drying		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Fishy		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Grassy, Woody, Vegetable		NS	NS	0	0	0
Flavor Profile, Marshy, Septic, Swampy		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Medicinal, Chemical, Rubbe		NS	NS	Trace	Trace	Trace
Flavor Profile, Musty, Earthy, Moldy		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Salty		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Soapy, Slimy		NS	NS	No Trace	No Trace	No Trace
Flavor Profile, Sweet		NS	NS	No Trace	No Trace	No Trace
Fluoride	mg/L	2	0.1	ND	0.1	0.1
Foaming Agents (MBAS)	mg/L	0.5	NS	ND	ND	ND
Geosmin	ng/L	NS	NS	<1	<1	<1
Glyphosate	ug/L	700	25	ND	ND	ND
Hardness (as CaCO ₃)	mg/L	NS	NS	130	183	151
Heptachlor	ug/L	0.01	0.01	ND	ND	ND
Heptachlor Epoxide	ug/L	0.01	0.01	ND	ND	ND
Heterotrophic Plate Count	CFU/ml	NS	NS	<1	22	2
Hexachlorobenzene	ug/L	1	0.5	ND	ND	ND
Hexachlorobutadiene	ug/L	NS	0.5	ND	ND	ND
Hexachlorocyclopentadiene	ug/L	50	1	ND	ND	ND
Hydroxide Alkalinity (as CaCO ₃)	mg/L	NS	NS	<0.5	<0.5	<0.5
Hydroxide Alkalinity (as OH)	mg/L	NS	NS	<0.5	<0.5	<0.5
Iron	ug/L	300	100	ND	132	132
Isopropylbenzene (Cumene)	ug/L	NS	0.5	ND	ND	ND
Lead	ug/L	15	5	ND	ND	ND
Lindane (Gamma-BHC)	ug/L	0.2	0.2	ND	ND	ND
Lithium	ug/L	NS	NS	<5	6.80	6.16
Magnesium	mg/L	NS	NS	14	21	17
Manganese	ug/L	50	20	ND	ND	ND
Mercury	ug/L	2	1	ND	ND	ND
Methiocarb	ug/L	NS	NS	<2	<2	<2
Methomyl	ug/L	NS	2	ND	ND	ND
Methoxychlor	ug/L	30	10	ND	ND	ND
Methyl tert-Butyl Ether (MTBE)	ug/L	13	3	ND	ND	ND
Methylisoborneol (MIB)	ng/L	NS	NS	3	3	3
Molinate (ORDRAM)	ug/L	20	2	ND	ND	ND
Molybdenum	ug/L	NS	NS	1	2	2
Monobromoacetic Acid	ug/L	NS	1	ND	ND	ND
Monochloramines	mg/L	NS	NS	1.00	1.76	1.51
Monochloroacetic Acid	ug/L	NS	2	ND	ND	ND



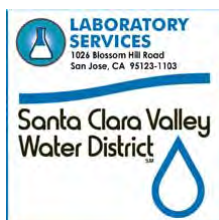
Annual Water Quality Summary Min/Max/Avg¹

Water Treatment Plant Operational and Compliance Data

Start: 1/1/2015 End: 12/31/2015

STWTP Effluent (Treated Water)

Test Parameter	Units	MCL	DLR ²	MIN	MAX	AVG
Monochlorobenzene (Chlorobenzene)	ug/L	70	0.5	ND	ND	ND
Naphthalene	ug/L	NS	0.5	ND	ND	ND
n-Butylbenzene	ug/L	NS	0.5	ND	ND	ND
Nickel	ug/L	100	10	ND	ND	ND
Nitrate	mg/L	45	2	ND	4	4
Nitrite (as N)	mg/L	1	0.4	ND	ND	ND
N-Nitrosodiethylamine	ng/L	NS	NS	ND	ND	ND
N-Nitrosodimethylamine	ng/L	NS	NS	2.20	2.20	2.20
N-Nitrosodi-n-propylamine	ng/L	NS	NS	ND	ND	ND
n-propylbenzene	ug/L	NS	0.5	ND	ND	ND
Odor T.O.N.	T.O.N.	3	1	1	1	1
Oxamyl (Vydate)	ug/L	50	20	ND	ND	ND
Paraquat	ug/L	NS	20	ND	ND	ND
Pentachlorophenol	ug/L	1	0.2	ND	ND	ND
Percent Monochloramines	%	NS	NS	57	94	82
Perchlorate	ug/L	6	4	ND	ND	ND
pH	pH units	NS	NS	7.3	7.9	7.7
Phosphate	mg/L	NS	NS	0.60	1.42	0.97
Picloram	ug/L	500	1	ND	ND	ND
p-Isopropyltoluene	ug/L	NS	NS	<0.5	<0.5	<0.5
Potassium	mg/L	NS	NS	2.7	4.1	3.4
Propoxur (Baygon)	ug/L	NS	NS	<2	<2	<2
sec-Butylbenzene	ug/L	NS	0.5	ND	ND	ND
Selenium	ug/L	50	5	ND	ND	ND
Silica	mg/L	NS	NS	8	16	13
Silver	ug/L	100	10	ND	ND	ND
Simazine (PRINCEP)	ug/L	4	1	ND	ND	ND
Sodium	mg/L	NS	NS	48	81	66
Specific Conductance (E.C.)	umhos/cm	2200	NS	495	773	671
Strontium	ug/L	NS	NS	228	391	287
Styrene	ug/L	100	0.5	ND	ND	ND
Sulfate	mg/L	600	0.5	55.3	98.1	69.3
Temperature	Deg. C	NS	NS	12	24	19
tert-Amyl Methyl Ether (TAME)	ug/L	NS	3	ND	ND	ND
tert-Butyl Alcohol (TBA)	ug/L	NS	2	ND	ND	ND
tert-Butylbenzene	ug/L	NS	0.5	ND	ND	ND
Tetrachloroethylene (PCE)	ug/L	5	0.5	ND	ND	ND
Thallium	ug/L	2	1	ND	ND	ND
Thiobencarb (BOLERO)	ug/L	70	1	ND	ND	ND
Toluene	ug/L	150	0.5	ND	ND	ND
Total Alkalinity (as CaCO3)	mg/L	NS	NS	79	139	104
Total Chloramines	mg/L	NS	NS	1.61	2.29	1.84
Total Coliforms	P/A 100ml	NS	NS	Absent	Absent	Absent
Total Dissolved Solids	mg/L	1500	NS	314	530	393
Total Haloacetic Acids (HAA5)	ug/L	60	NS	4	9	6
Total Organic Carbon	mg/L	NS	0.3	2.30	3.70	2.97
Total PCB's (as DCB)	ug/L	0.5	0.5	ND	ND	ND
Total Trihalomethanes (THM)	ug/L	80	NS	24	65	44
Total-Xylene	ug/L	1750	NS	ND	ND	ND
Toxaphene	ug/L	3	1	ND	ND	ND



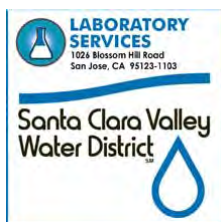
Annual Water Quality Summary Min/Max/Avg¹

Water Treatment Plant Operational and Compliance Data

Start: 1/1/2015 End: 12/31/2015

STWTP Effluent (Treated Water)

Test Parameter	Units	MCL	DLR ²	MIN	MAX	AVG
trans-1,2-Dichloroethylene	ug/L	10	0.5	ND	ND	ND
trans-1,3-Dichloropropene	ug/L	0.5	0.5	ND	ND	ND
Trichloroacetic Acid	ug/L	NS	1	ND	2.4	1.8
Trichloroethylene (TCE)	ug/L	5	0.5	ND	ND	ND
Trichlorofluoromethane (FREON 11)	ug/L	150	5	ND	ND	ND
Trichlorotrifluoroethane (FREON 113)	ug/L	1200	10	ND	ND	ND
True Color	Color Units	NS	NS	<2.5	<2.5	<2.5
Turbidity	NTU	5	NS	0.03	0.13	0.06
Vanadium	ug/L	NS	3	ND	3	3
Vinyl Chloride	ug/L	0.5	0.5	ND	ND	ND
Zinc	ug/L	5000	50	ND	ND	ND



Annual Water Quality Summary Min/Max/Avg¹

Water Treatment Plant Operational and Compliance Data

Start: 1/1/2015 End: 12/31/2015

¹ "MIN" presents the single lowest analytical result for the reporting period. "MAX" presents the single highest analytical result for the reporting period. "AVG" is the average of all analytical results for the reporting period.

² Where a DLR is indicated for a particular Test Parameter, the analytical result for that test is presented as "ND" when the result is less than the DLR (e.g., if the analytical result for Aluminum is 0.04 mg/L, it will be presented as "ND" in this report).

PWTP = Penitencia Water Treatment Plant

RWTP = Rinconada Water Treatment Plant

STWTP = Santa Teresa Water Treatment Plant

MCL = Maximum Contaminant Level

DLR = Detection Limit For Reporting

umhos/cm = Micromhos Per Centimeter

T.O.N. = Threshold Odor Number

NTU = Nephelometric Turbidity Units

CFU/ml = Colony Forming Units Per Milliliter

CFU/100 = Colony Forming Units Per 100 Milliliters

mg/L = Milligrams Per Liter

ABS = Centimeters⁻¹

ug/L = Micrograms Per Liter

pCi/L = Picocuries Per Liter

MFL = Million Fiber Per Liter

P/A 100ml = Present or Absent per 100ml

NS = No Standard

ND = Not Detected At Or Above The DLR

NT = Not Tested

NR = Not Reported

Attachment I

Notices of District Education Programs and Services Available to Customers

<http://www.valleywater.org/Programs/TeachersStudents.aspx>

Attachment J
District Agricultural Water Order Form
Not Applicable

Attachment K
Drainage Problem Area Report
Not Applicable

Attachment L
Retailer Water Quality Reports

Quality. Service. Value.®



2015 Water Quality Report

Los Altos Suburban District

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.



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At California Water Service (Cal Water), protecting our customers' health and safety is our highest priority. It's part of our commitment to deliver quality, service, and value to our customers.

Quality. We are dedicated to providing a high-quality water supply to our customers. We have rigorous safeguards in place to make sure that our water meets or surpasses increasingly stringent water quality standards, and **we are pleased to announce that, in 2015, we met every primary and secondary state and federal standard.** In California, we conduct tests on 68,000 water samples per year to ensure we are in compliance with both state and federal standards.

Service. In addition to providing a safe supply of water whenever you need it, we also work diligently to ensure that supplies — and the infrastructure needed to deliver water from the source to your tap — are adequate to meet demand. And, as we work to make conservation a way of life in California, while still being in the midst of a historic drought, we offer a wide variety of conservation programs and rebates to help our customers use water wisely. Our dedicated team of professionals is here to assist you with both routine business and after-hours emergencies.

Value. The costs to provide water service continues to increase, but we are working to ensure that our water stays affordable. We do this in part by investing in infrastructure that is built to last and only replacing equipment when it is nearing the end of its useful life. We also work to find cost-effective solutions for securing, testing, treating, storing, and delivering the water to you. We do all it takes to deliver a clean, reliable water supply right to your home, for less than a penny per gallon in nearly all of our service areas.

This annual water quality report shows any constituents that were detected in your water in 2015, and how your water compares to state and federal water quality standards. This report also provides information about the steps we take to protect your health and safety and answers questions you may have about your water quality.

If you have any questions or concerns, you can contact us by phone or email, through our web site, or in person at your local Customer Center. For important announcements and other water-related news, please visit calwater.com or watch for information in your monthly bill.

Sincerely,

Ron Richardson, District Manager, Los Altos Suburban District

LOS ALTOS SUBURBAN DISTRICT 949 "B" STREET LOS ALTOS, CA 94024 (650) 917-0152

Your Water System

Cal Water has provided high-quality water utility services in the Los Altos area since 1931. To meet the needs of our customers in Los Altos and parts of Los Altos Hills, Cupertino, Mountain View, and Sunnyvale, we use a combination of local groundwater and purchased water. Our purchased water, which is treated surface water from the Santa Clara Valley Water District (SCVWD), comes from SCVWD reservoirs and the San Joaquin-Sacramento River Delta.

Our water system includes 297 miles of main, 65 booster pumps, and 46 storage tanks. We proactively maintain and upgrade our facilities to ensure a reliable, high-quality supply.

If you have any questions, suggestions, or concerns, please contact our local Customer Center, either by phone or through the contact link at www.calwater.com.

USING WATER WISELY

California is still in a historic drought, and as we work to make conservation a way of life, like Governor Brown stated in his Executive Order in May, we remind our customers that we are here to help them use water wisely.

Cal Water has a robust water conservation program that includes rebates, kits, and other tools to help our customers save water. Visit www.calwater.com/conservation for details.

For more on the drought and water use restrictions, visit www.calwater.com/drought.



WATER QUALITY LABORATORY

Water professionals collect samples from throughout the water system for testing at our state-of-the-art water quality laboratory, which is certified through the stringent Environmental Laboratory Accreditation Program (ELAP). Scientists, chemists, and microbiologists test the water for more than 140 constituents with equipment so sensitive it can detect levels as low as one part per trillion. In order to maintain the ELAP certification, all of our scientists must pass blind-study proficiency tests each year for every water quality test performed.

Water quality test results are entered into our Laboratory Information Management System (LIMS), a sophisticated software program that enables us to react quickly to changes in water quality and analyze water quality trends in order to plan effectively for future needs.

DIVISION OF DRINKING WATER

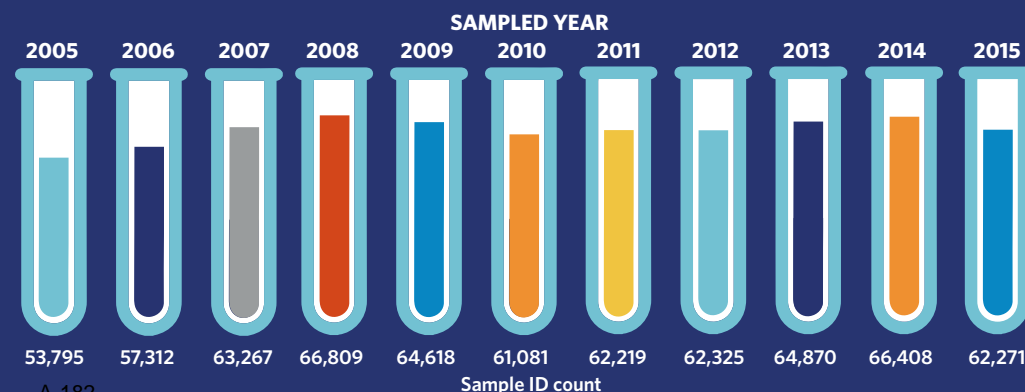
On July 1, 2014, Gov. Jerry Brown transferred the State's Drinking Water Program from the California Department of Public Health to the State Water Resources Control Board's Division of Drinking Water (DDW). The transition was created to consolidate all major water quality programs within a single department. According to the Governor's office, this consolidation allows the State to better manage and protect water resources and ensure safe drinking water for Californians.

Visit www.swrcb.ca.gov/drinking_water/programs for more information about water quality requirements or the Drinking Water Program.

CROSS-CONNECTION CONTROL

To ensure that the high-quality water we deliver is not compromised in the distribution system, Cal Water has a robust cross-connection control program in place. Cross-connection control is critical to ensuring that activities on customers' properties do not affect the public water supply. Our cross-connection control specialists ensure that all of the existing backflow prevention assemblies are tested annually, assess all non-residential connections, and enforce and manage the installation of new commercial and residential assemblies. Last year, our specialists oversaw installation of 1,645 new assemblies and testing of 25,175 backflow prevention assemblies company-wide.

Number of samples collected



DWSAPP

By the end of 2002, Cal Water had submitted to the DDW a Drinking Water Source Assessment and Protection Program (DWSAPP) report for each water source in the water system. The DWSAPP report identifies possible sources of contamination to aid in prioritizing cleanup and pollution prevention efforts.

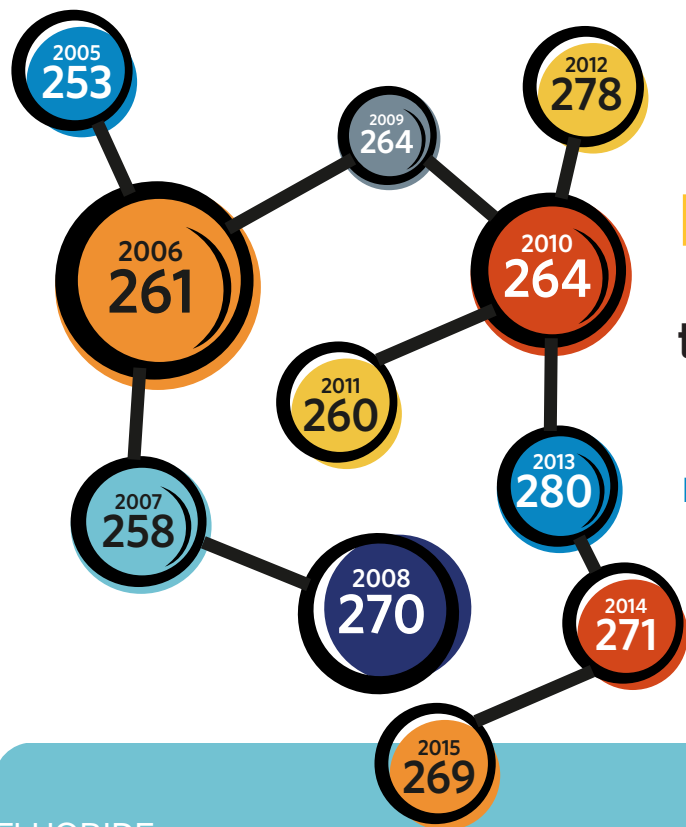
The water sources in your district are considered most vulnerable to the following activities, for which no associated contaminant has been detected: sewer collection systems, gas stations, dry cleaners, underground storage tanks (confirmed leaking tanks), chemical/petroleum pipelines, electrical/electronic manufacturing, research laboratories, agricultural drainage, and wells (agricultural).

SCVWD provides treated surface water to the Silicon Valley from three water treatment plants. SCVWD surface water is mainly imported from the South Bay Aqueduct, Lake Del Valle, and San Luis Reservoir, which all draw water from the Sacramento-San Joaquin Delta watershed.

SCVWD's local water sources include Anderson and Calero Reservoirs.

SCVWD's source waters are vulnerable to potential contamination from a variety of land-use practices, such as agricultural and urban runoff, recreational activities, livestock grazing, and residential and industrial development. The imported sources are also vulnerable to wastewater treatment plant discharges, seawater intrusion, and wildland fires in open space areas. In addition, local sources are vulnerable to potential contamination from commercial stables and historic mining practices. No contaminant associated with any of these activities has been detected in SCVWD's treated water. The water treatment plants provide multiple barriers for physical removal and disinfection of contaminants. For additional information, visit the SCVWD web site at www.valleywater.org.

We encourage customers to join us in our efforts to prevent water pollution and protect our most precious natural resource.



Number of constituents tested annually since 2005

SAMPLED YEAR
PARAMETER
COUNT

FLUORIDE

State law requires Cal Water to add fluoride to drinking water if public funding is available to pay for it, and it is a practice endorsed by the American Medical Association and the American Dental Association to prevent tooth decay.

In this area, low levels of fluoride occur naturally, but Cal Water doesn't add any to the water supply. Show the table in this report to your dentist to see if he or she recommends giving your children fluoride supplements.

More information about fluoridation, oral health, and related issues can be found on the DDW web site at www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml. For general information on water fluoridation, visit us online at www.calwater.com.

Water Hardness

We use water testing equipment so sensitive it can detect levels as low as 1 part per trillion.

[That's equivalent to 2 golf ball rotations on a putting green as long as to the distance from Earth to the sun!]



Water's "hardness" is a measure of the amount of minerals (generally calcium, magnesium, and carbonate) it contains. Water is considered **soft** if its hardness is less than 75 parts per million (ppm), **moderately hard** at 75 to 150 ppm, **hard** at 150 to 300 ppm, and **very hard** at 300 ppm or higher.

Hard water is generally not a health concern, but it can have an impact on how well soap lathers and is significant for some industrial and manufacturing processes. Hard water may also lead to mineral buildup in pipes or water heaters.

Some people with hard water opt to buy a water softener for aesthetic reasons. However, some water softeners add salt to the water, which can cause problems at wastewater treatment plants. In addition, people on low-sodium diets should be aware that some water softeners increase the sodium content of the water.





Possible Contaminants

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

More information about contaminants and potential health effects can be obtained by calling the United States Environmental Protection Agency (EPA) Safe Drinking Water Hotline at (800) 426-4791.

The sources of drinking water (both tap and bottled) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER INCLUDE:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.

Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA and the DDW prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DDW regulations also establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people, such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, and those with HIV/AIDS or other immune system disorders; some elderly people; and infants can be particularly at risk from infections. These people should seek advice from their health care providers about drinking water. EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

About Lead

You may have questions about lead in drinking water as a result of the water quality crisis in Flint, Michigan. Although public officials continue to investigate what went wrong in Flint, several factors contributed to the problem:

- The City has a high number of lead service lines in its water system.
- The City switched from a treated supply of water to an untreated and corrosive supply. The lack of required corrosion treatment caused lead from service lines to get into the water.
- The City was not completely following the Environmental Protection Agency's Lead and Copper Rule.
- The City did not respond quickly to water quality concerns.

None of these conditions exist at Cal Water. We have worked proactively to eliminate lead-bearing materials from our water systems, and we are compliant with health and safety codes mandating the installation of lead-free materials in public water systems. We test our water sources to ensure that the water we deliver to customers' meters meets water quality standards and is not corrosive toward plumbing materials. The water we deliver may meet lead standards, but what about your home plumbing? Because lead in drinking water comes primarily from materials and components associated with service lines and home plumbing, the Lead and Copper Rule is a critical part of our water quality monitoring program.

The Lead and Copper Rule requires us to test water *inside* a representative number of homes that have plumbing most likely to contain lead and/or lead solder. This test, with other water quality testing, tells us if the water is corrosive enough to cause lead from home plumbing to leach into the water. If the "Action Level" for lead is exceeded, we work with our customers to investigate the issue and, if necessary, implement corrosion control before the lead levels create a health issue.

As the crisis in Flint has made clear, if present, elevated levels of lead can cause serious health problems, especially for pregnant women and children. If your home's plumbing contains lead piping or pipe fittings, lead solder, or brass fixtures that may contain lead, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking.

If you are concerned about lead in your water, you may wish to have your water tested by a lab. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

In your system, results from our lead monitoring program, conducted in accordance with the Lead and Copper Rule, were non-detectable for the presence of lead.

Key Definitions

Maximum Contaminant Level (MCL)

The highest level of a contaminant that is allowed in drinking water. Primary MCLs protect public health and are set as close to the PHGs (or MCLGs) as are economically and technologically feasible. Secondary MCLs relate to the odor, taste, and appearance of drinking water.

Exceeded Standard

Out of compliance with a primary MCL, a secondary MCL, or an action level, as determined by the DDW. For some compounds, compliance is determined by averaging the results for one source over a year.

Regulatory Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers treatment or other required action by the water provider.

Maximum Contaminant Level Goal (MCLG)

The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the EPA.

Maximum Residual Disinfectant Level (MRDL)

The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG)

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Notification Level (NL)

A health-based advisory level for an unregulated contaminant in drinking water. It is used by DDW to provide guidance to drinking water systems.

Primary Drinking Water Standard (PDWS)

MCLs and MRDLs for contaminants that affect health, along with their monitoring, reporting, and water treatment requirements.

Public Health Goal (PHG)

The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment without regard to cost or available detection and treatment technologies.

Treatment Technique (TT)

A required process intended to reduce the level of a contaminant in drinking water.

Table Introduction

Cal Water tests your water for more than 140 regulated contaminants and dozens of unregulated contaminants. This table lists only those contaminants that were detected.

In the table, water quality test results are divided into two major sections: "Primary Drinking Water Standards" and "Secondary Drinking Water Standards and Unregulated Compounds." Primary standards protect public health by limiting the levels of certain constituents in drinking water. Secondary standards are set for substances that don't impact health but could affect the water's taste, odor, or appearance. Some unregulated substances (hardness and sodium, for example) are included for your information.

TABLE KEY

μS/cm	measure of specific conductance
n/a	not applicable
ND	not detected
NTU	nephelometric turbidity unit
pCi/L	picoCuries per liter (measure of radioactivity)
ppm	parts per million (milligrams per liter)
ppb	parts per billion (micrograms per liter)
ppt	parts per trillion (nanograms per liter)
SMCL	secondary maximum contaminant level



2015 Water Quality Table

Primary Drinking Water Standards

SCVWD Data¹

Los Altos System

Radiological	Year Tested	Unit	MCL (SMCL)	PHG (MCLG)	Exceeded Standard?	Range	Average	Range	Average	Source of Substance
Gross alpha particle activity	2009–2015	pCi/L	15	(0)	No	ND		ND–10	1.5	Erosion of natural deposits
Radium 228	2009–2015	pCi/L	5	0.019 (0)	No	ND		ND–1.3	0.1	Erosion of natural deposits
Uranium	2009–2015	pCi/L	20	0.43	No	ND–1	ND	ND–12	0.9	Erosion of natural deposits
Inorganic Chemicals	Year Tested	Unit	MCL (SMCL)	PHG (MCLG)	Exceeded Standard?	Range	Average	Range	Average	Source of Substance
Aluminum	2013–2015	ppm	1 (0.2)	0.6	No	ND–0.07	ND	ND–0.05	ND	Erosion of natural deposits; residue from some surface water treatment processes
Barium	2013–2015	ppm	1	2	No	ND		ND–0.17	0.1	Discharges of oil-drilling waste and from metal refineries; erosion of natural deposits
Hexavalent chromium	2013–2014	ppb	10	0.02	No	ND		ND–2.6	1.3	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
Chromium	2013–2015	ppb	50	(100)	No	ND		ND–8.1	1	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride	2013–2015	ppm	2	1	No	ND–0.1	ND	ND–0.2	0.1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as nitrogen) ²	2015	ppm	10	10	No	ND–1.1	ND	0.9–8.5	6.1	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

¹ Santa Clara Valley Water District supply data is reported from 2015 results. The range of years prior to 2015 reflect Cal Water data.

² The average nitrate level was 6.1 ppm, with a maximum level of 8.5 ppm. We are closely monitoring nitrate levels. Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 ppm may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant or you are pregnant, you should seek advice from your health care provider.

2015 Water Quality Table

(Continued)

Inorganic Chemicals	Year Tested	Unit	MCL (SMCL)	PHG (MCLG)	Exceeded Standard?	Range	Average	Range	Average	Source of Substance
Perchlorate	2013–2015	ppb	6	1	No	ND		ND–2.2	0.2	Inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries; usually gets into drinking water as result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts
Selenium	2013–2015	ppb	50	(50)	No	ND		ND–2.3	0.5	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
	Year Tested	Unit	MCL (SMCL)	PHG (MCLG)	Exceeded Standard?	Highest Level	Lowest Monthly Percent	Highest Level	Lowest Monthly Percent	Source of Substance
Turbidity (surface water requiring filtration)	2015	NTU	TT	n/a	No	0.6	99.9	n/a	n/a	Soil runoff
DBP Precursor	Year Tested	Unit	MCL (SMCL)	PHG (MCLG)	Exceeded Standard?	Range	Average	Range	Average	Source of Substance
Total organic carbon	2015	ppm	TT	n/a	No	1.9–3.1	2.7	n/a	n/a	Various natural and manmade sources
Disinfection Byproducts	Year Tested	Unit	MCL (SMCL)	PHG (MCLG)	Exceeded Standard?	Distribution System				Source of Substance
						Range		Highest Annual Average		
Total haloacetic acids	2015	ppb	60	n/a	No	ND–24		11		Byproduct of drinking water chlorination
Total trihalomethanes	2015	ppb	80	n/a	No	ND–69		45		Byproduct of drinking water chlorination

2015 Water Quality Table

(Continued)

Disinfectant and DBP Precursor	Year Tested	Unit	MRDL	MRDLG	Exceeded Standard?	Range	Average	Source of Substance
Chloramine	2015	ppm	4	4	No	ND–2.2	0.8	Drinking water disinfectant added for treatment

Other Regulated Substances

Metals	Year Tested	Unit	AL	PHG (MCLG)	Exceeded Standard?	90 th Percentile	Samples > AL	Source of Substance
Copper	2013	ppm	1.3	0.3	No	0.32	1 of 33	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	2013	ppb	15	0.2	No	ND	1 of 33	Internal corrosion of household plumbing systems; discharge from industrial manufacturers; erosion of natural deposits

Secondary Drinking Water Standards and Unregulated Compounds

Los Altos System SCVWD Data¹

Inorganic Chemicals	Year Tested	Unit	SMCL	PHG (MCLG)	Exceeded Standard?	Range	Average	Range	Average	Source of Substance
Boron	2015	ppm	NL=1	n/a	No	0.17–0.2	0.2	0.1		Erosion of natural deposits
Bromide	2015	ppm	n/a	n/a	No	0.1–0.2	0.1	n/a	n/a	Erosion of natural deposits
Calcium	2013–2015	ppm	n/a	n/a	No	24–29	26	62–120	84	Erosion of natural deposits
Chloride	2013–2015	ppm	500	n/a	No	87–120	103	32–81	53	Erosion of natural deposits; seawater influence
Color	2013–2015	Units	15	n/a	No	ND–11	6	ND–5	ND	Naturally occurring organic matter
Hardness	2013–2015	ppm	n/a	n/a	No	133–163	144	260–400	323	Erosion of natural deposits
Iron	2013–2015	ppb	300	n/a	No	ND		ND–180	17	Leaching from natural deposits; industrial wastes
Magnesium	2013–2015	ppm	n/a	n/a	No	15–18	16	22–42	28	Erosion of natural deposits
Manganese	2013–2015	ppb	50	n/a	No	ND	ND	ND–32	2.3	Leaching from natural deposits
Molybdenum	2013–2015	ppb	n/a	n/a	No	2		ND–2.6	0.7	Erosion of natural deposits

2015 Water Quality Table

(Continued)

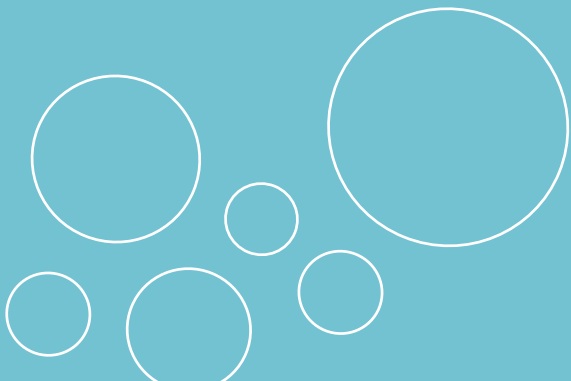
Inorganic Chemicals	Year Tested	Unit	SMCL	PHG (MCLG)	Exceeded Standard?	Range	Average	Range	Average	Source of Substance
Odor	2013–2015	TON	3	n/a	No	1		ND	ND	Naturally occurring organic matter
pH	2015	Units	n/a	n/a	No	7.5–8	7.7	6.5–8	7.3	Inherent characteristic of water
Sodium	2013–2015	ppm	n/a	n/a	No	64–90	75	23–44	33	Erosion of natural deposits; seawater influence
Specific conductance	2013–2015	µS/cm	1600	n/a	No	636–749	696	420–860	704	Erosion of natural deposits; seawater influence
Strontium	2013–2015	ppb	n/a	n/a	No	n/a	n/a	240–1100	425	Erosion of natural deposits
Sulfate	2013–2015	ppm	500	n/a	No	66–79	72	5.1–46	33	Runoff/leaching from natural deposits; industrial wastes
Total dissolved solids	2013–2015	ppm	1000	n/a	No	330–424	381	360–520	434	Runoff/leaching from natural deposits
Turbidity (groundwater)	2013–2015	NTU	5	n/a	No	0.05–0.08	0.07	ND–0.5	0.2	Soil runoff
Vanadium	2013–2015	ppb	NL=50	n/a	No	ND		2.2–19	5.9	Erosion of natural deposits; manufacturing of alloys and steel
Disinfection Byproducts	Year Tested	Unit	MCL (SMCL)	PHG (MCLG)	Exceeded Standard?	Range	Average	Range	Average	Source of Substance
Chlorate	2013–2015	ppb	NL=800	n/a	No	62–160	116	43–300	138	Byproduct of drinking water chlorination
Organic Chemicals	Year Tested	Unit	SMCL	PHG (MCLG)	Exceeded Standard?	Range	Average	Range	Average	Source of Substance
Chlorodifluoromethane (freon 22)	2013–2014	ppb	n/a	n/a	No	n/a	n/a	ND–2.9	0.6	Refrigerant

Thank you.

Thanks for taking the time to learn more about your water quality! Even more information awaits you at www.calwater.com. Visit our web site to get information about your account, water use history, water rates, and water system.

You will also find water-saving tips and news about water conservation programs and rebates available in your area.

- > [Drought news](#)
- > [Lead in water](#)
- > [Water treatment and disinfection](#)
- > [Protecting the water supply](#)



California drinking water regulations require that water delivered by public water systems be, at all times, pure, wholesome and potable, as required by the Federal and State Safe Drinking Water Acts. To accomplish this mandate, domestic water must meet strict standards, as established in the California Domestic Water Quality and Monitoring Regulations. This regulation includes primary and secondary Maximum Contaminant Levels (MCL) and monitoring frequencies for specified microbiological, chemical and radionuclide contaminants. Primary contaminants are those that may have an adverse health effect. Secondary contaminants are those that may adversely affect the aesthetic quality of the drinking water. The regulation includes the provisions adopted by the federal Safe Drinking Water Act of 1974. The state has direct enforcement responsibility for all public water systems with 200 or more service connections.

The Environmental Protection Agency (EPA) establishes monitoring requirements and maximum contaminant levels. As the EPA develops new standards, California will amend state regulations, which establish water quality requirements for local water supplies. The domestic water supplied by the City of Gilroy meets all current regulations. This report includes the respective Public Health Goal (PHG), or the federal Maximum Contaminant Level Goal (MCLG) for chemicals that do not yet have a PHG.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Gilroy is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/regulatory-information-topic/regulatory-information-topic-cross-cutting-issues#lead>

Tables 1, 2, 3, 4, 5, and 6 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The SWRCB requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are more than one year old.

Microbiological Contaminants (to be completed only if there was a detection of bacteria)	Highest No. of detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(in a month) 1	0	More than 5% samples in a month with a detection	0	Naturally present in the environment
Fecal Coliform or E. coli	(in a year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

TABLE 2 - CUSTOMER TAP LEAD/COPPER SAMPLING

Lead and Copper (to be completed only if there was a detection of lead or copper in the last sample set)	No. of samples collected	90th percentile level detected	No. Sites exceeding AL	AL	MCLG	Typical Source of Contaminant
Lead (ppb) 9/1/2015	30	6.5	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm) 9/1/2015	30	0.290	0	1.3	0.3	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Data	Avg. Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	5/20/2015	25.11	18.0-46.0	none	none	Generally found in ground and surface water
Hardness (ppm)	5/20/2015	236	180-280	none	none	Generally found in ground and surface water

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Data	Avg. Level Detected	Range of Detection	MCL	PHG (MCLG)	Typical Source of Contaminant
Perchlorate (ppb)	2015	0.516	N/D-2.9	6	6	An inorganic chemical used in rocket propellant, fireworks, explosives, flares, matches, and a variety of industries.
Flouride (ppm)	2015	0.04	ND-0.12	2	1 (NA)	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (N) (ppm)	Quarterly 2015	6	1.1-9.9	10	10 (NA)	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Tetrachloroethylene [PCE] (ppb)	Monthly 2015	0.1	ND-2.7	5	0.06 (NA)	Leaching from PVC pipes; discharge from factories, dry cleaners and auto shops (metal degreaser)
Total trihalomethanes [TTHM(s)] (ppb)	Quarterly 2015	4.71	0-10.0	80	NA (NA)	By-product of drinking water chlorination
Total Haloacetic Acids (HAA5) (ppb)	Quarterly 2015	0.25	0-2.0	60	NA (NA)	By-product of drinking water chlorination

TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD


Chemical or Constituent (and reporting units)	Sample Data	Avg. Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	5/20/2015	25.8	20-33	500	NA (NA)	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (micromhos/cm)	5/20/2015	551	470-610	1600	NA (NA)	Substances that form ions when in water; seawater influence
Sulfate (ppm)	5/20/2015	38	32-45	500	NA (NA)	Runoff/leaching from natural deposits, industrial wastes
Total dissolved solids [TDS] (ppm)	5/20/2015	299	180-410	1000	NA (NA)	Runoff/leaching from natural deposits

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS


Chemical or Constituent	Sample Data	Level Detected	Aciton Level	Health Effects Language
Vanadium (ppb)	7/8/03	Avg. 1.19 (NID-5.0)	50	The babies of some pregnant women who drink water containing vanadium in excess of the action level may have an increased risk of developmental effects, based on studies in laboratory animals

* Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided below.

City of Gilroy



Annual Water Quality Report 2015



**Presented By The City of Gilroy
Water Department**

City of Gilroy Annual Water Quality Report PWSID#4310004

The report contains important information about your drinking water. Translate it or speak with someone who understands it.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien

Chi tiết này thật quan trọng.
Xin nhờ người dịch cho quý vị.

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

We test the drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2015.

The City of Gilroy is committed to providing a safe, reliable supply of excellent quality drinking water that meets Federal and State regulations. This brochure is a snapshot of the quality of water that we provided in 2015. Included are the details about the source of the City’s water, what it contains, and how it compares to State standards. We are committed to providing you with information because informed customers are the best allies. The City encourages public interest and participation in decisions affecting the community’s drinking water supply. Our City Council generally meets at 6:00 P.M. on the first and third Monday of each month at City Hall. The Santa Clara Valley Water District Board of Directors meetings are on the first and third Tuesday of each month at 9:30 a.m. (and the fifth Tuesday at 7:30 p.m. when applicable.) The City of Gilroy will take any steps necessary to ensure that your water continues to meet safe drinking water standards.

The State Water Resources Control Board (SWRCB), Drinking Water Field Operations Branch, requires water agencies to annually notify their customers of the constituents or elements in their drinking water. This is not the result of punitive action, nor is it indicative of any violation of treatment practices. It is strictly a mandated public information service legislated to keep you informed each year of the facts about your drinking water.

Water System

The City of Gilroy obtains its municipal water supply from ground-water well sources within the Llagas Basin Aquifer. The City currently operates nine water wells that vary in depth that are located throughout the City. In 2015, these wells supplied 53,000 residents with water for personal and industrial use. Gilroy treats our water using chlorine disinfection to remove or reduce harmful contaminants that may come from the source water. The City has performed a Source Water Assessment of our water which identifies possible impacts to water quality. Our source water is considered most vulnerable to the following activities: gas stations, dry cleaners, and metal plating/finishing/fabricating. A copy of the Source Water Assessment is available by contacting Engineering at (408) 846-0450. The Security Vulnerability Assessment was completed in 2003. If you have any questions regarding this report or the water system please contact Dan Aldridge at (408) 846-0271.

As the Environmental Protection Agency (EPA) develops new standards, California will amend state regulations that establish water quality requirements for local water supplies. The domestic water supplied by the City of Gilroy meets all current regulations. This report includes the respective public health goal (PHG), or the federal maximum contaminant level goal (MCLG) for chemicals that do not yet have a PHG.

System Improvement

To meet the growing needs of our customers, the City of Gilroy is continually developing and improving our water system. Booster Station 6 and Reservoir F-1 were put in operation to provide Zone 2 water to South Eagle Ridge in 2004. A new well was drilled and installed in 2006 and put in operation in 2008. Reservoir A and B have had the interior recoated and cathodic protection installed. We have completed installation of a new generator for Well 8/8A in 2010. We are currently working on replacing the water main lines for 1st Street, Casey Street, and Swanston Street. Additional improvements are planned over the next several years.

Perchlorate Monitoring Continues

The perchlorate plume that originated at the Olin Site in Morgan Hill has contaminated wells as far south as Gilman

Road. The City of Gilroy has tested for perchlorate monthly since February 2003 and quarterly since 2008. We will continue to monitor quarterly for perchlorate. For more information about the perchlorate contamination/cleanup check the Santa Clara Valley Water District’s web site at <http://www.valleywater.org/index.htm>

On March 11, 2004 the Office of Environmental Health Hazard Agency (OEHHA) announced the publication of a Public Health Goal for perchlorate of 6 ppb (parts per billion). The California Department of Public Health (CDPH) revised the Action Level on the same day to 6 ppb. Both web sites have been revised with this latest information. CDPH: http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Perchlorate.shtml

OEHHA: <http://www.oehha.ca.gov>

The United States Environmental Protection Agency (USEPA) has more info regarding perchlorate at their web site: <http://www.epa.gov/safewater/index.html> Research and analysis of the effects of perchlorate are continuing. For the latest information see the websites listed above.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA’s Safe Drinking Water Act Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek the advice about drinking water from their health care providers. USEPA/ Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

With California facing water shortfalls in the driest year in recorded state history and California in the fourth year of a drought, Governor Edmund G. Brown Jr. on 4/1/15 proclaimed a State of Emergency and directed state officials to take all necessary actions to prepare for these drought conditions.

State agencies, led by the State Water Resources Control Board, will execute a statewide water conservation campaign to make all Californians aware of the drought and encourage personal actions to reduce water usage. More information is available about the drought and actions at the following website: http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/index.shtml

This campaign will call on Californians to reduce their water usage by 25 percent statewide.

Water Conservation Tips

Water conservation measures not only save our water supply, but can also cut the cost of water treatment. By conserving water, we can reduce the energy costs of pumping at the treatment facility and also chemical costs for processing the water. There are a number of measures you, as the water consumer, can do to conserve on water usage.

Conservation measures you can use inside your home include:

1. Fix leaky faucets, pipes, toilets, etc.
2. Install water-saving devices in faucets, toilets and appliances. All fixtures produced since 1994 are low flow fixtures, but have gotten even more water efficient very recently. Simply replacing old fixtures with a new one will reduce water consumption by nearly one-half. (See Santa Clara Valley Water District web site for rebates available for water saving devices at <http://www.valleywater.org>)
3. Wash only full loads of laundry.
4. Don’t use the toilet for trash disposal.
5. Take shorter showers. Do not let the water run while shaving, washing, brushing teeth, or cleaning fruits and vegetables.
6. Soak dishes before washing. Run the dishwasher only when full.
7. Purchase an energy efficient washing machine and receive a rebate

You can conserve outdoors as well:

1. Water the lawn and garden as little as possible. Outdoor watering is more efficient between 6 p.m. and 9 a.m., and also reduces demand during peak use periods.
2. Use mulch around plants and shrubs or choose plants that don’t need much water.
3. Repair leaks in faucets and hoses. Use water-saving nozzles.

4. Wash your car at a commercial carwash that recirculates its water.
5. Sweep clippings, leaves, and dirt from walks and driveways rather than using the hose.
6. Obey any and all water use restrictions and regulations. Consult the City of Gilroy website at www.cityofgilroy.org for the latest water conservation regulations.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water before we treat it include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agricultural, urban stormwater runoff, and residential uses.
- Organic Chemical Contaminants, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the US Environmental Protection Agency (USEPA) and the SWRCB prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant’s blood to carry oxygen, resulting in a serious illness; symptoms

include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women, and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

Definitions:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer’s tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U. S. Environmental Protection Agency.

Primary Drinking Water Standards: MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

NA: not applicable

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

pCi/L: picocuries per liter (a measure of radiation)

Regulatory Action Levels (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.



CITY OF MORGAN HILL

WATER CONNECTION

JULY 2016

Take this ad and go look at your lawn.



If it is lush and green are you:

- a. Wearing green sunglasses
- b. Painting your lawn green
- c. Replacing your lawn with artificial turf
- d. Watering way too much during the drought



408-776-7333
mhdrought.com

Morgan Hill residents are **REQUIRED** to help

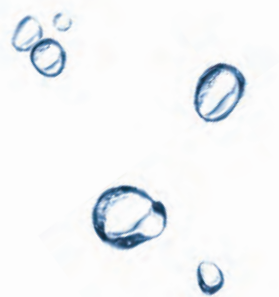
Conserve water as follows:

Limit landscape watering to two days a week

- 💧 Monday and Thursday for ODD numbered addresses
- 💧 Tuesday and Friday for EVEN numbered addresses
- 💧 No watering on Wednesdays and Weekends
- 💧 Water for 15 minutes or less per zone

WATER QUALITY

Consumer Confidence Report



Our Goal: Meet or Exceed Federal & State Regulations

The City of Morgan Hill is committed to providing the community a safe, reliable supply of excellent quality drinking water that meets or exceeds Federal and State regulations. Again in 2016, we met or exceeded every water quality standard without a single violation.

This report gives information about the quality of water provided in 2016. It describes where your water comes from, what it contains and how it compares to State standards.

Share This Report

Landlords, businesses, schools, hospitals and other groups are encouraged to share this important water quality information with water users at their locations who are not billed customers of the City of Morgan Hill and therefore do not receive this report directly.

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

A Word About Chemicals and Organisms

Here is a brief description of chemicals and organisms, and how the City of Morgan Hill monitors, tests, and treats for them:

Lead and Copper Testing

In 1991, the United States Environmental Protection Agency (USEPA) adopted the Lead and Copper Rule which requires all cities, including Morgan Hill, to perform lead and copper testing. The City's public water system does not have detectable levels of lead and copper; however, these metals may leach into the water from home plumbing.

The City is on a three-year cycle for testing of lead and copper determined by the primary testing performed at the inception of the Lead and Copper Rule.

The City last completed its tri-annual round of sampling in 2015 and the sample results remain under Federal Action Levels for both lead and copper. We will retest these levels again in 2018.

Elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. You can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or <http://water.epa.gov/drink/info/lead>

Nitrates as N

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or if you are pregnant, you should ask advice from your health care provider.

The City's water supply is below the maximum contaminant level (MCL) for nitrates. In 2016, the City performed 33 nitrate analyses alone to ensure a safe water supply.

Unregulated Contaminants

The City monitors for unregulated contaminants as required by USEPA. This helps the USEPA and SWRCB determine where certain contaminants occur, and whether the contaminants need to be regulated.

Water Sources

Morgan Hill is located in South Santa Clara County, situated within the Coyote and Llagas underground aquifers. These aquifers are the source of Morgan Hill's water supply.

The City currently operates 13 groundwater wells throughout the City. In 2016, these wells supplied 2,046 million gallons of water to approximately 13,620 active water connections. The water produced by these wells is disinfected with sodium hypochlorite to protect against microbial contaminants.

An assessment of the drinking water sources for the City of Morgan Hill was completed in September 1998. The assessment concluded that the groundwater source to be most vulnerable to the following activities associated with contaminants detected in groundwater: low density septic systems, irrigated crops, grazing and animal operations, agricultural/irrigation wells and animal feeding operations (occurrence of nitrate in groundwater).

A copy of the complete assessment is available at the State Water Resource Control Board, Drinking Water Field Operations Branch at 850 Marina Bay Parkway, Bldg. P, 2nd Floor, Room 458, Richmond, California, and the City of Morgan Hill Utilities Division at 100 Edes Court.

Water Quality Data

The table on pages 6-7 of this report lists all the SWRCB-regulated drinking water contaminants detected during the test cycle up to December 31, 2016.

To ensure that tap water is safe to drink, SWRCB prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Morgan Hill's water is treated in accordance with SWRCB regulations.

The SWRCB Food and Drug Branch regulations establish limits for contaminants in bottled water; these limits provide the same protection for the public water supply. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk.

Unless otherwise noted, the data presented in this table is from testing done over the period January 1 - December 31, 2016. The State allows the City to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Thus, some of the data – though representative of the water quality – is more than a year old.

Water Sampling and Testing

The water sampling required by SWRCB consists of weekly Bacteria (520), Quarterly Nitrate (8), Quarterly Trihalomethanes (16), Quarterly Haloacetic Acids (16), Annual Nitrate (25), Triannual Inorganic Chemicals (184), Triannual Radiological (4), Triannual Synthetic Organic Chemicals (395), Triannual Volatile Organic Chemicals (196), Triannual General Physical (175), for a total of 1,535 required samples from 30 separate sample stations and the 15 active source wells located throughout the City's water production and distribution system.

Water Quality Statement

For the calendar year 2016, your tap water met all U.S. Environmental Protection Agency (USEPA) and State drinking water health standards. The City of Morgan Hill vigilantly safeguards your water supply, and once again we are proud to report that the City's system is in full compliance with all State Water Resource Control Board.

Other Information

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (800) 426-4791. Or find it on USEPA's website:

<http://www.epa.gov/dwstandardsregulations/drinking-water-standards-and-health-advisory-tables>

California notification levels are available on the State Board's website: http://www.swrcb.ca.gov/drinking_water/certlic/drinkingwater/NotificationLevels.shtml

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

Water System Improvements

The City's water system consists of 13 production wells, 182 miles of water main, nine pumping stations, and 12 reservoirs. This complex, interrelated system requires 24-hour monitoring and an extensive program of ongoing maintenance. Additionally, a five-year program of capital improvements must be constantly updated to plan and fund new capacity and the replacement of aging infrastructure. During the past year, the following water system improvements were completed:

New Water Main:

4000 Feet of 16" Water Main

New Well Drilling:

BoysRanch 2A Well, and Jackson Well #3

TERMS & ABBREVIATIONS USED IN THE DATA TABLES

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to PHGs or MCLGs as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Regulatory Action Level (AL): The concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow.

n/a: not applicable
ns: no standard
nd: not detectable at testing limit
cu: color unit (a measure of color in water)
ppb: parts per billion or micrograms per liter
ug/L: micrograms per liter
ppm: parts per million or milligrams per liter
mg/L: milligrams per liter
pCi/l: picocuries per liter (a measure of radiation)
MFL: Million Fibers per Liter, with a fiber length greater than 10 micrometers

grains per gallon: the measure of the concentration of a solution

TON: Threshold Odor Number (a measure of the odor associated with water)

umhos/cm: the measure of the dissolved inorganic salt content

<: less than

DLR: Detection limit for purposes of reporting.

Contaminants that may be present in source water before we treat it.

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, and mining or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agricultural and residential uses.
- **Radioactive contaminants**, which are naturally occurring.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum distillation, and can also come from gas stations, urban runoff and septic systems.

Water Quality Statement

For the calendar year 2016, your tap water met all U.S. Environmental Protection Agency (USEPA) and State drinking water health standards. The City of Morgan Hill vigilantly safeguards your water supply, and once again we are proud to report that the City's system is in full compliance with all State Water Resource Control Board.

MICROBIOLOGICAL CONTAMINENTS						
MICROBIOLOGICAL CONTAMINANT	HIGHEST MONTHLY % OF POSITIVE SAMPLES	NO. OF MONTHS IN VIOLATION	MCL	MCLG	TYPICAL SOURCE OF CONTAMINATION	ACTION LEVEL EXCEEDED?
TOTAL COLIFORM BACTERIA (01/01/2016 Thru 03/31/2016)	0.0%	0	MORE THAN 5.0% OF MONTHLY SAMPLES ARE POSITIVE	0	NATURALLY PRESENT IN THE ENVIRONMENT	NO
FECAL COLIFORM BACTERIA (STATE TOTAL COLIFORM RULE) (01/01/2016 THRU 03/31/2016)	0.0%	0	A ROUTINE SAMPLE AND A REPEAT SAMPLE ARE TOTAL COLIFORM POSITIVE, AND ONE OF THOSE IS ALSO FECAL COLIFORM OR E.COLI POSITIVE.	0	HUMAN AND ANIMAL FECAL WASTE	NO
E. COLI (FEDERAL REVISED TOTAL COLIFORM RULE) (4/1/2016 THRU 12/31/2016)	0.0%	0	ROUTINE AND REPEAT SAMPLES ARE TOTAL COLIFORM - POSITIVE AND EITHER IS E.COLI-POSITIVE OR SYSTEM FAILS TO TAKE REPEAT SAMPLES FOLLOWING E. COLI POSITIVE ROUTINE SAMPLE OR SYSTEM FAILS TO ANALYZE TOTAL COLIFORM-POSITIVE REPEAT SAMPLE FOR E. COLI	0	HUMAN AND ANIMAL FECAL WASTE	NO

LEAD AND COPPER RULE								
PARAMETER	DATE TESTED	UNITS	ACTION LEVEL	PHG (MCLG)	NUMBER OF SITES SAMPLED	HOUSEHOLD RESULTS 90th PERCENTILE	TYPICAL SOURCE OF CONTAMINATION	ACTION LEVEL EXCEEDED?
LEAD	Sep 2015	ppb	15	0.2	30	0	INTERNAL CORROSION OF HOUSEHOLD PLUMBING SYSTEMS; EROSION OF NATURAL DEPOSITS; LEACHING FROM WOOD PRESERVATIVES	NO
COPPER	Sep 2015	ppm	1.3	0.3	30	0.3	INTERNAL CORROSION OF HOUSEHOLD PLUMBING SYSTEMS; EROSION OF NATURAL DEPOSITS; LEACHING FROM WOOD PRESERVATIVES	NO

SAMPLING RESULTS FOR SODIUM AND HARDNESS									
PARAMETER	DATE TESTED	UNITS	MCL	PHG (MCLG) [MRDLG]	GROUNDWATER RANGE OF DETECTION			TYPICAL SOURCE OF CONTAMINANT	EXCEEDED MCL?
					LOW	HIGH	AVG.		
SODIUM	2016	ppm	NS	N/A	19	38	27	"SODIUM" REFERS TO THE SALT PRESENT IN THE WATER AND IS GENERALLY NATURALLY-OCCURRING	NS
HARDNESS	2016	ppm	NS		188	290	240	RUNOFF/LEACHING FROM NATURAL DEPOSITS	NS
HARDNESS	2016	GRAINS/GAL	NS		11	17	14	RUNOFF/LEACHING FROM NATURAL DEPOSITS	NS

PRIMARY DRINKING WATER STANDARDS - MANDATORY HEALTH RELATED STANDARDS										
PARAMETER	DATE TESTED	UNITS	DLR	MCL	PHG (MCLG) [MRDLG]	GROUNDWATER RANGE OF DETECTION			TYPICAL SOURCE OF CONTAMINANT	EXCEEDED MCL?
						LOW	HIGH	AVG.		
INORGANIC CHEMICALS										
ALUMINUM	2016	ug/L	50	1000	600	0	51	4.64	EROSION OF NATURAL DEPOSITS; RESIDUE FROM SOME SURFACE WATER TREATMENT PROCESSES	NO
BARIUM	2016	ppm	0.1	1	2	0.00	0.05	0.05	DISCHARGES OF OIL DRILLING WASTES AND FROM METAL REFINERIES; EROSION OF NATURAL DEPOSITS	NO
FLUORIDE (NATURALLY OCCURING)	2016	ppm	0.1	2	1	0	0.16	0.13	EROSION OF NATURAL DEPOSITS; WATER ADDITIVE THAT PROMOTES STRONG TEETH; DISCHARGE FROM FERTILIZER AND ALUMINUM FACTORIES	NO
NITRATE (AS N)	2016	ppm	2	45	45	0	7.4	4.0	RUNOFF AND LEACHING FROM FERTILIZER USE; LEACHING FROM SEPTIC TANKS AND SEWAGE; EROSION OF NATURAL DEPOSITS	NO
HEXAVALENT CHROMIUM	2016	ppb	1	10	0.02	1	2.7	1.9	DISCHARGE FROM ELECTROPLATING FACTORIES, LEATHER TANNERIES, WOOD PRESERVATION, CHEMICAL SYNTHESIS, REFRACTORY PRODUCTION, AND TEXTILE MANUFACTURING FACILITIES; EROSION OF NATURAL DEPOSITS	NO
IRON	2016	ppb	100	300		0	120	10.0	LEACHING FROM NATURAL DEPOSITS; INDUSTRIAL WASTES	NO
NITRATE + NITRITE (AS N)	2016	ppb		10	10	0	6.5	3.58	RUNOFF AND LEACHING FROM FERTILIZER USE; LEACHING FROM SEPTIC TANKS AND SEWAGE; EROSION OF NATURAL DEPOSITS	NO

DISINFECTANT BYPRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BYPRODUCT PECURSORS									
PARAMETER	DATE TESTED	UNITS	MCL	PHG (MCLG) [MRDL]	GROUNDWATER RANGE OF DETECTION			TYPICAL SOURCE OF CONTAMINANT	EXCEEDED MCL?
					LOW	HIGH	AVG.		
TRICHALOMETHANES (TTHM)	2016	ppb	80	N/A	0	18.05	6.36	BY-PRODUCT OF DRINKING WATER CHLORINATION	NO
HALOACETIC ACIDS (HAA5)	2016	ppb	60	N/A	0	2.6	1.21	BY-PRODUCT OF DRINKING WATER DISINFECTION	NO
CHLORINE RESIDUAL (CL2)	2016	ppm	4.0	[4.0]	0.2	0.67	0.42	DRINKING WATER DISINFECTANT ADDED FOR TREATMENT	ND

SECONDARY DRINKING WATER STANDARDS - AESTHETICS STANDARDS									
PARAMETER	DATE TESTED	UNITS	MCL	PHG (MCLG) [MRDLG]	GROUNDWATER RANGE OF DETECTION			TYPICAL SOURCE OF CONTAMINANT	EXCEEDED MCL?
					LOW	HIGH	AVG.		
CHLORIDE	2016	mg/L	500	N/A	3.4	77	54	RUNOFF/LEACHING FROM NATURAL DEPOSITS; SEAWATER INFLUENCE	NO
SULFATE	2016	mg/L	500	N/A	3.4	49	36.0	RUNOFF/LEACHING FROM NATURAL DEPOSITS; INDUSTRIAL WASTES	NO
TOTAL DISSOLVED SOLIDS	2016	mg/L	1000	N/A	340	430	376	RUNOFF/LEACHING FROM NATURAL DEPOSITS	NO
SPECIFIC CONDUCTANCE (E.C.)	2016	umho/cm	1,600	N/A	590	610	600	SUBSTANCES THAT FORM IONS WHEN IN WATER; SEA WATER INFLUENCES	NO
TURBIDITY	2016	UNITS	5	N/A	0	1.4	0	SOIL RUNOFF	NO
COLOR	2016	unit	15	N/A	0	0	0	NATURALLY-OCCURING ORGANIC MATERIALS	NO
ODOR-THRESHOLD	2016	TON	3	N/A	0	0	0	NATURALLY-OCCURING ORGANIC MATERIALS	NO
LIST OF ADDITIONAL CONSTITUENTS ANALYZED									
PH	2016	unit	NS	6.5-8.5	7.2	7.7	7.5	PH IS AN EXPRESSION OF THE INTENSITY OF THE BASIC OR ACIDIC CONDITION OF A LIQUID	NS

UNREGULATED CONTAMINATE MONITORING RULE 3										
PARAMETER	DATE TESTED	UNITS	NOTIFICATION LEVEL	PHG (MCLG)	GROUNDWATER RANGE OF DETECTION					
					LOW	HIGH	AVG.			
CHLORATE	2014	ug/L	800 ug/L	NS	0	150	57.5			
CHROMIUM	2014	ug/L	N/A	NS	0.91	3.7	2.32			
HEXALVALENT CHROMIUM	2014	ug/L	N/A	NS	0.78	3.5	2.1			
MOLYBDENUM	2014	ug/L	N/A		0	1.1	0.2			
STRONTIUM	2014	ug/L	N/A		170	590	444			
VANADIUM	2014	ug/L	50ug/L		1	6.3	2.2			

POSTAL CUSTOMER
MORGAN HILL, CA

Don't Be a Water Waster

- Adjust sprinklers so only your lawn is watered and not the house, sidewalk, or street.
- Run your clothes washer and dishwasher only when full. You can save up to 1,000 gallons a month.
- Monitor your water bill for unusually high use. Your bill and water meter are tools that can help you discover leaks.
- Water your lawn and garden in the morning or evening when temperatures are cooler.
- Use a broom instead of a hose to clean your driveway and sidewalk and save water every time.
- If water runs off your lawn easily, split your watering time into shorter periods for better absorption.
- Shorten your shower by a minute or two and you'll save up to 150 gallons per month.

These great ideas and more can be found at wateruseitwisely.com/100-ways-to-conserve



Dear Customers,

This report is sent in compliance with the Safe Drinking Water Act and only contaminants that were detected in samples are listed in this report. Landlords, businesses and schools are encouraged to share this report with non-billed water users at their locations. Additional copies are available at no charge by calling our office at (408) 227-9540. Our water quality specialist, Mike Carey, will be available to answer any questions you may have concerning this report.

Low Water Rates and Mandatory Water Conservation

Great Oaks' rates for water service continue to be the lowest in San José by an even wider margin than in past years – even with the Mandatory Water Conservation restrictions required by the State Water Resources Control Board and the California Public Utilities Commission.

Santa Clara Valley Water District Litigation Update

In November 2005, Great Oaks Water filed a lawsuit against the Santa Clara Valley Water District (SCVWD) for failing to properly set Groundwater Charges, also known as Pump Tax. In 2009, Great Oaks prevailed in both of two portions of the case in the trial court. In February 2010, the SCVWD appealed the decision and in December 2015, the court of appeal issued a decision that reversed the trial court judgment and ordered Great Oaks and SCVWD back to the trial court for further proceedings. Neither Great Oaks nor SCVWD were satisfied with the court of appeal decision and both petitioned the California Supreme Court to review the case. The Supreme Court granted review, but delayed briefing until it decides a related case. In the meantime, Great Oaks continues to challenge SCVWD's ever-increasing pump taxes, which now account for about 50% of your water bill.

Thank You

Your water is safe, clean and great tasting, and you pay one of the lowest rates for water in the State. As your water provider, Great Oaks is uniquely positioned to be an advocate on your behalf for positive change on the water issues that affect your lives. Thank you for your kind words of encouragement. We promise to continue to provide you with high quality water and strong community service.

Sincerely,

John Roeder, Chairman and CEO
Great Oaks Water Co.

**Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.**

此份有關你的食水報告，
內有重要資料和訊息，請找
他人為你翻譯及解釋清楚。

Chi tiết này thật quan trọng.
Xin nhờ người dịch cho quý vị.

During the past year, we have taken hundreds of water samples in order to determine the presence of any biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state allows us to monitor for certain substances less than once per year because the concentrations of substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

Regulated Substances							
Substance (unit of measure)	Year Sampled	MCL (MRDL)	PHG (MCLG) (MRDLG)	Amount Detected	Range Low-High	Violation	**Typical Source
1,1,1 Trichloroethane (ppb)	2013	200	1000	0.14	ND-1.5	NO	2
Freon 113 (ppb)	2013	1200		0.49	ND-12	NO	2,6
Barium (ppm)	2013	1	2	0.10	.08-.17	NO	1
Flouride (ppm)	2013	2	1	0.16	.14-.2	NO	1,3
Gross Alpha Part.(pCi/L)	2008	15	0	1.4	ND-4.1	NO	1
Chromium Total (ppb)	2013	100		3.37	1.6-8.6	NO	2,5
Hexavalent Chromium(ppb)	2014	10		3.48	1.8-8.3	NO	2,5
Nitrate [as NO3] (ppm)	2015	45	45	7.4	2.7-23.5	NO	3,4
Total Coliform (% positive)	2015	>5% MONTHLY SAMPLES POSITIVE	0	1.34%	0-10.44%	YES	5
Secondary Substances	Year Sampled	SMCL	PHG (MCLG)	Amount Detected	Range Low-High	Violation	Typical Source
Chloride (ppm)	2013	500	NS	42	35-54	NO	7
Copper (ppm)	2011	1	0.3	.0001	ND-.0048	NO	1
Specific Conductance (uS/cm)	2013	1600	NS	651	540-840	NO	8
Sulfate (ppm)	2013	500	NS	45	31-62	NO	7,9
Total Dissolved Solids (ppm)	2013	1000	NS	400	330-520	NO	7
Turbidity (NTU)	2013	5	NS	0.12	.06-.45	NO	10
Odor – Threshold(TON)	2013	3	NS	0.9	ND-2	NO	12
	Year Sampled	AL	PHG (MCLG)	90th%tile	Sites >AL /total sites	Violation	Typical Source
*Copper (ppm)	2014	1.3	0.3	0.48	0/30	NO	11
*Lead (ppm)	2014	15	0.2	0.004	0/30	NO	11

*Tap Water samples were collected for lead and copper analyses from sample sites throughout the service area.

Unregulated and Other Substances	Year Sampled	Amount Detected	Range Low-High	Typical Source
Alkalinity (ppb)	2013	215	180-280	1
Bicarbonate (ppb)	2013	273	220-340	1
Calcium (ppb)	2013	50	34-67	1
Hardness [as CaCO3] (ppm)	2013	280	230-360	1
Magnesium (ppb)	2013	38	31-50	1
Potassium (ppb)	2013	1.4	1.2-1.6	1
Sodium (ppm)	2013	29	26-41	1

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs (SMCLs) are set to protect the odor, taste, and appearance of water.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or risk to health. MCLGs are set by the US EPA.

NA: Not Applicable **NS:** No Standard **ND:** Not Detected

PDWS (Primary Drinking Water Standard): MCLs and MRDLs for contaminants that effect health, along with their monitoring and reporting requirements and water treatment requirements.

PHG (Public Health Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

ppb: parts per billion **ppm:** parts per million

TON: Threshold Odor Number, a measure of odor.

NTU: Nephelometric Turbidity Unit: This is a measure of the cloudiness of the water.

****Typical Source**

1. Erosion of natural deposits
2. Discharge from metal degreasing sites and other factories
3. Runoff and leaching from fertilizer use
4. Leaching from septic tanks and sewage
5. Naturally present in the environment
6. Dry-cleaning solvent
7. Runoff/leaching from natural deposits
8. Substances that form ions when in water
9. Industrial wastes
10. Soil runoff
11. Internal corrosion of household plumbing systems
12. Naturally occurring organic materials

Unregulated Contaminant Monitoring Rule 3

PARAMETER	UNITS	AVERAGE	RANGE
Chlorate	ppb	9.57	ND – 58.5
Chlorodifluoromethane	ppb	.181	ND – 0.98
Chromium	ppb	3.06	1.75 – 6.85
Hexavalent Chromium	ppb	3.322	1.8 – 6.55
Strontium	ppb	535.5	385 – 775
Vanadium	ppb	1.756	1.2 – 2.75

Unregulated contaminants do not have a drinking water standard set by the USEPA. The purpose of monitoring for these contaminants is to help the EPA decide whether the contaminants should have a standard.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at: (800) 426-4791 or <http://water.epa.gov/drink/hotline>.

Quality First

Once again we are proud to present our annual water quality report. This report covers all testing performed between January 1 and December 31, 2015. The events of the past few years have presented us with many challenges. In spite of this, we have maintained our high standards and we will deliver to you, the best quality drinking water possible. As we continue to feel the effects of the drought, it is important for all of us to be mindful of the dangers of handling hazardous materials carelessly. We must keep the paths to our underground water storage clean and clear. There may be other hurdles in the future, but know that we will always stand behind you and the drinking water we work diligently to provide. This report is sent in compliance with the Safe Drinking Water Act, and only contaminants that were detected in samples are listed in this report. Landlords, businesses, and schools are encouraged to share this report with non-billed water users at their locations. Additional copies are available at no charge by calling our office at (408)227-9540. Our water quality specialist, Mike Carey, will be available to answer any questions you may have concerning this report.

Source Water Assessment

Great Oaks Water conducted Drinking Water Source Assessments for all wells to determine potential sources of contamination. Assessments were performed in accordance with the Safe Drinking Water Act requirements. The assessments indicate that the wells may be vulnerable to contaminants from the following sources: septic systems, sewer collection systems serving nearby single family residential housing, nearby agricultural wells, gas stations, parks, highways and their related activities, nearby computer-related manufacturing facilities, roads, streets, parking lots, railroads, spreading basins, storm-drain discharge, crops, illegal activities, unauthorized dumping, unregulated tanks, photo processing and printing, and monitoring wells. All of Great Oaks Water Company's wells are constructed to minimize the influence of these potential contaminants under the approval of the California Department of Public Health. A copy of the assessment is available for viewing at the California Department of Public Health Drinking Water Program Office, 850 Marina Bay Parkway, Building P, Second Floor, Richmond, CA, or at Great Oaks Water Company, 20 Great Oaks Boulevard, Suite 120, San Jose, CA.

NITRATE

Nitrate in drinking water at levels above 45mg/l is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45mg/l may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider. Nitrate levels in Great Oaks Water Company's water sources are shown in the enclosed table. In 2014 Great Oaks Water Company did not detect nitrate at or above 45mg/l in any sources.

Source Water Description

The customers of Great Oaks Water Company are fortunate to have water supplied from very pristine aquifers underlying this valley. All of our water is pumped from 19 wells (not surface water) located throughout our service area.

Wellhead Protection Plan

Great Oaks Water ensures the safe operation and restricts access to all of the wells in our system. It is every resident's responsibility to guard against any activity that could do harm or contaminate our source water. All of the land in Great Oaks Waters service area is a channel to the water our wells draw. Be aware that oil spills and chemical spills can wash off the surface and make their way to storm drains and ultimately into the ground. Address these situations immediately to minimize their impact on our precious resource. Great Oaks Water will continue to do its part to protect our well sites, now all of us need to do our part to protect the watershed.

About Our Violation

In March 2015, Great Oaks Water Company was issued a Notice of Violation from the State Water Resources Control Board for exceeding the MCL for monthly bacteriological sampling. 19 out of 182 samples taken during the month of March 2015, indicated the presence of coliform bacteria. Great Oaks Water Company did emergency chlorination in the affected area followed by extensive unidirectional water main flushing. Great Oaks Water Company will continue to flush water mains to prevent this situation from happening again.

Since March 2015, Great Oaks Water has been in full compliance with all drinking water standards.

Substances That Could Be In Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. Contaminants that may be present in source water include:

- ◆ Microbial Contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- ◆ Inorganic Contaminants, such as salts and metals, that can be naturally occurring or can result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;
- ◆ Pesticides and Herbicides, that may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses;
- ◆ Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and which can also come from gas stations, urban storm water runoff, agricultural applications, and septic systems;
- ◆ Radioactive Contaminants, that can be naturally occurring or can be the result of oil and gas production and mining activities.

City of Milpitas

Water Quality in 2015

Consumer Confidence Report issued June 2016



Last year, as in years past, your tap water met all USEPA and State drinking water health standards. The City of Milpitas vigilantly safeguards its water supplies and once again, we are proud to report that our system had no health related water quality standard violations in 2015.

Drinking Water Sources

The City purchases drinking water from two wholesalers: two-thirds from the San Francisco Public Utilities Commission (SFPUC) and one-third from the Santa Clara Valley Water District (SCVWD). SFPUC water is primarily from the Hetch Hetchy watershed located in the Sierra Nevada mountains and is supplemented by water from the Alameda watershed in Calaveras Reservoir and San Antonio Reservoir for filtration and disinfection at the Sunol Valley Water Treatment Plant. SCVWD water is primarily from the Sacramento-San Joaquin Delta watershed via the South Bay Aqueduct, Dyer Reservoir, Lake Del Valle and San Luis Reservoir and is supplemented by local water sources in Anderson and Calero Reservoirs for filtration and disinfection at Penitencia and Santa Teresa Water Treatment Plants. In 2015, the City supplied an average of 7.8 million gallons of water per day to approximately 16,000 homes and businesses for indoor and outdoor use in Milpitas. The City serves SFPUC source water to the area south of Calaveras Blvd and east of I-680, as well as north of Calaveras Blvd. and east of I-880. SCVWD service areas are west of I-880, as well as south of Calaveras Blvd and west of I-680. Refer to the Water Source Map to view the water service areas.



Some Hillside homes (Spring Valley Heights Subdivision and Ed Levin Park area) are not shown due to small size on map. They are in the SFPUC service area.

Emergency Supplies

The City does not blend SFPUC and SCVWD waters under normal operating conditions. However, the service areas can be physically interconnected to provide emergency water supply if needed. The City also has emergency interties with Alameda County Water District to the north and San Jose Water Company to the south. SFPUC and SCVWD share an intertie that can supply water from one wholesaler to the other. The City's Pinewood Well, located in the southwestern portion of the City, is also an emergency water supply.

Protecting Water Sources

Drinking Water Source Assessment Program

Drinking Water Source Assessment Programs evaluate the vulnerability of water sources to potential contamination. Drinking water source assessments have been conducted for both of the City of Milpitas' potable water supplies—SFPUC and SCVWD. The assessments are available for review at the State Water Resources Control Board (SWRCB), Department of Drinking Water, District Office. You may request that a summary of the assessments be sent to you by calling (510) 620-3474.

SFPUC

The SFPUC conducts a watershed sanitary survey for the Hetch Hetchy source annually and local water sources every five years. In 2015, a special watershed sanitary survey for the upcountry water sources including Cherry Creek, Eleanor Creek, and Lower Cherry Aqueduct was completed as part of the SFPUC's drought response plan efforts. These surveys evaluate the sanitary condition, water quality, potential contamination sources, and the results of watershed management activities, and were completed with support from partner agencies including the National Park Service and US Forest Service. These surveys have identified wildlife, stock, and human activities as potential contamination sources. The reports are available for review at the San Francisco District office of SWRCB (contact: 510-620-3474).



Hetch Hetchy Watershed. Source: SFPUC

SCVWD

SCVWD's source waters are vulnerable to potential contamination from a variety of land use practices, such as agricultural and urban runoff, recreational activities, livestock grazing, and residential and industrial development. The imported sources are also vulnerable to wastewater treatment plant discharges, seawater intrusion, and wild fires in open space areas. In addition, local sources are also vulnerable to potential contamination from commercial stables and historic mining practices. No contaminant associated with any of these activities has been detected in the SCVWD's treated water. The water treatment plants provide multiple barriers for physical removal and disinfection of contaminants. For additional information, visit SCVWD's website at www.valleywater.org.



Recycled Water

Recycled Water - Providing Drought-Proof, High Quality Water for Our Community

In 2015, irrigation, commercial, and industrial customers in Milpitas used 764,000 gallons of recycled water per day, thereby conserving an equal amount of drinking water. Recycled water from the San Jose/Santa Clara Water Pollution Control Plant undergoes an extensive treatment process (including filtration and disinfection) and is delivered to landscape irrigation and industrial process customers in Milpitas, San Jose and Santa Clara. For more information, please visit the South Bay Water Recycling Program's web site at: <http://www.sanjoseca.gov/sbwr>.

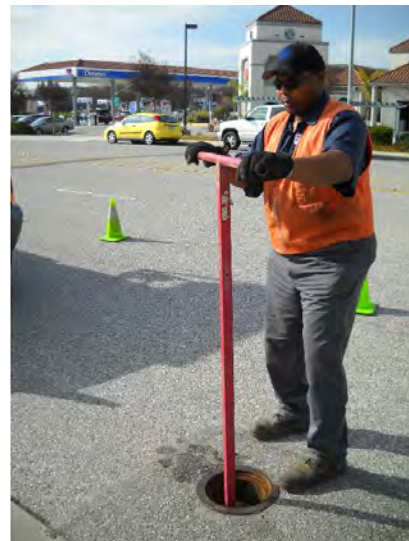
Maintaining Water Quality

Hydrant and Water Main Flushing. Flushing of fire hydrants and water mains is performed to remove sediment and keep the distribution system refreshed. As a result, residents in the immediate vicinity may experience temporary discoloration in their water. This discoloration does not affect the safety of the water. If you experience discoloration in your water after crews have been flushing in your neighborhood, clear the water from your home pipes by running water faucets for a few minutes. Flushing activities have been minimized due to the drought.

Backflow Testing. Backflow prevention devices keep the water supply safe by ensuring that the water used does not flow back into the City's distribution system. Milpitas sends out notifications and tracks the testing and repair of over 1,900 backflow devices each year.

Water Sampling. Sampling of the water system is also performed to verify the quality. This requires purging of the water line for a sample to be lab tested.

Survey. Site surveys are also performed to ensure the existing water system is also protected from any possible contamination.



Water Quality Monitoring

Fluoride and Dental Fluorosis

SFPUC supplies fluoridated water to the City. The fluoride levels in the treated water are maintained within the range required by state regulations. SFPUC water has been fluoridated at 0.9 milligram per liter (mg/L) until May 2015, when the State regulatory guidance was revised. That water source is now fluoridated at a new optimal level of 0.7 mg/L. Infants fed formula mixed with water containing fluoride at this level may have an increased chance of developing tiny white lines or streaks in their teeth. These marks are referred to as mild to very mild fluorosis, and are often only visible under a microscope. Even in cases where the marks are visible, they do not pose any health risk. The Center for Disease Control (CDC) considers it safe to use optimally fluoridated water for preparing infant formula. To lessen this chance of dental fluorosis, you may choose to use low-fluoride bottled water to prepare infant formula. Nevertheless, children may still develop dental fluorosis due to fluoride intake from other sources such as food, toothpaste and dental products. Contact your health provider or SWRCB if you have concerns about dental fluorosis. For additional information visit the SWRCB website www.swrcb.ca.gov/ and search for fluoride, or the CDC website www.cdc.gov/fluoridation/index.htm. Water supplied by SCVWD is not fluoridated although SCVWD is planning on starting fluoridation in future years. Please reference the map on the front page of this document to find your service area.

Chloramine

Both SFPUC and SCVWD waters are treated with chloramine to protect public health by destroying disease-causing organisms. Chloramine is considered safe for use as a water disinfectant. However, home dialysis patients and aquarium owners must take precautions before using the chloraminated water in kidney dialysis machines or aquariums. Dialysis patients should consult with their doctor or dialysis technician and aquarium owners should consult with their pet store.



Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using the water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800) 426-4791 or at: www.epa.gov/safewater/lead.

2015 Water Quality Data

Water Quality Monitoring Results

The City collected over 2,000 drinking water samples for analysis in State-certified laboratories to safeguard the public's health and water supply in 2015. The water supplied in Milpitas has met all USEPA and State drinking water health standards in 2015, as shown in the following table, which lists all drinking water constituents that were detected during the 2015 calendar year. Additionally, many other constituents were monitored. Unless otherwise noted, the data presented in this table are for testing done between January 1 and December 31, 2015.

Definitions

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs or MCLGs as is economically and technologically feasible. Secondary MCLs (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by U.S. Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Notification Level (NL): These are health-based advisory levels established by SWRCB for chemicals in drinking water that lack MCLs.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health, along with their monitoring and reporting requirements, and water treatment requirements.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

				SCVWD Water ⁽¹⁾		SFPUC Water ⁽²⁾		
DETECTED CONSTITUENTS	Unit	MCL	PHG [MCLG]	Range or Level	Avg. or [Max]	Range or Level	Avg. or [Max]	Typical Sources in Drinking Water
Microorganism								
Total Coliform Bacteria ⁽³⁾	%	5	[0]	ND	ND	ND	ND	Naturally present in environment
Giardia lamblia	Cyst/L	TT	[0]	0 - 0.2	[0.2]	0 - 0.08	0.01	Naturally present in environment
Cryptosporidium	Oocysts/L	TT	[0]	ND	ND	ND	ND	Naturally present in environment
Turbidity ⁽⁵⁾								
Unfiltered Hetch Hetchy Water	NTU	5	NS	NA	NA	0.2 - 0.5	[3.1]	Soil runoff
Filtered Water – SVWTP	NTU	MCL = 1, and 95% of samples minimum ≤ 0.3 NTU	NS	NA	NA	97%-100% of samples ≤ 0.3 NTU	[1]	Soil runoff
Filtered Water – PWTP STWTP	NTU	MCL = 1, and 95% of samples minimum ≤ 0.3 NTU	NS	Both plants 100% of samples ≤ 0.3 NTU	[0.28] [0.12]	NA	NA	Soil runoff
Milpitas distribution system ^(3,4)	NTU	5	NS	ND - 1.63	0.19	ND - 6.10	0.35	Soil runoff
Inorganic Chemicals								
Chlorine residual ⁽³⁾	ppm	MRDL = 4	MRDLG = 4	0.3 - 4.0	1.4	0.6 - 3.8	2.6	Disinfection treatment
Fluoride (naturally occurring)	ppm	2	1	ND	ND	ND - 0.8	0.3	Erosion of natural deposits
Fluoride (with additive) ⁽⁶⁾	ppm	2	1	NA	NA	0.6 - 1.2	0.9	Water additive promotes strong teeth
Nitrate (as NO ₃)	ppm	45	45	ND - 5	ND	ND	ND	Fertilizer runoff, erosion of natural deposits
Organic Chemicals								
Total Organic Carbon ⁽⁷⁾	ppm	TT	NS	2.27 - 3.50	3.10	1.4 - 5.2	2.1	Various natural and man-made sources
Secondary Standards								
Aluminum	ppb	1000	60	ND - 68	ND	ND	ND	Erosion of natural deposits
Chloride	ppm	600	NS	85 - 163	120	<3 - 16	8.4	Soil runoff, leaching from natural deposits
Color ^(3,4)	unit	15	NS	<5 - 90	<5	<5	<5	Natural occurring organics
Odor ⁽³⁾	TON	3	NS	<1	<1	<1	<1	Natural occurring organics
Specific Conductance	µS/cm	2200	NS	621 - 872	720	34 - 213	144	Substances that form ions when in water
Sulfate	ppm	600	0.5	56.4 - 76.1	65.6	1.2 - 30	15	Soil runoff, leaching from natural deposits
Total Dissolved Solids (TDS)	ppm	1500	NS	330 - 462	382	<20 - 93	54	Soil runoff, leaching from natural deposits
Radionuclides								
Natural Uranium ⁽⁸⁾	pCi/L	20	[0]	1	-	ND	ND	Erosion of natural deposits

KEY	ND = Not Detected	PWTP = Penitencia Water Treatment Plant
<= Less Than	NL = Notification level	
Avg = Average	NS = No Standard	STWTP = Santa Teresa Water Treatment Plant
cyst/L = microbe cysts/liter	NTU = Nephelometric Turbidity Units	
LRAA = locational running annual average	Oocyst/L = microbe Oocysts/liter	SVWTP = Sunol Valley Water Treatment Plant
is reported, which includes test results of prior year	pCi/L = picocuries per liter	
Max = Maximum	ppb = parts per billion	
NA = Not Applicable	ppm = parts per million	
	TON = Threshold Odor Number	
	µS/cm = Microsiemens/centimeter	

2015 Water Quality Data (continued)

DETECTED CONSTITUENTS - Unregulated	Unit	MCL	PHG [MCLG]	SCVWD Water ⁽¹⁾		SFPUC Water ⁽²⁾		Typical Sources in Drinking Water
				Range	Avg. or [Max]	Range	Avg. or [Max]	
Alkalinity (as CaCO ₃)	ppm	NS	NS	83 - 87	85	7 - 128	30	Physical characteristic
Ammonia (free)	ppm	NS	NS	0.06 - 0.22	0.15	ND	ND	Disinfection treatment
Ammonia (total)	ppm	NS	NS	0.34 - 0.55	0.47	ND	ND	Disinfection treatment
Boron	ppb	(1000) NL	NS	165 - 222	190	103	103	Natural deposits
Bromide	ppb	NS	NS	100 - 220	160	ND	ND	Natural deposits
Calcium	ppm	NS	NS	22 - 24	23	3 - 18	11	Natural deposits
Chlorate ⁽³⁾	ppb	(800) NL	NS	0 - 81	[81]	0 - 120	[120]	Byproduct of disinfection
Chromium ⁽³⁾	ppb	NS	NS	0 - 0.30	[0.30]	0 - 0.24	[0.24]	Natural deposits
Hardness (as CaCO ₃)	ppm	NS	NS	131 - 149	136	13 - 65	42	Physical characteristic
Hexavalent Chromium (dissolved) ⁽³⁾	ppb	NS	NS	0 - 0.057	[0.057]	0 - 0.086	[0.086]	Natural deposits
Magnesium	ppm	NS	NS	14 - 17	16	0.2 - 5.6	3.7	Natural deposits
Molybdenum ⁽³⁾	ppb	NS	NS	0 - 1.9	1.9	ND	ND	Natural deposits
pH ⁽³⁾	unit	NS	NS	7.86 - 8.57	8.19	7.33 - 9.90	9.33	Acidity of water
Phosphate	ppm	NS	NS	0.87 - 1.05	0.94	ND	ND	Natural deposits, anticorrosive additive
Potassium	ppm	NS	NS	3.5 - 4.4	4.0	0.2 - 0.9	0.6	Natural deposits, soil runoff
Silica	ppm	NS	NS	5 - 14	9	3.7 - 5.4	4.7	Natural deposits, treatment
Sodium	ppm	NS	NS	60 - 97	80	2.9 - 19	13	Natural deposits
Strontium ⁽³⁾	ppb	NS	NS	0 - 270	[270]	0 - 290	[290]	Natural deposits
Vanadium ⁽³⁾	ppb	(50) NL	NS	0 - 2.0	[2.0]	0 - 0.53	[0.53]	Natural deposits
Disinfection By-products								
Total Trihalomethanes ⁽³⁾	ppb	80	NS	50 - 76	57.4 LRAA	24 - 39	36.1 LRAA	By-product of disinfection
Total Haloacetic Acids ⁽³⁾	ppb	60	NS	0 - 16	11.0 LRAA	19 - 36	29.3 LRAA	By-product of disinfection
Lead and Copper⁽⁹⁾	Unit	AL	PHG	Range	90th Percentile	# sites ⁽¹⁰⁾	# sites >AL	Typical Sources in Drinking Water
Copper	ppb	1300	300	16 - 170	70	35	0	Corrosion of household plumbing
Lead	ppb	15	0.2	<0.5 - 4	1.8	35	0	Corrosion of household plumbing

Notes:	(6) SFPUC started fluoridating its water in November 2005.
(1) Water quality data in SCVWD's transmission system, unless noted as (3)	(7) Precursor for disinfection byproduct formation.
(2) Water quality data in SFPUC's transmission system, unless noted as (3)	(8) Result from monitoring done by SCVWD at San Luis Reservoir on 11/5/2013. Radiological monitoring is conducted every 9 years by water wholesalers as well as by the City.
(3) Water quality data in the City's distribution system.	(9) Lead and copper monitoring was conducted for selected homes and businesses in August 2013. The standard is met if the 90th percentile is less than the action level.
(4) Although one MCL exceedance for Color and Turbidity occurred in 2015, the locational running annual average was not exceeded. Color and Turbidity are secondary standards that do not affect human health.	(10) 29 sites are in SFPUC service area; 6 sites are in SCVWD service area.
(5) Turbidity is a measure of the cloudiness of the water, and is also used to indicate the effectiveness of the filtration system. High turbidity can hinder the effectiveness of disinfectants.	

Contaminants and Regulations

The sources of drinking water (both tap and bottled water) include rivers, lakes, oceans, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Such substances are called contaminants. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides** that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.
- **Radioactive contaminants** which can be naturally-occurring or be the result of oil and gas production and mining activities.

Be the Solution to Storm Water Pollution

Ever wonder where that storm drain goes? Unlike indoor plumbing, the storm drain carries rainwater and urban pollution directly to our neighborhood creeks and eventually to the San Francisco Bay without treatment! Here are a few simple things you can do to prevent pollution of our creeks and Bay:

- Call the Household Hazardous Waste Program at (408) 299-7300 to make an appointment to dispose household hazardous wastes such as batteries, paints, fluorescent lamps, and used motor oil to your local hazardous waste facilities.
- Sweep up leaves, dirt and waste near curbs and place in the proper bins for recycling or garbage collection.
- Pick up litter. A large portion of the trash in our creeks and Bay starts out as litter on our streets.
- Keep pet waste away from neighborhood streets and storm drains.

In order to ensure that tap water is safe to drink, USEPA and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

What Else Should I Know?

More information about contaminants and potential health effects can be obtained by calling the USEPA'S Safe Drinking Water Hotline (1-800-426-4791).

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as those with cancer undergoing chemotherapy, who have undergone organ transplants, HIV/AIDS, other immune system disorders, some elderly people, or infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline 1-800-426-4791 or at www.epa.gov/safewater.

Cryptosporidium and *Giardia* are parasitic microbes found in most surface water. Test methods approved by the USEPA do not distinguish between dead organisms and those capable of causing disease. Filtration and disinfection are common effective treatment methods, but cannot guarantee 100 percent removal. If ingested, these parasites may produce symptoms of nausea, abdominal cramps, diarrhea, and associated headaches. Very low levels were found as shown on the Water Quality Data table on page 4 and are below levels of concern for most people. Most healthy individuals overcome the disease within a few weeks. However, immuno-compromised people are at greater risk. Consult your health provider. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

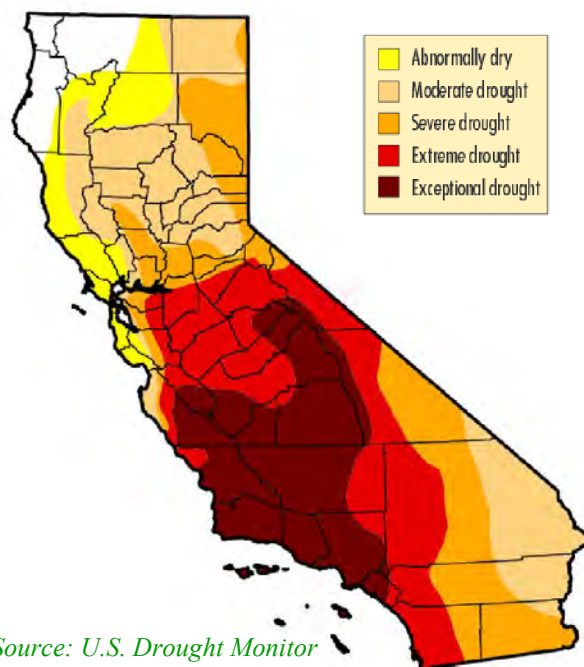


Drought Update

The State of California is experiencing a severe multiple-year water drought. On May 9, 2016, Governor Brown signed a Proclamation which mandated permanent potable water use restrictions. In addition, on May 18, 2016 the State Water Resources Control Board (SWRCB) adopted revised water conservation regulations. Similarly, San Francisco Public Utilities Commission (SFPUC) requested water conservation targets 10% and Santa Clara Valley Water District (SCVWD) is expected to request 10-20% water conservation targets, reflecting their supply conditions. In order to meet these goals, the City is asking all residents and businesses to cut back their water use. City code currently prohibits the following uses of water and can apply fines for misuse of water.

It is prohibited to....

- Use potable water to water lawn or landscape more than two days per week.
- Use potable water to clean sidewalks, decks, or buildings.
- Construct new swimming pools or ponds or initial fill of any swimming pool or pond (refilling due to evaporation or repairs is acceptable)
- Use potable water to clean, fill, or maintain levels in decorative fountains
- Use potable water in a way that results in flooding or runoff
- Use a hose unless there is a shutoff nozzle on end of hose
- Serve water at a restaurant unless requested by customer
- Use broken or defective plumbing, sprinkler or irrigation systems



Source: watersavings.org

For the latest water use regulations, please visit the City's website at www.ci.milpitas.ca.gov. For more information on conservation and rebates, contact the Santa Clara Valley District's Water Conservation Hotline at (408) 630-2554 or email conservation@valleywater.org.

Frequently Asked Questions

Why is my water brown or not clear?

Water sitting in aging household plumbing may become brown or rusty colored. This should clear up once sitting water is flushed out from the pipes and replaced with water that has not been sitting in the pipes. Also check for blocked fixture strainers, dirty filters, and dirty water heater.

Is there fluoride in the water?

See the water service area map on page 1. If you live in the blue colored area for SFPUC, you have fluoridated water. Otherwise, you do not have fluoridated water.

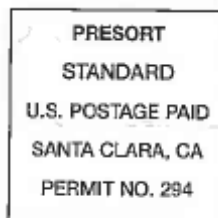
Why has my water pressure dropped suddenly?

Call the Milpitas Public Works Department at (408) 586-2600. You can also check for clogged strainers and proper operation of any pressure regulator (setting). The Water system in the streets varies typically from 40 to 140 psi depending on the location.

If you use water for medical equipment such as a dialysis machine, medical equipment requiring re-calibration if the water quality fluctuates, etc., please provide your email address and contact information (name, address, phone #) to jleung@ci.milpitas.ca.gov with a subject: "water medical dependent user".



City of Milpitas
455 E. Calaveras Blvd.
Milpitas, CA 95035



ECRWSS

This report contains important information about your drinking water. Translate or speak about it with someone who understands it.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

此份有关你的食水报告,内有重要资料和信息,请找他人為你翻譯及解釋清楚。

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

**Chi tiết này thật quan trọng.
Xin nhờ người dịch cho quý vị.**

यह सूचना महत्वपूर्ण है ।
कृपा काके किसी से :सका अनुवाद कराये ।

ਇਹ ਸੂਚਨਾ ਮਹੱਤਵਪੂਰਣ ਹੈ ।
ਕ੍ਰਿਪਾ ਕਰਕੇ ਕਿਸੀ ਤੋਂ ਇਸ ਦਾ ਅਨੁਵਾਦ ਕਰਾਉ ।

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

Postal Customer

2016 Consumer Confidence Report

HOW CAN I GET INVOLVED?

City Council meetings typically occur on the first and third Tuesday of every month at 7:00 p.m. in the City Hall Council Chambers located at 455 E. Calaveras Blvd. City Council Agendas are posted prior to each meeting at City Hall and on the City's website.

The City is a member of the American Water Works Association and the Bay Area Water Supply and Conservation Agency.

To Contact Us

Billing Questions 408.586.3100

Water Emergencies (Mon.-Fri., 8:00 a.m. - 5:00 p.m.) 408.586.2600

Water Emergencies (after hours) 408.586.2400

Water Quality Questions 408.586.3326

Water Conservation Hotline: 408.586.2666

Visit our website at www.ci.milpitas.ca.gov

For questions or comments about water quality, please call (408) 586-2600.

EPA Safe Drinking Water Hotline 800.426.4791

State Water Resources Control Board, Department of Drinking Water District Office 510.620.3474

To find out more about drinking water treatment, quality and regulations, visit these internet sites:

American Water Works Association • www.awwa.org

Santa Clara Valley Water District • www.valleywater.org

San Francisco Public Utilities Commission • www.sfwater.org

United States Environmental Protection Agency • www.epa.gov/safewater/

State Water Resources Control Board Division of Drinking Water • www.cdph.ca.gov/programs/pages/ddwem.aspx

Water Quality 2015

CONSUMER CONFIDENCE REPORT JUNE 2016



Tuolumne River

photo: SFPUC

Your Water Quality

The City of Mountain View is committed to providing its customers with a safe and reliable supply of high-quality drinking water that meets federal and state standards. The City of Mountain View works with its wholesale water suppliers, the San Francisco Public Utilities Commission (SFPUC) and the Santa Clara Valley Water District (SCVWD), to test over 2,000 water samples each year to continuously monitor water quality. Each year the City publishes a summary of water quality sampling results and other information about Mountain View's water system in its Consumer Confidence Report. This 2015 Consumer Confidence Report was prepared in accordance with Federal Safe Drinking Water Act and State Water Resources Control Board requirements.

The Water Journey: Source to Tap

Mountain View's drinking water undertakes a long journey before being delivered to your tap. From its original source, water is captured in reservoirs and aquifers, then treated and disinfected before entering the City's water distribution system and being delivered to your home. Look inside to learn about the journey your water takes before being delivered, and how the City operates and maintains its water system.

Read More Inside:

Your Drinking Water	2
Conservation Update	2
The Water Journey	3
Protecting Your Health	4
Water Quality Data	5
Important Definitions	5
Protecting Source Waters	7
How to Contact Us	8

This report contains important information about your community's water quality. If necessary, please have the report translated or speak with a friend who understands it well.

Este reporte contiene información importante sobre la calidad del agua en su comunidad. Si necesita entender su contenido en español, pida a un familiar o amigo que se la explique.

Это сообщение содержит важную информацию о качестве воды в нашем регионе. Если вам нужна помощь в переводе, поговорите с человеком, хорошо понимающим английский язык.

这份报告含有关于您社区饮用水质量的重要资讯。如果需要, 请找可以为您翻译的人翻译或解释清楚

Your Drinking Water

Mountain View's Water Supply Sources

The City of Mountain View supplies nearly eight million gallons per day to over 17,900 meter connections using reservoirs, pump stations, wells and over 176 miles of pipeline. The City obtains water from several sources to provide operational flexibility during system maintenance, drought and disasters. The map on the right shows the three zones where source waters are distributed within Mountain View. Mountain View's drinking water sources are described below.

San Francisco Public Utilities Commission

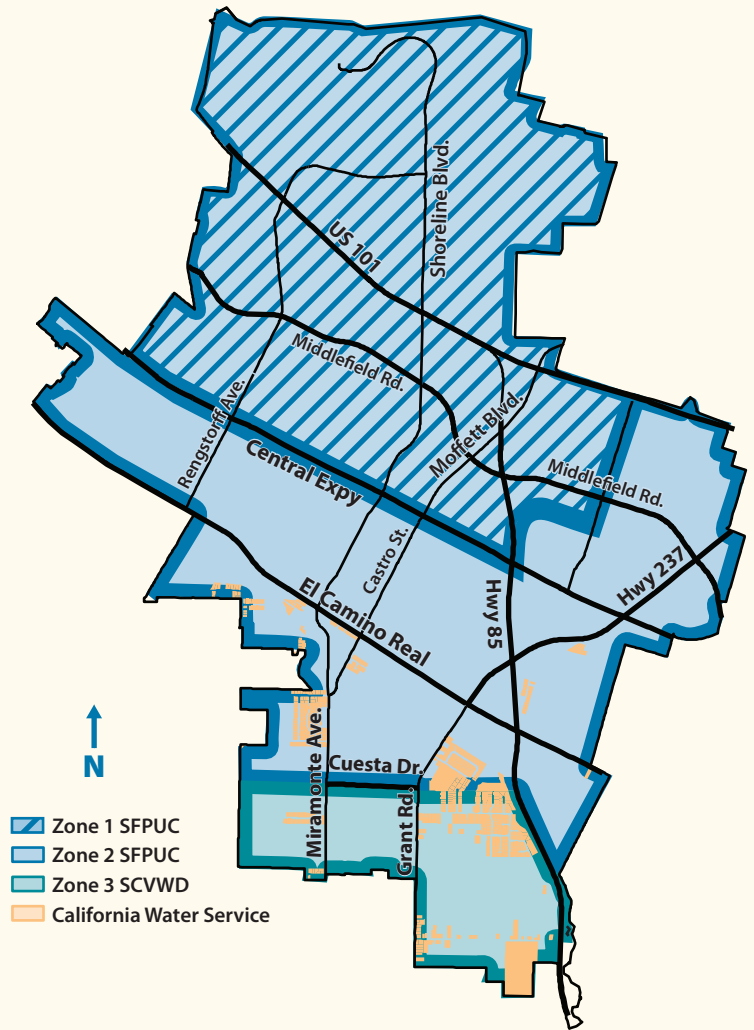
The City purchases approximately 90 percent of its drinking water from the San Francisco Public Utilities Commission's (SFPUC) Hetch Hetchy system. Most of the SFPUC's water originates from Sierra Nevada snowmelt that flows into the Tuolumne River and is stored in the Hetch Hetchy Reservoir in Yosemite National Park. Other sources of SFPUC water include rainwater runoff collected in watersheds in Alameda, San Mateo and Santa Clara counties.

Santa Clara Valley Water District

Approximately 8 percent of the City's potable water supply is purchased from the Santa Clara Valley Water District (SCVWD). About half of this water is imported from the Sacramento-San Joaquin Delta (Delta). The SCVWD's other water sources include local groundwater and surface water collected and stored in local reservoirs. For operational flexibility, the zone served with SCVWD water is occasionally supplemented with water from the SFPUC.

City Wells

Two percent of the potable water supply comes from groundwater wells owned and operated by the City. This water is pumped from a deep aquifer and blended with SFPUC water for distribution to City water customers.



San Luis Reservoir, October 2015

Conservation Update

In response to the increasingly severe drought, Governor Jerry Brown and the State Water Resources Control Board (Water Board) imposed mandatory reductions on urban water suppliers throughout California. Mountain View's mandatory reduction was set at 16 percent (compared to 2013 water use). Thanks to the efforts of our residents, businesses and institutions, Mountain View exceeded the 16 percent mandate and achieved 28 percent conservation for the entire year. However, despite normal precipitation this winter, sustained efforts will be necessary to fully replenish water supplies. Information about the City's current water-use restrictions and conservation programs can be found online at www.conservewater.mountainview.gov or by calling the City's Water Conservation Hotline at (650) 903-6216.

The Water Journey: Source to Tap

Mountain View's drinking water completes a long journey before reaching each of the City's water customers. From its original source as rain or snow, water is captured in reservoirs and aquifers, then treated and disinfected before being delivered to the City's water distribution system and your tap.

Capturing Water from the Source

Most of the City's drinking water originates from pristine Sierra Nevada snowmelt, captured near the headwaters of the Tuolumne River in the Hetch Hetchy Reservoir in Yosemite National Park. Other sources of water include the Delta and local rainwater runoff captured in reservoirs in Santa Clara and Alameda counties. The Delta transports snowmelt and rainwater runoff from 40 percent of California's land area, including the Sierra Nevada, Coast Ranges, and southern Cascade Range. Water in the Delta system travels through rivers, aqueducts, and reservoirs such as Shasta, Oroville, New Melones, New Don Pedro, Del Valle, and San Luis before entering Santa Clara County. Once in the county, Delta water is percolated into the groundwater aquifers or combined with local surface water and stored in local reservoirs for treatment and groundwater replenishment.

Treatment and Disinfection

Different sources of water require different levels of treatment and disinfection. Hetch Hetchy Reservoir is the largest water supply on the West Coast that does not require conventional treatment. Due to its highly protected source and conveyance facilities (closed pipes and tunnels), Hetch Hetchy water requires only pH adjustment for corrosion control, and disinfection. Delta water and rainwater runoff stored in regional reservoirs use conventional water treatment processes (coagulation/flocculation, sedimentation and filtration), in addition to corrosion control and disinfection. Facilities used to treat and disinfect the City's water sources include the Tesla Treatment Facility, Sunol Valley Water Treatment Plant, and Rinconada Treatment Plant.

Delivery System

Mountain View's water distribution system includes over 176 miles of pipelines up to 27 inches in diameter. The City's three pressure zones are hydraulically isolated to maintain optimal pressure and regulate the flow of different sources into each zone. Mountain View has four water storage reservoirs that hold between one and eight million gallons each. The City's reservoirs provide operational maintenance flexibility and back-up water supply in case of emergency.

Teamwork

Operating a drinking water system requires a large team of individuals with knowledge and training in different disciplines. Mountain View's staff of engineers and certified operators and technicians monitor important items such as quality and pressure, perform ongoing maintenance and repairs, plan for and design system replacements, upgrades and extensions and identify and quickly address problems such as leaks. The City also works closely with its wholesale suppliers to coordinate maintenance shutdowns and repairs, source water changes, and other actions that could change the characteristics or availability of the City's water supply.

Drought Challenges

As conditions change due to drought and other factors, the City and its wholesale suppliers adjust operations to meet each new challenge. Common problems encountered during drought years that can affect the taste and quality of drinking water include: increased surface water temperature, slower reservoir turnover, and slower system flow. To mitigate and prevent water quality problems, the City and its wholesale suppliers work together to adjust operational practices as needed. In some cases these activities, such as system flushing, may appear to be contradictory to water conservation objectives, but are necessary to ensure the water we deliver remains fresh.



Sacramento-San Joaquin Delta photo: DWR



Rinconada Treatment Plant photo: SCVWD



Graham Reservoir Pump Station



Utility crew performs a repair.



Protecting Your Health

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, and some elderly and infants can be particularly at risk from infections. These individuals should seek advice about drinking water from their health-care providers. EPA and Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection from *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Water Quality Monitoring

Nitrate: Nitrate in drinking water at levels above 10 milligrams per liter (mg/L) is a health risk for infants less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of an infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant or you are pregnant, you should seek advice from your health-care provider. Nitrate levels in Mountain View's water did not exceed regulatory health levels.

Lead: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water comes primarily from materials and components associated with water service lines and home plumbing. The City of Mountain View is responsible for providing high quality drinking water but cannot control the variety of materials used in private plumbing components. When your water has been sitting in your on-site plumbing for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Keep a pitcher or bucket nearby to collect this flush water and use it to water plants in your house or garden.

If you are concerned about lead in your water, you may wish to have your water tested independently. Testing can be performed using an over-the-counter lead testing kit commonly available at local hardware stores. Additional information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/lead.



In compliance with state and federal regulations, the City conducts lead testing every three years. Samples are collected from representative homes throughout the City and sent to a laboratory for testing.

Cryptosporidium and Giardia: *Cryptosporidium* and *Giardia* are parasitic microbes found in most surface water supplies. If ingested, these parasites may produce symptoms of nausea, stomach cramps and headaches. The SFPUC and SCVWD regularly test for *Cryptosporidium* and *Giardia* in their source water and treated water supplies.

Chloramine Disinfectant: Drinking water provided to the City of Mountain View by the SFPUC and SCVWD is disinfected using chloramine. Although people and animals can safely drink chloraminated water, chloramine must be removed or neutralized for some special users, including some business and industrial customers, kidney dialysis patients and customers with fish and amphibian pets. More information on chloramine is available at: <https://www3.epa.gov/region9/water/chloramine.html>.



Drinking Water Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, that can be naturally occurring or from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.

Radioactive contaminants that can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA and the Water Board regulate the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration sets standards for bottled water (based on EPA standards) to provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

Water Quality Data

Water quality staff from the SFPUC, the SCVWD, and the City of Mountain View regularly collect and test water samples from reservoirs, wells and designated sampling points to ensure the water supplied to Mountain View customers meets state and federal drinking water standards. This table provides an analysis of the results of water samples collected in 2015. The table contains results for substances detected in the water, including the name of each substance, the highest level allowed by regulation, the amount detected, the usual sources of each substance and a key to the units of measurement. Sample results that are below detection limits are not listed. The presence of a substance does not necessarily indicate the drinking water poses a health risk. For additional details about this table, refer to the important definitions below and the table key on Page 6.

Important Definitions

- Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs are set by the U.S. EPA.
- Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected health risk. PHGs are set by the California Environmental Protection Agency.
- Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.
- Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected health risk. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- Detection Limit for Purposes of Reporting (DLR):** The designated minimum level at or above which a contaminant in drinking water must be reported to the Water Board.

CITY OF MOUNTAIN VIEW SOURCE WATER QUALITY DATA FOR 2015 (1)				
Detected Contaminants		Measurements		
Primary Health Related Constituents	Units	DLR	MCL	PHG or MCLG
Turbidity (3)				
Unfiltered Hetch Hetchy Water	NTU	—	5	NS
Filtered Water (turbidity)	NTU	—	TT (5)	NS
Filtered Water (percentage of time)	—	—	TT (5)	NS
Microbiological				
Giardia lamblia	Cyst/L	—	TT	0
Organic Chemicals				
Total Trihalomethanes (TTHMs)	ppb	0.5	80	NS
Total Haloacetic Acids (HAA-5s)	ppb	1	60	NS
Total Organic Carbon	ppm	0.3	TT	NS
Inorganic Chemicals				
Aluminum	ppb	50	1000	600
Fluoride (6)	ppm	0.1	2	1
Hexavalent Chromium	ppb	1	10	0.02
Nitrate (as N)	ppm	0.4	10	10
Radionuclides				
Gross Alpha Particle Activity	pCi/L	3	15	0
Constituents with Secondary Standards				
Chloride	ppm	NS	500	NS
Color	Unit	NS	15	NS
Manganese	ppb	20	50	NS
Odor	TON	1	3	NS
Specific Conductance	µS/cm	NS	1600	NS
Sulfate	ppm	0.5	500	NS
Total Dissolved Solids	ppm	NS	1000	NS
Turbidity	NTU	NS	5	NS
Other Water Constituents Analyzed				
Alkalinity (as CaCO3)	ppm	NS	NS	NS
Barium	ppb	100	1000	2000
Boron	ppb	100	NS	NS
Bromide	ppb	NS	NS	NS
Calcium (as Ca)	ppm	NS	NS	NS
Chlorate	ppb	20	NS	NS
Hardness (as CaCO3)	ppm	NS	NS	NS
Magnesium	ppm	NS	NS	NS
pH	—	NS	NS	NS
Phosphate	ppm	NS	NS	NS
Potassium	ppm	NS	NS	NS
Silica	ppm	NS	NS	NS
Sodium	ppm	NS	NS	NS
MOUNTAIN VIEW SYSTEM CONSTITUENTS				
Turbidity	NTU	—	5	NS
Organic Chemicals				
Total Trihalomethanes (TTHMs)	ppb	0.5	80	NS
Total Haloacetic Acids (HAA-5s)	ppb	1	60	NS
Other Water Constituents Analyzed				
Fluoride (6)	ppm	0.1	2	1
Total Chlorine	ppm	—	MRDL=4	MRDLG=4
Free Ammonia	ppm	NS	NS	NS
Customer Tap Lead and Copper Sampling				
Lead (10)	ppb	5	(15)	0.2
Copper (11)	ppm	0.05	(1.3)	0.3

Water Source					
SFPUC Range	SFPUC Avg. or [Max]	SCVWD Range	SCVWD Avg. or [Max]	CMV Wells Range (2)	Typical Source in Drinking Water
0.2 — 0.5 (4)	[3.1]	—	—	—	Soil run-off
—	[1]	—	0.05 — 0.08	—	Soil run-off
97 - 100%	—	100%	—	—	Soil run-off
<0 — 0.08	<0.01	—	—	—	Naturally present in the environment
—	—	51 — 78	63.8	—	Byproduct of drinking water disinfection
—	—	11 — 34	18.9	—	Byproduct of drinking water disinfection
1.4 — 5.2	2.1	1.90 — 3.07	2.69	—	Various natural and man-made sources
—	—	ND	ND	<50	Erosion of natural deposits
ND — 0.8	0.3 (7)	ND — 0.01	ND	<0.1 — 0.11	Erosion of natural deposits
—	—	ND	ND	ND — 1.4	Erosion of natural deposits
—	—	ND — 5	ND	4 — 7	Erosion of natural deposits
—	ND	—	—	2.1 — 2.6	Erosion of natural deposits
<3 — 16	8.4	87 — 120	103	34 — 58	Run-off/leaching from natural deposits
<5 — 5	<5	<2.5	<2.5	<5	Naturally occurring organic materials
—	—	ND	ND	<20	Leaching from natural deposits
—	—	1	1	<1	Naturally occurring organic materials
34 — 213	144	636 — 749	696	570 — 710	Substances that form ions when in water
1.2 — 30	15	66 — 79.3	72.1	32 — 38	Run-off/leaching from natural deposits
<20 — 93	54	330 — 424	361	400 — 500	Run-off/leaching from natural deposits
0.1 — 0.3	0.1	0.05 — 0.08	0.07	<0.1 — 0.24	Soil run-off
SFPUC Range	SFPUC Average	SCVWD Range	SCVWD Average	CMV Wells Range (2)	
7 — 128	30	84 — 117	95	240 — 273	Naturally occurring
—	—	—	—	150	Naturally occurring
103	103	167 — 219	187	—	Naturally occurring
—	—	0.07 — 0.17	0.11	—	Naturally occurring
3 — 18	11	24 — 29	26	75 — 83	Naturally occurring
39 — 280 (8)	157 (8)	62 — 160	116	—	Naturally occurring
13 — 65	42	133 — 163	144	273 — 339	Naturally occurring
<0.2 — 5.6	3.7	15 — 18	16	21 — 32	Naturally occurring
7.1 — 9.9	9.0	7.5 — 8.0	7.7	7.5 — 7.8	Naturally occurring
—	—	0.80 — 0.97	0.88	—	Naturally occurring
0.2 — 0.9	0.6	3.4 — 4.2	3.7	1.0 — 1.3	Naturally occurring
3.7 — 5.4	4.7	6 — 14	9	—	Naturally occurring
2.9 — 19	13	64 — 90	75	28 — 31	Naturally occurring
KEY					
—	Non Applicable				
<	Less Than				
ND	Non-Detect				
NS	No Standard				
NTU	Nephelometric Turbidity Unit				
Cyst/L	Cysts per Liter				
ppm	parts per million (equal to milligrams per liter)				
ppb	parts per billion				
µS/cm	microSiemens/centimeter				
TON	Threshold Odor Number				
SMCL	Secondary Maximum Contaminant Level				
SWRCB	State Water Resources Control Board				
CMV	City of Mountain View				
SFPUC	San Francisco Public Utilities Commission				
SCVWD	Santa Clara Valley Water District				
EPA	Environmental Protection Agency				
pCi/L	picocuries per liter				
Range or [Avg]	Typical Source in Drinking Water				
0.0 — 0.5	Soil run-off				
36.4 — 73.2 (9)	Byproduct of drinking water disinfection				
19.1 — 37.0 (9)	Byproduct of drinking water disinfection				
[0.83]	Naturally occurring and added for treatment				
[2.38]	Water disinfectant added for treatment				
ND — 0.33	Water disinfectant added for treatment				
7.6	Corrosion of household plumbing				
0.1	Corrosion of household plumbing				

Footnotes

- (1) All results met state and federal drinking water health standards.
- (2) CMV well sampling is conducted in accordance with regulatory schedules.
- (3) Turbidity is a water clarity indicator and also indicates the effectiveness of water treatment plants.
- (4) Turbidity is measured every four hours. Values shown are monthly average turbidity values.
- (5) Turbidity limits are based on the TT requirements in the state drinking water regulations, which require filtered water turbidity to be equal to or less than 0.3 NTU a minimum of 95 percent of the time.
- (6) Fluoride occurs naturally in source waters from the SFPUC, SCVWD, and City wells. The City of Mountain View and SFPUC added fluoride in 2015 to meet Water Board required levels.
- (7) The natural fluoride in the Hetch Hetchy supply was ND. Elevated fluoride levels in the Sunol Valley Water Treatment Plant raw water are attributed to the transfer of the fluoridated Hetch Hetchy water into the reservoirs.
- (8) The detected chlorate in the treated water is a degradation product of sodium hypochlorite used by the SFPUC for water disinfection.
- (9) The reported data for TTHMs and HAA-5s describe the range and the highest quarterly running annual average value. The MCLs only apply to the running annual averages.
- (10) The Lead and Copper Rule monitoring results for 2013, the most recently required testing, comply with the U.S. EPA health regulations. One of the 34 water samples collected at the consumer taps had Lead concentrations above the Action Level. Value reported is the 90th percentile.
- (11) The Lead and Copper Rule monitoring results for 2013 comply with the U.S. EPA health regulations. None of the 34 samples had Copper concentrations above the Action Level. Value reported is the 90th percentile.

Protecting Source Waters

To give water utilities and community members the information they need to protect their drinking water sources, the Safe Drinking Water Act requires states to develop EPA-approved programs to carry out assessments of all source waters. A Drinking Water Source Assessment is a study that defines the land area contributing water to each public water system, identifies the major potential sources of contamination that could affect the drinking water supply, and determines how susceptible the public water supply is to this potential contamination. Utilities and citizens can use the publicly available study results to take actions to reduce potential sources of contamination and protect drinking water. Studies have been conducted for all three City of Mountain View potable water supplies and are available for review at the State Water Resources Control Board, Division of Drinking Water District Office, 850 Marina Bay Parkway, Building P, Second Floor, Richmond, California, 94804, (510) 620-3474. More information and study summaries are available online at www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/dwsap.shtml.

SFPUC

The SFPUC's annual Hetch Hetchy Watershed Survey evaluates sanitary conditions, water quality, potential contamination sources and the results of watershed management efforts by the SFPUC and its partner agencies, including the National Park Service and United States Forest Service, to reduce or eliminate contamination sources. The SFPUC also conducts sanitary surveys of the local Alameda and Peninsula watersheds, as well as approved standby water sources, every five years. The latest five-year surveys were completed in 2011 for the period of 2006-2010, with the next surveys scheduled for 2016. The surveys identified wildlife, livestock and human activities as potential contamination sources.

SCVWD

SCVWD surface water is imported mainly from the South Bay Aqueduct, Dyer Reservoir, Lake Del Valle and San Luis Reservoir, which all receive water from the Sacramento-San Joaquin Delta watershed. The SCVWD's local water sources include Lexington and Anderson reservoirs. The SCVWD's source waters are vulnerable to potential contamination from a variety of land use practices, such as agricultural and urban runoff, recreational activities, livestock grazing and residential and industrial development. Water from imported sources is vulnerable to wastewater treatment plant discharges, seawater intrusion and wildland fires. Commercial stables and historic mining practices may also be sources of contamination to local water sources. No contaminant associated with any of these activities has been detected in the SCVWD's treated waters. The SCVWD's water treatment plants use multiple techniques for disinfection and physical removal of contaminants. For additional information, visit the SCVWD website at www.valleywater.org.

City Wells

Groundwater beneath the City of Mountain View is available in two aquifers separated by natural clay formations. Because City wells are drilled deep into the lower aquifer, the clay formations and geology help protect the City's groundwater supply from contamination. Mountain View regularly tests water produced by City wells and conducts assessments to ensure the safety of its groundwater supply. The source assessments of Mountain View's drinking water wells determined the City's groundwater is potentially vulnerable to contamination from auto repair shops and leaking underground storage tanks, but noted these potential impacts are likely to be confined to the upper aquifer. To receive a copy of the well assessment summaries, contact the Public Services Division at (650) 903-6329.



Hetch Hetchy Reservoir



Anderson Reservoir

photo: SCVWD



City groundwater supply well

Treatment Technique Violation

Failure to Meet Filtration Requirement - Due to an operational error in the San Francisco Regional Water System, the SFPUC failed to filter drinking water from the San Antonio Reservoir for a brief period of time on March 3, 2015. A valve was accidentally opened for approximately 20 minutes, allowing a limited amount of untreated water from the SFPUC's San Antonio Reservoir in the East Bay to enter into the treated San Francisco Regional Water System, and subsequently enter the City of Mountain View's system. The untreated water was blended with already treated water before reaching any customers, providing some disinfection treatment. Some customers in our service area received this blend of water. The San Antonio Reservoir is a highly protected drinking water reservoir with no public access. Two years of water quality data, including additional samples taken immediately after the incident, confirmed the absence of pathogens of concern, such as *Cryptosporidium* and *Giardia*. The SFPUC has been working with its regulatory agency, the Water Board's Division of Drinking Water, and their wholesale customers, including the City of Mountain View, to develop measures to prevent a future recurrence of such an incident.



To Contact Us

City of Mountain View
Public Services Division
231 North Whisman Road
Mountain View, CA 94043
(650) 903-6329

Business Hours:

Monday - Friday
8:00 a.m. - 4:00 p.m.

To Report Suspicious Activities or Persons, Please Dial 911

Ask Mountain View Online

www.mountainview.gov/askMV

Public Participation

The Mountain View City Council meets regularly on the second and fourth Tuesday of each month at 6:30 p.m. in the Council Chambers at City Hall, 500 Castro Street, Second Floor. Members of the public are encouraged to attend. Contact the City Clerk's Office at (650) 903-6304 for more information.

For more information about this Consumer Confidence Report or your water service, please contact:

Kerry Holeman

Water Quality Technician
(650) 903-6241
www.waterquality.mountainview.gov

Alison Turner

Utilities Services Manager
(650) 903-6329

Water Quality and System Operations (24 hours)

(650) 903-6329

Request a Paper Copy

The Water Quality Report is available online at www.mountainview.gov/CCR2015. If you would like to request a paper copy, please call (650) 903-6241 or email waterquality@mountainview.gov.

Utility Account Status/Billing

Monday – Friday
8:00 a.m. – 5:00 p.m.
(650) 903-6317

Water Conservation Hotline

(650) 903-6216
www.conservewater.mountainview.gov

Water Supply Information

www.mountainview.gov/depts/pw/services/water/

More information regarding drinking water, treatment, quality, and regulations is available at:

Santa Clara Valley Water District

(408) 265-2607
www.valleywater.org

San Francisco Public Utilities Commission

(415) 554-3289
www.sfwater.org

State Water Resources Control Board

(510) 620-3474
www.waterboards.ca.gov/drinking_water/programs/index.shtml

U.S. EPA Safe Drinking Water Hotline

(800) 426-4791
www.epa.gov/safewater

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WATER QUALITY



**City of
Santa Clara**
The Center of What's Possible

Report contains water quality monitoring results

The City of Santa Clara is committed to providing you, the water consumer, with a safe and reliable supply of high quality drinking water. Each year we publish an annual water quality report known as the Consumer Confidence Report. This is the 27th annual report on water quality in Santa Clara and it contains the latest water quality monitoring results obtained through the end of calendar year 2014. It answers some of the most common water quality questions asked by our customers. We hope it will provide the facts and perspectives you need to make an informed evaluation of your tap water.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency and the State Water Resources Control Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Water Resources Control Board, Drinking Water Division regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Report fulfills federal, state regulations

This report has been prepared in accordance with the requirements of the Safe Drinking Water Act and State regulations. Although the water you receive is tested for more than 100 potential contaminants and 48 other parameters, the majority of the potential contaminants are never detected. To simplify the report, only the constituents that were detected in at least one water source appear in the water quality table on page 3. We are also required by the State to provide additional information about certain constituents that appear on the water quality table even though the water meets all applicable drinking water standards. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Santa Clara water comes from three sources

The City of Santa Clara has three separate sources of drinking water. Often, these sources are used interchangeably or are blended together. Altogether these sources provide an average of 18 million gallons of water per day to the homes, businesses, industries and institutions of Santa Clara. In 2014 about 29% of our water was treated surface water purchased from the Santa Clara Valley Water District, imported from the Sacramento-San

See map of water sources on page 2

Joaquin Delta, and from the San Francisco Public Utility Commission's Hetch-Hetchy System, imported from the Sierra Nevada Mountains. The remaining 71% is pumped from the City's system of 27 deep wells serving the rest of Santa Clara.

Information for people with compromised immune systems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as cancer patients undergoing chemotherapy, individuals who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Drinking water must meet standards

The quality of drinking water is carefully regulated by the federal government. In 1974, Congress passed the Safe Drinking Water Act, requiring the United States Environmental Protection Agency (USEPA) to establish uniform standards for drinking water. The Safe Drinking Water Act was further amended in 1986 and 1996, adding even more stringent standards. In California, these standards are enforced by the State Water Resources Control Board, Drinking Water Division.

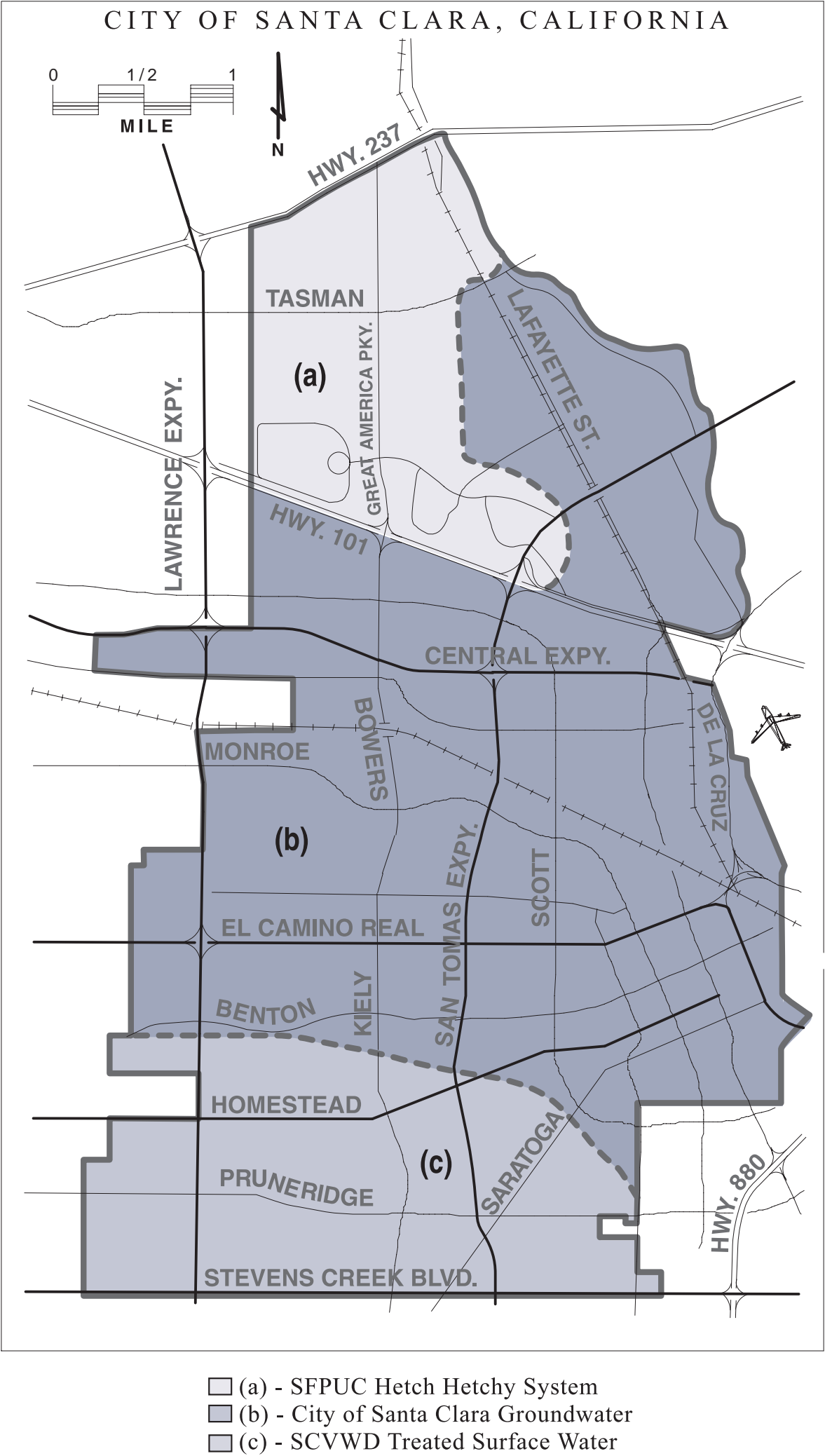
There are two types of drinking water standards. **PRIMARY STANDARDS** are designed to protect public health. These standards specify the limits, called "Maximum Contaminant Levels" (MCLs) for substances in water that may be harmful to humans or affect their health if consumed in large quantities. **SECONDARY STANDARDS** are based on aesthetic qualities of water such as color, taste and odor. These standards specify limits for substances that may affect consumer acceptance of the water. Both Primary and Secondary Standards are listed in this report.

We take great pride in
delivering the safest and
highest quality water available.

It is important to the City of Santa Clara that you, the water consumer, have current and factual information about your water supply. In this latest issue of our report, we hope to further your understanding and strengthen your confidence in the quality and integrity of the water supplied to you by the City of Santa Clara. We take great pride in delivering the safest and highest quality water available.



If you have any questions about the information in this report, or if you want to participate in water quality related issues, please call the Water Utility at 408-615-2000.



City wells

The majority of water consumed in the City of Santa Clara is pumped from the City’s system of 27 deep wells. Well water is pulled up from groundwater – water that is located in aquifers (water-filled spaces between sand, gravel, silt and clay) deep in the ground. Aquifers are replenished by rainwater that infiltrates down from the land surface.

Hetch Hetchy system

The City purchases water from the Hetch Hetchy System. The San Francisco Public Utilities Commission actively protects the water resources entrusted to its care. Its annual update of Hetch Hetchy Watershed Sanitary Survey evaluates the sanitary conditions, water quality, potential contamination sources and the results of watershed management activities with partner agencies (such as the National Park Service and U.S. Forest Service). The San Francisco Public Utilities Commission also conducts sanitary surveys every five years to detect and track sanitary concerns for the Bay Area watersheds and the approved standby water sources in Early Intake Watershed, which includes Cherry Lake and Lake Eleanor. The latest five-year surveys were completed in 2011 for the period of 2006-2010. These surveys identified wildlife, stock and human activities as potential contamination sources. They are available for review at the California Department of Public Health San Francisco District office, 510-620-3474.

Santa Clara Valley Water District

The Santa Clara Valley Water District provides treated surface water to our water system from the Rinconada Water Treatment Plant, one of three water treatment plants the district operates. District surface water is mainly imported from the South Bay Aqueduct, Lake Del Valle and San Luis Reservoir which all draw water from the Sacramento - San Joaquin Delta watershed. The district’s local water sources include Anderson and Calero Reservoirs.

Santa Clara Valley Water District’s source waters are vulnerable to potential contamination from a variety of land use practices, such as agricultural and urban runoff, recreational activities, livestock grazing and residential and industrial development. Imported sources are also vulnerable to wastewater treatment plant discharges, seawater intrusion and wild land fires in open space areas. In addition, local sources are also vulnerable to potential contamination from commercial stables and historic mining practices. No contaminant associated with any of these activities has been detected in the district’s treated water. The water treatment plants provide multiple barriers for physical removal of contaminants and disinfection of pathogens. For additional information, visit the Santa Clara Valley District website at valleywater.org.

Some City water is fluoridated

Fluoride is nature’s cavity fighter. Fluoridation adjusts the naturally occurring fluoride in drinking water to the ideal level for protecting your teeth. Fluoridated drinking water benefits people of all ages by preventing tooth decay.

In November of 2005, the San Francisco Public Utilities Commission Hetch Hetchy system completed construction of a fluoridation facility in the East Bay. The water purchased by the City from the Hetch Hetchy system is fluoridated, while water from Santa Clara Valley District is not fluoridated.

If your zip code is 95054, you are in the area receiving fluoridated water. However, this area is also served by well water that has not been fluoridated. Refer to the map above that shows the area supplied with water from both the Hetch-Hetchy system and the City’s wells. The majority of the City will continue to receive water without added fluoride.

State law requires the addition of fluoride to all water systems in California serving 10,000 customers or more. Fluoridation of the remaining water sources in the City would require installation of fluoride injecting equipment at each of the City’s 27 active wells and at its treated water connection from the Santa Clara Valley Water District. The law includes a provision for state funds to finance this fluoridation equipment, but it may be some time before the state can provide funding to move forward with a fluoridation program for the remainder of the City.

For more information about fluoridation, visit the State Water Resources Control Board website: waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml



City of Santa Clara Water Quality Table

PRIMARY STANDARDS FOR SOURCE WATER SAMPLING:										
	UNIT	MCL	State PHG/ Fed (MCLG)	analysis for City SC Well Water range	analysis for average	analysis for SCVWater District range	analysis for average	analysis for HETCH HETCHY range	analysis for average or [max]	Common Sources of:
MICROBIOLOGICAL										
giardia lamblia	cyst/L	TT	0	NA	NA	NA	NA	<0.01 - 0.04	<0.01	naturally present in environment
RADIOACTIVITY										
Gross Alpha	pCi/L	15	(0)	ND	ND	ND	ND	ND	ND	erosion of natural deposits
INORGANIC CHEMICAL										
Aluminum	PPM	1	0.6	ND	ND	ND	ND	ND	ND	natural deposits/treatment process
Arsenic	PPB	10	0.004	ND-4.8	0.5	ND	ND	ND	ND	erosion of nat'l deposit/runoff
Barium	PPM	1	2	0.08-0.15	0.12	ND	ND	ND	ND	erosion of nat'l deposit/oil drilling
Chromium	PPB	50	(100)	ND-3.3	1.1	ND	ND	ND	ND	erosion of nat'l deposit/plating
Fluoride	PPM	2	1	0.1-0.17	0.14	ND	ND	ND - 0.8	0.4	water additive/erosion of nat'l deposits
Nitrate (as NO ₃)	PPM	45	45	1.7-29	15	ND	ND	ND	ND	erosion of nat'l deposit/runoff/leaching
Turbidity	NTU	5	NA	ND-0.44	0.16	0.06-0.08	0.07	0.2 - 0.6 ⁽²⁾	12.81 ⁽¹⁾	soil runoff
PRIMARY STANDARDS AS MEASURED IN CITY OF SANTA CLARA DISTRIBUTION SYSTEM:										
MICROBIOLOGICAL										
Total Coliform	% pos (+)	5.00%	(0)	0-0.6%	<5%	naturally present in environment				
DISINFECTION BYPRODUCTS, RESIDUALS, PRECURSORS										
Trihalomethanes	PPB	80	NA	0- 84 ⁽³⁾	[37.6]	byproduct of drinking water disinfection				
Haloacetic Acids	PPB	60	NA	0-30	[16.7]	byproduct of drinking water disinfection				
Chlorine residual	PPM	4	4	0.0-2.8	0.4	drinking water disinfectant				
INORGANIC CHEMICAL as measured at 54 Residential Taps in 2013:										
Copper	PPM	AL = 1.3	0.3	90th percentile = 0.345 ppm			Number Exceeded = 0		corrosion of plumbing systems	
Lead	PPB	AL = 15	0.2	90th percentile = 3.0 ppb			Number Exceeded = 0		corrosion of plumbing systems	
SECONDARY STANDARDS: "CONSUMER ACCEPTANCE CONTAMINENT LEVELS"										
Aluminum	PPB	200	NA	ND	ND	ND	ND	ND	ND	natural deposits/treatment process
Color	UNITS	15	NA	ND	ND	<2.5	<2.5	ND	ND	naturally occurring organic material
Copper	PPM	1	NA	ND-0.003	ND	ND	ND	ND	ND	erosion of nat'l deposit/leaching
Iron	PPB	300	NA	ND-35	7	ND	ND	ND	ND	leaching from nat'l deposits/ind. waste
Manganese	PPB	50	NA	ND-13	2.6	ND	ND	ND	ND	leaching from natural deposits
Odor	UNITS	3	NA	ND-1	0.2	1-2	1	ND	ND	naturally occurring organic material
Tot.Dissolved Solids	PPM	1000	NA	330-450	386	360-540	424	31 - 120	81	runoff/leaching from natural deposits
Sp. Conductance	uS/cm	1600	NA	520-720	632	650-964	731	32 - 222	151	subst.forming ions/seawater intrusion
Chloride	PPM	500	NA	25-57	41	95-166	115	<3 - 15	9	runoff/leaching nat'l deposits/seawater
Sulfate	PPM	500	NA	40-61	46	56.4-111.0	76.7	0.9 - 32	17	runoff/leaching nat'l deposits/ind. waste
UNREGULATED CONTAMINANTS AS MEASURED IN CITY OF SANTA CLARA DISTRIBUTION SYSTEM:										
NOTIFICATION LEVEL										
Chlorodifluoromethane	PPB	NA	0 - 440		355					
Chlorate	PPB	800	0 - 150		96.7					
Chromium	PPB	NA	0 - 3.3		1.8					
Molybdenum	PPB	NA	0 - 5		1.7					
Strontium	PPB	NA	0.3 - 440		308.8					
Vanadium	PPB	50	0.2 - 4.8		2.7					

CONSUMER INFORMATION

pH	UNITS	NS	NS	7.0-8.1	7.4	7.6-7.8	7.7	6.9 - 10.2	9.3
Alkalinity (as CaCO3)	PPM	NS	NS	120-200	156	82-106	97	8 - 94	37
Hardness	PPM	NS	NS	140-320	244	130-178	149	7 - 77	46
Calcium (as Ca)	PPM	NS	NS	40-86	64.8	26-32	28	3 - 20	11
Sodium	PPM	NS	NS	23-59	31.2	<0.5-121	64	2.4 - 16	10
Magnesium	PPM	NS	NS	11-34	21	16-21	18	<0.2 - 6.4	3.9
Potassium	PPM	NS	NS	ND-1.3	1.2	3.2-4.7	3.8	0.2 - 1	0.6

[1] Turbidity is measured every four hours. These are monthly average turbidity values.
[2] The highest turbidity of the unfiltered Hetch Hetchy water in 2014 was 2.8 NTU.
[3] During the course of sampling for Disinfection Byproducts, one monitoring point resulted in an 84 PPB for Trihalomethanes, above the 80 PPB MCL. However, compliance is determined on a locational running annual average (LRAA) that is indicated as 37.6 PPB, which is below the 80 PPB MCL.

Definitions and Notes

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

MAXIMUM CONTAMINANT LEVEL (MCL) = The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

MAXIMUM CONTAMINANT LEVEL GOAL (MCLG) = The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

MAXIMUM RESIDUAL DISINFECTANT LEVEL (MRDL) = The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL (MRDLG) = The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

PUBLIC HEALTH GOAL (PHG) = The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

REGULATORY ACTION LEVEL (AL) = The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

TREATMENT TECHNIQUE (TT) = A required process intended to reduce the level of a contaminant in drinking water.

UNREGULATED CONTAMINANTS = Unregulated contaminant monitoring helps EPA and State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

pCi/L = picocuries per liter (a measure of radioactivity)

PPM = Parts Per Million

PPB = Parts Per Billion

P = Present

A = Absent

<DLR = less than Detection Limit for Reporting

DISTRIBUTION SYSTEM = drinking water delivery system

RESIDENTIAL TAPS = household faucets used for lead and copper sampling

DISINFECTION BYPRODUCTS = chemical by products of disinfection

SECONDARY STANDARDS = secondary MCLs are set to protect the aesthetics of drinking water

NTU = Nephelometric Turbidity Unit. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality.

uS/cm = microSiemens per centimeter

NA = not applicable or available

ND = not detected

NS = no standard

Copper and Lead Tap Monitoring was performed in August 2013.

VANADIUM = the babies of some pregnant women who drink water containing vanadium in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals

HARDNESS = the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring.

SODIUM = refers to the salt present in the water and is generally naturally occurring.

ATTENTION

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Chi tiết này thật quan trọng.
Xin nhờ người dịch cho quý vị.

Atencion: Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien.

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

Mahalaga ang impormasyong ito.
Mangyaring ipasalin ito.

이 안내는 매우 중요합니다.
본인을 위해 번역인을 사용하십시오.

यह सूचना महत्वपूर्ण है ।
कृपा करके किसी से :सका अनुवाद कराये ।

ਇਹ ਸੂਚਨਾ ਮਹੱਤਵਪੂਰਣ ਹੈ ।
ਬਿੱਪਾ ਕਰਕੇ ਕਿਸੀ ਤੋ ਇਸ ਦਾ ਅਨੁਵਾਦ ਕਰਾਉ ।

この報告書には上水道に関する重要な情報が記されて
おります。翻訳を御依頼なされるか、内容をご理解なさっ
ておられる方にお尋ね下さい。

Water Quality Monitoring

The City completed a Drinking Water Source Assessment and Protection Program (DWSAPP) for the groundwater sources in August 2002 and submitted to the State Board in December 2002. A copy of this program is available at the City’s Water Utility offices at 1500 Warburton Ave. You may request a summary of the individual assessments by contacting the Water Utility at 408-615-2000 or by email at water@santaclaraca.gov.

The City’s groundwater sources are considered most vulnerable to contamination in these ways: by leaking underground tanks containing fuel or dry-cleaning chemicals; old, unrecorded septic systems; storm drain dry wells located at various places around the City; many old, shallow, private wells, abandoned and not properly destroyed; and possibly some contaminants from a small landfill dump left over from the early years of the 20th century.

Lead

There have been no exceedances of the ACTION LEVEL for lead in the City of Santa Clara groundwater sources or supplies purchased from other agencies. It is possible for lead levels in your home to be higher than other homes in the community because of plumbing materials used in the original construction of your home. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Santa Clara is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791 or on the website epa.gov/safewater/lead.

Nitrates

Nitrate in drinking water at levels above 45 mg/L is a health risk for infants less than six months old. Such nitrate levels in drinking water can interfere with the capacity of the infant’s blood to carry oxygen, resulting in serious illness. Symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask for advice from your health care provider.

Cryptosporidium and Giardia

Cryptosporidiosis is a disease of the intestinal tract brought on by a parasitic microbe (a protozoan) called Cryptosporidium. The disease is transmitted through contaminated water, food or direct contact with human or animal waste. If you are healthy with a normal immune system, the flu-like symptoms usually last about two weeks. Symptoms include diarrhea, stomach cramps, upset stomach and slight fever. However, immuno-compromised people, infants, small children and the elderly are at greater risk of developing life-threatening illness.

The water purchased by the City from the San Francisco Public Utilities Commission Hetch Hetchy system has been tested for Cryptosporidium and Giardia. The source waters and treated waters are tested at least monthly and occasionally show very low levels of Cryptosporidium in the waters serving the East Bay, South Bay and San Francisco Peninsula. Giardia, another parasitic organism causing similar symptoms, is monitored with the same frequency and very low levels are occasionally detected in the same source waters.

The general public is at very low risk and there have been no reported cases of Cryptosporidiosis and Giardiasis attributed to the City’s public water supply. This advisory applies to water received from the Hetch Hetchy system in the area of the City north of Highway 101. The California Department of Public Health issues guidance for people with serious immune system problems. Currently, available guidance from the state and county health agencies recommends that people with such conditions consult with their doctor or primary health care provider about preventing Cryptosporidium and Giardia infection from all potential sources. Water consumers may choose to boil their drinking water at a rolling boil for at least one minute as an extra precaution.

For information about Cryptosporidiosis and Giardiasis, or copies of available guidance, contact the Santa Clara County Department of Environmental Health at 408-918-3400. You may also contact the USEPA Drinking Water Hotline at 1-800-426-4791 or visit the website water.epa.gov/drink/index.cfm.

What are the sources of tap water?

Sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

- Microbial (microbiological) contaminants, such as viruses and bacteria, that may come from wildlife, agriculture and/or livestock operations, sewage treatment plants and septic systems
- Inorganic contaminants such as salts and metals, occurring naturally or resulting from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses
- Organic chemical contaminants, including synthetic and volatile organic chemicals. These are by-products of industrial processes, petroleum production, gas stations, urban stormwater runoff, agricultural chemical and fertilizer applications, and septic systems
- Radioactive contaminants, which can be naturally occurring or result from oil and gas production and mining

In order to ensure that tap water is safe to drink, the USEPA and the State Water Resources Control Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA’s Safe Drinking Water hotline at 1-800-426-4791.



IMPORTANT CONTACT INFORMATION

City of Santa Clara
1500 Warburton Ave.
Santa Clara, CA 95050
408-615-2200
SantaClaraCA.gov

Water Utility
1500 Warburton Ave.
Santa Clara, CA 95050
Office hours: 8 a.m. – 5 p.m.,
Monday-Friday
408-615-2000

Water Billing Questions
408-615-2300

Water Quality Report Questions
Lisa Tulee
408-615-2010
ltulee@santaclaraca.gov

Water Emergencies
408-615-2000 Monday-Friday,
8 a.m.-5 p.m.
408-615-5640 other days
and times

Water Conservation
Save20gallons.org
408-630-2554 – Water
Conservation Hotline and
Rebate Information

Sign up for a free Water-Wise
House Call from Santa Clara
Valley Water District by calling
1-800-548-1882

Web Resources
If you would like to learn more
about drinking water quality,
treatment and regulation,
contact these organizations:

**American Water Works
Association**
awwa.org

**State Water Resources
Control Board, Division of
Drinking Water** [waterboards.
ca.gov/drinking_water/
programs/index.shtml](http://waterboards.ca.gov/drinking_water/programs/index.shtml)

**United States Environmental
Protection Agency**
water.epa.gov/drink/index.cfm

**San Francisco Public
Utilities Commission, Water
Quality Bureau**
sfwater.org/index.aspx?page=163

**Santa Clara Valley Water
District**
valleywater.org

Water Education Foundation
watereducation.org

**Water Quality Information
Center**
nal.usda.gov/wqic

Public Input
To provide input on decisions
that affect drinking water
quality, you are welcome to
provide input to the Santa
Clara City Council at a Council
meeting or in advance via mail,
email or phone contact. A list
of all City Council meetings,
agenda items and study sessions
can be viewed on the City
website SantaClaraCA.gov.

eNotify
Sign up to receive news from the
Water Utility
SantaClaraCA.gov

This brochure summarizes last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to drinking water standards set by the U.S. Environmental Protection Agency (USEPA) and State Water Resources Control Board (SWRCB).



2015 WATER QUALITY REPORT

INFORME DE CALIDAD DEL AGUA DE 2015 ~ BÁO CÁO CHẤT LƯỢNG NƯỚC NĂM 2015

CITY OF SAN JOSE ENVIRONMENTAL SERVICES DEPARTMENT • SAN JOSE MUNICIPAL WATER SYSTEM

Delivering World Class Utility Services and Programs to Improve Our Health, Environment and Economy



San José Municipal Water System
Environmental Services Department
3025 Tuers Road
San José, CA 95121

2015 WATER QUALITY REPORT



This report contains important information about your drinking water. [Visit our website to translate this water quality report.](#)

本報告含有關於您的飲用水的重要資訊。請上我們的網站翻譯這份水質報告。

본 보고서에는 귀하의 식수에 관한 주요 정보들이 있습니다.
[이 수질 보고서의 번역본을 보시려면 저희 웹 사이트를 방문해 주십시오.](#)

Este informe contiene información importante sobre su agua potable.
[Visite nuestro sitio web para traducir este informe sobre la calidad del agua.](#)

Ang ulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa tubig na iniinom ninyo.
[Bisitahin ang aming website upang isalin ang ulat tungkol sa kalidad ng tubig.](#)

Bản báo cáo này có thông tin quan trọng về nước uống của quý vị.
[Xin viếng trang mạng của chúng tôi để phiên dịch báo cáo về chất lượng của nước này.](#)

The Source of Your Water

The San José Municipal Water System (Muni Water) serves the North San José, Alviso, Evergreen, Edenvale, and Coyote Valley communities of the City of San José. The source of your water depends on the service area in which you are located.

■ North San José/Alviso Service Area

Muni Water purchases a blend of Hetch Hetchy water and treated water from the San Francisco Public Utilities Commission (SFPUC) and delivers it to our Alviso and North San José customers. In 2015, the Hetch Hetchy Watershed provided most of the total SFPUC water supply, with supplementation by local watersheds in Alameda and Santa Clara counties. The major water source originates from spring snowmelt flowing down the Tuolumne River to the Hetch Hetchy Reservoir where it is stored. Since this water source meets all federal and state criteria for watershed protection, disinfection treatment practices, bacteriological quality monitoring, and high operational standards, the State and USEPA have granted this water source a filtration exemption.

The Alameda Watershed spans more than 35,000 acres in Alameda and Santa Clara counties. Surface water from rainfall and runoff is collected in the Calaveras and San Antonio reservoirs. Prior to distribution, the water from these reservoirs is treated at the Sunol Valley Water Treatment Plant (SVWTP). In 2011, the SFPUC began using ultraviolet (UV) light as an additional disinfection step for the Hetch Hetchy water supply. Fluoridation, chloramination, and corrosion control treatment are provided for the combined Hetch Hetchy and SVWTP water at the Sunol Chloramination and Fluoridation facilities.

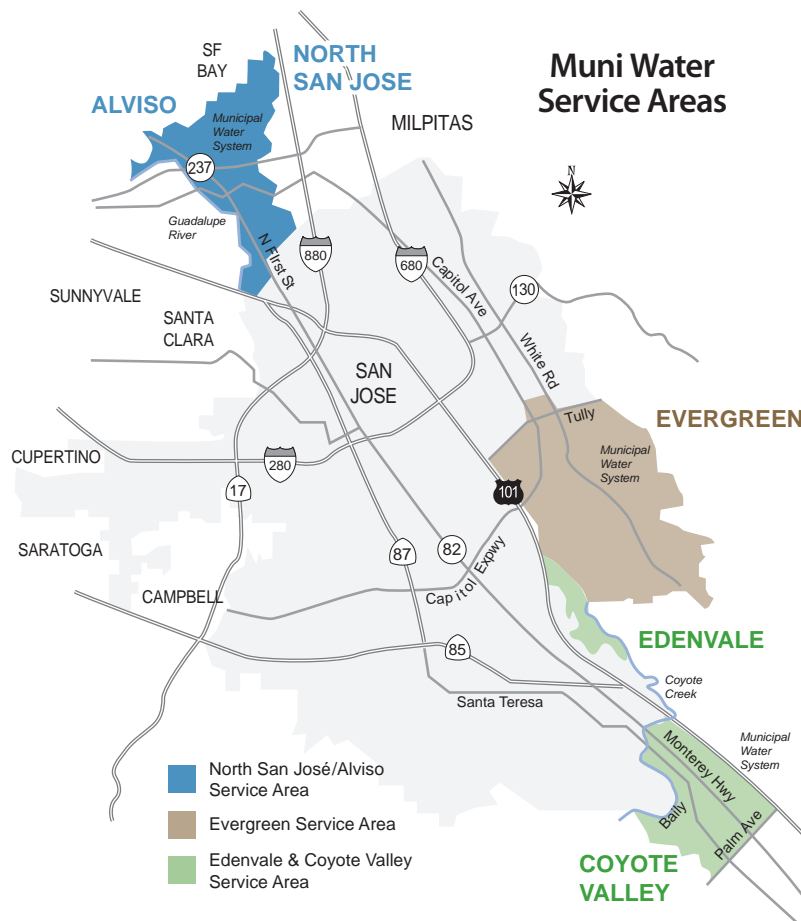
The SFPUC actively and aggressively protects the natural water resources entrusted to its care. An annual report on the Hetch Hetchy Watershed reflects the evaluation of its sanitary conditions, water quality, and potential contamination sources. The report also presents performance results of watershed management activities implemented by the SFPUC and partner agencies to reduce or eliminate potential contamination sources. The SFPUC also conducts sanitary surveys of the local watersheds every five years. These surveys identified wildlife and human activity as potential contamination sources. The reports are available for review through the SWRCB San Francisco District office.

In 2015, groundwater from local deep water wells in North San José was utilized to supplement the SFPUC supply. With this source water change, some customers may have received a blend of groundwater and SFPUC water. A slight difference in taste and odor may be noticed since groundwater generally has a higher mineral content than surface water.

Muni Water conducted a one-time source water assessment of the wells in January of 2003.*

■ Evergreen Service Area

Muni Water purchases treated surface water from the Santa Clara Valley Water District (SCVWD) and delivers it to our Evergreen customers. SCVWD surface water is mainly imported from the South Bay Aqueduct, Dyer Reservoir, Lake Del Valle, and San Luis Reservoir, which all draw water from the Sacramento-San Joaquin Delta watershed. SCVWD local surface water sources include Anderson and Calero



reservoirs. Water from imported and local sources is pumped to and treated at three water treatment plants located in San José.

Since 2006, the SCVWD has used ozone as the primary disinfectant. Ozone disinfection is highly effective at inactivating microbial contaminants and creates fewer disinfection by-products than chlorine. Ozone also effectively removes negative tastes and odors often caused by seasonal algal blooms in the Delta source waters.

SCVWD source waters are vulnerable to potential contamination from a variety of land use practices, such as agricultural and urban runoff, recreational activities, livestock grazing, and residential and industrial development. Imported sources are additionally vulnerable to wastewater treatment plant discharges, seawater intrusion, and wildfires in open space areas. Local sources are additionally vulnerable to contamination from commercial stables and historic mining practices. No contaminant associated with any of these activities has been detected in SCVWD treated water. The water treatment plants provide multiple barriers for physical removal and disinfection of contaminants. For additional information, visit the SCVWD website at www.valleywater.org.

Rather than depending solely on imported water supplies during the drought, Muni Water utilized groundwater from local deep water wells to supplement the SCVWD supply. With this source water change, some customers may have received a blend of groundwater and SCVWD water. A slight difference in taste and odor may be noticed since groundwater generally has a higher mineral content than surface water.

Muni Water conducted a source water assessment for the Evergreen wells in December 2014.*

■ Edenvale Service Area

Groundwater from deep water wells provides 100 percent of the supply for this service area. Muni Water conducted a one-time source water assessment for the Edenvale wells in January 2003.* Although the source is considered potentially vulnerable to chemical and petroleum processing activities, no contaminants associated with these activities have been detected.

■ Coyote Valley Service Area

Groundwater from deep water wells provides 100 percent of the supply for this service area. An assessment of these wells was conducted in June 2004,* and potable use of the groundwater began in 2005. Although the source is considered potentially vulnerable to agricultural drainage, unauthorized dumping, storage tank leaks, and sewer collection systems, no contaminants associated with these activities have been detected.

* For information about the type of contaminants tested or to get a copy of the groundwater well assessment reports for your service area, please contact a Water Quality Engineer at 408-277-3671.

Water Quality

Coliforms, reported as “Total Coliform,” are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Standards for compliance vary depending on the size of the distribution system. In larger systems (including Evergreen, Edenvale, and Coyote Valley), 95 percent of all samples taken each month must be free of coliforms. In smaller systems (including North San José and Alviso), no more than one sample per month may test positive for the presence of coliforms.

Disinfection of surface water is necessary to destroy disease-causing organisms for the protection of public health. In Evergreen, North San José, and Alviso, water is disinfected using chloramine. Except for a slight chlorinous taste or odor, chloramine is not harmful to the general public. However, it must be removed for kidney dialysis machines and aquariums. If you are receiving kidney dialysis treatment, please contact your doctor or dialysis technician. For pet fish, contact your local fish store for more information about special water treatment.

Fluoride is added to the treated water supplies in Evergreen, North San José, and Alviso to help prevent dental cavities in consumers.

The Evergreen community approved fluoridation with an advisory vote in the early 1960s. Muni Water does not fluoridate well water. As a result, some areas of Evergreen supplied with a blend of groundwater and treated water may receive fluoride levels slightly below the recommended range.



The SFPUC System-Wide Fluoridation Project (affecting North San José and Alviso) became operational in November 2005. The fluoride levels in the treated water are maintained within the range required by state regulations. In 2015, some areas of North San José and Alviso may have received a blend of non-fluoridated groundwater and SFPUC treated water. As a result, some customers received water with fluoride levels slightly below the recommended range.

At present, additional fluoride is not added in Edenvale or Coyote Valley service areas. Consult your doctor or dentist if you are considering additional fluoride supplements or treatments.

Hardness consists mainly of calcium and magnesium salts. Although it does not pose a health risk, it may be considered undesirable for other reasons. Some benefits to reducing hardness by using water softeners are reductions in soap usage, longer life for water heaters, and less incrustation of pipes. Some disadvantages are an increase in sodium intake (depending on type of softener used), proper maintenance/servicing requirements, and potential adverse affects on plants and landscaping.

Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the water treatment process. The turbidity standard for unfiltered supplies (e.g., Hetch Hetchy) is 5 NTU. The turbidity for filtered water supplies (e.g., SCVWD treated water) must be less than 0.3 NTU 95 percent of the time, and at no time higher than 1 NTU.

Giardia Lamblia is a parasitic microbe found in most surface water. The SFPUC and SCVWD regularly test for this waterborne pathogen, and found it at very low levels in source water in 2015. However, current test methods approved by the USEPA do not distinguish between dead organisms and those capable of causing disease. Ingestion of *Giardia Lamblia* may produce symptoms of nausea, abdominal cramps, diarrhea, and associated headaches.

Lead, if present at elevated levels, can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Muni Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at www.epa.gov/safewater/lead.

2015 Water Quality Data

Water at various locations in the distribution system is tested by certified City staff and a private, state-certified laboratory using the latest testing procedures and equipment. During 2015, numerous tests were conducted on samples taken from the distribution system. In addition to these tests, the SCVWD and SFPUC perform their own water quality analyses of the source and treated water.

Test results from the distribution system and source water analyses are shown in the table at right. Some of the data, though representative, are more than one year old. SWRCB allows monitoring for some contaminants less than once per year since the concentrations of these contaminants do not change frequently.

Lab analysis was also performed for many constituents other than those listed in the tables; only those chemicals detected in the tap water are shown. For a complete list of all the chemicals analyzed or any questions about this report, please contact a Water Quality Engineer at 408-277-3671.

PRIMARY DRINKING WATER STANDARDS — Public Health-Related Standards

Parameter	Unit	MCL (MRDL) [AL]	PHG (MCLG) [MRDLG]	Evergreen (SCVWD Treated Water)		Evergreen (Groundwater)		Edenvale (Groundwater)		Coyote Valley (Groundwater)		North San José/Alviso (SFPUC Treated Water)		North San José (Groundwater)		Typical Source
INORGANIC CHEMICALS				Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	
Aluminum	ppm	1	0.6	ND	ND - 0.072	0.05 ^b	ND - 0.21	ND ^b	ND	ND ^c	ND	ND	ND	ND ^b	ND	1
Barium	ppm	1	2	ND	ND	0.16 ^b	0.15 - 0.16	0.14 ^b	0.13 - 0.14	ND ^c	ND	ND	ND	0.2 ^b	0.2 - 0.2	1
Fluoride	ppm	2	1	0.89 ^a	0.4 - 1.2	0.13 ^b	0.11 - 0.14	0.2 ^b	0.2 - 0.2	0.16 ^c	0.16 - 0.16	0.8	0.6 - 1.0	0.1 ^b	0.1 - 0.1	1, 2
Hexavalent Chromium	ppb	10	0.02	ND	ND	4.8 ^b	3.9 - 7.1	6.5 ^b	4.2 - 8.8	4.3 ^c	4 - 4.5	ND	ND	ND ^b	ND	1, 12
Iron	ppm	0.3	0.1	ND	ND	ND ^b	ND - 0.27	ND ^b	ND - 0.2	ND ^c	ND	ND	ND	0.13	ND - 0.68	1
Nitrate (as NO3)	ppm	45	45	ND	ND - 4	11	10 - 12	8	7 - 15	ND	ND - 2	ND	ND	8	3 - 14	1, 3
ORGANIC CHEMICALS																
Total Trihalomethanes ^d	ppb	80	NS	50	29 - 75	NA	NA	NA	NA	NA	NA	45	28 - 64	NA	NA	4
Total Haloacetic Acids ^d	ppb	60	NS	12	0 - 15	NA	NA	NA	NA	NA	NA	31	1 - 36	NA	NA	4
Total Organic Carbon	ppm	TT	NS	3.03	2.57-3.63	NA	NA	NA	NA	NA	NA	2.1	1.4 - 5.2	NA	NA	15
RADIONUCLIDES																
Gross Alpha Particle Activity	pCi/L	15	0	ND	ND	1 ^b	0.04 - 2.5	ND ^c	ND	3.2 ^b	ND - 6.3	ND	ND	NA	NA	1
DISINFECTION																
Chloramine (as chlorine) ^a	ppm	(4)	[4]	1.20	0.02 - 2.4	NA	NA	NA	NA - 2.5*	NA	NA - 3.9*	2.9	1.2 - 3.4	NA	NA	5
MICROBIOLOGICAL																
<i>Giardia lamblia</i>	cyst/L	TT	(0)	0.2	0.2 - 0.2	NA	NA	NA	NA	NA	NA	0.01	ND - 0.08	NA	NA	6
				Highest %	Range	Highest %	Range	Highest %	Range	Highest %	Range	Highest #	Range	Highest #	Range	
Total Coliform ^a	% pos per month	5	(0)	0.97%	0 - 0.97	0.97%	0 - 0.97	0.97%	0 - 0.97	0.97%	0 - 0.97	NA	NA	NA	NA	6
	# pos per month	1	(0)	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0	0	6
CLARITY																
Turbidity (unfiltered sources)	NTU	5	NS	NA		NA	NA	NA	NA	NA	NA	Highest Level = 3.1		NA	NA	7
Turbidity (filtered sources)	NTU	1	NS	Highest Level = 0.12°		NA	NA	NA	NA	NA	NA	Highest Level = 1°		NA	NA	7
LEAD AND COPPER																
90th Percentile (# Samples Exceeding AL)																
Lead ^a	ppb	[15]	0.2	ND (0 of 54)				ND (0 of 54)				ND (0 of 31)				8
Copper ^a	ppb	[1300]	300	190 (0 of 54)				190 (0 of 54)				ND (0 of 31)				8

SECONDARY DRINKING WATER STANDARDS — Aesthetic Standards

Parameter	Unit	SMCL	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Typical Source
Chloride	ppm	500	80	65 - 109	48 ^b	45 - 53	45 ^b	43 - 48	42 ^c	40 - 43	8.4	ND - 16	38 ^b	30 - 45	9, 10
Color	CU	15	ND	ND	ND ^b	ND	ND ^b	ND	1 ^c	0 - 1	ND	ND - 5	ND ^b	ND	11
Odor	TON	3	1	1 - 1	ND ^b	ND	1 ^b	ND - 1	ND ^c	ND	ND	ND	ND ^b	ND	11
Specific Conductance	µS/cm	1600	638	615 - 680	808 ^b	760 - 840	690 ^b	680 - 730	530 ^c	520 - 540	144	34 - 213	755 ^b	630 - 880	10, 14
Sulfate	ppm	500	64	58 - 74	69 ^b	65 - 73	49 ^b	48 - 49	37 ^c	36 - 37	15	1.2 - 30	67 ^b	51 - 82	9, 12
Total Dissolved Solids	ppm	1000	380	314 - 530	548 ^b	530 - 590	395 ^b	380 - 440	310 ^c	310 - 310	54	ND - 93	455 ^b	370 - 540	9
Turbidity	NTU	5	0.06	0.05 - 0.08	1 ^b	ND - 2.6	0.31 ^b	0.27 - 0.77	0.52 ^c	0.10 - 0.61	0.1	0.1 - 0.3	0.49 ^b	0.18 - 0.79	7

OTHER WATER QUALITY PARAMETERS

Parameter	Unit	MCL	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range
Boron	ppb	NS	168	140 - 206	NA	NA	NA	NA	NA	NA	103	103	NA	NA
Calcium	ppm	NS	30	25 - 36	63 ^b	56 - 70	49 ^b	45 - 49	41 ^c	40 - 41	11	3 - 18	78 ^b	58 - 97
Hardness (as CaCO3) ^f	ppm	NS	159	135 - 179	402 ^b	388 - 422	305 ^b	300 - 310	230 ^c	220 - 240	42	13 - 65	305 ^b	220 - 390
Magnesium	ppm	NS	17	16 - 20	60 ^b	56 - 68	45 ^b	43 - 46	33 ^c	30 - 35	3.7	0.2 - 5.6	28 ^b	19 - 37
pH	-	NS	7.7	7.5 - 7.8	7.7 ^b	7.6 - 7.9	8 ^b	7.9 - 8	7.7 ^c	7.7 - 7.7	9	7.1 - 9.9	8 ^b	7.8 - 8.1
Potassium	ppm	NS	3.1	2.7 - 3.9	NA	NA	NA	NA	NA	NA	0.6	0.2 - 0.9	NA	NA
Silica	ppm	NS	11	10 - 15	NA	NA	NA	NA	NA	NA	4.7	3.7 - 5.4	NA	NA
Sodium	ppm	NS	60	48 - 76	38 ^b	34 - 42	31 ^b	30 - 35	20 ^c	19 - 21	13	2.9 - 19	40 ^b	34 - 45

* Temporary chlorination was performed during April 2015 and October 2015 for maintenance purposes. No chlorine was present in the service area during the remainder of the year.

NOTES:

- a** Distribution system data in 2015
- b** Well data in 2014
- c** Well data in 2013
- d** Distribution system data in 2015. Running averages are calculated from data for previous quarters that are not shown in this table.
- e** Filtered water turbidity required to be < 0.3 NTU in 95% of samples. All filtered water sources met this standard.
- f** To convert hardness from ppm to grains per gallon, divide by 17.1

TYPICAL SOURCES IN DRINKING WATER:

- 1** Erosion of natural deposits
- 2** Water additive that promotes strong teeth
- 3** Runoff/leaching from fertilizers
- 4** By-product of drinking water disinfection
- 5** Added for disinfection
- 6** Naturally present in the environment
- 7** Soil runoff
- 8** Internal corrosion of household plumbing systems
- 9** Runoff/leaching of natural deposits
- 10** Seawater influence
- 11** Naturally-occurring organic material
- 12** Industrial waste
- 13** Industrial discharges
- 14** Substances forming ions in water
- 15** Various natural and manmade sources
- 16** Naturally occurring
- 17** Human/animal fecal waste
- 18** Discharge from steel and pulp mills, chrome plating
- 19** Discharge from metal factories

See back panel
for definitions and
abbreviations used
in this table.

A Message from the U.S. Environmental Protection Agency

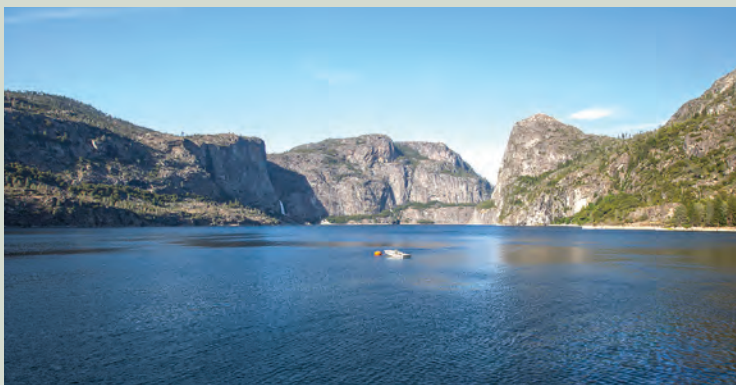
Across America, the sources of both tap and bottled drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, which can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- **Radioactive contaminants**, which can be naturally-occurring or result from oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and SWRCB prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. SWRCB regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. USEPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at 800-426-4791.



Hetch Hetchy Reservoir, photo courtesy of AJ Valdez



Casey Price, water system technician, ensures customers receive high quality water.

SAFEGUARDING YOUR WATER SUPPLY

PROTECTING our water supply is important to ensure that water is safe from contamination and aesthetically pleasing for use. Protection begins in the watersheds, where people and their activities can be a major cause of source contamination. Contamination requires additional treatment, which increases the cost to deliver water to your tap.

PARTICIPATING in public meetings and forums regarding water issues enables decision-makers to hear your perspective and allows

you to be directly involved in protecting your water supply. Visit www.sanjoseca.gov/councilagenda for San José City Council meeting agendas.

UNDERSTANDING that drinking water — including bottled water — may reasonably be expected to contain at least minute amounts of contaminants will help you make an informed choice about your drinking water. The presence of contaminants does not necessarily indicate a health risk.



Although water supply levels have improved, **California has now entered its fifth year of drought.** Thanks to our San José Municipal Water System customers who have done an excellent job, we reduced water use by 27 percent! It is important that everyone continue to reduce their water use.

Please Continue to Use these Rules and Tips:

- Residents and businesses can only water outdoors before 10:00 a.m. and after 8:00 p.m., if using a hand held hose with an automatic shut off nozzle or drip irrigation system.
 - Fix leaks as soon as possible.
 - Residents can use your Home Water Reports to track your water use trends and get customized tips on actions you can take.
 - Install a rain barrel and get up to \$100 in rebates.
- Visit www.sjenvironment.org/waterconservation for more information.
- Visit San José Municipal Water System's office for free conservation items such as faucet aerators, low flow showerheads, and shower timers.

To view the complete list of water use rules now in effect, please visit www.sjenvironment.org/muniwater

Get even more conservation tips at www.sjenvironment.org/waterconservation or call 408-277-3671.

To report water being wasted, please contact Santa Clara Valley Water District at www.valleywater.org/drought or call 408-630-2000.



About Us

THE SAN JOSE MUNICIPAL WATER SYSTEM is a City-owned water utility that has served customers since 1961. We are committed to delivering a reliable water supply that meets or exceeds all drinking water health standards.

Our office is open from 8:00 a.m. to 5:00 p.m., Monday through Friday (closed holidays). For more information, visit our website at www.sjenvironment.org/muniwater or call 408-535-3500 (translation services are available).

In accordance with the Americans with Disabilities Act, City of San José Environmental Services Department materials can be made available upon request in alternative formats, such as Braille, large print, audiotape or computer disk. Requests may be made by calling 408-277-3671 (voice), 800-735-2929 (California Relay Service), or 408-294-9337 (TTY).

The City of San José is committed to open and honest government and strives to consistently meet the community's expectations by providing excellent service, in a positive and timely manner, and in the full view of the public.



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Definitions

AL (Regulatory Action Level)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

MCL (Maximum Contaminant Level)

The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technically feasible.

Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

MCLG (Maximum Contaminant Level Goal)

The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

MRDL (Maximum Residual Disinfectant Level)

The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal)

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NL (Notification Level)

Health-based advisory levels established by the SWRCB for chemicals in drinking water that lack maximum contaminant levels.

PDWS (Primary Drinking Water Standard)

MCLs and MRDLs for contaminants that affect health along with their monitoring, reporting, and water treatment requirements.

PHG (Public Health Goal)

The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Source Water

Raw water that has not been treated to meet drinking water standards.

Treated Water

Water that has been treated to meet USEPA and SWRCB drinking water standards.

Treatment Technique

A required process intended to reduce the level of a contaminant in drinking water.

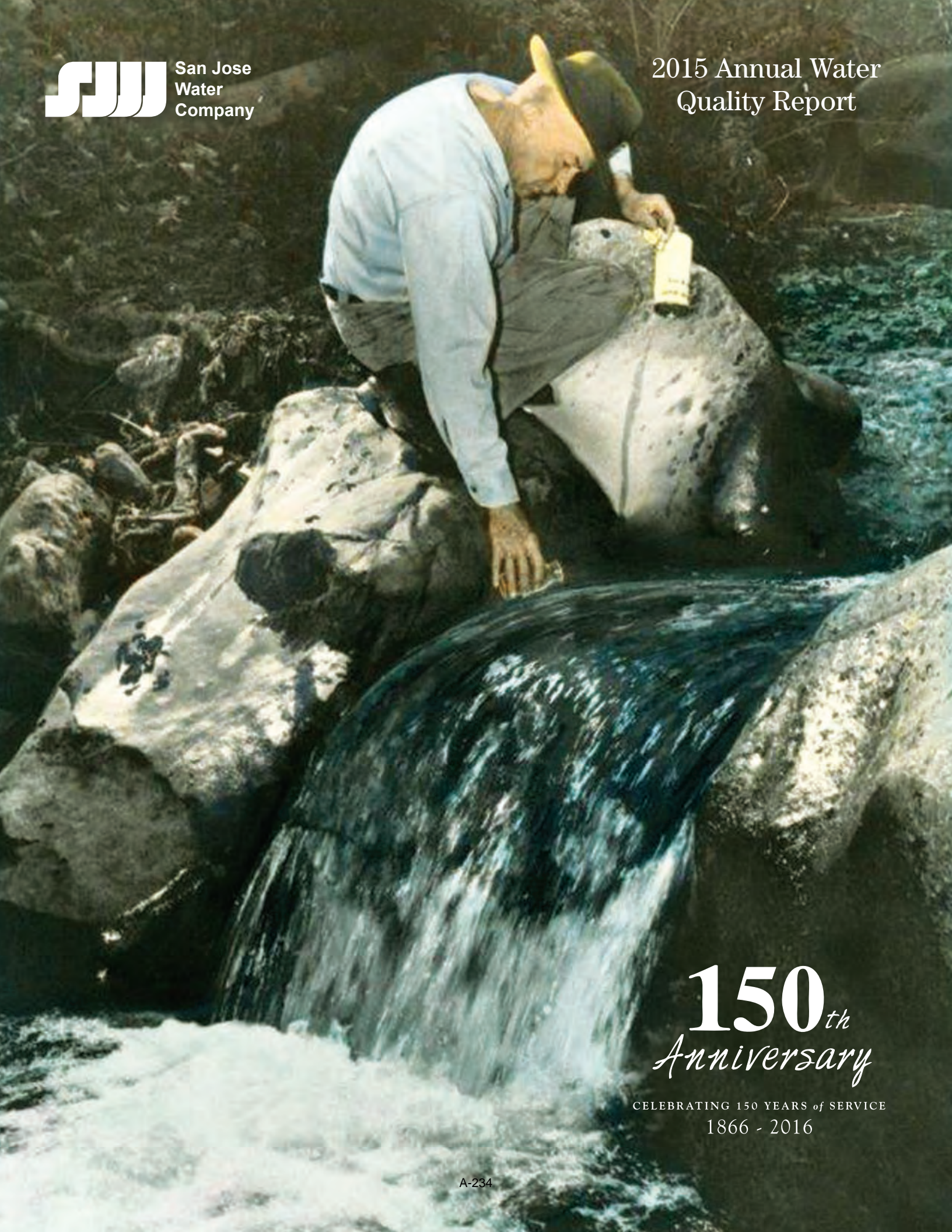
Abbreviations:

<	less than
AL	Action Level
CU	Color Unit
NA	Not Applicable
ND	Not Detected
NS	No Standard
NTU	Nephelometric Turbidity Units
pCi/L	pico Curies per liter
ppb	parts-per-billion (equals 1 microgram per liter (µg/L))
ppm	parts-per-million (equals 1 milligram per liter (mg/L))
TON	Threshold Odor Number
TT	Treatment Technique
µS/cm	microSiemens per centimeter



San Jose
Water
Company

2015 Annual Water Quality Report



150th *Anniversary*

CELEBRATING 150 YEARS of SERVICE
1866 - 2016

Providing You With the Highest Quality Water Possible is our First Priority

Recent news stories have raised questions about lead and other contaminants in drinking water across the country. Please be assured that San Jose Water Company's (SJWC) water supply complies with all drinking water requirements and remains safe for all potable uses.

A large portion of SJWC's water system was constructed or replaced after lead was no longer commonly employed. In addition, the various sources of water (e.g., groundwater, surface water) delivered to customers have been treated by the Santa Clara Valley Water District to control potential corrosion or the water is naturally non-corrosive. As a result, the data collected show that, on average, any lead and copper concentrations at our customer taps are extremely low or not detected. Results from the most recent sampling campaign are included in this report.

The United States Environmental Protection Agency and the California State Water Resources Control Board regulate water quality testing and the acceptable levels of lead and copper to protect public health. Since testing takes place at the customers' taps, our lead and copper testing program relies on the cooperation of customers throughout our water system. The next round of water testing at the tap is planned for the spring and summer of 2017. Becoming involved is as easy as contacting our Customer Service Department and requesting to be included on our list of candidates. Please note that SJWC will select testing locations that meet certain criteria to ensure representativeness. If your home is a match, we will contact you in early 2017 to confirm and discuss the next steps. If you are selected to participate you will promptly receive results from the water collected at your tap.



SJWC's new zero-discharge flushing truck cleans water mains more effectively than conventional flushing while conserving water.

With 150 years of history in delivering safe, high quality and reliable water service, SJWC is amongst the most innovative water service providers in the Bay Area. Our water quality initiatives related to drought and conservation continue to be industry leading. For example in 2015 SJWC implemented a new water pipe cleaning system that both cleans more effectively than conventional methods but also conserves water. More information on this and other aspects of the company's operations, conservation, and water supply can be accessed on our website at www.sjwater.com.



2015 SJWC Annual Water Quality Report

SJWC tests our water supplies for over 200 possible contaminants. Only those contaminants that were detected in any of our water sources appear in this table. Primary standards related to public health, while secondary standards relate to aesthetic qualities such as taste, odor, and color. The state Division of Drinking Water allows us to monitor for some contaminants less often than yearly because the concentrations do not change frequently. Some of our data, though representative, are more than a year old. Averages are weighted based on use of each source during the year.

Primary Standards — Mandatory Health-Related Standards

PARAMETERS	UNITS	MCL	PHG OR (MCLG)	GROUNDWATER		IMPORTED SURFACE WATER		MOUNTAIN SURFACE WATER		TYPICAL SOURCES*	
				AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE	RANGE		
INORGANIC CHEMICALS											
Aluminum	ppm	1	0.6	ND	ND	ND	ND - 0.68	ND	ND - 0.17	1, 4	
Barium	ppm	1	2	0.15	ND - 0.31	ND	ND	ND	ND	8, 10	
Fluoride	ppm	2	1	ND	ND	ND	ND - 0.1	ND	ND	1	
Hexavalent Chromium	ppb	10	0.02	3.1	ND - 5.8	ND	ND	ND	ND	8, 10	
Nitrate (as N)	ppm	10	10	3.2	0.93 - 5.6	ND	ND - 5.0	1	ND - 1.7	1, 2	
RADIONUCLIDES											
Gross Alpha Activity	pCi/L	15	15	2.2	0.02 - 8.1	ND	ND	ND	ND - 0.09	1	
Combined Radium	pCi/L	5	0	ND	ND	ND	ND	ND	ND	1	
Uranium	pCi/L	20	-	ND	ND	ND	ND - 1.0	ND	ND	1	
VOLATILE ORGANIC CHEMICALS											
1,1,1-Trichlorethane	ppb	200	1000	0.44	ND - 1.8	ND	ND	ND	ND	8	
CLARITY											
Turbidity	NTU	TT = 1 NTU	none	NA		LEVEL FOUND		LEVEL FOUND		11	
	NTU	TT= 95% of samples ≤ 0.3 NTU	none	NA		100%		100%			
MICROBIOLOGICAL				SJWC DISTRIBUTION SYSTEM							
				RANGE			HIGHEST LEVEL DETECTED				
Coliform Bacteria	%	> 5% of monthly samples positive	0	0 - 3.3%			3.3%				10
				UNTREATED IMPORTED SURFACE WATER							
				AVERAGE			RANGE				
Giardia	cysts/L	TT	0	ND			ND - 0.2				11
LEAD AND COPPER				SJWC AT THE TAP SAMPLING (2014)							
				90 th PERCENTILE LEVEL			# OF SITES ABOVE AL				
Lead	ppb	15	0.2	4.5			0 of 51				1, 14
Copper	ppm	1.3	0.3	0.46			0 of 51				1, 14
DISINFECTION BYPRODUCTS		MCL	PHG or MCLG	COMPLIANCE LEVEL			RANGE				
Total Trihalomethanes	ppb	80	none	70			5.1 - 100				9
Haloacetic Acids	ppb	60	none	47			0.0 - 76				9
DISINFECTION		MRDL	MRDLG	SJWC DISTRIBUTION SYSTEM RUNNING ANNUAL AVERAGE							
Total Chlorine	ppm	4.0 as Cl ₂	4 as Cl ₂	0.86							

Secondary Standards — Aesthetic Standards

PARAMETER	UNITS	MCL	PHG or MCLG	GROUNDWATER		IMPORTED SURFACE WATER		MOUNTAIN SURFACE WATER		TYPICAL SOURCES
				AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE	RANGE	
Color	Units	15	none	3	0 - 5	0	0	0	0	11, 12
Odor-Threshold	TON	3	none	ND	ND - 1	1	1 - 1	1	1 - 1	12
Hardness (as CaCO ₃)	ppm	NA	none	321	160 - 490	146	130 - 180	210	200 - 220	1
Chloride	ppm	500	none	48	32 - 69	100	65 - 160	19	13 - 24	3, 6
Iron	ppb	300	none	30	0 - 210	ND	ND	ND	ND	3, 5
Manganese	ppb	50	none	4	0 - 20	ND	ND	ND	ND	3
Sodium	ppm	NA	none	30	18 - 69	72	48 - 97	18	16 - 20	1
Sulfate	ppm	500	none	58	34 - 86	67	56 - 79	36	34 - 37	3, 5
Total Dissolved Solids	ppm	1000	none	470	310 - 650	380	310 - 530	200	120 - 300	3
Conductivity	umho/cm	1600	none	700	350 - 980	680	610 - 870	400	360 - 450	6, 13

*Typical Sources of Chemical Constituents

1. Erosion of natural deposits 2. Runoff and leaching from fertilizer use 3. Runoff and leaching of natural deposits 4. Residue from some surface water treatment processes 5. Industrial waste 6. Seawater influence 7. Discharge from industrial chemical factories 8. Discharge from metal degreasing sites and other factories 9. By-product of drinking water disinfection 10. Naturally present in the environment 11. Soil erosion and stream sediments 12. Naturally occurring organic materials 13. Substances that form ions when in water 14. Internal corrosion of household plumbing systems

Unregulated Contaminant Monitoring Rule 3

PARAMETER	UNITS	GROUNDWATER		IMPORTED SURFACE WATER		MOUNTAIN SURFACE WATER	
		AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE	RANGE
1,4-Dioxane	ppb	ND	ND - 0.22	ND	ND	ND	ND
Chlorodifluoromethane	ppb	ND	ND - 0.12	ND	ND	0.08*	0.08*
Chromium VI	ppb	1.1	0.37 - 1.7	ND	ND	0.46	0.38 - 0.54
Molybdenum	ppb	ND	ND - 2.5	1.3	ND - 2.2	ND	ND
Strontium	ppb	423	240 - 710	210	130 - 420	192	150 - 240
Vanadium	ppb	3.1	1.8 - 4.4	2.7	1.5 - 3.7	1.2	1.4 - 1.6

*Data from single measurement.

UCMR testing was not conducted in 2015. Unregulated contaminants do not have a drinking water standard set by USEPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard.

Important Definitions

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

One part per million (ppm): is the same as one milligram per liter (mg/L). One ppm corresponds to a single penny in \$10,000 or one minute in two years.

One part per billion (ppb): is the same as one microgram per liter (ug/L). One ppb corresponds to a single penny in \$10,000,000 or one minute in two thousand years.

Detection Limit for Purposes of Reporting (DLR): The lowest level of a constituent that the Department of Public Health requires to be reported.

Nephelometric Turbidity Units (NTU): This is a measure of the cloudiness of the water.

Not Detected (ND): If a constituent is not measured at or above a DLR, it is reported as ND.

Not Analyzed (NA): Source designated non-vulnerable or testing not required.

TON: Threshold Odor Number, a measure of odor.

umho/cm: micromho per centimeter, a measure of electrical conductivity.

pCi/L: picocuries per liter, a measure of radioactivity.



Water Quality Guidance

Source Water Assessment

An assessment of the drinking water sources for SJWC's water system was completed in December 2002. SJWC's wells are considered most vulnerable to one or more of the following activities, which have not been associated with any contaminants detected in the water supply: dry cleaners, automobile gas stations and repair shops, and underground storage tanks. Some of SJWC's wells are also considered vulnerable to metal plating and finishing, photo processing/printing, electrical/electronics manufacturing, chemical/petroleum processing/storage, known contaminant plumes, and plastics/synthetics producers. SJWC's surface supplies are considered most vulnerable to low density septic systems. Imported surface water purchased from Santa Clara Valley Water District (SCVWD) is considered most vulnerable to a variety of land use practices, such as agricultural and urban runoff, recreational activities, livestock grazing, as well as residential and industrial development. In addition, local sources are vulnerable to potential contamination from commercial stables and historic mining practices. Although these activities exist in areas near one or more of SJWC's or SCVWD's sources, physical barriers, treatment systems, and monitoring programs are in place to ensure that water supplied to our customers is not adversely affected. Customers seeking additional information may view a copy of the assessment during normal business hours at SJWC's offices at 110 West Taylor Street, San Jose.

Special Populations

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available

from the Safe Drinking Water Hotline (1-800-426-4791).

Drinking Water Regulation

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791). The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants such as viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

Fluoride

For information on Fluoride in your water, please refer to our website at www.sjwater.com.

Lead

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. San Jose Water Company is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/lead>.

Nitrate

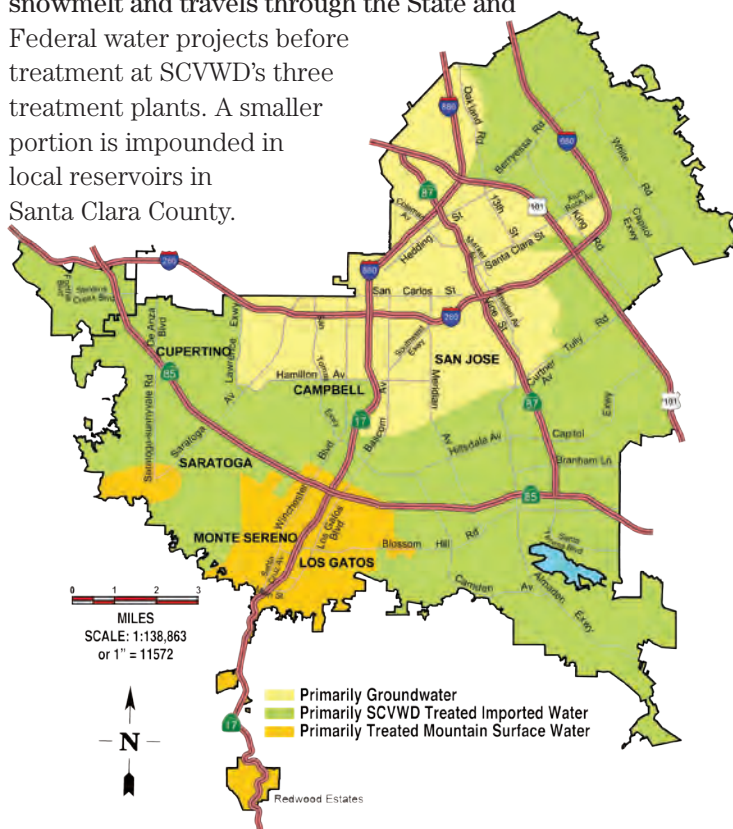
Nitrate-N in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such Nitrate-N levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate-N levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

Turbidity

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration systems.

SJWC Service Area and Water Supply Sources

SJWC provides water from three major sources. The first source is groundwater, which is pumped from over 100 wells that draw water from the Santa Clara Groundwater Subbasin. The second source is local mountain surface water, which is collected in our watershed in the Santa Cruz Mountains and treated at our two treatment plants. The third source, imported surface water, is provided by the Santa Clara Valley Water District (SCVWD), our wholesale supplier. A majority of imported water originates as Sierra snowmelt and travels through the State and Federal water projects before treatment at SCVWD's three treatment plants. A smaller portion is impounded in local reservoirs in Santa Clara County.



Reminder for Dialysis Patients and Aquarium Owners

Chloramine and chlorine may be present in the water provided by SJWC. These chemicals are used to protect public health by destroying disease-causing organisms. Except for a slight chlorinous taste or odor, these disinfectants will not cause any problems for the general public. However, home dialysis patients and aquarium owners must take special precautions before the water can be used in kidney dialysis machines or aquariums. Please consult your doctor or dialysis technician to be sure your home equipment is adequate and proper tests are being performed every time it is used. Before filling an aquarium or fish pond, the disinfectant must be removed. Your local tropical fish store can help determine the best water treatment for your fish.

Your drinking water is continually tested to ensure compliance with state and federal standards for quality and safety. This annual report summarizes the results of more

than 17,000 water quality tests conducted throughout the year. If you have any questions about your water quality, service, or the information contained in this report, please call us at (408) 279-7900 during normal business hours (Monday through Friday between 8:00 a.m. and 5:30 p.m.). Or, you may contact the USEPA Safe Drinking Water Hotline at 1-800-426-4791 for additional public information about the Safe Drinking Water Act or USEPA's drinking water regulatory programs.

To Learn More about the Quality of Your Water

Drinking Water Information on the Internet

Detailed information about specific drinking water topics is available on the Internet. Visit our web site or any other of those listed below to find out more about water treatment, quality, and current regulations.

San Jose Water Company: www.sjwater.com

Santa Clara Valley Water District: www.valleywater.org

American Water Works Association: www.awwa.org

SWRCB Division of Drinking Water:

http://www.waterboards.ca.gov/drinking_water/programs/index.shtml

United States Environmental Protection Agency:

<http://water.epa.gov/drink/>

This brochure provides a snapshot of last year's water quality data for SJWC. Included are details about where your water comes from and how your water quality compares to State standards. As you can see, in 2015, as in years past, your tap water met all USEPA and State primary drinking water health standards.

Se le está enviando este informe en conformidad con la Ley de Agua Potable Segura. Se alienta a los propietarios, negocios y escuelas a compartir este informe con los usuarios a los que no se cobra el agua en sus centros. Llame a nuestra oficina para obtener más copias sin costo.

Báo cáo này được gửi đến quý vị chiếu theo quy định của Đạo Luật Nước Uống An Toàn. Những người cho thuê nhà, chủ doanh nghiệp và nhà trường được khuyến khích chia sẻ bản báo cáo này với những người sử dụng nước tại chỗ nhưng không nhận hóa đơn. Quý vị có thể xin thêm miễn phí bản sao của báo cáo này bằng cách gọi văn phòng chúng tôi.

這份報告根據《安全飲用水法案》的規定寄發給您。請房東、企業業主以及學校當局將此報告內容與其所在地點不會收到水費帳單的自來水用戶分享。如需更多的免費報告副本，請致電本辦公室。

This report is being sent to you in compliance with the Safe Drinking Water Act. Landlords, businesses and schools are encouraged to share this report with nonbilled water users at their locations. Additional copies are available free of charge by calling our office.



San Jose Water Company
110 West Taylor Street, San Jose, CA 95110
customer_service@sjwater.com
(408) 279-7900 • www.sjwater.com
Se Habla Español
At your service since 1866

IMPORTANT CONTACT INFORMATION

CITY CONTACTS

City of Sunnyvale

456 West Olive Ave.
Sunnyvale, CA 94086
Tel: (408) 730-7415
TDD: (408) 730-7501
Fax: (408) 730-7286
sunnyvale.ca.gov

Hours of Operation: 8 a.m. to 5 p.m., M–F

**Environmental Services
Department (Leaks, Breaks,
Water Quality Questions)**
(408) 730-7900

Utility Division (Billing)
(408) 730-7400, Residential
(408) 730-7681, Commercial

**Backflow and Cross-
Connection Control Program**
(669) 600-7322

**SCVWD Water Conservation
Hotline**
(408) 630-2554

To report water waste
(408) 630-2000

SCVWD Pollution Hotline
(888) 510-5151 (24 Hours)

WEB RESOURCES

Division of Drinking Water
waterboards.ca.gov/drinking_water/

US EPA
water.epa.gov/drink

**Department of
Water Resources**
www.dwr.water.ca.gov

**Bay Area Water Supply and
Conservation Agency**
bawscs.org

**American Water Works
Association**
awwa.org or DrinkTap.org

SCVWD
valleywater.org

SFPUC
sfwater.org

TO GET INVOLVED

To provide input on decisions that affect drinking water quality, you are welcome to speak on any issue specifically coming before the City Council at a regularly scheduled council meeting. You can also speak on any topic you wish to bring to the Council's attention during the "Oral Communications" portion of the meeting agenda. Alternatively, you can send a letter in advance of a meeting.

City Council Meetings

City Hall Council Chambers
456 West Olive Ave.
Sunnyvale, CA 94086
Tuesdays, 7 p.m.

A list of City Council meetings, agenda items and study issues can be obtained by visiting sunnyvale.ca.gov or by calling the City Clerk's office at (408) 730-7483.



Sunnyvale has three City-operated swimming pools and one contracted pool available to the public. With summer fast approaching and water conservation on the mind, considering keeping a cover on your pool and using one of our public pools. We offer aquatic programs at each facility including recreational swim, swim lessons for all ages, water exercise classes and various American Red Cross courses such as Lifeguard Training and First Aid and CPR. Lifeguards are on duty during recreation swim hours. For more information about pool locations, hours and programs, visit sunnyvale.ca.gov/Departments/CommunityServices/SwimmingandAquatics.aspx

HEALTH AND EDUCATION INFORMATION

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA Safe Drinking Water Hotline.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy; persons who have undergone organ transplants; people with HIV/AIDS or other immune system disorders; some elderly; and infants can be particularly at risk from infections. These people should seek advice from their health care providers.

USEPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the USEPA Safe Drinking Water Hotline.

USEPA Safe Drinking Water Hotline ►
(800) 426-4791

Water Conservation Rebate Programs

Residential High-Efficiency Clothes Washer Rebate Program.

The Santa Clara Valley Water District has a rebate program for purchasing and installing a qualifying Energy Star Most Efficient clothes washer. Santa Clara County residents may be eligible to receive up to \$150 for a combined water agency and PG&E rebate while funding is available. For information, visit valleywater.org/Programs/High-EfficiencyClothesWasherRebate.aspx

Turf Replacement Rebate Program. The Department of Water Resources has a rebate program for removing turf and replacing it with landscapes that require little water at California single-family residences to support the State's drought response. Up to \$2 per square foot of removed and replaced turf will be rebated per eligible household. For information visit saveourwaterrebates.com

Toilet Replacement Rebate Program. The Department of Water Resources has a rebate program that provides rebates for replacing toilets at California single-family residences to support the State's drought response. Up to \$100 will be rebated for purchase and installation of one qualified high-efficiency toilet (1.28 gallons per flush or less) per household that replaces a less-efficient toilet (using more than 1.6 gallons per flush). For information visit saveourwaterrebates.com



CITY OF SUNNYVALE 2015 WATER QUALITY REPORT

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

Chi tiết này thật quan trọng. Xin nhờ người dịch cho quý vị.

此份有關你的食水報告，內有重要資料和訊息，請找他人為你翻譯及解釋清楚。

この情報は重要です。翻訳を依頼してください。

이 소책자에는 식수수질 보고서의 내용을 요약한 당신의 수도물에 관한 중요한 정보가 적혀져있습니다. 이 정보를 이해하실수 있는 분에게 번역을 부탁하십시오.

यह सूचना महत्वपूर्ण है ।
कृपा करके किसी से :सका अनुवाद करायें ।

Last year your tap water met all state and federal drinking water health standards

The City of Sunnyvale aims to provide superior service while delivering a reliable, high-quality drinking water supply to our residents. Last year, your tap water met all state and federal drinking water health standards. The City vigilantly safeguards its water supplies, and once again, we are proud to report that our system has met or exceeded water quality standards.

WHAT'S INSIDE ►

Important information about your water

Water conservation

Ways to contact the City

Protecting your water supply

To ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **Microbial Contaminants** such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic Contaminants** such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and Herbicides** that may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- **Organic Chemical Contaminants** including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.
- **Radioactive Contaminants** that can be naturally-occurring or be the result of oil and gas production and mining activities.

Protection begins in the watersheds. Protecting the water supply is important to ensure that water is safe from contamination and aesthetically pleasing for use. Contamination requires treatment, which increases the cost to deliver water to your tap. Here are ways that you can help protect our watershed:

- Eliminate excess use of lawn and garden fertilizers and pesticides.
- Pick up after your pets.
- Take used motor oil and other recyclables to the SMaRT Station.
- Dispose of pharmaceuticals at any Sunnyvale fire station. Medications should not to be flushed down drains or put in the garbage.
- Dispose of cleaners, chemicals and paints at a Household Hazardous Waste Drop-off Event.
- Volunteer in your community. The Creek Connections Action Group works to protect the County's waterways. Visit www.cleanacreek.org.
- Participate in public meetings and forums. It allows decision-makers to hear your perspective and you to be involved in protecting your water supply.

More information about disposal and recycling ▶
Call (408) 730-7262

SMaRT Station
301 Carl Road, Sunnyvale, CA 94089
Open daily, 8 a.m. to 5 p.m., Tel: (408) 752-8530

Household Hazardous Waste Drop-off
164 Carl Road, Sunnyvale, CA 94089
Every 3rd Saturday, 8 a.m. to 1 p.m.



Where your water comes from

The City of Sunnyvale has three different sources of drinking water supply: local groundwater, treated surface water from the Santa Clara Valley Water District (SCVWD) and treated surface water from the San Francisco Public Utilities Commission (SFPUC). There are also pockets of Sunnyvale customers who receive water from the California Water Service Company (Cal Water); questions regarding the source and delivery of water provided by Cal Water can be directed to its local office at (650) 917-0152.

Local Groundwater

The City owns, operates and maintains six deep wells. The wells are used to help supplement the imported water supplies during peak demands in the summer months and emergency situations. The City is always working to increase flexibility in local groundwater supplies, enhance water quality, reduce operating costs and increase reliability. Recent groundwater improvements include water well connections, electrical upgrades and installation of an emergency generator. Groundwater pumped from these wells is taxed by SCVWD.

The City completed a Drinking Water Source Assessment Program (DWSAP) in January 2003 for these groundwater sources. The City's groundwater sources are considered most vulnerable to

contamination by leaky underground fuel tanks, dry cleaning chemicals, sewer collection systems, old septic systems and machine shops.

SFPUC Supply

The City purchases a blend of Hetch Hetchy water and treated water from SFPUC to serve the northern part of the city. Filtered water turbidity from SFPUC met the standard of 0.3 NTU or less, 95% of the time.

The Hetch Hetchy Watershed provides most of the SFPUC water supply, supplemented by the Alameda watershed. The major water source originates from spring snowmelt flowing down the Tuolumne River and is stored in the Hetch Hetchy Reservoir. Since this water source meets all federal and state standards for watershed protection, disinfection treatment practices, bacteriological quality monitoring and

operations, the State has granted this water source a filtration exemption.

The Alameda Watershed spans more than 35,000 acres in Alameda and Santa Clara counties. Surface water from rainfall and runoff is collected in the Calaveras and San Antonio Reservoirs. Prior to distribution, the water from these reservoirs is treated. Fluoridation, chloramination and corrosion control treatment are provided for the combined Hetch Hetchy and treated water. Fluoride is added to the naturally occurring level to help protect against tooth decay. In 2015, average fluoride levels in the treated water were maintained within a range of 0.6-1.0 mg/L as required by the State Board. Since May 2015, water has been fluoridated at the new optimum level of 0.7 mg/L.

The SFPUC actively protects the water resources entrusted to its care. Its annual update of the Hetch Hetchy Watershed Sanitary Survey evaluates the sanitary conditions, water quality, potential contamination sources and the results of watershed

management activities with partner agencies (such as the National Park Service and US Forest Service). The SFPUC also conducts sanitary surveys every five years to detect and track sanitary concerns for the Bay Area watersheds and the approved standby water sources in Early Intake Watershed, which includes Cherry Lake and Lake Eleanor. The latest 5-year surveys were completed in 2011 for the period of 2006-2010. These surveys identified wildlife, stock and human activities as potential contamination sources. To review them at the District office, contact DDW at (510) 620-3474.

More information on SFPUC ▶
[Visit sfwater.org](http://Visit.sfwater.org)

SCVWD Supply

The City purchases treated surface water from SCVWD and delivers it to the southern portion of the city. SCVWD imports more than half of its supply from the South Bay Aqueduct, Dyer Reservoir, Lake Del Valle and San Luis Reservoir, which all draw



water from the Sacramento-San Joaquin Delta Watershed. SCVWD local surface water sources include Anderson and Calero Reservoirs. SCVWD source waters are vulnerable to potential contamination from a variety of land use practices such as agricultural and urban runoff, recreational activities, livestock grazing, and residential and industrial development. Imported sources are vulnerable to wastewater treatment plant discharges, seawater intrusion and wildfires in watershed areas.

Local sources are also vulnerable to contamination from commercial stables and historic mining practices. No contaminant associated with any of these activities has been detected in SCVWD treated water. Water treatment plants provide disinfection and multiple barriers for physical removal of contaminants. To review the DWSAP, contact DDW at (510) 620-3474.

More information on SCVWD ▶
[Visit valleywater.org](http://Visit.valleywater.org)

WATER CONSERVATION

While water supply conditions have improved after four years of drought, continued water conservation efforts are critical until state and local water reservoirs are back to normal levels. Below is a list of ongoing prohibited water use in Sunnyvale.



Prohibited water use in Sunnyvale:

- Watering outdoor landscapes in a manner that causes excess runoff into gutters, streets, or stormdrains
- Washing a motor vehicle with a hose, unless the hose is fitted with a shut-off nozzle
- Allowing leaking plumbing or irrigation systems to go unfixed.
- Irrigating with sprinklers is prohibited between 9 a.m. – 6 p.m. when daylight savings time is in effect. Each station is limited to no more than 15 minutes of irrigation time.

Additional City prohibitions affecting commercial businesses:

- Restaurants and other food service establishments can only serve water to customers on request
- Operators of hotels and motels must provide guests with the option to not have towels and linens laundered daily and prominently display notice of this option

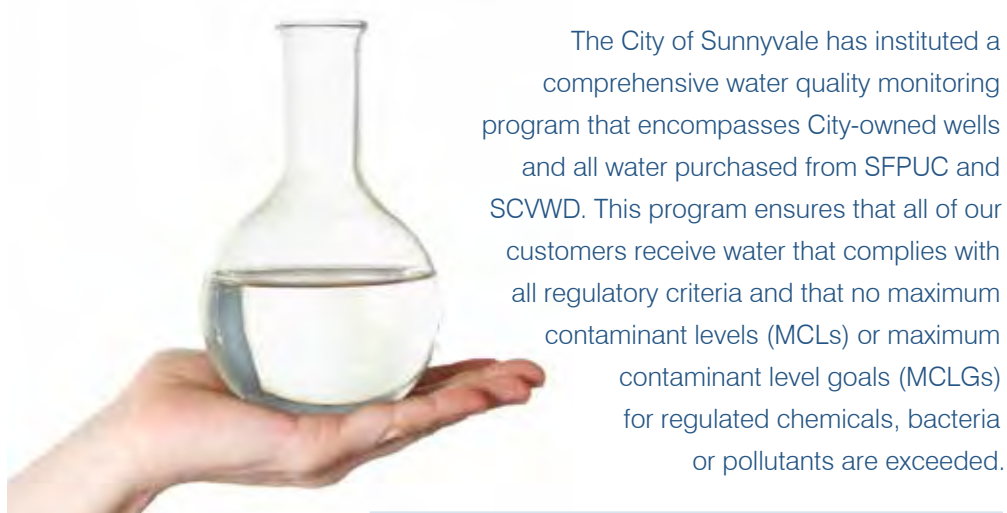
To stay up-to-date on water conservation efforts, requirements, rebate programs and water saving tips, visit WaterConservation.inSunnyvale.com or, the SCVWD at valleywater.org. Please report water waste at (408) 630-2000 or by email at drought@valleywater.org.

Steps to Save Water Indoors

- Check toilets and faucets for leaks. You could save thousands of gallons.
- Install water-efficient faucet aerators and showerheads in your kitchen and bathrooms.
- Take shorter showers. You will save 2.5 gallons of water each minute.
- Only wash full loads of laundry and dishes.
- Replace your old top-loading clothes washer with a high-efficiency model.

Steps to Save Water Outdoors

- Plant native or drought-tolerant plants that require less watering.
- Apply organic mulch around plants to reduce moisture loss, keep weed-growth down and promote healthier soil.
- Water during cool parts of the day and deeply soak your lawn to ensure moisture reaches the roots.
- Water your lawn only when it needs it.
- Use a broom to sweep off pavement. Using a hose wastes money and water.



The City of Sunnyvale has instituted a comprehensive water quality monitoring program that encompasses City-owned wells and all water purchased from SFPUC and SCVWD. This program ensures that all of our customers receive water that complies with all regulatory criteria and that no maximum contaminant levels (MCLs) or maximum contaminant level goals (MCLGs) for regulated chemicals, bacteria or pollutants are exceeded.

The table to the right shows the results of the distribution system and source water analyses conducted by the City, SCVWD and SFPUC. Water quality data are grouped by water source. Last year we conducted more than 20,000 tests for more than 80 parameters. We detected only 14 of these parameters, and none were detected at levels higher than the State Board allows.

Only the parameters detected are shown. Other constituents were analyzed but are not listed because they were not detected. Additionally, unregulated parameters are shown to provide you with supplemental information.

Some data—although representative—were collected prior to 2015, as the State Board requires monitoring for some constituents less than once per year since the concentrations of these constituents do not vary frequently or significantly.



More information ►

For more information about this report or the City's water quality monitoring program, please contact:

John Ramirez
City of Sunnyvale
Water Operations Manager
Tel: (408) 730-7900
TDD: (408) 730-7501
jramirez@sunnyvale.ca.gov

PRIMARY DRINKING WATER STANDARDS (PUBLIC HEALTH RELATED STANDARDS)										
PARAMETER	Unit	MCL, (AL), or [MRDL]	PHG, (MCLG), or [MRDLG]	Groundwater Well		SCVWD		SFPUC		Typical Sources*
				Average or [Max]	Range	Average or [Max]	Range	Average or [Max]	Range	
SOURCE WATER SAMPLING										
INORGANIC CHEMICALS										
Barium	ppm	1	2	0.10	ND–0.13	ND	ND	ND	ND	3, 21
Fluoride	ppm	2	1	0.14	0.13–0.16	ND	ND–0.1	0.3	ND–0.8	3, 5, 6
Chromium VI (Hexavalent Chromium)	ppb	10	0.02	1.3	ND–3.6	ND	ND	ND	ND	3, 18, 19, 22
Nitrate (as Nitrogen)	ppm	10	10	3.7	2.5–6.3	ND	ND–5	ND	ND	3, 7, 8
RADIONUCLIDES										
Uranium	pCi/L	20	0.43	ND	ND	ND	ND–1.0	ND	ND	3
DISINFECTION BYPRODUCT PRECURSORS										
TOC (precursor control)	ppm	TT	NA			2.69	1.90–3.07	2.1	1.4–5.2	10
MICROBIOLOGICAL										
Giardia Lamblia	cyst/L	TT	(0)			ND	ND	0.01	ND–0.08	1
Turbidity	NTU	TT _a	NA			[0.60]	99.9% _b	[3.1]	97–100% _b	2
DISTRIBUTION SYSTEM SAMPLING										
LEAD AND COPPER RULE STUDY (SUNNYVALE 2013 AT-THE-TAP SAMPLING)				90th Percentile		# of Samples Above AL				
Lead	ppb	(15)	0.2	1		0 out of 53		3, 17, 19		
Copper	ppm	(1.3)	0.3	0.079		0 out of 53		3, 17, 18		
DISINFECTION RESIDUALS AND BYPRODUCTS				Highest Location RAA		Range				
Disinfectant Residual as Chlorine	ppm	[4]	[4]	1.79		0.02–4.6		20		
Total Trihalomethanes	ppb	80	NA	60.7		25.7–60.8		9		
Haloacetic Acids	ppb	60	NA	28.8		10.0–35.0		9		
MICROBIOLOGICAL				Average		Range				
Total Coliform Bacteria	% pos / month	5.0%	(0)	0.17%		0–0.7%		1		
SECONDARY DRINKING WATER STANDARDS (AESTHETIC STANDARDS)										
PARAMETER	Unit	MCL		Average	Range	Average	Range	Average	Range	Sources*
Chloride	ppm	500		47	36–68	103	87–120	8.4	ND–16	11, 12, 14
Odor — Threshold	TON	3		ND	ND	1	1	ND	ND	13
Specific Conductance	μS/cm	1600		677	610–740	696	636–749	144	34–213	14, 16
Sulfate	ppm	500		37	28–42	72.1	66.0–79.3	15	1.2–30	11, 12, 15
Total Dissolved Solids	ppm	1000		395	360–430	381	330–424	54	ND–93	11, 12
Zinc	ppm	5		0.07	ND–0.09	ND	ND	ND	ND	11, 12, 15
UNREGULATED PARAMETERS FOR UCMR ³										
PARAMETER	Unit	NL		Average	Range	Average	Range	Average	Range	
Chlorate	ppb	800		81	45–130	116	62–160	157	39–280	
Chlorodifluoromethane (HCFC-22)	ppb	NS		0.52	ND–2.2	NA	NA	NA	NA	
Molybdenum	ppb	NS		1.2	ND–1.6	2	2	NA	NA	
Strontium	ppb	NS		404	280–500	NA	NA	NA	NA	
Vanadium	ppb	50		1.6	ND–5.2	ND	ND	NA	NA	
OTHER WATER QUALITY PARAMETERS										
PARAMETER	Unit	MCL		Average	Range	Average	Range	Average	Range	
Hardness (as Calcium Carbonate)	ppm	NS		322	300–340	144	133–163	42	13–65	
pH	Units	NS		8.7 _c	7.1–9.9 _c	7.7	7.5–8.0	9.0	7.1–9.9	
Sodium	ppm	NS		29	23–42	75	64–90	13	2.9–19	
Temperature	°C	NS		18 _c	7–26 _c	17	15–20	NA	NA	

Important information about your water quality

Fluoride

Currently, all water from SFPUC is fluoridated while water from SCVWD, the City's other wholesale water provider is not. The City also does not fluoridate well water. As a result, some areas of Sunnyvale receive fluoridated water, other areas receive non-fluoridated water and some areas receive a mixture of both. A map showing the areas is found below. **According to the Centers for Disease Control and Prevention, if a child under the age of six months is exclusively consuming infant formula reconstituted with fluoridated water, there may be an increased chance of dental fluorosis. Consult your child's health care provider for more information.**

Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you do so, you may wish to collect the flushed water and use it for another purpose, such as watering plants. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at water.epa.gov/lead.

Chromium-6

On July 1, 2014, the new MCL of 10 ppb became effective for Chromium-6. Until then, chromium-6 was regulated under the 50 ppb primary drinking water standard for total chromium, which was established in California in 1977. The City is pleased to report that there have been no detections exceeding the new MCL.

Hardness Classification	Grains per Gallon	mg/L or ppm
Soft	less than 1.0	less than 17.1
Slightly hard	1.0–3.5	17.1–60
Moderately hard	3.5–7.0	60–120
Hard	7.0–10.5	120–180
Very hard	over 10.5	over 180

HOW TO READ THIS CHART

DEFINITIONS OF KEY TERMS

Maximum Contaminant Level (MCL). The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water. MCLs are established by USEPA and the State Board.

Maximum Contaminant Level Goal (MCLG). The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Maximum Residual Disinfectant Level (MRDL). The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG). The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Notification Level (NL). Notification levels are health-based advisory levels established by the State Board for chemicals in drinking water that lack MCLs. When chemicals are found at concentrations greater than their notification levels, certain requirements and recommendations apply.

Primary Drinking Water Standard (PDWS). MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.

Public Health Goal (PHG). The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Office of Environmental Health Hazard Assessment.

Regulatory Action Level (AL). The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique (TT). A required process intended to reduce the level of a contaminant in drinking water.

Total Organic Carbon (TOC). TOC has no health effects. However, TOC provides a medium for the formation of disinfection byproducts including trihalomethanes and haloacetic acids. Drinking water containing disinfection byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems or nervous system effects and may lead to an increased risk of cancer.

Turbidity. Turbidity has no health effects. It is a measure of the clarity of the water and is monitored because it is a good indicator of water quality and the effectiveness of a filtration system. The MCL for turbidity is based on the TT. For unfiltered water, the MCL is 5.0 NTU. For filtered water, the MCL is ≤0.3 NTU 95% of the time.

UCMR. Unregulated Contaminant Monitoring Rule requires monitoring for contaminants not currently regulated. This monitoring provides a basis for future regulatory actions to protect public health.

Waiver. State permission to decrease the monitoring frequency for a particular contaminant.

ABBREVIATIONS

°C	Degrees Celsius
CU	Color unit
DDW	Division of Drinking Water
Max	Maximum
NA	Not applicable
ND	Not detected
NS	No standard
NTU	Nephelometric turbidity unit
ppb	parts per billion (micrograms per liter)
ppm	parts per million (milligrams per liter)
µS/cm	microSiemens per centimeter
% pos	% positive
RAA	Running annual average
SCVWD	Santa Clara Valley Water District
SFPUC	San Francisco Public Utilities Commission
TOC	Total organic carbon
TON	Threshold odor number
USEPA	United States Environmental Protection Agency

NOTES

- For unfiltered water, the MCL is 5.0 NTU. For filtered water, the MCL is ≤0.3 NTU 95% of the time.
- Percent of time ≤0.3 NTU.
- Levels in the distribution system.

* TYPICAL SOURCES IN DRINKING WATER

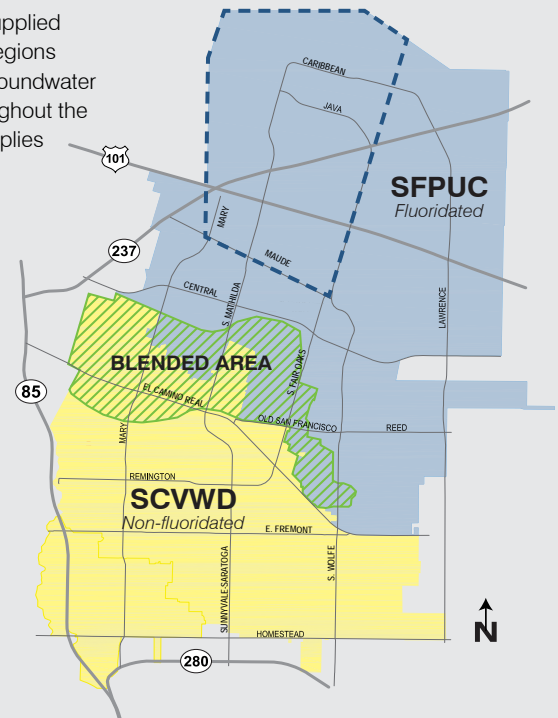
- Naturally present in the environment
- Soil runoff
- Erosion of natural deposits
- Residue from some surface water treatment processes
- Water additive that promotes strong teeth
- Discharge from fertilizer and aluminum factories
- Runoff and leaching from fertilizer use
- Leaching from septic tanks and sewage
- By-product of drinking water disinfection
- Various natural and man-made sources
- Runoff from natural deposits
- Leaching from natural deposits
- Naturally-occurring organic materials
- Seawater influence
- Industrial wastes
- Substances that form ions when in water
- Internal corrosion of household plumbing systems
- Leaching from wood preservatives
- Discharges from industrial manufacturers
- Drinking water disinfectant added for treatment
- Discharges of oil drilling wastes and from metal refineries
- Discharge from mines and chemical manufacturers

WATER SUPPLY MAP

The adjacent map indicates which areas of the City are supplied by SFPUC, SCVWD or a mixture of the two. The colored regions correspond to the colored columns in the table above. Groundwater wells, which are not shown on this map, are located throughout the City. Local groundwater is blended with surface water supplies from SFPUC and SCVWD. SFPUC water is fluoridated but SCVWD and groundwater supplies are not.

TREATMENT VIOLATION

On March 3, 2015, at approximately 4:50 p.m., due to an operational error, SFPUC Regional Water System staff accidentally operated the valves at the Sunol Valve Lot allowing untreated water from San Antonio Reservoir to enter the Regional Water System for an estimated 20 minutes. The City does not provide treatment; however, we obtain treated water from the Regional Water System. As a result, a blend of treated and untreated water may have been served to some Sunnyvale customers on March 4, 2015. Affected customers (shown within the dashed blue boundary) were notified. Inadequately treated surface water may contain disease-causing organisms that can cause diarrhea, nausea, cramps and associated headaches.



Attachment M
District Well Ordinance

ORDINANCE NO. 90-1

AN ORDINANCE OF SANTA CLARA VALLEY WATER DISTRICT REGULATING THE CLASSIFICATION, CONSTRUCTION AND DESTRUCTION OF WELLS AND OTHER DEEP EXCAVATIONS; REQUIRING THE DESTRUCTION OF ABANDONED OR UNUSED WELLS; ADOPTING WATER CONTAMINATION HAZARD STANDARDS; MAKING VIOLATION A MISDEMEANOR; AND REPEALING ORDINANCE NO. 85-1

TABLE OF CONTENTS

Section 1: Purpose

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Section 10: Enforcement

Section 11: Prior Ordinances

Section 12: Severability

Section 13: Effective Date

The Board of Directors of the Santa Clara Valley Water District do ordain as follows:

Section 1: Purpose

1.1 It is the purpose of this ordinance to provide within the District for the classification of existing wells, to regulate the construction of new wells, the reconstruction or deepening of existing wells, and the destruction of wells, including water wells, monitoring wells, cathodic protection wells, exploratory holes, and other deep excavations, to the end that such wells and excavations will not cause pollution or contamination of groundwater, or otherwise jeopardize the health, safety, or welfare of the people of the District.

Section 2: Classification of Wells

2.1 All wells within Santa Clara County will be placed into one of the three following classifications: "Active Well," "Inactive Well," "Abandoned or Unused Well."

2.2 Active Well - An active well is a well that has been utilized at least once in the preceding 12 months for the extraction of groundwater. Active wells within groundwater charge zones of the District are subject to the District's groundwater production requirements and require, pursuant to the District Act, the filing of groundwater production statements.

(a) If the pump from an active water well has been removed for repair or replacement, the well is still considered to be an active well. During the repair period, the well shall be adequately covered to prevent injury to people and to prevent the entrance of undesirable water or foreign matter.

2.3 Inactive or Standby Well - An inactive or standby well means a well that has not been used for a period of one year or more for the production of groundwater, but is maintained in such a condition that it could be so used, or a monitoring well maintained for such use, or a cathodic protection well maintained for such use.

(a) The owner of a well who desires to place or maintain it in the above classification shall obtain from the District, at intervals set by the District, a permit verifying the classification.

(b) As evidence of the owner's intention regarding continued use and as conditions of the permit, the owner shall properly maintain the well in such a way that:

(b.1) The well has no defects which will permit the impairment of quality of water in the well or in the water-bearing formation penetrated.

(b.2) The well head is appropriately protected to prevent accidental entry and to prevent the entrance of undesirable water or foreign matter.

(b.3) The well is marked so that it can be clearly seen.

(b.4) The area surrounding the well is kept clear of brush or debris.

(c) Wells used for monitoring are considered inactive wells so long as they are maintained for this purpose. However, such wells shall be in compliance with this

ordinance and bear an appropriate cap with the label, "Monitoring Well," and the name of the agency or organization using the well. It shall be securely locked when not in use.

(d) Cathodic protection wells or test wells deep enough to promote interaquifer transfer of groundwater shall be considered inactive wells as long as they remain functional.

2.4 Abandoned or Unused Well - An abandoned or unused well may be defined under one or more of the following:

(a) A well, other than a monitoring well, which has been out of service continuously for one year or more, and does not meet the definition of a standby well.

(b) A monitoring well from which no measurement or sample has been taken for a period of three years.

(c) A well which is in such a state of disrepair that it cannot be made operational for its intended purpose.

(d) A test hole or exploratory boring 24 hours after construction and testing work has been completed.

(e) A cathodic protection well that is no longer functional for its original purpose.

(f) Any boring that cannot be satisfactorily completed as a well.

2.5 The final determination as to the status of a well will be made by the District.

Section 3: Definitions

3.1 Definitions of terms shall be as set forth from time to time in: 1) Chapter II and Appendix I of the Department of Water Resources Bulletin No. 74, "Water Well Standards: State of California," 2) Standards for the Construction and Destruction of Wells and other Deep Excavations in Santa Clara County," by the Santa Clara Valley Water District, referenced in Section 7 of this ordinance, and 3) as set forth below:

(a) "Board" shall mean the Board of Directors of the Santa Clara Valley Water District.

(b) "District" shall mean the Santa Clara Valley Water District.

(c) "General Manager" shall mean the General Manager of the Santa Clara Valley Water District or his/her designee.

(d) "Health Department" shall mean the Santa Clara County Health Department.

(e) "Inspecting Officer" shall mean a person designated by the General Manager and authorized to ensure that the provisions of this ordinance are enforced. Such person will be a member of staff of the District or the Health Department.

(f) "Person," as used in this ordinance, shall mean any person, association, firm, corporation, municipality, the County of Santa Clara, special district, or public agency.

(g) "Water Contamination Hazard": Pursuant to Section 6.1 of the Santa Clara Valley Water District Act, the Board hereby declares that a water contamination hazard is a condition created by wells or deep excavations into which water will or may foreseeably flow where that water contains contaminants in excess of the applicable standard currently promulgated by the California Department of Health Services or which is the subject of a cleanup order issued by the cognizant Regional Water Quality Control Board.

(h) Tense or Gender: Words used in the present tense include the future as well as the present. Words used in the masculine gender include the feminine and neuter. The singular number includes the plural, and the plural the singular.

(i) "Section Headings," when contained in this ordinance, shall not be deemed to govern, limit, modify, or in any manner affect the scope, meaning, or intent of the provisions of any section.

Section 4: State Reporting

4.1 Nothing contained in this ordinance shall be deemed to release any person from compliance with the provisions of Article 3, Chapter 10, Division 7 of the Water Code of the State of California or any amendment thereto.

Section 5: Prohibitions

5.1 No person within the County of Santa Clara shall construct, modify, or destroy a well unless a written permit has first been obtained from the District.

5.2 To prevent the contamination of underground water supplies through open wells, no person within the County of Santa Clara shall knowingly permit the existence on premises in his or her ownership or possession and control of any well opening or entrance which is not sealed or secured in such a way as to prevent the introduction of contaminants.

5.3 No person within the County of Santa Clara shall knowingly permit the existence of any abandoned well on premises in his or her ownership or possession and control.

Section 6: Permit Procedures

6.1 When Permit Required: No person shall dig, bore, drill, deepen, modify, repair, or destroy a water well, cathodic protection well, observation well, monitoring well, or any other excavation that may intersect ground water without first applying for and receiving a permit as provided in this ordinance unless exempted by law.

6.2 Penalty for Failure to Obtain Permit: In addition to the requirements of Section 10 hereof, any person who shall commence any work for which a permit is required by this ordinance without having obtained a permit, shall be required, if subsequently granted a permit for this work, to pay double the standard permit fee.

6.3 Emergency Work: The above provisions shall not apply to emergency work required on short notice to maintain drinking water or agricultural supply systems. In such cases, the person responsible for the emergency work shall:

(a) Satisfy the District that the work was urgently necessary, and

(b) Demonstrate that all work performed was done in conformance with the technical standards as designated in Section 7.

6.4 Application: Permits required by this ordinance shall be subject to conditions set forth in this ordinance or as required by law. The General Manager shall prescribe and provide a standard form of application for permits under the terms of this ordinance. The application form shall contain space for the name and address of the applicant, together with such information as in the judgement of the General Manager is necessary to establish the location of the well, the purpose of the permit, and the extent of any proposed work. When required by the District, drawings and specifications for any proposed work shall accompany the application form and shall be detailed enough to demonstrate compliance with the standards.

6.5 Fees: Fees to cover District costs required for the review of applications, issuance of permits, Board hearings of appeals, and inspection of work under this ordinance, and the method of payment of such fees, may be as established and adopted by the Board from time to time by resolution.

6.6 Payment of Fees and Costs, Waiver: At the recommendation of the General Manager and approval by the Board, all or any part of the fees and costs of compliance with this ordinance may be waived or paid by the District in accordance with such guidelines and procedures as may be established by the Board.

6.7 Abandoned Wells: As a condition of a construction or reconstruction permit, any abandoned wells on the property shall be destroyed in accordance with standards provided in this ordinance.

6.8 Posting of Permit: It shall be the responsibility of the permittee to maintain a copy of the permit on the drilling site during all stages of construction or destruction.

6.9 Permit - Denial: The District shall deny an application for a permit if, in its judgement, issuance of a permit is not in the public interest.

6.10 Limitations: When the District issues a permit pursuant to this ordinance, it may condition the permit in any manner necessary to carry out the purposes of this ordinance. Conditions may include, but are not limited to, such quantity and quality testing methods as the District finds necessary.

6.11 Persons permitted to work on Wells: All construction, reconstruction, or destruction work on wells shall be performed by a person who possesses an active C-57 contractor's license in accordance with the provisions of the California Business and Professions Code, Section 7000, et. seq. and Water Code Section 13750.5.

6.12 Term of Permit and Completion of Work: Work authorized by a permit issued pursuant to this ordinance shall begin within one hundred eighty (180) calendar days from the date of issuance of the permit unless a different starting date is stated in the permit. If the work is not so begun, the permit shall become void. The permittee shall notify the District at least one (1) working day before starting any work authorized by the permit. Subject to revocation, as hereinafter specified, the permit shall be valid for a term of one year from the date of issuance unless a lesser term is specified. The permittee shall complete the work authorized by the permit within the time specified in the permit. If at any time the General Manager determines that any delay in the prosecution or completion of the work authorized is due to lack of reasonable diligence on the part of the permittee, the General Manager may, following due notice to the permittee and an opportunity to be heard, revoke the permit. The General Manager may, upon good cause being shown, extend the permit for an additional maximum period of six (6) months. Further extensions may be granted only by the Board.

6.13 Ordered Additional Work: Upon suspending or revoking any permit, the District may order the permittee to perform any work reasonably necessary to protect the underground waters from pollution or contamination, if any work already done by the permittee has left a well in such a condition as to constitute a hazard to the quality of the underground waters. No permittee or person who has held any permit issued pursuant to the ordinance shall fail to comply with any such order.

6.14 Guarantee of Performance: Prior to the issuance of a permit, the applicant shall post with the General Manager a cash deposit or bond guaranteeing compliance with the terms of this ordinance, in an amount determined by the General Manager as necessary to protect the District and public against faulty or uncompleted work. The amount shall not exceed the total estimated cost of the work. The deposit or bond may be waived if the General Manager determines that other assurances of compliance are adequate.

6.15 Liability: A permittee shall assume all liability imposed by law for personal injury or property damage resulting from any work performed by the permittee or his or her agent under the permit, or resulting from failure of the permittee to perform each obligation under said permit. If any claim of such liability is made against the District, its officers, employees, or agents, the permittee shall defend, indemnify, and hold them and each of them harmless from such claim.

6.16 Variances: The District shall have the power under the following specified conditions to grant a variance from any provision of the standards and to prescribe alternative requirements in their place:

(a) Special Circumstances: There must be, in a specific case, a special circumstance where practical difficulties or unnecessary hardship would result from the strict interpretation and enforcement of any standard.

(b) Intent of Ordinance Not Compromised: The granting of such a variance shall be consistent with the purposes of this ordinance.

6.17 Special Ground Water Protection Areas: The District may designate areas where ground water quality problems are known to exist and where a well will penetrate more than one aquifer. The District may require in these designated areas special well seal(s) to prevent mixing of water from several aquifers. Where an applicant proposes well construction, reconstruction, or destruction work in such an area, the District may require the applicant to provide a report prepared by a Registered Geologist or Registered Civil Engineer (California Business and Professions Code Sections 7850 and 6762 respectively) that identifies all strata containing poor quality water and recommends the location and specifications of the seal or seals needed to prevent the entrance of poor quality water or its migration into other aquifers.

Section 7: Standards

7.1 Standards for the construction and destruction of wells and other deep excavations will be in accordance with the latest revisions of both the District Well Standards and Department of Water Resources Bulletin 74-81, and all subsequent supplements and revisions to either.

7.2 Destruction of Abandoned Wells: All persons owning an abandoned well as defined in the well standards shall destroy it or cause it to be destroyed before December 31, 1991, except those excluded by California Health and Safety Code Section 24440.

7.3 Inspections: The District shall make an inspection of the annular seal placement upon construction or reconstruction of a well and of the grouting of wells to be destroyed. It may make an initial inspection of each proposed work site, an inspection at the completion of the work, and inspections at such other times as it deems appropriate.

7.4 Required Notice: The District shall be notified a minimum of twenty-four (24) hours prior to sealing the annular space and prior to destruction of a well. Drillers who anticipate completing a well in less than one day shall notify the District twenty-four (24) hours prior to commencement of drilling and provide the anticipated time to commence the sealing of the annular space.

7.5 Should the District Fail to be Present: If the District wishes to allow a seal to be tremied or placed or a well destroyed without inspection, the driller shall seal the well in accordance with the standards of this ordinance and any permit conditions. No seal shall be tremied or placed or a well destroyed until permission to proceed is given.

7.6 Final Inspection: If requested by the District, the driller shall notify the District within seven (7) calendar days of the completion of the work at each drilling site. The District may make a final inspection after completion of the work to determine whether the well was completed in accordance with this ordinance.

7.7 Submittal of State "Report of Completion": A copy of the "Report of Completion" (Water Well Driller's Report, Department of Water Resources Form 188) required by California Water Code Section 13751, shall be submitted by the permittee to the District within thirty (30) calendar days of construction, alteration, or destruction of any well. This report shall document that the work was completed in accordance with the standards and all additional permit conditions.

7.8 Confidentiality of Report: In accordance with California Water Code Section 13752, reports made in accordance with Section 7.7 above, will not be made available for inspection by the public but shall be made available for inspection by governmental agencies for use in making studies. Reports shall be made available to any person who obtains written authorization from the owner of the well.

7.9 Requirements of Other Agencies: Nothing in this ordinance shall be deemed to excuse any person from compliance with the provisions of California Water Code Sections 13750 through 13755 relating to notices and reports of completion or any other federal, state, or local reporting regulations.

Section 8: Right of Hearing

8.1 Review and Appeal: Any person aggrieved by the refusal to issue a permit, by the terms of a permit, or by any District decision made under this Ordinance, shall have the right of review and appeal.

(a) The aggrieved person may, upon written request, have the matter reviewed by the General Manager. Upon receipt of such a written request, the General Manager shall schedule the same for review within thirty (30) calendar days and give applicant at least fourteen (14) calendar days' written notice of the time and place of said review unless applicant agrees to a lesser time.

(b) If the applicant is not satisfied with the results of the review by the General Manager, an appeal may be presented to the Board.

(c) The appeal to the Board shall be in writing and made within fourteen (14) calendar days after the General Manager's review. It shall specify the grounds upon which it is taken, and shall be accompanied by a filing fee as established by the Board. The Clerk of the Board shall set the appeal for hearing at the earliest practicable time, and shall notify the appellant, in writing, of the time so set at least five (5) days prior to the hearing. After

the hearing, the Board may reverse in whole or in part, or may modify the order or determination appealed from. The action of the Board shall be final and conclusive.

Section 9: Entry and Inspection 9.1 Right of Entry and Inspection

Representatives of the District shall have the right to enter upon any premises at all reasonable times to make inspections and tests for the purpose of such enforcement and administration. The representative shall first present proper credentials and demand entry. If premises are unoccupied, a reasonable effort will be made to locate the owner or other person having charge or control of same. If entry is refused, recourse will be had to such remedies as are provided by law to secure entry.

Section 10: Enforcement

10.1 Notice of Violation: Whenever the District determines that a well (a) has not been completed, constructed, or destroyed in accordance with a permit or the plans and specifications relating thereto, (b) has been completed, constructed, or destroyed without the required permit, or (c) has been abandoned and not been destroyed in accordance with the provisions of this ordinance, the District may record a Notice of Violation with the Office of the County Recorder. The owner(s) of the property, as revealed by the assessment roll, on which the violation is situated and any other person responsible for the violation shall be notified of the recordation, if their respective addresses are available.

10.2 Appeal: If the property owner(s) or authorized agent disagree with the determination, he/she may submit evidence to the District indicating that there is no violation and then shall have the right to appeal an adverse decision of the District to the Board in accordance with the provisions of Section 8 hereof.

10.3 Notice of Public Nuisance: Whenever the District determines that a public nuisance as defined by Section 6.1 of the Santa Clara Valley Water District Act exists, the General Manager shall proceed in accordance with said Act to initiate proceedings to abate the same.

10.4 Emergency Abatement: If the General Manager finds that a well subject to this ordinance is, by reason of condition, operation or maintenance, causing significant irreparable damage to the groundwater, or presents an immediate danger to health and safety, and that it is impracticable to notify the owner or permittee, the General Manager may perform emergency work necessary to abate the condition without giving notice as above required, and the owner of the land as shown on the last equalized assessment roll shall be liable for the cost thereof.

10.5 Removal of Violation Notice: The District shall submit a Removal of Notice of Violation to the county recorder when: (a) it is determined by the District, after review, that no violation of this ordinance exists; or (b) all required and corrective work has been completed and approved by the District.

10.6 Violation a Misdemeanor: Any person who violates any of the provisions of this ordinance, or fails to satisfy the terms of a permit issued hereunder, is guilty of a misdemeanor, and upon conviction thereof is punishable by a fine not exceeding five hundred dollars (\$500), or imprisonment in the county jail not to exceed thirty (30) days, or both that fine and that imprisonment. Any violation or threatened violation may also be enjoined by civil action.

10.7 Civil Enforcement: Violations of this ordinance may also be redressed by civil action. In addition to being subject to prosecution, any person who violates any of the provisions of this ordinance may be made the subject of a civil action. Appropriate civil action includes, but is not limited to, injunctive relief and cost recovery.

10.8 Remedies Cumulative: The remedies available to the Board to enforce this ordinance are in addition to any other remedies available under ordinance or statute, and do not replace or supplant any other remedy but are cumulative thereto.

Section 11: Prior Ordinances

11.1 Conflicts and Repeal: Ordinance 85-1 is hereby repealed. All ordinances of the District in conflict with the terms and conditions of this ordinance are hereby repealed to the extent of such conflict.

Section 12: Severability

12.1 If any section, subsection, paragraph, subparagraph, sentence, clause, or phrase of this ordinance is for any reason held to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect the validity or constitutionality of the remaining portions of this ordinance; and the Board declares that this ordinance and each section, subsection, paragraph, subparagraph, sentence, clause, and phrase thereof would have been adopted irrespective of the fact that one or more of such section, subsection, paragraph, subparagraph, sentence, clause, or phrase be declared invalid or unconstitutional.

Section 13: Effective Date

13.1 This ordinance shall take effect May 24, 1990. Within ten (10) days after its adoption it shall be published once in full with the names of the members voting for and against the same in a newspaper or general circulation printed, published and circulated in the District. **PASSED AND ADOPTED** by the Board of Directors of Santa Clara Valley Water District on April 24, 1990.

Attachment N
Retailer Rates

Cal Water-Effective January 1, 2017

Categories	Tiers	Rates*
Quantity Rates		
For 1-10 CCF, per CCF		4.4004
For 11-27 CCF, per CCF		4.6813
For over 27 CCF, per CCF		5.6176

Monthly Service Charge	
	All
5/8"	17.88
3/4"	26.82
Fire Sprinkler with 1 "	18.95
1"	44.70
1.5"	89.40
2"	143.04
3"	268.20
4"	381.89
6"	620.60
8"	992.98
10"	1,414.56
12"	1,826.44
14"	2,491.61

Gilroy- Effective July 1, 2016

Categories	Tiers*	Zone 1**	Zone 2	Zone 3
Residential	0-30,000	\$2.78	\$3.33	\$3.91
	30,001+	\$3.29	\$3.84	\$4.42
Wastewater	Single Family	\$46.64/mo		
	Multi Family	\$33.13/mo		
Non-Residential	Low Strength	Domestic Strength	Medium Strength	High Strength
	\$7.41	\$9.21	\$12.08	\$18.63

Monthly Service Charge		
	Residential	Commercial
5/8"		
3/4"	\$8.66	\$8.66
1"	\$14.45	\$14.45
1.5"	\$28.90	\$28.90
2"	\$46.24	\$46.24
3"	\$86.69	\$86.69
4"		
6"		
8"		
10"		

*Tiers in gallons

**All Rates per 1000 gallons

Great Oaks - effective July 1, 2016

	Usage Charge per 100 Feet (ccf)	
Usage per billing period	Uniform Rates	Tierd Rates
0 - 13 ccf	\$2.8458	\$2.6275
13 - 32 ccf	\$2.8458	\$2.8458
over 32 ccf	\$2.8458	\$3.2812

Monthly Service Charge	
	All
5/8"	\$8.15
3/4"	\$12.23
1"	\$20.38
1.5"	\$40.76
2"	\$65.22
3"	\$122.28
4"	\$203.81
6"	\$407.62
8"	\$652.18
10"	\$937.52
12"	\$1,345.52

Milpitas - effective June 3, 2014

Categories	Tiers	Rates*
Residential	1-10	\$2.62
	11-20	\$3.48
	21-30	\$4.69
	31 +	\$5.29
Commercial	N/A	\$5.29
Potable Irrigation	N/A	\$5.29
Ed Levin Park	N/A	\$3.08
Recycled Irrigation	N/A	\$4.08
Recycled Water Industrial	N/A	\$2.65

*Rates per HCF

Bi-Monthly Service Charge		
	Residential	Commercial
5/8"	\$27.36	\$27.36
3/4"	\$29.07	\$29.07
1"	\$41.28	\$41.28
1.5"	\$52.07	\$52.07
2"	\$67.96	\$67.96
3"	\$181.95	\$181.95
4"	\$230.57	\$230.57
6"	\$351.86	\$351.86
8"	\$460.99	\$460.99
10"	\$667.31	\$667.31

Mountain View-Effective July 1, 2016

Categories	Tiers	Rates*
Residential Single Unit	0-3 CCF	\$4.76
	>3-15 CCF	\$6.35
	>15 CCF	\$10.16
Multiple Unit (2-4), on 5-8" or 3/4"	0-2 CCF	\$4.76
	>2-7 CCF	\$6.35
	>7 CCF	\$10.16
Commercial-Uniform rate		\$6.35

*Rates per CCF

Monthly Service Charge			
	Residential-Single Unit	Residential-Multi Unit	Commercial
5/8"	\$14.00	\$14.00	\$14.00
3/4"	\$14.00	\$14.00	\$14.00
1"	\$14.00	\$28.00	\$28.00
1.5"	\$14.00	\$56.00	\$56.00
2"	\$14.00	\$89.60	\$89.60
3"	\$14.00	\$168.00	\$168.00
4"	\$14.00	\$280.00	\$280.00
6"	\$14.00	\$560.00	\$560.00
8"	\$14.00	\$896.00	\$896.00
10"	\$14.00	\$1,344.00	\$1,344.00

Morgan Hill - Effective January 1, 2016

Categories		Rates*
Single Family Residential	0-10 hcf	\$1.74
	11-30 hcf	\$3.47
	31+	\$5.21
Multi Family Residential	0-8 hcf	\$1.74
	9-16 hcf	\$3.47
	17+	\$5.21
Commercial	N/A	\$2.84

*Rates per HCF

Monthly Service Charge		
Meter Size	Residential	Commercial
5/8"	\$8.94	\$8.94
3/4"	\$8.94	\$8.94
1"	\$8.94	\$8.94
1.5"	\$14.86	\$14.86
2"	\$23.89	\$23.89
3"	\$47.70	\$47.70
4"	\$77.23	\$77.23
6"	\$118.63	\$118.63

Palo Alto - Effective July 1, 2016

Customer Rate Schedule	Meter Size	Monthly Service Charge
W-1	5/8"	\$16.77
W-4	3/4"	\$22.60
W-7	1"	\$34.26
	1.5"	\$63.40
	2"	\$98.37
	3"	\$209.11
	4"	\$372.31
	6"	\$762.81
	8"	\$1,403.94
	10"	\$2,219.92
	12"	\$2,919.34
W-2	5/8"	\$50.00
	3"	\$125.00
W-3	2"	\$3.79
	4"	\$23.42
	6"	\$68.03
	8"	\$144.97
	10"	\$260.70
	12"	\$421.11

	Volume Charges (by Rate Schedule)		
Customer Rate Schedule	Commodity	Drought Surcharge	Total
W-1			
Tier 1	\$6.30	\$0.43	\$6.73
Tier 2	\$8.82	\$1.21	\$10.03
W-4	\$7.32	\$0.53	\$7.85
W-7	\$8.72	\$1.25	\$9.97
W-2	\$7.32	\$0.53	\$7.85
W-3	\$10.00		\$10.00

Purissima Hills effective July 1, 2015

Categories	Tiers	Rates*	Monthly Service Charge	
City Residents	1-10	\$4.64		All
	11-30	\$5.38	5/8"	N/A
	31-60	\$7.06	3/4"	\$15.00
	61-100	\$8.74	1"	\$24.50
	100 +	\$10.42	1.5"	\$34.00
			2"	\$49.00
			3"	\$60.50
			4"	\$112.00
Commercial	N/A	\$6.45		

*Rates per CCF

San Jose Municipal-Effective July 1, 2016

Categories	Tiers	Zone 1*	Zone 2	Zone 3,4	Zone 5,6	Edenvale	Coyote	Alviso	North S.J.
Residential Bi-Monthly*	0-14	\$3.74	\$3.95	\$4.12	\$4.33	\$3.74	\$3.74	\$3.74	\$3.74
	15-28	\$4.31	\$4.47	\$4.64	\$4.87	\$4.31	\$4.31	\$4.31	\$4.31
	29-42	\$4.31	\$4.47	\$4.64	\$4.87	\$4.31	\$4.31	\$4.31	\$4.31
	42+	\$4.31	\$4.47	\$4.64	\$4.87	\$4.31	\$4.31	\$4.31	\$4.31
Commercial Bi-Monthly	N/A	\$4.31	\$4.47	\$4.64	\$4.87	\$4.31	\$4.31	\$4.31	\$4.31

*All Rates per HCF

**Residential Bi-Monthly rates are multiplied by the number of dwellings to determine total cost.

Bi-Monthly Meter Service Charge		
	Residential	Commercial
5/8"	\$32.98	\$18.00
3/4"	\$33.68	\$18.38
1"	\$58.60	\$31.98
1.5"	\$117.20	\$63.96
2"	\$180.66	\$98.58
3"	\$341.82	\$186.52

4"	\$522.48	\$285.10
6"	\$683.66	\$373.04
8"	\$976.70	\$532.92
10"	\$1,220.92	\$666.18

San Jose Water Company-Effective March 20, 2017

Categories		Tiers	Rates*
Residential		0 to 3 CCF	\$4.2878
Residential		4 to 18 CCF	\$4.7642
Residential		over 18 CCF	\$5.2406
All other Customers		per 100 cu. Ft	\$4.7642

*Rates per HCF

Monthly Service Charge				
	General	Recycled	General w/Fire Sprinkler**	Private Fire Service
5/8"	\$25.45		\$25.45	
3/4"	\$25.45		\$24.45	
1"	\$42.37		\$42.37	
1.5"	\$84.78		\$84.78	
2"	\$135.68	\$31.62	\$135.68	\$25.75
3"	\$254.37	\$42.16	\$254.37	\$38.60
4"	\$423.96	\$47.43		\$51.48
6"	\$847.91	\$79.05		\$77.24
8"	\$1,356.67	\$94.86		\$102.96
10"	\$1,950.24	\$147.55		\$128.71
12"				\$154.45

Santa Clara Water Utility-Effective May 24, 2016

Categories		Tiers	Rates*
Potable Water Service		N/A	\$4.95
Recycled Water Service		N/A	\$3.07

*Rates per HCF

Potable Monthly Service Charge			
	Potable Water	Fire Service	Cross Connection Controls
5/8"	\$14.30		
3/4"	\$14.30		
1"	\$22.80		\$12.10
1.5"	\$41.50		
2"	\$58.69	\$15.85	\$23.35
3"	\$163.35		\$33.10
4"	\$229.90	\$24.95	\$41.40
6"	\$453.75	\$42.95	\$58.05
8"	\$695.75	\$61.70	\$71.35
10"	\$853.00	\$94.35	\$86.10
12"	\$1,101.00	\$127.00	
Recycled Monthly Service Charge			
	Recycled Water	Fire Service	Cross Connection Controls
5/8"	\$14.30		
3/4"	\$14.30		
1"	\$22.80		\$12.10
1.5"	\$41.50		
2"	\$58.69	\$15.85	\$23.35
3"	\$163.35		\$33.10
4"	\$229.90	\$24.95	\$41.40
6"	\$453.75	\$42.95	\$58.05
8"	\$695.75	\$61.70	\$71.35
10"	\$853.00	\$94.35	\$86.10
12"	\$1,101.00	\$127.00	

Sunnyvale Fiscal Year 2016/17

Categories	Tiers	Rates*
Monthly Single Family Residential	0-5	\$3.75
	6 +	\$4.58
All Other Customer Classes		\$4.14
Bi-Monthly Single Fam Residential	0-10	\$3.75
	11+	\$4.58

*Rates per HCF

Water Service Fees Single Family		
	Monthly	Bi-Monthly
5/8"	\$12.01	\$24.02
3/4"	\$16.93	\$33.86
1"	\$26.76	\$53.52
1.5"	\$51.33	\$102.66
2"	\$80.81	\$161.62

Water Service Fees Multi Family/Mobile Home		
	Monthly	Bi-Monthly
5/8"	\$20.12	\$40.24
3/4"	\$29.09	\$58.18
1"	\$47.02	\$94.04
1.5"	\$91.86	\$183.72
2"	\$145.67	\$291.34
3"	\$289.15	\$578.30
4"	\$450.17	\$901.14
6"	\$898.95	\$1,797.90
8"	\$1,437.01	\$2,874.02
10"	\$3,768.60	\$7,537.20

Water Service Fees Commercial		
	Monthly	Bi-Monthly
5/8"	\$20.12	\$40.24
3/4"	\$29.09	\$58.18
1"	\$47.02	\$94.04
1.5"	\$91.86	\$183.72
2"	\$145.67	\$291.34
3"	\$289.15	\$578.30
4"	\$450.57	\$901.14
6"	\$898.95	\$1,797.90
8"	\$1,437.01	\$2,874.02
10"	\$3,768.60	\$7,537.20

Water Service Fees Landscape		
	Monthly	Bi-Monthly
5/8"	\$27.93	\$55.86
3/4"	\$40.80	\$81.60
1"	\$66.55	\$133.10
1.5"	\$130.92	\$261.84
2"	\$208.15	\$416.30
3"	\$414.13	\$828.26
4"	\$645.84	\$1,291.68
6"	\$1,289.50	\$2,579.00
8"	\$2,061.90	\$4,123.80

Water Service Fees Recycled Water		
	Monthly	Bi-Monthly
5/8"		
3/4"		
1"		
1.5"	\$45.44	\$90.83
2"	\$72.71	\$145.42
3"	\$145.42	\$290.84
4"	\$227.22	\$454.44
6"	\$454.44	\$908.88
8"	\$727.10	\$1,454.20
10"	\$1,908.64	\$3,817.28

Attachment O
Retailer Water Company Contact List

Water Retailers Conservation Contact List Updated 1/13/2017			
			949 B Street Los Altos, CA 94024
California Water Service Company (CALWAT)			Main Number (650) 917-0152
Jade Joesten	(408) 367-8369	jjoesten@calwater.com	
Scott Povi, Cust Svg Mgr. Los Altos Dist.		spovio@calwater.com	
Rod Zavala		rzavala@calwater.com	
City of Cupertino			10300 Torre Avenue Cupertino, CA 95014
Katy Nomura	408-777-4844	katyn@cupertino.org	
City of Los Altos (Water Code Enforcement)			
Aida Farramen	650-947-2603		
			7351 Rosanna Street Gilroy, CA 95020
Gilroy, City of (GCSD)		Main Number (408) 846-0420	Billing (408) 846-0420
Dan Aldridge	(408) 846-0271	daldridge@ci.gilroy.ca.us	
Rick Smelser	(408) 846-0260	rsmelser@ci.gilroy.ca.us	
Arica Hernandez		ahernandez@ci.gilroy.ca.us	
			P.O. Box 23490 San Jose, CA 95153
Great Oaks Water Company (GOWC)		Main number (408) 227-9540	Billing (408) 227-9540
Wendy Pon-Villalpando		customerservice@greatoakswater.com	
Tim Guster	(408)227-9540 Ext. 17	tguster@greatoakswater.com	
			455 E. Calaveras Boulevard Milpitas, CA 95035
Milpitas, City of (MILPIT)		Main number (408) 586-3000	Billing (408) 586-3100
Mike Rocha	(408) 586-2629	mrocha@ci.milpitas.ca.gov	
Kendra Mann	(408) 568-2629	kmann@ci.milpitas.ca.gov	Added 12/5/16
Peri Newby		pnewby@ci.milpitas.ca.gov	Added 12/5/16
Jeffrey Leung	(408) 586-3326	jleung@ci.milpitas.ca.gov	
Kelly Jost	(408) 586-2666	kjost@ci.milpitas.ca.gov	
Glen Campi		gcampi@ci.milpitas.ca.gov	
			17555 Peak Avenue Morgan Hill, CA 95037
Morgan Hill, City of (MORGAN)		Main number (408) 779-7271	Billing (408) 779-7221
Andi Borowski	(408) 310-4169	aborowski@morganhill.ca.gov	
Anthony Eulo	(408) 310-4179	anthony.eulo@morganhill.ca.gov	
			231 N. Whisman Road Mountain View, CA 94043
Mountain View, City of (MTVIEW) Internal enforcement		Main number (650) 903-6317	Billing (650) 903-6317
Elizabeth Flegel	(650) 903-6774	elizabeth.flegal@mountainview.gov	
Phil Dolan	(650) 903-6078	phil.dolan@mountainview.gov	
NASA Ames (NASA)			
Mr. Kelly Kasser	(650) 604-3320	Kelly.J.Kasser@nasa.gov	
			P.O. Box 10250 Palo Alto, CA 94303
Palo Alto, City of (CPAU) option for Internal Enforcement: drought@cityofpaloalto.org		Rebates (650) 329-2241	Billing (650) 329-2161
Mr. Kevin Carley	(650) 617-3181	kevin.carley@cityofpaloalto.org	
Mr. Edbert Nguyen		edbert.nguyen@cityofpaloalto.org	
			26375 Fremont Blvd. Los Altos Hills, CA 94022
Purissima Hills Water District (PHWD)		Main number (650) 948-1217	Billing (650) 948-1217
Samantha Vu	(650) 948-1217	samv@purissimawater.org	
			3025 Tuers Road San Jose, CA 95121
San Jose Municipal Water System (SJAWS)			Billing (408) 535-3500
Shannon Heimer	(408) 794-6768	shannon.heimer@sanjoseca.gov	
Derek Hentschke	(408) 794-6785	derek.hentschke@sanjoseca.gov	
San Jose Water Company (SJWC) option for Internal Enforcement: https://www.sjwater.com/for_your_information/save_water_money/report_water_waste			374 W. Santa Clara Street San Jose, CA 95196
		Main/Billing (408) 279-7900	Fax (408) 279-7868
Mr. Kurt Elvert	(408) 918-7264	kurt.elvert@sjwater.com	
			1500 Warburton Avenue Santa Clara, CA 95050
Santa Clara, City of (SCLARA) Option for Internal		Main number (408) 615-2000	Billing (408) 615-2300
Sheena Griffin	(contact directly for WW)	SGriffin@SantaClaraCA.gov	
Mike Vasquez	408.615.2006	MVasquez@SantaClaraCA.gov	
Diane Foronda	(408) 615-2009	dforonda@santaclaraca.gov	
Eric Dhakni	408-615-2013	edhakni@santaclaraca.gov	
			70 West Hedding Street San Jose, CA 95110
Santa Clara, County			
Mr. Mark Ruffing	(408) 299-5794	Mark.Ruffing@pln.sccgov.org	
MAC Room	408-299-3682	Available 24/7/365	
Dave Snow	408-993-4784	Dave.Snow@faf.sccgov.org	
Mr. Kyle Larson	(408) 299-5162	Kyle.Larson@ceo.sccgov.org	
			221 Commercial Street Sunnyvale, CA 94088
Sunnyvale, City of (SUNNYV)		Main number (408) 730-7400	Billing (408) 730-7400
Mr. Mansour Nasser	(408) 730-7578	MNasser@sunnyvale.ca.gov	
Ms. Eria Garnica		EGarnica@sunnyvale.ca.gov	
			327 Bonair Siding Stanford, CA 94305-7270
Stanford University Utilities Division		Main number (650) 723-2300	Billing (650) 723-4221
Ms. Jennifer Fitch	(650) 723-3494	jcfitch@stanford.edu	
Ms. Erica Kudyba		ekudyba@standford.edu	

Attachment P
Water Waste Prohibitions
Summary by Retail Water Company

BMP 13 – Water Waste Prohibition Summary for Santa Clara County

City of Gilroy – No electronic link

- **Sec. 27.11. Use of water by consumer; leaks; wasting water.**

No consumer shall supply water to any person other than the occupants of the premises of such consumer; provided, however, that such consumer may supply water to such persons for the use on the premises or in the performance of any contract for the improvement of any street or other public place after having given notice and received permission from the director of the department of public works. No consumer shall permit leaks or waste water (Ord. No. 479, § 3)

City of Morgan Hill

https://www.municode.com/library/ca/morgan_hill/codes/code_of_ordinances?nodeId=TIT13PU_SE_CH13.04WASY_13.04.330WAWADREM

Title 13 PUBLIC SERVICES

Section 13.04.330 Wasting of water and drought emergencies.

A.

Applicability.

1. The provisions of this chapter apply to any person in the use of any potable water in the city.
2. The provisions of this chapter do not apply to uses of water necessary to protect public health and safety or for essential government services, such as police, fire and other similar emergency services.
3. The provisions of this chapter do not apply to the use of recycled water, with the exception of subsection B.1. of this section.
4. The provisions of this chapter do not apply to the use of water by commercial nurseries and commercial growers to sustain plants, trees, shrubs, crops or other vegetation intended for commercial sale.
5. This chapter is intended solely to further the conservation of water. It is not intended to implement nor supersede any provision of federal, state, or local statutes, ordinances, or regulations relating to protection of water quality or control of drainage or runoff.

B.

Prohibition Against Waste: The following water conservation requirements are effective at all times and are permanent. Violations of this section will be considered waste and an unreasonable use of water.

1. **Limits on Watering Hours:** Watering or irrigating of lawn, landscape or other vegetated area with potable water is prohibited between the hours of nine a.m. and seven p.m. Pacific Standard/Daylight Savings Time on any day, except by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system.

2. Limit on Watering Duration: Watering or irrigating of lawn, landscape or other vegetated area with potable water using a landscape irrigation system or a watering device that is not continuously attended is limited to no more than fifteen minutes watering per day per station/valve/zone. This subsection does not apply to landscape irrigation stations/valves/zones that exclusively use drip type irrigation systems or high efficiency sprinkler nozzles that have a precipitation rate of less than one inch per hour. However, at no time can any irrigation system be operated long enough to cause runoff.
3. No Excessive Water Flow or Runoff: Watering or irrigating of any lawn, landscape or other vegetated area in a manner that causes or allows excessive water flow or runoff onto an adjoining sidewalk, driveway, street, alley, gutter or ditch is prohibited.
4. No Washing Down Hard or Paved Surfaces: Washing down hard or paved surfaces, including but not limited to sidewalks, walkways, driveways, parking areas, tennis courts, patios or alleys, is prohibited except by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off device, a low-volume, high-pressure cleaning machine equipped to recycle any water used, or a low-volume high-pressure water broom.
5. Obligation to Fix Leaks, Breaks or Malfunctions: Excessive use, loss or escape of water through breaks, leaks or other malfunctions in the water user's plumbing or distribution system for any period of time after such escape of water should have reasonably been discovered and corrected and in no event more than ten days of receiving written notice from the city, is prohibited.
6. Recirculating Water Required for Water Fountains and Decorative Water Features: Operating a water fountain or other decorative water feature that does not use recirculated water is prohibited.
7. Limits on Washing Vehicles: Using water to wash or clean a vehicle, including but not limited to any automobile, truck, van, bus, motorcycle, boat or trailer, whether motorized or not is prohibited, except by use of a hand-held bucket or similar container or a hand-held hose equipped with a positive self-closing water shut-off nozzle or device. This subsection does not apply to any commercial car washing facility that incorporates a recycled water system in its operation.
8. Drinking Water Served Upon Request Only: Eating or drinking establishments, including but not limited to a restaurant, hotel, cafe, cafeteria, bar, or other public place where food or drinks are sold, served, or offered for sale, are prohibited from providing drinking water to any person unless expressly requested.
9. Commercial Lodging Establishments Must Provide Guests Option to Decline Daily Linen Services: Hotels, motels and other commercial lodging establishments must provide customers the option of not having towels and linen laundered daily. Commercial lodging establishments must prominently display notice of this option in each bathroom using clear and easily understood language.
10. No Installation of Single Pass Cooling Systems: Installation of single pass cooling systems is prohibited in buildings requesting new water service.
11. No Installation of Non-recirculating in Commercial Car Wash and Laundry Systems: Installation of non-recirculating water systems is prohibited in new commercial conveyor car wash and new commercial laundry systems.
12. Restaurants Required to Use Water Conserving Dish Wash Spray Valves: Food preparation establishments, such as restaurants or cafes, are prohibited from using non-water conserving dish wash spray valves.
13. Commercial Car Wash Systems: Within one year of passage of this ordinance, all commercial conveyor car wash systems must have installed operational re-circulating water systems, or must have secured a waiver of this requirement from the city.
14. Construction Activities: Use of potable water for construction site dust control, compaction, and other site activities suitable for nonpotable water is prohibited if recycled water is available within five miles of the construction site.

15. Plumbing System Testing: Use of potable water for plumbing system testing is prohibited unless required by law or alternative testing procedures are determined to be unsuitable by city inspection staff.

16. Pool Covers: Constructing a pool without the inclusion of a pool cover is prohibited. All contracts for the construction of a new pool entered into after September 2, 2015, shall include the provision of a pool cover.

C.

Level 1 Water Supply Shortage (Eleven percent to twenty percent reduction): A level 1 water supply shortage exists when the city council determines, in its sole discretion, that due to drought, other water supply conditions, or as mandated by the state of California, a water supply shortage or threatened shortage exists and an eleven percent to twenty percent consumer demand reduction is necessary to make more efficient use of water and appropriately respond to existing water conditions. Upon the declaration by the city of a level 1 water supply shortage condition, the following mandatory water conservation requirements, in addition to the prohibited uses of water set forth in subsection B of this section, shall apply during such time that the level 1 water supply shortage is in effect.

1. Limits on Watering Days. Watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to three to five days per week (as necessary to achieve reductions as determined in the discretion of the city manager) on a schedule established and posted by the city. During the months of November through March, watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to no more than one day per week on a schedule established and posted by the city. This provision does not apply to landscape irrigation zones that exclusively use very low flow drip type irrigation systems when no emitter produces more than two gallons of water per hour. This provision also does not apply to watering or irrigating by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system.

2. Obligation to Fix Leaks, Breaks or Malfunctions. All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within seventy-two hours of notification by the city unless other arrangements are made with the city.

3. No Washing Down Hard or Paved Surfaces. Washing down hard or paved surfaces, including but not limited to sidewalks, walkways, driveways, parking areas, tennis courts, patios or alleys, is prohibited except when necessary to alleviate safety or sanitary hazards, and then only by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off device, a low-volume, high-pressure cleaning machine equipped to recycle any water used, or a low-volume high-pressure water broom. Washing down structures, fences, and hard surfaces expressly for the purposes of preparing a surface for the application of a surface coating is not prohibited provided it does not occur more than one time in any twelve-month period.

D.

Level 2 Water Supply Shortage (Twenty-one percent to thirty-five percent reduction). A level 2 water supply shortage exists when the city council declares, in its sole discretion, that due to drought, other water supply conditions, or as mandated by the state of California, a water supply shortage or threatened shortage exists and a twenty-one percent to thirty-five percent consumer demand reduction is necessary to make more efficient use of water and appropriately respond to existing water conditions. Upon the declaration of a level 2 water supply shortage condition, the following mandatory water conservation requirements, in addition to the prohibited uses of water set forth in subsections B. and C. of this section, shall apply during such time that the level 1 water supply shortage is in effect.

1. Watering Days. Watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to two days per week (as necessary to achieve reductions as determined in the

discretion of the city manager) on a schedule established and posted by the city. During the months of November through March, watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to no more than one day per week on a schedule established and posted by the city. This provision does not apply to landscape irrigation zones that exclusively use very low flow drip type irrigation systems when no emitter produces more than two gallons of water per hour. This provision also does not apply to watering or irrigating by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system.

2. **Obligation to Fix Leaks, Breaks or Malfunctions.** All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within forty-eight hours of notification by the city unless other arrangements are made with the city.

3. **Limits on Filling Ornamental Lakes or Ponds.** Filling or refilling ornamental lakes or ponds with potable water is prohibited, except to the extent needed to sustain aquatic life, provided that such animals are of significant value and have been actively managed within the water feature prior to declaration of a supply shortage level under this section.

4. **Limits on Washing Vehicles.** Using potable water to wash or clean a vehicle, including but not limited to, any automobile, truck, van, bus, boat or trailer, whether motorized or not, is prohibited except at a commercial car washing facility that utilizes a recirculating water system to capture or reuse water. This provision does not apply to bicycles and motorcycles. The use of potable water to clean the windshield, windows, or mirrors of a vehicle by use of a hand-held bucket or similar container is not prohibited.

5. **Recirculating Water Required for Water Slides and Water Play Features:** Operating a water slide or other water play feature that does not use recirculated water is prohibited.

6. **Pool covering.** Pools constructed after September 2, 2015, shall be covered at all times except when being actively used for recreational purposes or serviced.

E.

Level 3 Water Supply Shortage - Emergency Condition (Greater than thirty-five percent reduction). A level 3 water supply shortage shall be referred to as a water shortage emergency. A level 3 condition exists when the city council declares, in its sole discretion or as mandated by the state of California, a water shortage emergency and notifies its residents and businesses that a greater than thirty-five percent reduction in consumer demand is necessary to maintain sufficient water supplies for public health and safety, pursuant to Water Code Section 350 et seq. Upon the declaration of a level 3 water supply shortage condition, the following mandatory water conservation requirements, in addition to the prohibited uses of water set forth in subsections B., C. and D. of this section, shall apply during such time that the level 3 water supply shortage is in effect

1. **No Watering or Irrigating.** Watering or irrigating of lawn, landscape or other vegetated area with potable water is prohibited. This restriction does not apply to the following categories of use, unless the city has determined that recycled water is available and may be applied to the use:

- a. Maintenance of vegetation, excluding lawns, that is watered using a hand-held bucket or similar container, hand-held hose equipped with a positive self-closing water shut-off nozzle or device;
- b. Maintenance of existing landscape necessary for fire protection;
- c. Maintenance of existing landscape for soil erosion control;
- d. Maintenance of plant materials identified to be rare or essential to the well-being of protected species;
- e. Maintenance of landscape within active public parks and playing fields, day care centers, golf course greens, and school grounds, provided that such irrigation does not exceed two days per week for no more than fifteen minutes watering per day per station and is prohibited between the hours of nine a.m. and seven p.m. Pacific Standard/Daylight Savings Time, according to the schedule established in subsection D.1. or this section.

- f. Actively irrigated environmental mitigation projects.
 - 2. Obligation to Fix Leaks, Breaks or Malfunctions. All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within twenty-four hours of notification by the city unless other arrangements are made with the city.
 - 3. Limits on New Potable Water Service: Upon declaration of a level 3 water shortage emergency condition, the city may limit the issuance of building permits, new potable water services, temporary meters and/or statements of immediate ability to serve or provide potable water service (such as, will-serve letters, certificates, or letters of availability). The city may consider exemptions to the limitation that include, but are not limited to the following circumstances:
 - a. A valid, unexpired building permit has been issued for the project; or
 - b. The project is necessary to protect the public health, safety, and welfare; or
 - c. The applicant provides substantial evidence of an enforceable commitment that water demands for the project will be offset prior to the provision of a new water meter(s) to the satisfaction of the city.
 - d. This provision does not preclude the resetting or turn-on of meters to provide continuation of water service or the restoration of service that has been interrupted for a period of one year or less.
 - 4. Limits on Building Permits. Upon declaration of a level 3 water supply shortage emergency condition, the city manager is authorized to implement a program in his or her discretion to limit or withhold the issuance of building permits which require new or expanded water service, except to protect the public health, safety and welfare, or in cases which meet the city's adopted conservation offset requirements.
 - 5. Discontinue Service. The city, in its sole discretion, may discontinue service to consumers who willfully violate provisions of this section.
 - 6. No New Annexations. Upon the declaration of a level 3 water supply shortage condition, the city may suspend consideration of annexations to its service area. This subsection does not apply to boundary corrections and annexations that will not result in any immediate increased use of water.
 - 7. Suspension of Swimming Pool Permit Issuance. The issuance of all permits for the initial construction of all swimming pools shall be suspended. Valid unexpired swimming pool construction permits issued prior to the declaration of level 3 water supply shortage shall remain valid if pool construction has begun prior to the declaration of the level 3 water supply shortage.
 - 8. Construction Activities: Use of potable water for construction site dust control, compaction, and other site activities suitable for nonpotable water is prohibited if recycled water is available within forty miles of the construction site.
- F. Procedures for Determination/Notification of Water Supply Shortage. The existence of level 1, level 2 or level 3 water supply shortage conditions may be declared by resolution of the city council adopted at a regular or special public meeting held in accordance with state law. The mandatory conservation requirements applicable to level 1, level 2 or level 3 conditions will take effect on the tenth day after the date the shortage level is declared. Within five days following the declaration of the shortage level, the city must publish a copy of the resolution in a newspaper used for publication of official notices.
- G. Hardship Waiver. If, due to unique circumstances, a specific requirement of this chapter would result in undue hardship to a person using water or to property upon which water is used, that is disproportionate to the impacts to water users generally or to similar property or classes of water users, then the person may apply for a waiver to the requirement as provided in this section.
- 1. Application: Application for a waiver must be on a form prescribed by the city manager and accompanied by a nonrefundable processing fee in an amount set by city council resolution.

2. Supporting Documentation: The application must be accompanied by photographs, maps, drawings, and other information, including a written statement of the applicant.
3. Required Findings for Waiver: The waiver may be granted or conditionally granted only upon a written finding of the existence of facts demonstrating an undue hardship to a person using water or to property upon which water is used, that is disproportionate to the impacts to water users generally or to similar property or classes of water use due to specific and unique circumstances of the user or the user's property. An application for a waiver will be denied unless the city manager finds, based on the information provided in the application, supporting documents, or such additional information as may be requested, and on water use information for the property as shown by the records of the city or its agent, all of the following:
- a. That the waiver does not constitute a grant of special privilege inconsistent with the limitations upon other residents and businesses;
 - b. That because of special circumstances applicable to the property or its use, the strict application of this chapter would have a disproportionate impact on the property or use that exceeds the impacts to residents and businesses generally;
 - c. That the authorizing of such waiver will not be of substantial detriment to adjacent properties, and will not materially affect the ability of the city to effectuate the purpose of this chapter and will not be detrimental to the public interest; and
 - d. That the condition or situation of the subject property or the intended use of the property for which the waiver is sought is not common, recurrent or general in nature.
4. Approval Authority: The city manager must act upon any completed application no later than ten days after submittal and may approve, conditionally approve, or deny the waiver. The applicant requesting the waiver must be promptly notified in writing of any action taken. Unless specified otherwise at the time a waiver is approved, the waiver will apply to the subject property during the period of the mandatory water supply shortage condition. The decision of the city manager shall be final.

(Ord. 1895 N.S. § 1, 2008; Ord. 30 N.S. § 4.10, 1948)

(Ord. No. 1932 N.S., § 5, 5-27-2009; Ord. No. 2159 N.S., § 4, 9-2-2015; Ord. No. 2177 N.S., § 4, 11-18-2015)

City of Sunnyvale

<http://qcode.us/codes/sunnyvale/view.php?topic=12&frames=on>

Chapter 12.34. WATER CONSERVATION RESTRICTION

12.34.010. Purpose and application.

The purpose of this chapter is to identify and restrict nonessential water uses which, if allowed, would constitute wastage of the water supply of the city. The provisions of this chapter shall apply to all persons or entities using water obtained from the city of Sunnyvale both in and outside the city of Sunnyvale and within the city's water service area, and regardless of whether any person or entity using water has a contract for water service with the city. Use of water by the city itself shall be in conformance with a water conservation plan to be presented by the city manager to the city council for approval, and which shall essentially conform to the provisions

of this chapter. This chapter is adopted pursuant to the provisions of Water Code Section 350, et seq., the city charter and the common law. (Ord. 2433-93 § 1 (part)).

12.34.020. Nonessential uses prohibited.

(a) To prevent the waste and unreasonable use of water and to promote water conservation, the following actions are hereby prohibited, except where necessary to address an immediate health or safety need or to comply with a term or condition in a permit issued by a state or federal agency:

(1) The use of broken or defective plumbing, sprinklers, watering or irrigation systems that permit the escape or leakage of potable water.

(2) The application of potable water to outdoor landscaping in a manner that causes runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures.

(3) The use of potable water to irrigate outdoor landscaping between the hours of nine a.m. and six p.m. during daylight savings time except with a bucket or a hose that is fitted with a shut-off nozzle or device that causes it to cease dispensing water immediately when not in use.

(4) The use of potable water to irrigate outdoor landscaping more than fifteen minutes per day per station when using a landscape irrigation system or a watering device that is not continuously attended, except for landscape irrigation systems that exclusively use very low-flow drip-type irrigation systems when no emitter produces more than two gallons of water per hour, weather-based controllers, or stream rotor sprinklers that meet a seventy-one percent efficiency standard.

(5) The use of a hose that dispenses potable water to wash any motor vehicle, watercraft, mobilehome, or other vehicles or machinery unless the hose is fitted with a shut-off nozzle or device that causes it to cease dispensing water immediately when not in use.

(6) The use of potable water to wash sidewalks, driveways, filling station aprons, patios, parking lots, porches or other paved or hard surfaced areas.

(7) The use of potable water in a fountain or other decorative water feature unless the water is part of a recirculating system.

(8) The application of potable water to outdoor landscapes while it is raining or within forty-eight hours after measurable rainfall (0.20 inches).

(9) The serving of drinking water other than upon request in eating or drinking establishments, including, but not limited to, restaurants, hotels, cafes, cafeterias, bars, or other public places where food or drink are served and/or purchased.

(10) *The use of potable water to irrigate ornamental turf on public street medians.*

(11) *The use of potable water to irrigate landscapes outside of newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission and the Department of Housing and Community Development.*

(12) *The installation of any single pass cooling process in new construction.*

(b) *To promote water conservation, operators of hotels and motels shall provide guests with the option of choosing not to have towels and linens laundered daily. The hotel or motel shall prominently display notice of this option in each guestroom using clear and easily understood language. (Ord. 3086-16 § 1; Ord. 3041-14 § 1; Ord. 2433-93 § 1).*

12.34.030. Exceptions.

(a) *The director of environmental services is hereby authorized to grant to any user an exception to the prohibitions set forth in Section [12.34.020](#), upon a finding by the director that such exception is necessary to prevent an emergency condition affecting the health, sanitation or fire protection of such user, and that the user to whom such adjustment or exception pertains has adopted or used all practicable water conservation measures.*

(b) *Exceptions permitted hereunder shall be made only upon written application submitted to the director setting forth a statement of justification for such exception. The director may attach conditions, specifications or other qualifying provisions to any exception granted. (Ord. 3041-14 § 2; Ord. 2433-93 § 1).*

12.34.040. Penalty--Flow restricting devices.

(a) *Upon a determination by the director of environmental services that a user has continuously or repeatedly violated or failed to comply with one or more provisions of Section [12.34.020](#), or of any conditions of any exception granted pursuant to the provisions of Section [12.34.030](#), the director may issue an order to cease and desist from continued or repeated violation, and further order such user to comply forthwith with such provisions or terms of exception, or otherwise to take appropriate remedial or preventive action. If after the issuance of such cease and desist order, such user continues to consume or use, or again consumes or uses water in violation of any such provision or condition of exception, the director may order the installation of a flow restricting device upon the water service line to the premises of such user. Such flow restricting device shall be installed and maintained for a period of not less than three days nor more than ten days for a first violation, and shall be installed and maintained for not less than ten days for each succeeding violation, and may be ordered to remain installed and maintained for a period of up to three months upon a finding by the director that any user is habitually in violation of any of the provisions of this chapter, or the provisions of any exception granted pursuant to Section [12.34.030](#).*

(b) *Prior to installation of any such flow restricting device, the director shall give written notice of intent to install such device, including the reasons for the proposed installation. The notice shall specify the date, time and place at which the user or other interested party may appear before the director to present any evidence or reasons why such installation should not*

occur. Instead of appearing, the user or other interested party may present written material to the director at or before the time specified. The installation of a flow restricting device shall not occur less than twenty-four hours after the time specified in the notice. The written notice shall be delivered personally, or by posting with the United States mail service, first class postage prepaid, certified mail, and addressed to the last known address of the user to whom given. Copies of the notice shall also be delivered personally or by mail as specified above, to the owner of the property on which the flow restrictor is proposed to be installed as shown on the last equalized assessment roll of the county assessor, county of Santa Clara, and to the person or entity shown on the latest city records as being responsible for payment of utility charges on such property, if either or both is different from the user to whom the notice is sent.

(c) There are hereby established, and there shall be imposed and levied charges in the amount of fifty dollars for each installation and fifty dollars for each removal of flow restricting devices under this section. (Ord. 3041-14 § 3; Ord. 2433-93 § 1).

12.34.050. Implementation.

The director of environmental services is authorized to delegate authority granted under this chapter to such deputies, officers, employees or agents of the city as the director shall designate, and to establish such rules, regulations and procedures, and to prepare or furnish such forms as the director deems necessary or appropriate to carry out the provisions of this chapter. (Ord. 3041-14 § 4; Ord. 2433-93 § 1).

12.34.060. Notices.

Except as otherwise provided, notices required to be given pursuant to the provisions of this chapter shall be in writing, may be combined with water service bills or other written communication, and shall be delivered personally, or by posting with the United States mail service, first class postage prepaid, and addressed to the last known address of the user to whom given, or to the owner of the premises to which the water service of such user pertains, shown on the last equalized assessment roll of the county assessor, county of Santa Clara. (Ord. 2433-93 § 1).

12.34.070. Violations.

It is unlawful for any person, firm, partnership, association, corporation or political entity to use water obtained from the water system of the city of Sunnyvale in violation of any provision of this chapter or in violation of the conditions of any exception granted pursuant to Section [12.34.040](#) of this chapter. Use of water by any user in accordance with the provisions of any exception granted by the director shall not be deemed in violation of this chapter. Violations of this chapter shall be punishable as infractions. (Ord. 2433-93 § 1).

12.34.080. Remedies cumulative.

The remedies and penalties provided for in this chapter shall be cumulative and not exclusive, and shall be in addition to any or all other remedies available to the city. (Ord. 2433-93 § 1 (part)).

City of Mountain View

https://www.municode.com/library/ca/mountain_view/codes/code_of_ordinances?nodeId=PTIITHCO_CH35WASEOTMUSE_ARTIIPRPEWASU_DIV3WACO_S35.28.3PRNOWAUS

Click on the **Chapter 35 Water, Sewage, and Other Municipal Services** link

DIVISION 3. WATER CONSERVATION.*

SEC. 35.17. Right to limit amount of water furnished.

The director of public works shall have the right to limit the amount of water furnished to any consumer, should the circumstances reasonably warrant such action, even though no limit be stated in the application or permit for such use. (Code 1938, Sec. 144; Ord. No. 175.809, 10/29/62.)

SEC. 35.28.3. Prohibition of nonessential water use.

The nonessential water uses defined in [Sec. 35.28.4](#), et seq. are prohibited as set forth below. In the event of a declared water shortage, any prohibited water uses imposed by this division in which two (2) or more prohibitions apply to the same water use, the most restrictive prohibition shall apply.

- (a) Normal supply conditions. Any of the nonessential water uses defined in [Sec. 35.28.4.1](#) are prohibited at all times.
- (b) Stage 1 water shortage (up to ten (10) percent reduction). A Stage 1 water shortage exists when the city council declares that a water supply shortage exists and a demand reduction of up to ten (10) percent is necessary to appropriately respond to existing supply conditions. Upon declaration of a Stage 1 water shortage by the city council, city staff shall increase public education and outreach efforts to increase public awareness of the prohibited nonessential water uses as defined in [Sec. 35.28.4.1](#) and to encourage voluntary reduction in water use.
- (c) Stage 2 water shortage (up to twenty-five (25) percent reduction). A Stage 2 water shortage exists when the city council declares that a water supply shortage exists and a demand reduction of up to twenty-five (25) percent is necessary to appropriately respond to existing supply conditions. Upon declaration of a Stage 2 water shortage by the city council, any of the nonessential water uses defined in [Sec. 35.28.4.1](#) through [Sec. 35.28.4.2](#) are prohibited.
- (d) Stage 3 water shortage (up to forty (40) percent reduction). A Stage 3 water shortage exists when the city council declares that a water supply shortage exists and a demand reduction of up to forty (40) percent is necessary to appropriately respond to existing supply conditions. Upon declaration of a Stage 3 water shortage by the city council, any of the nonessential water uses defined in [Sec. 35.28.4.1](#) through [Sec. 35.28.4.3](#) are prohibited.

- (e) Stage 4 water shortage (greater than forty (40) percent reduction). A Stage 4 water shortage exists when the city council determines that a water supply shortage exists and a demand reduction of greater than forty (40) percent is necessary to make more efficient use of water and appropriately respond to existing water conditions. Upon declaration of a Stage 4 water shortage by the city council, any of the nonessential water uses defined in [Sec. 35.28.4.1](#) through [Sec. 35.28.4.4](#) are prohibited.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.3.1. - Water shortage declaration.

The city manager may recommend the city council adopt a resolution to declare a water shortage when there is a reasonable probability that there will be a supply shortage necessitating a demand reduction in order to ensure that sufficient supplies will be available to meet anticipated demands. Upon declaration of a water shortage emergency, the city manager shall take action to implement the prohibitions identified in this division, as applicable to the declared water shortage stage. The declared water shortage shall remain in effect until rescinded or otherwise modified by subsequent resolution of city council.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.4. Nonessential water uses defined.

The following uses of potable water are hereby determined to be nonessential, except as further provided herein.

SEC. 35.28.4.1. – Normal supply conditions.

The following nonessential water uses are prohibited at all times and in all declared water shortage stages.

(a) Failure to repair broken or defective water systems.

(1) Use of potable water through any meter when written notice has been given by the director to repair broken or defective plumbing, sprinkler, watering or irrigation systems and has failed to effect such repairs. The failure of any customer to effect said repairs within the applicable time period after said written notification by director shall constitute grounds for immediate discontinuance of water service pursuant to [Sec. 35.28.6](#).

(2) The time period within which repair shall be made of the broken or defective plumbing, sprinkler, watering or irrigation systems after receiving written notice is determined by the water supply condition as follows:

1. A maximum of ten (10) days under normal supply conditions.
2. A maximum of ten (10) days during a Stage 1 water shortage.
3. A maximum of five (5) days during a Stage 2 water shortage.
4. A maximum of three (3) days during a Stage 3 water shortage.
5. A maximum of twenty-four (24) hours during a Stage 4 water shortage.

- (b) Water use that results in flooding or runoff. Use of potable water which results in flooding or runoff into gutters, sidewalks, driveways, streets, highways, roads or other hard-surfaced areas.
- (c) Cleaning hard-surfaced areas. Use of potable water through a hose for the cleaning of hard-surfaced areas without a positive automatic shutoff valve on the outlet end of the hose.
- (d) Vehicle washing. Use of potable water through a hose for washing cars, buses, boats, trailers or other vehicles without a positive automatic shutoff valve on the outlet end of the hose.
- (e) Restaurant water service. Use of potable water for restaurant water service unless upon request.
- (f) Single-pass cooling systems. Use of potable water in single-pass cooling systems. (Ord. No. 5.14, § 1, 4/8/14; Ord. No. 3.15, § 1, 5/26/15.)

SEC. 35.28.4.2. – Stage 2 water shortage

The following nonessential water uses are prohibited during a declared Stage 2, Stage 3 and Stage 4 water shortage.

- (a) Cleaning hard-surfaced areas. Use of potable water for washing down of hard-surfaced areas, except by use of a hand-held bucket or similar container or when necessary to alleviate safety or sanitary hazards.
- (b) Vehicle washing. Use of potable water for washing cars, buses, boats, trailers or other vehicles except by use of a hand-held bucket or similar container. This subsection does not apply to any commercial vehicle washing facility.
- (c) Landscape watering and irrigation.
 - (1) Watering or irrigation of lawn, landscape or other vegetated area with potable water between the hours of 9:00 a.m. and 5:00 p.m. on any day, except by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shutoff nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system. This subsection does not apply to irrigation stations that exclusively use drip-type irrigation systems.
 - (2) Watering or irrigation of lawn, landscape or other vegetated area with potable water for more than one (1) to three (3) days per week, as determined by the director, depending on the circumstances, to achieve the targeted demand reduction pursuant to a schedule established and posted by the city. This subsection does not apply to watering or irrigating for very short periods of time for the express purpose of adjusting or repairing an irrigation system.
 - (3) Watering or irrigation of lawn, landscape or other vegetated area with potable water for more than fifteen (15) minutes per day per irrigation station. This subsection does not apply to irrigation stations that exclusively use drip-type irrigation systems or high-efficiency sprinkler nozzles that have a precipitation rate of less than one (1) inch per hour, or watering or irrigating for very short periods of time for the express purpose of adjusting or repairing an irrigation system.
 - (4) Watering or irrigation of lawn, landscape or other vegetated area with potable water during a rain event.
 - (5) As an alternative to compliance with (c)(2) and (c)(3) of this section, large landscape water customers with a dedicated irrigation meter and those eligible and participating in the city's Landscape Water Budget Program may elect to reduce irrigation water use below the customer's Landscape Water Budget by a percentage as determined by the director and posted by the city.

Any customer electing to comply with this alternative irrigation program shall notify the city of their election in a manner determined by the director. If the customer fails to comply with

the reduction requirements for any consecutive two-month period, the customer shall be removed from participation in this alternative program and be required to comply with (c)(2) and (c)(3) of this section. After removal from the program, a customer may re-elect to participate in this alternative program, only if the customer has reduced their irrigation water use below the Landscape Water Budget by the percentage set forth above as determined by the director and posted by the city for a consecutive two-month period.

(d) Decorative water features. Use of potable water in decorative water features except as needed to maintain aquatic life.

(e) Prerinse spray valves. Use of potable water through a non-low-flow prerinse spray valve for restaurant dishwashing.

(f) Hotel linens. Providing hotel guests with new towels and bed linens daily, without offering the option to reuse said towels and bed linens.

(g) New commercial car washes. Construction or installation and operation of a new commercial conveyor car wash system that does not utilize water-recirculation technologies.

(h) New commercial laundry systems. Construction or installation and operation of a new commercial laundry system that does not utilize water-recirculation technologies.

(i) Construction. Use of potable water for construction purposes, including, but not limited to, dust control, when recycled water is readily available.

(Ord. No. 5.14, § 1, 4/8/14; Ord. No. 3.15, § 2, 5/26/15.)

SEC. 35.28.4.3. – Stage 3 water shortage

The following nonessential water uses are prohibited during a declared Stage 3 and Stage 4 water shortage.

(a) Commercial car washes. Operating a commercial car wash system that does not utilize water-recirculation technologies.

(b) Filling swimming pools. Filling swimming pools or spas with potable water.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.4.4. – Stage 4 water shortage

The following nonessential water uses are prohibited during a declared Stage 4 water shortage.

(a) Landscape watering or irrigation. Watering or irrigating of lawn, landscape or other vegetated area with potable water, except for the following uses:

(1) Maintenance of existing landscape necessary for fire protection.

(2) Maintenance of existing landscape for soil erosion control.

(3) Maintenance of plant materials identified to be rare or essential to the well-being of protected species.

(4) Maintenance of landscape within active public parks and playing fields, day-care centers, golf course greens and school grounds, provided that such irrigation does not exceed one (1) day per week and does not occur between 9:00 a.m. and 5:00 p.m.

(5) Actively irrigated environmental mitigation projects.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.5. Exceptions; Hearing and appeals.

The procedures for exceptions and appeals shall be as set forth below.

(Ord. No. 5.14, § 1, 4/8/14.)

SEC. 35.28.5.1. Exceptions.

Written applications for an exception to the provisions of this division shall be made to the director. A written determination will be made on all requests for exceptions within ten (10) business days from receipt of an application for an exception and mailed to the applicant.

The director's determination shall consider the following criteria:

- (a) Whether all practical water conservation measures have been previously adopted;
- (b) Whether failure to grant the application would cause an emergency condition adversely affecting the health, sanitation, fire protection or safety of the customer or the public; or
- (c) Whether undue hardship would result to the applicant if the application were denied or the flow-restricting device were installed, including adverse economic impact such as loss of production or loss of jobs.

(Ord. No. 5.14, § 1, 4/8/14; Ord. No. 3.15, § 3, 5/26/15.)

SEC. 35.28.5.2. Appeals.

Denials of any application for an exception or a decision of the director to install a flow-restricting device or discontinue water service may be appealed to the city manager, or his/her designee, whose decision shall be final. An application for an appeal shall be filed with the city clerk in writing within seven (7) calendar days after the director's decision and shall state the specific grounds for the appeal. The city manager shall issue a written decision within fifteen (15) calendar days after the appeal has been filed with the city clerk. (Ord. No. 5.14, § 1, 4/8/14.)

City of Milpitas

https://www.municode.com/library/ca/milpitas/codes/code_of_ordinances?nodeId=TITVIIIPUWO_CH6WACO

Milpitas Municipal Code

Chapter 6 WATER CONSERVATION

VIII-6-1.00 Purpose

The City Council of the City of Milpitas has found that the limited supply of City waters are subject to ever increasing demands; that the City's economic prosperity depends on adequate supplies of water; and that the City policy promotes conservation and efficient use of potable water.

Consistent with the above findings, the purpose of this chapter is to promote the values and benefits of conservation and efficient use of potable water; and establish provisions for water management practices and prevention of potable water waste. (Ord. 240 (part), 5/3/94)

VIII-6-2.00 Definitions

The words used in this chapter have the meaning set forth below:

- 2.01 "Reclaimed Water" means treated or recycled wastewater of a quality suitable for non-potable uses and not intended for human consumption.
- 2.02 "Runoff" means water that is not absorbed by the surface to which it is applied and flows from the area.
- 2.03 "Potable Water" means water sold by the City of Milpitas intended for human consumption. (Ord. 240 (part), 5/3/94)

VIII-6-3.00 Restrictions

The following uses of potable water are prohibited:

- 3.01 Use that results in flooding or runoff in gutters, waterways, patios, sidewalks, driveways, or streets except as permitted in Section 3.02 A and B.
- 3.02 Use without a shutoff nozzle on the outlet end of the hose for:
- A. Washing cars, buses, boats, aircraft, trailers or other vehicles;
 - B. Washing buildings, structures, sidewalks, walkways, driveways, patios, parking lots, tennis courts, or other hard-surfaced areas; and
 - C. Watering outside plants, lawn, landscape and turf areas.
- 3.03 Service of water by any restaurant except upon the request of a customer.
- 3.04 Use through broken or defective plumbing, sprinkler, watering or irrigation systems.
- 3.05 Use in new, added or altered commercial car wash equipment unless a recycled water system is incorporated.
- 3.06 Use in new, added or altered cooling system equipment unless at least fifty percent (50%) of the water is recycled. A waiver to allow less than fifty percent (50%) recycling may be granted by the Chief Building Official due to water quality concerns only. Cost is not an acceptable reason to request or receive a waiver.
- 3.07 Use for irrigation if reclaimed water is available.
- 3.08 Use in new, added, or altered decorative fountains unless a recycled water system is incorporated. (Ord. 240 (part), 5/3/94)

VIII-6-5.00 Supplemental Water Use Restrictions

Notwithstanding Section VIII-6-3.00 or any other provision of the Municipal Code, the following uses of Potable Water are prohibited:

- 5.01 Use of Potable Water for cleaning of any hard surfaces, such as sidewalks, streets, buildings, and parking lots.
- 5.02 Use of a hose that dispenses potable water to wash a motor vehicle, except where the hose is fitted with a shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use.
- 5.03 Use of Potable Water for construction purposes including dust control and compaction.
- 5.04 Use of Potable Water for cleaning, filling, or operating water features, such as decorative fountains, except where the water is part of a recirculating system.
- 5.05 Use of Potable Water for watering or irrigation of any plants, lawn, grass, landscaping or turf areas except between the hours of 6:00 p.m. through 9:00 a.m. and for no more than three days during any seven-day period. The days of watering shall be:
- Address Ending in Odd Number: Monday, Thursday, and Saturday;
- Address Ending in Even Number: Tuesday, Friday, and Sunday;
- No address: Monday, Thursday, and Sunday.
- The following activities are exempt from the day and time restrictions on watering or irrigation:
- (a) Use of Potable Water for short periods during timer adjustment and repair of irrigation system are exempt from the time and day restriction set forth above.
 - (b) Watering by hand.
 - (c) Watering plants slated for sale in nursery/garden centers.
 - (d) Watering using drip irrigation systems.

The Public Works Director and/or the Director of Engineering is also authorized to approve a variation of the time and day schedule restriction, provided the variation meets the required reduction above of only three days in any seven-day period.

5.06 The serving of drinking water other than upon request in eating or drinking establishments, including but not limited to restaurants, hotels, cafes, cafeterias, bars, or other public places where food or drink are served and/or purchased.

5.07 Exceptions to the prohibitions enumerated in 5.01 through 5.07 may be granted where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a state or federal agency, or where otherwise allowed by law. (Ord. No. 240.5, § 2, 8/16/16; Ord. No. 240.3, § 2, 6/16/15; Ord. No. 240.2, § 2, 8/19/14)

VIII-6-6.00 – Additional Supplemental Water Use Restrictions

- Notwithstanding Section VIII-6-3.00, Section VIII-6-5.00 or any other provision of the Municipal Code, the following uses of Potable Water are prohibited:
 - 6.01 The application of Potable Water to outdoor any plants, lawn, grass, landscaping or turf areas during and within 48 hours after measurable rainfall.
 - 6.02 To promote water conservation, owners and operators of hotels and motels shall provide guests with the option of choosing not to have towels and linens laundered daily. The hotel or motel shall prominently display notice of this option in each guestroom using clear and easily understood language.
 - 6.03 Newly constructed homes and buildings shall be designed with drip or microspray irrigation systems, provided any new landscaping shall continue to be restricted from installation during the declared drought as set forth in Section VIII-5-5.07.
 - 6.04 The application of Potable Water to street medians containing ornamental turf.
 - 6.05 Hydrant flushing, except for health and safety purposes.
 - 6.06 Pools and spas shall be covered when not in use to prevent evaporation.
 - 6.07 The prohibitions enumerated in 6.01, 6.03, and 6.04 do not apply to any water treatment features, such as landscaping and green roofs, to meet the requirements of Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit No. CAS612008, C3 Provision.
 - 6.08 Exceptions to the prohibitions enumerated in 6.01 through 6.06 may be granted where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a state or federal agency, or where otherwise allowed by law. (Ord. No. 240.5, § 2, 8/16/16; Ord. No. 240.3, § 2, 6/16/15)

City of San Jose – San Jose Municipal Water System

https://www.municode.com/library/ca/san_jose/codes/code_of_ordinances?nodeId=TIT15PUUT_CH15.10WAWAPRWASHME_PT2WAWAPR

Part 2 - WATER WASTE PREVENTION

15.10.200 - Water waste prevention.

A. The regulations in this part are intended to be permanent water conservation measures and to apply to the use of water from all sources on an on-going basis.

B. No person shall waste water from any source nor shall any person allow such water wastage.

C. No person shall use any water from any source, or continue the use of any water from any source, in any way prohibited by this chapter.

(Ord. 24600.)

15.10.210 - Repair of plumbing, sprinkler and irrigation systems.

A. No owner or manager or other person responsible for the day-to-day operation of any premises shall fail to initiate repair of any leaking, broken or defective water pipes, faucets, plumbing fixtures, other water service appliances, sprinklers, watering or irrigation systems within five (5) working days after the owner, manager or other responsible person knew or should have known of such leaks, breaks or defects.

B. No owner or manager or other person responsible for the day-to-day operation of any premises shall fail to complete repair of any leaking, broken or defective water pipes, faucets, plumbing fixtures, other water service appliances, sprinklers, watering or irrigation systems, as soon as practical after initiation of such repair.

(Ord. 24600.)

15.10.220 - Water run-off prohibited.

A. No person shall use any water in any manner which results in run-off onto sidewalks, driveways, gutters or streets, except for water used in accordance with Sections [15.10.240](#) or [15.10.250](#).

B. No person shall use any water in any manner which results in run-off beyond the immediate area of use, or the pooling or puddling of water, except for water used in accordance with Sections [15.10.240](#) or [15.10.250](#).

(Ord. 24600.)

15.10.230 - Food service establishments.

A. No person shall provide any water to any customer at any food service establishment unless and until the customer requests water.

B. No person shall use any non-water conserving dish wash spray valve in any food service establishment

(Ords. 24600, 28597.)

15.10.235 - Hotels, motels and other lodgings.

The owner and manager of every hotel, motel, inn, guest house, bed and breakfast facility, and every other short-term commercial lodging shall prominently display a written notice in each bathroom of the facility providing customers or guests with the option of helping to conserve water by not having towels and linens laundered daily.

(Ord. 28597.)

15.10.240 - Cleaning of structures and surfaces.

No person shall use water through a hose to clean the exterior of any building or any structure or to clean sidewalks, driveways, patios, decks, tennis courts, parking lots or any other exterior paved or hard-surfaced areas, unless such hose is equipped with an automatic positive self-closing valve.

(Ord. 24600.)

15.10.250 - Washing of vehicles.

No person shall use any water through a hose to wash any car, truck, boat, trailer, bus, recreational vehicle, camper, or any other vehicle, or any portion thereof, unless such hose is equipped with an automatic positive self-closing valve.

(Ord. 24600.)

15.10.255 - Commercial car washes.

No owner, manager or employee of a commercial car wash facility shall use any water to wash, or allow or permit the use of any water to wash, any car, truck, boat, trailer, bus, recreation vehicle, camper or any other vehicle, or any portion thereof, except if such person can demonstrate that such washing is exclusively by one of the following methods:

A. Use of mechanical automatic car wash facilities utilizing water recycling equipment.

B. Use of a bucket and handwashing.

C. Use of a hose equipped with an automatic positive self-closing valve.

(Ord. 24600.)

15.10.260 - Building and construction.

No person shall use, permit or allow the use of potable water for building or construction purposes, such as consolidation of backfill or dust control, without a prior approved written exception from the city.

(Ord. 24600.)

15.10.270 - Hydrants.

No person, except a water company for the purpose of necessary hydrant or water distribution system maintenance, or under the direction of the city's fire chief for firefighting or fire sprinkler maintenance, shall use, permit or allow the use of any water or flushing of any water from any fire hydrant, without a prior approved written exception from the city.(Ord. 24600.)

15.10.290 - Landscape irrigation.

A. No person shall use, permit or allow the use of potable water to irrigate any outdoor landscaping at any time between the hours of 10:00 a.m. and 8:00 p.m., unless the person using, permitting or allowing the use of the water is using a bucket, hand-carried container, or a hose equipped with an automatic positive self-closing valve.

B. No person shall use, permit or allow the use of potable water to irrigate any outdoor landscaping or other vegetated area more than fifteen minutes per day per station when using a landscape irrigation system or a watering device that is not continuously attended, except for landscape irrigation systems that exclusively use very low-flow drip-type irrigation systems when no emitter produces more than two gallons of water per hour and weather-based controllers or stream rotor sprinklers that meet a seventy-one percent efficiency standard.

C. The restrictions on landscape irrigation contained in this section do not apply to the following activities or during the following periods of time:

1. Syringing of golf course greens, golf course tees, lawn bowling greens or lawn tennis courts;
2. The conduct of a landscape water management audit to provide for the evaluation and adjustment of a landscape irrigation system; or
3. During plant establishment periods as defined in [Section 15.11.390](#) of this code.

(Ords. 24600, 28597, 29243.)

15.10.295 - Use of reclaimed water.

No person shall use, permit or allow the use of potable water to irrigate any outdoor landscaping, where an irrigation system has been installed to allow for use of reclaimed water and reclaimed water is available to the property for irrigation use.

(Ord. 24600.)

City of Santa Clara:

<http://www.codepublishing.com/CA/SantaClara/#!/SantaClara13/SantaClara1315.html#13.15.130>

The City of Santa Clara takes water waste very seriously. Water use and restrictions can be found in City Municipal Code 13.15.080 section 1C detailed below:

The following list of Water Use Restrictions and Prohibitions are specific measures which prevent water waste and achieve reasonable, yet substantial, reductions in water use by all users in the City.

The following uses of water are prohibited by the City:

- Wasting water, which includes but is not limited to, the flooding or runoff on City sidewalks, gutters, and streets.
- Cleaning of sidewalks, driveways, patios, parking lots, or other paved or hard-surfaces areas, or washing cars, buses, boats, trailers, or any vehicle by use of a hose unless that hose is fitted with an operating automatic shut-off valve.
- Water waste due to broken or defective plumbing, fire system, irrigations system, or any appurtenance thereto; or to open or to leave open any stopcock or faucet so as to permit water waste.
- Service of water by any restaurant unless requested by a patron.
- Installation of a single-pass cooling system.
- Installation of a non-recirculating decorative fountain.
- Construction of a non-recirculating conveyor car wash.

City of Cupertino

[http://library.amlegal.com/nxt/gateway.dll/California/cupertino/cityofcupertinocaliforniamunicipalcode?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:cupertino_ca](http://library.amlegal.com/nxt/gateway.dll/California/cupertino/cityofcupertinocaliforniamunicipalcode?f=templates$fn=default.htm$3.0$vid=amlegal:cupertino_ca)

CHAPTER 15.32: WATER CONSERVATION

Section

- 15.32.010 Findings and determinations.
- 15.32.020 Definitions.
- 15.32.030 Prohibitions on water use
- 15.32.040 Regulations for Restrictions on Water Use.
- 15.32.070 Emergency suspension of water service.
- 15.32.080 Violation–Penalty.

15.32.010 Findings and Determinations.

A. A reliable supply of potable water is essential to the public health, safety, and welfare of the people and economy of the City of Cupertino; and

B. Article X, Section 2 of the California Constitution declares that the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare; and

C. Article XI, Section 7 of the California Constitution declares that a city or county may make and enforce within its limits all local, police, sanitary and other ordinances and regulations not in conflict with general laws; and

D. The Governor of the State of California and/or other State regulatory agencies such as the State Water Resource Control Board may, as regional drought conditions warrant, mandate water conservation measures; and

E. The Santa Clara Valley Water District, or other wholesale water supplier serving the City of Cupertino, may implement water conservation goals specific to the Cupertino area based upon drought stages identified in their Urban Water Management Plan or in other declaration or action; and

F. San Jose Water Company, California Water Service Company, and any other urban water suppliers in the City of Cupertino, will coordinate water conservation measures with the Santa Clara Valley Water District and, depending on the severity of a drought, may file with the California Public Utilities Commission specific water use targets and/or budgets along with associated tariffs and enforcement measures, consistent with its Water Shortage Contingency

Plan to achieve state mandated water use reductions that may affect City of Cupertino residents and businesses; and

G. The adoption and enforcement of water conservation regulations is essential to minimize the effects of drought and shortage within the City and ensure a reliable and sustainable minimum supply of water to protect public health, safety and welfare of current and future community members and to protect the environment; and

H. The purpose of this Chapter is to establish water conservation measures that are intended to alter behavior related to the use of water, reduce the consumption of water, assure reasonable and beneficial use of water, prevent the waste of water, and maximize the efficient use of water across the City of Cupertino.

(Ord. 15-2131, § 1 (part), 2015; Ord. 1622, (part), 1993; Ord. 1587, (part), 1992; Ord. 1580, (part), 1992; Ord. 1558, § 1, 1991; Ord. 1524, § 1, 1990; Ord. 1513, § 1, 1990)

15.32.020 Definitions.

As used in this chapter

A. "Customer" means any person who pays for service to receive potable water.

B. "Irrigation system" means the components of a system meant to apply water to an area for the purpose of irrigation, including, but not limited to, piping, fittings, sprinkler heads or nozzles, drip tubing, valves, and control wiring.

C. "Landscape" means all of the outdoor planting areas, turf areas, and water features at a particular location.

D. "Person" means any individual, firm, partnership, association, corporation, trust, governmental body or other organization or entity.

E. "Potable water" means water which conforms to the federal and state standards for human consumption.

F. "Runoff" means water which is not absorbed by the soil or landscape to which it is applied and flows from the landscape onto other areas.

G. "Water" means potable water.

H. "Water feature" means a design element where open, artificially supplied water performs an aesthetic or recreation feature, including, but not limited to, ponds, lakes, waterfalls, fountains, and streams.

I. "Urban water supplier" means the California Water Service and/or San Jose Water Company or any other urban water supplier as defined by Water Code Section 10617, excluding wholesale suppliers, unless the wholesale supplier is functioning in a retail capacity.

J. "Water district" means the Santa Clara Valley Water District or other wholesale water supplier as defined by State law.

(Ord. 15- 2131, § 1 (part), 2015; Ord. 1776, (part), 1998; Ord. 1622, (part), 1993; Ord. 1587, (part), 1992; Ord. 1580, (part), 1992; Ord. 1558, § 2, 1991; Ord. 1524, § 2, 1990; Ord. 1513, § 2, 1990)

15.32.030 Prohibited Uses of Water.

To prevent water waste, the unreasonable use of water, and to promote water conservation, each of the following actions are prohibited while using potable water:

A. No person shall waste water, including, but not limited to flooding or creating runoff on sidewalks or gutters, adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures.

B. No person shall use a hose that dispenses potable water to wash vehicles, including cars, trucks, buses, boats, aircraft, and trailers, whether motorized or not, unless the hose is fitted with a shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use.

C. No person shall waste water by failing to repair defective plumbing, sprinkler, watering or irrigation systems.

D. No person shall use water for single pass cooling process for new building construction. (Ord. 15-2131, § 1 (part), 2015; Ord. 1622, (part), 1993; Ord. 1587, (part), 1992; Ord. 1580, (part), 1992; Ord. 1558, § 3, 1991; Ord. 1524, § 3, 1990; Ord. 1513, § 3, 1990)

15.32.040 Regulations for Restrictions on Water Use.

A. The City Council may determine that additional restrictions on water use are needed as a result of drought or other water supply conditions, to achieve additional conservation goals, or for other public purposes. The City Council may adopt Regulations Restricting Water Use.

B. The Regulations shall take effect as soon as practicable.

C. The Regulations shall remain in effect until the City Council repeals, modifies, or amends them, or according to their own terms, whichever comes first.

D. The Regulations adopted pursuant to this chapter shall have the force and effect of law. (Ord. 15-2131, § 1 (part), 2015)

City of Campbell

http://library.municode.com/HTML/16242/level2/TIT8PUPESAMO_CH8.34POWAUSRE.html

8.34.010 Purpose.

The city council finds and determines that the purposes in adopting this chapter are to wisely manage our water resources, practice voluntary efficient water use, avoid water waste and to preserve the health and safety of the people of this municipality. (Ord. 1868 §1(part), 1993).

8.34.020 - Permanent potable water use restrictions.

It shall be unlawful to make any of the following uses of potable water:

- (1) Water waste by flooding or runoff on sidewalks, streets, gutters or other paved areas;
- (2) Cleaning of sidewalks, driveways, patios, parking lots, or other paved or hard-surfaced areas in a manner which results in excessive run-off or waste;
- (3) Use of water through a hose for washing cars, buses, boats, trailers, or other vehicles without a positive automatic shutoff valve on the outlet end of the hose. Exceptions include washing vehicles

at commercial or fleet vehicle washing facilities operated at fixed locations where equipment using water is properly maintained to avoid wasteful use.

(Ord. No. 2190, § 1, 9-1-2015)

Editor's note— Ord. No. 2190, § 1, adopted Sept. 1, 2015, amended [§ 8.34.020](#) in its entirety to read as herein set out. Former [§ 8.34.020](#), pertained to potable water use restrictions, and derived from Ord. 1868, § 1(part), adopted in 1993.

8.34.030 Penalty.

(a) It is unlawful for any person, firm or corporation to violate any provision, or fail to comply with any mandatory requirement of this chapter. Except as otherwise provided in subsection (b) of this section, any entity violating any provision, or failing to comply with any mandatory requirement of this chapter is guilty of an infraction, and upon conviction shall be punished by a fine of not more than one hundred dollars.

(b) Notwithstanding any provision to the contrary, any person, firm or corporation committing any act made unlawful pursuant to subsection (a) of this section shall be guilty of a misdemeanor and upon conviction shall be punished by a fine of not more than one thousand dollars and/or imprisonment of not more than six months, if any of the following circumstances exists:

(1) The violation was committed willfully or with knowledge of its illegality;

(2) The violator does not cease or otherwise abate the violation after receiving notice of such violation;

(3) The violator has previously been convicted of violating the same provision of this title within one year of the currently charged violation; or

(c) Each person, firm or corporation violating any provision, or failing to comply with the mandatory requirements of this chapter shall be deemed guilty of a separate offense for each and every day during any portion of which any violation of any provision of this chapter is committed, continued or permitted by such person, firm or corporation, and shall be punishable as provided in this section.

(d) The administrative penalties of [Chapter 6.10](#) of the Campbell Municipal Code shall apply to a violation of this Chapter.

(Ord. 1868 §1(part), 1993).

(Ord. No. 2190, § 3, 9-1-2015)

City of Saratoga

http://library.municode.com/HTML/16616/level2/CH15ZORE_ART15-47WAFILA.html#CH15ZORE_ART15-47WAFILA_15-47.010ADSTCAMOWAEFLAOR

- **15-47.010 - Purpose of Article.**

The purpose of this Article is to reduce water waste in landscaping by promoting the use of region-appropriate plants that require minimal supplemental irrigation, and by establishing standards for irrigation efficiency. This Article implements the California Water Conservation in Landscaping Act.

(Ord. No. 321, § 1, 11-19-2014)

The following Water Retailers are not municipalities and although they support water conservation they do not have the authority to enact an ordinance:

California Water Service Company -

<http://www.calwater.com/conservation/index.php>

California Water Service Company is located within the cities of Cupertino (see below) and Los Altos (no ordinance found).

Great Oaks Water Company - <http://www.greatoakswater.com/>

Great Oaks Water Company is covered by the City of San Jose's ordinance (see above)

The San Jose Water Company - <https://www.sjwater.com/news/topic/sjwcs-conservation-efforts-response-governor%E2%80%99s-drought-declaration>

San Jose Water Company is located within the cities of San Jose, Cupertino, Campbell, Saratoga, Los Gatos, and Monte Sereno.

The following Water Retailers do not receive District water however their ordinances are provided for information only

Purissima Hills Water District – (does not receive District water)

http://www.purissimawater.org/images/03-01_Establishing_Rules_and_Regs_Prohibiting_Wasteful_Water_Use.pdf

Stanford University – (does not receive District water)

<https://suwater.stanford.edu/efficiency-overview>

Stanford University is not a city government so it does not have the ability to pass an ordinance, however the link above outlines the Water Sustainability, Efficiency and Conservation efforts of the University.

City of Palo Alto – (does not receive District water)

[http://www.amlegal.com/nxt/gateway.dll/California/paloalto_ca/paloaltomunicipalcode?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:paloalto_ca](http://www.amlegal.com/nxt/gateway.dll/California/paloalto_ca/paloaltomunicipalcode?f=templates$fn=default.htm$3.0$vid=amlegal:paloalto_ca)

then click on the - Title 12 Public Works and Utilities – link

Chapter 12.32 WATER USE REGULATIONS

Sections:

12.32.010 Water use regulations.

No purchaser of water from the city of Palo Alto, nor any customers of the water utility of the city of Palo Alto, shall use water or allow any other person to use water under the control of such customer or purchaser in the following ways:

- (a) Potable water shall not be allowed to flood or run off into gutters: driveways, sidewalks, streets or other unlandscaped areas.
- (b) By means of a hose to wash cars, boats, trailers, buses or other vehicles or to wash sidewalks, building structures, other hard-surfaced areas or parts thereof without an operating automatic shut-off valve. Use of a hose for such purposes should be avoided whenever possible.
- (c) Potable water for consolidation of backfill and other nondomestic uses in construction shall not be used if other water sources such as reclaimed water are available, as determined by the director of utilities or his or her designee. Applicants for hydrant permits from

the city of Palo Alto shall be deemed to have consented to restrictions on water use which may be imposed by the director of utilities or his or her designee.

(d) Any broken or defective plumbing, sprinklers, watering or irrigation systems which permit the escape or leakage of water shall be repaired or replaced as soon as possible, but no later than the date established by the director of utilities, or his or her designee, as reasonable after observation of the broken or defective system.

(Ord. [4041](#) § 1, 1991: Ord. [3964](#) § 1, 1990: Ord. [3884](#) § 2 (part), 1989)

12.32.020 Enforcement.

In addition to enforcing observed violations of this chapter by any person as a misdemeanor or an infraction, the city manager and his designated employees are authorized to enforce the provisions of this chapter against customers and water purchasers of the utility as follows:

(a) Reports of violations shall be called to the attention of the party responsible for the service connection used in the violation and shall be investigated by the utilities department personnel to the extent possible.

(b) Violations established to the satisfaction of the utilities department personnel shall result in the issuance of a written warning to the violator and the party responsible for the service connection used in the violation.

(c) A record shall be kept by the department of utilities of the city of Palo Alto of all violations.

(d) If a second violation is established to the satisfaction of the utilities department personnel, the violator or party responsible for service connection used in the violation, or either of them, shall receive a more severe written warning, advising them of the possibility that their water flow will be restricted.

(e) For any third or subsequent violation by the same violator, customer, or water purchaser, or for any willful violation, the city manager or his designee may elect to install a flow restrictor upon the service connection of the purchaser or customer at the purchaser's or customer's expense. Prior to installation of the water restrictor, the director of utilities shall give written notice to the person responsible for the service connection, which is to be restricted, of his intention to install a restrictor. The person or persons to whom notice is to be given shall have five business days from the date of service of the notice to request a hearing before the city manager or his designee in order to present any and all evidence they may have as to why a restrictor should not be installed or under what conditions it might be installed.

If a hearing is requested, the city manager or his designee shall schedule a date and time for said hearing as soon as possible after the request is filed, but not later than five business days after the filing or such request for hearing.

At the hearing, the person whose service connection is to be restricted may offer evidence as to why the restrictor should not be installed or under what conditions it might be installed. Utilities personnel shall also be allowed to offer whatever evidence they may have as to why the restrictor should be allowed and under what conditions. The city manager or his designees shall make a determination as to whether the restrictor shall or shall not be installed and what conditions, if any, should pertain.

(f) Upon a determination to install a restrictor after hearing, or the failure of the affected party to request a hearing, the director of utilities, under whatever conditions, if any, he may deem advisable under the circumstances, may install a flow restrictor on the service connection

of the customer or purchaser of water whose service connection was used in the violations observed or established and bill the costs of such installation to said customer or purchaser in accordance with the following conditions:

- (1) The first installation shall be for a period of three days;
- (2) Subsequent installations shall be for a period to be determined by the director of utilities, in an amount sufficient to accomplish the purposes of this chapter. Flow restrictors shall be installed in accordance with water utility rules and regulations and at the following rates which shall be borne by the user:

Meter Size	Installation Cost	Removal Cost
5/8" to 1"	\$25.00	\$25.00
1 1/2" to 2"	50.00	50.00
3" and larger	Actual cost	Actual cost

Actual cost will include all material, labor, equipment and overhead charges.
(Ord. [3884](#) § 2 (part), 1989)

12.32.040 Indoor and outdoor water efficiency..+

Pursuant to the California Water Conservation in Landscaping Act, also known as the State Landscape Model Ordinance, Government Code §§ 65591, et seq. as amended, a city is required to adopt the State Landscape Model Ordinance or equivalent local landscape water efficiency requirements that are "at least as effective" as the state ordinance in conserving water. The council has adopted requirements that are at least as effective in reducing landscaping water use, also known as outdoor water use, as well as additional requirements for existing landscapes and indoor water use in Chapter 16.14 (California Green Building Code).

(Ord. 5108 § 2, 2010)